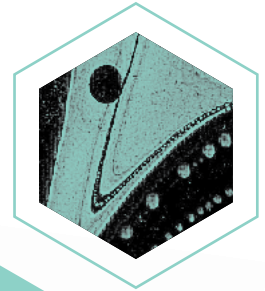


# Annual Report 2017

**Lonza**



**Company**

**Segments**

**Financial  
Report**

**Remuneration  
Report**

**Corporate  
Governance  
Report**

**AR**

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# Company

**~53**

Manufacturing  
and R&D  
Facilities

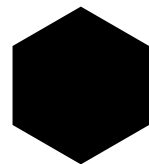
**650**

Active Patent  
Families



**14,618**

Employees  
End of 2017



**5.1 bn**

Sales 2017  
in CHF

With sites that span the world – from Canada to China, from Switzerland to South Africa, from the US to the UK, and from Singapore to Spain – Lonza is a global company that supplies the pharmaceutical, biotech, consumer health and specialty ingredients markets.

**30**

Countries  
Around  
the World

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# Letter to Stakeholders

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Richard Ridinger  
Chief Executive Officer

Rolf Soiron  
Chairperson of the Board of Directors

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## Dear Stakeholders,

The year 2017 was a good year for Lonza, indeed – not only because we achieved better results than anticipated, but also because we made important steps forward in our journey to become the partner of choice for our customers worldwide by more and more unique offerings of value for the pharmaceutical and consumer healthcare industries.

We are pleased that the company was capable of executing and integrating Capsugel – the largest acquisition in our history – successfully and according to plan. Lonza also grew organically by a healthy 10.4% versus prior year and exceeded our 2017 guidance standalone sales. The addition of Capsugel for approximately half a year led to sales of CHF 5.1 billion with a **CORE EBITDA** margin of 24.8%. Pharma&Biotech and Specialty Ingredients contributed to the record-breaking results, while Capsugel has confirmed its potential to add to Lonza's growth.

Yes, we think, Lonza has become stronger than ever. However, our leaders and staff will remain focused on optimizing further processes and structures to ensure that profitable growth continues well into the future. That is why our focus for 2018 will be on thorough execution and efficiency, particularly for Lonza's enabling functions – like IT, procurement and finance – which must continue to be modernized and optimized in order to support the company's further prosperous growth.

## The Healthcare Continuum as Lonza's Framework

We want to strengthen Lonza's leading role as a provider of valuable solutions for the global pharmaceutical and consumer healthcare markets, with a focus on patient health, consumer preventive health and healthy consumer environment. The "healthcare continuum" describes well how many markets offer growth and development potential for Lonza, and it also provides a common platform for our different technologies and capabilities. Markets within the healthcare continuum span all of our Pharma&Biotech and many of our Specialty Ingredients businesses – from prescription drugs to personal care and well-being.

Accelerating growth within the healthcare continuum was also at the roots of the decision to acquire Capsugel, the leading provider of innovative dosage forms for the biopharmaceutical and the consumer health and nutrition industries.

The healthcare continuum provides a strategic framework for what we do and what we stand for, and it will contribute to an even-better recognition of Lonza's values and ambitions.

## Integration Is Essential

Through the acquisition of Capsugel, Lonza added a trusted brand with a large breadth of technologies. With Capsugel we expanded the market reach of Lonza's contract development and manufacturing organization (CDMO) and products businesses.

The integration has been progressing smoothly: Employees are already acting as one organization. But we are still only at the beginning of a long path of fully exploiting all the potential of our combined skills and strengths.

We are well positioned to benefit from the dynamics in our customers' industries and to address the most-interesting technology trends. However, we must continue to work on our goals of establishing an integrated portfolio of industry-leading technologies – from active pharmaceutical ingredients (APIs) through excipients to dosage forms and delivery technologies – and of building a leading integrated, value-added solutions provider in drug development, formulation, delivery technologies and manufacturing for the global pharma and consumer healthcare industries.

We should not overlook the fact that Lonza's family also grew in 2017 with smaller acquisitions: PharmaCell in the Netherlands, MicroMacinazione in Switzerland, HansaBiomed in Estonia and the Hayward, CA, site in the United States. Integration of all these interesting new units is progressing well.

# We Foster Profitable Growth

As we already mentioned, Lonza grew organically, too. Growth will continue to be the watchword in 2018 and beyond. For that reason we have been investing in innovative business models and projects like Ibex<sup>®</sup> Solutions in Visp (CH), which, by the way, also demonstrates our commitment to strengthen Switzerland as an industrial hub. Continuous facility expansions and upgrades, driven by customer needs, such as the U.S. sites of Houston, TX; Portsmouth, NH; and Bend, OR, will also contribute to Lonza's growth. Needless to say, we will continue to grow also by adding bolt-on technical acquisitions wherever we find convincing opportunities.

Lonza's goal is to strengthen our global footprint, also by enforcing our positions outside the company's already-strong home markets of Europe and the United States, with greater emphasis in South East Asia, South America, China, Japan, India, Oceania and South Africa.

# We Believe in Industry Responsibility

Lonza not only operates sites worldwide, but also feels responsible for our impact on and relations with the local communities where we live and work. Yes, we also take responsibility for our industrial heritage, as demonstrated by our continued progress in Visp (CH) on remediating the mercury situation.

We want our sites to make further progress toward comprehensive environmental and health protection and safety at work, and we do not shy away from higher ambitions than merely complying with legal standards. Sustainability and corporate social responsibility continue to be high on our agenda going forward.

Our sites should become good ambassadors of the healthcare continuum!

# How We See 2018 to 2022

Based on the foundation laid in the past, and with the new baseline including Capsugel, we already announced our outlook for 2018, i.e.:

- Mid-single-digit sales growth on a comparable basis in line with Mid-Term Guidance 2022
- 100 bps improvement in CORE EBITDA margin in line with Mid-Term Guidance 2022

Lonza's activities within the healthcare continuum are expected to grow above average while optimizations in parts of the Lonza portfolio will continue.

Delivering on this outlook for 2018 will be a further step toward our Mid-Term Guidance 2022, disclosed in the half-year presentation in July 2017:

- Sales CHF 7.5 billion
- CORE EBITDA margin 30%
- CORE RONO 35%

Such an improvement of Lonza's performance will certainly be a welcome present for the company's 125<sup>th</sup> anniversary in 2022.

Measuring financial returns on Lonza's investment will be more ambitious in 2018, as we intend to replace CORE RONO (return on net operating assets) by the ROIC (return on invested capital) concept.

This outlook and guidance are based on the present business composition and current macro-economic conditions, visibility and constant exchange rates.

## The Upcoming Annual General Meeting

The Board is proposing a stable dividend for shareholders of CHF 2.75 per share for 2017, despite the considerable 40.7% increase in share capital.

At the Annual General Meeting on 4 May 2018, the Board of Directors will also propose changes in the composition of the Board. As announced several times, we will also have a change in the Board's Chairperson. We think that the passage of the baton is taking place in a moment in which the Lonza enjoys good health.

## Our Thanks!

Finally, we would not like to miss this opportunity to sincerely thank all our employees for their outstanding efforts. They all created the successes of last year, and they made it possible to look from an even-higher level into the future.

We want to assure you, our owners, that the Board and the management of the company are determined to continue on our path of continuous value creation, growth and profitability. Lonza's position in the healthcare continuum is strong – but new opportunities are endless.

### **Rolf Soiron**

Chairperson of the Board of Directors

### **Richard Ridinger**

Chief Executive Officer

# Highlights of the Business Year 2017



## January

Lonza began 2017 – our 120<sup>th</sup> anniversary year – by announcing record-breaking financial performance in 2016

## February

Lonza placed 5 million new shares, raising gross proceeds of CHF 865 million



2017

01  
17

02  
17

03  
17

## April

Lonza already upgraded our full-year outlook 2017

## July

Lonza completed acquisition of Capsugel to create a leading integrated solutions provider for the global pharma and consumer healthcare industries

Lonza launched Ibex® Solutions in Visp (CH) – an innovative new concept in biological manufacturing and development



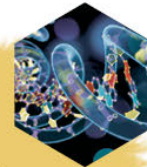
05  
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## May

Lonza acquired cell and gene contract manufacturer PharmaCell, (NL), and extended global footprint in autologous medicines

Lonza completed capital increase by way of a rights offering

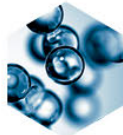
Lonza acquired HansaBioMed Life Sciences, Tallinn (EE), and invested in Exosomics Siena (I), to reinforce next-generation research and applications based on exosomes

## September

Groundbreaking for Lonza strategic partnership with Sanofi to establish a large-scale biologics production facility in Ibex® complex in Visp (CH)

Another strategic agreement signed: Portola Pharmaceuticals, Inc. to manufacture AndexXa® in Ibex® facility

Lonza-Capsugel's first synergistic commercial offerings in consumer health & nutrition launched in Las Vegas, NV (USA)



09  
17

## August

Lonza acquired Micro-Macinazione (CH) to create the global leader in micronization capacity and capabilities

Lonza expanded capabilities for Drug Product Services for Parenteral Dosage Forms in Basel (CH)

10  
17

11  
17

12  
17

2018

## October

Lonza acquired U.S. clinical manufacturing in Hayward, CA (USA), site to support ongoing customer demand

## November

Ramp-up of world's largest cell-and gene-therapy facility in Houston, TX (USA), successfully ongoing

## December

Capsugel fully integrated into the Lonza structure

Lonza successfully closed major transformational year with record-breaking full-year results





# Financial Highlights

## Overview

Lonza's 120th anniversary year in 2017 was characterized by record-breaking full-year results, which included double-digit organic sales growth, organic CORE EBITDA and CORE EBIT growth well above sales growth and an attractive CORE RONOA of 28.3% for Lonza standalone.

We exceeded our full-year 2017 guidance and demonstrated our strong organic growth potential. Having closed the acquisition of Capsugel on 5 July 2017, Lonza consolidated Capsugel for nearly six months in 2017. Lonza reported sales of CHF 5.1 billion (Lonza standalone CHF 4.6 billion) for the full-year 2017, a 23.5% increase in reported currency compared with the same period in 2016 (Lonza standalone 10.4% sales growth in reported currency).

Margins for Lonza further improved, resulting in a record-breaking CORE EBITDA margin of 24.8% (23.9% Lonza standalone) and CORE EBIT margin of 18.8% (18.0% Lonza standalone) in reported currency.

Net debt as a consequence of the Capsugel acquisition ended 2017 at CHF 3.8 billion, which resulted in a net debt/CORE EBITDA (proforma) ratio of 2.65x – a leverage level significantly below the previously communicated threshold of up to 3x net debt/CORE EBITDA. The ratio was also supported by the strong operational free cash flow of CHF 619 million before acquisitions.

Our outstanding organic sales growth and high margin improvement demonstrate Lonza's robust operational performance and commercial excellence. Pharma&Biotech and Specialty Ingredients contributed to the record-breaking full-year results with offerings along and beyond the healthcare continuum as growth drivers. With less than six months on our books until the end of the reporting year, Capsugel has already shown potential to add to Lonza's growth, especially as synergies are expected to materialize starting in 2018.

## Key Figures Lonza Standalone

million CHF	2017	Change in %	2016
Sales	4,562	10.4	4,132
CORE EBITDA <sup>1</sup>	1,091	18.8	918
<i>CORE EBITDA Margin</i>	23.9%		22.2%
EBITDA	1,060	25.0	848
<i>EBITDA Margin</i>	23.2%		20.5%
CORE EBIT <sup>1</sup>	822	26.3	651
<i>CORE EBIT Margin</i>	18.0%		15.8%
EBIT	728	49.8	486
<i>EBIT Margin</i>	16.0%		11.8%
CORE RONOA <sup>1</sup>	28.3%	31.6	21.5%
RONOA	19.3%	52.0	12.7%

<sup>1</sup> **CORE Definition:** Lonza believes that disclosing CORE results of the Group's performance enhances the financial markets' understanding of the company because the CORE results enable better comparison across years. CORE results exclude exceptional expenses and income related to e.g. restructuring, environmental-remediation, acquisitions and divestitures, impairments and amortization of acquisition-related intangible assets, which can differ significantly from year to year. For this same reason, Lonza uses these CORE results in addition to IFRS as important factors in internally assessing the Group's performance. The reconciliation of IFRS to CORE results within the supplementary financial information provides further details on the adjustments.

## Key Figures Lonza Including Capsugel

million CHF	2017	Change in %	2016
Sales	5,105	23.5	4,132
CORE EBITDA <sup>1</sup>	1,265	37.8	918
<i>CORE EBITDA Margin</i>	24.8%		22.2%
EBITDA	1,153	36.0	848
<i>EBITDA Margin</i>	22.6%		20.5%
CORE EBIT <sup>1</sup>	958	47.2	651
<i>CORE EBIT Margin</i>	18.8%		15.8%
EBIT	723	48.8	486
<i>EBIT Margin</i>	14.2%		11.8%
CORE RONOA <sup>1</sup>	29.1%	35.3	21.5%
RONOA	9.7%	(23.6)	12.7%
Operating Free Cash Flow (before acquisition)	619	(3.0)	638
Operating Free Cash Flow	(2,691)	(759.6)	408
Net Debt	3,762	137.5	1,584

<sup>1</sup> **CORE Definition:** Lonza believes that disclosing CORE results of the Group's performance enhances the financial markets' understanding of the company because the CORE results enable better comparison across years. CORE results exclude exceptional expenses and income related to e.g. restructuring, environmental-remediation, acquisitions and divestitures, impairments and amortization of acquisition-related intangible assets, which can differ significantly from year to year. For this same reason, Lonza uses these CORE results in addition to IFRS as important factors in internally assessing the Group's performance. The reconciliation of IFRS to CORE results within the supplementary financial information provides further details on the adjustments.

# Financial Summary 2017

## Financial Summary – Lonza Standalone

- Sales growth of 10.4% in reported currency, rising to CHF 4,562 million
- CORE EBITDA growth of 18.8% in reported currency, reaching CHF 1,091 million
- CORE EBIT experienced growth of 26.3% in reported currency, increasing to CHF 822 million
- Margin improvement resulting in an organic CORE EBITDA margin of 23.9% (+1.7 pp compared with same period last year) and organic CORE EBIT margin of 18.0% (+2.2 pp compared with same period last year) in reported currency
- CORE RONOA improved significantly to 28.3% (21.5 % in 2016)

## Financial Summary – Lonza Including Capsugel

- Sales growth of 23.5% in reported currency, rising to CHF 5,105 million
- CORE EBITDA growth of 37.8% in reported currency, reaching CHF 1,265 million
- CORE EBIT experienced growth of 47.2% in reported currency, increasing to CHF 958 million
- Margins improvement for Lonza including Capsugel resulting in a CORE EBITDA margin of 24.8% (+2.6 pp compared with same period last year) and CORE EBIT margin of 18.8 % (+3.0 pp compared with same period last year) in reported currency
- CORE RONOA improved to 29.1% (21.5% in 2016)

## Historical Progression

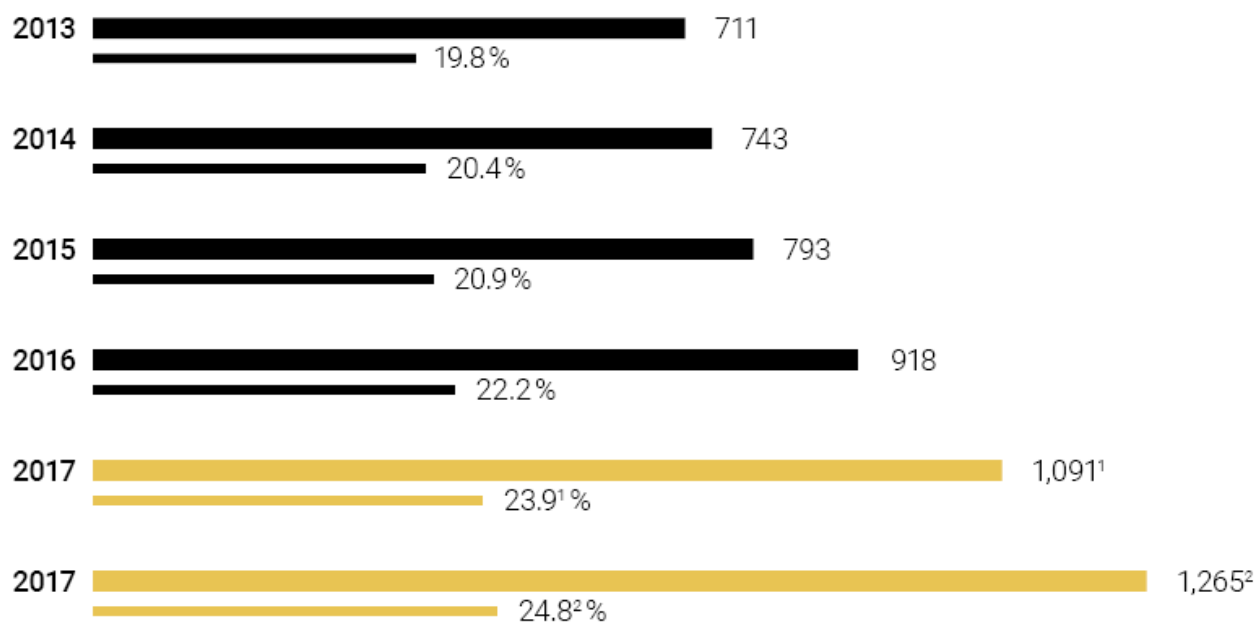
### Sales Progression (in million CHF)



<sup>1</sup> Sales Progression 2017 Lonza Standalone

<sup>2</sup> Sales Progression 2017 Lonza Including Capsugel

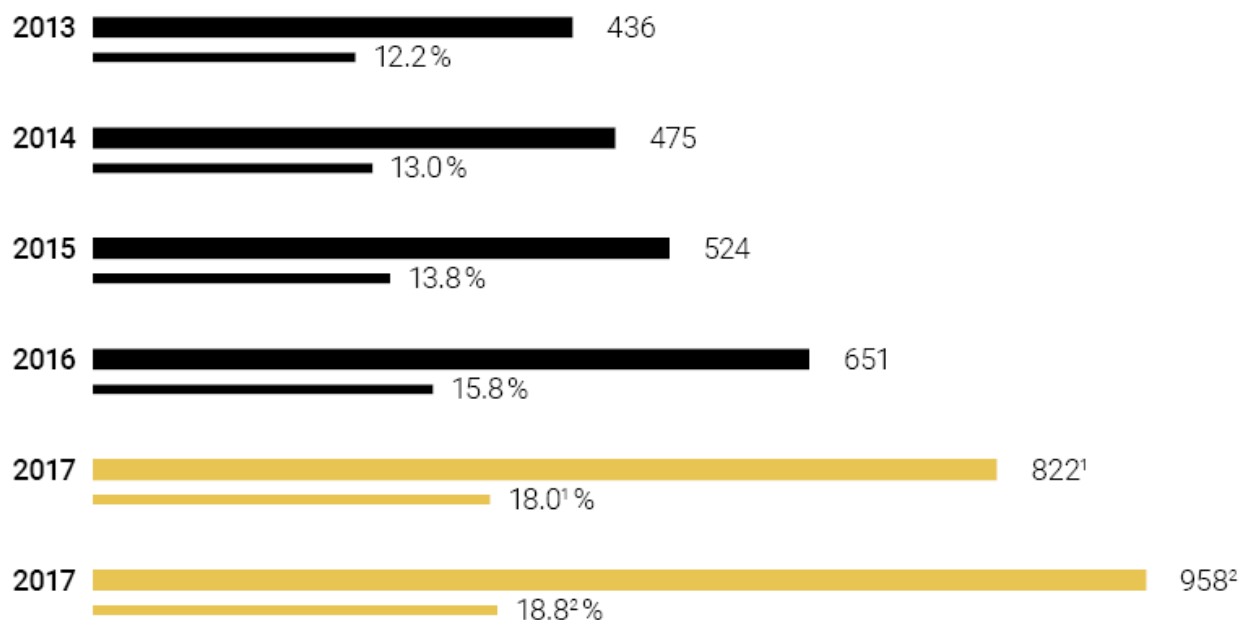
## CORE EBITDA (in million CHF) and CORE EBITDA Margin



<sup>1</sup> CORE EBITDA and CORE EBITDA Margin 2017 Lonza Standalone

<sup>2</sup> CORE EBITDA and CORE EBITDA Margin 2017 Lonza Including Capsugel

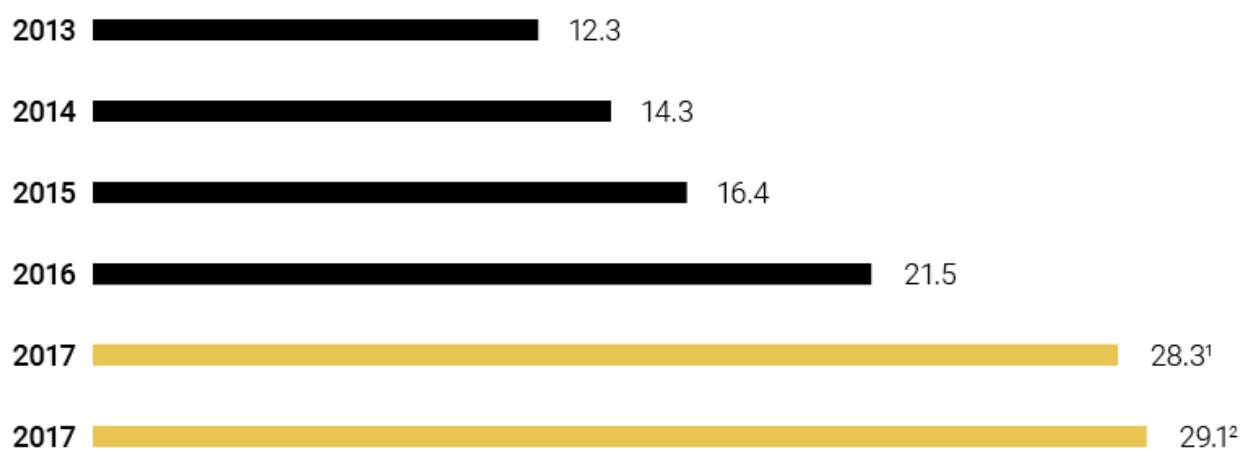
## CORE EBIT (in million CHF) and CORE EBIT Margin



<sup>1</sup> CORE EBIT and CORE EBIT Margin 2017 Lonza Standalone

<sup>2</sup> CORE EBIT and CORE EBIT Margin 2017 Lonza Including Capsugel

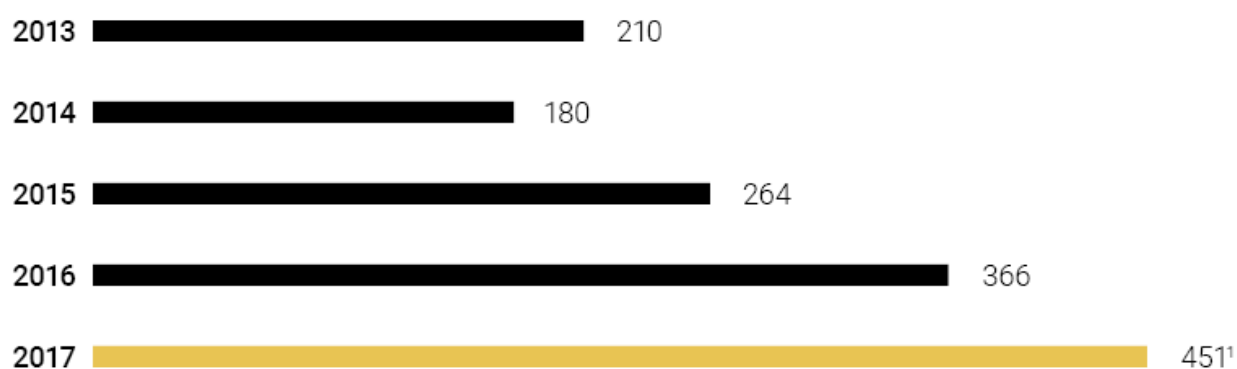
## CORE RONO



<sup>1</sup> CORE RONO 2017 Lonza Standalone

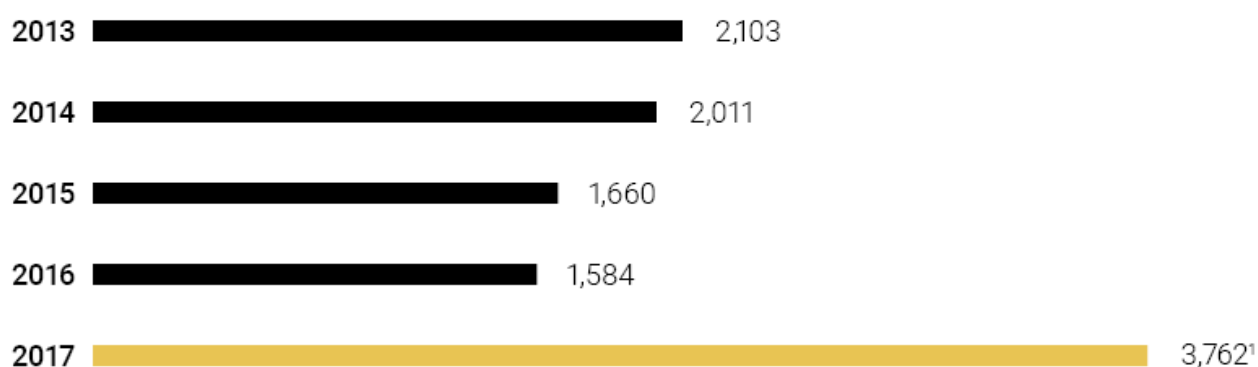
<sup>2</sup> CORE RONO 2017 Lonza Including Capsugel

## Capital Expenditures (in million CHF)



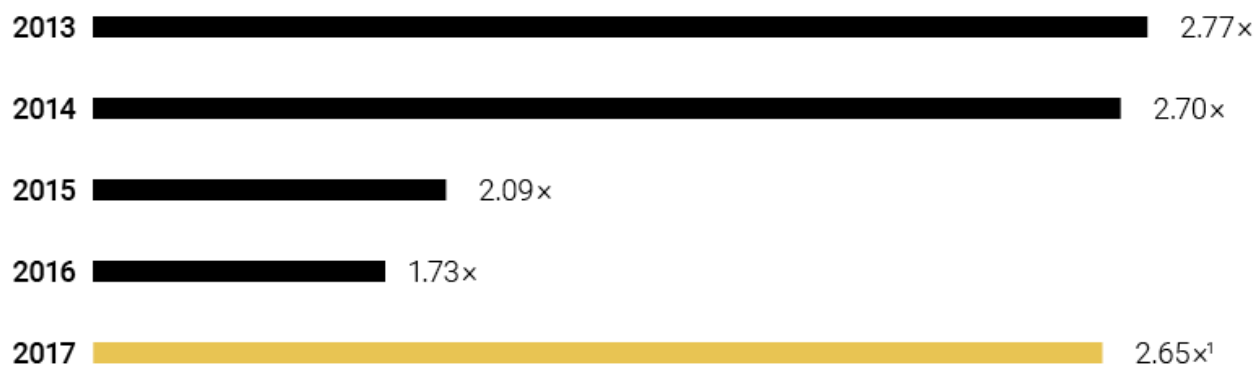
<sup>1</sup> Capital Expenditures (in million CHF) 2017 Lonza Including Capsugel

## Net Debt (in million CHF)



<sup>1</sup> Net Debt (in million CHF) 2017 Lonza Including Capsugel

# Net Debt/CORE EBITDA



<sup>1</sup> Net Debt/CORE EBITDA 2017 Lonza Including Capsugel

## Capital Measures in 2017

During 2017 the Capsugel acquisition was financed through a combination of equity and debt instruments. Following the successful placement of 5.0 million new shares with gross proceeds in the amount of CHF 865 million by way of an accelerated bookbuilding in February, Lonza offered – after the approval of shareholders during the Annual General Meeting (AGM) on 25 April 2017 – a total of 16,548,612 newly issued shares by way of a discounted rights offering with gross proceeds in the amount of CHF 2.3 billion.

The balance of the acquisition price was financed through indebtedness including a USD 1.0 billion term loan and USD 1.4 billion bridge loan facilities provided by the assigned banks. The bridge was refinanced by traditional debt instruments. Lonza issued dual tranche CHF 235 million straight bonds in July 2017. The bonds have a maturity of 4 and 7 years with coupons of 0.2% and 0.7%, respectively.

Furthermore, we priced our multi-tranche “Schuldschein” loan (private placement) with a total size of EUR 700 million and USD 200 million at competitive market terms in August 2017. The EUR tranches have maturities of 4 and 6 years with fixed and variable coupons, respectively, while the USD tranches have maturities of 5 years (variable coupon) and 7 years (fixed coupon). In December 2017 Lonza placed a USD 100 million, 7-year tranche “Schuldschein” loan. The proceeds plus available cash were used to fully redeem the outstanding debt bridge.

## Outlook 2018

After a boost in performance and a large number of growth activities started in 2017, the focus for 2018 will be on thorough execution and integration, making sure that all synergies can be captured. A number of new business teams are at the starting line and ready to capture those synergies. Lonza will also continue to invest in innovation while further improving our operational excellence across the entire – now larger – Lonza portfolio.

By integrating, modernizing and optimizing Lonza's enabling functions – like IT, procurement and finance – we are ensuring that the company structure is fit for further growth. Based on the sound foundation laid in 2017 for the future, and starting from a new baseline, Lonza (including Capsugel) is announcing the following outlook for 2018:

- Mid-single-digit sales growth on a comparable basis in line with Mid-Term Guidance 2022
- 100 bps improvement in CORE EBITDA margin in line with Mid-Term Guidance 2022

The Outlook 2018 is a next step toward achieving our Mid-Term Guidance 2022. During 2018 the healthcare continuum is expected to grow above average while Lonza is executing ongoing optimizations in parts of the basic portfolio like the discontinuation of fertilizers.

## Mid-Term Guidance 2022

With 120 years of company history, Lonza is stronger than ever and well prepared to maintain positive momentum toward the company's 125th anniversary in 2022 and beyond. Therefore, Lonza confirms the Mid-Term Guidance 2022, as announced during the half-year results presentation in July 2017:

- Sales CHF 7.5 billion
- CORE EBITDA margin 30%
- CORE RONO 35%

During 2018 CORE RONO (return on net operating assets) will be replaced by ROIC (return on invested capital).

The Outlook 2018 and Mid-Term Guidance 2022 are based on the present business composition, macro-economic environment, current visibility and constant exchange rates.

# Value Creation Along and Beyond the Healthcare Continuum

Celebrating our 120-year anniversary in 2017, Lonza is one of the world's leading and most respected suppliers to the pharmaceutical, biotech, consumer health and specialty ingredients markets with more than 100 sites and approximately 14,500 full-time employees worldwide.

Lonza's overall strategy is to be the leading integrated solutions provider for the global pharmaceutical and consumer health markets. We want to accelerate growth along the healthcare continuum.



## **Discover more**

Serving Along and Beyond the Healthcare Continuum  
Becoming a Leading Integrated Service Provider  
Highlighting Our Initiatives in 2017



# Serving Along and Beyond the Healthcare Continuum

Lonza creates solutions that contribute to healthier living by developing and manufacturing preventive and curative medicine for pharma and biotech companies and their patients, nutritional ingredients and personal-care products for consumer health and anti-microbial solutions to enhance the overall quality of life.

[More information on healthcare continuum.](#)

These markets along the healthcare continuum span all of our [Pharma&Biotech](#) and many of our [Specialty Ingredients](#) businesses, now also including Capsugel. Our services and products range from active pharmaceutical ingredients and delivery systems to drinking water sanitizers, from nutritional and personal-care ingredients to agricultural products, and from industrial preservatives to microbial control solutions that combat dangerous viruses, bacteria and other pathogens. Building on technology platforms and know-how on commercializing solutions in highly regulated markets for more than 120 years, Lonza is the "agile" example of a company that masters continuous transformations. We demonstrate that agility by being ahead of times to meet the greatest challenges of the 21<sup>st</sup> Century in curative and preventive healthcare, and by protecting and preserving our resources.



# Becoming a Leading Integrated Service Provider

We believe that we have a unique capability to connect our expertise in biotech, fine chemistry, formulation and application technology, delivery systems, microbial control, and regulatory and quality requirements, which allows Lonza to provide the best solutions for our customers to meet some of the world's **greatest challenges**.

At Lonza we strive for integrated offerings across technologies and along the entire Contract Development and Manufacturing Organization (CDMO) value chain to leverage **synergies** in technologies and know-how in order to provide full-service offerings to our customers in the pharma and health markets – from gene to patient, from nutritional ingredient to consumer and from microbial control to safe surroundings.

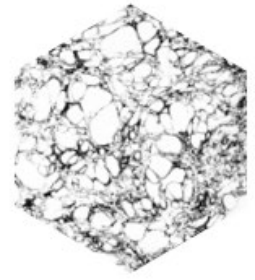
The **Capsugel acquisition** in July 2017 represented a major leap forward in our strategic quest to become the world's leading integrated solutions provider across the healthcare continuum.

## **More Information on Leading Integrated Service Provider for Pharma and Health Markets**

[Adding Capsugel to Create an Integrated Service Provider for the Healthcare Continuum](#)

[Capitalizing on Our Strategic Fit](#)

[Leveraging Early Commercial Synergies](#)



**1,3 bn**

CORE EBITDA  
in CHF



**958 mn**

CORE EBIT  
in CHF

**5,1 bn**

Sales 2017  
in CHF



**30**

Countries  
Around  
the World

**466**

Successful  
Audits

**~53**

Manufacturing  
and R&D  
Facilities

**14,618**

Employees  
End of 2017

**650**

Active  
Patent Families

# Adding Capsugel to Create an Integrated Service Provider for the Healthcare Continuum

In 2017 Lonza completed the acquisition of U.S.-based Capsugel. Capsugel – now a Lonza company – designs, develops and manufactures a wide range of innovative dosage forms for more than 4,000 customers in the biopharmaceutical and consumer health and nutrition industries in more than 100 countries.

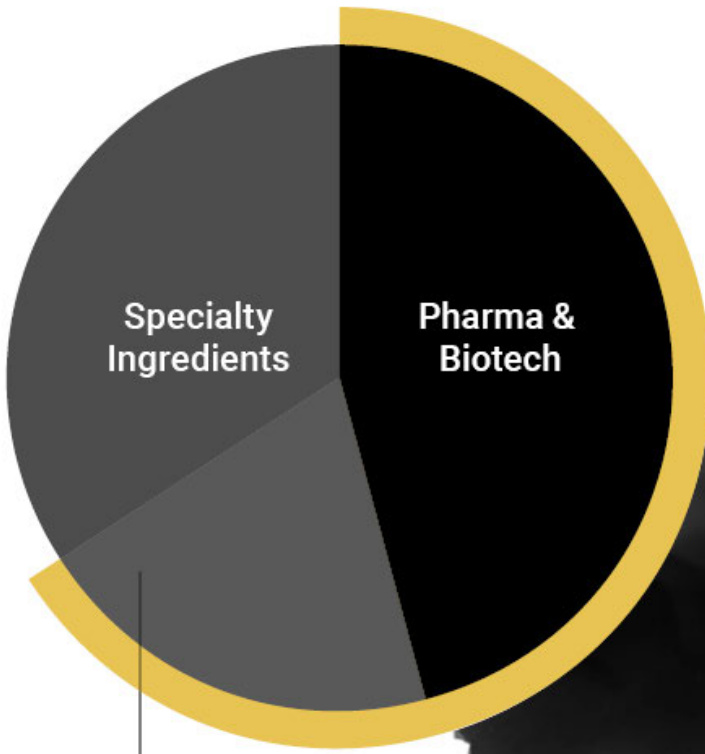


The acquisition of Capsugel accelerates Lonza’s strategy to grow and deliver value along the [healthcare continuum](#) by complementing our existing offerings and by opening up new market opportunities in the pharma and consumer health industries. This transformational step positions Lonza as a unique integrated global leader serving those industries.

With Capsugel’s additional sales, 66% of Lonza’s total revenues are now derived from providing profitable solutions to customers in the pharma and consumer healthcare and nutrition industries.

After the successful closing of the acquisition of Capsugel on 5 July 2017, the post-deal integration began immediately. Lonza puts a strong focus on business continuity while the integration successfully proceeded as planned. All integration workstreams made great progress during 2017 on the journey to bring our two world-class companies together; and at the beginning of 2018, we started to work as one company. Colleagues across the globe have started to build relationships, share expertise and work as one team to bring quality, innovation and excellence to customers – from ingredient sourcing to finished dosage forms.

To energize the one-team spirit, Lonza leaders have been visiting Capsugel sites around the world to meet with teams, to welcome colleagues into the Lonza family and to raise any issues and capture potential opportunities. Lonza and Capsugel employees are committed to the common path of offering high-quality products and services along the healthcare continuum.



*Consumer Health  
and Nutrition Part  
of Specialty Ingredients*

**66%**

**Lonza's  
businesses  
along the  
healthcare  
continuum**

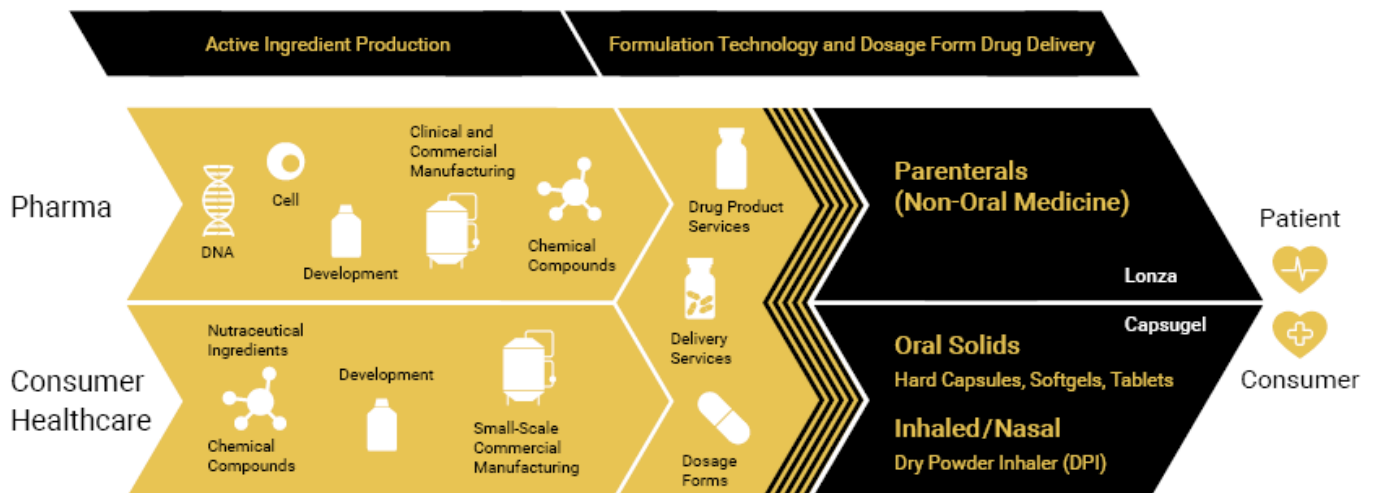
# Capitalizing on Our Strategic Fit

The integration of Capsugel has further strengthened the depth and breadth of Lonza's offerings for small organic molecules. Lonza has a great track record of developing and manufacturing medicines, therapies and healthy ingredients; and Capsugel is a world leader in advanced oral dosage delivery technologies with a market-leading position in hard capsules.

By bringing these offerings together, we can ensure a sustainable future for our Pharma&Biotech business, balance our product and services portfolio, and expand our value-chain offerings in small organic molecules, hard capsules and oral dosage forms for solids in order to get closer to the patient.

The same synergistic dynamic applies to Consumer Health and Nutrition, where tailored dosage forms can optimize the value of nutritional, dietary and other healthful supplements and ingredients manufactured by Lonza.

With proven scientific expertise and innovation in engineering, Capsugel also is a real powerhouse in Research & Development.



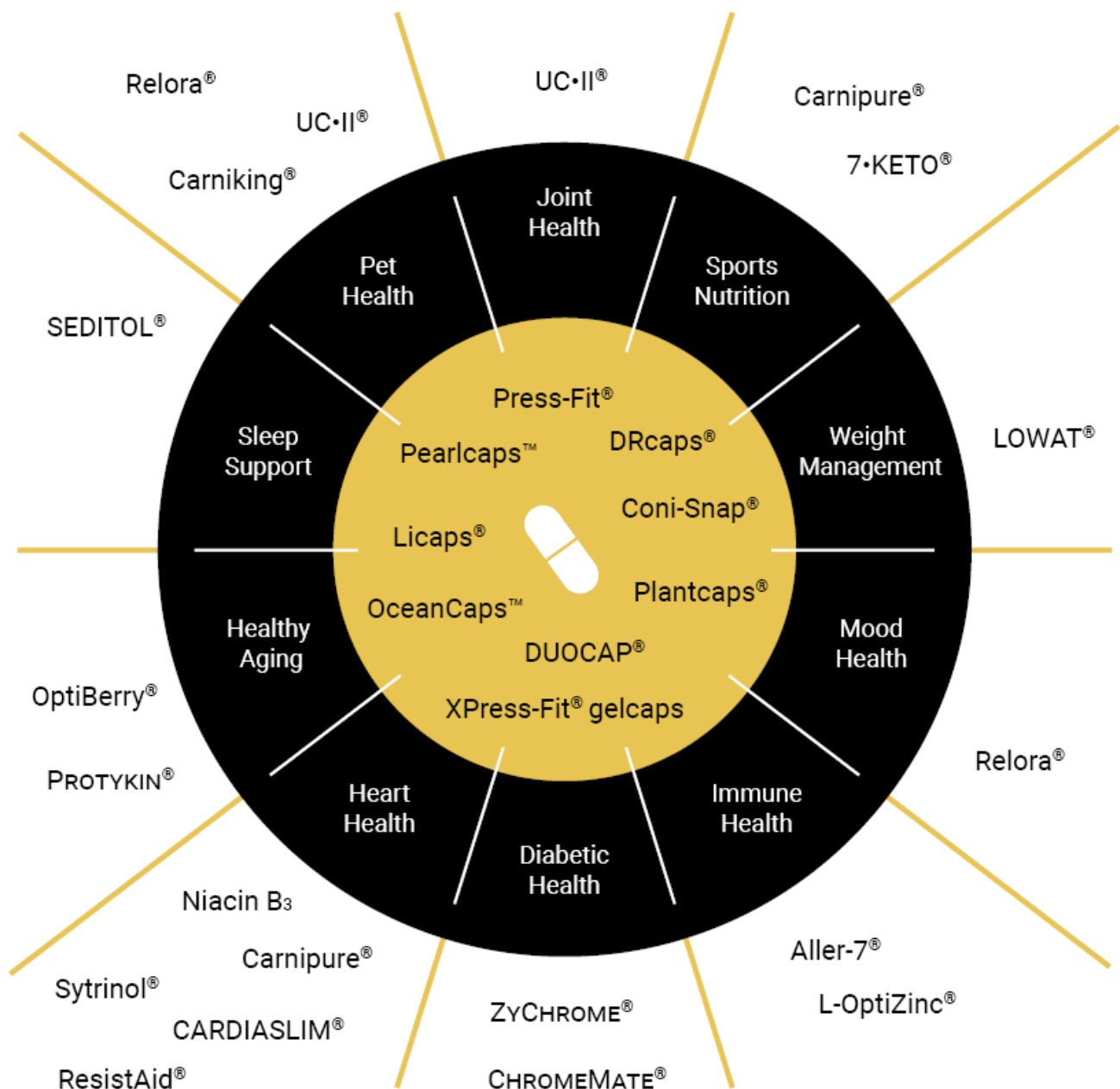
*For example, anyone who has tried to give a sick young child or a frail elderly person a sizeable solid pill will recognize the enormous value of Capsugel's industry-leading role in multi-particulate drug-delivery technologies. Requiring superior formulation and manufacturing skills, this process involves making drug-containing spherical pellets, granules or beadlets that can be incorporated into food or liquids. The volume of medicines, vitamins and other healthful supplements for children and the elderly speaks to the huge commercial potential of this vital technology. For more examples visit our Capsugel website.*

# Leveraging Early Commercial Synergies

The Lonza and legacy Capsugel sales and marketing teams are devising compelling combinations of Lonza's health and nutrition ingredients in finished dosage forms. At the major Supply Side West 2017 trade show in September in Las Vegas, NV (USA), for instance, the integrated Capsugel and Lonza booths featured new dosage forms for our fast-selling UC-II® undenatured type II collagen for joint comfort, mobility and flexibility.

There we also showcased Carnipure® free-flowing L-Carnitine for exercise recovery and energy metabolism in four of Capsugel's dosage technologies: liquid-formulated DUOCAP®, Licaps®, beadlet-in-capsule dosage forms and lipid multi-particulates forms.

Combing Lonza's strong spectrum of science-backed nutritional ingredients with Capsugel's integrated formulation and delivery solutions





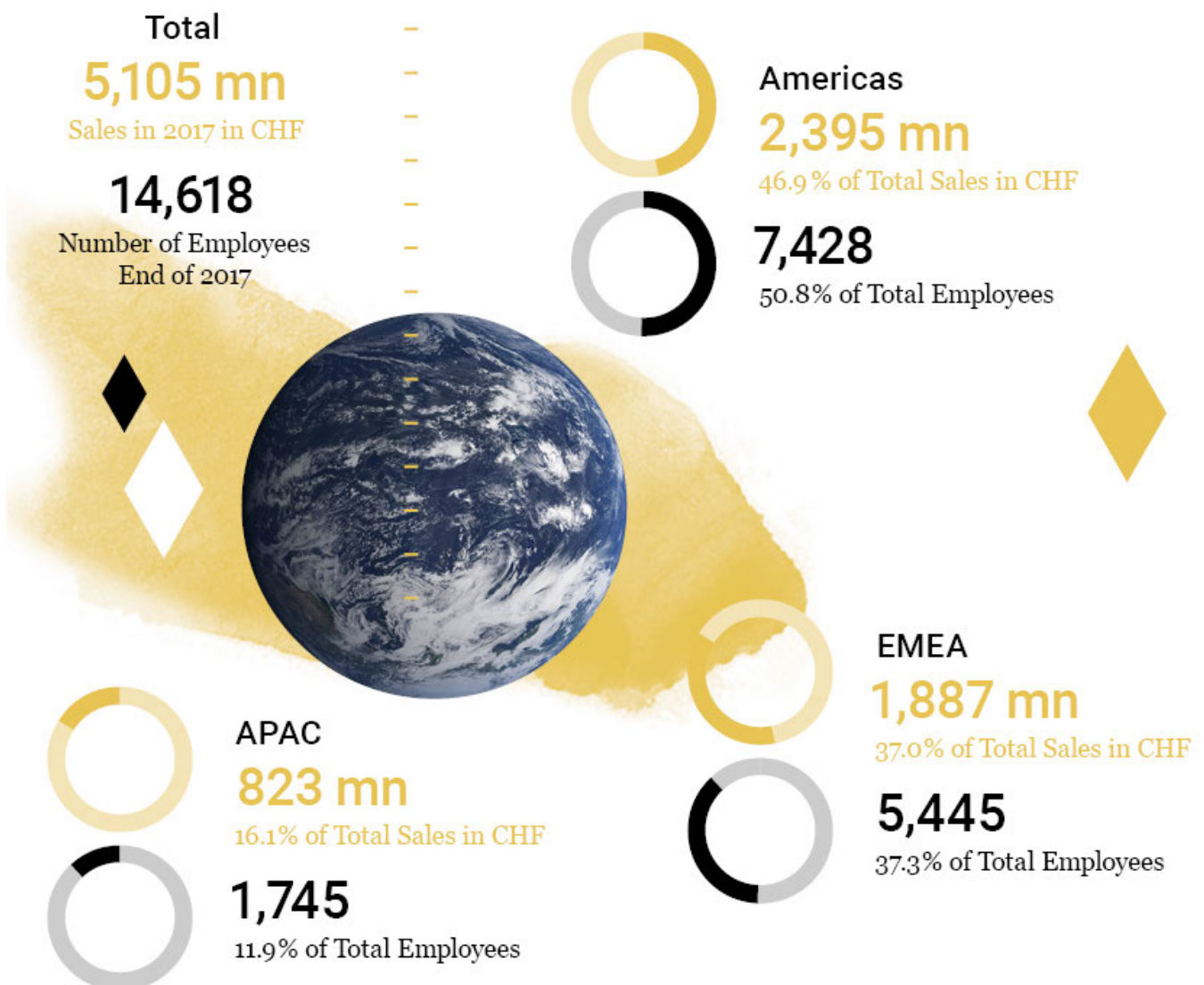
On the Pharma&Biotech side, Lonza and Capsugel teams joined together for the first time publicly in late 2017 in Frankfurt at the Convention of Pharmaceutical Ingredients (CPhI), the largest pharmaceutical trade show in the world. Our core message at CPhI was that Lonza can enable their customers from start to finish – from early medicine development and clinical trials all the way to commercialization and beyond. Customers in the past would have had to use multiple suppliers to achieve what Lonza and Capsugel can now offer together – from drug substance and formulation to final dosage form.

# Highlighting Our Initiatives in 2017

## Making New Acquisitions

During 2017 Lonza also extended our offerings and services in several core areas through bolt-on acquisitions:

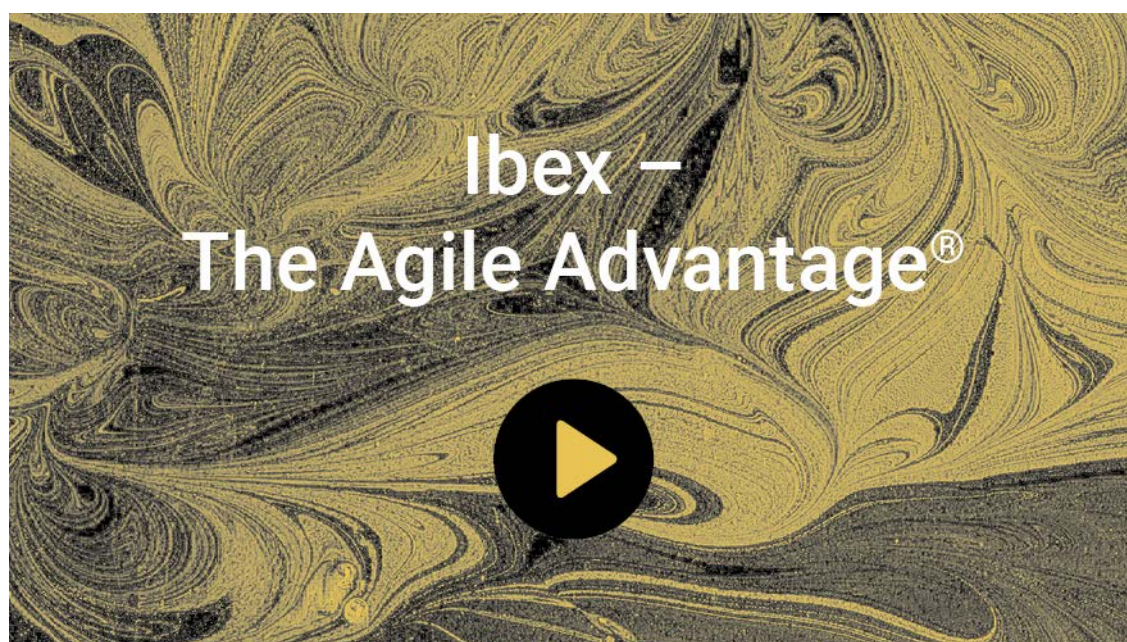
- Expertise in autologous cell- and gene-therapy manufacturing with the acquisition of **PharmaCell B.V. (NL)**, which allows Lonza to be the only CDMO to offer an international cell and gene therapy manufacturing network, spanning the United States, Europe and Asia.
- Addition of early-phase clinical manufacture capacity from the acquisition from Shire plc of a clinical-stage mammalian manufacturing site in the United States, which allows us to address increasing demand for clinical-stage current Good Manufacturing Practice (cGMP) manufacturing capacity.
- To establish Lonza as the global leader in micronization of active ingredients for the pharma and fine chemical industries, we supplemented Capsugel's existing micronization center in Pennsylvania by acquiring **Micro-Macinazione (MicMac)** in August. A Swiss-based global pioneer of jet mill equipment for micronization, MicMac is one of Europe's leading contract micronization providers.



## Launching New Programs and Platforms

Two major programs were also initiated in 2017 to strengthen Lonza as the go-to partner for the pharma and biotech industry:

- Increase of our capacity and expansion of capabilities in Parenteral Dosage Form development, with a further build-out of our Drug Product Services (DPS) offerings in Basel (CH). Together with Capsugel's expertise in oral solids, Lonza now provides high-end solutions for both oral and parenteral dosage forms.
- Launch of **Ibex<sup>®</sup> Solutions**, an innovative new biological development and manufacturing concept, providing highly responsive capability from late discovery to clinical and commercial manufacture. Ibex<sup>®</sup> Solutions cover any technology platform – mammalian, microbial, cellular or bio-conjugate – and are tailored to fit our customers' evolving needs.



Addressing evolving regulatory landscapes and identifying unmet needs in the marketplace, Lonza Specialty Ingredients in 2017 focused on converting those customer needs into solutions.

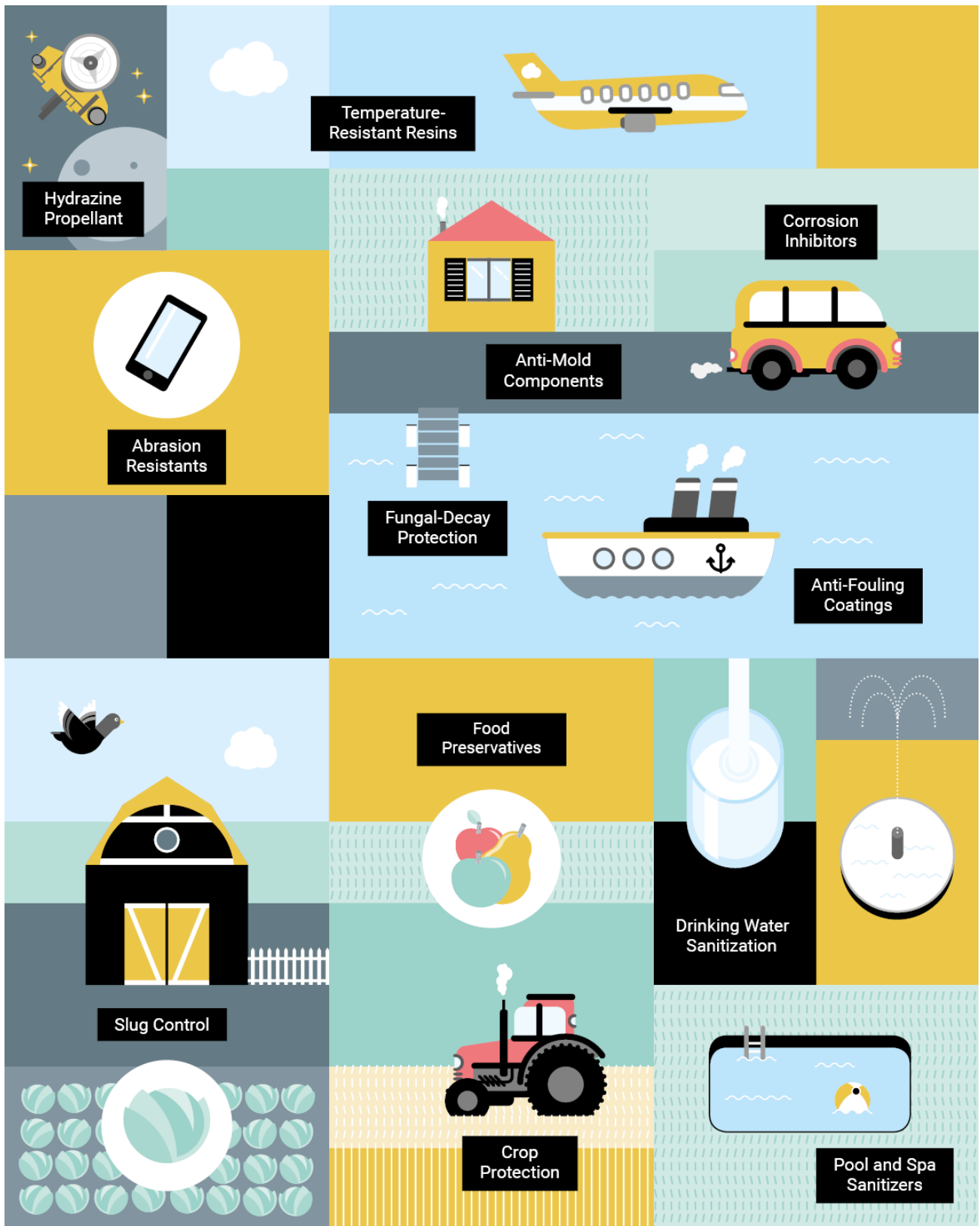
- One specific offering was the new Proxel<sup>®</sup> Spektra<sup>™</sup> Preservative, which is free from formaldehyde, as well as methylisothiazolinone (MIT). This new, innovative in-can preservative is designed to address increasing market demand for MIT-free biocide formulations.
- Also following global market trends, in this case for reduced contact times without compromising efficacy profiles, a new generation of disinfectant cleaners has been developed and launched under the NUGEN<sup>®</sup> brand. These disinfectant cleaner concentrates have been registered with the U.S. Environmental Protection Agency (EPA). Lonza's formulator customers can now access the first of the new generation of registered disinfectants with broad spectrum claims at fast contact times.

# Showing How We Create Value

Drawing upon 120 years of experience in satisfying both fundamental and emerging human needs, we at Lonza are providing solutions to the most-urgent issues being generated by our current era's growing, aging and more affluent population.

We believe our pharma, biotech and preventive healthcare expertise, combined with our specialty chemicals' know-how, will enable us to continue to satisfy global megatrend needs along the entire healthcare continuum – for curative and preventive healthcare, as well as for resources protection and preservation.





**Discover more**

- Meeting Global Megatrends
- Structuring Our Businesses
- Capitalizing on Cross-Business Synergies
- Demonstrating a Spirit of Innovation
- Investing in Our People

# Meeting Global Megatrends

Lonza's businesses are satisfying vital global needs that often span the intersecting effects of four key global megatrends:

- Growing World Population
- Aging of Global Populations
- Rapid Growth of Megacities
- Growth of Middle Classes in BRIC and VISTA Countries

BRIC countries are Brazil, Russia, India and China. VISTA countries are Vietnam, Indonesia, South Africa, Turkey and Argentina.



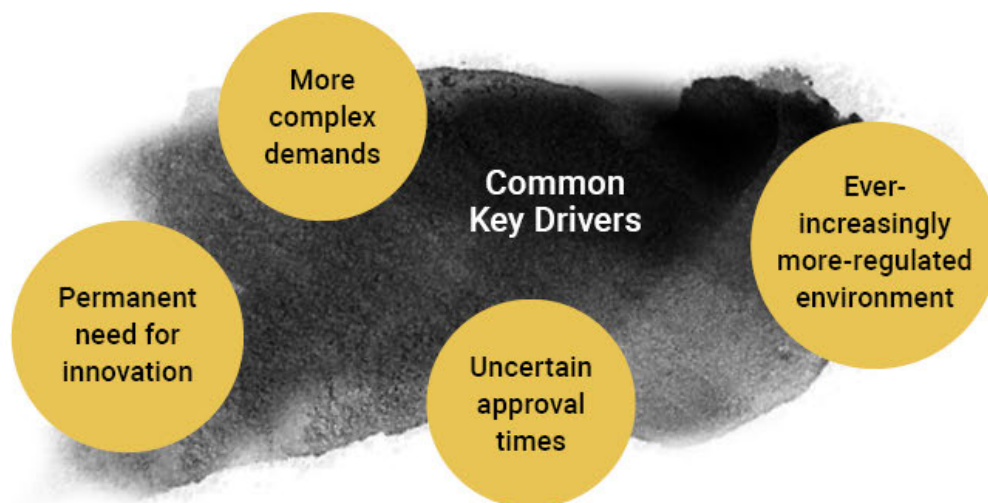
## Lonza Offerings

### Pharma & Biotech Segment<sup>1</sup>

- Custom Development
- Custom Manufacturing
- Delivery Systems
- Bioscience Solutions

### Specialty Ingredients Segment<sup>1</sup>

- Consumer Health
- Consumer & Resources Protection
- Water Care



<sup>1</sup>Lonza operates with two segments. When Capsugel was acquired on 5 July 2017, it remained a separate segment for the balance of the year. As of 1 January 2018, Capsugel is fully integrated within both Lonza segments Pharma&Biotech and Specialty Ingredients

# Addressing the Growing World Population

In a world where the population exceeds 7 billion people and will reach an estimated 10 billion by 2050, according to United Nations research, curative and preventive healthcare, as well as resources protection and preservation, have become overarching topics. Medicine has made undisputable progress within the last century, and we are benefiting from a standard of living as never before.

However, major diseases of our time – like cancer, diabetes, arthritis, thrombosis, HIV, cardiovascular diseases and many more – are challenging. A growing world population adds to the high demand for curative medicines for these diseases. At the same time, consumers want to take actions to prevent their health deteriorating and are looking for nutritional offerings, hygiene and anti-microbial solutions in their homes and surroundings.

Lonza's Agro Ingredients businesses are at the forefront of helping address a growing world population that is looking for safe, healthful and abundant foods and supplements.

Water is also an increasingly scarce and valuable resource. Whether for drinking, cooking, agricultural irrigation, beverage production, food processing or industrial applications, water needs are growing and are often in conflict. To address the needs for clean water and for water conservation, Lonza is also pursuing growth opportunities across multiple market segments in developed and emerging nations.



# Addressing Aging World Populations

As the proportion of elderly people in the world is reaching new heights, Lonza's know-how and technologies enable our customers to support healthy aging by fighting the growing prevalence of cancer, heart disease, diabetes and many other age-related illnesses. Heavy investment in oncology treatments continues to yield more low-dose/highly potent applications to address the needs of an aging population. With our expertise and investments in highly potent active pharmaceutical ingredients (HPAPI) capacity and the isolation capabilities we have available across all of our drug-delivery technologies, we are strongly aligned to support this global megatrend trend.

The rapid growth of elderly populations in the West and in Asian nations like China and Japan also is driving ever-rising demand for healthful foods and nutritional supplements, anti-aging cosmetics and other personal-care products. Our Nutrition business's strategy of providing "Active Ingredients for Living Actively™" is benefiting from our expanded nutritional portfolio in areas of muscle health, healthy weight maintenance, mobility (e.g. joint health), and support for a healthy immune system and digestion. Lonza's Personal Care business is dedicated to making everyone – including the elderly who proclaim 70 to be the new 50 – look and feel their best.

# Addressing the Rapid Growth of Megacities

Movement of populations from rural areas to megacities is generating a need for many Lonza products and services, including the use of nutritional supplements to support good health and an active lifestyle.

Growing populations within megacities are triggering needs for simple yet effective hygiene products to combat a broad range of pathogens, including particular bacteria and viruses that are often present in healthcare facilities. Around the globe our sanitizers and disinfectants are used in hospitals and other medical settings, industrial cleanrooms, homes, restaurants and institutional food-preparation facilities, schools, offices, gyms and cruise ships.

We are also innovative leaders in addressing the sustainability of an ever-more-populated earth. Our Coatings and Composites products, for example, help conserve energy by making aircraft, automobiles and satellites lighter and stronger, by reducing fouling on ocean-going ships to improve fuel efficiencies and reduce maintenance costs, and by improving yields in the production of shale, oil and gas.

Wood is one of the world's most vital, renewable, natural resources that can support the growth of megacities. Our technologies enable the use of wood products for critical construction and infrastructure needs throughout the world. We offer fire-protection and mold-control technologies for the treatment of wood materials used in commercial construction, including nursing/retirement homes, high-rise apartments and condominiums, schools, hospitals, etc. Also we deliver durable and reliable preservative treatments that protect wood used in the installation and expansion of railroads and utility lines.

In a growing number of cities worldwide, engineered wood is being used in high-density construction joints, joists, timbers and beams in addition to steel and concrete construction. We at Lonza have pioneered treatments that add a preservative and water-repellent property to our customers' engineered timbers, as well as products that combine fungicides and insecticides to protect this wood from insects and decay.

The threat of fire in densely developed cities helps explain the growing use of our fire-retardant treatments for wood used in schools, apartment complexes, homes, train stations, hospitals and other areas.

In crowded urban areas such as megacities, green-thinking municipalities and industries are conserving precious water resources by treating and recycling wastewater so that it can be used for other purposes. Lonza provides sanitizers and organic coagulants that treat the water and reduce the amount of sludge, which in turn means less waste disposal.

# Addressing the Growth of Middle Classes in BRIC and VISTA Countries

The growing middle classes in BRIC and VISTA countries are generating increasing demand for medication, healthy food and nutrition, hygiene, personal care, and efficient yet sustainable solutions for housing and living – all supplied by Lonza.

With modern facilities in Singapore and China, Lonza's Pharma&Biotech segment is capitalizing on rising demand in Asia Pacific and elsewhere for medicines and biotech therapies. A major objective of governments and industry in emerging countries is to provide their sizeable populations with affordable treatments.

Rising demand for nutritional supplements and personal-care products also can be seen in BRIC and VISTA countries. Brazil's youthful population, for example, is eager for healthful nutritional supplements; so it was rewarding that our Consumer Health and Nutrition business won a trade show innovation award there for a formula that contains both Lonza's Carnipure<sup>®</sup> L-Carnitine and caffeine in a tailored Capsugel dosage form.

Growth in these emerging middle classes is creating needs for improved hygienic standards and convenience – needs that can, for example, be met by such products as Lonza's fast-acting, broad-spectrum disinfecting wipes. Approved for healthcare settings, food-handling facilities and homes, these handy wipes are engaged in front-line battles against a broad spectrum of harmful viruses and bacteria, including the often difficult-to-address sources of hospital-acquired infections.

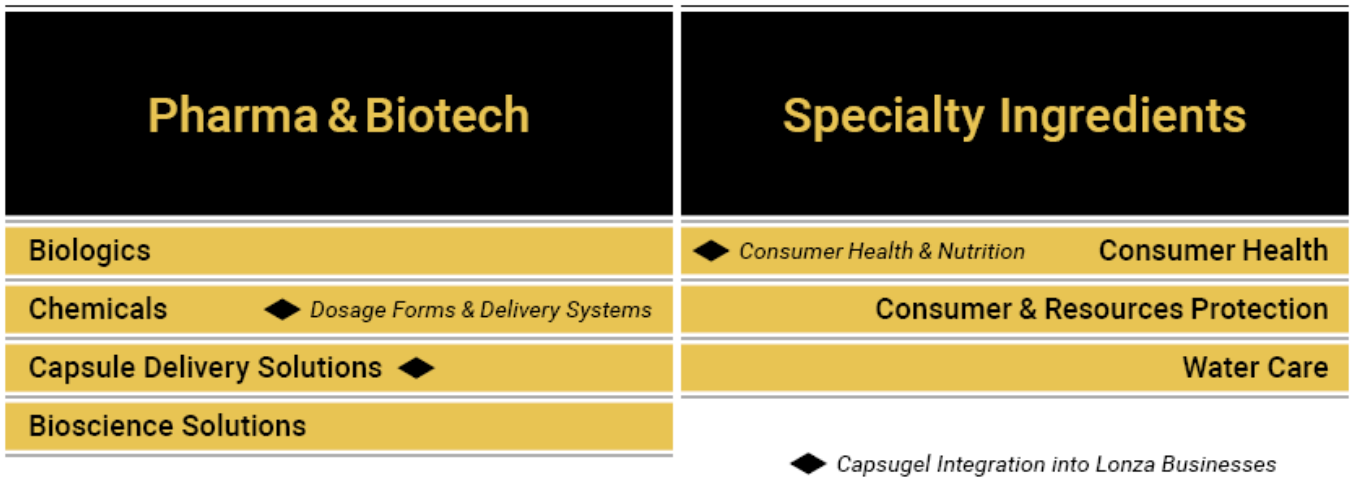
Many of the BRIC and VISTA nations are in hot, humid areas of the planet. This fact underscores the value of our Coatings and Composites business, which helps customers fight mold that contributes to the so-called "sick-building syndrome" by providing protective biocides and fungicides for paints, wallboard, ceiling tiles, adhesives and other building products.

# Structuring Our Businesses

In the first half of 2017, Lonza operated with two segments - **Pharma&Biotech** and **Specialty Ingredients**. When Capsugel was acquired on 5 July 2017, it remained a separate segment for the balance of the year. We adjusted our segments at the end of the year following the acquisition of Capsugel. From 1 January 2018, Capsugel has been fully integrated into Lonza's Pharma&Biotech and Specialty Ingredients segments.

## Aligning Segments for Growth

Lonza internal organizational structure as of 1 January 2018



To optimize growth prospects in Lonza's segments, Capsugel's Biopharmaceuticals business has been integrated into Lonza Pharma&Biotech while Capsugel's Consumer Health and Nutrition business joined Specialty Ingredients.

As of 1 January 2018, the Pharma&Biotech segment is operating with a Chemical Division and a Biologics Division, as well as the existing Bioscience Solutions Business Unit and a new Capsule Delivery Solutions Business Unit. The latter business unit will cover the capsules business for pharma markets. Capsugel's dosage forms and development services have been integrated in the newly formed Dosage Forms and Delivery Systems (DFDS) Business Unit within the Chemical Division.

Specialty Ingredients began operating on 1 January 2018 in three distinct units: a Consumer Health division, a Consumer & Resources Protection division and a Water Care business unit.

The former Consumer Health and Nutrition business of Capsugel has been integrated into the existing Consumer Health and Nutrition business of Lonza's Specialty Ingredients segment to create the new Consumer Health and Nutrition (CHN) business unit. Together with the Consumer Product Ingredients business unit, they formed the new Consumer Health division.

Coatings and Composites and Agro Ingredients are continuing to operate in their current structures under the new umbrella of a Consumer & Resources Protection division. A project already began in 2017 to create a distinctive identity and strategic pathway for these markets and value chains that we serve beyond the healthcare continuum.

# Capitalizing on Cross-Business Synergies

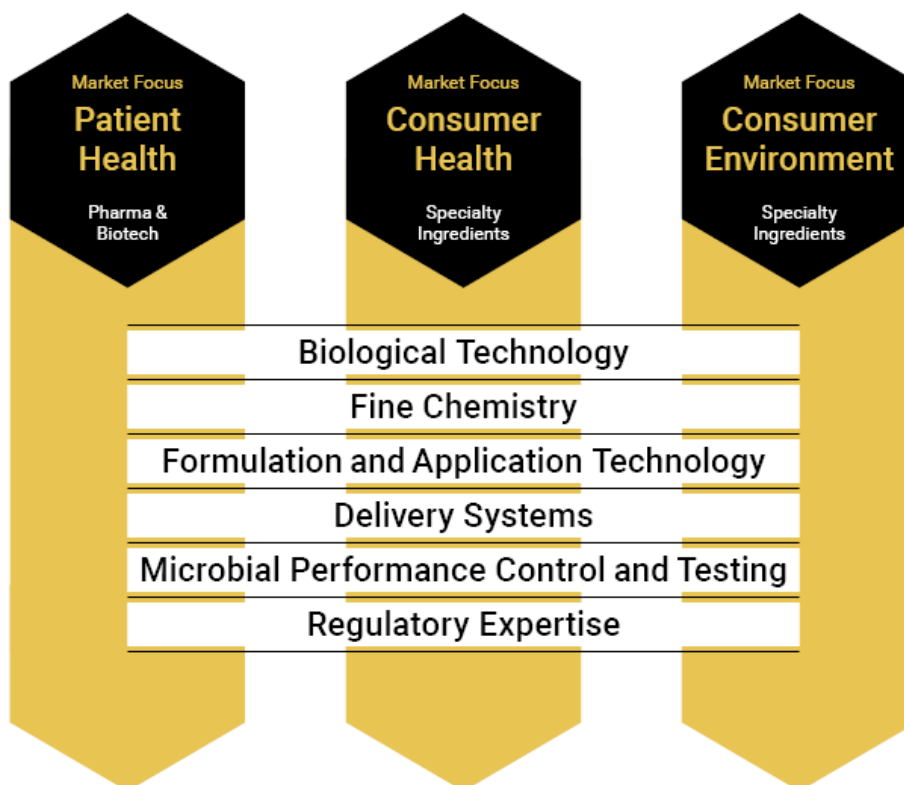
Lonza is thriving today and will gain even more competitive advantages going forward because we excel at transferring knowledge, experience, technology and best-in-class practices across our businesses.

The quest to capitalize on cross-business synergies is embodied in the challenge that our CEO has issued repeatedly in recent years – “If Lonza only knew what Lonza knows!”

## Applying Knowledge Across the Businesses

We are bridging the gaps in knowledge between businesses, functions and technologies in many ways, including simple things such as using electronic laboratory notebooks that can be broadly accessed by Lonza researchers so that they can benefit from each others’ work. As another example, we have deployed a new global quality organization that will make it easier to share quality, error prevention and regulatory excellence practices across the entire company.

The value of cross-business synergies is vividly apparent in two vital goals of the Capsugel integration: to generate CHF 100 million in additional, synergistic sales per year by 2022 and CHF 30 million in operational and CHF 15 million in tax savings by 2020. We are already well on track toward achieving those goals.



### Discover more examples

- Exploiting Capsugel’s Innovative Dosage Forms
- Opening a Portal to Sales Across Pharma&Biotech and Consumer Health Businesses
- Offering Biocide Alternatives to Banned Disinfectants and Preservatives

# Exploiting Capsugel's Innovative Dosage Forms

Scientists are sharing expertise to apply Capsugel's leading capsule and delivery technologies to Lonza ingredients for both the pharma and the consumer health and nutrition markets. At a major trade show in 2017 in Las Vegas, NV (USA), for example, customers were introduced to 10 new consumer health and nutrition products that feature Lonza ingredients in tailored Capsugel dosage forms. Among others these cross-business offerings included Lonza's Carnipure<sup>®</sup> free-flowing L-Carnitine metabolism nutrient essential for energy metabolism in Capsugel's liquid-formulated DUOCAP<sup>®</sup>, Licaps<sup>®</sup>, beadlet-in-caplet and multi-particulate forms.

Lonza collaborates with consumer healthcare brand customers to drive innovation, creating new applications for existing technologies. Our Melt Spray Congeal<sup>™</sup> (MSC) technology, for instance, was developed to control the release profile of biopharmaceutical actives. Now, however, we are applying the same technology to nutritional ingredients, where we replicate the timed-release effect for ready-to-drink beverages.

Capitalizing on the demand for both clean label and healthy aging choices, Lonza-Capsugel has launched the liquid-filled Plantcaps<sup>®</sup> technology. For the first time, customers with branded products are able to deliver organic, nutritional oils to consumers in a convenient, plant-based, more-natural capsule.

Within the Pharma&Biotech segment, Capsugel's focus on oral and nasal dosage forms has nicely complemented our Drug Product Services' focus on parenterals, which involves drugs for delivery via injection or implantation. This range of delivery methods is highly complementary for all molecule types.

## Opening a Portal to Sales Across Pharma&Biotech and Consumer Health Businesses

The Pharma&Biotech businesses are collaborating to capitalize on the "portal" that the Bioscience Solutions business provides in terms of being a vital entry point to cross-business sales. Bioscience Solutions' clients for our cell culture media, for example, may also need cell therapy, or viral therapy process development and manufacturing services.

That's why businesses as diverse as Emerging Technologies and Drug Product Services and functions like Research & Development are working with Bioscience Solutions to position Lonza's broad portfolio of products and services as "the comprehensive solution" for patient-specific, cell-based products and related needs. Depending on the customer's process, they could also utilize Bioscience Solutions' newly launched Nucleofactor<sup>®</sup> LV.

Consumer Health spearheaded a broad-based assessment to discover and pursue new uses for Lonza Bioscience Solutions' agarose technology, which has long been a critical technology for electrophoresis and protein chromatography. The applications now in development range from skin- and hair-care products through to novel delivery systems. We expect the initial products from this collaboration to launch in late 2018.

# Offering Biocide Alternatives to Banned Disinfectants and Preservatives

Lonza's pyrithione chemistry is a sterling example of a proven technology that is used in multiple business units. Our Zinc Omadine<sup>®</sup>, for example, is the world's leading active anti-dandruff ingredient offering bactericide-fungicide efficacy out of shampoos, conditioners and leave-on products. Lonza's Zinc Omadine<sup>®</sup> actives have been providing dandruff relief and improved scalp health for over 50 years.

Tailored versions of our pyrithione chemistry not only protect shower curtains and bath mats from mold and mildew but also are a key active ingredient in marine antifouling paints to deter the growth of barnacles, slime and other foulants on ships' hulls and on aquaculture fishing nets.

We also blend pyrithiones along with other actives into our Proxel<sup>®</sup> family of products that help preserve and protect architectural paints and coatings. These solutions protect the painted or treated surfaces from black mold, mildew and other pathogens that are often cited as causes of "sick-building syndrome," which includes respiratory ailments and other illnesses suffered by homeowners, students, nursing home patients, etc. Our compounds also protect the in-can paint or coating from bacteria and thereby extend the product's shelf- and service-life.

Biocides such as methylisothiazolinone (MIT) and triclosan are increasingly being banned or severely restricted by health regulatory agencies. Our products, which are widely registered worldwide, are serving as the preferred alternatives to these biocides. In fact, Lonza has become a leading supplier of triclosan-free antibacterial hand-wash technologies in North America.

# Demonstrating a Spirit of Innovation



At Lonza we understand that innovation is the lifeblood of our businesses and one of the reasons why customers are attracted to us.

Our innovative spirit is alive all throughout Lonza. We celebrate and reward employees and teams who excel at innovation, whether these efforts involve new product development, operational excellence breakthroughs or error prevention tools and methods.

In 2017 we also made innovation more accessible and broadened the reach to all employees through a new "Just Imagine" campaign to commemorate our 120<sup>th</sup> anniversary. It challenged employees to submit innovative ideas that might become the latest breakthrough or achievement as part of the next 120 years of our journey.

## **Further information on**

- [Our Approach to Innovation](#)
- [Pharma&Biotech Innovations](#)
- [Specialty Ingredients Innovations](#)



# Our Approach to Innovation

We recognize that keeping our pipelines full with innovative products and services that meet customers' emerging and unmet needs requires a disciplined innovation project management (IPM) approach. As part of this process, we begin with a vigorous evaluation of innovation projects through an integrated approach that involves business and marketing leaders, technology reviews and a financial overview to determine whether the project is worthy of investment.

The first principle of our IPM philosophy is that the project is customer focused and satisfies must-have needs. And to ensure that the project remains on target, our approach requires frequent contacts with customers, other marketplace experts and our own R&D experts so that we can fine-tune the project to respond to any new customer concerns or ideas.

Once innovation projects are selected for support, dedicated cross-functional teams work to help with the execution of the projects, to track their progress against critical milestones, and to otherwise manage and optimize the innovation portfolio to deliver the expected results and strategic goals. This vital teamwork is overseen on a daily basis by our Go-to-Market Excellence IPM Steering Committee, which includes key business portfolio managers and process owners, as well as support services such as R&D and IT experts.

## **See examples of innovations in 2017**

- [Pharma&Biotech Innovations](#)
- [Specialty Ingredients Innovations](#)

# Pharma&Biotech Innovations

## Innovating Breakthrough Therapies

Lonza Pharma&Biotech's Research and Development function is one of the key pillars to position the segment as a partner of choice for the pharma and biotech industries. Our innovative spirit is captured in the new brand description of Lonza Pharma&Biotech – Delivering the Medicines of Tomorrow, Today®.

Throughout 2017 we applied our inventive mindset to address the increasing number of medicines that are obtaining breakthrough-therapy designation and other accelerated-approval pathways. Due to the fast-track timeline, these molecules require innovative regulatory, development and project-planning solutions. The experience needed to deliver these solutions is available from only a few custom development and manufacturing organizations (CDMOs) in the world, and Lonza is one of them.

Lonza's Custom Development business is currently working on several products that have breakthrough-therapy designation across multiple technologies. In large-molecule medicines, we have supported 45 percent of breakthrough-therapy designation launches. Also in the realm of small molecules, we have supported 36 percent of breakthrough-therapy designation medicines. We continually focus on refining our existing tools and developing new tools at each stage of development.

These advances give customers impressive predictive models based on our vast experience to aid technology selection, which accelerates the transition to first-in-human trials and to market. Our offerings have evolved so that we can now provide an integrated approach from active pharmaceutical ingredient (API) to finished form and from point of concept to commercialization, which results in a significant reduction in the complexity of drug programs.

## Innovating to Increase Potency and Efficacy

The heavy investment in oncology treatments continues to yield more low-dose/highly potent applications. With our expertise and investments in capacity for highly potent active pharmaceutical ingredients (HPAPI), as well as the isolation capabilities we have available across all of our drug delivery technologies, we are strongly aligned to support this trend. In our collaboration with Clovis, we are moving toward real-time release testing of APIs, a first in the CMO pharmaceutical industry, which requires close collaboration with customers and with regulators.

# Innovating Nucleofection Services

Lonza is one of the world's leading providers of advanced nucleofection services and systems that are being used to help develop cures for diseases at the molecular level by using the breakthrough gene-editing technologies CRISPR/Cas9, TALENs and ZFNs. Nucleofection is a premiere transfection technology for the non-viral introduction of DNA and other substrates into primary cells and cell lines, including clinically relevant cells like human T-cells.

Used in combination with nucleofection, these innovative gene-editing technologies can generate induced pluripotent stem cells (iPSCs), which have the ability to self-renew and generate any cell type in the human body for use in regenerative medicine, disease modeling and drug development.

# Innovating Autologous Technologies

Innovation in the field of cell and gene therapies is transforming the way that patients with cancers and genetic diseases are treated – or better yet – cured. At the forefront of this revolution are autologous therapies, in which cells from a specific patient are extracted, processed *ex vivo*, and then returned to the patient as therapeutic medicines. Given the small-batch, patient-specific nature of this approach, large-scale production with its cost efficiencies do not apply.

For that reason it is critical for Lonza to innovate ways in which these therapeutic cures can be supplied. That's where the Cocoon™ technology, currently under development in collaboration with Octane Biotech, comes in. It is based on an automated cGMP-in-a-box concept for autologous cell- and gene-therapy manufacturing. The goal is to provide a scalable and cost-efficient solution to current autologous cell- and gene-therapy manufacturing bottlenecks.

Lonza's breadth of services across the entire biologic product's lifecycle is based on innovation – from cell-line construction, process development, clinical phase manufacturing and formulation services to full commercial production.

For more information and continuous updates, visit our [Lonza Pharma&Biotech website](#).

# Specialty Ingredients Innovations

Lonza's Research and Technology team in Specialty Ingredients focuses on innovation in response to and in advance of changes in the marketplace.

## Innovating in Consumer Health and Nutrition

In all key aspects, the acquisition of Capsugel in 2017 represented a major step forward for Specialty Ingredients businesses in terms of our ability to offer our customers innovative products and services. With Capsugel we can now provide integrated product development to clients from active ingredients all the way through to finished dosage forms.

Capsugel is a real innovative powerhouse with proven engineering and scientific expertise. For example, in 2017 Lonza capitalized on the growing consumer desire for safe, natural products by launching liquid-filled Plantcaps<sup>®</sup> technologies. For the first time ever, our customers are able to deliver organic, nutritional oils and other healthful ingredients to consumers in a convenient plant-based, more-natural capsule.

Similarly, our DUOCAP<sup>®</sup> capsules improve the stability of nutritional ingredients like probiotics that are at the center of a digestive-wellness revolution. And our Melt Spray Congeal<sup>™</sup> (MSC) technology, which was developed to control the release profile of biopharmaceutical actives, is now being applied to nutritional ingredients so that customers can replicate the timed-release effect for ready-to-drink beverages.

In 2017 Lonza's Consumer Health and Nutrition business enjoyed rapidly growing sales of our innovative, breakthrough joint-mobility product – our proprietary UC-II<sup>®</sup> undenatured type II collagen. This nutritional ingredient, available in a small daily pill, has been clinically proven to benefit consumers by improving joint mobility. It is a go-to ingredient for leading brands, with dozens of consumer product launches throughout the world.

## Innovating in Personal Care and Hygiene

Because of our innovative chemistry and biotechnology, Lonza is able to offer customers in the personal care, cosmetics, hygiene, paints, coatings and related industries a wide range of safe, preferred alternatives to prior microbial-control ingredients.

For example, hygiene customers are frequently asking for more sustainable, "green" disinfectants and preservatives. With quat-based and other widely registered and approved disinfectants, Lonza's Hygiene business has become a leading supplier of triclosan-free antibacterial hand-wash technologies in North America. We are addressing this desire with new product development efforts through biotechnology-based platforms and readily biodegradable microbial-control solutions.

# Innovating in Coatings and Composites

In 2017 our Coatings and Composites business launched innovative patented products to replace more-hazardous alternatives in the paint and the coatings and leather markets. Our new Proxel<sup>®</sup> Spektra<sup>™</sup> product, for instance, has no methylisothiazolinone (MIT) but offers broad-spectrum effectiveness against bacteria, fungi and other contaminants.

Coatings and Composites continues to innovate with new developments expected in the fields of architectural coatings, marine anti-fouling coatings, composites and others. We also are offering innovative business models to bring value to our customers through unique service offerings and formulation expertise.

## Offering Revolutionary Treatments for Commercial Pools

During the third quarter of 2017, our Water Care business launched a revolutionary new pool-sanitization system that challenges the current status quo in the hotel, motel, apartment and condominium (HMAC) market segment.

The new system will first be launched under the CCH Endurance<sup>®</sup> and Pulsar<sup>®</sup> Infinity brands in the United States with global roll-out expected once regulatory approvals are obtained in each region. Based on trichlorosiocyanuric acid, the innovative Lonza system has been shown to save up to six times the amount of water needed and provides much higher levels of cryptosporidium control, which is the leading cause of gastrointestinal illness in public recreational waters.

For more information and updates, visit our Lonza Specialty Ingredients website.

# Investing in Our People



Our Human Resources (HR) strategy consists of two simple – yet challenging – goals. First, we aim to support all Lonza colleagues in their personal and professional growth. In addition, we want to attract the best talent globally that fits our corporate culture, values and objectives.

We approached 2017 with a focus on several new initiatives to ensure Lonza is "The Place to Go, Stay and Grow." At the same time, we continued to support programs and projects that have worked successfully in the past.

## **Further information is available online**

- [Go](#)
- [Stay](#)
- [Grow](#)

# Go

## Developing an Employee Value Proposition

As part of a broad Employee Value Proposition (EVP) project, Lonza's HR professionals have been capturing and sharing the eagerness and pride that employees feel about their work with Lonza. The EVP's elements are built from interviews and focus groups with employees and leaders, as well as from benchmark assessments of our key talent competitors and target candidate pools. Following this thorough analysis, HR launched a series of activities to enhance Lonza's employer brand.

One Lonza branding outreach campaign, for example, included the release of a film celebrating 120 years of Lonza – “Our Story by Our People.” We are getting further promotional mileage out of the film by featuring snippets of employees who are telling stories about what Lonza means to them on social media platforms like Facebook and LinkedIn.



Lonza needs to establish relationships with prospective employees in ever-more creative ways – and especially in the online and virtual realms where new generations “live.” To do so effectively, we are also using social media sites aimed at prospective applicants to feature impressive stories about Lonza breakthroughs in medicine and health and about employees’ pride in working for Lonza.

Visit us on our social media sites:

- [LinkedIn](#)
- [Facebook](#)
- [Twitter](#)
- [YouTube](#)

# Recruiting the Best and Brightest

In 2017 HR focused intently on implementing a multifaceted new recruitment delivery model. We have built state-of-the-art platforms to attract, assess and engage the talent we need to deliver against our growth agenda. This new recruiting model has been implemented at nearly all Lonza legacy sites and will be extended to Capsugel businesses and locations in 2018.

In addition, HR is drawing on innovative technologies to meet our personnel growth goals while also investing heavily in the employer brand of Lonza, including bolstering our presence at career fairs and trade shows.

# Supporting a Diverse Global Workforce

Reflecting the global breadth of Lonza's businesses, HR leaders and business partners have been creating a best-in-class approach to managing and serving Lonza's growing expatriate population. We are providing a more-integrated approach for both domestic relocation and global mobility and offering a wide range of services, technology options and practices.

In order to broaden the diversity of our Swiss workforce, in 2017 Lonza joined the [Advance Women](#) network of approximately 60 companies, a group that aims to actively increase the share of women in leading positions in Swiss firms. We also continue to take part in [UNITECH International](#), a non-profit network of leading European technical universities and multi-national enterprises that connects Lonza with young engineers who will be tomorrow's technology leaders.



# Stay

## Maximizing & Aligning Performance with MAP

Our new performance management process, Maximizing & Aligning Performance (MAP), facilitates quarterly meetings for managers and employees to discuss an employee's goals and aspirations and to assess progress on personal or departmental projects. By having more frequent and informal "Performance Check-Ins," we take the stress out of the typical annual performance conversation and ensure employees are set up for success throughout the year.

## Launching Initiatives for a Smooth Capsugel Integration

One reason that Lonza was attracted to Capsugel was both companies' have a culture that celebrates and rewards high-performing teams and individuals. In fact, one of the themes of the internal launch of our acquisition of Capsugel was "Bringing Together High-Performing Teams."

Integration processes often generate challenges. Colleagues from HR, Talent & Organization Development and the business integration teams continue to deploy a portfolio of tools to address growing change management needs. These resources can be applied to integrating Capsugel and other smaller companies we acquire, as well as to managing the fast-paced changes that we are facing throughout the company. We are well positioned for the integration of all our new employees into Lonza.

In 2017 HR formed a Total Rewards team that integrated Compensation and Benefits teams across Lonza and Capsugel. That new dedicated team has been working to strengthen our ability to offer competitive, market-based total rewards by evaluating the terms and conditions of employment globally. In that way HR can better understand the trends and developments in key markets, as well as the skills that will support the business more effectively. On a holistic level, HR can ensure that the right policies, compensation, incentives, benefits and programs are in place and can identify potential areas for improvement, harmonization and standardization.

# Grow

## Developing Along a Career Path

Employees have the opportunity to develop through site-based, centrally organized learning programs. We introduced several online interactive tools for Lonza employees, including "Pathfinder – Planning Your Career at Lonza," which provides proactive and personal career planning and development.

In addition, we rolled out "Harvard ManageMentor," an online micro-learning platform for targeted leaders, managers and employees. This portfolio of curated videos, worksheets and tools align with Lonza's core competencies to provide just-in-time learning. The Harvard ManageMentor resource also offers structured certificate programs in 18 topic areas. Employees who complete the entire course receive a co-branded "Lonza-Harvard ManageMentor" certificate. Leaders can also use the content to drive change, execute strategy or motivate their teams.

## Building Stronger Leaders and High-Performing Teams

Building high-performing teams is at the heart of our Culture and People Strategy. Approximately 100 leaders have focused on leading from the "inside out" through the "Self-Managing Leadership" journeys we offered for key executives and their teams. We have certified HR professionals who can continue rolling out the program to the next levels. The next phases of building high-performing teams include team coaching and a "Leading for the Future" pilot program to help leaders build future-focused competencies.

In November more than a dozen leaders graduated from our inaugural 11-month "Step-Up Growth Project." This CEO-sponsored leadership initiative is designed to drive organic growth and develop "intra-preneurial" general managers. Acceptance into the program includes rigorous criteria for each growth project and for the leader who will drive it. In partnership with Duke Corporate Education, growth-project leaders participate in a Growth-Project Certificate in the Advanced Management Program to apply targeted business training in order to evolve business models into viable revenue-generating businesses.

Also we selected 16 participants for our third Leadership Acceleration Program. This nine-month leadership program builds leadership and business skills. Participants work in small groups to apply their learnings to real Lonza business projects; they develop defensive and offensive strategies for those projects, such as the integration of recently acquired companies and their technologies.

We also introduced our first globally aligned Manager Academy to develop people-focused managers. To ensure we continually increase employee engagement and performance, the Manager Academy aligns with MAP, our annual performance management process, and with our core competencies.

# Positioning Lonza as “The Place to Go, Stay and Grow”

Our corporate HR team, working closely with our HR business partners, will continue in 2018 to position Lonza as “The Place to Go, Stay and Grow.” With thousands of new colleagues from Capsugel and other smaller acquisitions having join us in 2017, Lonza is now approximately 14,500 employees strong. We are proud to be working together to create the world’s leading, integrated solutions provider to the healthcare continuum and other strategic markets.

# Management and Company Structure

Lonza's organizational structure enables a dedicated approach to our target markets and allows us to serve our customers' needs in the most efficient way possible. In the first half of 2017, Lonza operated with two segments - Pharma&Biotech and Specialty Ingredients. When Capsugel was acquired on 5 July 2017, it remained a separate operational segment for the balance of the year.

## Leadership



From left to right: Guido Driesen (Permanent Guest to the EC), Rodolfo Savitzky, Jürgen Steinemann, Werner Bauer, Christoph Mäder, Margot Scheltema, Marc Funk, Richard Ridinger, Rolf Soiron, Sven Abend, Barbara Richmond, Antonio Trius, Fridtjof Helemann, Patrick Aebischer, Albert M. Baehny, Jean-Daniel Gerber, Andreas Bohrer (Company Secretary)

## Segments

The core competencies that span Lonza's segments are advanced manufacturing and quality-control systems, superior regulatory expertise, in-depth market knowledge, sales, marketing and business development, as well as extensive technical customer-support and R&D capabilities.

In 2017 Lonza participated in the following segments<sup>1</sup> :

Pharma & Biotech	Specialty Ingredients
Mammalian Manufacturing	Consumer Health
Chemical and Microbial Manufacturing	Coatings and Composites
Clinical Development and Manufacturing	Agro Ingredients
Emerging Technologies	Water Care
Bioscience Solutions	

Based on the integration of Capsugel and for further aligning our segments for growth, from 1 January 2018 Lonza has been participating in a [new internal organizational structure](#).

## Pharma&Biotech<sup>2</sup>

- Mammalian Manufacturing
- Chemical and Microbial Manufacturing
- Clinical Development and Manufacturing
- Emerging Technologies
- Bioscience Solutions

## Specialty Ingredients<sup>3</sup>

- Consumer Health
- Coatings and Composites
- Agro Ingredients
- Water Care

<sup>1</sup> In the first half of 2017, Lonza operated with two segments - Pharma&Biotech and Specialty Ingredients. When Capsugel was acquired on 5 July 2017, it remained a separate segment for the balance of the year. From 1 January 2018, Capsugel has been fully integrated into Lonza's Pharma&Biotech and Specialty Ingredients segments. For more information regarding Capsugel, please see the [Financial Report](#).

<sup>2</sup> As of 1 January 2018, the Pharma&Biotech segment is operating with a Chemical Division and a Biologics Division, as well as the existing Bioscience Solutions Business Unit and a new Capsule Delivery Solutions Business Unit. The latter business unit will cover the capsules business for pharma markets. Capsugel's dosage forms and development services have been integrated in the newly formed Dosage Forms and Delivery Systems (DFDS) Business Unit within the Chemical Division.

<sup>3</sup> As of 1 January 2018, the Specialty Ingredients segment is operating in three distinctive units: a Consumer Health Division, a Consumer & Resources Protection Division and a Water Care Business Unit. The former Consumer Health & Nutrition business of Capsugel has been integrated within the existing Consumer Health & Nutrition business of Lonza's Specialty Ingredients segment, and together they have formed the new Consumer Health and Nutrition Business Unit. Together with the Consumer Product Ingredients Business Unit, they have formed the new Consumer Health Division. Coatings & Composites and Agro Ingredients are continuing to operate in their current structures under the new umbrella of a Consumer & Resources Protection Division.

## Operational Units

Operational Units are divided into four: Pharma&Biotech Operations, Research & Development, along with Specialty Ingredients Operations and Research & Technology. After closing of the Capsugel acquisition on 5 July 2017, Capsugel remained an independent operational unit within the Lonza structure to prepare functional and business integration. From 1 January 2018, Capsugel has been fully integrated within the Lonza Operational Units mentioned above.

## Corporate Functions

The Corporate Functions include Human Resources, Finance & Controlling, IT, Corporate Development, Engineering, Legal / Ethics & Compliance/ IP, Procurement, Quality, Corporate Communications and Investor Relations and Environment, Health and Safety. These internal service providers set targets, provide guidelines and enforce standards. Also, they have the clear goal of fulfilling the global governance role for all parts of the company.

## Global Business Service Organization

Our Global Business Service Organization (GBSO) supports our market activities, segments, operational units and Corporate Functions. The GBSO focuses on standardization and automation of processes to drive productivity. Service delivery is being centralized in Manchester (UK) to support EMEA markets and in San Jose (CR) for the Americas. By establishing standardized and harmonized solutions that enable the implementation of innovations at pace and scale, the GBSO is helping to facilitate Lonza's profitable growth. Key focus areas are on the critical business support functions.

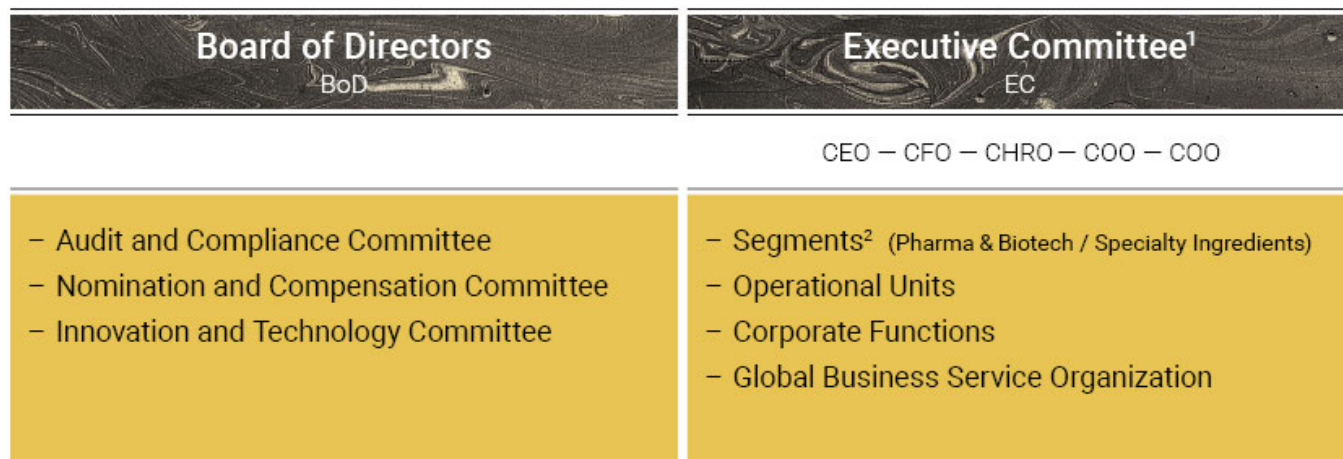
## Holding Company and Listed Companies

Lonza Group Ltd, with the registered office in Basel (CH), is the ultimate parent company of the Lonza Group. Except for Lonza Group Ltd, no company belonging to the Lonza Group is listed. Please refer to [the Shares and Participation Certificates section](#) for information on the listed shares, the stock exchanges on which Lonza Group Ltd is listed and the market capitalization.

## Principal Subsidiaries and Joint Ventures

The principal subsidiaries and joint ventures of the Lonza Group are shown in [Note 33: Principal Subsidiaries and Joint Ventures](#).

# Corporate Governance and Remuneration Policy



<sup>1</sup> As of February 2017, Fridtjof Helemann joined the Executive Committee as Chief Human Resources Officer (CHRO), extending the Executive Committee to five members. As of July 2017, Guido Driesen became a permanent guest to the Executive Committee.

<sup>2</sup> Lonza operated with two segments in the first half of 2017. When Capsugel was acquired on 5 July 2017, it remained a separate operational segment for the balance of the year. From 1 January 2018, Capsugel has been fully integrated into Lonza Pharma&Biotech and Lonza Specialty Ingredients

## Board of Directors

The Board of Directors is Lonza's supreme governance body, consisting of the Chairperson, the Vice Chairperson and the other members. All Board members are elected by the Annual General Meeting. Lonza's Board defines the strategic direction and is responsible for the ultimate management of Lonza. It monitors the business and financial performance against agreed goals and objectives, ensures that appropriate controls and systems are in place to manage risks and is committed to maintaining the highest standards of integrity and transparency in its governance of Lonza.

## Executive Committee

The Executive Committee is responsible for managing Lonza worldwide and for implementing policies and strategies as defined by the Board of Directors. It supports and coordinates the activities of the segments, operational units, corporate functions and the Global Business Service Organization. Appointed by the Board of Directors, the Executive Committee performs the duties delegated to it by the Board. Lonza's Executive Committee consists of the Chief Executive Officer, the Chief Financial Officer, the two Chief Operating Officers and the Chief Human Resources Officer<sup>3</sup>.

<sup>3</sup> As of February 2017, Fridtjof Helemann joined the Executive Committee as Chief Human Resources Officer (CHRO), extending the Executive Committee to five members. As of July 2017, Guido Driesen became a permanent guest to the Executive Committee.

# Committees

Standing Board Committees in the following areas provide corporate governance guidance and support for the Board of Directors:

## Audit and Compliance Committee

Lonza's Audit and Compliance Committee meets and consults regularly with the Executive Committee, the Lonza Audit Services (Internal Audit) and the independent auditors to review the scope and results of their work and performance, according to the Audit and Compliance Committee Charter. This committee reviews the systems of internal control and financial reporting, as well as compliance with laws and regulations.

## Nomination and Compensation Committee

The Nomination and Compensation Committee is entrusted with the review and recommendation of compensation policies and programs, as well as the compensation of the members of the Executive Committee and key executives. Furthermore, this committee evaluates potential members of the Board of Directors.

## Innovation and Technology Committee

The Innovation and Technology Committee supports innovation and technology by monitoring potential technology breakthroughs, supporting management in driving innovation projects and providing and facilitating contacts, e.g. with academia and research institutions.

For more information please see the [2017 Corporate Governance Report](#).



# Corporate Responsibility Insights

Sustainability is at the core of Lonza. That is how we conduct business and how we create value for our stakeholders. Sustainability is reflected in our long-term business approach to sustainably grow along and beyond the [healthcare continuum](#) and to contribute with our products and services to [patient's health](#), [preventive healthcare](#) and [safe environment](#) we are living in.

We approach sustainability from three perspectives: environmental, social and governance perspective.

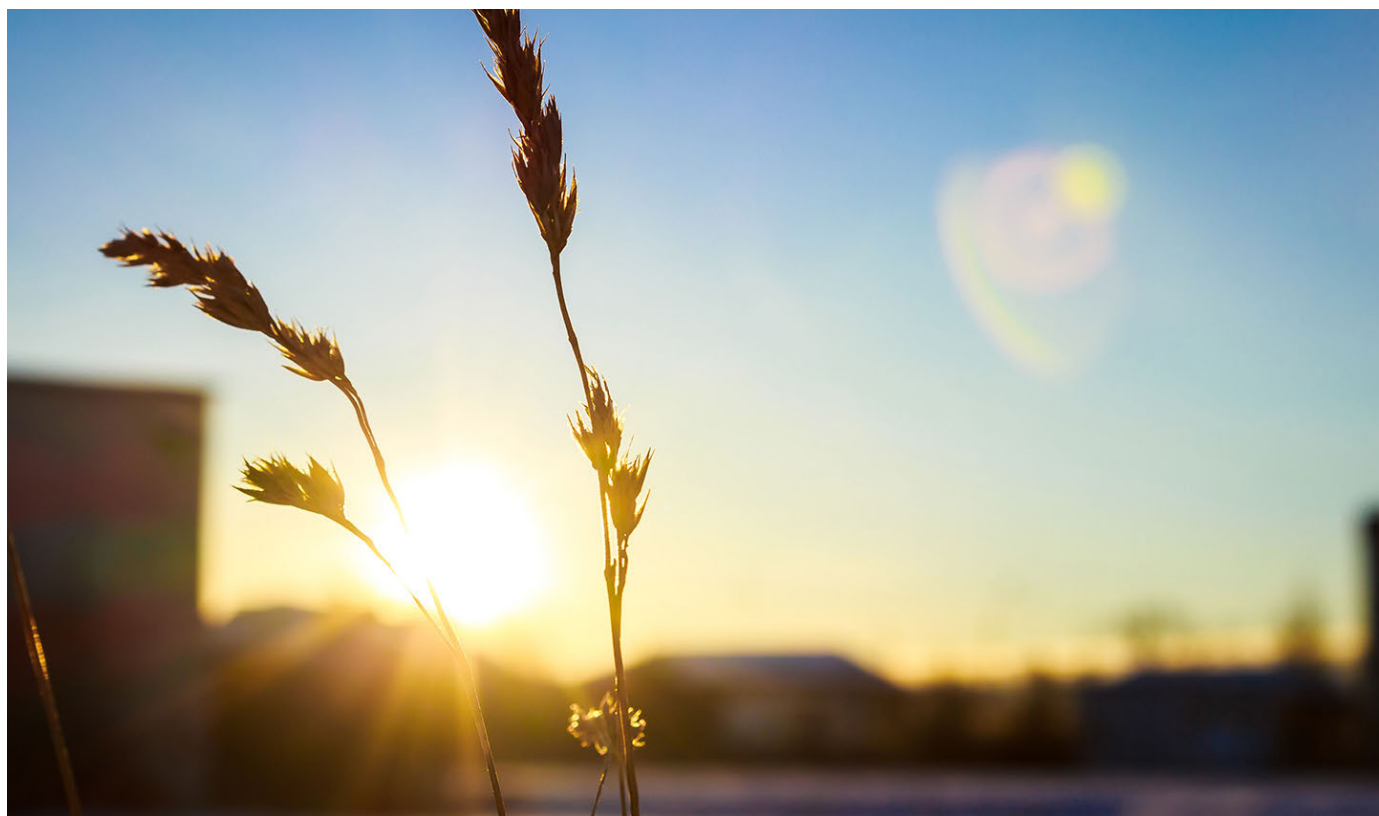
Discover more about our [Corporate Governance](#) approach

Discover more about our [Employee Relationships](#) approach

## **Discover more about our sustainability insights**

- [Investing in Environment, Health and Safety](#)
- [Creating Value Through Responsible Sourcing](#)
- [Focusing on Quality](#)
- [Investing in Our Communities](#)

# Investing in Environment, Health and Safety



## Strengthening the Present to Secure the Future

At Lonza we are committed to providing the highest quality products and services that delight our customers while also minimizing our impact on the environment, conserving energy and natural resources, and helping to improve the quality of life. As part of our broad corporate social responsibility efforts, the key elements of our approach to sustainability are the following:

- Empowering our employees within a culture of innovation
- Extracting the highest efficiency from our raw materials, including energy
- Measuring and reporting our environmental impact
- Collaborating with industry associations and other stakeholders to improve continuously

# Protecting Our Stakeholders

“Vision Zero” – the ethical principle that underscores all our efforts in the realm of the environment, health and safety (EHS) – sets the ultimate goals of achieving zero injuries, zero manufacturing process incidents, zero distribution incidents and zero environmental incidents. It is at the heart of our EHS policy, wherein Lonza commits to operations and practices that prevent harm to people and damage to the environment or property. Our principles for environment, health, safety and security set forth in the policy and resulting from the company's ethical conviction take precedence and apply throughout Lonza.

Whereas the EHS policy defines the high-level principles, our corporate EHS management system consisting of 22 detailed guidelines supports their implementation. Six of our corporate guidelines are considered critical, and they get enhanced selective attention during our internal comprehensive EHS audits. They include activities such as working from heights; protecting workers against unexpected fall risks; entering confined spaces; and preventing any exposure of employees to harmful, toxic or asphyxiating atmospheres while working in egress-restricted environments.

Our Central Process Safety department - part of the corporate EHS group – whose expertise helps keep our processes safe, made further progress in 2017 in supporting the manufacturing sites. The department is working closely with the sites in the implementation of the internal rules and standards for process safety to which all are obliged to adhere. Numerous site visits across the world with in-person exchange of advice and expert knowledge drive safe operation to excellence - a prerequisite for our "license to operate."

Our EHS group also oversees our company-wide sustainability efforts. The continuous-improvement tools and disciplines that drive improved safety and environmental quality are also applied to making sustainable use of natural resources, reducing our carbon footprint, minimizing hazardous waste and managing remediation activities responsibly, as well as otherwise improving the quality of life for our stakeholders.

EHS risk assessments serve as valuable tools in our business and operating practices and in our planning processes. We review new ventures, capital investments in production equipment and systems and other major projects not only for the business opportunities they present, but also for their environmental, health and safety impact.

# EHS Performance

The year 2017 marked further significant progress in safety as we achieved the lowest rate in Lonza history of lost-time injuries and illnesses (LTIFR) per one million hours worked of 0.54 (on a historically comparable scope, not including the Capsugel acquisition). Even when integrating Capsugel into the rate calculation, Lonza still delivered a previously unmatched rate of 0.73. Broadly speaking, Lonza has halved the incident rate for safe working from 2016. Our reporting year's performance marked a satisfying step on our Safety 2020 Campaign - whose goal is a frequency rate of LTIFR of not more than 0.6 incidents per one million hours worked, which we already surpassed in 2017.

The year 2017 closed without any material incidents or breakdowns of manufacturing operations, nor were there any severe incidents or damage inflicted on the environment in connection with the transportation of Lonza products and raw materials. Nevertheless, we routinely test and maintain our corporate emergency communication system, as well as the local site emergency response systems to prepare us to keep harmful effects to a minimum and crisis situations under control.

We are aware of the challenge we face to deliver future safety records and live up to our set goals. Therefore, we focus on continuously improving personal and behavioral safety to build on and strengthen our safety culture, which has a long and successful history in Lonza. Safety at work is a core responsibility of each and every leader and employee; and the culture to live up to "Vision Zero" is a central element in Lonza's leadership, project management and team cooperation.

Training initiatives continue to reinforce the learning effects by reviewing every safety incident – including challenging the assumptions about causes and remedies. We conduct monthly global conferences to widely share the results of safety incident reviews to foster awareness and to apply insights gained to identical or similar challenges elsewhere. And we continue to strengthen our capacity and expertise in process safety management and implementation in order to further minimize the risks inherent to the chemical processes running in our installations.

The ultimate goal of our safety culture remains to ensure that at the end of a working day, every employee returns home safely and unharmed to their families and friends. "Vision Zero" will be our guide.

The table below summarizes key environmental and resource intensities. In order to continue comparability with previous year's data, the scope excludes the mid-2017 acquisition of Capsugel.

# Intensities<sup>1</sup> of Selected Parameters

		2017	Change from 2016
Energy consumption	GJ/t	16	-11%
Industrial water	m <sup>3</sup> /t	12	-5%
CO <sub>2</sub> e (scope-1) <sup>2</sup>	kg/t	656	-19%
CO <sub>2</sub> e (scope-2) <sup>2</sup>	kg/t	389	-14%
Air impurities <sup>3</sup>	kg/t	1.1	-21%
Hazardous waste	kg/t	194	32%

<sup>1</sup> Consumption of a resource or emission of a pollutant in relation to the production of one metric ton of finished goods

<sup>2</sup> Carbon dioxide equivalents

<sup>3</sup> Air impurities comprise VOC, nitrogen oxides (NOx), sulphur dioxide (SO<sub>2</sub>) and particulate matter

## Chemicals Management

Lonza's product formulation skills, wide product-regulatory assurance and global regulatory expertise provide us distinct competitive advantages in a world of increasingly strict chemical management assurance.

One challenging program is the European Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) initiative. To ensure continuing compliance and business, Lonza is in the process of registering all covered substances imported, manufactured and marketed in the European Union. New substances are registered before reaching the 1 ton per year (tpa) threshold. Preregistered phase-in substances (mainly existing substances listed in the European Inventory of Existing Chemical Commercial Substances or EINECS) are registered in a tiered process based on volume and substance properties.

To date, Lonza has successfully registered all first-tier and second-tier chemicals. Registrations of third-tier chemicals (>1 tpa) are ongoing and are scheduled to be completed before the 31 May 2018 deadline.

The REACH regulation sets a number of new and challenging requirements with respect to the use of chemical substances. Manufacturers or importers have to demonstrate the safe use of a substance for all of its identified uses. The uses are communicated and accessible to businesses and the general public.

At Lonza a team of more than 60 regulatory experts at locations in Europe, the Americas and Asia Pacific serve and support Lonza businesses globally to ensure compliance with existing regulatory requirements and to stay abreast of future requirements. Their expertise is also a great value to customers who incorporate our regulated ingredients in their end-use applications.

# EHS Commitment

Lonza commits considerable resources to EHS activities. At the end of the reporting year, approximately 200 people worked in the core EHS field. EHS operating costs amounted to CHF 59 million in 2017, 3.4% up on the previous year. Capital expenditure on EHS was CHF 43 million, equivalent to 0.9% of sales and 11% of the Group's total investment in fixed assets.

About two thirds of the EHS capital expenditure in 2017 was absorbed by the large chemical and pharmaceutical manufacturing complex at Visp and the related infrastructure. Most prominent were the pre-investment related to the planned new Ibex<sup>®</sup> manufacturing complex, the replacement of electrofilters in the solid and liquid residual waste incineration plant to allow a continued state-of-the-art highly efficient operation, besides the revamping of a plant complex where ammonia recovery, the breakdown of non-biodegradables and wastewater extraction activities take place. An investment into a significant improvement to avoid emissions from process wastewater collection and pretreatment basins was realized and leads to a sustained reduction of odor emissions while setting an even higher standard to safeguard against potential groundwater contamination.

Numerous EHS-related capital was spent on projects at other sites in 2017, including significant warehouse safety upgrades at the French water site in Amboise, and at the biopharmaceutical activities in Porriño (ES). Further projects included safety upgrades at the U.S. site in Rockland, ME, and in Rochester, NY.

## Corporate Responsibility

Providing transparent evidence of corporate sustainability practices is part of our commitment to excellence. Most of this information is shared on our [corporate website](#); and in addition, we disclose [climate data](#) and activity assessments in the framework of the [Carbon Disclosure Project](#) for the benefit of our stakeholders and as an active participant in the [UN Global Compact foundation](#). We also participate in and respond to a variety of customer and supplier targeted sustainability assessments and surveys.

As a company that makes pharmaceuticals, personal-care products, nutritional ingredients, drinking water sanitizers and hygiene disinfectants, we are sensitive to concerns about the use of animals to test the safety of these products for human use or consumption. Whenever possible, we do our utmost to promote the use of alternatives to animal tests; but in many cases, we are required by law and regulations to conduct such tests. Such required testing is conducted by external, state-of-the-art laboratories that Lonza approves and audits.

Lonza is accredited by the [Association for Assessment and Accreditation of Laboratory Animal Care](#) because we apply high standards for the humane care and use of laboratory animals. The company is also recognized by the U.S. National Institutes of Health Office of Laboratory Animal Welfare and complies with the Public Health Service Policy on Humane Care and Use of Laboratory Animals.

Our U.S. facilities are third-party certified under the Society of Chemical Manufacturers and Affiliates (SOCMA) ChemStewards<sup>®</sup> initiative. Lonza Ltd in Switzerland is a Responsible Care<sup>®</sup> company, and our facility in Nansha (CN) is certified under both ISO 14001 and OHSAS 18001. All of our facilities adhere to the Lonza EHS management system, which is based on the ChemStewards<sup>®</sup> program and addresses all aspects of environment, health, safety and security.

# Industrial Heritage at the Swiss Manufacturing Site

In 2017 Lonza's large site in Visp (CH) made progress as planned to address mercury contamination around a wastewater discharge canal ("Grossgrundkanal"), on surrounding soil near the canal and in certain other areas where canal sediments were deposited as fill many decades ago. This industrial legacy traces back to when Lonza used large amounts of mercury as a catalyst in chemical processes, and the site discharged industrial wastewater with mercury containing effluent into the canal between 1930 and the mid-1970s.

Various parties were involved in the maintenance of the publicly owned canal by dredging and excavating sediments from the waterway. At times when neither the awareness nor the environmental legislation was on today's level, parts of the removed material were used as fill material on various land properties. Only during the 1970s did the communities and the people become aware of the full problem in connection with mercury. In 1976 Lonza commissioned our wastewater treatment plant, where mercury-containing effluent has subsequently been treated.

Since 2013 Lonza has worked closely with the communities in prefinancing all required technical investigations in residential areas and agricultural zones between Visp and Niedergesteln (CH).

While 2016 marked the demonstration of the effectiveness of the chosen and approved approach when two contaminated areas were selected and remediated in a pilot project, the year 2017 was the year of readiness for the large-scale remediation in the residential areas. Lonza finally obtained the consent of the competent cantonal and communal authorities and all concerned land owners; and first remediation activities started in November 2017.

In December 2017 Lonza, the Canton of Valais and the concerned municipalities signed an agreement about the repartition of the investigation and remediation costs. The agreement includes the commitment that private landowners of parcels to be remediated will not be held financially liable for the costs incurred. This agreement marked a breakthrough moving forward the Upper Valais mercury remediation process. During 2018 we will see a big step toward complete remediation when the activities will be in full swing.

Neither historically nor in the recent past have adverse health effects to humans or animals been linked to the mercury contamination found in the investigated region – as was confirmed in an independent epidemiological study by the University of Zurich (CH), which was conducted through 2015. The study concluded that no evidence for adverse health effects exists.

Lonza, the Canton of Valais, the municipalities and other parties involved are working hard to efficiently resolve the mercury-related industrial heritage in the perimeters of concern.

# Goals

The 2016-2020 medium-term sustainability goals, which were endorsed by Lonza's executive management in 2015, became effective with the beginning of the reporting year 2016.

These medium-term goals include a 40% reduction of the 2015 safety target of the former cycle and a 10% reduction of environmental and resource rates achieved by the end of 2015. The decision to apply relative goals (rates on sales) was made on the basis of the challenges related to the business portfolio and the asset portfolio that lie ahead.

These goals include direct (scope1) and indirect (scope2) greenhouse gas emissions (GHG), other established lead parameters for air emissions, as well as the resources-related parameters of energy and water consumption. The GHG goal 2020 has been adjusted to updated indirect CO<sub>2</sub>e scope-2 emission factors for various regional energy grids during 2017 (goal was reduced from 166 t/mn to 161 t/mn).

## Medium-Term Goals for 2020

The 2017 achievements do not include the mid-2017 acquisition of Capsugel. Medium-term goal integration will take place in 2018.

### Safety<sup>1</sup>

		Goal 2020	Achieved 2017	Status 2015
LTIFR <sup>2</sup> (frequency)	LTI/mn hrs	0.6	0.54	1.54

### Environment<sup>1</sup>

		Goal 2020 restated	Achieved 2017	Status 2015
CO <sub>2</sub> e (scope 1+2) <sup>3</sup>	t/mn CHF	161	148	178
Air impurities <sup>4</sup>	kg/mn CHF	173	152	193

### Resources<sup>1</sup>

		Goal 2020 restated	Achieved 2017	Status 2015
Energy (total)	GJ/mn CHF	2300	2250	2550
Industrial water	m <sup>3</sup> /mn CHF	1720	1680	1910

<sup>1</sup> Includes all active production and R&D sites, as well as headquarters in the referenced years. Rates are expressed as units per hours worked for Safety and as units per sales in CHF for Environment and for Resources.

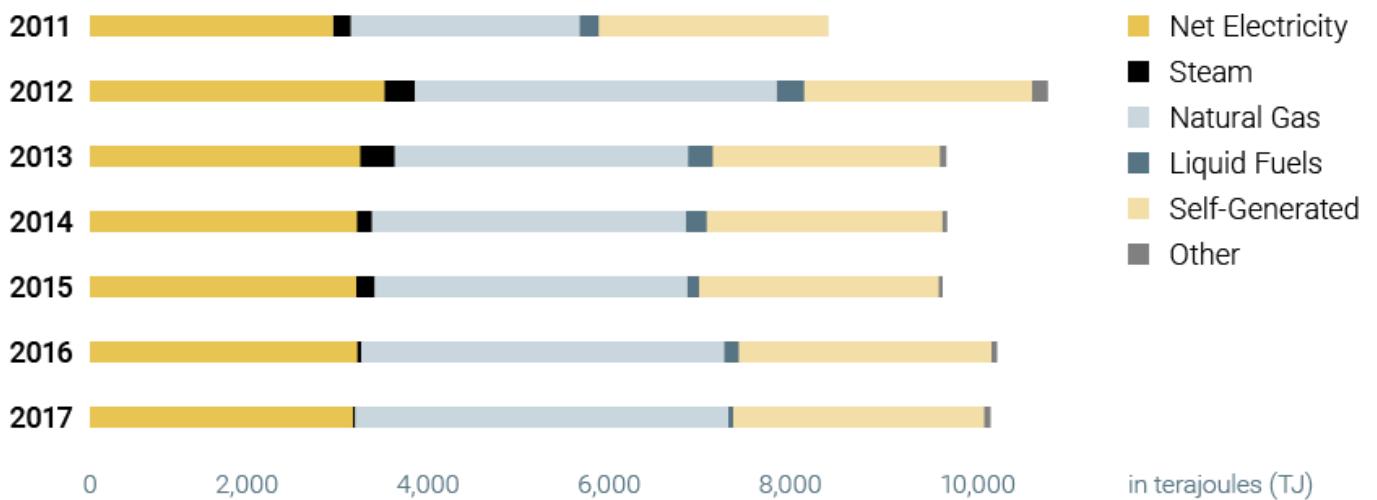
<sup>2</sup> Lost-time injury frequency rate: number of accidents per 1 million hours worked

<sup>3</sup> Carbon dioxide equivalents

<sup>4</sup> Air impurities comprise VOC, nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>) and particulate matter

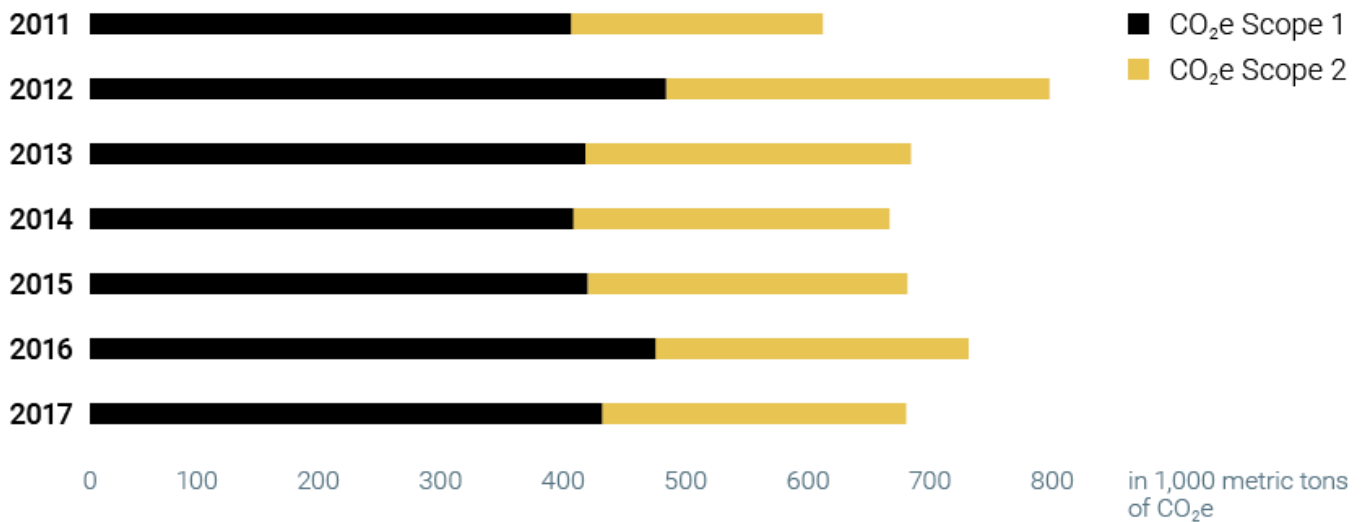


# Energy



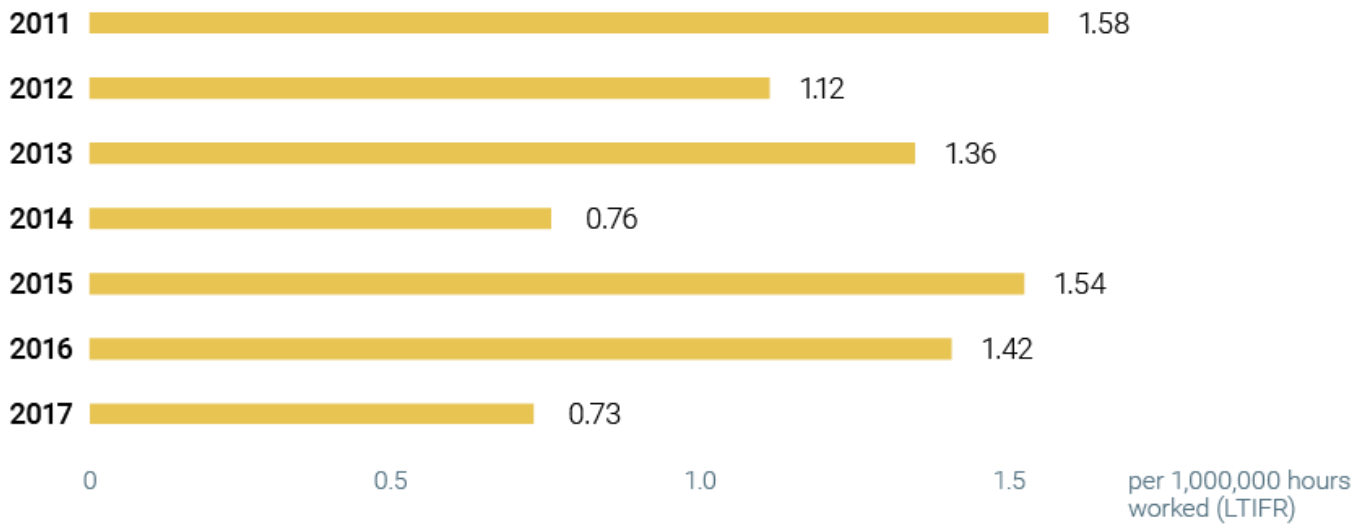
The total energy requirement in 2017 was 10,200 Terajoules (TJ) (2,850 GWh); and with 1% down on the previous year, it remained essentially unchanged. Accompanied by a favorable economic environment with a sales increase of 10.4% the reporting year 2017 resulted in a 10% year-over-year decrease in energy demand related to sales. The main energy sources used by Lonza in 2017 were natural gas (41%), electricity (29%) and self-generated energy, mainly by incineration of waste (28%). Liquid, mainly fossil-based fuels, accounted for 1% of the overall energy consumption.

# Greenhouse Gas Emissions



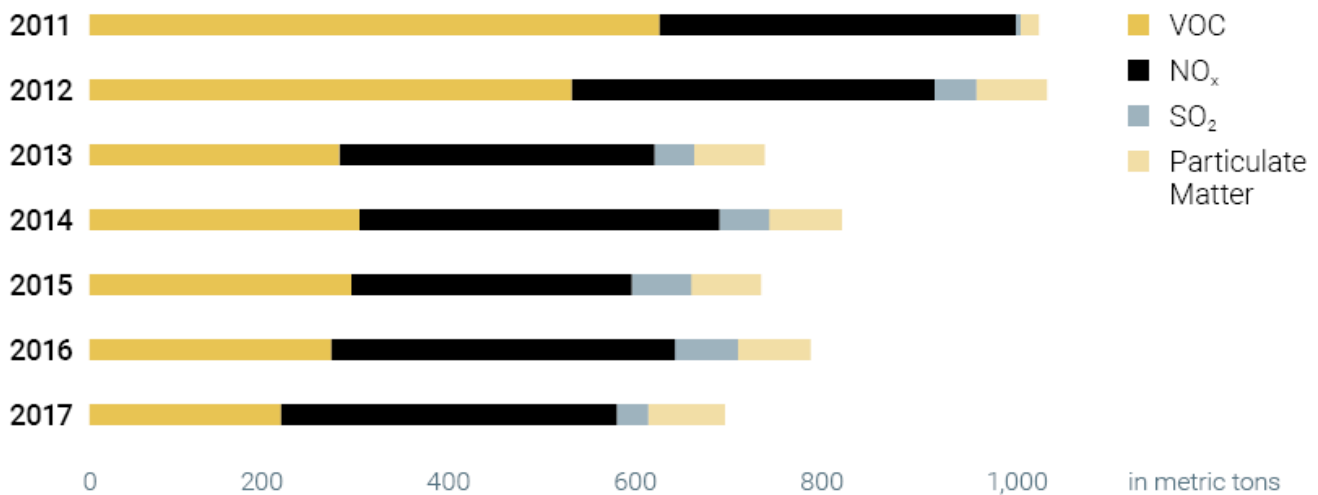
Total output of greenhouse gas (GHG) emissions in 2017 was 676,000 metric tons of carbon dioxide equivalents (CO<sub>2</sub>e), 7.2% down on the previous year (scope-1 and scope-2 reductions, as well as adjustments of electricity emission factors of national grids, contributed to the GHG overall reductions). Direct emissions (scope-1) amounted to 425,000 metric tons, while indirect emissions (scope-2) were at 252,000 metric tons. Almost half of all scope-1 CO<sub>2</sub>e (47%) emitted is generated by the thermal treatment of waste materials or by chemical reactions during normal production processes; stationary fuel use accounted for 51%. Indirect scope-2 emissions are calculated by regional specific standard emission factors from the consumption of purchased electricity or steam in the respective grid regions. They decreased by 3.4% compared with 2016.

# Occupational Accidents



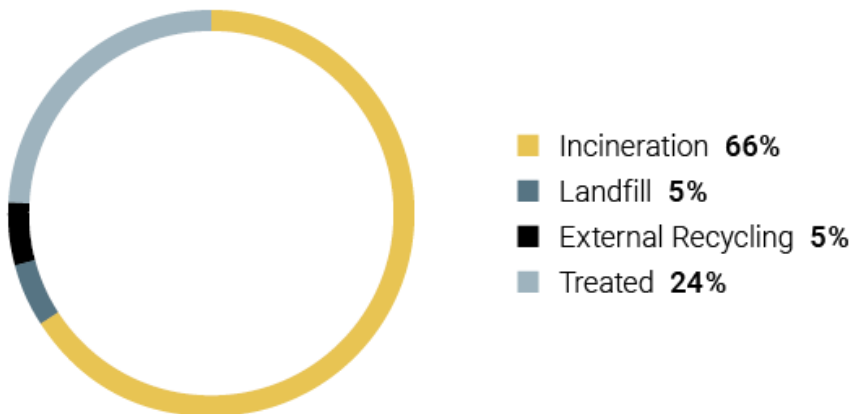
Our safety performance in 2017 demonstrates an all-time record and underlines our strong safety commitment and the effectiveness of the management controls in place. The progress from the previous two years is significant – with 0.54 (0.73 incl. Capsugel) we more than halved the rates for 2015 and 2016 and are back on track of what 2012 and 2014 indicated what is possible. We continue to intensify the global co-operation across all levels of administration and manufacturing of all segments to embed “Vision Zero” in our safety culture. With an engaged and motivated workforce and a dedicated leadership team, we want to achieve our 2020 goal of a lost-time injury rate of no more than 0.6.

# Air Impurities



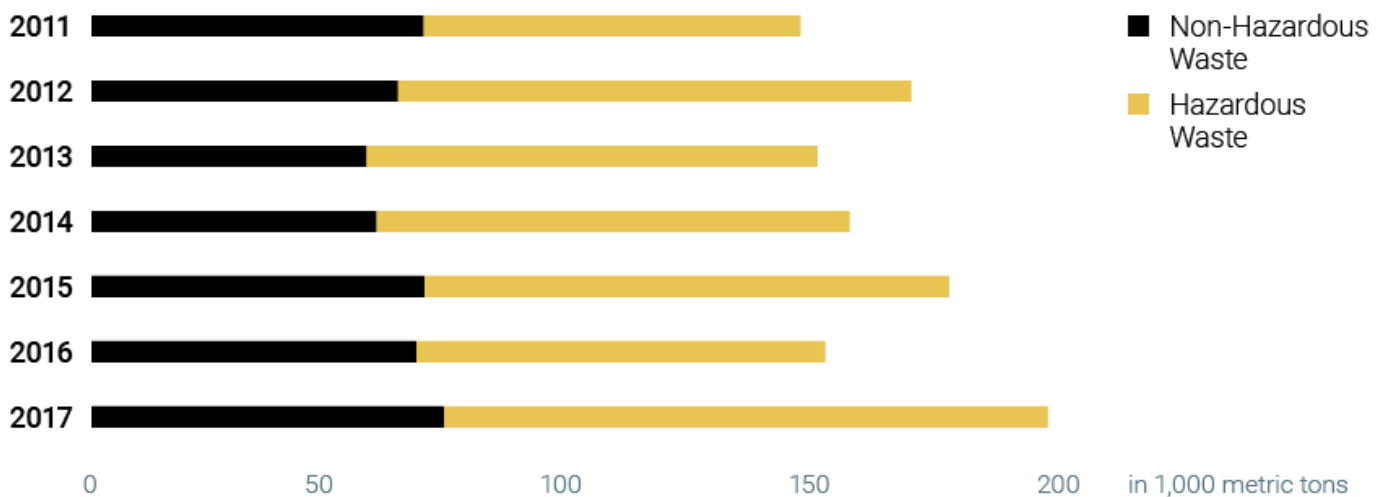
Air impurities, totaling 690 metric tons in 2017, were 12% down on the previous year. Primarily responsible for this significant decrease was emission control equipment at Visp including 74% lower halogenated VOC emissions. VOC and nitrogen oxides (NO<sub>x</sub>) were responsible for 83% of all air impurities. Technical improvements at emission points have been realized in recent years and contributed to the reductions. VOC emissions are mainly the result of solvent use in product manufacturing, cleaning and maintenance processes. Halogenated VOC made up 6% of total VOC and Lonza continues to minimize their consumption where possible.

# Final Treatment of Special Waste



In the reporting year, 95% of hazardous waste materials were incinerated, externally recycled or treated to render them non-hazardous; and 5% went to secured landfills. All companies involved in the transportation, processing and final disposal of wastes are known to Lonza. In all countries hazardous waste is handled by institutionalized manifest systems. Waste treatment is a matter of trust; the selection of the vendors is based on quality and EHS criteria, as well as on economic factors. As a matter of principle, we work only with reputable firms that comply with their applicable legal requirements.

# Waste Categories



The total quantity of waste generated by Lonza in 2017 was 199,000 metric tons, of which 126,000 metric tons consisted of special (hazardous) wastes and 73,000 metric tons of non-hazardous wastes or inert materials. More than 90% of the significant increase of around 40,000 tons compared to the previous year was incurred by remediation activities at Visp, with the materials destined for thermal treatment. At all our sites, Lonza follows a specialized waste-disposal concept dedicated to the principles of avoidance, reduction, recycling or recovery and lastly environmentally sound disposal. The categorization into special (hazardous) waste and non-hazardous waste at all sites follows the applicable local legislation.

# Creating Value Through Responsible Sourcing

Lonza's global Procurement team proved the value of our close partnerships with major suppliers worldwide and our robust supply chains in the face of some practical challenges in 2017. These hurdles included working around a railroad blockage in Germany that affected our site in Visp (CH) and responding to chemical supply chains disrupted by major hurricanes in the United States. These operational issues were resolved thanks to the teams with no material impact on the company's overall performance.

Drawing on a broad global base, the procurement teams played a vital role in cost-effectively supporting more than 50 manufacturing and R&D sites worldwide with the raw materials, services and other support they needed to excel and grow in 2017.



# Competitive external supplies

In 2017 Procurement worked closely with the businesses to increase the savings performance by roughly 30% compared with the previous year across almost all external-spend categories. These savings are vital to Lonza's competitive position and profitability.

Together with stakeholders from the different businesses, Procurement develops strategies for spend categories for a diverse range of strategic raw materials and services. The team also uses enhanced analytics and reporting of key raw-material price variances, as well as future price projections, to help our businesses make timely choices. Our risk analysis process also enables us to identify high-risk materials and take adequate mitigation actions.

In tight alignment with our business leadership and value-chain management professionals, Procurement in 2017 successfully launched a breakthrough initiative known as DIVER - **Drive and Improve Vendor Results**. This initiative is reassessing almost CHF 1 billion of Lonza's external spend to reallocate expenditures to the most beneficial suppliers and to generate other efficiencies. Further significant financial savings are expected going forward.

# Surety of external supplies

Each year the Procurement team must respond to everything from unexpected disruptions to rising costs for vital raw materials to assure reliable and affordable external supplies. Beyond this year's hurricanes and rail supply disruptions, the team successfully navigated several unexpected *force majeure* events at some major suppliers.

The Procurement team also helped our businesses cost-effectively cope with the trend of rising costs for global commodities, including basic chemicals in Europe, where deindustrialization is forcing companies like Lonza either to pay higher costs from the dwindling number of European suppliers or to seek new suppliers in Asia and the Americas. Our professionals secured favorable pricing and terms by leveraging our volume requirements, by capitalizing on close strategic partnerships with existing suppliers and by integrating new suppliers into our supply chain.

# Supporting business growth

Procurement helped facilitate Lonza's growth in serving the strategic healthcare continuum markets by directing growing demand to the right sourcing market segments, by identifying new supply sources and by scaling up existing sources. For example, the team stepped up support to Pharma&Biotech while we built a strong pipeline of growth initiatives, as well as to the newly created Consumer Health and Nutrition division that combines both Capsugel and Lonza offerings.

In 2018 Procurement will be focusing on achieving our vision of a One Purchasing Community that features greater coordination with local sites and business sourcing so that, where possible, we can centralize purchasing to drive competitiveness and strengthen supplier relationships and logistic networks.

# Responsible sourcing

Suppliers to Lonza must adhere to the requirements defined in Lonza's Supplier Code of Conduct. This code defines standards of business ethics, as well as labor, health, environmental and safety practices. We routinely conduct audits of suppliers to monitor adherence to this code. These strict ethical requirements are of utmost value when sourcing compliant materials for medicines and therapies, as well as natural and organic ingredients for consumer health and nutrition products.

Looking ahead, Procurement will continue to focus on value-added activities, strategic partnerships inside and outside Lonza, and the search for business opportunities wherever they might arise – all aimed at assuring a best-in-class procurement function.

# Quality Initiatives

## Driving a Proactive Quality Culture Through Human-Performance Management

We at Lonza are absolutely committed to our reputation as an innovative leader in quality performance within all of our offerings along and beyond the healthcare continuum. Just as in the realm of workplace safety, achieving superior quality requires constant vigilance and rigorous continuous improvement programs and processes.



In 2017 our major manufacturing sites in Portsmouth, NH (USA), Singapore (SG), Porrino (ES), Visp (CH) and Nansha (CN) and Slough (UK) successfully passed strict regulatory audits. Those audits were just 15 of the 25 successful regulatory inspections conducted at our Pharma&Biotech sites worldwide. Our Pharma&Biotech network worldwide also underwent 135 customer audits; and here, too, we have successfully addressed customer concerns and observations. And where we face quality challenges, such as at our site in Walkersville, MD (USA), we provide teams of experts to assist the site.

We recognize that human performance is a key factor for superior and sustainable quality. Indeed, many of the process-related deviations across the biopharmaceutical industry are currently attributed to human errors, which impact safety, quality and security of supply.

The Error Prevention System (EPS) is built on the backbone of our Operational Excellence program. Each is a vital part of Lonza's global quality initiative, whose aim is to engage all employees in systemic thinking and achieving excellence in all that we do throughout Pharma&Biotech businesses, sites and functions. We have a similar, quality-focused initiative in our Specialty Ingredients businesses, many of whom also face strict regulatory requirements for ingredients intended for human health, hygiene and wellness.

Our Error Prevention System, launched in 2014, engages operators and other experts to establish error-proof standard operating procedures, work instructions and batch records, as well as learning and qualification modules. It also harnesses automation where possible to simplify operations and to ensure vital equipment is operating at optimal levels.

For example, EPS and other quality initiatives have reduced deviations across all Lonza Pharma&Biotech sites worldwide from 2014 to 2017 by approximately 50% – at the same time, production output increased around 30%. Of greater importance, customers are impressed by the EPS program delivering often-dramatic reductions in manufacturing issues related to their products.

To get human performance to the next level, best practices throughout the Lonza network are embraced and leveraged as standardized processes and trainings. As an example, the Lonza Pharma&Biotech Academy governs harmonization of training curricula and makes sure that training delivery follows state-of-the-art learning methodologies in order to ensure "quality at source," which is one of Lonza's Pharma&Biotech strategic pillars.

The bottom line, however, comes through seeing tangible improvements – site to site and across the organization. Evidence shows that human performance efforts are preventing negative outcomes by powerfully engaging operators and others in proactive and preventive efforts that create a more positive working environment. The ultimate objective of these efforts is to enhance patient health and safety by manufacturing products of the highest quality for the healthcare continuum markets.



# Investing in Our Communities

## Caring About Communities Around the Globe

By cultivating relationships and contributing our knowledge, expertise, logistics and financial support, Lonza is creating sustainable value for our communities around the world. With our commitment to ethical, social and environmental responsibility and sustainability, Lonza supports events, projects and programs directly linked to Lonza's employees and sites. Our sponsoring activities focus on the following four priority giving areas:

- Social and Humanitarian
- Education and Science
- Health and Sports
- Arts and Culture



The Global Megatrends and the Environment, Health and Safety (EHS) sections of this Annual Report give further details about Lonza's efforts toward a responsible use of natural resources and our ambitions to reduce our ecological footprint.

# Our Sponsoring Approach: Linked to Our Businesses

In the communities where we operate, Lonza is committed to having a positive impact. We are neighbors, a vital source of jobs, a charitable sponsor of local civic and cultural projects, and often a significant contributor to local economies. While our financial donations are important, our employees also play a critical role by volunteering in programs and projects in our priority areas.

We want to be a reliable, long-term and active partner and to engage at the earliest possible stage of any community project we sponsor in order to optimize the use of available resources. Accordingly, we focus our resources on a small number of selected projects where our engagement can make a distinctive difference and which are linked to our businesses.

# Social and Humanitarian

## Supporting Vitamin Angels Programs

Lonza's Nutrition business supports Vitamin Angels, a global charity that helps at-risk populations in need – specifically, pregnant women, new mothers and children under five – gain access to lifesaving and life-changing vitamins and minerals. We have been a supporter of Vitamin Angels since 2005. In 2017 Lonza donated vitamin B3 compounds to help Vitamin Angels as they reached out to 300,000 expecting and new mothers in more than 50 countries.

## Refurbishing a Rural School in Jamaica

Early in the year, Lonza Water Treatment's Surface Water group partnered with their customers to renovate and improve the Woodlands Basic School in a remote, impoverished community of Montego Bay in Jamaica. This project was a part of the annual PEACH™ charitable outreach work performed jointly between Lonza and our customers.

The goals of our PEACH™ projects (People Extending a Caring Hand) are to give Lonza customers and employees the opportunity to improve the lives of others and in doing so to strengthen the ties between us.

*Before the group even arrived, local contractors, sponsored by Lonza, built an addition to the school. The addition included a new roof that enclosed a courtyard for additional classroom space. Once the preparations were complete, 31 volunteers arrived to donate their time and efforts toward an extensive makeover that included beautifying the new classroom, installing doors and windows, installing a water tank that will allow the children to have continuous access to clean water, and assembling and painting new picnic tables for the children to enjoy their tropical surroundings.*

*The volunteer work took place during the group's annual retreat, a rewards trip for the top professional applicators who use Applied Biochemists® products. This rewards program allows Lonza to connect directly with the customers using our products - the customers who treat toxin-producing algae and cyanobacteria in drinking water reservoirs or who help to eliminate the nuisance weeds that block irrigation canals. In addition to the volunteer work, the team gathered for a business meeting, featuring updates from Lonza technical experts. The group also donated school supplies to the 30 children of Woodlands Basic School. The children range in age from 2 to 6 years old.*

# Lonza's Response to Hurricane Harvey

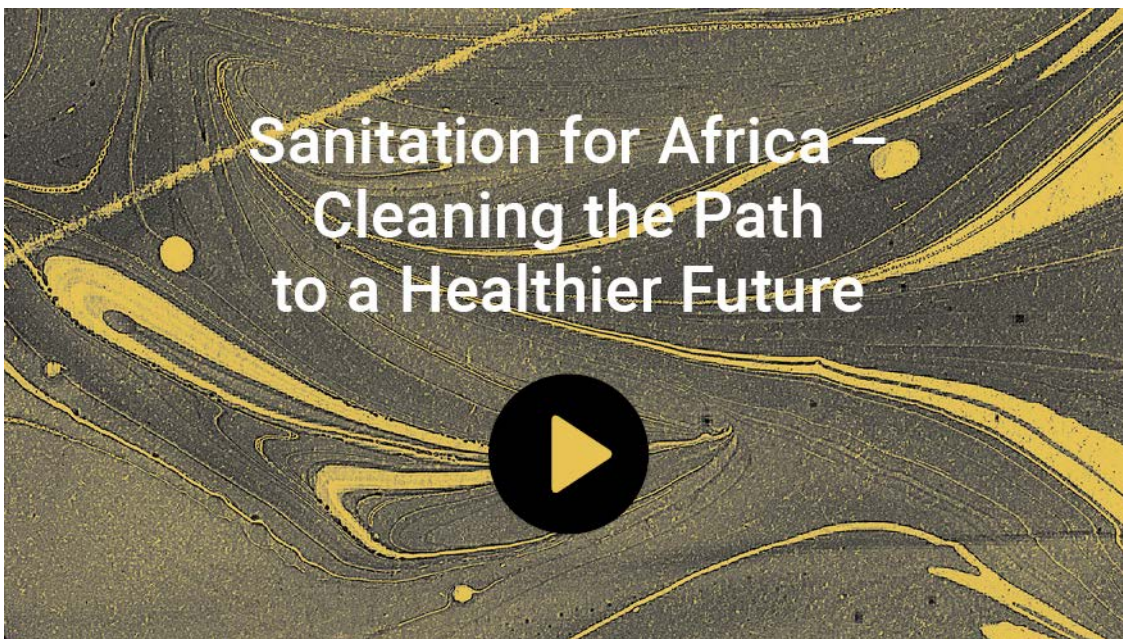
The devastating storms in the U.S. Southeast in August and September 2017 had fortunately only minimal impact on our sites in the areas of Houston, TX; Tampa, FL; and Greenwood, SC. Operations were interrupted only for a few days, we had little to no damage and, most importantly, all of our employees and their families were safe. As a concerned organization, Lonza immediately donated money for overall disaster relief; and our employees, in addition, supported many local relief activities.

## Cleaning the Path to a Healthier Future

Uganda, as one of the poorest countries in the world, is in dire need of sanitary improvements. Under a three-year project known as **Sanitation for Africa**, Lonza Water Treatment is teaming up with the non-governmental organization Clean Habitat Uganda to provide our HTH Scientific® sanitizer tablets for use in pit latrines in that African nation. Clean Habitat Uganda will distribute our sanitizing tablets to communities serving 5,000 homes.

Since the kick-off in 2015, the project has evolved and is continuously expanding its reach into the communities.

*Pit latrines, also known as outhouses or long drops, serve as household or even community toilets and are an ideal breeding ground for disease and virus-bearing mosquitoes, flies, cockroaches and other insects. One or two (depending on the pit size) of our sanitizing tablets, comprised of dry calcium hypochlorite, are placed into each latrine, where they help combat bacteria, foul odors and insect growth, which in turn helps to control diseases that can be carried by the insects.*



# Education and Science

## Partnering with Swiss Youth in Science

Another continuing project in 2017 is Lonza's partnership with Swiss Youth in Science, which began in July 2014. Founded in 1967 the foundation *Schweizer Jugend forscht* (Swiss Youth in Science) supports inquisitive and motivated children and young people with the aim of awakening joy and fascination for scientific work.

With the foundation's series of courses, children and young people become more interested in subjects such as mathematics, computer science, natural sciences and technology; and they learn about options for their future studies or professional careers. Through this intense engagement, Lonza contributes to the promotion of science and helps in the development of the next generation of scientific professionals.

## Sponsoring a Swiss Think Tank

As a corporate citizen interested in the future development of society and its interdependencies with politics and economics, Lonza has been a partner of *Avenir Suisse*, an independent think tank for economic and social issues, for many years. *Avenir Suisse* aims to demonstrate a need for political action and to help solve problems by means of initiatives and proposals. To this end it performs analyses based on scientific principles, organizes conferences and participates in public debates. Founded in 1999 it is supported by more than 100 companies and private individuals from all economic branches and regions of Switzerland.

# Health and Sports

## Getting Fit While Having Fun

Building on the success of the first realization of the project “[Lonza Makes You Fit](#)” in 2016, Visp (CH) and Basel (CH) committed to the next round of the program to motivate employees to engage in sportive activities.

Besides the Gornergrat Zermatt Marathon, the project extended also to cycling with the “Bärgüf”-event, where employees also supported the cancer foundation “Bärgüf” every time they reached the top of the mountain.

Lonza contributed the first CHF 250 for each Lonza cyclist with the goal to collect at least CHF 1,000 by each participant. The money donated supported the “Bärgüf” organization, the aim of which is to actively fight cancer and give cancer patients new hope through solidarity.

More than 300 participants from Lonza – including our CEO Richard Ridinger – participated in the Gornergrat Zermatt Marathon, which motivated Lonza to continue the project “[Lonza Makes You Fit](#)” in 2018.

## Organizing an Annual Charity Golf Event

The [Lonza Harvest Open](#) is an annual charity golf tournament organized by volunteers from the Lonza site in Portsmouth, NH (USA). A fun event for organizers and attendees, it raises awareness and funding for specialized projects for local non-profit organizations in the Seacoast region of Maine, Massachusetts and New Hampshire. The 2017 Lonza Harvest Open is in its 16th year, and the event raised more than \$88,000. During the last 16 years, Lonza has raised more than \$990,000 for 36 New Hampshire charities.

# Arts and Culture

## Bringing Classical Music Closer to Kids and Teens

In September 2015 Lonza initiated a new sponsoring partnership with the Basel Chamber Orchestra to support the group's project "Classroom Piece." The project was produced in cooperation with a theater pedagogue and four musicians from the orchestra with the goal of giving children and teens the necessary impetus to develop their musical personality, independent of social and cultural backgrounds. Lonza is proud to be actively supporting the development of this novel project over the next several years with the goal of bringing classical music closer to the community.



# Investor Information

Shares of Lonza Group Ltd are listed on the SIX Swiss Exchange and were included in the Swiss Market Index (SMI) in 2017. Lonza also maintains a secondary listing on the SGX Singapore Exchange. The nominal value of the Lonza Group Ltd share is CHF 1. Lonza's share price closed at the end of 2017 at CHF 263.3, which represents an increase of 49.4% in 2017.

The free float in Lonza Group Ltd registered shares reached 99.7% at year-end, and the average daily trade volume was 314,971 shares in 2017.

## Listing and Security Information

### Stock Exchange Listing/Trading:

- SIX Swiss Exchange
- SGX Singapore Exchange

### Common Stock Symbols

- Bloomberg LONN SW
- Reuters LONN.S
- SIX Financial Information LONN
- SGX O6Z

### Security Number

- Valor 001384101
- ISIN CH0013841017



# Upcoming Financial Events

Date and Time	Event
04 May 2018, 10:00 am CET	Annual General Meeting for the Financial Year 2017 Congress Center Basel, Switzerland
04 May 2018	Q1 2018 Qualitative Business Update
08 May 2018	Ex-Dividend Date
09 May 2018	Record-Dividend Date
11 May 2018	Dividend Payment Date
25 July 2018	Half-Year Results 2018
24-26 September 2018	Capital Markets Day (Zurich, Switzerland)
25 October 2018	Q3 2018 Qualitative Business Update
18 April 2019, 10:00 am CET	Annual General Meeting for the Financial Year 2018 Congress Center Basel, Switzerland

## Shareholdings

According to disclosure notifications filed with Lonza, the following shareholders held more than 3% of Lonza's share capital as of 31 December 2017:

Principal Shareholders	%
BlackRock, Inc., New York, NY (USA)	9.67
Massachusetts Mutual Life Insurance Company, Springfield, MA (USA)	4.06

Lonza knows of no other shareholder(s) that owned more than 3% of our share capital as of 31 December 2017. To the best of Lonza's knowledge, the above-mentioned shareholders are not linked by any shareholders' agreement or similar arrangement with respect to their shareholdings in Lonza or the exercise of shareholders' rights. For a full review of the individual disclosure notifications made during 2017, please refer to the [SIX Swiss Exchange disclosure platform](#).

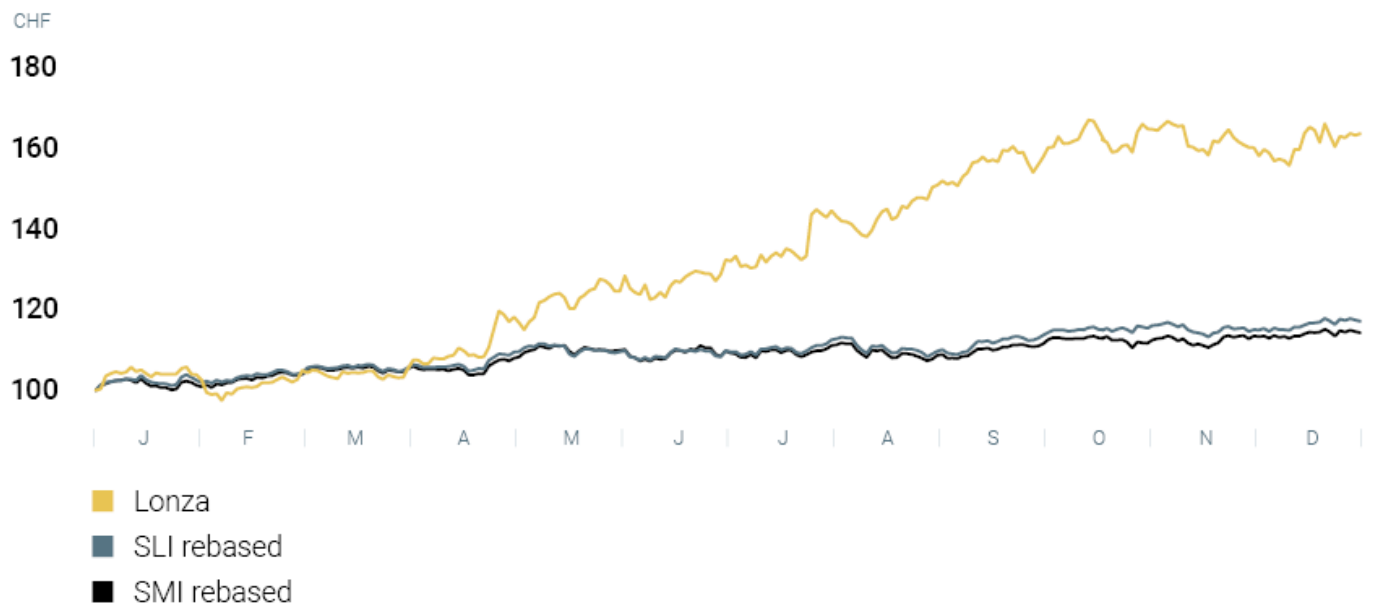
# Share Price Development 2017



CHF / Share

Share price high	268.7	A Full-Year 2016 Results	25 January
Share price low	157.2	B Accelerated Bookbuilding	01 February
Closing price	263.3	C Lonza Annual General Meeting (AGM)	25 April
		D Launch of Rights Offering	25 April
		E First-Quarter 2017 Qualitative Business Update	25 April
		F Dividend Payment	03 May
		G Completion of Rights Offering	10 May
		H Half-Year 2017 Results	26 July
		I Third-Quarter 2017 Qualitative Results	26 October

## Lonza Share Price Development vs. Swiss Leader Index and the Swiss Market Index (Rebased)



## Dividend Payment History (in CHF/Share)<sup>1</sup>



<sup>1</sup> Graph refers to pay-out year of dividend.

Lonza's Board of Directors is proposing a stable dividend for shareholders of CHF 2.75 per share for 2017, despite a 40.7% increase in share capital. Subject to approval at the Annual General Meeting, the dividend of CHF 2.75 per share for 2017 will be paid out of the reserve capital contribution in May 2018 and will be free from Swiss withholding tax.

## Ten-Year Overview of Major Highlights

million CHF	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 Lonza Standalone	2017 Lonza Incl. Capsugel
Sales	2,937	2,690	2,680	2,692	3,925	3,584	3,640	3,803	4,132	4,562	5,105
Result from operating activities (EBIT)	441	239	374	261	340	253	423	428	486	728	723
Net capital invested	3,768	3,900	3,688	5,667	5,437	4,958	5,224	4,859	5,026	5,191	11,468
Return on net operating assets (RONOA) in %	13.8	6.7	10.8	6.9	7.5	5.9	10.3	10.8	12.7	19.3	9.7
Headcount	8,462	8,386	8,280	11,001	10,789	9,935	9,809	9,829	10,130	10,979	14,618

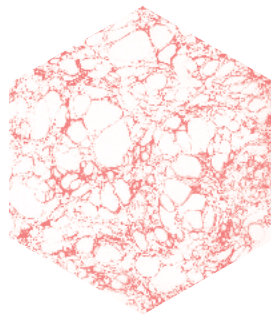
# Significant News Releases

The most significant news releases during the course of 2017 were the following:

Date	News Release
04 January 2017	Lonza Concludes Divestment of Peptides Business and Operations in Braine-l'Alleud, Belgium, to PolyPeptide
25 January 2017	Lonza Reports Record-Breaking Financial Performance, Resulting in 24.2% CORE EBIT Growth, Driven by Pharma and Biotech
25 January 2017	Lonza Appoints Fridtjof Helemann, CHRO, to Executive Committee
31 January 2017	Lonza Announces the Launch of an Accelerated Bookbuilding
01 February 2017	Lonza Successfully Places 5.0 million New Shares, Raising Gross Proceeds of CHF 865 million
16 February 2017	Lonza and Selecta Biosciences Announce Manufacturing Agreement for Anc80-AAV-Based Gene Therapy for Treatment of Methylmalonic Acidemia
27 February 2017	Sanofi and Lonza Enter into a Strategic Partnership to Establish a Large-Scale Biologics Production Facility
23 March 2017	Lonza Offers New, Innovative MIT-Free Preservative for In-Can Preservation in Europe
30 March 2017	Lonza Publishes Annual Report 2016 and Invitation to the 2017 Annual General Meeting
25 April 2017	Lonza Starts 2017 with Outstanding First Quarter
25 April 2017	Lonza Announces the Results of the 2017 Annual General Meeting – All Motions Proposed by Board of Directors Accepted
25 April 2017	Lonza Launches Rights Offering
10 May 2017	Lonza Announces the Successful Results of the Rights Offering
16 May 2017	Lonza Invests to Develop Exosomes for Next-Generation Life-Science Applications
30 May 2017	Lonza Acquires Cell and Gene Contract Manufacturer PharmaCell
27 June 2017	Lonza Has Received All Regulatory Approvals to Move Forward with Acquisition of Capsugel
06 July 2017	Lonza Completes Acquisition of Capsugel to Create Leading Integrated Solutions Provider to the Global Pharma and Consumer Healthcare Industries
26 July 2017	Lonza Pharma&Biotech Launches Ibex <sup>®</sup> Solutions – An Innovative New Concept in Biological Manufacturing and Development
26 July 2017	Lonza Delivers Strong Performance in First Half 2017 and Sets a Strong Foundation for Continued Attractive Mid-Term Growth
04 August 2017	Lonza Acquires Micro-Macinazione to Create the Global Leader in Micronization Capacity and Capabilities
22 September 2017	Groundbreaking for the New Large-Scale Biologics Production Facility in Visp (CH)
03 October 2017	Lonza to Acquire a U.S. Clinical Manufacturing Site to Support Ongoing Customer Demand
05 October 2017	Lonza Cell & Gene Therapy Facility in Houston, TX, Area to Complete Construction on Schedule in 2017
09 October 2017	Lonza Announces Formation of New Research and Development Collaborative Innovation Center in Israel
26 October 2017	Lonza Reports a Strong Third Quarter and Capsugel Integration on Track
28 November 2017	New Plastics Laboratory Opening at the Lonza Innovation and Technology Center in Alpharetta, GA (USA)
30 November 2017	Lonza, Akouos and MEE Announce Strategic Gene Therapy Licence Agreement on Hearing and Balance Disorders

For a comprehensive review of the media releases issued during 2017, refer to [www.lonza.com/news](http://www.lonza.com/news)

# Segments



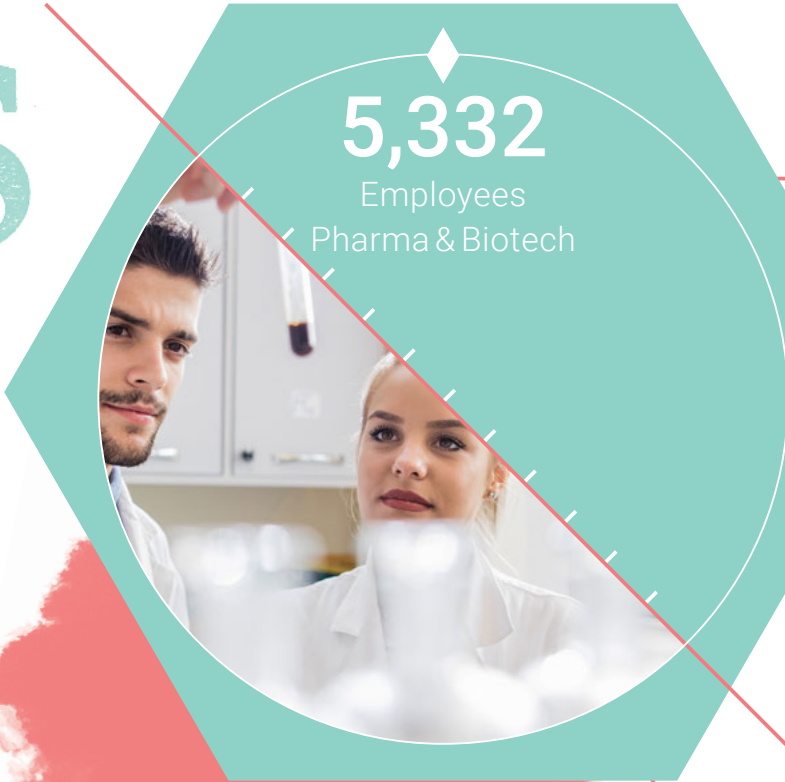
3,729

Employees  
Specialty Ingredients

S

5,332

Employees  
Pharma & Biotech



— Specialty  
— Ingredients

38

— Manufacturing  
— Sites

— Pharma & Biotech

29

— Manufacturing  
— Sites



The following segment report refers to Lonza standalone covering Pharma&Biotech and Specialty Ingredients. After the acquisition of Capsugel on 5 July 2017, Capsugel operated as a separate unit; and functional and business integration were prepared in parallel. From 1 January 2018, Capsugel has been fully integrated into Lonza Pharma&Biotech and Lonza Specialty Ingredients. This segment report covers the new structure and references to Capsugel. For more information on Capsugel, please see the Company Report.

— 2,400 mn  
— Specialty Ingredients  
Sales 2017 in CHF

2,124 mn

Pharma & Biotech  
Sales 2017 in CHF



Annual Report  
2017

<b>Pharma&amp;Biotech</b>	84
— Mammalian Manufacturing	87
— Chemical and Microbial Manufacturing	90
— Clinical Development and Manufacturing	94
— Emerging Technologies	98
— Bioscience Solutions	101
<b>Specialty Ingredients</b>	105
— Consumer Health	108
— Coatings and Composites	114
— Agro Ingredients	119
— Water Care	122

# Pharma&Biotech



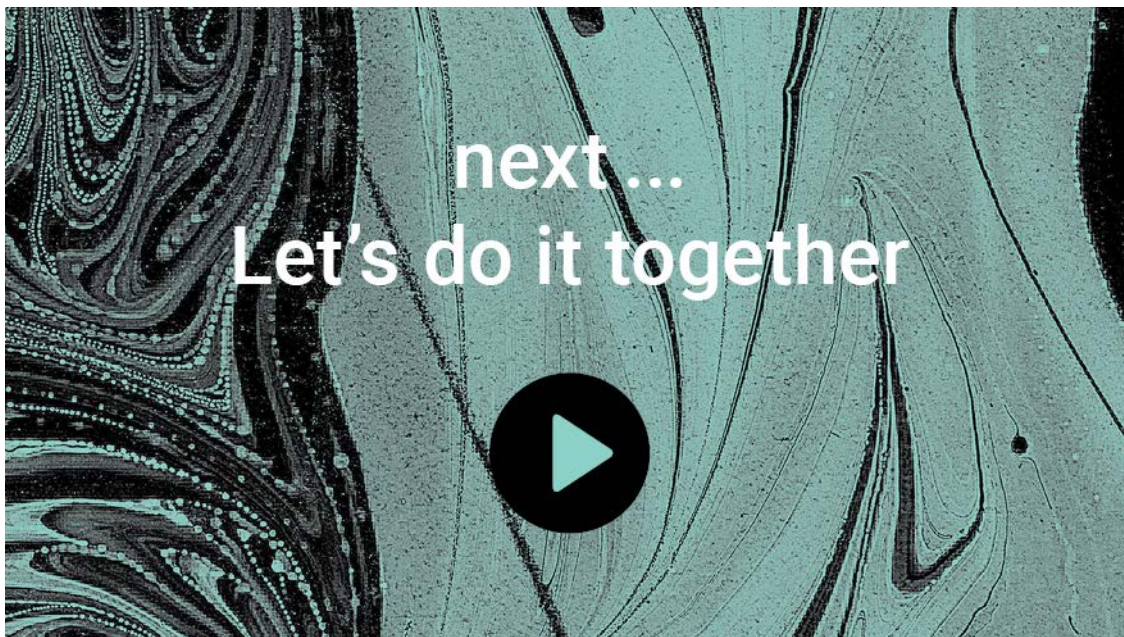
~350 clinical development programs  
~50 commercial medicines supplied  
~140 billion pharma capsules produced

6  
technologies

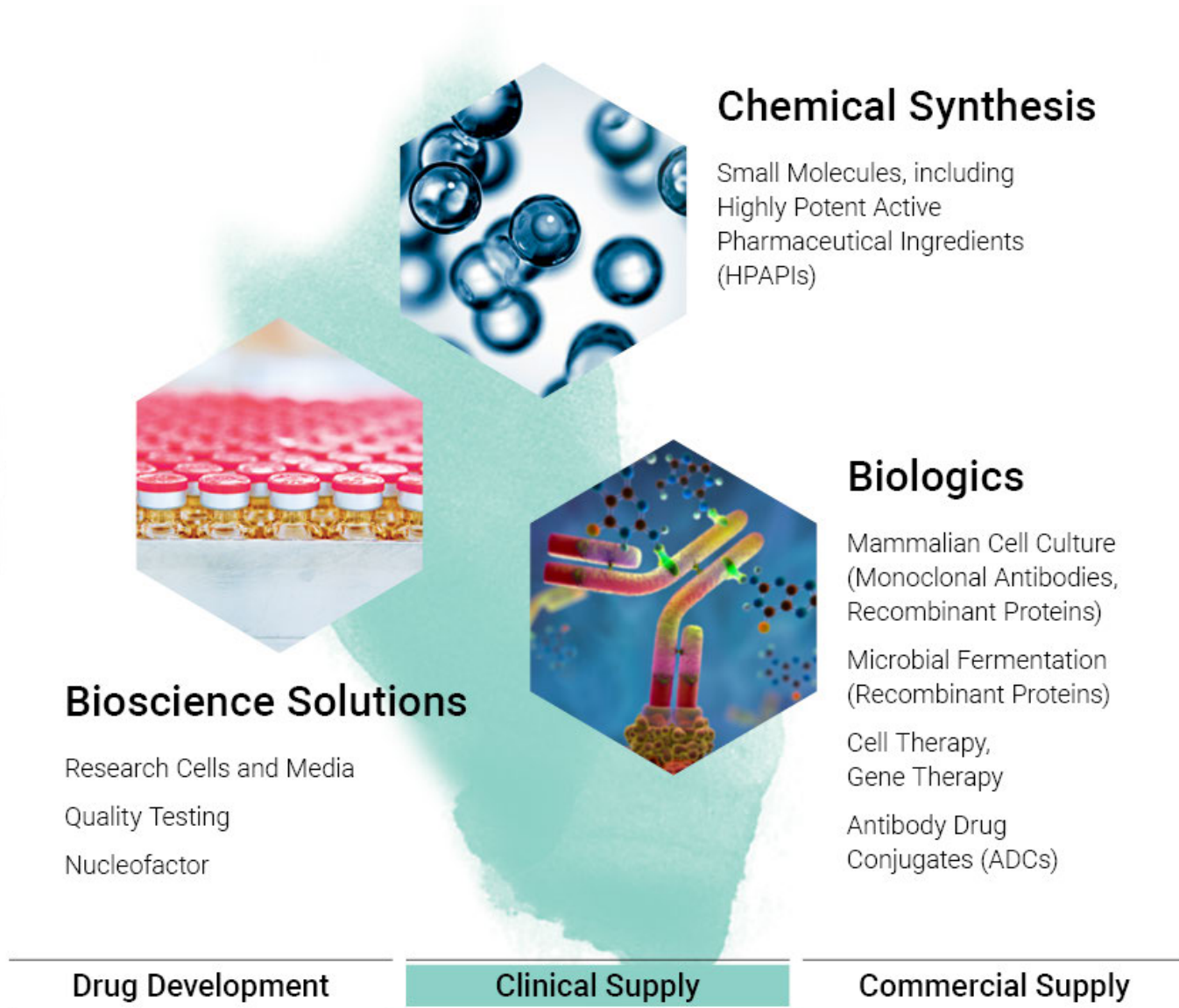
Delivering the Medicines of Tomorrow, Today.®

Lonza's Pharma&Biotech vision is to enable our customers to meet some of the greatest challenges in patient treatment. The Pharma&Biotech market-focused segment comprises the following businesses:

- Mammalian Manufacturing
- Chemical and Microbial Manufacturing
- Clinical Development and Manufacturing
- Emerging Technologies
- Bioscience Solutions



As of 1 January 2018, the Pharma&Biotech segment is operating with a Chemical Division and a Biologics Division, as well as the existing Bioscience Solutions Business Unit and a new Capsule Delivery Solutions Business Unit. The latter business unit will cover the capsules business for pharma markets. Capsugel's dosage forms and development services have been integrated in the newly formed Dosage Forms and Delivery Systems (DFDS) Business Unit within the Chemical Division.



## Pharma&Biotech Overview 2017

Pharma&Biotech saw another record year in 2017 with commercial excellence, robust operational execution and business-model innovation as key performance drivers. The continued outstanding performance was supported by high demand across all businesses with strong development in Commercial Mammalian and in Chemical Manufacturing, as well as ongoing high demand for Clinical Development services.

The segment (Lonza standalone) delivered remarkable sales growth of 18.9% (19.4% in constant exchange rates), reaching CHF 2.1 billion, which led to an excellent CORE EBIT of CHF 530 million and an extremely high 31.8% CORE EBIT growth year over year. Pharma&Biotech expects to continue the momentum in 2018 by benefiting from continued strong demand in the global pharma market and by covering the entire value chain with the broadest set of technology platforms in the contract development and manufacturing industry – mammalian, microbial, chemical, bioconjugates, cell and gene therapy.

# Pharma&Biotech Financial Summary <sup>1, 2</sup>

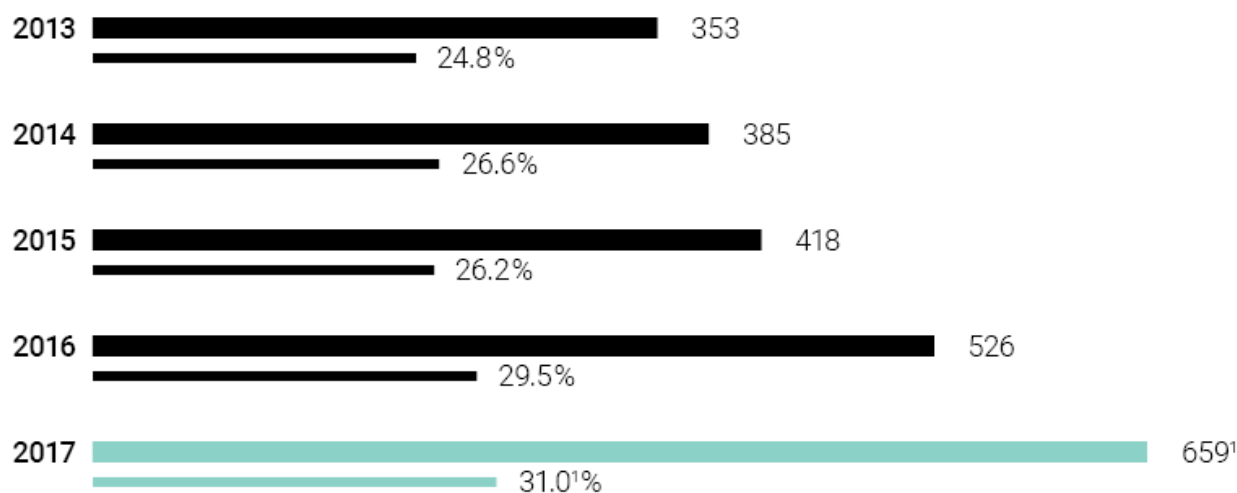
million CHF	2017	Change in %	2016
Sales	2,124	18.9	1,786
CORE EBIT <sup>3</sup>	530	31.8	402
CORE EBIT margin in %	25.0		22.5
CORE EBITDA <sup>3</sup>	659	25.3	526
CORE EBITDA margin in %	31.0		29.5

<sup>1</sup> Results of Pharma&Biotech are presented on a standalone basis (excluding Capsugel) to enable year-over-year performance comparison.

<sup>2</sup> Restated to reflect divestiture of peptides business (Sales CHF -32 million, favorable impacts on CORE EBIT CHF 12 million and CORE EBITDA CHF 6 million) and the transfer of a business from Pharma&Biotech to Specialty Ingredients (Sales CHF -30 million, unfavorable impacts on CORE EBIT CHF 11 million and CORE EBITDA CHF 11 million).

<sup>3</sup> **CORE Definition:** Lonza believes that disclosing CORE results of the Group's performance enhances the financial markets' understanding of the company because the CORE results enable better comparison across years. CORE results exclude exceptional expenses and income related to e.g. restructuring, environmental-remediation, acquisitions and divestitures, impairments and amortization of acquisition-related intangible assets, which can differ significantly from year to year. For this same reason, Lonza uses these CORE results in addition to IFRS as important factors in internally assessing the Group's performance.

## CORE EBITDA (in million CHF) and CORE EBITDA Margin Progression



<sup>1</sup> Results are presented on standalone basis (excluding Capsugel) to enable year over year performance comparison.



# Mammalian Manufacturing



**22** commercial large-molecule medicines  
Production scales from **2,000–20,000 L**  
across three existing state-of-the-art  
cGMP manufacturing sites



Lonza's Mammalian Manufacturing is a leading contract manufacturing provider for biologics. Our offerings include the manufacture of commercial bulk drug substance of monoclonal antibodies (mAbs) and recombinant proteins from mammalian cell cultures. Currently our portfolio includes products that represent essential active pharmaceutical ingredients (APIs) for lifesaving medicines, including cancer treatments and orphan drugs for rare diseases, where no alternative treatment exists.

Today Lonza's Mammalian Manufacturing has a global commercial manufacturing footprint, comprising production scales from 2,000L to 20,000L across three existing state-of-the-art cGMP manufacturing sites: Portsmouth, NH (USA), Porriño (ES) and Tuas, Singapore (SG). Furthermore, we are adding new capacity in our **Ibex®** biomanufacturing complex in Visp (CH), with the aim of bringing the right scale of capacity to fulfill different market segments' and customers' needs.

Our commercial track record and proven expertise over two decades have enabled us to gain a broad accreditation from global health authorities, including the U.S. Food and Drug Administration (FDA) and the European Medicines Agency (EMA). We pride ourselves on being the market leader for highly customized, reliable and innovative solutions to meet customers' needs.

## Discover More

Highlights 2017

Innovation & Initiatives

For further information about our mammalian cell culture capabilities for large-molecule drug substance, as well as for descriptions of Lonza's mammalian cell-culture facilities, including Portsmouth, Porriño and Singapore, please visit our [Mammalian Manufacturing website](#) or explore Lonza's worldwide sites by location including via our [360° Virtual Tours](#).

# Highlights 2017

Our Mammalian Manufacturing business experienced strong performance across our global manufacturing network in 2017, as we focused on continuing current levels of utilization and profitability. Strong demand in Mammalian Manufacturing was one of the key drivers in the Pharma&Biotech segment's sales growth.

In 2017 Lonza manufactured complex bulk drug substance for approximately 22 commercial large molecule medicines. We continued to benefit from a balanced customer portfolio, ranging from large pharmaceutical companies to emerging biotech enterprises. The outsourcing and dual-sourcing trends in the industry maintained a positive and healthy momentum.

To meet and anticipate strong demand in the commercial outsourcing market, we continue to invest in technology, processes and assets. These activities include expansion of the **Ibex<sup>®</sup>** biomanufacturing complex located in Visp.

**Ibex<sup>®</sup>** Solutions offer a modular, technology-independent development and manufacturing facility capable of supporting activities across multiple technologies – mammalian, microbial, cellular or bioconjugate – and from late discovery to development and commercial manufacturing. It is expected to reduce time-to-market for Lonza's customers by 12 months or more, de-risk their strategic investment decisions and allow them to benefit from Lonza's expertise and service network in Visp.

Several hundred new positions are expected to be created on Lonza's 100,000 m<sup>2</sup> (1,076,391 sq feet) brownfield site there. Construction began in June 2017; the first groundbreaking took place in September 2017.

First long-term contracts for **Ibex<sup>®</sup>** have been secured. As announced in February 2017, we entered into a **strategic partnership with Sanofi** by establishing a joint venture to build and operate together a large-scale mammalian cell culture facility for monoclonal antibody production.

Then in September we signed a **strategic agreement with Portola Pharmaceuticals** to manufacture **AndexXa<sup>®</sup>** product at our innovative **Ibex<sup>®</sup>** facility.

Already in 2018 we have added 2,000L single-use bioreactors in Singapore that could further address the increasing need for flexible volume and more limited patient demand, as in the case of orphan drugs.

These new endeavors have demonstrated our strong commitment to provide innovative, tailored solutions for our clients to improve their flexibility and strengthen their value chain and lifecycle management in a dynamic business environment.

# Innovation and Initiatives

We successfully evaluated a number of single-use technologies aimed at providing state-of-the-art manufacturing of commercial drug substances and introduced real-time monitoring of cell-culture processes instead of offline testing.

Development, testing and implementation of our process analytical technology (PAT) strategy continued in 2017. PAT includes rapid, real-time quality-control release testing and data handling.

We also stepped up the degree of automation used in upstream cell culture and downstream purification processing, and we increased raw material control via novel identity tracking and testing technologies.

In addition, 2017 saw advances in the development of continuous biomanufacturing processes that would potentially increase yield with a smaller production footprint.

The integration of the Capsugel business and the development of joint projects have the potential in the medium- and long-term to allow Lonza to offer a combined drug substance and drug product manufacturing service, taking advantage of considerable overlaps in our respective customer bases.

Lonza's innovative solutions, such as the expanded **Ibex<sup>®</sup>** complex, were deployed in 2017 to manufacture a stream of complex, high-quality drug substances for lifesaving medicines to meet customers' needs in 2020 and beyond.

We diversified our portfolio in 2017 by adding new growth products to the network for long-term business sustainability. The reporting year also saw initiatives to improve throughput and plant efficiency, leveraging a targeted portfolio revised in 2016.

# Chemical and Microbial Manufacturing



~**205** commercial small-molecule programs  
including Capsugel

~**315** clinical small-molecule programs  
including Capsugel



Lonza's Chemical and Microbial Manufacturing (CMM) business offers contract manufacturing services for small-molecule and microbial technologies. The peptides business was divested in January 2017 as a result of the continuous review of Lonza's business portfolio. CMM currently operates from nine plants at two locations, Visp (CH) and Nansha (CN), with a customer base that is a healthy mix of large, midsize and emerging pharmaceutical companies.

Lonza has one of the widest breadths of expertise in the production of highly potent active pharmaceutical ingredients (HPAPIs) within the contract manufacturing organization industry. This expertise spans highly skilled teams, state-of-the-art facilities and experience of more than 15 years in successfully commercializing HPAPI products. For the production of other active pharmaceutical ingredients (APIs), Lonza's breadth and economy of scale, our many years of experience in launch and long-term manufacture, and the dedication of our personnel ensure that we remain a leader in small-molecule contract manufacturing.

CMM supports the launch of three new chemical entities (NCEs) on average every year, and the Small Molecules team is heavily involved in the development of U.S. Food and Drug Administration- (FDA-) designated breakthrough therapies, with a significant number of these products being manufactured at Lonza. Accelerated time-to-market is a key factor in their development and production, and Lonza receives excellent customer feedback on how these products are managed throughout the accelerated process.

Customized Active Pharmaceutical Ingredient		Bioavailability and Targeted Release		
Drug Substance Development	Drug Substance Manufacturing	Drug Product Intermediate DPI	Drug Product Development	Drug Product Manufacturing
Early Intermediates	Micronized API	Multi-Particulate Technologies	Liquid Filled Hard Capsules	
GMP Intermediates	Spray-Dried Dispersions	Modified and Targeted Release	Softgels	
Highly Potent Active Pharmaceutical Ingredients (HPAPIs)	Lipid-Based Formulations		Capsule Solutions	
Cytotoxic Payload for Antibody Drug Conjugates (ADCs)	Liquid and Solvent-Based Formulations		Commercial and Clinical Manufacturing Services	

## Technology Platforms Along Clinical to Commercial

### Discover More

Highlights 2017  
Innovation and Initiatives

For further information about Chemical and Microbial Manufacturing service offerings in small molecules and microbials, including our expertise in HPAPI, specialized technologies such as cGMP Phosgenation & Carbonylation, Microreactor Technology, HPAPI, Microbial Fermentation, Handling of Insoluble Proteins and Innovative Business Models, click on our [Chemical Manufacturing website](#) or our [Microbial Manufacturing website](#).

Click here for a 360° virtual tour of our facilities in Visp (CH) and Nansha (CN).

# Highlights 2017

The reporting year saw buoyant demand for our CMM services, reflected in a high level of bookings, reaching into the medium term. Sales of recently launched products provided significant momentum. Chemical manufacturing was one of the key drivers behind the strong results returned by the Lonza Pharma&Biotech segment in 2017.

We strengthened the pipeline for development services, which led to further new product introductions at all chemical assets. Production of materials that require high-containment facilities continues to grow faster than the rest of our CMM business.

Another key highlight of the year was sustained investment in innovative business models, such as the start of construction of a mono-plant (dedicated API manufacturing plant) for Clovis in Visp (CH). Such projects are driven by customer demand and afford security of supply while allowing for flexibility to adapt to the changing needs of the product lifecycle.

In August 2017 we acquired *Micro-Macinazione* SA, based in Molinazzo (CH). As a market leader in the micronization of APIs and excipients, *Micro-Macinazione* extended our capacity for particle engineering in Europe. In combination with the Quakertown, PA (USA), micronization services from the Capsugel acquisition, Lonza now holds a leading position in contract micronization, which plays well to the market need to address bioavailability and solubility challenges. We are strongly positioned to provide a seamless service in micronized API production supporting customers globally from our European and U.S. facilities.

# Innovation and Initiatives

Major initiatives in the reporting year included ongoing development and adaptation of our business models to offer innovative solutions. The key factor here is responding to customers' needs, such as an increased focus on added value to strengthen market presence. Three examples of this innovation are listed below:

1. During 2017 we invested in constant innovation in manufacturing processes to ensure flexibility at all times in order to deliver products to our customers faster and to meet demand increases. In our collaboration with Clovis, we are moving toward real-time release testing of APIs, a first in the CMO pharmaceutical industry, which requires close collaboration with customers and with regulators.
2. Additionally, Lonza leveraged our unique capabilities to develop an innovative "Fix and Flex" business model to enable our customers to achieve ambitious growth targets. "Fix and Flex" allows our customers to ensure the security of supply and guaranteed access to assets they need. The business model allows them to fix a certain component of their supply needs while retaining their flexibility to adjust the capacity according to the changing needs of their product. We have received positive feedback and already have several examples of "Fix and Flex" set-ups in our portfolio.
3. Our initiative on early intermediates enabled us to back-integrate to cover products previously sourced from Asia, which addressed compliance and risk management issues. This initiative is driven by innovation into process design, leveraging the strength in depth we have in chemistry at the Visp site (CH).

In January 2018 Pharma&Biotech was reorganized into a Biologics Division and a Chemical Division. During the restructuring Lonza CMM became the new Chemical Division with two business units: API Development and Manufacturing, and Dosage Forms and Delivery Systems. Lonza's microbial manufacturing business transitioned from the Chemical Division to the Biologics Division.

Furthermore, the integration of our small-molecule API business with Capsugel's drug formulation development capabilities aims to overcome our customers' key challenges of complexity, bioavailability, solubility and high potency, while helping shorten lead times for drug launches. Capsugel's pharma capsules business will remain a separate unit within Lonza's Pharma&Biotech segment, and all teams are working closely together to ensure we best serve our customers.

# Clinical Development and Manufacturing



~290 large-molecule clinical development programs

5 clinical development sites:  
Slough (UK), Hayward, CA (USA),  
Basel (CH), Singapore (SG), Cambridge (UK)



Lonza's Clinical Development and Manufacturing (CDM) business focuses on the early phase of drug development, from late discovery through early clinical trial supply. In 2017 we offered a broad portfolio of drug substance and drug product development services and clinical supply manufacturing across three modalities: mammalian, microbial and chemical. And we supported both large- and small-molecule development.

In CDM we strive to work with our customers to reliably deliver integrated, innovative and value-adding gene-to-patient or target-to-patient custom solutions. We work in partnership with our customers to enable them to progress their candidates rapidly and effectively through clinical development in order to deliver medical treatments successfully to patients.

For our customers in late discovery phase, our Applied Protein Services offering includes technologies and programs designed to assess and mitigate risks, reduce attrition and improve the quality and safety of therapeutic proteins in a cost-efficient and timely manner. These technologies include our Epibase® *in silico* and human peripheral blood mononuclear cell- (PBMC-) based *in vitro*, cellular immunogenicity screening services, and our antibody humanization and deimmunization.

Our Sentinel APART™ Platform is used as a tool for antibody aggregation prediction and re-engineering, and our Manufacturability Assessment Service is used to help predict manufacturing risk. Early-stage customers also benefit from our mammalian and microbial based Lightpath™ material supply services for their research and proof of concept purposes. We also complement these services with pharmaceutical development services to support our customers' lead candidate selection. Get more information on [our late discovery services](#).

When a lead candidate is selected, our industry-leading expression technologies, including the GS Xceed® Gene Expression System and XS™ Microbial Expression Technologies, are used to create commercially relevant cell lines or strains for protein expression. These technologies can be licensed out for use by our customers in their own facilities or provided by us in service mode. Get more information on our [GS Xceed® mammalian expression technology](#) or on our [XS™ Technology for microbial protein expression](#).

Following creation of a new cell line or strain, we engage in a program of process development and scale-up work that creates a process suitable for transfer to a cGMP manufacturing facility. These process development activities support small and large molecules. Once a process has been established, CDM can manufacture products to support not only preclinical activities, but also early clinical trial material. In addition to developing a process at Lonza, we are also able to technology transfer into Lonza products and processes that have been developed by our customers. Get more information on our services:

- Mammalian development and manufacture
- Small-molecule development and manufacture



Lonza's Drug Product Services (DPS) team in Basel (CH) focuses on parenteral dosage forms and offers options for monoclonal antibodies, other biologics and small molecules that require a parenteral dosage form. Our customers benefit from a seamless integration of pharmaceutical and drug substance development for rapid and reliable entry into the clinic and for robust late-stage development. In addition, Lonza DPS offers best-in-class analytical and specialized services for routine and troubleshooting in pharmaceutical manufacturing. Get more information on our [Drug Product Services](#).



We have a [global footprint](#) of manufacturing facilities, including Slough (UK) and Cambridge (UK), Basel (CH) and Tuas, Singapore (SG) for our mammalian projects, Visp (CH) for microbial projects, and Nansha (CN) and Visp (CH) for our small-molecule programs. In October 2017 we acquired a new clinical manufacturing site on the West Coast of the United States in Hayward, CA. Get more information on [our global sites](#).

## Discover More

[Highlights 2017](#)  
[Innovation and Initiatives](#)

For further information about Epibase<sup>®</sup>, Sentinel APART<sup>™</sup>, GS Xceed<sup>®</sup> Gene Expression System and XS<sup>™</sup> Microbial Expression Technologies, as well as our development and manufacturing capabilities for small- and large-molecule drug substance and drug products, please visit the Custom Development and Manufacturing website from links provided above.

# Highlights 2017

The Clinical Development and Manufacturing business overall continued to perform strongly as we took advantage of sustained high demand for full-service CDMO development and manufacturing services. CDM service offerings were among the key drivers in the strong performance of the Lonza Pharma&Biotech segment in 2017, which followed robust revenue and profitability growth the previous year.

In 2017 we supported early-phase customers with their pre-clinical and clinical innovator molecules, followed by process development and clinical-phase manufacture, in all three of our product and service modalities: mammalian, microbial and chemical. Following the acquisition of Capsugel, Lonza is now able to offer integrated programs for clinical development that include Lonza's drug substance offerings with drug product capabilities.

We expanded our mammalian manufacturing capacity in clinical development in our Slough (UK) facility, and we acquired a new site in the United States to support increased customer demand. In microbial we focused on strain development, process development, cGMP manufacture and process characterization work for late-stage programs. Our chemical technologies supported process development aimed at successful scale-up for commercial manufacture at our larger assets in Visp (CH).

In the reporting year, we experienced a significant increase in interest for our small-molecule containment capabilities, particularly for cytotoxic and highly potent active pharmaceutical ingredient (HPAPI) molecules.

The Drug Product Services (DPS) team in 2017 developed parenteral formulations for safe and efficient patient treatment across different types of molecules. That team provided a complete portfolio of services for parenteral dosage forms, including products for injection and infusion for intravenous, subcutaneous and intraocular routes of administration. These offerings also include specialized services, such as:

- Particulate identification, characterization and quantification
- Excipient and surfactant characterization
- Extractables and leachables assessment
- Container-closure integrity testing

To provide additional room for formulation, process development and specialized services, the floor space for Drug Product Services was tripled in 2017 to accommodate the demand.

# Innovation and Initiatives

From 2018 chemistry development and clinical manufacturing capabilities has moved to the Chemical Division under the API development and manufacturing business unit.

In 2017 Lonza launched XS™ *Pichia 2.0*, an expression and manufacturing platform for development of next-generation therapeutics. The reporting year also saw Lonza execute our first plasmid DNA project.

Our Drug Product Services team in Basel (CH) expanded in 2017 and now has 45 experts working on innovative solutions in parenteral formulations and dosage forms. We have filed several patents based on significant scientific output.

Capsugel's drug formulation team and Lonza's DPS team now form a strong basis for our growing formulation services in small and large molecules.

The Mammalian team launched new service offerings for support of early-phase biopharmaceutical drug development. These services included Protein Sequence Variant Analysis (PSVA), Developability Assessment for microbial-derived products, and new cell-line construction options including Multiplex CLC. Site expansion in Slough included additional single-use bioreactors. Lonza's new California site in Hayward is for clinical manufacture based on single-use technology.

We continued to invest in automation to improve project throughput and product quality from cell-line construction through process development. Also we expanded the pipeline of early-phase small molecules from both large and small biotech companies.

# Emerging Technologies



**4** global centers of excellence  
in cell and gene therapy:  
Houston, TX (USA)  
Maastricht / Geleen (NL)  
Portsmouth, NH (USA)  
Singapore (SG)



Cell and gene therapies and antibody drug conjugates are seen as the next frontiers in medicine. With our comprehensive offering that spans genetically and virally modified cell and gene therapies, viral vector gene therapies and antibody drug conjugates (ADCs), Lonza is at the forefront of these emerging industries.

Lonza, with our decades of experience in cell processing, is an industry leader in process development and manufacturing of cells under current good manufacturing practices (cGMP) for both allogeneic and autologous cell-based therapies. Our broad service offerings – combined with a global footprint that spans the United States, Europe and Asia – enable us to support our clients throughout clinical development and commercial production.

At our new Houston, TX (USA), facility, scheduled to be completed in Q1 2018, the Lonza team offers development and cGMP services for cell and gene therapies, including viral vector production. The range includes a wide selection of product types such as adenoviral, adeno-associated virus (AAV) and lentiviral vectors.

Our bioconjugate team in Visp (CH) is one of the industry leaders in process development and cGMP manufacturing of clinical and commercial bioconjugates, including ADCs. The team's track record encompasses several bioconjugate constructs, as well as novel payload, linker and conjugation technologies. A reorganization of the Emerging Technologies business unit in late 2017 focused our efforts in the fast-growing field of **cell and gene therapies** and ensured our bioconjugation services were fully aligned with our offerings in mammalian development and clinical manufacturing services.

## Discover More

### Highlights 2017

#### Innovation & Initiatives

For additional information about our services, such as process development, cGMP manufacturing, assay development, analytical and all other related services, click on our websites below:

- [Cell and Gene Therapy website](#)
- [Bioconjugates website](#)

See our facilities on our [360° virtual tour](#).

# Highlights 2017

During the reporting year, Lonza's business for bioconjugates, cell therapy and gene therapy experienced continued strong customer interest driven by new regulatory approvals of CAR-T therapies and positive market momentum.

In May 2017 Lonza acquired [PharmaCell BV \(NL\)](#), a cell-and-gene-therapy contract manufacturer in Europe that successfully launched two commercial autologous cell therapies. The acquisition strengthens Lonza's autologous cell- and gene-therapy offering and further enhances Lonza's global cell- and gene-therapy footprint, which is especially important for autologous therapies, where close proximity to the patient is critical.

Another highlight was the continuing construction of the world's largest dedicated cell- and gene-therapy facility in [Pearland, TX \(USA\)](#), which is expected come on-stream in Q1 2018. The projects from our existing Texas facility will be transferred to the new installation during 2018. A customer and press event to build momentum around the opening of this new facility is scheduled for 10 April 2018.

In February 2017 we entered into a strategic manufacturing agreement with [Selecta Biosciences](#) for ancestral adeno-associated viral vector- (Anc80-AAV-) based gene therapy. Lonza will produce an Anc80-AAV-based gene therapy product for Selecta's proprietary program for the treatment of methylmalonic acidemia (MMA), a rare inborn error of metabolism.

In November 2017 Lonza, Massachusetts Eye and Ear (MEE) and Akouos, a new biotechnology company focused on restoring and preserving hearing with backing from leading life science investors, [announced their strategic license agreements](#) for exclusive rights to the Anc-AAV gene therapy platform for all hearing and balance disorders.

Also during this reporting year, which marked a [decade of ADC manufacturing](#), our ADC team won the [Best Contract Manufacturer Award](#) at the World ADC Conference in San Diego, CA (USA). Lonza reinforced our strong position in clinical ADC development and manufacturing at our [Visp \(CH\)](#) site.

# Innovation and Initiatives

Our collaboration with Octane Biotech Inc. – based on the Cocoon™ technology, a fully automated, cGMP-in-a-box technology – made substantial progress in 2017. We have been successfully targeting and engaging key players in the autologous cell therapy field. The Cocoon™ technology keeps receiving positive feedback from customers and trade media, and it received the [Spark Health 2017 design award](#). Lonza was invited to give a series of talks that showcased the Cocoon™ technology at a variety of tradeshows and workshops organized by regulatory agencies, including the U.S. Food and Drug Administration (FDA) and the European Medicines Agency (EMA).

These activities were complemented by a series of key opinion leader talks about manufacturing automation, as well as sponsored case studies outlining the respective benefits of the technology.

Also in the field of Anc-AAV, our collaboration with Massachusetts Eye and Ear (MEE), which began in 2016 with an exclusive licensing agreement, is ongoing. Anc-AAV is a novel AAV technology capable of superior gene expression and has the potential to overcome critical limitations that exist with current AAV constructs, such as pre-existing immunity.

Our Nikon-Lonza collaboration project – with the aim to offer process development and manufacturing services in Japan in the cell-and-gene-therapy field – continues to progress according to plan. The new Nikon CeLL innovation (NCLi) facility in Tokyo (JP) is expected to go live in early 2018.

Lonza's early engagement in pluripotent stem cells is reaching a critical milestone with several of our clients in the late stages of filing Investigational New Drug (IND) applications with the FDA for first-in-man studies. Innovative approaches, including bioreactor-based expansion and differentiation, are at the core of Lonza's offerings in that field.

# Bioscience Solutions



**>2,500** scientific publications  
used a Lonza Bioscience product

**296** Bioscience products  
were filed with regulatory agencies

**>120**  
different primary  
cell types

Lonza's Bioscience Solutions offerings include cell-culture, transfection and molecular biology tools for life-science research. We serve customers across the world in academic and government institutions, as well as in major biotech and pharmaceutical organizations.

Our Bioscience Solutions team provides products and customer services in life-science research with our Clonetics™ and Poietics™ primary cells and stem cells, Nucleofector™ Transfection technology, and electrophoresis devices and reagents.

For the drug-discovery and translational research markets, we offer products and services targeting cardiovascular, respiratory, neurological, metabolic, cancer and other disease-research areas.

Bioscience Solutions is also one of the leading players in the global 3D cell-culture market. Our Therapeutic Cell Culture Media business serves customers in the pharmaceutical and biotech industry. Therapeutic cell-culture media are used in the production of therapeutics like antibodies, antibody drug conjugates (ADCs), vaccines and other biologics.

Lonza Testing Solutions offers [endotoxin-detection assays](#) that are applied in pharmaceutical product-release testing, medical device testing and dialysis clinics to help assure the safety of injectable drugs, implantable medical devices and dialysis equipment. Our fully integrated software solutions streamline Quality Control processes and offer insight into manufacturing operations, with quick access to management, compliance and trending data.



## Cell Culture

Primary and Stem Cell



## Transfection

Systems and Services



## Bulk Media / Custom Media

Research and Processing Use



## QC Testing

Solutions and Systems

Drug Discovery

Drug Development

Clinical Supply

### Discover More

Highlights 2017  
Innovation and Initiatives

Additional information about our services, such as process development, cGMP manufacturing, assay development, analytical and all other related services, is available [online](#). For further information specifically about Bioscience Solutions products – such as Endotoxin-Detection Assays, PowerCHO Advance™ Media, Hepatocytes, RAFT™ 3D Cell-Culture System, Cytosmart™ 2 System, Cells On Demand™ Services, 4DNucleofector™ LV (large volume) Device, MODA™ Paperless QC Micro Solution and PyroGene™ rFC Assay – visit our [Bioscience Solutions website](#).

Visit our [Walkersville, MD \(USA\)](#), [Cologne \(DE\)](#) and [Verviers \(FR\)](#) and other facilities online and take a 360° virtual tour of some facilities.



# Highlights 2017

Strong market demand for our Bioscience technologies continued in 2017, notably the cell biology, transfection, bio-therapeutic media and endotoxin product portfolios.

The reporting year saw the launch of five new products:

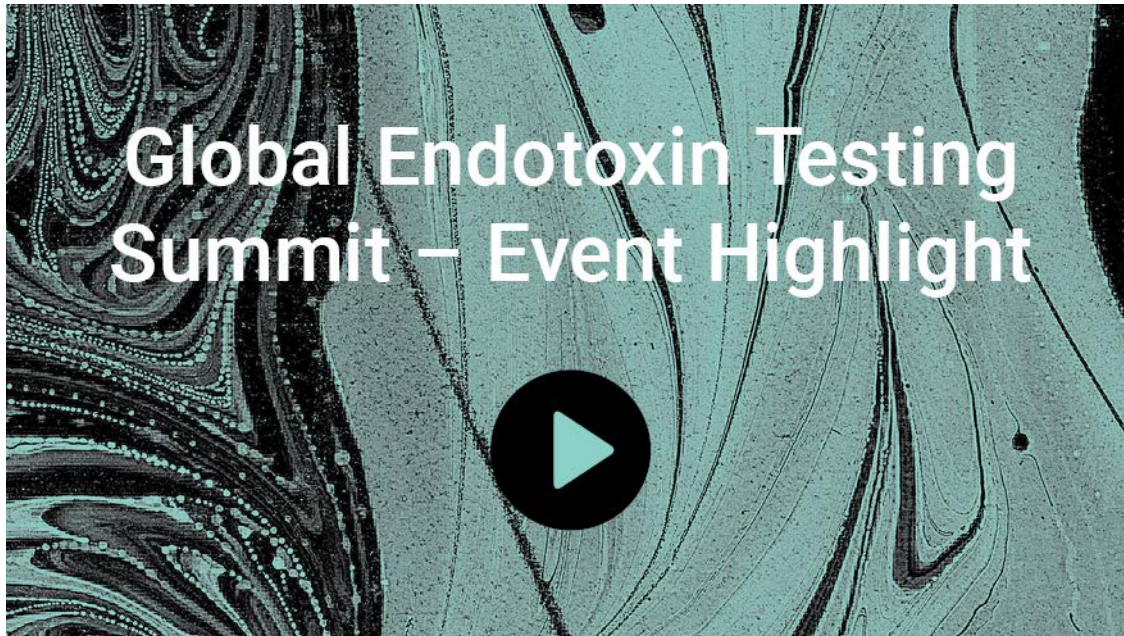
- Idiopathic pulmonary fibrosis (IPF) lung fibroblasts – to support research for treatment of IPF, a rare non-neoplastic pulmonary disease affecting approximately 5 million people worldwide. This release further expanded our airway disease portfolio, which also incorporates cells from asthma, chronic obstructive pulmonary disease (COPD) and cystic fibrosis donors, supporting some of the most important areas in respiratory research.
- Irradiated mouse-embryonic fibroblasts (iMEF) – an inactivated form of MEF cells that can be used to support some stem-cell cultures.
- CytoSMART™ 2 System, an upgrade of Lonza's popular system for affordable live-cell imaging and cell-culture monitoring.
- A new release of MODA-EM™ (Version 3.3) – quality-control tools for environmental monitoring or cleanrooms to facilitate compliance with data integrity requirements, while delivering better analytics and reporting.
- Silensomes™ HLM – pooled human liver microsomes (HLM) for *in-vitro* cytochrome P450 (CYP) phenotyping. HLMs are used to support qualitative and quantitative CYP phenotyping methods requested by regulatory agencies for drug metabolism and drug-drug interactions.

In May Lonza acquired HansaBioMed Life Sciences, based in Tallinn (EE) and invested in Exosomics Siena, an Italian start-up. These investments reinforced our platform for developing next-generation research and therapeutic and diagnostic applications based on exosomes.

Bioscience Solutions experienced ongoing positive market demand in 2017; but remediation efforts related to the production of certain biotherapeutic liquid media products manufactured in one particular area of our Walkersville, MD (USA), site that is used to produce <20 L containers negatively affected the performance. We are addressing the issues affecting the Walkersville site with a comprehensive approach and continue to focus on our commitments to the FDA made in connection with the FDA warning letter Lonza Walkersville received in April 2017. As of November 2017 and on a rolling basis, we have begun to resume manufacturing in the area where it was previously suspended. First products were released in January 2018; other products have become gradually available as well. Production of research-use-only (RUO) and certain for-further-manufacturing (FFM) media products in other manufacturing lines in Walkersville and other global sites have been ongoing.

# Innovation and Initiatives

Bioscience Solutions has advanced innovation at our research centers and through a number of initiatives, including specialist conferences and publication of white papers. In June 2017 in Annapolis, MD (USA), Lonza held the [Third Annual Global Endotoxin Summit](#), which brought together experts from around the world to discuss the latest research and market trends.



We expanded on-line support with the launch of a new [Endothelial Cell Application Center](#) in August 2017. This [resource](#) provides educational materials and product information to assist with vital endothelial cell research.

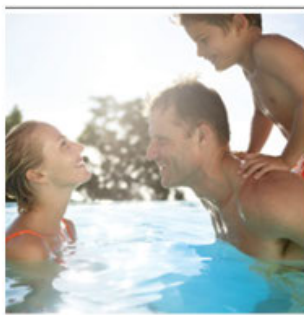
Bioscience Solutions is currently working on a Research & Development project for our second generation of PyroGene™, which is expected to provide a more stable production process and improved product quality.

We opened a new Center of Excellence facility in Durham, NC (USA), for primary-cell manufacturing, as well as for future research and development for cell biology. The transfer of these manufacturing activities from Walkersville to the new facility in Durham will leverage synergies and provide space for our growing endotoxin and media business at the Walkersville site.

This move also will strengthen our market position in cell biology. In turn, our endotoxin-detection portfolio market position will also be strengthened with Walkersville's renewed focus on the needs of additional manufacturing customers.

Another important initiative is the new West Coast commercial and warehousing office in South San Francisco, CA (USA). This location ensures closer proximity to key pharma and biotech accounts in the area and faster, better service and shipping options for West Coast customers.

# Specialty Ingredients



>**12,000** customers worldwide

**38** manufacturing sites

Serving **57** consumer, healthcare and industrial markets globally



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We take health a step further by connecting technology platforms and our distinct core competencies to integrated solutions and by providing smart solutions for healthy consumers and their environment.

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Our Specialty Ingredients segment is operating in 15 highly regulated anti-microbial fields of application and providing 25 technology platforms – from single ingredient to turnkey solutions, fully serviced with application technology and regulatory support. These offerings represent the most-comprehensive portfolio of anti-microbial solutions in the market.

Lonza will continue to leverage this unique anti-microbial expertise and offer products and solutions that significantly improve consumer and resource protection from harmful biological risks.

Discover Lonza Specialty Ingredients segment as operated in 2017:

- Consumer Health
- Coatings and Composites
- Agro Ingredients
- Water Care

As of 1 January 2018, the Specialty Ingredients segment began operating in three distinctive units: a Consumer Health Division, a Consumer & Resources Protection Division and a Water Care Business Unit.

The former Consumer Health and Nutrition business of Capsugel has been integrated within the existing Consumer Health and Nutrition business of Lonza's Specialty Ingredients segment, and together they have formed the new Consumer Health and Nutrition Business Unit. Together with the Consumer Product Ingredients Business Unit, they have formed the new Consumer Health Division. Coatings and Composites and Agro Ingredients are continuing to operate in their current structures under the new umbrella of a Consumer & Resources Protection Division.



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—  
**Prevention  
Protection  
Preservation**  
—  
—



Consumer Health

**Consumer Health and Nutrition**  
—  
**Consumer Product Ingredients**

Consumer & Resources Protection

**Coatings and Composites**  
—  
**Agro Ingredients**

**Water Care**

Building a unique solutions powerhouse by leveraging recent portfolio extensions

Strengthening our leading position through focus and business-model innovation



# Specialty Ingredients Overview 2017

Specialty Ingredients delivered strong results with growth drivers along and beyond the healthcare continuum.

The segment (Lonza standalone) posted sustained positive performance again this year with a sales increase of 5.2% (4.8% in constant exchange rates) to CHF 2.4 billion during 2017. CORE EBIT grew by 10.2% year-over-year to CHF 367 million with further improved margins. This strong performance was driven not only by Consumer Care businesses, but also by the further value creation achieved in the Coatings and Composites business, which includes Wood Protection, and in the Agro Ingredients business.

## Specialty Ingredients Financial Summary <sup>1,2</sup>

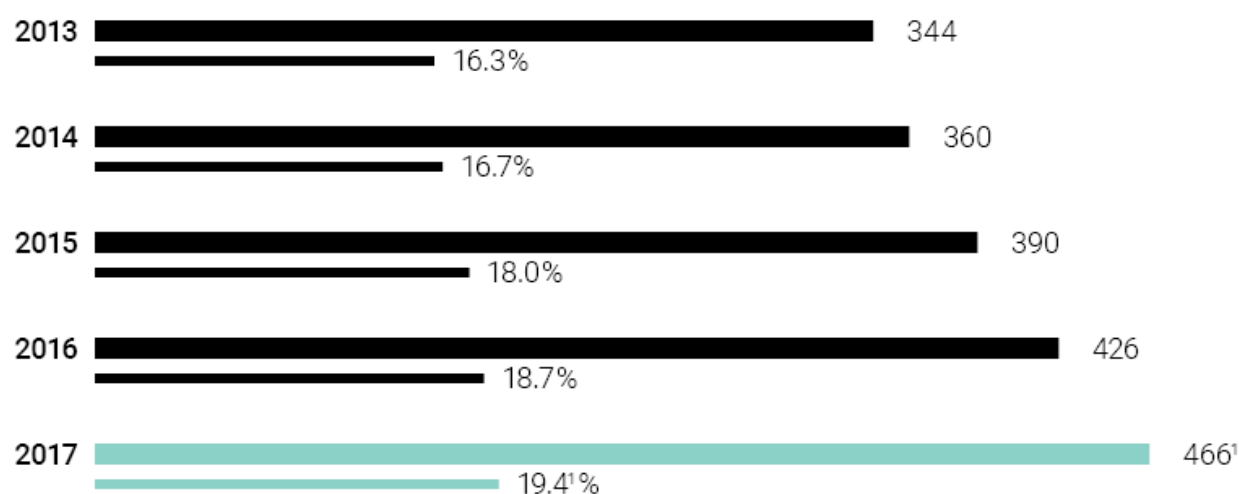
million CHF	2017	Change in %	2016
Sales	2,400	5.2	2,281
CORE EBIT <sup>3</sup>	367	10.2	333
CORE EBIT margin in %	15.3		14.6
CORE EBITDA <sup>3</sup>	466	9.4	426
CORE EBITDA margin in %	19.4		18.7

<sup>1</sup> Results of Specialty Ingredients are presented on standalone basis (excluding Capsugel) to enable year-over-year performance comparison.

<sup>2</sup> Restated to reflect the transfer of a business from Pharma&Biotech to Specialty Ingredients (Sales CHF +30 million, favorable impacts on CORE EBIT CHF 11 million and CORE EBITDA CHF 11 million).

<sup>3</sup> **CORE Definition:** Lonza believes that disclosing CORE results of the Group's performance enhances the financial markets' understanding of the company because the CORE results enable better comparison across years. CORE results exclude exceptional expenses and income related to e.g. restructuring, environmental-remediation, acquisitions and divestitures, impairments and amortization of acquisition-related intangible assets, which can differ significantly from year to year. For this same reason, Lonza uses these CORE results in addition to IFRS as important factors in internally assessing the Group's performance.

## CORE EBITDA (in million CHF) and CORE EBITDA Margin Progression



<sup>1</sup> Results are presented on standalone basis (excluding Capsugel) to enable year-over-year performance comparison.

# Consumer Health



>**19** manufacturing sites in **10** countries  
>**70** billion capsules produced annually  
>**300** product and formulation offerings



Addressing consumer needs in the health, nutrition, personal care, home care, hygiene, institutional, pet, food and beverage industries.

Consumer Health within Lonza's Specialty Ingredients segment is focused on becoming the leading partner for the fast-moving consumer goods industry by supporting health, wellness and beauty through science and technology. Lonza's Consumer Health business includes nutrition and dietary supplement ingredients and delivery systems, hygiene and preservation products, and personal-care offerings. With the addition of Capsugel, Lonza is now an industry leader in nutritional capsules, innovative formulations and finished dosage forms.

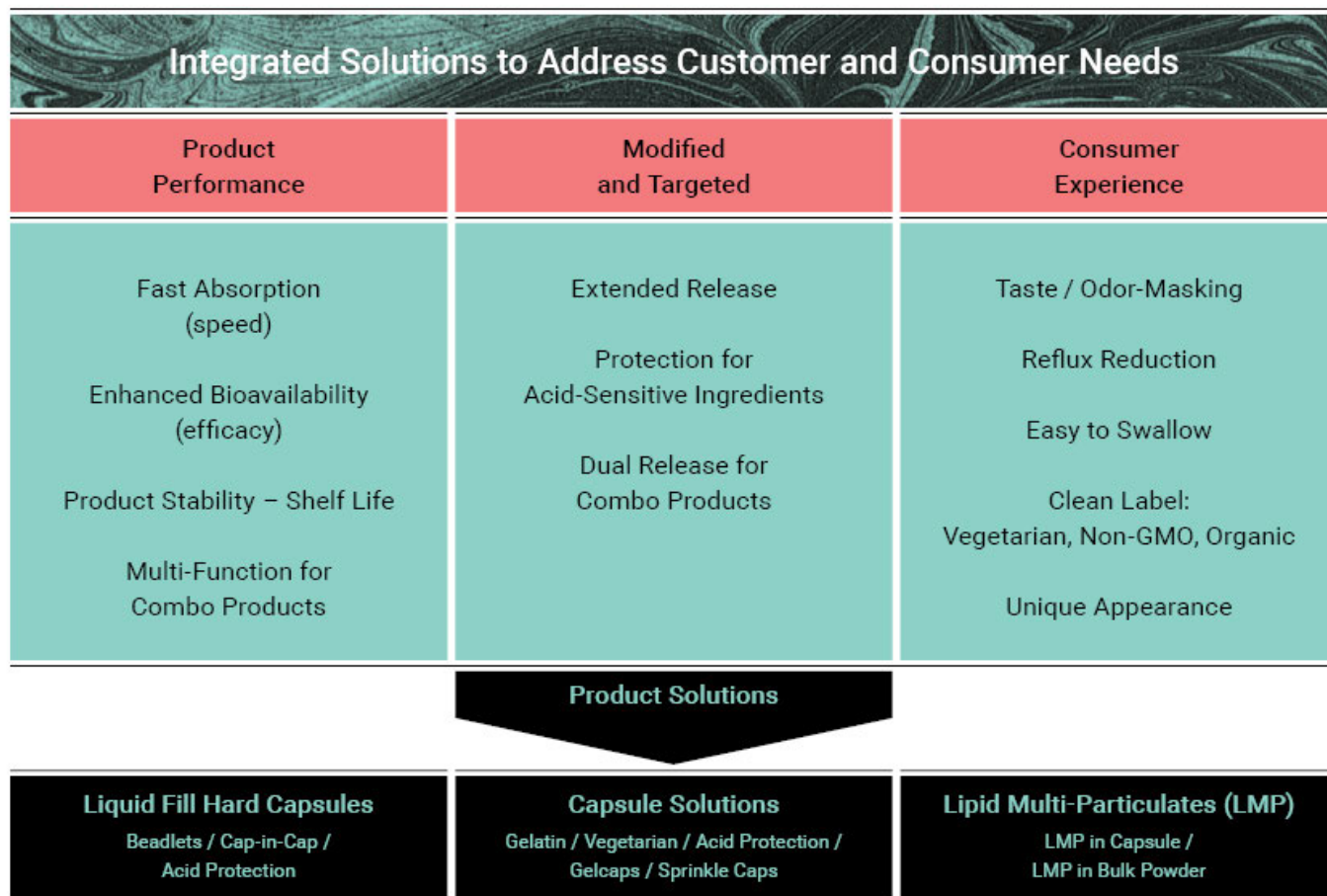
Together the teams in Consumer Health are capitalizing on people's desire for nutritious food and dietary supplementation, for protection from dangerous viruses and other pathogens, and for the ability to look and feel their best. While we help to protect the health and well-being of people and companion animals around the world through proprietary ingredients and vitamin and supplement delivery, we also offer innovative hair- and skin-care formulations and ingredients for the personal-care market.

Our market-oriented, collaborative approach in combination with world-class quality allows us to deliver the solutions our customers need and is further strengthened by Lonza's regulatory expertise. This advantage means that our customers have the regulatory support to obtain registration approvals required by local governmental agencies and the products backed by science in order to make marketable claims that help deliver meaningful differentiation.

We enable our customers to improve the lives of their consumers by ensuring healthier environments, delivering more nutritional foodstuffs, improving the delivery of vitamins and supplements, and offering more-advanced hair-, scalp- and skin-care products through the Consumer Health businesses.

In brief, Lonza's Nutrition business supplies branded health ingredients that are supported by scientific research, regulatory compliance and market insights. Clear benefits and a broad array of product applications make our products attractive for the dietary supplement, food and beverage, nutrition and pharmaceutical industries. Lonza offers formulation know-how and delivery solutions, strong service capabilities and global regulatory expertise to help our customers quickly deliver innovative and differentiated nutritional products to market.

We apply consumer market insights and our extensive experience in pharmaceutical-delivery science to help our customers improve bioavailability, targeted delivery, swallowability, odor masking and taste of their nutritionals. Our technology enables us to develop unique combination products and visually appealing dosage forms that meet the expectations of today’s health-conscious consumers.



Our Hygiene and Preservation team offers products to disinfect and sanitize “cleanrooms,” schools, food processing plants, restaurants, grocery stores, hospitals, health clinics, homes and more. We are a global leader for registered biocides, preservatives and antimicrobial formulations for use in disinfectants and sanitizers; and we serve both the homecare and the institutional cleaning markets. Our products offer broad-spectrum efficacy and extensive substrate compatibility. We provide industry-leading regulatory and toxicology expertise, which helps support wide global acceptance and regulatory compliance. Our robust data packages and innovative, market-focused R&D offerings enable our customers to stay at the forefront of industry developments.

## Widely Approved Portfolio of Actives with Formulated Solutions and Protocols

Private Households		Institutional Hygiene	
Kitchen Countertops Tiles Floors Bathroom Surfaces		Hospitals, Day Clinics, Nursing Homes Food Processing and Storage; Bars, Restaurants Transportation Services; Schools, Office Buildings, Public Facilities, Hotels, Accommodations	
Hard-Surface Disinfection and Sanitization	Garment Disinfection and Sanitization	Hand Hygiene	Material Preservation

Lonza also has a Personal Care business, where it serves the market as an established supplier of traditional and next-generation preservation and protection systems, custom developed fermentation, biotechnological and botanical actives, and functional ingredients, such as specialty emulsifiers and aesthetic modifiers. As a world-class manufacturer, we are among the global leaders in zinc pyrithione, quaternary ammonium actives and L-Carnitine.

### Discover More

Highlights 2017

Innovation & Initiatives

For further information about our businesses, visit our [Consumer Health website](#) or one of the following websites:

- Hygiene
- Preservation
- Nutrition
- Personal Care
- Capsules & Food Supplements



# Highlights 2017

Lonza's Consumer Health division, the former Consumer Care business unit until October 2017, was re-organized after the Capsugel acquisition in order to strengthen Lonza's position in the fast-moving healthcare and nutrition consumer goods market and to drive our growth along the healthcare continuum. Consumer Health now consists of **Consumer Health and Nutrition** and of Consumer Product Ingredients.

The strategic business unit experienced another successful year and contributed to Lonza's (standalone) full-year 2017 guidance. Growth drivers were the Hygiene and Preservation business and the Nutrition business.

Our Consumer Health and Nutrition business grew strongly in 2017. The continued success of our flagship ingredients **Carnipure®** L-Carnitine and **UC-II®** undenatured collagen helped drive this growth.

Following the acquisition of Capsugel in 2017, Consumer Health and Nutrition now further enhances our ability to combine expertise in high-quality, science-backed ingredients with formulation know-how and industry-leading capsule and encapsulation technologies to create innovative solutions for consumer health and nutrition companies.

Lonza expects to continue to benefit from high market demand and innovative product offerings in the fast-growing consumer products markets with Capsugel further strengthening Lonza's offerings. One recent example is the launch of several **new dietary supplement formulas** addressing sports, mood, sleep, weight management and immunity powered by Capsugel's formulation and finished dosage forms expertise.

Lonza benefited from growth momentum in disinfection solutions in several markets throughout 2017, and we see ongoing high demand in this non-cyclical business based on changing regulatory requirements. Our Hygiene and Preservation businesses performed strongly in 2017 with our extensive portfolio of products. These products include global solutions registered by the U.S. Environmental Protection Agency (EPA), the Canadian Therapeutic Products Directorate (TPD), the relevant authorities of many EU member states, the Ministries of Health in China and in Japan, as well as other regulatory agencies around the world.

Prominent existing product lines include our well-established Preservation portfolio under Lonza's **Proxel®** range of benzisothiazolinone (BIT)-based systems, **Dantogard®** and **Glydant®** series of preservatives built around dimethyl dimethylol hydantoin (DMDMH) range, our anti-fungal **Glycacil®** and **Omacide®** ranges based on Iodopropynyl butylcarbamate (IPBC), **Vantocil®** and **Cosmocil®** offers centered on polyaminopropyl biguanide (PHMB), and our expanding range of next-generation non-traditionals and protection systems under the **Geogard®**, **Mikrokill®** and **Biovert®** brands.

In disinfection Lonza's globally recognized platforms and solutions are sold as **Barquat®** and **Bardac®** for the first-generation quat-based active ingredients and **Carboquat®**, **Carboshield®** and **Bardap®** for the chlorine-free new-generation ones. Lonza's flexible **Lonzabac®** active amine biocidal products are also available, as well as our leading **Lonzagard®** and new **NUGEN™** state-of-the-art-disinfection solutions.

Today's personal-care consumer has an increased expectation in personalized products that meet their individual beauty and wellness rituals. Consumers desire products that go beyond basic claims and seek for new experiences that either maintain or restore their skin and hair in a healthy state. The pursuit of healthy, cleaner and greener lifestyles, along with the need for personalization, is driving premium positioning at all channels in the market where quality, efficacy and consumer engagement help deliver targeted solutions.

Although 2017 saw a softer overall performance, we remain one of the world's largest supplier of anti-dandruff actives with our **Zinc Omadine®** product portfolio. New product launches in the anti-dandruff markets with anti-microbial technology including geographical expansions are expected to further add to this momentum.

In addition, the Personal Care team is committed to creating customized formulation design based on our broad range of functional ingredients and helping to design modern, premium personal care products. Furthermore, continuous investments in innovation in the areas of skin and scalp health will help to create new solutions that defend and restore skin structure and scalp conditions to their most-healthy state.

# Innovation and Initiatives

The integration of the nutraceuticals specialist InterHealth, acquired by Lonza in September 2016, was one of the main projects in 2017 and was successfully completed in the reporting year. One result of the integration was the expansion and upgrading of the manufacturing site in Fort Smith, AR (USA) for our UC-II undenatured collagen ingredient, a nutritional ingredient clinically proven to benefit consumers by helping to improve joint mobility. It is a key ingredient for many leading brands to develop products in a convenient one-per-day dose.

The other major initiative was the beginning of the integration of Lonza nutritional ingredients and Capsugel formulation and encapsulation capabilities. Capsugel's strong presence in solutions for the delivery of dietary supplements opens new opportunities for Lonza's ingredients. Lonza's penetration in the food and beverage segments represents an opportunity to employ Capsugel's formulation sciences to improve performance and the consumer experience.

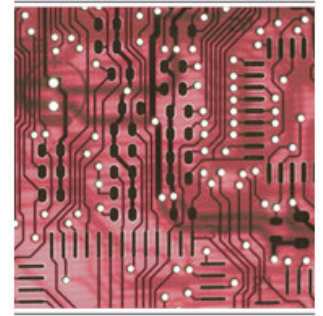
Our Consumer Health and Nutrition business has strong capabilities that play an important role in the development of advanced personal-care products and applications. Overall the hygiene and preservation and the personal-care markets are served globally out of four locations with five different sets of expertise:

- Biotechnology expertise in Visp (CH)
- Microbial control and preservation expertise in Allendale, NJ (USA)
- Microbial control and preservation expertise in Manchester (UK)
- Hair-care and formulation expertise in Manchester (UK)
- Skin-care expertise in South Plainfield, NJ (USA)

# Coatings and Composites



**16** locations in **11** countries  
**>200** biocide formulations  
**30** composite resins offerings  
**15** markets served



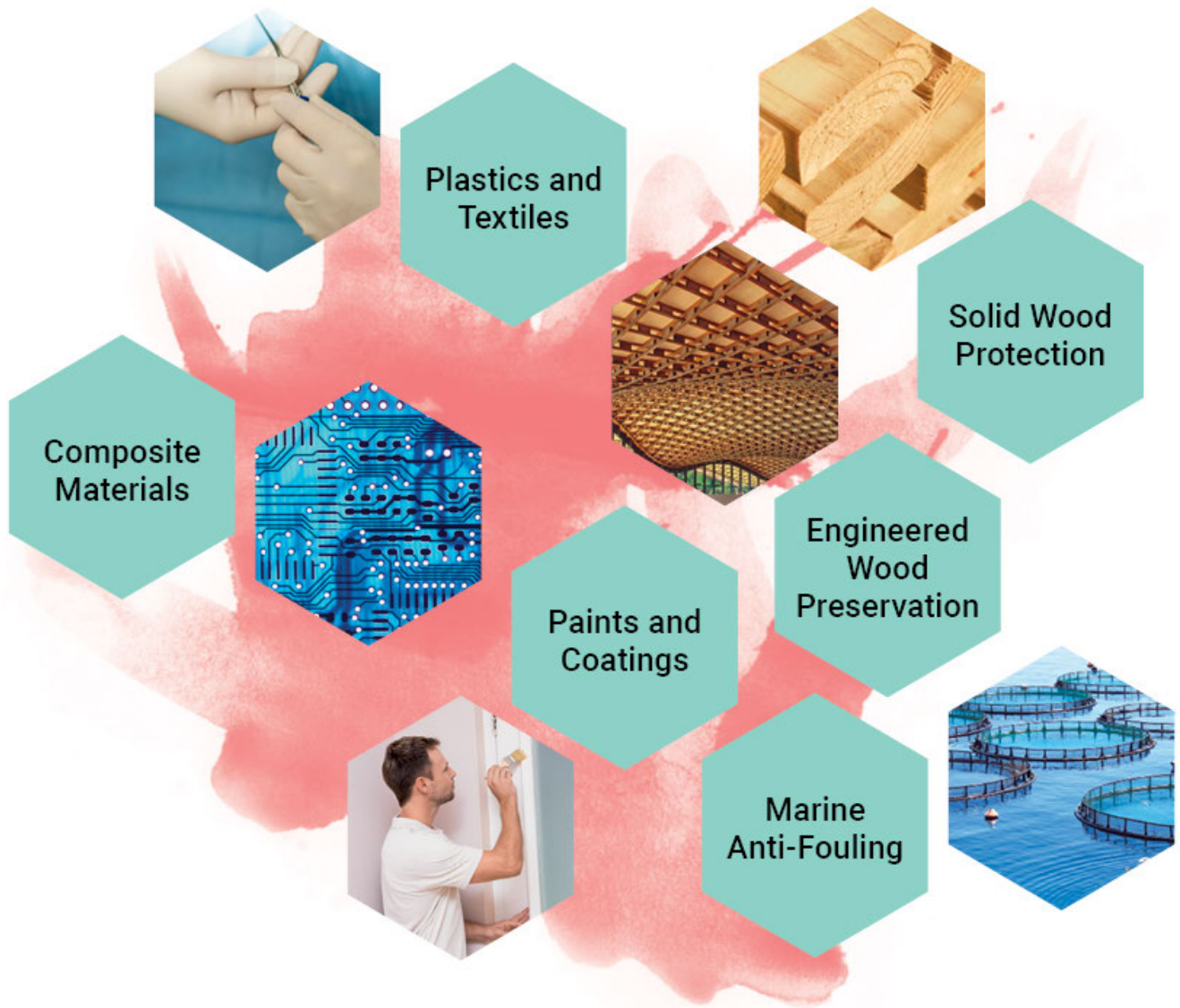
Innovative, safe and sustainable technologies to improve the way we live and protect our customers' reputations.

The strategic business unit **Coatings and Composites** globally offers a wide array of specialty solutions for the protection, enhanced performance and modification of the end-use characteristics of various materials, including carbon fibers, fabrics, leather, metals, plastics, stone and wood.

Our specialty products are used to produce coatings that are applied superficially or by penetrating processes. They protect the materials from biological (e.g. insects, decay, algae, mold and mildew) and physical-chemical degradation (e.g. fire, moisture). Our specialty biocide and non-biocide products are applied in paints, inks, sealants, adhesives, backing materials for bath mats and carpeting, shower curtains, wallboards, flooring and ceiling materials, wood preservatives and many more applications.

We also deliver specialty solutions for the in-process or end-of-process application for various composites (e.g. wood-plastic composites, laminated veneer, lumber, etc.) Our composite thermoset resin systems are used in modern consumer electronics to help support performance, as well as in the production of lightweight reliable structural and interior elements for passenger aircraft.

In our **Coatings and Composites** business, we strive to develop environmentally sustainable and innovative technologies in response to our customers' demands and the increasing challenges presented by the global regulatory landscape. We work on developing products and services that protect renewable resources such as wood, leather and natural fibers and that meet new, more stringent environmental regulations. **Lonza Coatings and Composites** consists of **Materials Performance and Protection** and **Wood Protection**.



## Materials Performance and Protection

Lonza's Materials Performance and Protection business unit is a leading innovative partner for our customers in the materials protection and high-tech composites markets. We offer a wide range of biocides and formulated products and a unique selection of thermoset resins and systems.

Our biocide products help to control mold and mildew in building materials, such as paints, wallboard and emulsions, as well as to improve performance of plastics, textiles and inks. By preventing fouling on ocean-going ships, we help to conserve fuel and reduce emissions and maintenance costs.

The major growth and innovation areas of this business unit are in paints and coatings, plastics and inks, anti-fouling paints and metalworking fluids, as well as in high-tech composites for electronics and aerospace applications. With technical service labs in all regions of the world, we can support our customers with testing services and application knowhow. Our Innovation Centers in Europe, North America, South America and Asia are continuously developing new products and solutions that address our customers' needs.

# Wood Protection

For more than 80 years, the **Wood Protection** business has pioneered and developed market focused technologies that preserve, protect and enhance wood. Our business provides trusted and innovative products, application systems and support services that are appreciated by our customers.

Lonza Wood Protection has become a leading name in worldwide wood protection, with operations throughout Asia Pacific, Africa, Europe, North America and South America. Our products help protect wood from termites and decay, reduce flame spread and smoke development in the event of a fire, improve the visual appearance of wood and prevent mold growth.

Lonza's flagship brands of industrial wood preservatives and fire retardants – Wolman<sup>®</sup>, Tanalith<sup>®</sup> and Dricon<sup>®</sup> – head a family of products that enhance the performance of wood. From reliable backyard decking and landscape products to railroad ties, heavyduty utility poles, marine docks and piling, our wood-protection chemicals enable a sustainable natural resource to last longer than it otherwise could. Additional specialty lines of our water repellents, mold inhibitors, colorants and sapstain-control solutions further enhance the appearance and performance of wood.

## **Discover More**

Highlights 2017  
Innovation & Initiatives

For further information about our Performance Ingredients, Composite Materials, Functional Chemicals, Materials Protection, Oil & Gas, Marine Anti-Fouling, Hydrazine and Wood Protection businesses, please visit our [Coatings and Composites website](#).

# Highlights 2017

Coatings and Composites reported overall strong sales growth, mainly in the electronics, marine anti-fouling, shale, oil & gas and plastics market segments.

New, innovative products in the electronics market, as well as ship maintenance and repair, especially in China, Japan, Southeast Asia and Europe, had a positive impact on the business. This growth was driven by an overall market rebound compared with prior year and by additional sales with key global customers. These two factors had a positive impact in driving higher sales and reflected our solid long-term relationships with industry-leading customers.

The launch of our new methylisothiazolinone- (MIT-) free preservatives in Europe continued to draw strong customer interest, with commercial approvals ramping up into 2018.

Lonza Wood Protection delivered another good performance in 2017 despite facing the challenges of a highly competitive market environment. Within the Wood Protection business, engineered wood preservation and mold-control offerings saw particularly strong growth, and efforts have been ongoing to further optimize performance within these markets.

Other highlights in 2017 include the increased market penetration of unique Lonza biocides used to combat mold in polyurethane foam applications. Newly introduced products for shale, oil and gas were adopted in the marketplace. We also experienced strong sales growth in the U.S. market for hydraulic fracturing (“fracking”). Also regulatory approval of Lonza’s Omadine<sup>®</sup> product offerings for the leather market in Mexico in 2017 set the stage for market penetration in 2018.

# Innovation and Initiatives

In Materials Performance and Protection, we launched new products to replace competitors' more hazardous alternatives in the paint and coatings and the leather markets. We applied for and were granted patents for many of these innovative technologies in 2017.

Proxel Spektra™ Preservative is our new MIT-free product launched in Europe in 2017, which was developed to address the growing regulatory concerns surrounding the use of MIT as a preservative. It offers robust, long term, in-can protection of our customers' coatings products.

Innovative development work is ongoing in the fields of architectural coatings, marine anti-fouling coatings, composites and others. We are also creating new business models to bring value to our customers through unique service offerings and formulation expertise.

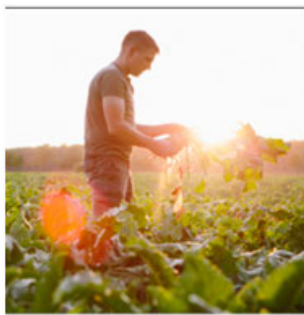
In 2017 our Wood Protection unit also aligned our business models as we completed a further stage in the integration of the Zelam and Diacon businesses, both acquired in 2015.

Initiatives in 2017 included the "Why Wood?" campaign, which highlights the benefits of wood versus alternative materials, in particular its renewability and sustainability. Our preservative products enable long-term protection for wood and wood products used in outdoor applications, which significantly extends their useful life and enhances the sustainability of wood-based materials.

In the reporting year, we introduced glue-line insecticide additive technologies used in protection of engineered wood products in North America, Russia and New Zealand. We also launched new anti-sapstain application and monitoring technologies in New Zealand, Australia, the United States and South America; and we introduced new wood preservative products in Russia, Brazil and China.



# Agro Ingredients



**250** product offerings  
**>400** customers globally  
The world's largest manufacturer of  
**vitamin B3**



Offering versatile actives through established customer relations, as well as expertise in biocides technologies and regulatory environment.

Lonza's **Agro Ingredients** business offers highly effective products and custom agricultural manufacturing services designed to improve crop yields and food quality. Our business consists of three areas – agro solutions, custom manufacturing and animal nutrition. While we offer products and services to industrial customers, we also supply finished products for end use by agricultural enterprises and farmers.

Lonza's offerings to the agricultural market derive from our unrelenting focus on our customers' needs and requirements and are based on our expertise in chemical and biological technology. The agro solutions business offers industrial intermediates, preservatives and additives for agrochemical formulations, as well as a broad range of final crop-protection products.

Our state-of-the-art custom manufacturing supports our customers in the production of modern herbicides, insecticides and fungicides, including biologically derived products, such as biopesticides, biostimulants and other microbial active ingredients and intermediates. Lonza's services also include full life-cycle management for our customers' products.

The animal nutrition business offers animal feed additives and supports the production animal sector by providing branded, high-quality **ingredients** with clear benefits that are reinforced by our distributors and agents around the world. Examples include our vitamin B3 compounds (**niacin and niacinamide**) and our **Carniking®** and **LaraFeed®** products.

## Discover more

[Highlights 2017](#)  
[Innovation and Initiatives](#)

For further information about Agro Ingredients' custom manufacturing, intermediates, molluscicides, formulation ingredients, crop protection, animal-care businesses and performance ingredients, please visit our [Agro Ingredients website](#).

# Highlights 2017

During the reporting year, the Agro Ingredients unit was reorganized to integrate Performance Intermediates, which was previously part of Lonza's Coatings and Composites business. Zelum, a crop protection company acquired by Lonza in 2015, was renamed Lonza NZ Ltd. in 2017 in order to increase brand awareness and the image of Lonza in New Zealand and Australia.

Agro Ingredients showed solid growth based on higher demand in animal nutrition. Our vitamin B3 business for animal nutrition applications experienced favorable market conditions in all geographies, but a cyclical market demand has to be taken into consideration in a mid- to long-term view. Feed applications for L-Carnitine-based and arabinogalactan-containing formulations also grew by geographic expansion, especially in Asia.

Progress was also made in the build-up of a niche portfolio for selected specialty crops with a range of agrochemical products and applications, based on Lonza's broad technology platforms in chemistry and biotechnology. Geographic expansion, new label claims and new formulations are supporting the strategic growth in this business.

Lonza is one of the world's market leaders in molluscicides, with our offering of Meta<sup>®</sup> metaldehyde active ingredient and Meta<sup>®</sup>-based, formulated products. For example, Meta<sup>®</sup>, Lonza's specific molluscicide for slug and snail control in agriculture and home & garden applications, had strong demand from our strategic growth areas in Southeast Asia. We offer solutions for the main pest there – the Golden Apple Snail.

Also we serve the professional and home & garden markets with our formulated end-use molluscicide, Axcela<sup>®</sup>. In all the main markets, we collaborate with strategic partners and leading local distribution companies to support the growth of our premium-quality products.

Additionally, we offer fertilizers and sanitizing agents for the agricultural industry. Our Frexus<sup>®</sup> line of bactericides and algacides to ensure effective sanitization in the food, beverage and farming industries covers pre- and post-harvest treatment needs to ensure fresh and healthy food for consumers. For instance, our finished commercial Frexus<sup>®</sup> CH Sanitizer products are sold in Brazil – one of the largest agricultural markets in the world – as fertilizers and as disinfectants for fruit and vegetable crops (pre- and post-harvest treatments).

# Innovation and Initiatives

Capital expenditure in 2017 included geographical expansion of our crop-protection products into new markets, and investments at our production plants that targeted reduced costs. Lonza also invested in new R&D facilities at the Lonza site in New Plymouth (NZ) and in Salto (BR). Furthermore, we were able to expand our portfolio through the launch of Frexus<sup>®</sup> products in Paraguay, as well as Celenco<sup>®</sup> in Brazil. These initiatives provide Lonza the foundation for expanding these product ranges in the future in the Latin America region.

Our aim within the value-added chain of the agricultural sector is to help reduce crop losses and boost productivity. We enable our customers to optimize the use of increasingly scarce natural resources, such as arable land and clean irrigation water.

These sustainability targets would be impossible to achieve without the use of modern, highly efficient agro-chemistry. Meeting these requirements will take major investments in the research and development of effective and sustainable solutions. It will require innovation – and cutting-edge technology companies like Lonza are making an important contribution in this regard.

# Water Care



9 locations in 4 countries  
>740 product offerings  
covering 23 brands  
7 markets served



Strengthening our strong position through razor-sharp focus and business-model innovation.

Our Water Care business is one of the world's leading suppliers of sanitizers and other treatment chemicals for pools, spas and water parks. We are also rapidly growing sales in the treatment of surface waters, as well as water for drinking, agriculture, irrigation, food processing and industrial applications. For these types of applications, we offer oxidizing and non-oxidizing biocides, proprietary halogen stabilizers and innovative solutions that include proprietary feeder systems and controllers.

Water Care has strong leadership positions around the world. We have a long heritage of providing clean water solutions, with more than a century of experience in developing innovative water-treatment offerings.

Our Water Care products include residential and commercial swimming pool and spa water applications, as well as applications for drinking water, process water, wastewater, irrigation, surface water and industrial water. We build customer relationships by offering technical customer support, R&D, formulation expertise, regulatory excellence and powerful brand marketing, as well as product reliability and quality.

Our Water Care business has two segments, based on customer need: Residential Water, which encompasses ProDealer and Mass channels; and Industrial, Commercial, Municipal and Surface Water (ICMS), which offers chemicals and services.

Lonza's Residential Water brands keep recreational water clean and free of algae and bacterial growth, while keeping chlorine stabilizer and pH levels within the recommended ranges. With clean, clear water, pools and spas can be an integral part of a healthy lifestyle of exercise and stress reduction.

Our ICMS business includes a broad portfolio of chemicals, formulations and innovative solutions to answer customer needs for water sanitization and treatment. As highly specialized service providers, we offer a wide range of branded products to the market and provide onsite support for end-use customers. We provide products and automated feeder systems to commercial pools, including theme parks, hotels, public pools and camp parks. In addition to municipal drinking water and wastewater treatment facilities, we offer industrial applications for processes used in the pulp and paper, food and beverage, power, chemical and steel industries.

## Discover More

[Highlights 2017](#)

[Innovation and Initiatives](#)

For further information about our businesses, visit [Lonza Water Care website](#) or the following links:

- [Residential Water](#)
- [Non-Residential Water \(ICMS\)](#)
- [Water Treatment Products Worldwide](#)

## Lonza Water Care on social media:

- HTH® YouTube Channel (How-to Videos)
- HTH® Facebook page
- POOL Lifestyles™ Facebook page
- POOL Lifestyles™ YouTube Channel
- Leisure Time® Facebook page
- Pulsar® YouTube Channel
- Constant Chlor® YouTube Channel
- Constant Chlor® City of West Springfield Video Case Study

# Highlights 2017

In the reporting year, we renamed the business unit from “Water Treatment” to “Water Care” to reflect the group's alignment with Lonza’s commitment to consumer safety and our world-class product stewardship.

Unfavorable seasonal effects and a competitive market environment affected Lonza's Water Care business as expected. Commercial initiatives have been established to strengthen both the residential and the industrial water businesses.

Within the Residential Water group, our Mass channel continues to build upon the solid foundation of our flagship brand, HTH®. In addition to our high-quality, trusted products, we are focused on improving the customer experience. Using the latest digital-marketing practices, we can engage with consumers along their buying journey and deliver targeted messages and education for helping to improve the in-store and online experience. Our Mass team also invested in rebuilding our sales organization with talent that introduced the next level of category management into our market.

The ProDealer channel has a rich history of innovating in the pool and spa water-care product arena. Anchored by our cornerstone brands: poolife®, Leisure Time®, BAQUACIL®, BAQUA Spa® and GLB®, we continue to introduce differentiated, proprietary formulas that pool and spa owners trust to keep their water clean and clear. Our ProDealer channel continued to expand our market share in 2017, against a background of declining demand overall and a highly competitive market environment.

In 2017 our ICMS business recorded a solid year. ICMS invested in innovative green technology for drinking water applications to offer sustainable solutions in accordance with growing customer demands and regulatory requirements. We have made good progress in reducing the exposure to the more weather-dependent conditions in the Residential Water business by focusing more on the less-seasonal ICMS business.

For example, our calcium hypochlorite sanitization solutions, which are delivered via proprietary feed technologies, are present on all continents. Our Dry Tec® and Frexus™ branded disinfectants combat bacteria in the food and beverage industry. These solutions are used by some of the largest bottling companies in the world – in protein-producing facilities and for post-harvest washing facilities for all kinds of fresh products.

We also continued to demonstrate our excellent value proposition for drinking water disinfection in island communities, such as the Pacific Islands and the Caribbean, with new market entries and expansion of the range of solutions provided. Offering market-specific products that fulfill complex needs has allowed Lonza’s ICMS business to expand into niche markets and showcase the unique features and benefits of our portfolio of products and services.

# Innovation and Initiatives

Lonza manufactures and markets oxidizing and non-oxidizing biocides, along with specialized chemicals, under a number of premium brands. Keys to continued success in these businesses are to develop close customer relationships, launch compelling consumer marketing, develop innovative and differentiated products and maintain efficient manufacturing and distribution operations.

In 2017 Water Care launched the following new products and new dealer offerings:

- **NST<sup>®</sup>** was introduced to the ProDealer market with positive results. The launch created a differentiated category for pool-care products by utilizing a proprietary technology that addresses the growing problem of over-stabilization of residential pool water.
- A new pool sanitation system for the hotel, motel, apartment and condominium (HMAC) market segment was launched in the United States in 2017 under the CCH Endurance<sup>™</sup> and Pulsar<sup>®</sup> Infinity brands. Global roll-out expected once regulatory approvals are obtained in each region.
- **pHin** was launched in the retail trade in 2017. Water Care's partnership with pHin continues our investment into smart technology and the Internet of Things.
- A patent-pending product, AMP<sup>↑</sup><sup>™</sup> Activator, which increases the activity and efficacy of herbicides used to control nuisance aquatic vegetation, was launched by Water Care's Surface Water team in 2017. By improving the performance of these herbicides, AMP<sup>↑</sup><sup>™</sup> Activator allows reduced application rates of herbicides, which can be especially useful in areas of restriction and exposure controls. Commercial and operational excellence programs, as well as efforts for innovation in our product offerings, are ongoing to help Water Care to succeed in such a challenging market environment and seasonal business.





# Financial Report

**958 mn**

CORE EBIT  
in CHF

**24.8%**

CORE EBITDA  
Margin

**5,1 bn**

Sales 2017  
in CHF

**29.1%**

CORE RONOA

**F**

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# Consolidated Balance Sheet

## Assets<sup>1</sup>

million CHF	Note <sup>2</sup>	2017	2016
<b>Non-current assets</b>			
Property, plant and equipment	6	3,198	2,412
Intangible assets	5	3,701	968
Goodwill	5	4,002	1,287
Other non-current assets	7	108	58
Non-current income tax receivables		15	0
Deferred tax assets	22	33	38
<b>Total non-current assets</b>		<b>11,057</b>	<b>4,763</b>
<b>Current assets</b>			
Inventories	9	1,177	897
Trade receivables	11	825	612
Current tax receivables		80	16
Other receivables, prepaid expenses and accrued income	12	172	175
Cash and cash equivalents	13, 15	479	274
Assets held for sale	4	0	91
<b>Total current assets</b>		<b>2,733</b>	<b>2,065</b>
<b>Total assets</b>		<b>13,790</b>	<b>6,828</b>

<sup>1</sup> At 31 December

<sup>2</sup> See the accompanying notes to the consolidated financial statements

# Total Equity and Liabilities<sup>1</sup>

million CHF	Note <sup>2</sup>	2017	2016
<b>Equity</b>			
Share capital	26	74	53
Share premium		3,314	311
Treasury shares		(59)	(10)
Retained earnings and reserves		2,876	2,001
<b>Total equity attributable to equity holders of the parent</b>		<b>6,205</b>	<b>2,355</b>
Non-controlling interest		<sup>3</sup> 48	0
<b>Total equity</b>		<b>6,253</b>	<b>2,355</b>
<b>Liabilities</b>			
Non-current provisions	14	101	90
Employee benefit liabilities	24	578	717
Other non-current liabilities		149	134
Non-current debt	15	3,730	1,571
Non-current income tax payables		46	0
Deferred tax liabilities	22	760	329
<b>Total non-current liabilities</b>		<b>5,364</b>	<b>2,841</b>
Current provisions	14	69	49
Other current liabilities	16	992	882
Trade payables	17	400	284
Current debt	15	516	289
Current tax payables		196	88
Liabilities held for sale	4	0	40
<b>Total current liabilities</b>		<b>2,173</b>	<b>1,632</b>
<b>Total liabilities</b>		<b>7,537</b>	<b>4,473</b>
<b>Total equity and liabilities</b>		<b>13,790</b>	<b>6,828</b>

<sup>1</sup> At 31 December

<sup>2</sup> See the accompanying notes to the consolidated financial statements

<sup>3</sup> Non-controlling interest acquired with the Capsugel business combination (see note 4.1)

# Consolidated Income Statement<sup>1</sup>

million CHF	Note <sup>2</sup>	2017	2016
<b>Sales</b>	2	<b>5,105</b>	<b>4,132</b>
Cost of goods sold		(3,277)	(2,731)
<b>Gross profit</b>		<b>1,828</b>	<b>1,401</b>
Marketing and distribution		(345)	(281)
Research and development	23	(103)	(84)
Administration and general overheads <sup>3</sup>		(659)	(478)
Other operating income	20	115	32
Other operating expenses	20	(113)	(104)
<b>Result from operating activities (EBIT) <sup>4</sup></b>		<b>723</b>	<b>486</b>
Financial income	21.1	17	2
Financial expenses	21.2	(159)	(114)
<b>Net financing costs</b>		<b>(142)</b>	<b>(112)</b>
Share of loss of associates / joint ventures	8	0	(1)
<b>Profit before income taxes</b>		<b>581</b>	<b>373</b>
Income taxes	22	147	(72)
<b>Profit for the period</b>		<b>728</b>	<b>301</b>
<b>Attributable to:</b>			
Equity holders of the parent		726	301
Non-controlling interest		2	0
<b>Profit for the period</b>		<b>728</b>	<b>301</b>
		CHF	CHF
Basic earnings per share	27	10.70	<sup>5</sup> 5.31
Diluted earnings per share	27	10.60	<sup>5</sup> 5.28

<sup>1</sup> For the year ended 31 December

<sup>2</sup> See the accompanying notes to the consolidated financial statements

<sup>3</sup> Includes the amortization of acquisition-related intangible assets (2017: CHF 104 million, 2016: CHF 40 million).

<sup>4</sup> Result from operating activities (EBIT) excludes interest income and expenses as well as financial income and expenses that are not interest related (see note 21) and Lonza's share of profit/loss from associates and joint ventures.

<sup>5</sup> As a consequence of the capital increase on 10 May 2017, the calculation of the earnings per share and the diluted earnings per share have been adjusted by the factor resulting from the rights offering.

# Consolidated Statement of Comprehensive Income<sup>1</sup>

million CHF	Note <sup>2</sup>	2017	2016
<b>Profit for the period</b>		<b>728</b>	<b>301</b>
<b>Other comprehensive income</b>			
<b>Items that will not be reclassified to profit or loss:</b>			
Remeasurements of net defined benefit liability	24	119	(37)
Income tax on items that will not be reclassified to profit or loss	22.2	(50)	69
<b>Items that are or may be reclassified subsequently to profit or loss:</b>			
Exchange differences on translating foreign operations		227	4
Cash flow hedges – effective portion of changes in fair value		(83)	(2)
Cash flow hedges – reclassified to goodwill	4.1	91	0
Cash flow hedges – reclassified to profit or loss		1	1
Income tax on items that are or may be reclassified to profit or loss	22.2	(5)	231
<b>Other comprehensive income for the period, net of tax</b>		<b>300</b>	<b>(26)</b>
<b>Total comprehensive income for the period</b>		<b>1,028</b>	<b>275</b>
<b>Total comprehensive income attributable to:</b>			
Equity holders of the parent		1,024	275
Non-controlling interest		4	0
<b>Total comprehensive income for the period</b>		<b>1,028</b>	<b>275</b>

<sup>1</sup> For the year ended 31 December

<sup>2</sup> See the accompanying notes to the consolidated financial statements

# Consolidated Cash Flow Statement<sup>1</sup>

million CHF	Note <sup>2</sup>	2017	2016
<b>Profit for the period</b>		<b>728</b>	<b>301</b>
<b>Adjustments for non-cash items:</b>			
- Income taxes	22	(147)	72
- Net financing costs	21	142	112
- Share of loss of associates / joint ventures	8	0	1
- Depreciation of property, plant and equipment (excl. impairment)	6	285	249
- Amortization of intangibles	5	126	58
- Reversal of impairment	3, 6	(2)	(2)
- Impairment losses on property, plant, equipment and intangibles	3, 5, 6	21	57
- Increase in provisions	14	58	56
- Increase in employee benefit liability		5	7
- Loss on disposal of property, plant and equipment		6	9
- Amortization of other liabilities / assets		(9)	6
- Share-based payments	25	29	28
- Recycling of accumulated foreign exchange losses	4.2	35	0
- Gain from Guangzhou (CN) land transaction	6	(74)	0
Income taxes paid		(102)	(54)
Interest paid		(62)	(63)
<b>Total before change in net working capital</b>		<b>1,039</b>	<b>837</b>
Increase in inventories		(22)	(19)
Increase in trade receivables		(45)	(60)
Increase / (decrease) in trade payables		35	(15)
(Increase) / decrease in other net working capital		(9)	172
Use of provisions	14	(28)	(21)
Decrease in other payables, net		(107)	(142)
<b>Net cash provided by operating activities</b>		<b>863</b>	<b>752</b>
Purchase of property, plant and equipment	6	(427)	(355)
Purchase of intangible assets	5	(24)	(11)
Proceeds from sale of tangible and intangible assets		2	2
Acquisition of subsidiaries, net of cash acquired	4	(3,310)	(230)
Proceeds from disposal of assets held for sale	4.2	20	0
Purchase of unconsolidated investments		(9)	(11)
Proceeds from sale of other assets		0	2
Purchase of other assets		(1)	0
Net increase of loans and advances		(1)	0
Interest received		10	2
Dividends received		4	0
<b>Net cash used for investing activities</b>		<b>(3,736)</b>	<b>(601)</b>

Increase of capital	26	3,024	0
Issue of straight bond	15	235	249
Repayment of straight bond	15	0	(400)
Repayment of acquired Capsugel debt	15	(1,952)	0
Issue of syndicated loan	15	225	100
Repayment of syndicated loan	15	(100)	0
Issue of term loans	15	955	0
Proceeds from acquisition bridge financing	15	1,380	0
Repayment of acquisition bridge financing	15	(1,399)	0
Proceeds from German private placements	15	1,085	0
Repayment of US private placement	15	(156)	0
Increase / (decrease) in debt	15	73	(82)
Increase in other non-current liabilities		31	66
Decrease in other non-current liabilities		(8)	(1)
Dividends paid	27	<sup>4</sup> (160)	(131)
Purchase of treasury shares		(71)	0
Sale of treasury shares		3	48
<b>Net cash provided by / (used for) financing activities</b>		<b>3,165</b>	<b>(151)</b>
Effect of currency translation on cash		<sup>5</sup> (87)	1
<b>Net increase in cash and cash equivalents</b>		<b>205</b>	<b>1</b>
Cash and cash equivalents at 1 January		274	277
<b>Cash and cash equivalents at 31 December</b>		<b>479</b>	<b>278</b>
Cash and cash equivalents classified as held for sale	4.2	0	(4)
<b>Cash and cash equivalents at 31 December (as reported)</b>		<b>479</b>	<b>274</b>

<sup>1</sup>For the year ended 31 December

<sup>2</sup>See the accompanying notes to the consolidated financial statements

<sup>3</sup>Includes direct attributable expenses associated with the rights offering of CHF 99 million.

<sup>4</sup>Includes dividends of CHF 1 million paid to minority shareholders of a subsidiary.

<sup>5</sup>Includes exchange rate impact on USD cash balances to finance the Capsugel acquisition (resulting from the CHF proceeds from the capital increases, subsequently converted to USD).

# Consolidated Statement of Changes in Equity

million CHF	Note <sup>1</sup>	Attributable to equity holders of the parent						Non-controlling interest	Total equity	
		Share capital	Share premium	Retained earnings	Hedging reserve	Translation reserve	Treasury shares			Total
<b>At 31 December 2015</b>		<b>53</b>	<b>311</b>	<b>2,387</b>	<b>(3)</b>	<b>(562)</b>	<b>(51)</b>	<b>2,135</b>	<b>0</b>	<b>2,135</b>
Profit for the period		0	0	301	0	0	0	301	0	301
– Remeasurement of defined benefit liability		0	0	(27)	0	0	0	(27)	0	(27)
– Exchange differences on translating foreign operations		0	0	0	0	3	0	3	0	3
– Cash flow hedges		0	0	0	(2)	0	0	(2)	0	(2)
Other comprehensive income, net of tax		0	0	(27)	(2)	3	0	(26)	0	(26)
<b>Total comprehensive income for the period</b>		<b>0</b>	<b>0</b>	<b>274</b>	<b>(2)</b>	<b>3</b>	<b>0</b>	<b>275</b>	<b>0</b>	<b>275</b>
Dividends	27	0	0	(131)	0	0	0	(131)	0	(131)
Recognition of share-based payments	25	0	0	26	0	0	0	26	0	26
Movements in treasury shares		0	0	9	0	0	41	50	0	50
<b>At 31 December 2016</b>		<b>53</b>	<b>311</b>	<b>2,565</b>	<b>(5)</b>	<b>(559)</b>	<b>(10)</b>	<b>2,355</b>	<b>0</b>	<b>2,355</b>
Profit for the period		0	0	726	0	0	0	726	2	728
– Remeasurement of defined benefit liability		0	0	69	0	0	0	69	0	69
– Exchange differences on translating foreign operations		0	0	0	0	221	0	221	2	223
– Cash flow hedges		0	0	0	8	0	0	8	0	8
Other comprehensive income, net of tax		0	0	69	8	221	0	298	2	300
<b>Total comprehensive income for the period</b>		<b>0</b>	<b>0</b>	<b>795</b>	<b>8</b>	<b>221</b>	<b>0</b>	<b>1,024</b>	<b>4</b>	<b>1,028</b>
Dividends	27	0	0	(159)	0	0	0	(159)	(1)	(160)
Recognition of share-based payments	25	0	0	26	0	0	0	26	0	26
Movements in treasury shares		0	0	(16)	0	0	(49)	(65)	0	(65)
Capital injection from owners of the parent		21	3,003	0	0	0	0	3,024	0	3,024
Acquisition of subsidiary with non-controlling interest		0	0	0	0	0	0	0	45	45
<b>At 31 December 2017</b>		<b>74</b>	<b>3,314</b>	<b>3,211</b>	<b>3</b>	<b>(338)</b>	<b>(59)</b>	<b>6,205</b>	<b>48</b>	<b>6,253</b>

<sup>1</sup> See the accompanying notes to the consolidated financial statements



# Translation Reserve

The translation reserve of the consolidated statement of changes in equity comprises all foreign exchange differences arising from the translation of the financial statements of foreign entities including the impact on translating monetary items that form a net investment in a foreign operation.

# Notes to the Consolidated Financial Statements

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# Note 1 – Account Principles

## Lonza Group

Lonza Group Ltd and its subsidiaries (hereafter “the Group” or “Lonza”) operate under the name Lonza. Lonza Group Ltd is a limited liability company incorporated and domiciled in Switzerland. The Group is headquartered in Basel, Switzerland. Lonza is one of the world’s leading and most-trusted suppliers to the pharmaceutical, biotech and specialty ingredients markets. It harnesses science and technology to create products that support safer and healthier living and that enhance the overall quality of life. With the 2017 Capsugel acquisition, Lonza now offers products and services from the custom development and manufacturing of active pharmaceutical ingredients to innovative dosage forms for the pharma and consumer health and nutrition industries. Benefiting from its regulatory expertise, Lonza is able to transfer its know-how from pharma to hygiene and fast-moving consumer goods all the way to coatings and composites and the preservation and protection of agricultural goods and other natural resources.

## Basis of Preparation

The consolidated financial statements for 2017 and 2016 are reported in Swiss francs (CHF), rounded to millions, and based on the annual accounts of Lonza Group Ltd (Company) and its subsidiaries at 31 December, which have been drawn up according to uniform Group accounting principles. The consolidated accounts are prepared in accordance with the International Financial Reporting Standards (IFRS) and with Swiss law. They are prepared on the historical cost basis, except that derivative financial instruments and contingent considerations are stated at their fair values and the employee benefit liability is stated at the fair value of plan assets less the present value of the defined benefit obligation.

As a result of the 2017 acquisition of Capsugel SA (see note 4.1) certain of the financial statement positions have changed significantly compared to the previous financial year. Therefore, the comparability of the consolidated balance sheet positions as of the end of 2017 and 2016 as well as the consolidated income statement 2017 and 2016 is limited.

## Changes in Accounting Standards

There were no new standards or amendments to existing standards that had a significant impact on the Group’s consolidated financial statements.

The following new and revised standards have been issued, but are not yet effective. They have not been applied early in these consolidated financial statements. The current status of the expected effects is disclosed below.

Standard / Interpretation	Effective date	Planned application by Lonza
IFRS 15 – Revenue from Contracts with Customers	** 1 January 2018	Reporting year 2018
IFRS 9 – Financial Instruments	* 1 January 2018	Reporting year 2018
Amendments to IFRS2 – Classification and Measurement of Share-based Payment Transactions	* 1 January 2018	Reporting year 2018
IFRIC 22 – Foreign Currency Transactions and Advance Consideration	* 1 January 2018	Reporting year 2018
IFRS 16 – Leases	** 1 January 2019	Reporting year 2019
Long-term Interests in Associates and Joint Ventures – Amendments to IAS 28	* 1 January 2019	Reporting year 2019
IFRIC 23 – Uncertainty over Income Tax Treatments	* 1 January 2019	Reporting year 2019
Annual Improvements to IFRS® Standards 2015–2017 Cycle	* 1 January 2019	Reporting year 2019

\* No or no significant impact is expected on the consolidated financial statements

\*\* The Group's assessment on the impacts of adopting these standards is outlined below

*IFRS 15 Revenue from contracts with customers* amends revenue recognition requirements and establishes principles for reporting information about the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. Revenue is recognized when a customer obtains control of a good or service and thus has the ability to direct the use and obtain the benefits from the good or service. Based on the Group's assessment the adoption of the new standard will primarily impact its long-term contracts in the custom manufacturing business and will result in recognition of contract assets for costs incurred during the pre-manufacturing phase as well as additional deferred income related to payments from customers before supply of goods. The Group applies a full retrospective application of IFRS15 to enhance comparability. The Group expects that the adoption of IFRS 15 will result in the recognition of additional deferred income of approximately CHF 100 – 120 million and contract costs of approximately CHF 30 – 40 million as of 31 December 2017. The additional deferred income and contract costs are expected to be amortized consistent with the underlying contractual terms spanning a period of 5 – 10 years. Furthermore, the Group expects that the implementation of IFRS 15 will have an adverse impact of CHF 15 – 25 million on the retrospective 2017 consolidated income statement, as a result of the deferral of certain payments from customers.

*IFRS 16 Leases* substantially changes the financial statements as the majority of leases will become on-balance sheet liabilities with corresponding right of use assets on the balance sheet. The current operating lease commitments of CHF 170 million as of 31 December 2017 (see note 6) provide, subject to the provision of the standard, an indicator of the impact of the implementation of IFRS 16 on the Group's consolidated balance sheet. However, Lonza is still in the process of evaluating the potential impacts of applying IFRS 16.

## Principles of Consolidation

The consolidated financial statements represent the accounts for the year ended 31 December of Lonza Group Ltd and its subsidiaries. Subsidiaries are those entities controlled, directly or indirectly, by Lonza Group Ltd. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the

subsidiary. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and if they do not result in a loss of control. The significant subsidiaries included in the consolidated financial statements are shown in [note 33](#).

The full consolidation method is used, whereby the assets, liabilities, income and expenses are incorporated in full, irrespective of the extent of any non-controlling interest. Payables, receivables, income and expenses between Lonza-consolidated companies are eliminated. Intercompany profits included in year-end inventories of goods produced within Lonza are eliminated, as well as unrealized gains on transactions between subsidiaries. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

The Group's interests in equity-accounted investees comprise interests in associates and joint ventures, as disclosed in [note 8](#). Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities. Associates and interests in joint ventures are accounted for in the consolidated financial statements using the equity method of accounting. They are recognized initially at cost, which includes transaction costs. Subsequent to the initial recognition, the consolidated financial statements include the Group's share of the profit and loss and other comprehensive income of equity-accounted investees, until the date on which significant influence or joint control ceases. Dividends paid during the year reduce the carrying value of the investments.

## Segment Reporting

For the purpose of segment reporting, the Group's Executive Committee (EC) is considered to be the Group's Chief Operating Decision Maker. The determination of the Group's operating segments is based on the organizational units for which information is reported to the EC on a regular basis. The information provided is used as the basis of the segment revenue and profit disclosures reported in [note 2](#). Selected segment balance sheet information and performance measures are also routinely provided to the EC.

Lonza had two segments in the first half of 2017 as well as in 2016: Pharma&Biotech and Specialty Ingredients. When Capsugel was acquired on 5 July 2017, it remained a separate operating segment from its acquisition date through 31 December 2017. Revenues are primarily generated from the sale of products. The Pharma&Biotech segment and Capsugel also derive revenues from rendering of services as well as the sale or licensing of products or technology to third parties. Residual operating activities from certain global activities are reported as "Corporate." These include the EC and global group functions for communications, human resources, finance (including treasury and taxes), legal, environmental and safety services. Transfer prices between operating segments are set on an arm's-length basis. Operating assets and liabilities consist of property, plant and equipment, goodwill and intangible assets, trade receivables / payables, inventories and other assets and liabilities, such as provisions, which can be reasonably attributed to the reported operating segments. Non-operating assets and liabilities mainly include current and deferred income tax balances, post-employment benefit assets / liabilities and financial assets / liabilities such as cash, investments and debt. In 2018 the Group anticipates integrating the Capsugel reporting segment into Pharma&Biotech and Specialty Ingredients.

## Revenue Recognition

Sales are recognized when the significant risks and rewards of ownership of the assets have been transferred to a third party and are reported net of sales taxes and rebates. Rebates to customers are recognized in the same period that the related sales are recorded. Revenue from termination fees is recorded in the income statement in the period in which the termination occurs. The percentage of completion (POC) method is applied for

development projects and defined long-term contracts in the Pharma&Biotech segment that have the economic substance of a construction contract. The stage of completion of a contract is determined on the basis of the estimated total contract costs. Revenue from the sale of rights is recognized upon transfer of rights or on an accrual basis, depending on whether the transaction in substance is a sale or a licensing arrangement. Interest income is recognized on a time-proportion basis using the effective interest method. Dividend income is recognized when the right to receive payment is established.

## Foreign Currencies

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in Swiss francs (CHF), which is the Group's presentation currency. For consolidation purposes the balance sheet of foreign consolidated companies is translated to CHF with the exchange rate on the balance sheet date. Income, expenses and cash flows of the foreign consolidated companies are translated into CHF using the monthly average exchange rates during the year (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions). Exchange rate differences arising from the different exchange rates applied in balance sheets and income statements are recognized in other comprehensive income. In the individual company's financial statements, transactions in foreign currencies are translated at the foreign exchange rate applicable at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated at the foreign exchange rate ruling at that date. All resulting foreign exchange gains and losses are recognized in the individual company's profit or loss statement, except when they arise on monetary items that form a part of the Group's net investment in a foreign entity. In such a case, the exchange gains and losses are recognized in other comprehensive income.

## Derivative Financial Instruments and Hedging

Derivative financial instruments are initially recognized in the balance sheet at their fair value. The method of recognizing the resulting gain or loss is dependent on whether the derivative contract is designed to hedge a specific risk and qualifies for hedge accounting. On the date a derivative contract is entered into, the Group designates derivatives that qualify as hedges for accounting purposes as either a hedge of the fair value of a recognized asset, liability or firm commitment (fair value hedge), a hedge of a forecasted transaction (cash flow hedge) or a hedge of a net investment in a foreign entity. Changes in the fair value of derivatives that are fair value hedges are recognized in the income statement, along with any changes in the fair value of the hedged asset or liability that is attributable to the hedged risk. Changes in the fair value of derivatives in cash flow hedges that are highly effective are recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. Where the forecasted transaction results in the recognition of an asset or liability, the gains and losses previously included in other comprehensive income are included in the initial measurement of the asset or liability. Otherwise, amounts recorded in other comprehensive income are transferred to the income statement and classified as revenue or expense in the same period in which the forecasted transaction affects the income statement.

Certain derivative instruments, while providing effective economic hedges under the Group's policies, do not qualify for hedge accounting. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognized immediately in the income statement.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in other comprehensive income at that time remains in equity and is recognized in the income statement, when the committed or forecasted transaction is ultimately recognized in the income statement.

However, if a forecasted or committed transaction is no longer expected to occur, the cumulative gain or loss that was recognized in other comprehensive income is immediately transferred to the income statement.

The purpose of hedge accounting is to match the impact of the hedged item and the hedging instrument in the income statement. To qualify for hedge accounting, the hedging relationship must meet several strict conditions with respect to documentation, probability of occurrence, hedge effectiveness and reliability of measurement. At the inception of the transaction, the Group documents the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions.

This process includes linking all derivatives designated as hedges to specific assets and liabilities or to specific firm commitments or forecasted transactions. The Group also documents its assessment, both at the hedge inception and on an ongoing basis, as to whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

The fair value of derivatives (forward exchange contract, FX swaps, commodity swaps and interest rate swaps) is estimated by discounting the difference between the contractual forward price and the current forward price for the residual maturity of the contract using a credit-adjusted risk-free rate. Current forward prices are provided by banks or other financial service providers.

## Property, Plant and Equipment

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. The assets are depreciated on a component basis over their estimated useful lives, which vary from 10 to 50 years for buildings and structures, and 5 to 16 years for production facilities, machinery, plant, equipment and vehicles. Fixed assets are depreciated using the straight-line method over their estimated useful lives. Subsequent expenditure incurred to replace a component of an item of property, plant and equipment that is accounted for separately, including major inspection and overhaul expenditure, is capitalized. Other subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the item of property, plant and equipment. Borrowing costs incurred with respect to qualifying assets are capitalized and included in the carrying value of the assets.

All other expenditure is recognized in the income statement as an expense as incurred. The residual values and the useful life of items of property, plant and equipment are reviewed and adjusted, if appropriate, at each balance sheet date.

## Leases

Financial leases, which effectively constitute assets purchased with long-term financing, are carried as fixed assets at their purchase price and are written off over their estimated useful lives if the leased assets are transferred to the lessee at the end of the lease term. If there is no reasonable certainty that the lessee will obtain ownership by the end of the lease term, the asset is fully depreciated over the shorter of the lease term and its useful life. The corresponding liabilities are included in non-current and current debt. The finance lease gives rise to a depreciation expense for depreciable assets as well as a finance expense for each accounting period. For the purpose of classifying a lease of land and buildings, lease of the land and of the buildings is evaluated separately. Lease payments under an operating lease are recognized as an expense in the income statement on a straight-line basis over the lease term.



# Intangible Assets

Purchased intangible assets with a finite useful life are stated at cost less accumulated amortization and accumulated impairment losses. Intangible assets acquired in a business combination are recognized at their fair value. Intangibles include software, licenses, patents, trademarks and similar rights granted by third parties, capitalized product development costs and capitalized computer software development costs. Costs associated with internally developed or maintained computer software programs are recognized as an expense as incurred. Costs that are directly associated with the production of identifiable and unique software products controlled by the Group, and that will probably generate future economic benefits exceeding costs beyond one year, are recognized as intangible assets. Those direct costs include the software development employee costs and an appropriate portion of relevant overheads. Intangible assets are amortized using the straight-line method over their estimated useful lives, which is the lower of the legal duration and the economic useful life. Useful lives vary from 3 to 5 years for software, 5 to 35 years for patents, trademarks and similar rights and 4 to 16 years for development costs. All intangible assets in Lonza have finite useful lives, except for the Capsugel trade name acquired in 2017 and the trademarks acquired in 2011 through the Arch Chemicals business combination and 2007 through the Cambrex business combination. The Group considers that these trademarks have an indefinite useful life as they are well established in the respective markets and have a history of strong performance. The Group intends and has the ability to maintain these trademarks for the foreseeable future.

# Goodwill and Business Combinations

Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value at the date of acquisition and includes the cash paid plus the fair value at the date of exchange of assets, liabilities incurred or assumed and equity instruments issued by the Group. The fair value of the consideration transferred also includes contingent consideration arrangements at fair value. Directly attributable acquisition-related costs are expensed in the period the costs are incurred and the services are received and reported within administration and general overhead expenses. At the date of acquisition, the Group recognizes the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquired business. The identifiable assets acquired and the liabilities assumed are initially recognized at fair value. Where the Group does not acquire 100% ownership of the acquired business, non-controlling interests are recorded as the proportion of the fair value of the acquired net assets attributable to the non-controlling interest. Goodwill is recorded as the surplus of the consideration transferred over the Group's interest in the fair value of the acquired net assets. Any goodwill and fair value adjustments are recorded as assets / liabilities of the acquired business in the functional currency of that business.

When the initial accounting for a business combination is incomplete at the end of a reporting period, provisional amounts are recognized. During the measurement period, the provisional amounts are retrospectively adjusted and additional assets and liabilities may be recognized to reflect new information obtained about the facts and circumstances that existed at the acquisition date which, had they been known, would have affected the measurement of the amounts recognized at that date. The measurement period does not exceed 12 months from the date of acquisition. Goodwill is not amortized but is tested annually for impairment. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and if they do not result in a loss of control.

Goodwill may also arise upon investments in associates and joint ventures, being the surplus of the cost of investment over the Group's share of the fair value of the net identifiable assets. Such goodwill is recorded within investments in associates and joint ventures.

# Inventories

Inventories are reported at the lower of cost (purchase price or production cost) or market value (net realizable value). In determining net realizable value, any costs of completion and selling costs are deducted from the realizable value. The cost of inventories is calculated using the weighted average method. Prorated production overheads are included in the valuation of inventories. Adjustments are made for inventories with a lower market value or which are slow moving. Unsalable inventory is fully written off. Costs include all expenditures related directly to specific projects and an allocation of fixed and variable overheads incurred in the Group's contract activities based on normal operating capacity.

# Receivables

Trade receivables are recognized at the original invoice amount less allowances made for doubtful accounts. An allowance for doubtful accounts is recorded for the difference between the carrying value and the estimated recoverable amount where there is objective evidence that the Group will not be able to collect all amounts due. These estimates are based on specific indicators, such as the aging of customer balances, specific credit circumstances and the Group's historical experience, also taking into account economic conditions. Expenses for doubtful trade receivables are recognized in the consolidated income statement within cost of goods sold. Long-term accounts receivable are discounted to take into account the time value of money, where material.

# Financial Assets

Loans and advances and other financial assets are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise when the Group provides money, goods or services directly to a debtor with no intention of trading the receivable. They are classified as current with maturities not longer than 12 months and as non-current with maturities greater than 12 months after the balance sheet date. Loans and advances are carried at amortized costs using the effective interest method. Realized and unrealized gains and losses are recorded in the income statement in the period in which they arise. The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risk and rewards of ownership of the financial asset are transferred. Any interest in such transferred financial assets that is created or retained by the Group is recognized as a separate asset or liability.

# Cash and Cash Equivalents

Cash and cash equivalents include cash in hand, in postal and bank accounts, as well as short-term deposits and highly liquid funds that have an original maturity of less than three months.

# Impairment

Assets that are subject to amortization and depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Goodwill and intangible assets with indefinite useful lives are tested for impairment annually, and whenever there is an indication that

the assets may be impaired. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units).

Calculation of recoverable amount – In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

Reversal of impairment – An impairment loss is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognized. An impairment loss in respect of goodwill is not reversed. In respect of other assets, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

## Assets Held for Sale

Disposal groups comprising assets and liabilities are classified as held-for-sale if it is highly probable that they will be recovered primarily through sale rather than through continuing use.

Such disposal groups are generally measured at the lower of their carrying amount and fair value less costs to sell. Any impairment loss on a disposal group is allocated first to goodwill and then to the remaining assets and liabilities on a pro rata bases, except that no loss is allocated to inventories, financial assets or deferred tax assets, which continue to be recognized in accordance with the Group's other accounting policies. Impairment losses on initial classification as held-for-sale and subsequent gains and losses on remeasurement are recognized in profit or loss. Once classified as held-for-sale, intangible assets and property, plant and equipment are no longer amortized or depreciated.

## Deferred Taxes

Tax expense is calculated using the balance-sheet liability method. Additional deferred taxes are provided wherever temporary differences exist between the tax base of an asset or liability and its carrying amount in the consolidated accounts for the year.

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and, for deferred tax assets, operating loss and tax credit carry-forwards.

Deferred tax assets and liabilities are measured using enacted or substantially enacted tax rates in the respective jurisdictions in which Lonza operates that are expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. In assessing the recoverability of deferred tax assets, management considers whether it is probable that some portion or all of the deferred tax assets will not be realized. For transactions and other events recognized in other comprehensive income or directly in equity, any related tax effect is recognized in other comprehensive income or in equity. Liabilities for income taxes, mainly withholding taxes, which could arise on the remittance of retained earnings, principally relating to subsidiaries, are only recognized where it is probable that such earnings will be remitted in the foreseeable future.

# Employee Benefits

Employee-benefit liabilities as stated in the consolidated balance sheet include obligations from defined-benefit pension plans, other post-employment benefits (medical plans) as well as other long-term employee-related liabilities, such as long-term vacation accounts.

## Defined-Benefit Plans (Pension and Medical Plans)

Most of Lonza's subsidiaries operate their own pension plans. Generally, they are funded by employees' and employers' contributions. In addition, the Group operates three medical plans in the United States. The Group's net obligation in respect of defined-benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets. The calculation of defined-benefit obligations is performed annually by a qualified external actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements. Remeasurements of the defined-benefit liability, which comprise actuarial gains and losses and the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income.

The Group determines the net interest expense on the net defined-benefit liabilities for the period by applying the discount rate used to measure the defined-benefit obligation at the beginning of the annual period to the net defined-benefit liability, taking into account any changes in the net defined-benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined-benefit plans are recognized in profit or loss. While the net interest expense is disclosed within financial expenses, the other expenses related to defined-benefit plans are allocated to the different functions of the operating activities. When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that related to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Group recognizes gains and losses on the settlement of a defined-benefit plan when the settlement occurs.

## Provisions

A provision is recognized in the balance sheet when (i) the Group has a legal or constructive obligation as a result of a past event, (ii) it is probable that an outflow of economic benefits will be required to settle the obligation, and (iii) a reliable estimate of the amount of the obligation can be made. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

A provision for restructuring is recognized when the Group has approved a detailed and formal restructuring plan, and the restructuring has either commenced or has been announced publicly. Future operating costs are not provided for.

Provisions for environmental liabilities are made when there is a legal or constructive obligation for the Group that will result in an outflow of economic resources. Provisions are made for remedial work where there is an obligation to remedy environmental damage, as well as for containment work where required by environmental regulations.

# Debt

Debt instruments are initially recorded at cost, which is the proceeds received net of transaction costs. They are subsequently stated at amortized cost; any difference between the net proceeds and the redemption value is recognized in the income statement over the period of the debt instrument using the effective interest method.

# Share Capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Where any Group company purchases Lonza Group Ltd's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes), is deducted from equity attributable to the Group's equity holders until the shares are cancelled, reissued or disposed of.

# Dividend

Dividend distribution to Lonza's shareholders is recognized as a liability in the Group's financial statements in the period in which the dividends are approved by the Lonza shareholders.

# Share-Based Compensation

The Group operates various equity-settled, share-based compensation plans. The fair value of the employee services received in exchange for the grant of shares and other share-based compensations is recognized as an expense. The total amount to be expensed over the vesting period is determined by reference to the fair value of the shares granted. At each balance sheet date, the entity revises its estimates of the number of shares that are expected to become vested. It recognizes the impact of the revision of original estimates, if any, in the income statement, and a corresponding adjustment to equity over the remaining vesting period.

# Research and Development

Research and development costs are generally charged against income as incurred. Development costs are only capitalized when the related products meet the recognition criteria of an internally generated intangible asset, which mainly require the technical feasibility of completing the intangible asset, the probability of future economic benefits, the reliable measurement of costs and the ability and intention of the Group to use or sell the intangible asset. Fixed assets (buildings, machinery, plant, equipment) used for research purposes are valued similarly to other fixed assets. Such assets are capitalized and depreciated over their estimated useful lives. Expenses for research and development include associated wages and salaries, material costs, depreciation on fixed assets, as well as overhead costs.

# Other Operating Income and Other Operating Expenses

Other operating income and other operating expenses include items not assignable to other functions of the consolidated income statement. They mainly include gains and losses from the disposal of intangible assets, property, plant and equipment and other non-current assets, income and expenses from the release and recognition of provisions, income and expense related to restructuring, gains and losses from currency-related operating derivative instruments, as well as operating exchange rate gains and losses.

## Net Financing Costs

Net financing costs comprise interest payable on borrowings calculated using the effective interest method, the interest expenses on the net defined-benefit liability, the finance charge for finance leases, dividend income, foreign exchange gains and losses arising on financial assets and liabilities, gains and losses on hedging instruments that are recognized in the income statement and gains/losses on sale of financial assets. Interest income/expense is recognized in the income statement as it accrues, taking into account the effective yield of the asset or liability or an applicable floating rate. Dividend income is recognized in the income statement on the date that the dividend is declared. Interest income and expense include the amortization of any discount or premium or other differences between the initial carrying amount of an interest-bearing instrument and its amount at maturity calculated on an effective interest rate basis.

## Significant Accounting Estimates and Judgments

Key assumptions and sources of estimation uncertainty

### Use of Estimates

The preparation of the financial statements and related disclosures in conformity with International Financial Reporting Standards requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses. Actual results could differ from those estimates. Estimates are used in impairment tests, accounting for allowances for doubtful receivables, inventory obsolescence, depreciation, employee benefits, taxes, restructuring provisions and contingencies. Estimates and assumptions are reviewed periodically and the effects of revisions are reflected in the financial statements in the period they are determined to be necessary. The key assumptions about the future key sources of estimation uncertainty that entail a significant risk of causing a material adjustment to the carrying value of assets and liabilities within the next financial year are described below.

# Impairment Test of Property, Plant and Equipment, Intangible Assets and Goodwill

The Group has carrying values with regard to property, plant and equipment of CHF 3,198 million (2016: CHF 2,412 million), goodwill of CHF 4,002 million (2016: CHF 1,287 million) and intangible assets of CHF 3,701 million (2016: CHF 968 million) (see notes 5 and 6). The intangible assets include trademarks acquired through business combinations with a carrying value of CHF 630 million (2016: CHF 387 million), which have an indefinite useful life and are not systematically amortized. Goodwill and intangible assets with indefinite useful lives are reviewed annually for impairment. To assess if any impairment exists, estimates are made of the future cash flows expected to result from the use of the asset and its possible disposal. Actual outcomes could vary significantly from such estimates of discounted future cash flows. Factors such as changes in the planned use of buildings, machinery or equipment, or closure of facilities, the presence or absence of competition, technical obsolescence or lower-than-anticipated sales for products with capitalized rights could result in shortened useful lives or impairment. The impairment analysis as explained in note 5 is most sensitive to the discount rate used for the discounted cash flow model, as well as the expected future cash-inflows and the growth rate used for calculation purposes. The key assumptions used to determine the recoverable amount for the different cash-generating units are further explained in note 5.2

## Pensions

Many of the Group's employees participate in post-employment plans. The calculations of the recognized assets and liabilities from such plans are based upon statistical and actuarial calculations. In particular, the present value of the defined-benefit obligation is influenced by assumptions on discount rates used to arrive at the present value of future pension liabilities and assumptions on future increases in salaries and benefits. Furthermore, the Group's independent external actuaries use statistically based assumptions, covering areas such as future withdrawals of participants from the plan and estimates of life expectancy. At 31 December 2017, the present value of the Group's defined-benefit obligation was CHF 3,264 million (2016: CHF 3,145 million). The plan assets at fair value amounted to CHF 2,730 million (2016: CHF 2,472 million), resulting, compared with the present value of the pension obligation, in a funded status deficit of CHF 534 million (2016: CHF 673 million) (see note 24.1). The actuarial assumptions used may differ materially from actual results due to changes in market and economic conditions, higher or lower withdrawal rates or longer or shorter lifespans of participants and other changes in the factors being assessed. These differences could affect the fair value of assets or liabilities recognized in the balance sheet in future periods.

## Business Combinations

Where the Group acquires control of another business, the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquired business shall be recognized, separately from goodwill. The process of assessing fair values requires in particular management involvement and judgment in the recognition and measurement of the following items:

- Intellectual property, such as patents, licenses, trademarks, customer relations, technologies and similar rights
- Contingencies, such as legal and environmental matters
- Contingent consideration arrangements

- The recoverability of any accumulated tax losses previously incurred by the acquired company

In all cases, management makes an assessment based on the underlying economic substance of the items in order to fairly present these items.

## Environmental Provisions

Lonza is exposed to environmental liabilities and risks relating to its operations, principally in respect of provisions for remediation costs, which at 31 December 2017 amounted to CHF 113 million (2016: CHF 92 million), as disclosed in [note 14](#). Provisions for non-recurring remediation costs are made when there is a legal or constructive obligation and the cost can be reliably estimated. It is difficult to estimate any future action required by Lonza to correct the effects on the environment of prior disposal or release of chemical substances by Lonza or other parties, and the associated costs, pursuant to environmental laws and regulations. The material components of the environmental provisions consist of costs to clean and refurbish contaminated sites and to treat and contain contamination at sites. The Group's future remediation expenses are affected by a number of uncertainties that include, but are not limited to, the method and extent of remediation and the responsibility attributable to Lonza at the remediation sites, relative to that attributable to other parties. The Group permanently monitors the various sites identified as at risk for environmental exposures. Lonza believes that its provisions are adequate, based upon currently available information; however, given the inherent difficulties in estimating liabilities in this area, there is no guarantee that additional costs will not be incurred beyond the amounts provided. Due to the uncertainty both of the amount and timing of future expenses, the provisions provided for environmental remediation costs could be affected in future periods.

## Income Taxes

At 31 December 2017, deferred tax assets of CHF 33 million (2016: CHF 38 million), non-current tax receivables of CHF 15 million (2016: none), current tax receivables of CHF 80 million (2016: CHF 16 million), deferred tax liabilities of CHF 760 million (2016: CHF 329 million), non-current tax payables of CHF 46 million (2016: none) and current tax payables of CHF 196 million (2016: CHF 88 million) are included in the consolidated balance sheet. Significant estimates are required in determining the current and deferred assets and liabilities for income taxes. Some of these estimates are based on interpretations of existing tax laws or regulations. Management believes that the estimates are reasonable and that the recognized liabilities for income tax-related uncertainties are adequate. Various internal and external factors may have favorable or unfavorable effects on the actual amounts of estimated income tax assets and liabilities. These factors include, but are not limited to, changes in tax laws, regulations and /or rates, changing interpretations of existing tax laws or regulations and changes in overall levels of pre-tax earnings. Such changes that arise could affect the assets and liabilities recognized in the balance sheet in future periods. The enactment of the United States Tax Cuts and Jobs Act in December 2017 required significant estimates to determine the adjustments of the Group's current tax payables and its deferred tax assets and liabilities. These significant estimates are disclosed in [note 22](#).



# Critical Accounting Judgments in Applying the Group's Accounting Policies

In the process of applying the Group's accounting policies, management has made the following judgments that have the most significant effect on the amounts recognized in the financial statements (apart from those involving estimations, which are dealt with above).

## Revenue Recognition

The Group has recognized revenue for sales of goods during 2017 to customers who have the right to rescind the sale if the goods do not meet the agreed quality. The Group believes that, based on past experience with similar transactions, the quality delivered will be accepted. Therefore, it is appropriate to recognize revenue on these transactions during 2017. Moreover, the Group has various contractual agreements which include upfront and milestone payments over a period of several years. Revenue is recognized only when, according to management's judgment, risks and rewards have been transferred to the customer and no future performance obligation exists. For certain transactions, recognition of revenue is based on the performance of the conditions agreed in particular contracts, the verification of which requires evaluation and judgments by management.

## Intangible Assets

The Group considers the Capsugel trade name acquired through the business combination in 2017 as well as the trademarks acquired in 2011 through the Arch Chemicals business combination and in 2007 through the Cambrex business combination to have an indefinite useful life as they are well established in the respective markets and have a history of strong performance. The Group intends and has the ability to maintain these trademarks for the foreseeable future. The assumption of an indefinite useful life is reassessed whenever there is an indication that a trademark may have a definite useful life. In addition, intangible assets with indefinite useful lives are tested for impairment on an annual basis (see note 5).

# Note 2 – Operating Segments

## 2.1 General Information

According to the requirements of IFRS 8 “Operating Segments” Lonza identified the following two market-focused segments: Pharma&Biotech and Specialty Ingredients. The Capsugel business acquired in 2017 operated independently from the existing segments and was therefore managed and reported separately from its acquisition date through 31 December 2017. The three segments are described as follows:

### Pharma&Biotech

In the **Pharma&Biotech** segment, Lonza is one of the world’s leading suppliers of active pharmaceutical ingredients (APIs) and biopharmaceuticals as well as research and testing products and services. Lonza manufactures products that are at the forefront of powerful new treatments for cancer, diabetes, immune system disorders, heart conditions, Alzheimer’s and Parkinson’s diseases, inflammation and many other medical diseases and conditions. Lonza’s customers cover a wide spectrum: from the world’s largest pharmaceutical and biotechnology companies to medical research and testing organizations, as well as small start-ups pioneering breakthrough medical treatments.

### Specialty Ingredients

In the **Specialty Ingredients** segment, Lonza is an innovative supplier of solutions that promote health, wellness, beauty, nutrition, hygiene and materials protection. Lonza’s Consumer Care business is a global leader in several important chemical ingredient categories that provide health, wellness, beauty and protection claims for our fast-moving consumer goods customers. These ubiquitous materials include actives for antidandruff shampoos, cosmetic ingredients, vitamin B3 compounds (niacin and niacinamide), L-Carnitine and microbial control solutions such as disinfectants and sanitizers that help protect us from dangerous and unwanted microbes. Lonza’s Agro Ingredients business offers – in addition to active ingredients for mollusk control – custom agricultural manufacturing services designed to improve crop yields and food quality. Additional offers include preservatives and additives for crop protection formulations, as well as animal feed additives. Coatings and Composites globally offers a wide array of specialty solutions for the protection, enhanced performance and modification of the end-use characteristics of various materials including carbon, fibers, fabrics, leather, metals, plastics, stone and wood. The Water Treatment business is one of the world’s largest suppliers of sanitizers and other treatment chemicals for pools, spas and water parks, surface waters, as well as water for drinking, agriculture, irrigation, food processing and industrial applications.

# Capsugel<sup>1</sup>

In the Capsugel segment, which was acquired in July 2017, Lonza designs, develops and manufactures a wide range of innovative dosage forms for the biopharmaceutical and consumer health and nutrition industries. Lonza's unique combination of science, engineering, formulation and capsule expertise enables the broadest range of capsule polymers, sizes and designs in the industry, as well as the ability to offer integrated product design, development, clinical supply and commercial manufacturing services to customers around the world. The diversified customer base includes companies that make branded, generic and specialty pharmaceuticals, biotech products, over-the-counter medicines, vitamins and dietary supplements.

<sup>1</sup>Lonza operated with two segments in the first half of 2017. When Capsugel was acquired on 5 July 2017, it remained a separate operational segment for the balance of the year. From 1 January 2018, Capsugel has been fully integrated into Lonza Pharma&Biotech and Lonza Specialty Ingredients.

## Corporate

Corporate includes mainly corporate functions, such as finance and accounting, legal, communication, information technology and human resources.

## Integration of Capsugel Business in 2018

In 2018, the Group anticipates integrating the Capsugel reporting segment into a revised structure, whereby the reporting segments will be reassessed.

As of 1 January 2018, the Pharma&Biotech segment is operating with a Chemical Division and a Biologics Division, as well as the existing Bioscience Solutions Business Unit and a new Capsule Delivery Solutions Business Unit. The latter business unit will cover the capsules business for pharma markets. Capsugel's dosage forms and development services have been integrated in the newly formed Dosage Forms and Delivery Systems (DFDS) Business Unit within the Chemical Division.

The former Consumer Health and Nutrition business of Capsugel has been integrated into the existing Consumer Health and Nutrition business of Lonza, and together with Lonza's Consumer Product Ingredients business, the new Consumer Health Division has been formed.

## 2.2 Information about Reportable Segment Profit or Loss, Assets and Liabilities including Reconciliations

In the following table, revenues and profit or loss are disclosed by the three reportable segments and corporate, which includes the costs of the corporate functions, including eliminations, and adds up to the Group total. Lonza does not allocate financing costs, income and expenses from associates and joint ventures as well as taxes to the reportable segments. The information disclosed by the operating segments is the same as that reported monthly to the Group's Executive Committee.

Year ended 31 December 2017 <sup>1</sup> million CHF	Specialty Ingredients	Pharma& Biotech	Capsugel	Total operating segments	Corporate/ Eliminations	Group total
<b>Sales third-party</b>	<b>2,400</b>	<b>2,124</b>	<b>543</b>	<b>5,067</b>	<b>38</b>	<b>5,105</b>
Intersegment sales <sup>1</sup>	20	5	0	25	(25)	0
<b>Total sales</b>	<b>2,420</b>	<b>2,129</b>	<b>543</b>	<b>5,092</b>	<b>13</b>	<b>5,105</b>
<b>Result from operating activities (EBIT)</b>	<b>332</b>	<b>498</b>	<b>(5)</b>	<b>825</b>	<b>(102)</b>	<b>723</b>
– Percentage return on third-party sales in %	13.8	23.4	(0.9)	16.3	n.a.	14.2
Financial income						17
Financial expenses						(159)
<b>Net financing costs</b>						<b>(142)</b>
Share of loss of associates / joint ventures						0
<b>Profit before income taxes</b>						<b>581</b>
Income taxes						147
<b>Profit for the period</b>						<b>728</b>
<b>Included in result from operating activities (EBIT):</b>						
Other operating income <sup>2</sup>	16	11	1	28	85	113
Other operating expenses <sup>2</sup>	(31)	(18)	(3)	(52)	(50)	(102)
Research and development	(42)	(110)	(5)	(157)	0	(157)
Depreciation and amortization	(133)	(139)	(98)	(370)	(41)	(411)
Impairment, net of reversal of impairment	(2)	(17)	0	(19)	0	(19)
Restructuring expenses	0	(4)	0	(4)	0	(4)
Environmental expenses	0	0	0	0	(31)	(31)
<b>Total assets</b>	<b>4,130</b>	<b>3,800</b>	<b>6,601</b>	<b>14,531</b>	<b>(741)</b>	<b>13,790</b>
<b>Total liabilities</b>	<b>621</b>	<b>1,497</b>	<b>2,722</b>	<b>4,840</b>	<b>2,697</b>	<b>7,537</b>
<b>Total equity</b>	<b>3,509</b>	<b>2,303</b>	<b>3,879</b>	<b>9,691</b>	<b>(3,438)</b>	<b>6,253</b>
<b>Net financial liabilities</b>	<b>(447)</b>	<b>(146)</b>	<b>2,399</b>	<b>1,806</b>	<b>3,409</b>	<b>5,215</b>
<b>Net capital invested <sup>3</sup></b>	<b>3,062</b>	<b>2,157</b>	<b>6,278</b>	<b>11,497</b>	<b>(29)</b>	<b>11,468</b>
Return on net capital invested (RONOA) <sup>4</sup> in %	15.4	29.5	(0.3)	11.0	n.a.	9.7

## Included in total assets:

Total property, plant and equipment	922	1,518	610	3,050	148	3,198
– Additions to property, plant and equipment	106	245	44	395	32	427
– Additions to property, plant and equipment from acquisitions	0	18	583	601	0	601
Total goodwill and intangible assets	1,672	554	5,444	7,670	33	7,703
– Additions to intangible assets	2	(3)	5	4	20	24
– Additions to goodwill and intangible assets from acquisitions	(2)	106	5,120	5,224	0	5,224
Investments in associates / joint ventures	8	2	0	10	10	20
Headcount	3,729	5,332	3,639	12,700	1,918	14,618
Average headcount	3,612	5,054	1,819	10,485	1,888	12,373

<sup>1</sup> Intersegment sales were based on prevailing market prices.

<sup>2</sup> Excluding restructuring and environmental related income / expenses

<sup>3</sup> Net capital invested comprises all operating assets and goodwill less operating liabilities.

<sup>4</sup> Calculated at historical monthly average rates based on net capital invested excluding goodwill.

Year ended 31 December 2016 <sup>1</sup> million CHF	Specialty Ingredients	Pharma& Biotech	Total operating segments	Corporate/ Eliminations	Group total
<b>Sales third-party</b>	<b>2,281</b>	<b>1,818</b>	<b>4,099</b>	<b>33</b>	<b>4,132</b>
Intersegment sales <sup>2</sup>	42	32	74	(74)	0
<b>Total sales</b>	<b>2,323</b>	<b>1,850</b>	<b>4,173</b>	<b>(41)</b>	<b>4,132</b>
<b>Result from operating activities (EBIT)</b>	<b>284</b>	<b>314</b>	<b>598</b>	<b>(112)</b>	<b>486</b>
– Percentage return on third-party sales in %	12.5	17.0	14.3	n.a.	11.8
Financial income					2
Financial expenses					(114)
<b>Net financing costs</b>					<b>(112)</b>
Share of loss of associates / joint ventures					(1)
<b>Profit before income taxes</b>					<b>373</b>
Income taxes					(72)
<b>Profit for the period</b>					<b>301</b>

### Included in result from operating activities (EBIT):

Other operating income <sup>3</sup>	12	10	22	9	31
Other operating expenses <sup>3</sup>	(18)	(24)	(42)	(4)	(46)
Research and development	(49)	(95)	(144)	0	(144)
Depreciation and amortization	(123)	(140)	(263)	(44)	(307)
Impairment, net of reversal of impairment	(5)	(50)	(55)	0	(55)
Restructuring expenses	(9)	(16)	(25)	(2)	(27)
Environmental expenses	0	0	0	(28)	(28)
Total assets	4,030	3,624	7,654	(826)	6,828
Total liabilities	616	1,478	2,094	2,379	4,473
Total equity	3,414	2,146	5,560	(3,205)	2,355
Net financial liabilities	(376)	(71)	(477)	3,119	2,672
Net capital invested <sup>4</sup>	3,038	2,076	5,114	(88)	5,026
Return on net capital invested (RONOA) <sup>5</sup> in %	13.8	17.3	15.4	n.a.	12.7

### Included in total assets:

Total property, plant and equipment	929	1,419	2,348	64	2,412
– Additions to property, plant and equipment	103	225	328	27	355
– Additions to property, plant and equipment from acquisitions	1	0	1	0	1
Total goodwill and intangible assets	1,712	512	2,224	31	2,255
– Additions to intangible assets	0	6	6	5	11
– Additions to goodwill and intangible assets from acquisitions	332	12	344	0	344
Investments in associates / joint ventures	7	3	10	8	18
Headcount	3,495	4,771	8,266	1,864	10,130
Average headcount	3,484	4,680	8,164	1,815	9,979

<sup>1</sup> Restated to reflect the transfer of a business from Pharma&Biotech to Specialty Ingredients

<sup>2</sup> Intersegment sales were based on prevailing market prices.

<sup>3</sup> Excluding restructuring- and environment-related income/expenses (CHF 15 million), as well as the Braine-related impairments (CHF 42 million)

<sup>4</sup> Net capital invested comprises all operating assets and goodwill less operating liabilities.

<sup>5</sup> Calculated at historical monthly average rates based on net capital invested excluding goodwill.

## 2.3 Measurement of Operating Segment Profit or Loss

The accounting principles applied to the operating segments are based on the same accounting principles used for the consolidated financial statements. Lonza evaluates the performance of its operating segments on the basis of the result from operating activities (EBIT) as well as the CORE result from operating activities. Intersegment sales and transfers are based on prevailing market prices.

## 2.4 Geographical Information

Year ended 31 December 2017 million CHF	Revenue from external customers (sales)	Non-current assets				Total
		Property, plant and equipment	Intangible assets	Goodwill	Other non- current assets	
Switzerland	486	911	55	53	46	1,065
Germany	211	3	28	68	0	99
Ireland	256	0	0	0	0	0
United Kingdom	165	91	72	9	2	174
France	169	99	158	10	0	267
Netherlands	22	7	3	33	0	43
Belgium	158	84	1,707	2,737	1	4,529
Sweden	174	0	0	0	0	0
Italy	23	0	0	11	0	11
Spain	20	126	0	0	0	126
Czech Republic	5	28	0	0	0	28
Denmark	31	3	0	11	0	14
Rest of Europe	65	2	0	0	0	2
<b>Europe</b>	<b>1,785</b>	<b>1,354</b>	<b>2,023</b>	<b>2,932</b>	<b>49</b>	<b>6,358</b>
United States	2,155	1,088	1,267	1,051	10	3,416
Canada	86	0	56	4	0	60
Mexico	17	8	26	0	0	34
Rest of North and Central America	12	2	0	0	0	2
<b>North and Central America</b>	<b>2,270</b>	<b>1,098</b>	<b>1,349</b>	<b>1,055</b>	<b>10</b>	<b>3,512</b>
Brazil	117	24	30	0	3	57
Rest of Latin America	29	0	0	0	0	0
<b>Latin America</b>	<b>146</b>	<b>24</b>	<b>30</b>	<b>0</b>	<b>3</b>	<b>57</b>
China	207	342	91	4	0	437
Singapore	178	275	47	0	3	325
Japan	163	41	48	0	0	89
India	64	23	32	2	0	57
Thailand	20	0	34	0	0	34
Indonesia	15	27	17	0	0	44
Rest of Asia	109	0	0	0	0	0
<b>Asia</b>	<b>756</b>	<b>708</b>	<b>269</b>	<b>6</b>	<b>3</b>	<b>986</b>
<b>South Africa</b>	<b>75</b>	<b>7</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>10</b>
<b>Australia &amp; New Zealand</b>	<b>73</b>	<b>7</b>	<b>27</b>	<b>9</b>	<b>2</b>	<b>45</b>
<b>Total</b>	<b>5,105</b>	<b>3,198</b>	<b>3,701</b>	<b>4,002</b>	<b>67</b>	<b>10,968</b>



Year ended 31 December 2016 million CHF	Revenue from external customers (sales)	Non-current assets				Total
		Property, plant and equipment	Intangible assets	Goodwill	Other non- current assets	
Switzerland	332	910	11	15	10	946
Germany	197	4	27	62	0	93
Ireland	146	1	0	0	0	1
United Kingdom	173	68	57	8	0	133
France	110	1	4	9	0	14
Netherlands	48	0	0	0	0	0
Belgium	19	9	0	54	0	63
Sweden	101	0	0	0	0	0
Italy	37	0	0	10	0	10
Spain	20	117	0	0	0	117
Czech Republic	7	26	0	0	0	26
Rest of Europe	106	3	0	11	0	14
<b>Europe</b>	<b>1,296</b>	<b>1,139</b>	<b>99</b>	<b>169</b>	<b>10</b>	<b>1,417</b>
United States	1,915	745	765	1,099	9	2,618
Canada	67	0	8	4	0	12
Rest of North and Central America	21	0	0	0	0	0
<b>North and Central America</b>	<b>2,003</b>	<b>745</b>	<b>773</b>	<b>1,103</b>	<b>9</b>	<b>2,630</b>
Brazil	104	15	10	0	4	29
Rest of Latin America	25	0	0	0	0	0
<b>Latin America</b>	<b>129</b>	<b>15</b>	<b>10</b>	<b>0</b>	<b>4</b>	<b>29</b>
China	143	216	10	4	0	230
Singapore	139	280	51	0	3	334
Japan	104	0	2	0	0	2
India	67	4	0	2	0	6
Rest of Asia	112	1	0	0	0	1
<b>Asia</b>	<b>565</b>	<b>501</b>	<b>63</b>	<b>6</b>	<b>3</b>	<b>573</b>
<b>South Africa</b>	<b>57</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>11</b>
<b>New Zealand</b>	<b>41</b>	<b>4</b>	<b>14</b>	<b>8</b>	<b>0</b>	<b>26</b>
<b>Other countries</b>	<b>41</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>7</b>
<b>Total</b>	<b>4,132</b>	<b>2,412</b>	<b>968</b>	<b>1,287</b>	<b>26</b>	<b>4,693</b>

## 2.5 Information About Major Customers

In 2017 Lonza's two largest customers accounted for 4.7% each and the third, fourth and fifth largest customers for 4.4%, 4.3% and 3.0% in relation to total Group sales, respectively. No other customer accounted for more than 2.9% of Lonza's total sales. The two largest customers related to the Pharma&Biotech segment and the Specialty Ingredients segment, while the third, fourth and fifth largest customers related to the Pharma&Biotech segment.

In 2016 Lonza's largest customer accounted for 5.3% and the second, third, fourth and fifth largest customers for 5.2%, 4.9%, 4.7% and 3.3% in relation to total Group sales, respectively. No other customer accounted for 3.2% or more of Lonza's total sales. Out of the five largest customers, the second-largest customer relates to the Specialty Ingredients segment, whereas the other largest customers related to the Pharma&Biotech segment.

# Note 3 – Restructuring

Year ended 31 December 2017 million CHF	Specialty Ingredients	Pharma& Biotech	Capsugel	Corporate	Total
Impairment of property, plant and equipment <sup>1</sup>	1	18	0	0	19
Restructuring charges	1	4	1	7	13
<b>Total</b>	<b>2</b>	<b>22</b>	<b>1</b>	<b>7</b>	<b>32</b>

Year ended 31 December 2016 million CHF	Specialty Ingredients	Pharma& Biotech	Capsugel	Corporate	Total
Impairment of property, plant and equipment, intangible assets and goodwill <sup>1</sup>	5	50	0	0	55
Restructuring charges	9	16	0	2	27
<b>Total</b>	<b>14</b>	<b>66</b>	<b>0</b>	<b>2</b>	<b>82</b>

<sup>1</sup> Net of reversal of impairment (2017: CHF 2 million; 2016: CHF 2 million)

In 2017 Lonza recognized an impairment loss of certain Visp (CH)-related property, plant and equipment of CHF 19 million, which was included within cost of goods sold.

Organizational changes in 2017 of the Group's finance and information technology functions resulted in restructuring charges of CHF 7 million. These costs are included within the Corporate administration and general overhead costs.

In 2016 the Special Ingredients segment redefined the strategy of its U.S. Water Treatment business. This led to an impairment of dedicated assets (CHF 1 million) and restructuring charges resulting from the write-off and disposal of inventories (CHF 8 million). In addition, Lonza further optimized its product portfolio at the Visp (CH) site, which resulted in impairment losses of CHF 3 million. The costs for these measures were included within cost of goods sold.

The 2016 impairment losses within Pharma&Biotech segment included CHF 42 million related to Peptides assets as disclosed in [note 4.2](#), while the restructuring loss of this segment comprised the expected lease termination cost (CHF 13 million) of Lonza's former manufacturing site in Hopkinton, MA (USA). These costs were included in other operating expenses.

# Note 4 – Business Combinations and Sale of Businesses

## 4.1 Acquisitions – 2017

### Acquisition of Capsugel S.A.

Effective 5 July 2017, Lonza received all required regulatory approvals to complete the acquisition of 100% of the shares of Capsugel S.A. (“Capsugel”) from KKR for a total consideration of USD 3.4 billion (CHF 3.3 billion at acquisition date rate) in cash. Upon acquisition, Lonza assumed existing Capsugel debt of USD 2.0 billion (CHF 1.96 billion at acquisition date rate). Lonza refinanced the assumed debt after the acquisition date. The acquisition was financed through a capital increase (see note 26) and additional debt (see note 15).

Capsugel designs, develops and manufactures a wide range of innovative dosage forms for the biopharmaceutical and consumer health and nutrition industries.

The Capsugel business is reported as a separate operating segment in 2017 but is being integrated into other Lonza businesses in 2018 (see note 2.1).

From 5 July to 31 December 2017, Capsugel contributed sales of CHF 543 million and a result from operating activities of CHF -5 million to the Group<sup>1</sup>.

<sup>1</sup>The result from operating activities for 2017 includes the impact of the fair value adjustment of acquired inventories (CHF 77 million increased cost of goods sold) as well as the amortization of the acquired technologies and customer relations (CHF 60 million).

The Capsugel identifiable assets acquired and liabilities assumed are set out in the table below and have been determined on a provisional basis:

million CHF

Intangible assets	
– Customer relationships	1,234
– Technologies	1,210
– Capsugel corporate trade name	240
– Computer Software	7
Property, plant & equipment	583
Inventories	253
Trade receivables	156
Cash & cash equivalents	120
Deferred tax liabilities	(662)
Debt	(1,964)
Employee benefit liabilities	(29)
Trade payables	(65)
Other net liabilities	(141)
<b>Net identifiable assets</b>	<b>942</b>

Goodwill	2,428
Non-controlling interest	(45)
<b>Total consideration</b>	<b>3,325</b>
<b>Total cash consideration transferred</b>	<b>3,325</b>
Cash and cash equivalents acquired	(120)
<b>Cash outflow on acquisition</b>	<b>3,205</b>

The total goodwill resulting from the Capsugel acquisition amounts to CHF 2,519 million and includes the effective portion of losses of CHF 91 million from cash flow hedges to manage the foreign exchange rate exposure that existed from 15 December 2016 until closing on 5 July 2017.

The fair value of the customer relationships was determined using an excess earning method while the fair value of the technologies as well as the Capsugel corporate trade name were determined using a relief from royalty method. Both methods are based on management forecasts and observable market data for discount rates, tax rates and foreign exchange rates. The present value was calculated using a risk-adjusted discount rate of 7.5%. The fair value of property, plant & equipment was determined based on market and cost methods. The fair value of inventories was determined based on the estimated selling price in the ordinary course of the business less the estimated costs of completion and sale, and a reasonable profit margin based on the effort required to complete and sell the inventories. Portions of the valuation of the acquired assets and liabilities of Capsugel were performed by an independent valuation provider.

Goodwill includes the acquired workforce, expected synergies from integrating Capsugel into Lonza's existing business. None of the goodwill recognized is expected to be deductible for income tax purposes. The acquisition has been accounted for using the acquisition method.

The fair value of the trade receivables amounts to CHF 156 million. The gross amount of trade receivables is CHF 164 million. The fair value includes a deduction of CHF 8 million for trade receivables for which it is expected that the full contractual amounts cannot be collected.

Directly attributable transaction costs of CHF 26 million are reported in the Capsugel segment within administration and general overhead expenses.

## Other acquisitions

### PharmaCell B.V.

Effective 3 May 2017, Lonza Group acquired 100% of the shares of PharmaCell B.V. for a cash consideration of EUR 31 million (CHF 33 million). PharmaCell is a contract development and manufacturing organization specialized in the field of cell and gene therapy and regenerative medicine with employees in Maastricht and Geleen (NL).

The acquisition is reported within the Pharma&Biotech segment and does not have significant impact on the consolidated financial statements for the twelve-month period ended 31 December 2017, with the exception of the acquired goodwill.

## Micro-Macinazione S.A.

On 26 July 2017, Lonza completed the acquisition of Micro-Macinazione S.A., a company specializing in the micronization of active ingredients for the pharmaceutical and fine chemical industries, based in Molinazzo di Monteggio, (CH). The total cash consideration amounted to CHF 67 million.

The acquisition is reported within the Pharma&Biotech segment and does not have a significant impact on the consolidated financial statements for the twelve-month period ended 31 December 2017, with the exception of the acquired goodwill and intangible assets.

The identifiable assets acquired and liabilities assumed of these acquisitions are set out in the table below and have been determined on a provisional basis:

million CHF	PharmaCell	Micro-Macinazione	Other	Total
Intangible assets				
– Customer relationships	3	28	0	31
– Technologies	0	6	0	6
Property, plant & equipment	6	7	5	18
Inventories	2	2	0	4
Trade receivables	6	5	0	11
Cash & cash equivalents	0	0	0	0
Deferred tax liabilities	(1)	(7)	0	(8)
Debt	(7)	(7)	0	(14)
Trade payables	(6)	(2)	0	(8)
Other net liabilities	0	(3)	0	(3)
<b>Net identifiable assets</b>	<b>3</b>	<b>29</b>	<b>5</b>	<b>37</b>
Goodwill	30	38	0	68
<b>Total consideration</b>	<b>33</b>	<b>67</b>	<b>5</b>	<b>105</b>
<b>Total cash consideration transferred</b>	<b>33</b>	<b>67</b>	<b>5</b>	<b>105</b>

Portions of the valuations of the acquired assets and liabilities of PharmaCell and Micro-Macinazione were performed by an independent valuation provider.

## Impact from 2017 Acquisitions on Consolidated Income Statement

If the 2017 acquisitions had occurred on 1 January 2017, Group sales in 2017 would have been CHF 5,660 million (+ CHF 555 million) and the Group result from operating activities CHF 783 million (+ CHF 60 million). These amounts were calculated using the Group's accounting policies and by adjusting the results of the subsidiaries to reflect the full year amortization that would have been charged if the fair value adjustments to intangible assets had applied from January 2017.

## 4.2 Divestment – 2017

On 7 December 2016 Lonza announced that it had entered into a definitive agreement with PolyPeptide Laboratories Holding (PPL) to sell the peptides business and operations of Lonza in Braine-l'Alleud, Belgium. Lonza's Braine facility, with approximately 280 employees, is the center for peptide chemical development and manufacturing within Lonza. The agreement was subject to customary closing conditions and legally closed on 3 January 2017.

As IFRS 5 held for sale criteria were met in 2016, the Lonza Braine-related assets and liabilities were classified as a disposal group in assets held for sale and liabilities held for sale in the 2016 consolidated balance sheet.

An impairment loss of CHF 42 million had been included in "Other operating expenses" for the write-down of the Lonza Braine disposal group to its estimated fair value less cost to sell. The impairment loss had been recorded to fully impair the Lonza Braine-related goodwill of CHF 31 million as well as to reduce the carrying amount of property, plant & equipment (CHF 9 million) and intangible assets (CHF 2 million).

The purchase price includes a one-time payment of CHF 20 million paid in 2017 as well as a defined percentage of the net sales of the disposed business for the financial years 2017 – 2021 (estimated to be CHF 40 million at year-end 2017 exchange rates). Lonza's estimate of the net present value of these future payments is reflected as a receivable in the consolidated balances sheet as of 31 December 2017.

At 31 December 2016 the assets held for sale and liabilities held for sale related to the Lonza Braine disposal were the following:

million CHF

Property, plant & equipment	39
Customer relationships	10
Deferred tax assets	4
Inventories	34
Cash and cash equivalents	4
<b>Assets held for sale</b>	<b>91</b>
Employee benefit liability	16
Trade payables	3
Other non-current operating liabilities	21
<b>Liabilities directly associated with assets held for sale</b>	<b>40</b>

The cumulative income or expense recognized in other comprehensive income related to the Lonza Braine operations as of 31 December 2016 was as follows:

million CHF

Remeasurements of net defined benefit liability, net of taxes	6
Exchange differences on translating foreign operations, net of taxes	29
<b>Cumulative expense recognized in other comprehensive income</b>	<b>35</b>

As a result of the closing of the transaction on 3 January 2017, the accumulated exchange rate translation reserve losses of CHF 29 million were reclassified to the income statement in 2017 (unfavorable effect of CHF 35 million within other expenses and a favorable effect of CHF 6 million within income taxes).

## 4.3 Acquisitions – 2016

### Acquisition of InterHealth Nutraceuticals Inc.

Effective 12 September 2016, Lonza acquired 100% of the shares of InterHealth Nutraceuticals Inc. (“InterHealth”) for a total consideration of USD 246 million (CHF 240 million), of which USD 229 million was paid in cash and USD 17 million arose from a contingent consideration arrangement. The contingent payments are based on the achievement of performance-related milestones and the range of undiscounted outcomes is between zero and USD 27.5 million. In addition, Lonza assumed InterHealth's net debt of USD 39 million (debt of USD 46 million net of cash & cash equivalents of USD 7 million) and repaid InterHealth's debt after the acquisition date.

InterHealth is a leader in research, development, manufacture and marketing of proprietary, value-added nutritional ingredients for use in dietary supplements, based in Benicia, CA (USA). The InterHealth business became part of Lonza's Consumer Health and Nutrition Business, but retained its facilities and employees. The combination of the two businesses allows Lonza to offer InterHealth's more than 15 branded ingredients, including its cornerstone ingredient UC-II.

The InterHealth business is reported within the Specialty Ingredients segment.

From 12 September 2016 to 31 December 2016, the acquired business contributed sales of CHF 21 million and a result from operating activities of CHF 3 million to the Group<sup>2</sup>. If the acquisition had occurred on 1 January 2016, Group sales in 2016 would have been CHF 4 170 million (+ CHF 38 million) and the Group result from operating activities CHF 498 million (+ CHF 12 million). These amounts were calculated using the Group's accounting policies and by adjusting the results of the subsidiary to reflect the full year amortization that would have been charged if the fair value adjustments to intangible assets had applied from January 2016.

<sup>2</sup> The result from operating activities 2016 included the impact of the fair value adjustment of acquired inventories (CHF 3 million increased cost of goods sold) as well as the complete amortization of the acquired order backlog (CHF 5 million).

The InterHealth identifiable assets acquired and liabilities assumed are set out in the table below:

million CHF	
Intangible assets	
– Products	57
– Customer relationships	114
– Order backlog	5
Property, plant & equipment	1
Inventories	9
Trade receivables	8
Cash & cash equivalents	7
Deferred tax liabilities	(63)
Debt	(44)
Provisions	(2)
Trade payables	(5)
Other net liabilities	(3)
<b>Net identifiable assets</b>	<b>84</b>
Goodwill	156
<b>Total consideration</b>	<b>240</b>



Cash	223
Contingent consideration	17
<b>Total consideration transferred</b>	<b>240</b>

The fair value of the customer relationships was determined using an excess earning method while the fair value of the products was determined using a relief from royalty method. Both methods are based on management forecasts and observable market data for discount rates, tax rates and foreign exchange rates. The present value was calculated using a risk-adjusted discount rate of 11%. Portions of the valuation of the acquired assets and liabilities of InterHealth were performed by an independent valuation provider.

Goodwill includes the acquired workforce, expected synergies from integrating InterHealth into Lonza's existing business as well as the expected future product development. None of the goodwill recognized is expected to be deductible for income tax purposes. The acquisition has been accounted for using the acquisition method.

Directly attributable transaction costs of CHF 2 million were reported in the Specialty Ingredients segment within administration and general overhead expenses.

## Acquisition of Triangle Research Labs

Effective 27 April 2016, Lonza Group acquired Triangle Research Labs for a total consideration of USD 16 million (CHF 15 million), resulting in a goodwill of CHF 12 million. The US-based company manufactures and supplies high-quality hepatocytes for medical and biomedical research in pre-clinical applications. This acquisition supports Lonza's strategy to continue developing its life-science platform and expanding its global cell-biology portfolio.

The acquisition is reported within the Pharma&Biotech segment and did not have a significant impact on the consolidated financial statements for the twelve-month period ended 31 December 2016.

# Note 5 – Intangible Assets and Goodwill

## 5.1 Cost and Accumulated Amortization and Impairment

Year ended 31 December 2017 million CHF	Goodwill	Capsugel trade name / Arch Chemicals Inc. and Cambrex trademarks	Patents, trademarks, client relationship	Computer software	Technologies / Development cost	Construction in progress	Total
<b>Cost</b>							
<b>At 1 January</b>	<b>1,287</b>	<b>388</b>	<b>733</b>	<b>138</b>	<b>95</b>	<b>1</b>	<b>2,642</b>
Additions	0	0	3	14	6	1	24
Disposals	0	0	(3)	(4)	0	0	(7)
Acquisition of subsidiaries	2,496	240	1,265	7	1,216	0	5,224
Currency translation differences	219	3	27	0	71	0	320
<b>At 31 December</b>	<b>4,002</b>	<b>631</b>	<b>2,025</b>	<b>155</b>	<b>1,388</b>	<b>2</b>	<b>8,203</b>
<b>Accumulated amortization and impairment</b>							
<b>At 1 January</b>	<b>0</b>	<b>(1)</b>	<b>(235)</b>	<b>(109)</b>	<b>(42)</b>	<b>0</b>	<b>(387)</b>
Amortization	0	0	(60)	(16)	(50)	0	(126)
Disposals	0	0	3	4	0	0	7
Currency translation differences	0	0	3	1	2	0	6
<b>At 31 December</b>	<b>0</b>	<b>(1)</b>	<b>(289)</b>	<b>(120)</b>	<b>(90)</b>	<b>0</b>	<b>(500)</b>
<b>Net carrying amount 31 December</b>	<b>4,002</b>	<b>630</b>	<b>1,736</b>	<b>35</b>	<b>1,298</b>	<b>2</b>	<b>7,703</b>

Year ended 31 December 2016 million CHF	Goodwill	Arch Chemicals Inc. and Cambrex trademarks	Patents, trademarks, client relationship	Computer software	Technologies / Development cost	Construction in progress	Total
<b>Cost</b>							
<b>At 1 January</b>	<b>1,124</b>	<b>384</b>	<b>574</b>	<b>129</b>	<b>93</b>	<b>3</b>	<b>2,307</b>
Additions	0	0	1	10	0	0	11
Disposals	0	0	0	(3)	0	0	(3)

Acquisition of subsidiaries	168	0	176	0	0	0	344
Transfer to assets held for sale (note 4.2)	(36)	0	(34)	(2)	0	0	(72)
Transfers / reclassification	0	0	0	2	0	(2)	0
Currency translation differences	31	4	16	2	2	0	55
<b>At 31 December</b>	<b>1,287</b>	<b>388</b>	<b>733</b>	<b>138</b>	<b>95</b>	<b>1</b>	<b>2,642</b>

### Accumulated amortization and impairment

<b>At 1 January</b>	<b>(6)</b>	<b>0</b>	<b>(217)</b>	<b>(99)</b>	<b>(34)</b>	<b>0</b>	<b>(356)</b>
Amortization	0	0	(38)	(13)	(7)	0	(58)
Disposals	0	0	0	2	0	0	2
Impairment losses	(31)	(1)	(2)	0	0	0	(34)
Transfer to assets held for sale (note 4.2)	36	0	24	2	0	0	62
Currency translation differences	1	0	(2)	(1)	(1)	0	(3)
<b>At 31 December</b>	<b>0</b>	<b>(1)</b>	<b>(235)</b>	<b>(109)</b>	<b>(42)</b>	<b>0</b>	<b>(387)</b>
<b>Net carrying amount 31 December</b>	<b>1,287</b>	<b>387</b>	<b>498</b>	<b>29</b>	<b>53</b>	<b>1</b>	<b>2,255</b>

Intangible assets include software purchased from third parties, related software implementation costs, as well as patents, trademarks, client relationship acquired and development costs. Their amortization is included in the line item "Administration and general overheads" of the consolidated income statement.

The Capsugel trade name acquired through the business combination in 2017 as well as the trademarks acquired through the acquisitions of Arch Chemicals (2011) and Cambrex (2007) are considered to have indefinite useful lives. As a result, these intangible assets with a carrying amount of CHF 630 million as of 31 December 2017 (2016: CHF 387 million) are not systematically amortized.

Development costs as of 31 December 2017 predominantly include technologies acquired with the acquisitions of Capsugel amounting to CHF 1,243 million and the Arch Chemical acquisition of CHF 42 million (2016: CHF 49 million), as well as with the Micro-Macinazione acquisition of CHF 6 million, the Cambrex acquisition of CHF 2 million (2016: CHF 3 million) and the Diacon acquisition of CHF 1 million (2016: CHF 1 million).

## 5.2 Impairment Tests for Cash-Generating Units Containing Goodwill and Intangible Assets with Indefinite Useful Lives

The Group has identified the following cash-generating units:

### Specialty Ingredients

The segment's business units are the cash-generating units used for the impairment testing of goodwill and intangible assets with indefinite useful lives, with the exception that the Wood Protection business continues to be considered as a separate cash-generating unit due to its independent cash flows, despite the fact that this business was integrated into the Coating and Composites business unit, with effect from the 2016 financial year.

### Pharma&Biotech

The various technologies (mammalian, chemical, etc.) applied within the segment are the cash-generating units used for the impairment testing of goodwill and intangibles assets with indefinite useful lives.

### Capsugel<sup>1</sup>

Capsugel's businesses (Consumer Health and Nutrition, Pharma Capsules and Dosage Forms and Delivery Systems) are the cash-generating units used for the impairment testing of goodwill and intangible assets with indefinite useful lives.

<sup>1</sup>Lonza operated with two segments in the first half of 2017. When Capsugel was acquired on 5 July 2017, it remained a separate operational segment for the balance of the year. From 1 January 2018, Capsugel has been fully integrated into Lonza Pharma&Biotech and Lonza Specialty Ingredients.

The following cash-generating units maintain carrying amounts of goodwill as presented below (at year-end exchange rates):

million CHF	2017	2016
Capsugel (representing a group of cash-generating units)	2,679	0
Specialty Ingredients (representing a group of cash-generating units)	712	743
Bioscience Solutions / Cell Therapy / Viral Therapeutics (representing a group of cash-generating units)	324	<sup>1</sup> 286
Consumer Health	208	<sup>1</sup> 218
Chemical (custom manufacturing and related development services)	<sup>2</sup> 38	0
Mammalian (custom manufacturing and related development services)	25	24
Agro Ingredients	12	12
Wood Protection	4	4
<b>Total carrying amounts of goodwill</b>	<b>4,002</b>	<b>1,287</b>

<sup>1</sup>Restated to reflect transfer of a business from Bioscience Solutions to Consumer Health (reclassification of goodwill of CHF 55 million)

<sup>2</sup>Amount reflects goodwill acquired in connection with the acquisition of Micro-Macinazione (see note 4.1)

The following cash-generating units maintain carrying amounts of intangible assets with indefinite useful lives as presented below (at year-end exchange rates):

million CHF	2017	2016
Specialty Ingredients (representing a group of cash-generating units)	348	360
Capsugel (representing a group of cash-generating units)	256	0
Bioscience Solutions / Cell Therapy / Viral Therapeutics (representing a group of cash-generating units)	26	27
<b>Total carrying amounts of intangible assets with indefinite useful life</b>	<b>630</b>	<b>387</b>

The recoverable amount of the above cash-generating units is based on the value-in-use calculation. These cash flow projections for 2018 to 2022 are based on the Lonza business strategy review and exclude any future cash inflows and outflows expected to arise from growth potential of future capital expenditures.

The cash flow projections beyond the five-year period, as stated in the respective paragraphs of the cash-generating units, are based on the concept of perpetual growth rates, which do not necessarily reflect the Group's strategic objective targets for the future growth potential of the underlying businesses.

The key assumptions and the approach to determining the recovery value of the significant cash-generating units are based on the following:

The goodwill arising from the acquisition of Capsugel in July 2017 is allocated to the group of cash-generating units reflecting the acquired businesses, which are Capsugel's Consumer Health and Nutrition business, the Pharma Capsules business and the Dosage Forms and Delivery Systems business. The cash flow projections for 2018–2022 are based on a 6.1% average sales growth with growing EBIT margins. The cash flow projections beyond the five-year period are based on a 2.5% growth rate. A pre-tax discount rate of 8.0% has been used in discounting the projected cash flows. Management believes that any reasonably possible change in the key assumptions on which the recoverable amount is based would not cause the carrying amount to exceed its recoverable amount.

The Specialty Ingredients business includes the cash-generating units of Consumer Health, Agro Ingredients, Coatings and Composites (excluding Wood Protection), Wood Protection and Water Care. These cash-generating units are the combination of the activities acquired through the Arch Chemicals acquisition in 2011, the former Life Science Ingredients activities from Lonza and the InterHealth Nutraceuticals acquisition in 2016. The cash flow projections for 2018–2022 are based on a 4.8% (2016: 4.5%) average sales growth. The cash flow projections beyond the five-year period are based on a 1% growth rate (2016: 1%). A pre-tax discount rate of 8.8% (2016: 8.5%) has been used in discounting the projected cash flows. Management believes that any reasonably possible change in the key assumptions on which the recoverable amount is based would not cause the carrying amount to exceed its recoverable amount.

The Bioscience Solutions / Cell Therapy / Viral Therapeutics businesses include the Cambrex Corporation, acquired in 2007, the amaxa business, acquired in 2008, MODA Technology Partners and Vivante cGMP Solutions, acquired in 2010, Triangle Research Labs, acquired in 2016, as well as PharmaCell, acquired in May 2017. The cash flow projections for 2018–2022 are based on a 14.3% (2016: 9.4%) average sales growth. The cash flow projections beyond the five-year period are extrapolated using a 0.5% (2016: 0.5%) growth rate. A pre-tax discount rate of 8.1% (2016: 7.7%) has been used in discounting the projected cash flows. Management believes that any reasonably possible change in the key assumptions on which the recoverable amount is based would not cause the carrying amount to exceed its recoverable amount.

The goodwill arising from the acquisition of InterHealth Nutraceuticals in September 2016 is allocated to the Consumer Health business. The cash flow projections for 2018–2022 are based on a 5.2% (2016: 7.6%) average sales growth with growing EBIT margins. The cash flow projections beyond the five-year period are based on a 1% (2016: 1%) growth rate. A pre-tax discount rate of 7.6% (2016: 8.1%) has been used in discounting the projected cash flows. Management believes that any reasonably possible change in the key assumptions on which the recoverable amount is based would not cause the carrying amount to exceed its recoverable amount.

In addition, the following table summarizes the assumptions applied for the other cash-generating units:

in %	2017	2016
<b>Mammalian CGU</b>		
Pre-tax discount rate	7.6	8.0
Average sales growth rate during forecast period	1.4	5.0
Sales growth rate after forecast period	0.0	0.0
<b>Chemical CGU</b>		
Pre-tax discount rate	6.5	n.a.
Average sales growth rate during forecast period	4.1	n.a.
Sales growth rate after forecast period	0.0	n.a.
<b>Agro Ingredients CGU</b>		
Pre-tax discount rate	7.8	7.8
Average sales growth rate during forecast period	2.6	3.9
Sales growth rate after forecast period	1.0	1.0

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## Wood Protection CGU

Pre-tax discount rate	10.3	8.3
Average sales growth rate during forecast period	4.9	3.7
Sales growth rate after forecast period	1.0	1.0

Management believes that any reasonably possible change in the key assumptions on which the recoverable amount is based would not cause the carrying amount to exceed its recoverable amount.

# Note 6 – Property, Plant and Equipment

Year ended 31 December 2017 million CHF	Land	Buildings and structures	Production facilities	Construction in progress	Total
<b>Cost</b>					
<b>At 1 January</b>	<b>40</b>	<b>1,741</b>	<b>3,903</b>	<b>374</b>	<b>6,058</b>
Additions	7	37	147	236	427
Guangzhou (CN) land transaction <sup>1</sup>	0	74	0	0	74
Disposals	(2)	0	(58)	0	(60)
Acquisition of subsidiaries	52	134	381	34	601
Transfers / reclassification	0	25	204	(229)	0
Currency translation differences	(1)	12	11	(9)	13
<b>At 31 December</b>	<b>96</b>	<b>2,023</b>	<b>4,588</b>	<b>406</b>	<b>7,113</b>
<b>Accumulated depreciation and impairment</b>					
<b>At 1 January</b>	<b>(3)</b>	<b>(906)</b>	<b>(2,737)</b>	<b>0</b>	<b>(3,646)</b>
Depreciation charge	0	(62)	(223)	0	(285)
Disposals	0	0	50	0	50
Impairment losses (see note 3)	0	(5)	(16)	0	(21)
Reversal of impairment losses (see note 3)	0	1	1	0	2
Currency translation differences	0	(2)	(13)	0	(15)
<b>At 31 December</b>	<b>(3)</b>	<b>(974)</b>	<b>(2,938)</b>	<b>0</b>	<b>(3,915)</b>
<b>Net carrying amount 31 December</b>	<b>93</b>	<b>1,049</b>	<b>1,650</b>	<b>406</b>	<b>3,198</b>
<b>Year ended 31 December 2016</b> million CHF					
	Land	Buildings and structures	Production facilities	Construction in progress	Total
<b>Cost</b>					
<b>At 1 January</b>	<b>48</b>	<b>1,728</b>	<b>3,915</b>	<b>225</b>	<b>5,916</b>
Additions	0	13	70	272	355
Disposals	0	(12)	(120)	(1)	(133)
Acquisition of subsidiaries	0	0	1	0	1
Transfer to assets held for sale (see note 4.2)	(8)	(19)	(65)	0	(92)
Transfers / reclassification	0	22	105	(127)	0
Currency translation differences	0	9	(3)	5	11
<b>At 31 December</b>	<b>40</b>	<b>1,741</b>	<b>3,903</b>	<b>374</b>	<b>6,058</b>



## Accumulated depreciation and impairment

<b>At 1 January</b>	<b>(3)</b>	<b>(858)</b>	<b>(2,689)</b>	<b>0</b>	<b>(3,550)</b>
Depreciation charge	0	(60)	(189)	0	(249)
Disposals	0	9	114	0	123
Impairment losses (see note 3)	0	(3)	(20)	0	(23)
Reversal of impairment losses (see note 3)	0	0	2	0	2
Transfer to assets held for sale (see note 4.2)	0	9	44	0	53
Currency translation differences	0	(3)	1	0	(2)
<b>At 31 December</b>	<b>(3)</b>	<b>(906)</b>	<b>(2,737)</b>	<b>0</b>	<b>(3,646)</b>
<b>Net carrying amount 31 December</b>	<b>37</b>	<b>835</b>	<b>1,166</b>	<b>374</b>	<b>2,412</b>

<sup>1</sup>Local government requested Lonza to close its Guangzhou (CN) manufacturing site. In response, Lonza entered into an agreement with a third-party property development company to jointly develop the original land into commercial properties. According to the agreement, Lonza provided the land and the property development company offered the funds and assumed construction responsibilities. In 2017 Lonza obtained its entitled portion of commercial properties based on the agreement. A non-cash gain of the property fair value was recognized in 2017. The fair value of the property was determined by independent external property valuation specialist.

Commitments for capital expenditure in property, plant and equipment amounted to CHF 107 million at year-end 2017 (2016: CHF 165 million), mainly related to capital expenditures at the US sites as well as for the Swiss-based operations. The carrying amount of property, plant and equipment under finance lease contracts at year-end 2017 amounted to CHF 9 million (2016: CHF 5 million). Depreciation relating to property, plant and equipment under finance lease amounted to CHF 0.6 million (2016: CHF 0.3 million). No assets were pledged for security of own liabilities in 2017 and 2016. The Group's obligation under finance leases is secured by the lessors' title to the leased assets.

## Leases

### 1. Lessee

million CHF	2017	2016
<b>Finance lease liabilities – minimum lease payments</b>		
Not later than 1 year	2	0
Later than 1 year and not later than 5 years	6	3
Later than 5 years	9	8
<b>Total future minimum finance lease payments</b>	<b>17</b>	<b>11</b>
Future finance charges on finance lease payments	(5)	(5)
<b>Present value of minimum finance lease payments</b>	<b>12</b>	<b>6</b>
<b>Present value of finance lease liabilities</b>		
Not later than 1 year	1	0
Later than 1 year and not later than 5 years	4	1

Later than 5 years	7	5
<b>Present value of minimum finance lease payments</b>	<b>12</b>	<b>6</b>
<b>Operating lease liabilities – minimum lease payments</b>		
Not later than 1 year	36	15
Later than 1 year and not later than 5 years	75	38
Later than 5 years	59	42
<b>Total future minimum operating lease payments</b>	<b>170</b>	<b>95</b>

Lonza leases a number of vehicles, buildings, warehouses, factory and office facilities under operating leases. These leases run for periods between one and 20 years, all with an option to renew the lease after that date. None of the leases include contingent rentals.

During the year ended 31 December 2017, CHF 29 million (2016: CHF 19 million) was recognized as an expense in the consolidated income statement in respect of operating leases.

The land and building elements of a lease of land and buildings were considered separately for the purpose of lease classification as outlined in IAS 17.

## 2. Lessor

There is an operating lease for which Lonza acts as lessor. This lease falls within the scope of IAS 17 and IFRIC 4 guidance. It consists primarily of a biopharmaceutical manufacturing facility in Visp. The future minimum lease payments under non-cancelable operating leases are zero, because the lease payments are pre-financed by the customer.

# Note 7 – Other Non-Current Assets

million CHF	2017	2016
Contingent consideration arising from disposal of Peptides business (see note 4.2)	40	0
Investments in associates / joint ventures (see note 8)	20	18
Other investments	16	13
Defined benefit pension plan asset (see note 24.1)	4	0
Loans and advances	5	1
Other assets	23	26
<b>Total</b>	<b>108</b>	<b>58</b>

# Note 8 – Investments in Associates and Joint Ventures

The following table summarizes the carrying amounts of interests in joint ventures and associates, which are accounted for using the equity method.

million CHF	2017	2016
<b>Balance sheet value</b>		
Interests in joint ventures	4	5
Interests in associates	16	13
<b>Total</b>	<b>20</b>	<b>18</b>
<b>Net income statement effect</b>		
Share of profit / (loss) of joint ventures	0	1
Share of profit / (loss) of associates	0	(2)
<b>Total</b>	<b>0</b>	<b>(1)</b>

In February 2017 Lonza announced that it had entered into a strategic partnership with Sanofi to build and operate a large-scale mammalian cell culture facility for monoclonal antibody production in Visp (CH). The strategic partnership combines the strong biologics development pipeline of Sanofi with the expertise of Lonza to design, construct, start up and operate a state-of-the-art large-scale mammalian cell culture facility. The total investment of both partners is estimated to be CHF 290 million (EUR 270 million). The facility is expected to be operational by 2020.

Lonza accounts for its share in BioAtrium AG (the entity which has been founded for this strategic partnership) as investment in associates in accordance with IAS 28. There has been no significant financial impact on Lonza's 2017 consolidated financial statements.

## 8.1 Joint Ventures

The Group has interests in three individually immaterial joint ventures. The following table analyzes, in aggregate, the carrying amount and share of profit and other comprehensive income of these joint ventures:

million CHF	2017	2016
Carrying amount of interests in joint ventures	4	5
Share of profit / (loss)	0	1
Share of other comprehensive income	0	0

In 2017 the Group received dividends of CHF 1 million (2016: none) from joint ventures.

## 8.2 Associates

The Group has interests in five financially immaterial associates (including Lonza's share in BioAtrium AG). The following table analyzes, in aggregate, the carrying amount and share of profit and other comprehensive income of these associates:

million CHF	2017	2016
Carrying amount of interests in associates	16	13
Share of profit / (loss)	0	(2)
Share of other comprehensive income	0	0

In 2017 the Group received dividends of CHF 3 million (2016: none) from associates.

# Note 9 – Inventories

million CHF	2017	2016
Inventories	1,288	1,006
Value adjustments	(111)	(109)
<b>Total</b>	<b>1,177</b>	<b>897</b>

million CHF	2017		2016	
Raw materials	25%	292	22%	200
Work in progress	6%	67	6%	58
Finished goods	50%	594	49%	439
Other	19%	224	22%	200
<b>Total</b>	<b>100%</b>	<b>1,177</b>	<b>100%</b>	<b>897</b>

## By Operating Segments<sup>1</sup>

million CHF	2017		<sup>2</sup> 2016	
Specialty Ingredients	45%	528	48%	429
Pharma&Biotech	39%	459	52%	468
Capsugel	16%	190	0%	0
<b>Total</b>	<b>100%</b>	<b>1,177</b>	<b>100%</b>	<b>897</b>

<sup>1</sup> Lonza operated with two segments in the first half of 2017. When Capsugel was acquired on 5 July 2017, it remained a separate operational segment for the balance of the year. From 1 January 2018, Capsugel has been fully integrated into Lonza Pharma&Biotech and Lonza Specialty Ingredients.

<sup>2</sup> Restated to reflect the transfer of a business from Pharma&Biotech to Specialty Ingredients

The development of inventory value adjustments in 2017 is shown as follows:

## Inventory Write-Downs

million CHF				2017	2016
	Raw materials	Work in progress and finished goods	Other	Total	Total
<b>At 1 January</b>	<b>13</b>	<b>59</b>	<b>37</b>	<b>109</b>	<b>100</b>
Increase	6	278	11	295	273
Reversal / Utilization of write-downs	(5)	(279)	(8)	(292)	(260)
Transfer to assets held for sale	0	(2)	0	(2)	(8)
Currency translation differences	0	1	0	1	4
<b>At 31 December</b>	<b>14</b>	<b>57</b>	<b>40</b>	<b>111</b>	<b>109</b>

The cost of inventories recognized as expenses during the period and included in “Cost of goods sold” amounted to CHF 3,083 million (2016: CHF 2,633 million).

# Note 10 – Development Contracts

In the Pharma&Biotech segment, the percentage of completion (POC) method was applied to account for development contracts. The stage of completion is estimated on the basis of costs incurred, compared with total forecasted costs. This accounting method is applied only to customer contracts with defined payment and delivery dates. Contract costs are usually recognized as an expense in the income statement in the accounting periods in which the work is performed. An expected excess of contract cost over total contract revenue is recognized as an expense as soon as it is apparent that total contract cost may exceed total contract revenue.

million CHF	2017	2016
<b>Contract revenue recognized as revenue in the period</b>	<b>90</b>	<b>59</b>
– Contract costs incurred	17	7
– Recognized profits less recognized losses	0	1
<b>Contract costs incurred plus recognized profits / less recognized losses</b>	<b>17</b>	<b>8</b>
Less progress billings	(23)	(2)
<b>Total net amount due from / (to) customers</b>	<b>(6)</b>	<b>6</b>
<b>Gross amount due from customers for contract work</b>	<b>0</b>	<b>6</b>
<b>Gross amount due to customers for contract work</b>	<b>(6)</b>	<b>0</b>



# Note 11 – Trade Receivables

million CHF	2017	2016
Receivables from customers	848	623
Allowances for credit losses	(23)	(11)
<b>Total</b>	<b>825</b>	<b>612</b>

The Group's credit risk is diversified due to the large number of entities comprising the Lonza customer base and the dispersion across many different industries and regions. Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. At 31 December 2017, there were no significant concentrations of credit risk. The maximum exposure to credit risk is equal to the carrying amounts.

## Aging of Trade Receivables

million CHF	2017	2016
Not past due	644	515
Past due 1–30 days	124	76
Past due 31–120 days	51	28
Past due more than 120 days	29	4
<b>Total</b>	<b>848</b>	<b>623</b>

## Reconciliation of changes in allowance accounts for credit losses

million CHF	2017	2016
<b>Balance at the beginning of the year</b>	<b>11</b>	<b>7</b>
Write-offs	(4)	(3)
Increase in provision for credit losses	25	9
Decrease in provision for credit losses	0	(2)
Disposal of subsidiary	(9)	0
<b>Balance at the end of the year</b>	<b>23</b>	<b>11</b>

In general, Lonza does not require collateral in respect of trade and other receivables, but uses credit insurance for country risk where appropriate.

# Accounts Receivable Securitization Programs

Lonza maintains two securitization programs for its US businesses, one with PNC Bank, National Association and another with Wells Fargo Bank, N.A.

Under the programs, Lonza sells certain U.S. and Canadian trade accounts receivable to PNC Bank (for the Arch Chemicals business and Lonza Walkersville Inc) and to Wells Fargo Bank, N.A. (for the Capsugel business) through two wholly owned subsidiaries, Arch Chemicals Receivables LLC and Capsugel Funding LLC.

The amount of receivables that Lonza can fund under the programs is subject to change based upon the level of eligible receivables, with a maximum amount of USD 105 million (2016: USD 50 million) at 31 December 2017 in the aggregate.

Under the programs, the payment by PNC Bank and Wells Fargo Bank, N.A. for a portion of the purchase price is deferred until the transferred underlying receivables have been completely settled. Lonza's maximum exposure related to the receivables sold is equal to the deferred purchase price component, which is substantially higher than the average expected credit loss on the receivables. As a result, Lonza continues to recognize all of the transferred receivables in the consolidated balance sheet.

As of 31 December 2017, the consolidated balance sheet includes receivables which Lonza sold to PNC Bank / Wells Fargo Bank, N.A. for which it obtained funds of USD 69 million (2016: USD 22 million). These are disclosed as "Other current liabilities" (note 15).

## Note 12 – Other Receivables, Prepaid Expenses and Accrued Income

million CHF	2017	2016
Other receivables	67	73
Prepaid taxes and social security payments	5	13
Prepaid expenses and accrued income	88	54
Derivative financial instruments (see note 29.5)	12	16
Loans and advances	0	1
Fees paid for debt facilities	0	18
<b>Total</b>	<b>172</b>	<b>175</b>

“Other receivables” include accruals and receivables for taxes (other than income taxes).

# Note 13 – Cash and Cash Equivalents

million CHF	2017	2016
Cash	458	222
Time deposits	21	52
<b>Total</b>	<b>479</b>	<b>274</b>

# Note 14 – Provisions

## Non-Current Provisions

million CHF	Environmental	Restructuring	Other	Total
<b>At 1 January 2017</b>	<b>82</b>	<b>2</b>	<b>6</b>	<b>90</b>
Increase	22	0	5	27
Used	(8)	0	0	(8)
Discount effect	1	0	0	1
Reversed	(1)	0	(1)	(2)
Reclassification (to current provisions)	(6)	(1)	0	(7)
<b>At 31 December 2017</b>	<b>90</b>	<b>1</b>	<b>10</b>	<b>101</b>

## Current Provisions

million CHF	Environmental	Restructuring	Other	Total
<b>At 1 January 2017</b>	<b>10</b>	<b>23</b>	<b>16</b>	<b>49</b>
Increase	12	12	15	39
Used	(4)	(8)	(8)	(20)
Reversed	(1)	0	(5)	(6)
Reclassification (from non-current provisions)	6	1	0	7
<b>At 31 December 2017</b>	<b>23</b>	<b>28</b>	<b>18</b>	<b>69</b>

## Environmental

The environmental provision comprises the future expenses for environmental remediation and protection of CHF 89 million (2016: CHF 66 million) for the plant in Visp (CH) as well as for various other plants of the acquired legacy Arch Chemicals business. The provision is expected to be utilized within ten years. The legacy Arch-related provisions include environmental risks for existing as well as divested plants.

## Restructuring

The restructuring provision primarily reflects the expected lease termination costs related to the phasedown of the Hopkinton, MA (USA) site amounting to CHF 16 million (2016: CHF 17 million) as well as CHF 4 million (2016: CHF 6 million) in relation to the VispChallenge restructuring program.

# Other

Other provisions are predominantly associated with customer claims and the asset retirement obligations of the Singapore-based operations.

# Note 15 – Net Debt

The net debt comprises:

million CHF	2017	2016
<b>Debt</b>		
Non-current debt	3,730	1,571
Current debt	516	289
<b>Total debt</b>	<b>4,246</b>	<b>1,860</b>
<b>Loans and advances (floating interest rates)</b>		
Non-current loans and advances	(5)	(1)
Current advances	0	(1)
Cash and cash equivalents	(479)	(274)
<b>Total loans and advances and cash and cash equivalents</b>	<b>(484)</b>	<b>(276)</b>
<b>Net debt</b>	<b>3,762</b>	<b>1,584</b>

## Non-Current Debt

million CHF	2017	2016
Straight bonds	1,213	1,317
Syndicated loan (2017–2022)	223	0
Syndicated loan (2011–2018)	0	99
Term loans	993	0
German private placement	1,108	5
Other long-term debt	182	144
Finance lease liabilities	11	6
<b>Total non-current debt</b>	<b>3,730</b>	<b>1,571</b>

## Straight Bonds – Fixed Interest Rates

million CHF	2017	2016
3.125% CHF 140 million, 2011/2018, due 7 December 2018, issued at 100.56%	140	139
2% CHF 200 million, 2012/2018, due 11 October 2018, issued at 100.21%	200	200
3% CHF 105 million, 2012/2022, due 11 October 2022, issued at 100.74%	105	105
1.75% CHF 300 million, 2013/2019, due 10 April 2019, issued at 100.45%	299	299
0.625% CHF 150 million, 2015/2020, due 22 September 2020, issued at 100.135%	150	150
1.25% CHF 175 million, 2015/2023, due 22 September 2023, issued at 100.133%	175	175
0.125% CHF 250 million, 2016/2021, due 1 November 2021, issued at 100.037%	249	249
0.2% CHF 125 million, 2017/2021, due 12 July 2021, issued at 100.179%	125	0
0.7% CHF 110 million, 2017/2024, due 12 July 2024, issued at 100.222%	110	0
<b>Total including current portion</b>	<b>1,553</b>	<b>1,317</b>
Less current portion of straight bonds	(340)	0
<b>Total non-current straight bonds</b>	<b>1,213</b>	<b>1,317</b>

## Acquisition Bridge Financing

The acquisition of Capsugel was financed with a combination of debt and equity financing. Lonza had committed debt financing (bridge financing) for the full acquisition amount of USD 5.5 billion from Bank of America Merrill Lynch and UBS, of which USD 1,457 million was raised in July 2017. The net proceeds of the bridge financing received in 2017 amounted to CHF 1,380 million after considering up-front fees of CHF 19 million (an additional CHF 18 million was paid in 2016). The bridge financing was fully repaid in 2017 and consequently the related up-front fees of CHF 37 million were recorded in the income statement.

## Term Loans

Lonza issued term loans of EUR 450 million and USD 489 million tranches carrying fixed interest rates and repayable in 2020 and 2022 (EUR 225 million and USD 245 million at the first maturity date), respectively. The net proceeds of the two term loan tranches received in 2017 totaled CHF 955 million.

## German Private Placement (issued in 2012)

Dual-currency German private placement (Schuldscheindarlehen) of EUR 34 million and USD 12 million tranches carried fixed and floating interest rates (LIBOR / EURIBOR + margin). The carrying amount was CHF 49 million as of 31 December 2016 and was fully repaid in 2017.



## German Private Placement (Issued in 2017)

- Dual-currency German private placement (Schuldscheindarlehen) of EUR 700 million and USD 200 million tranches carry fixed and floating interest rates (LIBOR / EURIBOR + margin) respectively, and are repayable in 2021 (EUR 325 million), 2022 (USD 150 million), 2023 (EUR 375 million) and 2024 (USD 50 million). The net proceeds of the German private placement tranches totaled CHF 986 million.
- Single-tranche German private placement (Schuldscheindarlehen) of USD 100 million carrying floating interest rates (LIBOR + margin) and repayable in 2024. The net proceeds amount to CHF 99 million.

## Syndicated Loan

In 2017 Lonza signed a new syndicated loan with a consortium of banks on the following terms: Credit facility of CHF 700 million, of which CHF 230 million was used as of 31 December 2017, due 2022, at floating interest rates (based on LIBOR). The net proceeds of the syndicated loan facility amount to CHF 225 million. The syndicated loan agreement contains a financial covenant that is based on Lonza's net debt / EBITDA ratio. The Group was in compliance with the covenant as of 31 December 2017.

## Others

Other non-current debt comprises industrial revenue bonds of USD 187 million (2016: USD 142 million) issued by governmental institutions in the United States (repayable in 2020, 2022, 2025, 2030 and 2047). The private placement of senior notes amounting to USD 158 million with certain institutional investors was repaid in 2017.

## Current Debt

million CHF	2017	2016
Due to banks and other financial institutions	119	68
Others	56	16
Leasing	1	0
<b>Non-current debt due within one year</b>		
- Straight bond (2011-2018)	140	0
- Straight bond (2012-2018)	200	0
- German private placement	0	44
- US private placement	0	161
<b>Total current debt</b>	<b>516</b>	<b>289</b>

## Debt: Movements in Carrying Value of Recognised Liabilities

million CHF	2017	2016
<b>At 1 January</b>	<b>1,860</b>	<b>1,938</b>
Repayment of straight bond	0	(400)
Repayment of German private placement	0	0
Proceeds from German private placements	1,085	0
Issue of term loans	955	0
Issue of straight bond	235	249
Issue of syndicated loan	225	100
Repayment of syndicated loan	(100)	0
Proceeds from acquisition bridge financing	1,380	0
Repayment of acquisition bridge financing	(1,399)	0
Repayment of US private placement	(156)	0
Repayment of acquired Capsugel debt	(1,952)	0
Proceeds from / (repayment of) borrowings	73	(82)
<b>Changes from financing cash flows</b>	<b>346</b>	<b>(133)</b>
<b>Amortization of financing costs and discounts</b>	<b>43</b>	<b>1</b>
<b>Business combinations</b>	<b>1,978</b>	<b>44</b>
<b>Reclassification of fees related to Capsugel financing (prepaid in 2016) to debt</b>	<b>(26)</b>	<b>0</b>
Net foreign currency transaction (gains) losses	69	0
Currency translation effects	(24)	10
<b>Changes in foreign exchange rates</b>	<b>45</b>	<b>10</b>
<b>At 31 December</b>	<b>4,246</b>	<b>1,860</b>

## Breakdown of Total Debt by Currencies

million CHF	2017			2016		
	Average interest rate %	%		Average interest rate %	%	
CHF	1.42	45	1,927	1.41	80	1,494
EUR	1.15	32	1,343	2.12	2	37
USD	2.57	23	976	2.63	18	327
Other	0	0	0	0	0	2
<b>Total</b>		<b>100</b>	<b>4,246</b>		<b>100</b>	<b>1,860</b>

# Note 16 – Other Current Liabilities

million CHF	2017	2016
Accrued liabilities and other payables	622	551
Derivative financial instruments (see note 29.5)	20	87
Liability related to securitization program (see note 11)	67	22
Other financial liabilities	268	212
Accrued interest payables	15	10
<b>Total</b>	<b>992</b>	<b>882</b>

“Accrued liabilities and other payables” include accruals and deferred income, such as down-payments from customers.

# Note 17 – Trade Payables

million CHF	2017	2016
Payable to third parties	400	284
<b>Total</b>	<b>400</b>	<b>284</b>

“Payables to third parties” principally comprise amounts outstanding for trade purchases and ongoing costs. The carrying amount of trade payables approximates their fair value.

# Note 18 – Material and Energy Costs

million CHF	2017	2016
Material costs	1,587	1,386
Energy costs	88	69
<b>Total</b>	<b>1,675</b>	<b>1,455</b>

# Note 19 – Personnel Expenses

million CHF	2017	2016
Wages and salaries	1,091	898
Operating expenses defined benefit pension plans (note 24.1)	47	45
Other social security contributions	234	188
Other personnel expenses	86	70
<b>Total</b>	<b>1,458</b>	<b>1,201</b>

# Note 20 – Other Operating Income and Expenses

## 20.1 Other Operating Income

million CHF	2017	2016
Gain from land sale transaction Guangzhou (CN) (see note 6)	74	0
Gain from foreign exchange rate differences and other operating derivative instruments	1	8
Release of provisions	8	4
Research & development tax credits	3	6
Sundry income	29	14
<b>Total</b>	<b>115</b>	<b>32</b>

## 20.2 Other Operating Expenses

million CHF	2017	2016
Accumulated exchange rate translation reserve losses from sale of Peptides business (see note 4.2)	35	0
Loss from disposal of property, plant and equipment	9	9
Loss from foreign exchange rate differences and other operating derivative instruments	9	5
Increase in provisions	17	28
Impairment of assets (see note 4.2)	0	42
Sundry expense	43	20
<b>Total</b>	<b>113</b>	<b>104</b>

# Note 21 – Financial Results

## Interest and Other Financial Income

million CHF	2017	2016
Interest income	10	2
Fair value adjustment on contingent purchase price consideration (see note 29.6)	7	0
<b>Total</b>	<b>17</b>	<b>2</b>

## Interest and Other Financial Expenses

million CHF	2017	2016
Interest expenses	(75)	(75)
Amortization of debt fees and discounts	(43)	(1)
Foreign exchange rate differences, including impact from currency-related financial derivative instruments	(26)	(29)
Other financial expenses	(15)	(9)
<b>Total</b>	<b>(159)</b>	<b>(114)</b>

"Amortization of debt fees and discounts" as well as "interest expenses" comprise expenses on the Group's debt (see note 15), the net defined-benefit liabilities (see note 24), the accounts receivable securitization program (see note 11) as well as other interest.



# Note 22 – Taxes

## 22.1 Income Taxes

### Major Components of Tax Expenses

million CHF	2017	2016
Current taxes	169	54
Deferred tax (income) / expense relating to the origination and reversal of temporary differences	(96)	20
Deferred tax (income) / expense resulting from tax rate changes	(220)	(2)
<b>Total</b>	<b>(147)</b>	<b>72</b>

Lonza Group Ltd and the operating company Lonza Ltd are domiciled in Switzerland. The maximum rate of all income taxes on companies domiciled in Switzerland is 8% (2016: 8%) for holding companies and 22% for operating companies in the Canton of Valais (2016: 22%).

Since the Group operates across the world, it is subject to income taxes in several different tax jurisdictions. Lonza uses, as the Group's tax rate, the ordinary tax rate for a legal entity in the Canton of Valais in Switzerland. The Group's effective tax rate for 2017 is -25% (2016: 19%).

The enactment of the United States Tax Cuts and Jobs Act (TCJA) and the Belgium Tax Reform, both in December 2017, reduced, among other provisions, the US Federal tax rate from 35% to 21% and the Belgium tax rate from 34% to 29.6% (for the years 2018 and 2019) and 25% (for year 2020 and following years). As a result of the changes in tax law, Lonza recognized substantial non-recurring adjustments to its current tax payables and its deferred tax assets and liabilities resulting in a net income tax benefit of CHF 187 million resulting in a negative group effective tax rate. Excluding the impacts of tax reform, Lonza Group would have had an effective tax rate of 6.8% for 2017.

The following table represents the key components of the aforementioned adjustments on deferred tax assets and liabilities and current tax payables:

million CHF	
Revaluation of deferred tax assets and liabilities due to U.S. tax rate changes	(90)
Revaluation of deferred tax assets and liabilities due to Belgium tax rate changes	(123)
Recognition of tax payables due to U.S. mandatory repatriation transition tax	50
Release of deferred tax liabilities on unremitted earnings	(24)
<b>Total revaluation of deferred tax assets and liabilities and current income tax liabilities</b>	<b>(187)</b>

The enacted U.S. tax reform legislation includes a provision that requires the U.S. parent company's foreign subsidiaries' unremitted earnings to be subject to an immediate toll tax on the qualifying amount of unremitted earnings (mandatory repatriation transition tax). Previously, these earnings were only taxable upon distribution to the U.S. parent company. Lonza had provided deferred tax liabilities amounting to CHF 24 million related to

certain of its non-US domiciled affiliates' unremitted earnings in the past, which have been released as a result of the TCJA. Conversely, Lonza recorded an estimate of CHF 50 million repatriation tax liability on accumulated post-1986 foreign earnings that is reported in taxes payable, as the toll tax amount owed is payable over eight years through 2026 (with the first of eight installments due in April 2019), independent from the effective distribution of deemed repatriated earnings.

The TCJA subjects a U.S. shareholder to current tax on global intangible low-taxed income earned by certain foreign subsidiaries. Under IFRS, an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as global intangible low-taxed income in future years or provide for the tax expense related to such income in the year the tax is incurred. We have elected to provide for the tax expense related to such income in the year the tax is incurred. As a result, there is no recorded impact from the global intangible low-taxed income in the current year.

The estimated tax payables for the mandatory repatriation transition tax are considered to be Lonza's best estimate at this point in time and are based on several assumptions (e.g. earnings and profits in the Group's foreign subsidiaries (including the portion in cash), foreign tax credits and other foreign losses available, and assertions on any remaining outside basis differences as of 31 December 2017). The estimate for the repatriation tax contains information that was readily available to us.

Certain information necessary to complete our evaluation of the financial statement impacts of TCJA was not readily available and Lonza will revise these estimates during 2018. Such revisions could be material as additional information to complete the tax returns is gathered and as any interpretation or clarification of the TCJA occurs through legislation, U.S. Treasury actions or other means.

Capital taxes of CHF 19 million (2016: CHF 12 million) are included in "Administration and general overheads".

## Reconciliation of Tax Expense

million CHF	2017	2016
Profit before income taxes	581	373
Tax at the group rate (2017: 22 % / 2016: 22 %)	128	82
Deviation from average group tax rate	(89)	3
Non-deductible expenses	2	4
Tax-free earnings	(29)	(17)
Deferred tax effect from tax rate changes	(220)	(2)
Changes in prior year estimates (including valuation allowances)	28	9
Tax on unremitted earnings	26	(9)
Effect of non-recognition of deferred tax assets	7	3
Other	0	(1)
<b>Total</b>	<b>(147)</b>	<b>72</b>
<b>Deferred tax expenses (charged) / credited directly to equity</b>	<b>0</b>	<b>0</b>
<b>Current tax expenses (charged) / credited directly to equity</b>	<b>(5)</b>	<b>(2)</b>

Lonza's 2017 effective tax rate is affected by certain positive one-time tax impacts of items that deviate from the Group tax rate, including tax deductible capital transaction costs (CHF 99 million) recognized directly in equity, certain changes to Lonza's legal and financing structure as well as by the geographical source of income which shifted on a year over year basis consistent with Lonza's business performance.

The components of deferred income tax balances are included in the following captions in the consolidated balance sheet:

## Components of Deferred Income Tax Balances

million CHF	2017		2016	
	Assets	Liabilities	Assets	Liabilities
Current provisions	8	20	6	17
Non-current provisions / Employee benefit liability	270	80	305	86
Intangible assets	1	839	1	357
Inventories, net	9	41	6	29
Property, plant and equipment	14	217	12	156
Other assets	22	13	8	23
Tax loss carry-forwards	159	0	39	0
Netting of deferred tax assets and deferred tax liabilities	(450)	(450)	(339)	(339)
<b>Total</b>	<b>33</b>	<b>760</b>	<b>38</b>	<b>329</b>

The development of deferred tax (expenses) / income can be explained as follows:

million CHF	2017	2016
Deferred tax assets	33	38
Deferred tax liabilities	(760)	(329)
<b>Net deferred tax liability, at 31 December</b>	<b>(727)</b>	<b>(291)</b>
Less deferred tax liabilities net, at 1 January	291	208
<b>(Increase) / decrease in deferred tax liabilities, net</b>	<b>(436)</b>	<b>(83)</b>
Currency translation differences	36	7
Acquisition of subsidiaries	666	64
Movements of deferred (tax assets) / liabilities recognized in other comprehensive income	50	(10)
Reclassification to assets held for sale	0	4
<b>Income / (expense) recognized in income statement</b>	<b>316</b>	<b>(18)</b>

## Unrecognized Tax Losses: Expiry

million CHF	2017	2016
Within 1 year	0	0
Between 2 to 5 years	25	72
After 5 years	148	32
Unlimited	320	168
<b>Total</b>	<b>493</b>	<b>272</b>

In assessing whether it is probable that future taxable profit will be available to utilize these tax loss carry-forwards, management considers whether such benefits are recoverable on the basis of the current situation of the company and the future economic benefits outlined in specific business plans for each relevant subsidiary.

Deferred tax liabilities have not been established for the withholding tax and other taxes that would be payable on the remittance of earnings of foreign subsidiaries, where such amounts are currently regarded as permanently reinvested. The total unremitted earnings of the Group, regarded as permanently reinvested, were CHF 416 million at 31 December 2017 (2016: CHF 543 million).

## 22.2 Disclosure of Tax Effects to Each Component of Other Comprehensive Income

million CHF	2017			2016		
	Before-tax amount	Tax (expense) benefit	Net-of-tax amount	Before-tax amount	Tax (expense) benefit	Net-of-tax amount
Exchange differences on translating foreign operations	227	(4)	223	4	(1)	3
Cash flow hedges	9	(1)	8	(1)	(1)	(2)
Remeasurement of defined-benefit liability	119	(50)	69	(37)	10	(27)
<b>Other comprehensive income</b>	<b>355</b>	<b>(55)</b>	<b>300</b>	<b>(34)</b>	<b>8</b>	<b>(26)</b>

# Note 23 – Research and Development Costs

Research and development (R&D) costs include all primary costs directly related to this function, as well as internal services and imputed depreciation. These costs are incurred for:

- Development of new products and services
- Improvement of existing products and services
- Development of new production processes
- Improvement of existing production processes
- Cost of patents
- Purchase price for product and process know-how to the extent not capitalized

The research and development costs amounted to CHF 157 million (2016: CHF 144 million) and represent the full range of R&D activity. However, the consolidated income statement discloses research and development costs of only CHF 103 million (2016: CHF 84 million), as the remainder of such costs are absorbed in “Cost of goods sold” for R&D products and services sold.

# Note 24 – Employee Benefits Liabilities

The tables below reconcile the Group's employee benefit liabilities in the balance sheet as well as the related remeasurement in the statement of other comprehensive income:

million CHF	2017	2016
Defined benefit pension plans (see note 24.1)	538	673
Post-employment medical benefits (see note 24.2)	36	40
Non-current vacation accrual (Swiss entities)	3	3
Other employee benefit liabilities	1	1
<b>Total</b>	<b>578</b>	<b>717</b>

million CHF	2017	2016
Remeasurement for:		
Defined-benefit pension plans (see note 24.1)	(120)	36
Post-employment medical benefits (see note 24.2)	1	1
<b>Total</b>	<b>(119)</b>	<b>37</b>

## 24.1 Defined-Benefit Pension Plans

The group operates defined-benefit pension plans in various countries, with the major plans being in Switzerland, Great Britain and the United States (as described below). For pension accounting purposes, these plans are considered as defined-benefit plans.

### Pension Plan in Switzerland

The Group's Swiss pension plan is governed by the Swiss Federal Law on Occupational Retirement, Survivors and Disability Pension Plans (BVG), and is funded through a legally separate trustee-administered pension fund (Pensionskasse der Lonza). The Board of Trustees is responsible for the investment of the assets, which cannot revert to the Company. The cash funding of these plans, which may from time to time involve special payments, is designed to ensure that present and future contributions should be sufficient to meet future liabilities.

The plan contains a cash balance benefit formula, accounted for as a defined-benefit plan. Employer and employee contributions are defined in the pension fund rules in terms of an age-related sliding scale of percentages of pay. Under Swiss law, the company guarantees the vested benefit amount as confirmed annually

to members. Interest may be added to member balances at the discretion of the Board of Trustees. The risks linked to retirement benefits (disability and death) have been reinsured until 31 December 2020. The investment risk is not reinsured.

Retirement benefits are based on the accumulated retirement capital (made up of yearly contributions and the interest thereon), which can either be drawn as a life-long annuity or as a lump sum payment or a combination of both. The annuity is calculated by multiplying the retirement capital with the applicable conversion rate defined in the fund rules. The Board of Trustees may adjust the annuity at its discretion subject to the plan's funded status including sufficient free funds as determined according to Swiss statutory valuation rules.

Retirement benefits and related plan assets of plan participants with a retirement date on or before 31 December 2007 were transferred to an insurance company. The insurance company guarantees these retirement benefits and bears the investment, death and disability risks.

## Pension Plan in the UK

The Group operates two major plans in the UK, the Hickson UK Group Pension Scheme and the Lonza Biologics Pension Scheme. Both plans are closed to new entrants. In addition, both schemes are registered schemes under UK legislation, are contracted out of the State Second Pension and are subject to the scheme funding requirements outlined in UK legislation. The plans are managed by corporate trustee bodies, which oversee investment strategy and general regulatory compliance.

The Hickson UK Group Pension Scheme is the defined-benefit pension plan of the UK Arch Chemicals business. Pensions are linked to final salaries and service, and statutory inflation increases apply, except where contractually different. Ongoing contributions are sufficient to fund current accrual rates, and a deficit recovery plan has been in place for a number of years to recover any shortfall in funding.

The Lonza Biologics Pension Scheme provides pensions in retirement and death benefits to members. Pension benefits are linked to a member's final salary at retirement and their length of service.

## Pension Plans in the United States

Lonza currently sponsors three qualified defined-benefit pension plans in the United States. All of the defined-benefit pension plans are fully frozen with respect to future benefit accruals (with the exception of a small group of participants). All eligible U.S. employees currently participate in a defined-contribution retirement plan. All eligible U.S. employees currently participate in one of the two current defined-contribution retirement plans (it is anticipated that effective 1 January 2019, the two current defined contribution plans will be merged).

As of December 31, 2016, the Pension Plan of Arch Chemicals and the Employees' Retirement Plan of Lonza Inc. purchased a Group Annuity Contract and transferred the related liability and plan assets for a selected group of retirees (approximately 1,500) from two of the pension plans to Voya Retirement Insurance and Annuity Company, resulting in a settlement gain of CHF 1 million.

Pension benefits for the majority of U.S. pension plan participants are generally based on final average pay and credited service as of the date of termination or as of the date benefit accruals were frozen (if earlier), and are payable as a lifetime pension. Participants in the Cash Balance formula under the Pension Plan of Arch Chemicals are covered under an account-based formula that is credited each year with interest based on the yield on ten-year U.S. Treasury securities. Participants in these plans may commence benefit payments upon attainment of normal retirement age or, if applicable, as of an early retirement age (usually age 55) provided the criteria for early retirement have been met as of the participant's termination of employment with the Company. Participants in the Cash Balance plan may elect to commence benefits upon termination of employment either in a single lump sum or as a lifetime annuity, or they may defer payment to a later date.

Pension benefit payments from the qualified pension plans are paid from a trustee-administered fund. The qualified defined-benefit plans, whose assets are held in a master trust, are subject to minimum funding requirements and are subject to further regulation under the Internal Revenue Code and the Employees Retirement Income Security Act of 1974 (ERISA). Responsibility for governance of these qualified plans lies with a committee of pension plan fiduciaries appointed by Lonza. Actuarial valuations are completed each year for each plan to determine the contribution requirement. The minimum annual contribution for each plan is equal to the present value of benefits accrued each year (if any), plus expected administrative expenses of the plan to be paid from the trust, plus a rolling amortization of any prior underfunding. The plan sponsor may elect to contribute more than the minimum, in which case the excess amounts may under certain circumstances be used to offset future funding requirements.

The movement in the net defined-benefit liability over 2016–2017 is as follows:

million CHF	Defined-benefit obligation	Fair value of plan assets	Net defined-benefit liability
<b>At 1 January 2016</b>	<b>3,066</b>	<b>(2,372)</b>	<b>694</b>

### Included in profit or loss

Current service cost	46	0	46
Gain on settlements	(58)	57	(1)
Interest expense / (income)	63	(48)	15

### Included in other comprehensive income

Actuarial loss / (gain) arising from:			
– Demographic assumptions	(19)	0	(19)
– Financial assumptions	202	0	202
– Experience adjustment	44	0	44
Return on plan assets excluding interest income	0	(191)	(191)
Remeasurements loss / (gain)	227	(191)	36
Effect of movements in exchange rates	(75)	71	(4)

### Other

Contributions paid:			
– Employers	0	(97)	(97)
– Plan participants	18	(18)	0
Benefits paid	(117)	117	0
Reclassification to liabilities held for sale	(25)	9	(16)
<b>At 31 December 2016</b>	<b><sup>1</sup> 3,145</b>	<b>(2,472)</b>	<b>673</b>

### Included in profit or loss

Current service cost	51	0	51
Gains on settlements	(4)	0	(4)
Interest expense / (income)	55	(42)	13



## Included in other comprehensive income

Actuarial loss / (gain) arising from:

– Demographic assumptions	(63)	0	(63)
– Financial assumptions	70	0	70
– Experience adjustment	40	0	40
Return on plan assets excluding interest income	0	(167)	(167)
Remeasurements loss / (gain)	47	(167)	(120)
Effect of movements in exchange rates	19	(16)	3

## Other

Contributions paid:

– Employers	0	(111)	(111)
– Plan participants	20	(20)	0
Benefits paid	(131)	131	0
Business combinations	62	(33)	29
<b>At 31 December 2017</b>	<b><sup>2</sup>3,264</b>	<b>(2,730)</b>	<b>534</b>

<sup>1</sup> Thereof present value of funded defined-benefit obligation of CHF 3,125 million and present value of unfunded defined-benefit obligation of CHF 20 million

<sup>2</sup> Thereof present value of funded defined-benefit obligation of CHF 3,236 million and present value of unfunded defined-benefit obligation of CHF 28 million

The defined-benefit pension plans are reported as follows in the balance sheet:

million CHF	2017 Total	2016 Total
Defined-benefit pension plan asset	4	0
Defined-benefit pension plan liability	(538)	(673)

Lonza offered a one-time “window” program to deferred vested participants in the U.S. pensions plans, permitting them to elect a one-time immediate lump sum payment (or immediate annuity) of their retirement benefit in lieu of a lifetime annuity beginning at retirement age, which resulted in a gain on settlement of CHF 4 million.

The Group expects to pay CHF 90 million in contributions to defined-benefit pension plans in 2018.

The defined-benefit obligation and plan assets are disaggregated by country as follows:

million CHF	2017					2016				
	CH	US	UK	Rest of the world	Total	CH	US	UK	Rest of the world	Total
Present value of defined-benefit obligation	1,887	551	743	83	3,264	1,847	563	712	23	3,145
Fair value of plan assets	(1,634)	(417)	(639)	(40)	2,730	(1,516)	(375)	(572)	(9)	(2,472)
<b>Total net defined-benefit liability</b>	<b>253</b>	<b>134</b>	<b>104</b>	<b>43</b>	<b>534</b>	<b>331</b>	<b>188</b>	<b>140</b>	<b>14</b>	<b>673</b>

The significant actuarial assumptions at the reporting date (expressed as weighted averages) were as follows:

in %	2017			2016		
	CH	US	UK	CH	US	UK
Discount rate	0.66	3.50	2.52	0.69	3.99	2.72
Future salary increases	1.00	0.00	3.35	1.00	0.00	3.42
Future pension increases	n.a.	0.00	2.44	n.a.	0.00	2.45

Assumptions regarding future mortality are based on actuarial advice in accordance with published statistics and experience in each territory<sup>1</sup>. These assumptions translate into an average life expectancy in years for a pensioner retiring at age 65:

in years	2017			2016		
	CH	US	UK	CH	US	UK
<b>Retiring at the end of the reporting period</b>						
– Male	21.6	21.6	21.6	22.3	21.0	21.7
– Female	23.4	24.2	24.2	24.3	23.0	24.5
<b>Retiring 20 years after the end of the reporting period</b>						
– Male	23.1	23.4	23.4	24.2	23.0	23.5
– Female	24.9	26.0	26.0	26.2	24.0	26.4

<sup>1</sup>For the Pension Plan in Switzerland BVG 2015 mortality tables were applied.

The sensitivity of the defined-benefit obligation to changes in the relevant actuarial assumptions is:

effect in million CHF	Change in assumption	31 12 2017		31 12 2016	
		Increase	Decrease	Increase	Decrease
Discount rate	0.25%	(125)	134	(119)	128
Future salary increases	0.25%	17	(17)	14	(14)
Life expectancy	1 year	114	(116)	89	(90)

The above sensitivity analyses are based on a change in an assumption while keeping all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined-benefit obligation to significant actuarial assumptions the same method (present value of the defined-benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognized within the balance sheet.

The methods and types of assumptions used in preparing the sensitivity analyses did not change compared with the previous period.

At 31 December the weighted average duration of the defined-benefit obligation for the major plans as well as the Group in total is:

in years	2017	2016
Group	15.9	15.8
CH	15.3	14.8
UK	19.7	20.8
US	12.2	12.1

Plan assets comprise:

million CHF	2017				2016			
	Quoted	Unquoted	Total	%	Quoted	Unquoted	Total	%
Equity instruments	1,334	0	1,334	48	708	0	708	28
Debt instruments								
Investment-grade (AAA to BBB)	891	0	891		1,007	0	1,007	
Non-investment-grade (below BBB)	32	0	32		39	0	39	
	923	0	923	34	1,046	0	1,046	42
Real-estate	33	95	128	5	112	78	190	8
Cash and cash equivalents	104	0	104	4	90	0	90	4
Other	215	26	241	9	420	18	438	18
<b>Total</b>	<b>2,609</b>	<b>121</b>	<b>2,730</b>	<b>100%</b>	<b>2,376</b>	<b>96</b>	<b>2,472</b>	<b>100%</b>

## 24.2 Post-Employment Medical Benefits

Lonza's post-employment medical benefit plans are not funded and are provided under defined-benefit plans. They consist of post-retirement healthcare benefits in the United States, such as drug coverage and other medical benefits, as well as limited death benefits.

The post-retirement healthcare plans are not open to new members and grandfathered participants must meet specific age / service requirements to participate.

The movements in the defined-benefit obligation are as follows:

million CHF	2017	2016
<b>At 1 January</b>	<b>40</b>	<b>38</b>
<b>Included in profit or loss</b>		
Current service cost	1	1
Past service credit	(3)	0
Interest expense	1	1
<b>Included in other comprehensive income</b>		
Remeasurements loss / (gain)		
Actuarial loss / (gain) arising from:		
– Demographic assumptions	0	(1)
– Financial assumptions	2	1
– Experience adjustment	(1)	1
Total remeasurements loss / (gain)	1	1
<b>Effect of movements in exchange rates</b>		
	(1)	1
<b>Other</b>		
Benefits paid	(3)	(2)
<b>At 31 December</b>	<b>36</b>	<b>40</b>

In 2017 one of the plans was amended. Following the elimination of certain benefits the Group recognized a past service credit of CHF 3 million.

The significant actuarial assumptions were as follows:

in %	2017	2016
Discount rate	3.50	3.99
Medical-cost trend rate	6.20	6.60

The sensitivity of the defined-benefit obligation to changes in the relevant actuarial assumptions is:

effect in million CHF	Change in assumption	31 12 2017		31 12 2016	
		Increase	Decrease	Increase	Decrease
Discount rate	0.25%	(1)	1	(1)	1
Medical-cost trend rate	1.00%	3	(3)	4	(4)
Life expectancy	1 year	1	(1)	1	(1)

For the medical plan the same mortality assumptions are applied as for the pension plans in the United States (see 24.1). In addition, the sensitivity analyses are based on the same methodology as for the pension plans.

# Note 25 – Share-Based Payments

## Equity-Settled Share Schemes

### Employee Share Purchase Plan (ESPP)

In keeping with its vision and culture, Lonza has continuously encouraged employee participation in the company through stock ownership. In 2005 the former Employee Share Purchase Plan (ESPP) was updated. Under the 2005 plan, ESPP Plus, employees were given the opportunity – but not the obligation – to purchase Lonza shares in multiples of three with a price reduction of 30%. The shares purchased in this manner remain blocked for three years and are eligible for a dividend. After this blocking period, participants are entirely free to do as they wish with the shares. If participants keep their shares for a further two years in a blocked deposit, they will then – after this holding period is over – receive one additional free share for every three shares purchased. Due to cost-saving measures, the reissue of the share purchase plan was interrupted in 2013.

The purchase conditions to participate in the ESPP Plus were as follows:

- 2012: ranging from 9 shares to 318 shares

The ESPP is not part of an incentive program. The plan is intended as a long-term share-savings scheme to provide employees with an incentive to strengthen teamwork and personal commitment.

### Details of Share Purchase Plans

	Purchased	Ratio	Granted share awards	Plan expiry date	Price at grant date CHF
ESPP 2012 Plus	200,802	3:1	66,934	30 05 2017	38.34

### Development Within 2017 of the ESPP Plus

	Share awards outstanding 01 01 2017	Share awards granted during 2017	Share awards forfeited during 2017	Shares vested during 2017	Share awards lapsed during 2017	Share awards outstanding 31 12 17
ESPP 2012 Plus	44,366	0	0	(39,700)	(4,666)	0
<b>Total shares</b>	<b>44,366</b>	<b>0</b>	<b>0</b>	<b>(39,700)</b>	<b>(4,666)</b>	<b>0</b>

## Development Within 2016 of the ESPP Plus

	Share awards outstanding 01 01 2016	Share awards granted during 2016	Share awards forfeited during 2016	Shares vested during 2016	Share awards lapsed during 2016	Share awards outstanding 31 12 16
ESPP 2011 Plus	17,543	0	0	(14,799)	(2,744)	0
ESPP 2012 Plus	58,603	0	(14,017)	(220)	0	44,366
<b>Total shares</b>	<b>76,146</b>	<b>0</b>	<b>(14,017)</b>	<b>(15,019)</b>	<b>(2,744)</b>	<b>44,366</b>

The weighted average share price of the vested shares in 2017 was CHF 38.34 (2016: CHF 75.21).

The fair value of shares granted were calculated using the market price at grant date. The discount on the purchase price of shares is expensed at the moment the employees acquire Lonza shares. The fair value of the free shares is expensed on a straight-line basis over the vesting period, based on estimates of shares that will eventually vest.

## Fair Value at Grant Date

in CHF

ESPP 2012	2,053,000
ESPP 2012 discount	2,309,625

## Long-Term Incentive (LTIP)

### History and Participation

The LTIP is an equity-based plan introduced in 2006 for the Executive Committee and a segment of key employees.

### Objective

The LTIP has been designed to align the interests of participants with those of Lonza's shareholders and to serve as a retention tool. LTIP participants are eligible to receive a number of Lonza shares at the end of the vesting period, provided that certain challenging performance conditions are met at the end of the three-year performance period.

## Equity Awards

Under the LTIP, participants are awarded the right to receive a number of Lonza registered shares in the future. Depending on the level of the job, the target equity award grant is between 10% and 100% of the annual base salary. The grant is made at target and the payout level can be between 0% and 200%. The Executive Committee members, including the CEO, have a target of 100% of base salary with payout levels between 0% and 200% maximum. Any proration is applied in relation to the entire length of the three-year performance period.

The LTIP plan design is determined at the beginning of the three-year performance period. For 2017 the plan design included minimum, target and stretch goals. The 2017 LTIP budget value for the Executive Committee was approved as submitted at the AGM 2017 and administered in accordance with this approval.

Vesting will depend on achievement of the performance conditions and cannot exceed the maximum amount (200%) of granted equity awards.

## Restriction and Vesting

The central feature of the plan is that key participants will only receive title and ownership of the shares after a three-year vesting period and only if the performance metrics required for vesting are partially or fully met.

## Vesting Targets

For the 2017 and 2016 LTIP the performance metrics were CORE EPS and CORE RONO A with 50% weight for each measure.

With the payout value directly linked to these key financial metrics, these two measures focus on Lonza's financial performance that will drive the valuation of Lonza with investors. The value of the LTIP will be ultimately driven by the share price at the time of payout, further linking the LTIP to the interests of the shareholders.

## Overview of Vesting Conditions for LTIP

For the years 2017 and 2016, the vesting of up to 50% of the granted equity awards depends on growth of CORE EPS achieved during Lonza's three fiscal years and the vesting of up to 50% of the granted equity awards depends on growth of CORE RONO A achieved during Lonza's three fiscal years.

### Performance Metrics for CORE EPS Approved at AGM 2017 (LTIP 2017)<sup>1</sup>

- The minimum threshold to be reached at year-end 2019 was determined by the NCC to be significantly higher than the CORE EPS achieved on 31 December 2016 (which was CHF 7.81). If this minimum threshold is not reached, the payout will be zero. If this threshold is reached, 50% of the equity awards granted under CORE EPS will vest.
- If the target is reached, 100% of the equity awards granted under CORE EPS will vest. CORE EPS is an internal, sensitive financial target which is not disclosed at this time.
- The maximum was determined to approximate 110% of the CORE EPS at target. If such level of CORE EPS is reached, 200% of the equity awards granted under CORE EPS will vest.



## Performance Metrics for CORE RONO A Approved at AGM 2017 (LTIP 2017)<sup>1</sup>

- The minimum threshold to be reached at year-end 2019 was determined by the NCC to be significantly higher than the CORE RONO A achieved on 31 December 2016 (which was 21.5%). If this minimum threshold is not reached, the payout will be zero. If this threshold is reached, 50% of the equity awards granted under CORE RONO A will vest.
- If the target is reached, 100% of the equity awards granted under CORE RONO A will vest. CORE RONO A is an internal, sensitive financial target which is not disclosed at this time.
- The maximum was determined to approximate 110% of the CORE RONO A at target. If such level of CORE RONO A is reached, 200% of the equity awards granted under CORE RONO A will vest.

<sup>1</sup> As a result of the acquisition of Capsugel, Lonza management deemed that the performance targets previously set in the LTIPs shall be adjusted to reflect and consider the Capsugel integration and contribution to the Group's future performance. The financial budget information of Lonza (EBIT, Core EBIT, Net Income and Core Net Income) and NOA used in the calculation of the Forecast Information agrees to the Lonza financial budget information (EBIT, Core EBIT, Net Income and Core Net Income) and NOA used in the calculation of the original LTIP performance targets for FY18 and FY19 as approved by the Board of Directors when establishing the 2016 and 2017 LTIPs. This information has been amended by the financial budget information of Capsugel for FY 18 and FY19 based on the forecasted information derived from calculations in connection with the acquisition. The methodology applied to incorporate the acquired Capsugel business and supporting calculations into the LTIPs has been validated by an external party.

## Treatment of LTIP in Change of Control Situations

Under the LTIP rules, if a Change of Control occurs, all unvested granted shares shall immediately vest and the granted price shall be the price at which the shares are sold in the transaction resulting in the Change of Control.

## Actual Performance and Payout for the LTIP 2015

The total 2014 LTIP payout equaled 100%.

Performance under the 2015 LTIP exceeded the target for CORE EPS, generating a 200% payout on 50% of the total award. Performance under the 2015 LTIP exceeded the target for Core RONO A, generating a 200% payout on the remaining 50% of the total award. The total 2015 LTIP payout equals 200%. The financial impact of the Capsugel integration were excluded from the Core results which are relevant for the LTIP payout.

### 2015 LTIP

	Actual performance	Payout in %
CORE EPS (Earnings Per Share) <sup>1</sup>	CHF 11.10	200
CORE RONO A (Return on Net Operating Assets) <sup>1</sup>	27.1%	200
<b>Total payout</b>		<b>200</b>

<sup>1</sup> CORE results exclude exceptional items such as restructuring charges, impairments and amortization of acquisition-related intangible assets, which can differ from year to year.

## Details of Long-Term Incentive Plans

	Grant date	Share price CHF	Granted equity awards	Fair value at grant date	Vesting date
LTIP 2014	01 02 2014	91.15	137,180	6,251,978	31 01 2017
LTIP 2015	01 02 2015	109.20	116,907	12,766,244	31 01 2018
LTIP 2016	01 02 2016	156.30	108,744	24,730,180	31 01 2019
LTIP 2017	01 02 2017	180.90	106,578	17,353,964	31 01 2020
LTIP 2017 Capsugel	27 07 2017	233.10	76,641	16,078,516	31 01 2020

## Vesting Conditions at Grant Date

	Market price CHF	Granted equity awards	Fair value of equity awards	Expected EPS / RONOA at grant date	Probability minimum targets	Volatility employees	Total probability	Total cost at grant date CHF
LTIP 2014 CORE RONOA	91.15	68,590	91.15	50%	100%	3%	97%	3,032,210
LTIP 2014 CORE EPS	91.15	68,590	91.15	50%	100%	3%	97%	3,032,210
LTIP 2015 CORE RONOA	109.20	58,453	109.20	100%	100%	3%	97%	6,191,576
LTIP 2015 CORE EPS	109.20	58,454	109.20	100%	100%	3%	97%	6,191,681
LTIP 2016 CORE RONOA	156.30	54,372	156.30	150%	150%	3%	97%	12,365,090
LTIP 2016 CORE EPS	156.30	54,372	156.30	150%	150%	3%	97%	12,365,090
LTIP 2017 CORE RONOA	180.90	53,289	180.90	100%	100%	10%	90%	8,676,982
LTIP 2017 CORE EPS	180.90	53,289	180.90	100%	100%	10%	90%	8,676,982
LTIP 2017 CAPSUGEL CORE RONOA	233.10	38,321	233.10	100%	100%	10%	90%	8,039,363
LTIP 2017 CAPSUGEL CORE EPS	233.10	38,320	233.10	100%	100%	10%	90%	8,039,153

## Development within 2017 of the LTIP

	Equity awards outstanding 01 01 2017	Equity awards granted during 2017	Equity awards forfeited during 2017	Vested equity awards during 2017	Equity awards lapsed during 2017	Equity awards outstanding 31 12 2017
LTIP 2014	124,680	0	0	(108,682)	(15,998)	0
LTIP 2015	114,909	0	(11,686)	0	0	103,223
LTIP 2016	108,744	3,051	(7,128)	0	0	104,667
LTIP 2017	0	106,578	0	0	0	106,578
LTIP 2017 CAPSUGEL	0	76,641	0	0	0	76,641
<b>Total equity awards</b>	<b>348,333</b>	<b>186,270</b>	<b>(18,814)</b>	<b>(108,682)</b>	<b>(15,998)</b>	<b>391,109</b>

## Development within 2016 of the LTIP

	Equity awards outstanding 01 01 2016	Equity awards granted during 2016	Equity awards forfeited during 2016	Vested equity awards during 2016	Equity awards lapsed during 2016	Equity awards outstanding 31 12 2016
LTIP 2013	189,672	0	0	(183,985)	(5,687)	0
LTIP 2014	137,411	0	(12,731)	0	0	124,680
LTIP 2015	116,907	0	(1,998)	0	0	114,909
LTIP 2016	0	108,744	0	0	0	108,744
<b>Total equity awards</b>	<b>443,990</b>	<b>108,744</b>	<b>(14,729)</b>	<b>(183,985)</b>	<b>(5,687)</b>	<b>348,333</b>

The estimated fair value of the granted equity awards in 2017 was CHF 162.82 for LTIP 2017 and CHF 209.79 for LTIP 2017 Capsugel (2016: CHF 227.42). The weighted average share price of the vested shares in 2017 was CHF 91.15 (2016: CHF 53.60). The outstanding granted equity awards on 31 December 2017 had a weighted average share price of CHF 175.16 (2016: CHF 123.33) and a remaining weighted average contractual life of 15 months (2016: 12 months). The costs were calculated using the market price at grant date, including probabilities as per conditions of vesting. The amounts for equity awards are expensed on a straight-line basis over the vesting period, based on estimates of equity awards that will eventually vest.

## Extended Short-Term Incentive Plan (E-STIP)

### Relationship to STIP

For the years 2013 and 2014 the company provided the members of the Executive Committee and Senior Management with Short-Term Incentive Plans, of which two-thirds is paid in cash (Cash STIP) and one-third in restricted share units (RSUs) (E-STIP) which vest after three years. Performance metrics are defined for each financial year; achievement determines the payout of STIP. The performance metrics for the STIP (Cash STIP and E-STIP) are the same.

## E-STIP

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Targeted E-STIP amount as % of base salary	<ul style="list-style-type: none"><li>– 26.7% for the Chief Executive Officer</li><li>– 25% for other Executive Committee members</li><li>– 10% to 20 % for Senior Management</li></ul>
E-STIP targets weighting	<ul style="list-style-type: none"><li>– 50% CORE EBIT (Financial)</li><li>– 15% Lonza Sales (Financial)</li><li>– 15% Operational Free Cash Flow (Financial)</li><li>– 20% Personal targets are linked back to the financial targets (10% weighting for CORE EBIT, 5% weighting for Sales and 5% weighting for Operational Free Cash Flow)</li></ul>
Maximum potential payout	Depending on the financial results achievement, the Cash STIP payout may range between 0% and 200% for the financial targets and 0% and 150% for personal targets. Total maximum payout opportunity is 190% (80% financial × 200% + 20% personal × 150% = 190%)

## Alignment on Share Price

The value of the plan is strongly dependent on Lonza's future share price, thereby further reinforcing the link to shareholders' interests. The E-STIP is awarded in the form of RSUs, which are subject to a three-year vesting requirement.

## Grant Timing

The grant of the RSUs under the E-STIP 2014 took place in April 2015 following shareholder approval at the AGM (E-STIP 2013 on 31 March 2014), on which date the number of RSUs was determined based on the closing stock price of the last business day in March. These RSUs vest after three years.

## Dividend and Voting Rights

The E-STIP RSUs, do not qualify for dividends and voting rights until vested.

## Treatment of E-STIP RSUs in Change of Control Situation

Under the outstanding E-STIP plan rules, if a change in control occurs, all unvested RSUs shall immediately vest and the granted price shall be the price at which the shares are sold in the transaction resulting in the change in control.

## Non-Vested RSUs

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	Grant date	Share price	Granted share units	Vesting date
E-STIP 2013	31 03 2014	90.15	19,771	31 03 2017
E-STIP 2014	31 03 2015	121.50	20,418	31 03 2018

## Development Within 2017 of E-STIP

	Share units outstanding 01 01 2017	Share units granted during 2017	Share units forfeited during 2017	Share units vested during 2017	Share units lapsed during 2017	Share units outstanding 31 12 2017
E-STIP 2013	16,919	0	0	(16,379)	(540)	0
E-STIP 2014	18,957	0	(892)	(600)	0	17,465
<b>Total</b>	<b>35,876</b>	<b>0</b>	<b>(892)</b>	<b>(16,979)</b>	<b>(540)</b>	<b>17,465</b>

## Development Within 2016 of E-STIP

	Share units outstanding 01 01 2016	Share units granted during 2016	Share units forfeited during 2016	Share units vested during 2016	Share units lapsed during 2016	Share units outstanding 31 12 2016
E-STIP 2012	28,445	0	0	(29,437)	992	0
E-STIP 2013	17,829	0	(380)	(530)	0	16,919
E-STIP 2014	19,718	0	(356)	(405)	0	18,957
<b>Total</b>	<b>65,992</b>	<b>0</b>	<b>(736)</b>	<b>(30,372)</b>	<b>992</b>	<b>35,876</b>

No RSUs were granted in 2017. The weighted average share price of the vested share unit in 2017 was CHF 91.26 (2016: CHF 62.90). The outstanding share units on 31 December 2017 had a weighted average share price of CHF 121.50 (2016: CHF 106.72) and a remaining weighted average contractual life of 3 months (2016: 9 months).

The fair value was calculated using the market price at grant date. The amounts for share units were expensed on a straight-line basis over the vesting period, based on estimates of share units that will eventually vest. The expected volatility was 3%.

## Fair Value at Grant Date

CHF

E-STIP 2013	1,728,885
E-STIP 2014	2,406,363

## Compensation of the Board of Directors

### Objective and Benchmarks

The NCC determined that they would again in 2017 use benchmark data of Swiss companies (various sectors) that are comparable in type of business, complexity, size and global presence to Lonza in determining competitive Board of Directors' Compensation. Lonza's objective is to pay the members of the Board of

Directors at the median of this benchmark group in accordance with their respective duties and responsibilities. The NCC and Board of Directors recently amended the peer group to reflect Lonza's inclusion in the SMI (Swiss Market Index for the Twenty Largest Listed Swiss Companies). The amended peer group more directly reflects our strategic business direction along the *healthcare continuum* as well as the transformational organic and inorganic growth of the *Company*.

For the period from the Annual General Meeting (AGM) 2017 to the AGM 2018, the members of the Board of Directors receive fixed gross compensation for Board of Directors membership and additional compensation for committee chairperson and committee memberships as described in the table below.

## Compensation for Board of Directors AGM 2017 to AGM 2018<sup>1</sup>

CHF	Annual fee	Additional committee membership fee	Additional committee chairperson fee
Board of Directors Member	200,000	40,000	80,000
Vice-Chairperson of the Board of Directors	300 000		
Chairperson of the Board of Directors	450 000		

<sup>1</sup> Refer to Section 3.3 regarding total compensation (including national employer social contributions) provided to the Board of Directors in the financial year 2017. The table above represents the period from AGM 2017 to AGM 2018 and does not include social contributions of the employer

The compensation of the Chairperson of the Board of Directors includes his remuneration as a member of the Innovation and Technology Committee of the Board of Directors. The compensation of the Vice-Chairperson of the Board of Directors includes remuneration for guest participation in any Committee meetings.

The total compensation of the Committee chairpersons amounts to CHF 280,000 and includes the Committee membership fee.

Board of Directors' compensation for 2017 is paid quarterly; 50% of the compensation is paid in cash and 50% in Lonza restricted shares. The number of shares granted for Board of Directors' compensation is based on the average closing share price of the last five business days of each quarter. Share restrictions lapse after three years from the grant date. Shares are eligible for a dividend. This structure of Board of Directors compensation is closely aligned with our shareholders' interests.

The members of the Board of Directors do not receive variable compensation. The members of the Board of Directors are reimbursed for travel and other related expenses associated with their responsibilities as members of the Board of Directors of Lonza.

## Development of Compensation for Board of Directors in 2017

Grant date	Total number of shares	Share price in CHF	Fair values of shares	Cash <sup>1</sup> CHF	Total CHF	Blocked until
31 03 2017	1,832	185.72	340,239	341,250	681,489	31 03 2020
30 06 2017	1,679	207.06	347,654	348,750	696,404	30 06 2020
30 09 2017	1,380	252.04	347,815	348,750	696,565	30 09 2020
31 12 2017	1,325	262.68	348,051	348,750	696,801	31 12 2020
<b>Total</b>	<b>6,216</b>	<b>222.61</b>	<b>1,383,759</b>	<b>1,387,500</b>	<b>2,771,259</b>	

<sup>1</sup> Excluding social security and withholding tax.

The amount of CHF 2,771,259 was recognized as an expense in the year 2017.

## Development of Compensation for Board of Directors in 2016

Grant date	Total number of shares	Share price in CHF	Fair values of shares	Cash <sup>1</sup> CHF	Total CHF	Blocked until
31 03 2016	1,930	160.98	310,690	311,250	621,940	31 03 2019
30 06 2016	2,149	158.38	340,359	341,250	681,609	30 06 2019
30 09 2016	1,847	184.14	340,107	341,250	681,357	30 09 2019
31 12 2016	1,937	175.48	339,905	341,250	681,155	31 12 2019
<b>Total</b>	<b>7,863</b>	<b>169.28</b>	<b>1,331,061</b>	<b>1,335,000</b>	<b>2,666,061</b>	

<sup>1</sup> Excluding social security and withholding tax.

The amount of CHF 2,666,061 was recognized as an expense in the year 2016.

## Development of Compensation for Board of Directors in 2015

Grant date	Total number of shares	Share price CHF	Fair values of shares	Cash <sup>1</sup> CHF	Total CHF	Blocked until
31 03 2015	2,600	122.08	317,408	311,250	628,658	31 03 2018
30 06 2015	2,316	126.96	294,039	311,250	605,289	30 06 2018
30 09 2015	2,409	128.86	310,424	311,250	621,674	31 09 2018
31 12 2015	1,939	160.32	310,860	311,250	622,110	31 12 2018
<b>Total</b>	<b>9,264</b>	<b>133.07</b>	<b>1,232,731</b>	<b>1,245,000</b>	<b>2,477,731</b>	

<sup>1</sup> Excluding social security and withholding tax.

The amount of CHF 2,477,731 was recognized as an expense in the year 2015.

## Development of Compensation for Board of Directors in 2014

Grant date	Total number of shares	Share price CHF	Fair values of shares	Cash <sup>1</sup> CHF	Total CHF	Blocked until
31 03 2014	3,442	89.98	309,711	275,000	584,711	31 03 2017
30 06 2014	3,576	96.22	344,083	311,250	655,333	30 06 2017
30 09 2014	2,966	114.92	340,853	311,250	652,103	30 09 2017
31 12 2014	3,076	111.28	342,297	311,250	653,547	31 12 2017
<b>Total</b>	<b>13,060</b>	<b>102.37</b>	<b>1,336,944</b>	<b>1,208,750</b>	<b>2,545,694</b>	

<sup>1</sup> Excluding social security and withholding tax.

The amount of CHF 2,545,694 was recognized as an expense in the year 2014.

## Recognition in the Consolidated Financial Statements

All the equity-settled share-based payments had an impact on the 2017 "Profit before income taxes" amounting to an expense of CHF 29 million (2016: CHF 28 million).



# Note 26 – Changes in Shares and Share Capital Movements

	31 12 2017	Change in year	31 12 2016	Change in year	31 12 2015
<b>Total number of shares</b>	<b>74,468,752</b>	<b>21,548,612</b>	<b>52,920,140</b>	<b>0</b>	<b>52,920,140</b>
<b>Treasury shares</b>					
Free shares	(225,920)	(97,029)	(128,891)	508,614	(637,505)
<b>Total treasury shares</b>	<b>(225,920)</b>	<b>(97,029)</b>	<b>(128,891)</b>	<b>508,614</b>	<b>(637,505)</b>
<b>Total shares ranking for dividend at 31 December</b>	<b>74,242,832</b>	<b>21,451,583</b>	<b>52,791,249</b>	<b>508,614</b>	<b>52,282,635</b>
<b>Share capital movements</b>					
<b>Share capital in CHF</b>	<b>74,468,752</b>	<b>21,548,612</b>	<b>52,920,140</b>	<b>0</b>	<b>52,920,140</b>

The share capital on 31 December 2017 comprised 74,468,752 registered shares (2016: 52,920,140) with a par value of CHF 1 each, amounting to CHF 74,468,752 (2016: CHF 52,920,140).

In February 2017 Lonza Group Ltd issued 5 million new shares (from Lonza Group Ltd's authorized capital) by way of an accelerated book building procedure with selected investors in Switzerland (private placement) and outside of Switzerland to institutional investors and qualified institutional buyers.

On 25 April 2017 the Annual General Meeting of Lonza Group Ltd approved an ordinary capital increase by the issuance of up to 22,000,000 fully paid-in registered shares by way of a rights offering and authorized the Board of Directors to determine the final number of offered shares to be newly issued and the offer price per offered share. The Board of Directors decided to offer 16,548,612 newly issued shares with a nominal value of CHF 1.00 each at an offer price of CHF 136.00.

The total gross proceeds of CHF 3.123 billion, net of certain costs and expenses associated with the capital increases (CHF 99 million), resulting in net proceeds of CHF 3.024 billion, were used to partially finance the acquisition of Capsugel S.A.

## Contingent and Authorized Capital

**Contingent Capital:** The share capital of Lonza Group Ltd may be increased through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000.

**Authorized Capital:** The Board of Directors shall be authorized to increase, at any time until 25 April 2019, the share capital of the Lonza Group Ltd through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000. The capital

increases in the form of contingent capital and authorized capital may increase the share capital of Lonza Group Ltd by a maximum aggregate amount of CHF 7,500,000. The details and conditions are set out in Articles 4<sup>bis</sup> to 4<sup>quater</sup> of the Company's *Articles of Association*.

At 31 December 2017, Lonza Group Ltd had a fully paid-in registered capital of CHF 74,468,752 and a contingent capital of CHF 7,500,000.

Reserves in the amount of CHF 26,460,070 (2016: CHF 26,460,070) included in the financial statements of the parent company cannot be distributed.

## Dividend

On 25 April 2017, at the Annual General Meeting shareholders approved the distribution of a dividend of CHF 2.75 per share in respect of the 2016 financial year (financial year 2015: CHF 2.50). The dividend distribution totaled CHF 159 million (2016: CHF 131 million) and was based on 57,920,140 shares, which included the 5 million new shares issued in February 2017.

A dividend payment per share of CHF 2.75 (2016: CHF 2.75) is proposed by the Board of Directors to be made after the balance sheet date, subject to approval at the Annual General Meeting on 4 May 2018 by the shareholders.

# Note 27 – Earnings Per Share

million CHF	2017	2016
<b>Basic earnings per share</b>		
Profit for the period (equity holders of the parent)	726	301
Weighted average number of outstanding shares	67,878,060	56,719,245
<b>Basic earnings per share in CHF</b>	<b>10.70</b>	<b>5.31</b>
<b>Diluted earnings per share</b>		
Profit for the period (equity holders of the parent)	726	301
– Impact from dilution	0	0
Diluted profit for the period	726	301
Weighted average number of outstanding shares	67,878,060	56,719,245
– Adjustments for dilutive share units and shares	582,174	327,407
Weighted average number of shares for diluted earnings per share	68,460,234	57,046,652
<b>Diluted earnings per share in CHF</b>	<b>10.60</b>	<b>5.28</b>
<b>Dividends paid for the period</b>	<b>159</b>	<b>131</b>
<b>Dividends per share for the period in CHF</b>	<b>2.75</b>	<b>2.50</b>
<b>Dividends declared after the balance sheet date</b>	<b>204</b>	<b>159</b>
<b>Dividends per share declared after the balance sheet date in CHF</b>	<b>2.75</b>	<b>2.75</b>

The nominal amount of Lonza Group Ltd's issued share capital increased from CHF 52,920,140 as of 31 December 2016 to CHF 74,468,752 as of 31 December 2017. As a consequence of the capital increase as of 10 May 2017 through a rights offering, the calculation of earnings per share and diluted earnings per share were adjusted by the factor resulting from the rights offering. The underlying weighted average number of shares was adjusted for December 2016 to 56,719,245 for the calculation of earnings per share and to 57,046,652 for the diluted earnings per share.

# Note 28 – Related Parties

## Identity of Related Parties

The Group has a related-party relationship with associates, joint ventures (see note 8), pension and other post-retirement plans (see note 24) as well as with the Board of Directors and the members of the Executive Committee.

## Transactions with Key Management Personnel

### Board of Directors

In 2017 payments to acting members of the Board of Directors of Lonza Group Ltd totaled CHF 2.884 million<sup>1</sup> (2016: CHF 2.860 million<sup>1</sup>), 47.99% (2016: 46.53%) of which was received in the form of shares. The Directors' fees are paid 50% in cash and 50% in shares; the value of the employer's social security contributions is added to the cash payments. The value of the granted shares is determined at the relevant market price at grant date. The shares vest three years after the date of grant and are eligible for a dividend. Members of the Board of Directors and their immediate relatives control 166,736 (2016: 135,180) or 0.22% (2016: 0.26%) of the voting shares of Lonza Group Ltd. None of the Directors owns shares in the Group's subsidiaries or associates.

### Executive Committee Compensation

The acting members of the Executive Committee received, for their contributions and time served in 2017, CHF 9.511 million<sup>1</sup> (2016: CHF 7.726 million<sup>1</sup>) in cash and additional benefits. Share-based compensation includes 17,805 LTIP shares granted (2016: 18,872 shares), the value of share-based STIP payments, equivalent to a total value of CHF 4.459 million (2016: CHF 3.390 million). No termination benefits were paid out in 2016 or 2017.

The compensation for the Board of Directors and the Executive Committee was as follows:

million CHF	2017	2016
Short-term benefits <sup>2</sup>	9.469	7.904
Post-employment benefits and other benefits <sup>3</sup>	1.542	1.351
Share-based payments	5.843	4.721
<b>Total</b>	<b>16.854</b>	<b>13.976</b>

The remuneration is included in “Personnel expenses” (see note 19). For additional information, please refer to the 2017 Lonza Remuneration Report.

<sup>1</sup> Including social security and withholding tax

<sup>2</sup> Including incentive payout in March of the following year

<sup>3</sup> Including contribution for social security and pension fund

# Note 29 – Financial Risk Management

## 29.1 Overall Risk Management Policy

Lonza is exposed in particular to credit and liquidity risk as well as to risks from movements in foreign currency exchange rates, interest rates and market prices that affect its assets, liabilities, and forecasted transactions. Lonza's overall risk management policy aims to limit these risks through operational and finance activities.

The Board of Directors has overall responsibility for the establishment and oversight of Lonza's risk management framework. Financial risk management is carried out by a central treasury department (Group Treasury). Group Treasury is responsible for implementing the policy, and identifies, evaluates and hedges financial risks in close cooperation with Lonza's business units. Group Treasury also has the sole responsibility for carrying out foreign exchange transactions and executing financial derivative transactions with third parties.

Lonza's risk management policies are established to identify and analyze the risks faced by Lonza, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and Lonza's activities.

Lonza Audit Committee oversees how management monitors compliance with Lonza's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by Lonza. Lonza Audit Committee is assisted in its oversight role by Internal Audit (Lonza Audit Services). Internal Audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Audit Committee.

## 29.2 Credit Risk

Credit risk is the risk of financial loss to Lonza if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and mainly arises from Lonza's receivables from customers.

### Accounts Receivables

Lonza's exposure to credit risk is influenced mainly by the individual characteristics of each customer. Risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. In monitoring customer credit risk, customers are grouped according to their credit characteristics, including geographic location, industry, and existence of previous financial difficulties.

Purchase limits are established for each customer, which are reviewed regularly. For customers domiciled in specific countries with high risk, Lonza has credit risk insurance covering the maximum exposure.

The maximum credit risk is equal to the carrying amount of the respective assets. There are no commitments that could increase this exposure to more than the carrying amounts. In general, Lonza does not require collateral in respect of trade and other receivables, but uses credit insurance for country risk where appropriate.

Lonza establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables. The allowance is based only on the specific loss component that relates to individually significant exposures. There is no collective impairment recognized

# Financial Instruments and Cash Deposits

Credit risk from balances with banks and financial institutions is managed by the Group's treasury department. Counterparty credit ratings are reviewed regularly. The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was as follows:

million CHF	2017	2016
<b>Loans and receivables</b>		
Trade receivables, net	825	612
Other receivables	67	73
Current advances	0	1
Non-current loans and advances	5	1
Cash and cash equivalents	479	274
<b>Total loans and receivables</b>	<b>1,376</b>	<b>961</b>
<b>Financial assets at fair value</b>		
Financial assets at fair value through profit or loss – held for trading:		
– Currency-related instruments <sup>1</sup>	5	12
– Interest-related instruments <sup>1</sup>	3	0
<b>Total financial assets at fair value through profit or loss – held for trading</b>	<b>8</b>	<b>12</b>
Financial assets at fair value through profit or loss - designated:		
Contingent consideration from sale of business	40	0
<b>Total financial assets at fair value through profit or loss - designated</b>	<b>40</b>	<b>0</b>
Financial assets effective for hedge accounting purposes:		
Commodity-related instruments <sup>1</sup>	4	4
<b>Total financial assets effective for hedge accounting purposes</b>	<b>4</b>	<b>4</b>
<b>Total financial assets at fair value</b>	<b>52</b>	<b>16</b>
<b>Total</b>	<b>1,428</b>	<b>977</b>

<sup>1</sup> Included in 'Other receivables, prepaid expenses and accrued income' (see note 12)

## 29.3 Liquidity Risk

Liquidity risk is the risk that Lonza will not be able to meet its financial obligations as they fall due. Lonza's approach to managing liquidity is to ensure that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to Lonza's reputation. Group Treasury maintains flexibility in funding also using bilateral and syndicated credit

lines. Lonza has concluded the following lines of credit: Committed credit lines of CHF 1,056 million (CHF 325 million used as of 31 December 2017), which are committed for up to five years and uncommitted credit lines of CHF 140 million (CHF 0 used as of 31 December 2017).

The table below analyzes the Group's financial liabilities and derivative financial liabilities in relevant maturity groupings, based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows, including interest payments. Balances due within 12 months are equal to their carrying balances, as the impact of discounting is not significant.

<b>Year ended 31 December 2017</b> million CHF	Carrying amount	Contractual cash flows <sup>1</sup>	Between 0 and 6 months	Between 7 and 12 months	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 5 years	Over 5 years
Straight bond (2011– 2018)	140	144	0	144	0	0	0	0
Straight bond (2012– 2018)	200	204	0	204	0	0	0	0
Straight bond (2012– 2022)	105	121	0	3	3	3	112	0
Straight bond (2013– 2019)	299	311	5	0	306	0	0	0
Straight bond (2015– 2020)	150	153	0	1	1	151	0	0
Straight bond (2015– 2023)	175	188	0	2	2	2	4	178
Straight bond (2016– 2021)	249	251	0	0	0	0	251	0
Straight bond (2017– 2021)	125	126	0	0	0	0	126	0
Straight bond (2017– 2024)	110	116	0	1	1	1	2	111
Syndicated loan (2017– 2022)	223	242	1	1	2	2	236	0
German private placement	1,108	1,234	8	15	23	23	565	600
Term loans	993	1,088	12	12	24	519	521	0
Other debt due to banks and financial institutions	119	119	119	0	0	0	0	0
Other debt due to others	238	305	58	3	5	38	30	171
Finance lease liabilities	12	16	1	1	1	1	3	9
<b>Total debt</b>	<b>4,246</b>	<b>4,618</b>	<b>204</b>	<b>387</b>	<b>368</b>	<b>740</b>	<b>1,850</b>	<b>1,069</b>
Trade payables	400	400	400	0	0	0	0	0
Other current liabilities <sup>2</sup>	605	605	605	0	0	0	0	0
<b>Total financial liabilities</b>	<b>5,251</b>	<b>5,623</b>	<b>1,209</b>	<b>387</b>	<b>368</b>	<b>740</b>	<b>1,850</b>	<b>1,069</b>

<sup>1</sup> Including interest payments

<sup>2</sup> Including negative fair values of derivative financial instruments according to note 29.5



<b>Year ended 31 December 2016</b> million CHF	Carrying amount	Contractual cash flows <sup>1</sup>	Between 0 and 6 months	Between 7 and 12 months	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 5 years	Over 5 years
Straight bond (2011– 2018)	139	149	0	4	145	0	0	0
Straight bond (2012– 2018)	200	208	0	4	204	0	0	0
Straight bond (2012– 2020)	105	124	0	3	3	3	6	109
Straight bond (2013– 2019)	299	316	5	0	5	306	0	0
Straight bond (2015– 2020)	150	154	0	1	1	1	151	0
Straight bond (2015– 2023)	175	190	0	2	2	2	4	180
Straight bond (2016– 2021)	249	252	0	0	0	0	252	0
Syndicated loan (2011– 2018)	99	100	0	0	100	0	0	0
German private placement	49	50	0	45	0	5	0	0
Other debt due to banks and financial institutions	68	68	68	0	0	0	0	0
Other debt due to others	321	361	22	169	3	3	40	124
Finance lease liabilities	6	11	0	0	0	1	2	8
<b>Total debt</b>	<b>1,860</b>	<b>1,983</b>	<b>95</b>	<b>228</b>	<b>463</b>	<b>321</b>	<b>455</b>	<b>421</b>
Trade payables	284	284	284	0	0	0	0	0
Other current liabilities <sup>2</sup>	570	570	570	0	0	0	0	0
Contingent consideration	18	18	11	0	7	0	0	0
<b>Total financial liabilities</b>	<b>2,732</b>	<b>2,855</b>	<b>960</b>	<b>228</b>	<b>470</b>	<b>321</b>	<b>455</b>	<b>421</b>

<sup>1</sup> Including interest payments

<sup>2</sup> Including negative fair values of derivative financial instruments according to note 29.5

## 29.4 Market Risk

Market risk is the risk that changes in market prices will affect Lonza's income or the value of its holdings of financial instruments. Lonza is exposed to market risk from changes in currency exchange and interest rates and commodities. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return on risk. Lonza has established a treasury policy of which the objective is to reduce the volatility relating to these exposures. Lonza enters into various derivative transactions based on Lonza's treasury policy that establishes guidelines in areas such as counterparty exposure and hedging practices. Counterparties to agreements are major international financial institutions with at least investment grade rating. Positions are monitored using techniques such as market value and sensitivity analyses. All such transactions are carried out within the guidelines set by the Audit Committee.

## Foreign Exchange Risk

The Group operates across the world and is exposed to movements in foreign currencies affecting the Group financial result and the value of Group equity. Foreign exchange risk arises because the amount of local currency paid or received for transactions denominated in foreign currencies may vary due to changes in exchange rates ("transaction exposures") and because the foreign currency denominated financial statements of the Group's foreign subsidiaries may vary upon consolidation into the Swiss-franc-denominated Group Financial Statements ("translation exposures"). Foreign exchange risks arise primarily on transactions that are denominated in USD, EUR and GBP.

In managing its exposure regarding the fluctuation in foreign currency exchange rates, Lonza has entered into a variety of currency swaps and forward contracts. These agreements generally include the exchange of one currency against another currency at a future date. Lonza adopts a policy of considering hedging for all the committed contractual exposure. The planned exposure is hedged within certain ranges. Hedge ratios are determined by the risk committee and depend on market expectation, risk bearing ability and risk appetite.

The table below shows the impact on post-tax profit if at 31 December a currency had strengthened (+) or weakened (-) versus the Swiss franc, with all other variables held constant as a result of the currency exposures outlined in the tables below:

million CHF	Sensitivity	Post-tax profit				Other comprehensive income			
		2017		2016		2017		2016	
		+	-	+	-	+	-	+	-
USD	+ / - 10%	<sup>1</sup> 261.5	<sup>1</sup> (261.5)	0.2	(0.2)	0.0	0.0	36.0	(36.0)
EUR	+ / - 10%	(39.0)	39.0	(4.0)	4.0	0.0	0.0	(2.7)	2.7
GBP	+ / - 10%	2.9	(2.9)	1.3	(1.3)	0.0	0.0	0.0	0.0

The summary quantitative data relating to the Group's exposure to currency risks as reported to the management of the Group is as follows:

**Year ended 31 December 2017**

million CHF	USD	GBP	EUR	SGD	DKK	Other	Total
Non-current financial assets	0	0	42	0	0	0	42
Trade receivables, net	120	37	53	2	3	1	216
Other receivables, prepaid expenses and accrued income	2	12	12	1	0	2	29
Current advances and financial assets	5	0	0	0	0	0	5
Cash and cash equivalents	146	5	27	1	0	2	181
Non-current debt	(770)	0	(1,344)	0	0	0	(2,114)
Other non-current liabilities	(2)	0	0	(4)	0	0	(6)
Other current liabilities	(56)	0	(17)	(10)	0	(3)	(86)
Trade payables	(26)	(2)	(36)	(13)	0	(4)	(81)
Group internal loans	<sup>1</sup> 3,703	0	743	0	0	0	4,447
<b>Gross balance sheet exposure</b>	<b>3,122</b>	<b>52</b>	<b>(520)</b>	<b>(23)</b>	<b>3</b>	<b>(2)</b>	<b>2,633</b>
Currency-related instruments	29	(17)	50	0	0	0	62
<b>Net exposure</b>	<b>3,151</b>	<b>35</b>	<b>(470)</b>	<b>(23)</b>	<b>3</b>	<b>(2)</b>	<b>2,695</b>

<sup>1</sup> Following the transfer of certain intercompany investments between Lonza Group companies on 5 January 2018 the balance of group internal USD loans has been reduced by CHF 2.4 billion (at year-end 2017 foreign exchange rates). Had these transactions occurred before 31 December 2017, the impact on the 2017 post-tax profit would have been:

- 1) Assuming USD / EUR had strengthened by 10% versus CHF
  - USD: + CHF 73 million
  - EUR: - CHF 181 million
- 2) Assuming USD / EUR had weakened by 10% versus CHF
  - USD: - CHF 73 million
  - EUR: + CHF 181 million

## Year ended 31 December 2016

million CHF	USD	GBP	EUR	SGD	DKK	Other	Total
Trade receivables, net	113	25	59	2	2	1	202
Other receivables, prepaid expenses and accrued income	0	8	14	2	0	0	24
Current advances and financial assets	5	0	0	0	0	0	5
Cash and cash equivalents	63	4	18	3	0	5	93
Non-current debt	(25)	0	0	0	0	0	(25)
Other non-current liabilities	0	0	0	(3)	0	0	(3)
Other current liabilities	(73)	(21)	(30)	(7)	0	(1)	(132)
Trade payables	(19)	(1)	(33)	(8)	0	(1)	(62)
Current debt	0	0	(37)	0	0	0	(37)
<b>Gross balance sheet exposure</b>	<b>64</b>	<b>15</b>	<b>(9)</b>	<b>(11)</b>	<b>2</b>	<b>4</b>	<b>65</b>
Currency-related instruments	(61)	1	(40)	0	0	0	(100)
<b>Net exposure</b>	<b>3</b>	<b>16</b>	<b>(49)</b>	<b>(11)</b>	<b>2</b>	<b>4</b>	<b>(35)</b>

The following exchange rates were applied during the year:

## Balance Sheet Year-End Rates

		2017	2016
EU	Euro	1.1683	1.0734
USA	Dollar	0.9758	1.0189
Great Britain	Pound sterling	1.3178	1.2520
Singapore	Singapore dollar	0.7305	0.7042
China	Renminbi	0.1499	0.1467

## Income Statement Year-Average Rates

		2017	2016
EU	Euro	1.1119	1.0901
USA	Dollar	0.9846	0.9852
Great Britain	Pound sterling	1.2686	1.3348
Singapore	Singapore dollar	0.7132	0.7136
China	Renminbi	0.1458	0.1483

## Interest Rate

Risk arises from movements in interest rates which could affect the Group financial result or the value of Group equity. Changes in interest rates may cause variations in interest income and expense. In addition, they may affect the market value of certain financial assets, liabilities and hedging instruments. The primary objective of the Group's interest rate management is to protect the net interest result.

Lonza's policy is to manage interest cost using a mix of fixed and variable rate debt. Group policy is to maintain at least 50% of its borrowings in fixed-rate instruments. In order to manage this mix in a cost-efficient manner, Lonza enters into interest rate swaps and cross-currency interest rate swaps to exchange at specified intervals, the difference between fixed and variable interest amounts calculated by reference to a corresponding notional principal amount. Lonza adopts a policy of having one-third of the debt on a short-term basis and two-thirds of the debt on a long-term basis. The mix between floating and fixed rates depends on the market view of Lonza.

Lonza's exposure to interest rate risk was as follows:

million CHF	2017	2016
Net debt (see note 15)	3,762	1,584
Net debt at fixed interest rates <sup>1</sup>	(2,396)	(1,374)
Interest risk exposure	1,366	210

<sup>1</sup> Including effects from cross-currency interest rate swaps

If the interest rates had increased /decreased by 1% in 2017, with all other variables held constant, post-tax profit would have been CHF 11.3 million lower / higher (2016: CHF 1.7 million lower / higher).

## Commodity Price Risk

Lonza needs liquefied petroleum gas (LPG) as raw material for a cracker in Visp. Butane, naphtha or propane can be used as feedstock for the cracker. The raw material ultimately used depends on its availability and specifications. The annual demand is approximately 110,000 metric tons. In order to minimize the risk of higher raw material prices, Lonza hedges the commodity price risk via swaps. At 31 December 2017, if the propane / naphtha price had weakened / strengthened by 10%, with all other variables held constant, other comprehensive income would have been CHF 2 million lower / higher (2016: CHF 2 million lower / higher).

## 29.5 Overview of Derivative Financial Instruments

The following table shows the contract or underlying principal amounts and fair values of derivative financial instruments by type of contract at 31 December 2017 and 2016. Contract or underlying principal amounts indicate the volume of business outstanding at the balance sheet date and do not represent amounts at risk. The fair values are determined by using the difference of the prices fixed in the outstanding derivative contracts from the actual market conditions which would have been applied at the year-end if we had to recover these trades.

## Financial Instruments at Fair Value Through Profit or Loss – Held for Trading

million CHF	Contract or underlying principal amount		Positive fair values		Negative fair values		Total net fair values	
	2017	2016	2017	2016	2017	2016	2017	2016
<b>Currency-related instruments</b>								
– Forward foreign exchange rate contracts	40	111	0	0	0	(4)	0	(4)
– Currency swaps	734	597	5	5	(7)	(21)	(2)	(16)
– FX Options <sup>1</sup>	0	1,426	0	7	0	(9)	0	(2)
<b>Total currency-related instruments</b>	<b>774</b>	<b>2,134</b>	<b>5</b>	<b>12</b>	<b>(7)</b>	<b>(34)</b>	<b>(2)</b>	<b>(22)</b>
<b>Interest-related instruments</b>								
– Cross-currency interest rate swaps	407	444	3	0	(13)	(35)	(10)	(35)
<b>Total interest-related instruments</b>	<b>407</b>	<b>444</b>	<b>3</b>	<b>0</b>	<b>(13)</b>	<b>(35)</b>	<b>(10)</b>	<b>(35)</b>
<b>Total financial instruments at fair value through profit or loss – held for trading</b>	<b>1,181</b>	<b>2,578</b>	<b>8</b>	<b>12</b>	<b>(20)</b>	<b>(69)</b>	<b>(12)</b>	<b>(57)</b>

## Financial Instruments Effective for Hedge-Accounting Purposes

million CHF	Contract or underlying principal amount		Positive fair values		Negative fair values		Total net fair values	
	2017	2016	2017	2016	2017	2016	2017	2016
<b>Currency-related instruments</b>								
– Forward foreign exchange rate contracts <sup>2</sup>	0	481	0	0	0	(6)	0	(6)
– Deal-contingent forward foreign exchange rate contracts <sup>3</sup>	0	611	0	0	0	(12)	0	(12)
<b>Total currency-related instruments</b>	<b>0</b>	<b>1,092</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(18)</b>	<b>0</b>	<b>(18)</b>
<b>Commodity-related instruments</b>								
– Naphtha swap	5	5	2	1	0	0	2	1
– Propane swap	9	12	2	3	0	0	2	3
<b>Total commodity-related instruments</b>	<b>14</b>	<b>17</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>
<b>Total financial instruments effective for hedge-accounting purposes</b>	<b>14</b>	<b>1,109</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>(18)</b>	<b>4</b>	<b>(14)</b>

<sup>1</sup> 2016: FX options equivalent to USD 1,400 million to manage the foreign exchange rate exposure related to the Capsugel acquisition

<sup>2</sup> 2016: Includes forward contracts to buy USD 500 million to manage the foreign exchange rate exposure related to the Capsugel acquisition

<sup>3</sup> 2016: Forward contract that would have terminated in case transaction to acquire Capsugel had not closed

# Offsetting of Financial Asset and Financial Liabilities

The Group enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master netting agreements with the respective counterparties in order to mitigate counterparty risk. Under such agreements the amounts owed by each counterparty on a single day in respect of all transactions outstanding in the same currency are aggregated into a single net amount that is payable by one party to the other. The ISDA agreements do not meet the criteria for offsetting in the balance sheet as the Group does not have a currently enforceable right to offset recognized amounts, because the right to offset is only enforceable on the occurrence of future events, such as a default or other credit events.

The following table sets out the carrying value of derivative financial instruments and the amounts that are subject to master netting agreements.

million CHF	Assets		Liabilities	
	2017	2016	2017	2016
Forward foreign exchange rate contracts	0	0	0	(22)
Currency swaps	5	5	(7)	(21)
FX Options	0	7	0	(9)
Cross-currency interest rate swaps	3	0	(13)	(35)
Commodity-related instruments	4	4	0	0
<b>Carrying value of derivative financial instruments</b>	<b>12</b>	<b>16</b>	<b>(20)</b>	<b>(87)</b>
Derivatives subject to master netting agreements	(5)	(9)	5	9
Collateral arrangements <sup>1</sup>	0	0	0	0
<b>Net amount</b>	<b>7</b>	<b>7</b>	<b>(15)</b>	<b>(78)</b>

<sup>1</sup> The Group has not entered into any collateral arrangements

## Financial Instruments by Type / Currency

million CHF	2017	2016
Forward foreign exchange rate contracts, currency swaps and FX options		
USD <sup>1</sup>	552	3,089
EUR	128	67
GBP	26	44
SGD	10	12
CAD	10	0
JPY	5	6
DKK	3	4
CZK	34	2
ILS	3	0
AUD	1	1
NZD	2	1
<b>Total</b>	<b>774</b>	<b>3,226</b>
Commodity swap	14	17
Cross-currency interest rate swap	407	444
<b>Total financial instruments</b>	<b>1,195</b>	<b>3,687</b>

<sup>1</sup> 2016: USD-denominated forward foreign exchange contracts, currency swaps and FX options of CHF 2,547 million to manage the foreign exchange rate exposure related to the Capsugel acquisition

Positive fair values of derivatives are included as part of “Other receivables, prepaid expenses and accrued income”. Negative fair values of derivatives are included as part of “Other current liabilities”.

Hedge accounting was applied to cash flow hedges on highly probable payments in foreign currencies and for raw materials (butane / naphtha / propane).

## 29.6 Financial Instruments Carried at Fair Value

The Group applied the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).



million CHF	2017				2016			
	Level 1	Level 2	Level 3	Total fair value	Level 1	Level 2	Level 3	Total fair value
<b>Assets</b>								
Derivative financial instruments	0	12	0	12	0	16	0	16
Contingent consideration related to sale of business	0	0	40	40	0	0	0	0
<b>Liabilities</b>								
Derivative financial instruments	0	(20)	0	(20)	0	(87)	0	(87)
Contingent consideration	0	0	0	0	0	0	(18)	(18)
<b>Net assets and liabilities measured at fair value</b>	<b>0</b>	<b>(8)</b>	<b>40</b>	<b>32</b>	<b>0</b>	<b>(71)</b>	<b>(18)</b>	<b>(89)</b>

In 2017 there were no transfers between Level 1 and Level 2 fair value measurements.

Details of the determination of Level 3 fair value measurements are set out below.

## Contingent consideration arrangements related to sale of business

million CHF	2017	2016
<b>At 1 January</b>	<b>0</b>	<b>0</b>
Arising from sale of business	37	0
Currency translation effects	3	0
<b>At 31 December</b>	<b>40</b>	<b>0</b>

The agreement to sell the Peptides business (see note 4.2) includes a contingent consideration arrangement under which Lonza will receive a defined percentage of the net sales of the disposed business for the financial years 2017 – 2021 (estimated to be CHF 40 million at year-end 2017 exchange rates). Lonza's estimate of the net present value of these future payments is reflected as a receivable in the consolidated balances sheet as of 31 December 2017.

## Contingent consideration arrangements

million CHF	2017	2016
<b>At 1 January</b>	<b>18</b>	<b>0</b>
Arising from business combinations	0	18
Used for settlements	(11)	0
Gains and losses included in the income statement	(7)	0
<b>At 31 December</b>	<b>0</b>	<b>18</b>

Lonza is party to certain contingent consideration arrangements arising from business combinations. The fair values are determined considering the expected payments. The expected payments are determined by considering the possible scenarios of forecast gross profit and sales, which are the most significant unobservable inputs. The estimated fair value would increase if the forecast gross profits and sales were higher. At 31 December 2017 the total potential payments under contingent consideration arrangements could be up to CHF 19 million (2016: CHF 30 million), primarily related to the InterHealth Nutraceuticals Inc acquisition. Based on InterHealth's 2017 performance no payment will be required and the contingent consideration liability has been adjusted accordingly.

## 29.7 Carrying Amounts and Fair Values of Financial Instruments by Category

The carrying values less impairment provision of trade receivables are assumed to approximate to their fair values due to the short-term nature of trade receivables. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments.

The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows. The fair value of forward foreign exchange contracts is determined using quoted forward exchange rates at the balance sheet date.

The table below shows the carrying amounts and fair values of financial instruments by category.

# Carrying Amounts and Fair Values of Financial Instruments by Category

million CHF	Carrying amount		Fair value	
	31 12 2017	31 12 2016	31 12 2017	31 12 2016
<b>Financial assets – available for sale</b>				
Other investments – available for sale – carried at cost	16	13	16	13
<b>Total financial assets – available for sale</b>	<b>16</b>	<b>13</b>	<b>16</b>	<b>13</b>
<b>Loans and receivables</b>				
Trade receivables, net	825	612	825	612
Other receivables	67	73	67	73
Current advances	0	1	0	1
Non-current loans	5	1	5	1
Cash and cash equivalents	479	274	479	274
<b>Total loans and receivables</b>	<b>1,376</b>	<b>961</b>	<b>1,376</b>	<b>961</b>
<b>Financial assets at fair value</b>				
Financial assets at fair value through profit or loss – held for trading:				
Currency-related instruments	5	12	5	12
Interest-related instruments	3	0	3	0
<b>Total financial assets at fair value through profit or loss – held for trading</b>	<b>8</b>	<b>12</b>	<b>8</b>	<b>12</b>
Financial assets at fair value through profit or loss - designated:				
Contingent consideration from sale of business	40	0	40	0
<b>Total financial assets at fair value through profit or loss - designated</b>	<b>40</b>	<b>0</b>	<b>40</b>	<b>0</b>
<b>Financial assets effective for hedge accounting purposes</b>				
Commodity-related instruments	4	4	4	4
<b>Total financial assets effective for hedge accounting purposes</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
<b>Total financial assets at fair value</b>	<b>52</b>	<b>16</b>	<b>52</b>	<b>16</b>
<b>Financial liabilities at amortized cost</b>				
Debt:				
– Straight bonds <sup>1</sup>	1,553	1,317	1,590	1,365
– Other debt	2,693	543	2,693	543
Current liabilities	595	465	595	465
Trade payables	400	284	400	284
<b>Total financial liabilities at amortized cost</b>	<b>5,241</b>	<b>2,609</b>	<b>5,278</b>	<b>2,657</b>

## Financial liabilities at fair value

Financial liabilities at fair value through profit or loss – held for trading:

Currency-related instruments	7	34	7	34
Interest-related instruments	13	35	13	35
<b>Total financial liabilities at fair value through profit or loss – held for trading</b>	<b>20</b>	<b>69</b>	<b>20</b>	<b>69</b>

## Financial liabilities at fair value through profit or loss – designated

Contingent consideration

Contingent consideration	0	18	0	18
<b>Total financial liabilities at fair value through profit or loss – designated</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>18</b>

## Financial liabilities effective for hedge accounting purposes

Currency-related instruments

Currency-related instruments	0	18	0	18
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Commodity-related instruments

Commodity-related instruments	0	0	0	0
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**Total financial liabilities effective for hedge accounting purposes**

<b>Total financial liabilities effective for hedge accounting purposes</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>18</b>
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**Total financial liabilities at fair value**

<b>Total financial liabilities at fair value</b>	<b>20</b>	<b>105</b>	<b>20</b>	<b>105</b>
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<sup>1</sup> The fair value of straight bonds for disclosure purposes is Level 1 and is calculated based on the observable market prices of the debt instruments.

## 29.8 Capital Management

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors both the demographic spread of shareholders and the return on capital, which Lonza defines as total shareholders' equity, excluding non-controlling interest, and the level of dividends to ordinary shareholders.

The Board seeks to maintain a balance between the higher returns that might be possible with higher levels of borrowing and the advantages and security afforded by a sound capital position. Lonza's target is to achieve a return on invested capital of between 10% and 15%; in 2017, the return was 9.7% (2016: 12.7%). In comparison, the weighted average interest expense on interest-bearing borrowings (excluding liabilities with imputed interest) was 1.6% (2016: 1.6%).

From time to time, Lonza purchases its own shares on the market; the timing of these purchases depends on market prices. Primarily, the shares are intended to be used for issuing shares under Lonza's share programs. Lonza does not have a defined share buy-back plan.

Neither Lonza Group Ltd nor any of its subsidiaries is subject to externally imposed capital requirements.

# Note 30 – Share Ownership of the Members of the Board of Directors and the Executive Committee

Based on information available to Lonza, the members of the Board of Directors and parties closely associated with them<sup>1</sup> held, as of 31 December 2017, a total of 166,736 (2016: 135,180) registered shares in Lonza Group Ltd and controlled 0.22% (2016: 0.26%) of the share capital. None of the members of the Board of Directors or Executive Committee owns shares in the Group's subsidiaries or associates.

The Company feels strongly that our Executive Committee and other senior managers should have a defined shareholding in Lonza to strengthen their alignment with our shareholders' interests. Starting in 2016 Lonza established minimum shareholding requirements for the Executive Committee and other senior managers based on level in the organization, and specified a five-year period to achieve these minimum requirements. Shareholding levels were reviewed annually beginning in January 2016. The NCC may periodically review the minimum shareholding requirements.

The members of the Executive Committee and parties closely associated with them<sup>1</sup> held 93,728 (2016: 67,335) shares and controlled 0.13% (2016: 0.13%) of the share capital. The individual control rights are proportional to the holdings shown below.

<sup>1</sup> Spouse, children below 18, any legal entities that they own or otherwise control, or any legal or natural person who is acting as their fiduciary.

Share ownership of acting members of the Board of Directors and Executive Committee as of 31 December:

## Board of Directors

Lonza shares (numbers)	2017	2016
Rolf Soiron, Chairperson	85,649	69,683
Albert M. Baehny, Vice Chairperson	329	
Patrick Aebischer	11,464	10,574
Werner Bauer	25,350	19,180
Thomas Ebeling		4,255
Jean-Daniel Gerber	17,312	12,840
Christoph Mäder	2,207	351
Barbara Richmond	3,496	2,184
Margot Scheltema	9,255	7,561
Jürgen Steinemann	5,592	4,356
Antonio Trius	6,082	4,196

## Executive Committee

Lonza shares (numbers)	2017	2016
Richard Ridinger, CEO	52,446	41,564
Sven Abend	5,000	1,373
Marc Funk	35,046	24,398
Fridtjof Helemann		
Rodolfo Savitzky	1,236	0

# Note 32 – Events After Balance Sheet Date

No noteworthy events occurred after the balance sheet date.

The Consolidated Financial Statements for 2017 were approved for issue by the Board of Directors on 7 March 2018 and are subject to approval by the Annual General Meeting on 4 May 2018.

# Note 33 – Principal Subsidiaries and Joint Ventures

The principal subsidiaries and joint ventures are shown in the tables below:

Lonza Companies	Town/Country	Currency <sup>1</sup>	Share capital in 000	Holding direct	Holding indirect
Arch Acquisition LLC	Wilmington US	USD	0.001		100%
Arch Chemicals Canada Inc.	Toronto CA	CAD	10,000		100%
Arch Chemicals Limited	Castleford GB	GBP	1,000		100%
Arch Chemicals Inc.	Allendale US	USD	<sup>2</sup> 0.1		100%
Arch Chemicals Receivables LLC	Wilmington US	USD	n.a.		100%
Arch Chemicals SAS	Aubergenville FR	EUR	11.34		100%
Arch Personal Care Products L.P.	South Plainfield US	USD	0.1		<sup>3</sup> 100%
Arch Protection Chemicals Private Limited	Mumbai IN	INR	<sup>2</sup> 1,300		100%
Arch Quimica Argentina S.R.L.	Buenos Aires AR	ARS	9,911		100%
Arch Quimica Brasil Ltda	Salto BR	BRL	30,388		100%
Arch Timber Protection B.V.	Wijchen NL	EUR	27.3		100%
Arch Treatment Technologies Inc.	Atlanta US	USD	0.1		<sup>4</sup> 100%
Arch UK Biocides Limited	Castleford GB	GBP	1,644		100%
Arch Water Products France S.A.S.	Amboise FR	EUR	460		100%
Arch Water Products South Africa (Proprietary) Limited	Kempton Park SA	ZAR	100		100%
Arch Wood Protection (Aust) Pty Limited	Trentham AU	AUD	0.08		<sup>4</sup> 100%
Arch Wood Protection (M) Sdn. Bhd.	Kuala Lumpur MY	MYR	500		100%
Arch Wood Protection (NZ) Limited	Auckland NZ	NZD	6,100		100%
Arch Wood Protection Canada Corp.	Mississauga CA	CAD	0.1		<sup>4</sup> 100%
Arch Wood Protection (SA) (Proprietary) Limited	Port Shepstone SA	ZAR	3		100%
Arch Wood Protection Inc.	Atlanta US	USD	0.1		<sup>4</sup> 100%
<sup>7</sup> Bend Research, Inc.	Salem US	USD	1		100%
BioAtrium AG	Visp CH	CHF	100		<sup>10</sup> 50%
<sup>7</sup> Capsugel (Thailand) Co. Ltd.	Bangkok TH	THB	170,000		100%
<sup>7</sup> Capsugel Australia Pty Ltd	Sydney AU	AUD	<sup>2</sup> 6,368.3		100%
<sup>7</sup> Capsugel Belgium NV	Bornem BE	EUR	<sup>2</sup> 301,801.3		100%
<sup>7</sup> Capsugel Brasil Importação e Distribuição de Insumos Farmacêuticos e Alimentos Ltda.	Rio de Janeiro BR	BRL	<sup>2</sup> 29,776.9		100%
<sup>7</sup> Capsugel Canada Corp.	Vancouver CA	CAD	<sup>2</sup> 7,345.8		100%
<sup>7</sup> Capsugel Colombia S.A.S.	Bogota CO	COP	10,000		100%
<sup>7</sup> Capsugel de Mexico, S. de R.L. de C.V.	Puebla ME	MXN	<sup>2</sup> 870,004		100%
<sup>7</sup> Capsugel Distribucion, S. de R.L. de C.V.	Puebla ME	MXN	20,000		100%
<sup>7</sup> Capsugel FinanceCo II S.à.r.l	Luxembourg LU	EUR	<sup>2</sup> 363.2		100%



<sup>7</sup> Capsugel FinanceCo S.à.r.l	Luxembourg LU	EUR	12.5	100%
<sup>7</sup> Capsugel FinanceCo S.C.A.	Luxembourg LU	EUR	<sup>2</sup> 32.3	100%
<sup>7</sup> Capsugel France Holdings SAS	Colmar FR	EUR	100,536.9	100%
<sup>7</sup> Capsugel France SAS	Colmar FR	EUR	1,280	100%
<sup>7</sup> Capsugel Funding, LLC	Wilmington US	USD	n.a.	100%
<sup>7</sup> Capsugel Germany GmbH	Frankfurt am Main DE	EUR	25	100%
<sup>7</sup> Capsugel Healthcare Private Limited	Haryana IN	INR	3,000,000	100%
<sup>7</sup> Capsugel Holdings (Hong Kong) Limited	Hong Kong HK	HK	0.001	100%
<sup>7</sup> Capsugel Holdings S.à.r.l	Luxembourg LU	EUR	<sup>2</sup> 78,025.4	<sup>11</sup> 100%
<sup>7</sup> Capsugel Holdings US, Inc.	Wilmington US	USD	1	100%
<sup>7</sup> Capsugel Hungary Kft.	Budapest HU	HUF	3,000	100%
<sup>7</sup> Capsugel İlaç ve Sağlık Ürünleri Pazarlama Limited Şirketi	Istanbul TR	TRY	10	100%
<sup>7</sup> Capsugel Italy Srl	Milano IT	GBP	10	100%
<sup>7</sup> Capsugel Japan Inc.	Sagamihara City JP	JPY	100,000	100%
<sup>7</sup> Capsugel Manufacturing, Inc.	Wilmington US	USD	1	100%
<sup>7</sup> Capsugel Middle East Sàrl	Beirut LB	LPB	5,000	100%
<sup>7</sup> Capsugel New Zealand Ltd.	Wellington NZ	NZD	<sup>2</sup> 4,598.3	100%
<sup>7</sup> Capsugel Philippines Inc.	Manila PH	PHP	10	<sup>5</sup> 100%
<sup>7</sup> Capsugel Ploërmel SAS	Ploërmel FR	EUR	<sup>2</sup> 42,674.3	100%
<sup>7</sup> Capsugel S.à.r.l.	Luxemburg LU	EUR	<sup>2</sup> 113,159.7	100%
<sup>7</sup> Capsugel Spain, S.L.	Madrid ES	EUR	3	100%
<sup>7</sup> Capsugel US, LLC	Wilmington US	USD	n.a.	100%
<sup>7</sup> Capsugel, Inc.	Wilmington US	USD	1	100%
<sup>7</sup> CH Capsules Malaysia Sdn Bhd	Petaling Jaya MY	MYR	100	100%
Diacon Technologies Ltd	Vancouver CA	CAD	<sup>2</sup> 0.6	<sup>2</sup> 100%
<sup>7</sup> HansaBioMed LS	Tallinn EE	EUR	102.516	100%
Hickson Ltd	Castleford GB	GBP	108,161	100%
InterHealth Nutraceuticals Inc.	Benicia US	USD	15.2	100%
<sup>7</sup> LLC Capsugel	Domodedovo RU	RUB	150	100%
Lonza AG	Visp CH	CHF	60,000	100%
Lonza America Inc.	Allendale US	USD	8	100%
Lonza Microbial Control Asia Pacific Pte Ltd	Singapore SG	USD	183.085	100%
Lonza Biologics Inc.	Portsmouth US	USD	1	100%
Lonza Biologics plc	Slough GB	GBP	14,500	100%
Lonza Biologics Porriño S.L.	Porriño ES	EUR	10,296	100%
Lonza Biologics Tuas Pte Ltd	Singapore SG	USD	25,000	100%
		SGD	172,000	
Lonza Bioscience SARL	Saint-Beauzire FR	EUR	8,849	100%
Lonza Bioscience Singapore Pte Ltd	Singapore SG	USD	1	100%
Lonza Biotec sro	Kouřim CZ	CZK	282,100	100%
Lonza (China) Investments Co. Ltd	Guangzhou CN	USD	84,000	100%
Lonza Cologne GmbH	Cologne DE	EUR	1,502	100%

Lonza Copenhagen ApS	Vallensbaek Strand DK	DKK	150		100%
Lonza Costa Rica S.A.	Heredia CR	CRC	0.1		<sup>10</sup> 100%
Lonza Geleen B.V.	Geleen NL	EUR	18		<sup>8</sup> 100%
Lonza do Brasil Especialidades Quimicas Ltda.	São Paulo BR	BRL	<sup>2</sup> 18,387	<sup>2</sup> 99.9%	<sup>2</sup> 0.1%
Lonza Guangzhou Ltd	Guangzhou CN	USD	12,000		100%
Lonza Guangzhou Nansha Ltd	Guangzhou CN	USD	135,500		100%
Lonza Houston Inc.	Houston US	USD	1		100%
Lonza Inc.	Allendale US	USD	697		100%
Lonza India Private Ltd	Mumbai IN	INR	23,459		100%
Lonza Japan Ltd	Tokyo JP	JPY	200,000	100%	
Lonza Luxembourg S.à r.l	Luxembourg LU	EUR	12	100%	
Lonza Microbial Control Asia Pacific Pte Ltd	Singapore SG	USD	183		100%
Lonza Milano S.r.l.	Treviglio IT	EUR	52		100%
Lonza Nanjing Ltd	Nanjing CN	USD	14,000		100%
Lonza Netherlands B.V.	Maastricht NL	EUR	2,115		<sup>9</sup> 100%
<sup>12</sup> Lonza NZ Ltd.	New Plymouth NZ	NZD	1,000		100%
Lonza Rockland Inc.	Rockland US	USD	0.1		100%
Lonza Sales AG	Basel CH	CHF	2,000	100%	
Lonza Shanghai International Trading Ltd	Shanghai CN	USD	200		100%
Lonza Swiss Finanz AG	Basel CH	CHF	100	100%	
Lonza Swiss Licences AG	Basel CH	CHF	100	100%	
Lonza Suzhou Ltd	Suzhou CN	USD	19		<sup>6</sup> 100%
Lonza Verviers Sprl	Verviers BE	EUR	19		100%
Lonza Walkersville Inc.	Walkersville US	USD	1		100%
<sup>7</sup> Micro-Macinazione SA	Monteggio CH	CHF	1,000		100%
<sup>7</sup> MW Encap (Holdings) Ltd.	London GB	GBP	<sup>2</sup> 146.6		100%
<sup>7</sup> MW Encap Ltd.	London GB	GBP	301		100%
<sup>7</sup> Powdersize, LLC	Wilmington US	USD	n.a.		100%
<sup>7</sup> PT Capsugel Indonesia	Cibinong Bogor Jawa Barat IN	INR	634,524,459.2		100%
<sup>7</sup> Suzhou Capsugel Ltd.	Suzhou CN	USD	29,700		75%
Triangle Research Labs, LLC	North Carolina US	USD	n.a.		100%
<sup>7</sup> Xcelience Clinical Services Ltd.	N/A	GBP	0.001		100%
<sup>7</sup> Xcelience, LLC	Wilmington US	USD	n.a.		100%

<sup>1</sup> Abbreviation of currencies in accordance with ISO standards.

<sup>2</sup> Rounded.

<sup>3</sup> Limited partnership.

<sup>4</sup> No par value or not provided by law.

<sup>5</sup> The shares are held in trust for Capsugel Belguim NV by Philippine nationals

<sup>6</sup> No shares issued; capital is registered.

<sup>7</sup> This entity was acquired by Lonza in 2017

<sup>8</sup> Former PharmaCell Cell Manufacturing Facility BV which was acquired as part of the PharmaCell Group by Lonza in 2017

<sup>9</sup> Former PharmaCell B.V. which was acquired as part of the PharmaCell Group by Lonza in 2017

<sup>10</sup> Founded by Lonza in 2017

<sup>11</sup> Direct holding as of January 2018

<sup>12</sup> Formerly Zelam Ltd



# Statutory Auditor's Report

To the General Meeting of Lonza Group Ltd, Basel

## Report on the Audit of the Consolidated Financial Statements

### Opinion

We have audited the consolidated financial statements of Lonza Group Ltd and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2017 and the consolidated income statement, statement of comprehensive income, consolidated cash flow statement and consolidated statement of changes in equity for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2017, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

### Basis for Opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Key Audit Matters



Revenue recognition



Accounting for the Capsugel S.A. acquisition



Income taxes

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.



## Revenue recognition

### Key Audit Matter

Lonza's recognition of revenue in a complete and accurate manner is exposed to various risks. There are two distinct risk factors that trigger revenue recognition as a key audit matter:

- custom manufacturing agreements in the Pharma & Biotech segment, and
- linkage of certain of management's incentive compensation to annual revenue targets.

Due to current market forces, the relevance of long-term product supply agreements with Lonza's Pharma & Biotech customers continues to increase. Under these agreements, Lonza constructs and launches new or reworked suites dedicated to client specific manufacturing, which are owned and operated by Lonza. Extending over multiple periods such agreements often combine milestone and upfront payments during a construction phase, the rendering of project management services and the delivery of goods. To a certain degree the identification of these different components as separable revenue streams as well as their relative fair value is subject to management's judgment and interpretation of the customer contract. This gives rise to the risk that revenue could be misstated due to the incorrect identification, separation and valuation of components resulting in an inappropriate timing of revenue recognition.

Lonza regularly publishes forecasted financial results. Performance targets embedded in management's short and long-term compensation incentive plans based on targeted results and achievement of such targets are partially contingent on the timing of revenue recognition. There is a risk of fraud in revenue recognition due to the incentives management may feel to achieve the forecasted results.

For further information on revenue recognition refer to the following:

- Note 1 Accounting principles
- Note 2 Operating segments

### Our response

For significant new or amended customer manufacturing agreements in the Pharma & Biotech segment we assessed the appropriateness of the identification, separation and valuation of contract elements and the timing of revenue recognition by making our own independent assessment, with reference to the relevant accounting standards. Furthermore, we challenged and assessed the qualification of separable components of significant new contracts and their valuation with Lonza management.

As a response to the risk of fraud in revenue recognition, we performed substantive sample testing of revenue recorded during the year and focused on revenue transactions taking place before and after year-end as well as bill-and-hold transactions to determine that revenue was recognized in the correct period. We tested the accuracy of the sales recorded, based on inspection of customer acceptance certificates, shipping documents and delivery notes. Furthermore, we have assessed the appropriateness of management's response to indications of improper revenue recognition, tested manual journal entries on a sample basis and tested controls over the recording of revenue in the relevant IT systems.

We also assessed the adequacy of the revenue recognition disclosures contained in accounting principles and in the note addressing information about reportable segments.



## Accounting for the Capsugel S.A. acquisition

### Key Audit Matter

On 5th of July 2017, Lonza acquired Capsugel S.A. ("Capsugel") for a total consideration of CHF 3.4 billion in cash. In addition, Lonza assumed Capsugel's debt of CHF 2 billion which was refinanced subsequently.

As part of the acquisition accounting, International Financial Reporting Standards require the recognition and measurement of the identifiable assets acquired and liabilities assumed at their fair values. As a result Lonza recognized goodwill of CHF 2.4 billion, representing the difference of the total consideration paid and the fair value of Capsugel's net assets.

Identifying and assessing the fair values of the assets acquired and liabilities assumed requires management judgement. In particular, the valuation of intangible assets such as customer relationships, technology and the acquired trade name, which amount to CHF 2.7 billion are based on estimates made by Lonza management.

In determining the fair values of these intangible assets, Lonza management engaged specialists who applied a valuation model that incorporates, amongst others, assumptions in respect of future revenues and margins, useful lives, customer attrition, royalty rates and discount rates.

For further information on goodwill and acquired intangible assets impairment refer to the following:

- Note 1 Accounting Principles
- Note 4 Business Combinations & Sales of Businesses

### Our response

We read the Capsugel purchase agreement to understand the key terms and conditions of the transaction and their implications on the accounting. We agreed the consideration paid to the agreement and bank statements.

Regarding the identification and valuation of intangible assets, we involved our own valuation specialists. They supported us in gaining sufficient evidence over the adequacy of valuation methodologies and the assumptions used. As part of these procedures, we considered and challenged the appropriateness of the methodology underlying the fair value estimation of the identified intangibles assets. Amongst others we focused on the remaining useful lives, and reviewed the attrition rate assumptions, where relevant, finding them to be in an acceptable range. As part of our procedures, we challenged the underlying business plan, its derivation and respective assumptions, and compared it, where available, to relevant benchmarks.

We also considered the adequacy of the disclosures for the Capsugel acquisition in the consolidated financial statements.

**Key Audit Matter**

Lonza Group operates across a number of different tax jurisdictions (primarily Europe, the US and China) giving rise to a high level of cross-border transactions and complex taxation arrangements being subject to various country specific tax laws. During the normal course of business local tax authorities may challenge financing arrangements between Lonza entities, transfer-pricing arrangements relating to the Group's manufacturing and supply chain and the ownership of intellectual property rights.

Lonza recorded the estimated impacts of the U.S. Tax Cuts and Jobs Act of 2017 as well as changes in Belgian tax law in 2017. The U.S. and Belgian tax reforms had a significant impact on Lonza's income tax related financial statement accounts, resulting in a net income tax benefit of CHF 187 million. The short time period available, due to the late December 2017 enactment, to implement the changes related to the U.S. Tax Reform required assumptions and estimates of certain input factors, which involved judgment by management. These judgments and estimates included accounting for the estimated U.S. tax on deemed repatriated earnings of Lonza's non-U.S. subsidiaries, the adjustment of deferred tax items at the lower enacted corporate tax rates and other estimated effects of a territorial tax based system.

The Group has also recognized provisions against uncertain tax positions, the estimation of which is subject to management's judgement.

Judgment is also required in the recognition and measurement of deferred tax assets, which result from losses brought forward.

**Our response**

Our audit approach included the use of local tax specialists in all key jurisdictions to evaluate tax provisions and potential exposures for the year ended 31 December 2017. In response to the U.S. and Belgian tax reforms, we assessed Lonza's estimates associated with the calculation of deemed repatriated earnings. As part of these procedures, we agreed foreign taxes paid and other inputs to previously filed tax forms or returns and reviewed the company's assumptions and methodology used in determining its estimates relative to the provisions of the newly enacted law. We challenged the Group's assumptions and judgments through our knowledge of Lonza's tax status circumstances and the enacted laws.

We obtained explanations from management regarding the known uncertain tax positions and analyzed existing correspondence with taxation authorities to identify uncertain tax positions. We assessed the adequacy of management's taxation provisions by considering country specific direct tax risks, transfer-pricing risks, compliance risks and potential penalties and fines. We challenged and evaluated the judgements made by management in assessing the quantification and likelihood of significant exposures and the level of liability required for specific cases.

In respect of deferred tax assets, we have considered the appropriateness of management's assumptions and estimates. We have assessed management's view of the likelihood of generating suitable future taxable profits to support the recognition of deferred tax assets. This included our consideration of whether internal budgets and management assumptions for the concerned legal entities support the related conclusions.

Furthermore, we evaluated whether the income tax related items including the related estimates associated with the U.S. and Belgium tax reforms were appropriately disclosed in the consolidated financial statements.

For further information on Income taxes refer to the following:

- Note 1 Accounting principles
- Note 21 Taxes



### **Other Information in the Annual Report**

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements of the Company, the remuneration report and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### **Responsibility of the Board of Directors for the Consolidated Financial Statements**

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

### **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Swiss law, ISAs and Swiss Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.



- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

## Report on Other Legal and Regulatory Requirements

In accordance with article 728a para. 1 item 3 CO and the Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

KPMG AG

Michael Blume  
Licensed Audit Expert  
Auditor in Charge

Florin Janine Krapp  
Licensed Audit Expert

Zurich, 7 March 2018

KPMG AG, Badenerstrasse 172, PO Box, CH-8036 Zurich

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# Financial Statements of Lonza Group Ltd, Basel

Balance Sheet Lonza Group Ltd, Basel

Income Statement Lonza Group Ltd, Basel

Notes to the Financial Statements Lonza Group Ltd, Basel

Proposal of the Board of Directors

Report of the Statutory Auditor

# Balance Sheet Lonza Group Ltd, Basel

## Assets <sup>1</sup>

CHF	Note	2017	2016
<b>Current assets</b>			
Cash and cash equivalents		15,585,640	9,123,135
Short-term financial assets:			
– from subsidiaries and associates		540,052	16,553,500
Other short-term receivables:			
– from third parties		4,505	56,947
– from subsidiaries and associates		12,945,713	11,039,220
Prepaid expenses and accrued income:			
– from third parties		14,118,775	31,578,917
– from subsidiaries and associates		48,090,577	51,277,028
<b>Total current assets</b>		<b>91,285,262</b>	<b>119,628,747</b>
<b>Non-current assets</b>			
Long-term financial assets:			
– from subsidiaries and associates	2.2	6,050,679,989	1,310,663,541
Investments	2.1	2,509,069,671	1,731,612,237
Property, plant and equipment		589,781	480,446
Prepaid expenses and accrued income:			
– from third parties		14,676,512	8,075,000
<b>Total non-current assets</b>		<b>8,575,015,953</b>	<b>3,050,831,224</b>
<b>Total assets</b>		<b>8,666,301,215</b>	<b>3,170,459,971</b>

<sup>1</sup> At 31 December

## Liabilities and Shareholders' Equity <sup>1</sup>

CHF	Note	2017	2016
<b>Current liabilities</b>			
Trade accounts payables:			
– from third parties	2.3	2,183,797	3,710,607
– from subsidiaries and associates		116,630	230,934
Short-term interest-bearing liabilities:			
– from third parties	2.4	95,042,412	61,995,056

– from subsidiaries and associates		1,150,440,779	849,999,635
<b>Short-term provisions:</b>			
– from third parties		1,974,681	4,914,626
<b>Accrued expenses and deferred income:</b>			
– from third parties		126,052,021	144,530,339
– from subsidiaries and associates		3,750,723	2,359,728
<b>Total current liabilities</b>		<b>1,379,561,043</b>	<b>1,067,740,925</b>
<b>Non-current liabilities</b>			
<b>Long-term interest-bearing liabilities:</b>			
– from third parties	2.5	2,343,228,100	100,471,250
– from subsidiaries and associates		238,285,295	5,538,259
<b>Long-term provisions:</b>			
– from third parties		3,367,279	256,499
<b>Total non-current liabilities</b>		<b>2,584,880,674</b>	<b>106,266,008</b>
<b>Total liabilities</b>		<b>3,964,441,717</b>	<b>1,174,006,933</b>
<b>Shareholders' equity</b>			
<b>Share capital</b>	2.6	74,468,752	52,920,140
<b>Legal capital reserves:</b>			
– Reserves from capital contributions	2.7	3,086,833,393	243,393,025
<b>Legal retained earnings reserves:</b>			
– General legal retained earnings	2.6	26,460,070	26,460,070
<b>Voluntary retained earnings:</b>			
– Available earnings:			
– Profit brought forward		1,603,898,183	1,639,126,780
– (Loss) Profit for the year		(30,612,535)	44,768,760
Treasury shares		(59,188,365)	(10,215,737)
<b>Total shareholders' equity</b>		<b>4,701,859,498</b>	<b>1,996,453,038</b>
<b>Total liabilities and shareholders' equity</b>		<b>8,666,301,215</b>	<b>3,170,459,971</b>
<b>Shareholders' equity as a percentage of total assets in %</b>		<b>54.3</b>	<b>63.0</b>

<sup>1</sup> At 31 December

# Income Statement Lonza Group Ltd, Basel

CHF	Note	2017	2016
<b>Income</b>			
Dividend income		20,000,000	34,509,237
Royalties income		132,681,423	103,494,862
Other financial income	2.9	124,678,979	25,232,322
Other operating income		1,166,096	1,199,302
<b>Total income</b>		<b>278,526,498</b>	<b>164,435,723</b>
<b>Expenses</b>			
Other financial expenses	2.10	225,395,569	42,849,149
Personnel expenses		39,322,762	40,716,256
Other operating expenses	2.11	43,918,049	31,833,372
Impairment losses on investments		81,180	478,000
Depreciation on equipment		173,706	212,690
Direct taxes		247,767	3,577,496
<b>Total expenses</b>		<b>309,139,033</b>	<b>119,666,963</b>
<b>(Loss) Profit for the year</b>		<b>(30,612,535)</b>	<b>44,768,760</b>

# Notes to the Financial Statements Lonza Group Ltd, Basel

## Note 1 – Principles

### 1.1 General Aspects

These financial statements were prepared according to the provisions of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations). Where not prescribed by law, the significant accounting and valuation principles applied are described below.

### 1.2 Financial Assets

Financial assets include short- and long-term loans to subsidiaries and associates. Loans granted in foreign currencies are translated at the rate as of the balance sheet date.

### 1.3 Treasury Shares

Treasury shares are recognized at acquisition cost and deducted from shareholders' equity at the time of acquisition. In case of a resale, the gain or loss is recognized through the shareholders' equity as an increase or decrease of available earnings brought forward.

### 1.4 Share-Based Payments

When treasury shares are used for share-based payment programs, the difference between the acquisition costs and any consideration paid by the employees at grant date is recognized as personnel expenses.

### 1.5 Short- / Long-Term Interest-Bearing Liabilities

Interest-bearing liabilities are recognized in the balance sheet at nominal value. Discounts and issue costs for bonds or syndicated loans are recognized as prepaid expenses and amortized based on Effective Interest Rate over the principals' maturity period. Premiums are recognized as accrued expenses and amortized based on Effective Interest Rate over the principals' maturity period.

### 1.6 Currency and Interest related instruments

Currency and Interest related instruments with a short-term holding period are valued at their fair value as at the balance sheet date. A valuation adjustment reserve has not been accounted for.

## 1.7 Presentation of a Cash Flow Statement and Additional Disclosures in the Notes

As Lonza Group Ltd has prepared its consolidated financial statements in accordance with a recognized accounting standard (International Financial Reporting Standards IFRS), it has decided to forgo presentation of a cash flow statement, information on interest-bearing liabilities and audit fees in the note disclosures as would be required by Swiss law.

## Note 2 – Information on Balance Sheet and Income Statement Items

### 2.1 Investments

Lonza Group Ltd holds the following direct subsidiaries as of 31 December 2017. For indirect principal subsidiaries, please see the list in [Note 33](#).

Direct subsidiaries	Place	Capital in 1,000		Share in capital and voting rights in %	
		31.12.2017	31.12.2016	31.12.2017	31.12.2016
Arch Quimica, S.A. de C.V.	Mexico, MX	MXN 109	MXN 109	28%	28%
Lonza AG	Visp, CH	CHF 60,000	CHF 60,000	100%	100%
Lonza America Inc.	Allendale, US	USD 8	USD 8	100%	100%
Lonza BioPharma AG <sup>1</sup>	Visp, CH	CHF 0	CHF 550	0%	100%
Lonza Bioproducts AG	Basel, CH	CHF 100	CHF 100	100%	100%
Lonza do Brasil Especialidades Quimicas Ltda.	Sao Paulo, BR	BRL 18,387	BRL 18,387	99.9%	99.9%
Lonza (China) Investments Co. Ltd	Guangzhou, CN	USD 75,500	USD 75,500	100%	100%
Lonza Europe BV	Breda, NL	EUR 21	EUR 21	68%	68%
Lonza Finance Limited	St. Helier, Jersey, GB	CHF 0	CHF 335	0%	100%
Lonza Holding Singapore Pte Ltd	Singapore, SG	USD 100,000		100%	
Lonza Japan Ltd	Tokyo, JP	JPY 200,000	JPY 200,000	100%	100%
Lonza Licences AG	Basel, CH	CHF 100	CHF 100	100%	100%
Lonza Luxembourg S.à r.l.	Luxembourg, LU	EUR 0	EUR 12	0%	100%
Lonza Sales AG	Basel, CH	CHF 2,000	CHF 2,000	100%	100%
Lonza Swiss Finanz AG	Basel, CH	CHF 100	CHF 100	100%	100%
Lonza Swiss Licences AG	Basel, CH	CHF 100	CHF 100	100%	100%
Aravis Venture 1, L.P.	Grand Cayman, Cayman Islands	USD 58,824		31%	
International School of Basel AG	Reinach, CH	CHF 20,525	CHF 20,525	1.6%	1.6%
Seed Fund Cycle-C3E (A), L.P.	Montreal, CA	CAD 42,000		2.4%	

<sup>1</sup> Lonza BioPharma AG was merged into Lonza AG as of 1 January 2017 (entry into commercial registry 31 January 2017)

Lonza Finance Limited in Jersey transferred the equity holdings in Lonza Holding Singapore Pte Ltd, Aravis Venture 1, L.P. and Seed Fund Cycle-C3E (A), L.P. to Lonza Group Ltd in 2017. Lonza Finance Limited was

dissolved as of 22 May 2017. The liquidation loss of CHF 81,846,923 was recorded directly to the Equity account "Profit brought forward" in accordance with Swiss Law.

## 2.2 Financial Assets

Lonza Group Ltd had issued subordination agreements of CHF 190 million (2016: CHF 170 million) on loans to subsidiaries and associates.

## 2.3 Trade Accounts Payables

Trade accounts payables include liabilities to personnel welfare institutions of CHF 250,909 at 31 December 2017 (2016: CHF 846,464).

## 2.4 Short-Term Interest-Bearing Liabilities

in CHF	31.12.2017	31.12.2016
Bank loans	95,042,412	61,995,056

## 2.5 Long-Term Interest-Bearing Liabilities

During 2017 the Capsugel acquisition was partially financed through indebtedness including a USD 1.0 billion term loan and USD 1.4 billion bridge loan facilities provided by third-party lenders. The bridge was subsequently refinanced by traditional debt instruments.

Lonza Group Ltd priced its multi-tranche "Schuldschein" loan (private placement) in a total amount of EUR 700 million and USD 200 million at competitive market terms in August 2017. The EUR tranches have maturities of 4 and 6 years with fixed and variable coupons, respectively. The USD tranches have maturities of 5 years (variable coupon) and 7 years (fixed coupon). In December 2017 Lonza placed a USD 100 million, 7-year tranche "Schuldschein" loan. The proceeds plus available cash were used to fully redeem the outstanding debt bridge.

The net proceeds of the syndicated loan facility amount to CHF 225 million. The syndicated loan agreement contains a financial covenant that is based on Lonza's net debt / EBITDA ratio. The Group was in compliance with the covenant as of 31 December 2017.

in CHF	31.12.2017	31.12.2016
Syndicate loans	2,343,228,100	100,471,250

## 2.6 Share Capital, Authorized and Contingent Capital

During 2017 the Capsugel acquisition was financed through a combination of equity and debt instruments. Following the successful placement of 5 million new shares with gross proceeds in the amount of CHF 845 million by way of an accelerated bookbuilding in February, Lonza offered – after the approval of shareholders during the Annual General Meeting (AGM) on 25 April 2017 – a total of 16,548,612 newly issued shares by way of a discounted rights offering with gross proceeds in the amount of CHF 2.2 billion.

The share capital on 31 December 2017 comprised 74,468,752 registered shares (2016: 52,920,140) with a par value of CHF 1 each, amounting to CHF 74,468,752 (2016: CHF 52,920,140).

Contingent Capital: The share capital of Lonza Group Ltd may be increased through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value CHF 1 each up to a maximum aggregate amount of CHF 7,500,000.

Authorized Capital: The Board of Directors shall be authorized to increase, at any time until 25 April 2019, the share capital of Lonza Group Ltd through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000. The capital increases in the form of contingent capital and authorized capital may increase the share capital of Lonza Group Ltd by a maximum aggregate amount of CHF 7,500,000. The details and conditions are set out in Articles 4<sup>bis</sup> to 4<sup>quater</sup> of the Company's Articles of Association.

At 31 December 2017, Lonza Group Ltd had a fully paid-in registered capital of CHF 74,468,752 and a contingent capital of CHF 7,500,000.

Reserves in the amount of CHF 26,460,070 (2016: CHF 26,460,070) included in the financial statements of the parent company cannot be distributed.

## 2.7 Reserves from Capital Contributions

CHF	
Reserves from Capital Contributions at 01.01.2016	374,645,313
Dividend payout April 2016	(131,252,288)
<b>Reserves from Capital Contributions at 31.12.2016</b>	<b>243,393,025</b>
Agio capital injection of 5,000,000 shares in February 2017	844,665,610
Dividend payout May 2017	(159,280,385)
Agio capital injection of 16,548,612 shares in May 2017	2,158,055,143
<b>Reserves from Capital Contributions at 31.12.2017</b>	<b>3,086,833,393</b>

## 2.8 Treasury Shares

	Total shares	Average rate in CHF	Number of transactions
<b>Treasury shares at 01.01.2016, weighted average price</b>	<b>637,505</b>	<b>79.26</b>	
Acquisitions 2016	0	0	0
Distribution to board members	(7,865)	165.55	4
Distribution to E-STIP share plans	(30,372)	162.75	2
Distribution to LTIP share plans	(183,985)	156.30	1
Distribution to ESPP share plans	(15,019)	170.50	6
Distribution to other share plans	(1,373)	162.70	1
Sale Treasury shares	(270,000)	180.31	3
<b>Treasury shares at 31.12.2016, weighted average price</b>	<b>128,891</b>	<b>79.26</b>	



Acquisitions 2017	288,789	247.06	7
Distribution to board members	(6,828)	201.47	4
Distribution to E-STIP share plans	(16,979)	184.31	3
Distribution to LTIP share plans	(108,682)	183.42	2
Distribution to ESPP share plans	(39,700)	206.63	2
Distribution to other share plans	(1,263)	205.40	1
Sale Treasury shares	(18,308)	180.28	1
<b>Treasury shares at 31.12.2017, weighted average price</b>	<b>225,920</b>	<b>261.99</b>	

## 2.9 Other Financial Income

Other financial income in 2017 includes interest income from loans to subsidiaries and associates of CHF 121,627,865 (2016: CHF 16,454,499).

## 2.10 Other Financial Expenses

CHF	2017	2016
Bank interest and fees	31,328,344	4,015,518
Interest on bonds	0	5,066,667
Interest on deposits subsidiaries	1,951,438	4,873,153
Amortization of discounts and issue costs	41,381,248	1,491,304
Premium paid on finance instruments	18,651,430	9,563,203
Net exchange rate loss	132,083,109	17,839,304
<b>Total financial expenses</b>	<b>225,395,569</b>	<b>42,849,149</b>

## 2.11 Other Operating Expenses

CHF	2017	2016
Consulting expenses	13,691,678	7,834,312
Administrative expenses	5,404,116	3,250,738
Other operating expenses	24,822,255	20,748,322
<b>Total other operating expenses</b>	<b>43,918,049</b>	<b>31,833,372</b>

Other operating expenses include transaction-related costs incurred for acquisition projects.

## Note 3 – Other Information

### 3.1 Full-Time Equivalents

At 31 December 2017, Lonza Group Ltd had 63 employees (2016: 61).

### 3.2 Contingent Liabilities, Guarantees and Pledges

At 31 December 2017, indemnity liabilities, guarantees and pledges in favor of third parties totaled CHF 1,702,772,154 (2016: CHF 1,517,927,309). The company is a member of the Lonza Group value-added-tax group in Switzerland and is thereby jointly and severally liable to the federal tax authorities for value-added-tax debts of that group.

### 3.3 Major Shareholders

In accordance with Art. 663c of the Swiss Code of Obligations: See 1.2. Significant Shareholders in the Group Structure and Shareholder section of the Corporate Governance Report.

### 3.4 Share Ownership of the Members of the Board of Directors and the Executive Committee

In accordance with Art. 663c para. 3 of the Swiss Code of Obligations: See note 30 in the Consolidated Financial Statements and Remuneration Report.

### 3.5 Shares for Members of the Board and Employees

According to the share-based payments (see note 25), Lonza Group Ltd allocates treasury shares as follows:

	2017		2016	
	Number of shares	Value in CHF	Number of shares	Value in CHF
Allocated to members of the Board of Directors	6,828	1,375,637	7,865	1,302,017
Allocated to members of the Executive Committee	19,202	3,551,697	11,657	1,821,989
Allocated to other employees	20,268	3,738,377	12,351	1,930,461
<b>Total</b>	<b>46,298</b>	<b>8,665,711</b>	<b>31,873</b>	<b>5,054,467</b>

In 2017 Lonza Group Ltd employed two members of the Executive Committee (2016: 2).

## Significant Events After the Balance Sheet Date

There are no significant events after the balance sheet date which could impact the book value of the assets or liabilities or which should be disclosed here.

# Proposal of the Board of Directors

*Concerning the Appropriation of Available Earnings and Reserve from Capital Contributions*

CHF	2017
Available earnings brought forward <sup>1</sup>	1,603,898,183
Loss for the year	(30,612,535)
<b>Available earnings at the disposal of the Annual General Meeting</b>	<b>1,573,285,648</b>
Allocation to General legal retained earnings reserve	(10,774,306)
<b>Available earnings carry-forward</b>	<b>1,562,511,342</b>

CHF	2017
Legal capital reserves qualified as reserves from capital contributions	3,086,833,393
<b>Reserves from capital contributions</b>	<b>3,086,833,393</b>
Payment of a dividend (out of reserves from capital contributions) in 2017 of CHF 2.75 (2016: CHF 2.75) per share on the share capital eligible for dividend of CHF 74,242,832 (2016: CHF 57,290,140)	(204,167,788)
<b>Available reserves from capital contributions carry-forward</b>	<b>2,882,665,605</b>

<sup>1</sup> Includes the gain on sale of Treasury shares CHF 1,849,566 and the liquidation loss from Lonza Finance Limited, Jersey CHF 81,846,923

If the General Annual Meeting approves the above proposal from the Board of Directors, the dividend of CHF 2.75 per registered share, net of withholding tax (as per Article 5 Abs 1<sup>bis</sup> VStG), will be paid as of 11 May 2018.

Basel, 7 March 2018

## **Rolf Soiron**

Chairperson of the Board of Directors

## **Richard Ridinger**

Chief Executive Officer



# Statutory Auditor's Report

To the General Meeting of Lonza Group Ltd, Basel

## Report on the Audit of the Financial Statements

### Opinion

We have audited the financial statements of Lonza Group Ltd, which comprise the balance sheet as at 31 December 2017, and the income statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion the financial statements for the year ended 31 December 2017 comply with Swiss law and the company's articles of incorporation.

### Basis for Opinion

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight Authority

We have determined that there are no key audit matters to communicate in our report.

### Responsibility of the Board of Directors for the Financial Statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

### Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Swiss law and Swiss Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:



- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

## Report on Other Legal and Regulatory Requirements

In accordance with article 728a para. 1 item 3 CO and the Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG AG

Michael Blume  
Licensed Audit Expert  
Auditor in Charge

Florin Janine Krapp  
Licensed Audit Expert

Zurich, 7 March 2018

KPMG AG, Badenerstrasse 172, PO Box, CH-8036 Zurich

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# Supplementary Financial Information

Free Cash Flow

Statement of Value Added

CORE Results

# Free Cash Flow

The following is a summary of the free cash flow, using Lonza's definition. It includes earnings before interest, taxes and depreciation (EBITDA) and subtracts / adds the increase / decrease of operating net working capital, subtracts capital expenditures, acquisitions and adds disposal of fixed assets and subsidiaries as well as adding changes of other long-term operating assets / liabilities. This key measure is the same as reported monthly to the Executive Committee.

million CHF	2017	2016
EBITDA	1,153	848
Change of operating net working capital	(41)	78
Capital expenditures in tangible and intangible assets	(451)	(366)
Disposal of tangible and intangible assets	8	10
Change of other assets and liabilities	24	68
Gain from Guangzhou (CN) land transaction <sup>1</sup>	(74)	0
<b>Free cash flow (before acquisitions / disposals)</b>	<b>619</b>	<b>638</b>
Acquisition of subsidiaries	(3,310)	(230)
<b>Free cash flow</b>	<b>(2,691)</b>	<b>408</b>

<sup>1</sup>See note 6 of the 2017 Financial Report.



# Statement of Value Added

	Note <sup>1</sup>	2017		2016	
		million CHF	%	million CHF	%
<b>Origin of value added</b>					
Income from production		5,146		4,152	
Dividend earned		0		0	
<b>Total income</b>		<b>5,146</b>	<b>100.0</b>	<b>4,152</b>	<b>100.0</b>
<b>Services bought from third parties</b>					
Material costs	18	(1,587)		(1,386)	
Energy costs	18	(88)		(69)	
Other operating expenses excl. capital taxes		(841)		(636)	
<b>Gross value added</b>		<b>2,630</b>		<b>2,061</b>	
Depreciation on property, plant and equipment as well as amortization on intangibles, impairment / reversal of impairment	5, 6	(430)		(362)	
Income from application of the equity method	8	0		(1)	
<b>Total net value added</b>		<b>2,200</b>	<b>42.8</b>	<b>1,698</b>	<b>40.9</b>
<b>Distribution of value added</b>					
To staff:					
– Wages and salaries	19	1,091		898	
– Pensions	19	47		45	
– Other social security contributions	19	234		188	
– Other personnel expenses	19	86		70	
<b>Total personnel cost</b>		<b>1,458</b>	<b>66.3</b>	<b>1,201</b>	<b>70.7</b>
To public authorities:					
– Income and capital taxes	22	(128)	(5.8)	84	4.9
To lenders:					
– Financial expenses net	21.1, 21.2	142	6.5	112	6.6
To shareholders:					
– Dividends paid	27	160	7.3	131	7.7

### To the company:

- Profit for the period		726			301		
- Dividends paid	27	(159)	567	25.8	(131)	170	10.0

### To non-controlling interest:

- Profit for the period		2			0		
- Dividends paid		(1)	1	0.0	0	0	0.0
<b>Total</b>			<b>2,200</b>	<b>100</b>		<b>1,698</b>	<b>100.0</b>

### Distribution of value added per employee

		CHF		CHF
Wages and salaries		88,176		89,989
Pensions		3,799		4,509
Other social security contributions		18,912		18,840
Other personnel expenses		6,950		7,015
<b>Total per employee</b>		<b>117,837</b>		<b>120,353</b>

<sup>1</sup>See the accompanying notes to the consolidated financial statements.

# CORE Results

Lonza believes that disclosing CORE results of the Group's performance enhances the financial markets' understanding of the company because the CORE results enable better comparison across years.

CORE results exclude exceptional expenses and income related to e.g. restructuring, environmental-remediation, acquisitions and divestitures, impairments and amortization of acquisition-related intangible assets, which can differ significantly from year to year. For this same reason, Lonza uses these CORE results in addition to IFRS as important factors in internally assessing the Group's performance.

## Reconciliation of IFRS Results to CORE Results 2017

million CHF	IFRS results	Impact from tax reform in US/Belgium	Results after US/Belgium tax reforms	Amortization of intangible assets from acquisitions	Impairments	Reversal of impairments	Restructuring costs / income	Income/expense from acquisition and divestitures <sup>3</sup>	Environment-related expenses	Gain from Guangzhou (CN) land transaction <sup>4</sup>	CORE results <sup>1</sup>
<b>Sales</b>	<b>5,105</b>	<b>0</b>	<b>5,105</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,105</b>
Cost of goods sold	(3,277)	0	(3,277)	0	21	(2)	0	77	27	0	(3,154)
<b>Gross profit</b>	<b>1,828</b>	<b>0</b>	<b>1,828</b>	<b>0</b>	<b>21</b>	<b>(2)</b>	<b>0</b>	<b>77</b>	<b>27</b>	<b>0</b>	<b>1,951</b>
Marketing and distribution	(345)	0	(345)	0	0	0	0	0	0	0	(345)
Research and development	(103)	0	(103)	0	0	0	0	0	0	0	(103)
Administration and general overheads	(659)	0	(659)	104	0	0	7	29	0	0	(519)
Other operating income	115	0	115	0	0	0	0	0	0	(74)	41
Other operating expenses	(113)	0	(113)	0	0	0	6	35	5	0	(67)
<b>Result from operating activities (EBIT)</b>	<b>723</b>	<b>0</b>	<b>723</b>	<b>104</b>	<b>21</b>	<b>(2)</b>	<b>13</b>	<b>141</b>	<b>32</b>	<b>(74)</b>	<b>958</b>
Financial income	17	0	17	0	0	0	0	0	0	0	17
Financial expenses	(159)	0	(159)	0	0	0	0	49	0	0	(110)
<b>Net financing costs</b>	<b>(142)</b>	<b>0</b>	<b>(142)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>(93)</b>
Share of loss of associates / joint ventures	0	0	0	0	0	0	0	0	0	0	0
<b>Profit before income taxes</b>	<b>581</b>	<b>0</b>	<b>581</b>	<b>104</b>	<b>21</b>	<b>(2)</b>	<b>13</b>	<b>190</b>	<b>32</b>	<b>(74)</b>	<b>865</b>
Income taxes <sup>2</sup>	147	(187)	(40)	(7)	(1)	0	(1)	(13)	(2)	5	(59)
<b>Profit for the period</b>	<b>728</b>	<b>(187)</b>	<b>541</b>	<b>97</b>	<b>20</b>	<b>(2)</b>	<b>12</b>	<b>177</b>	<b>30</b>	<b>(69)</b>	<b>806</b>
Non-controlling interest	(2)	0	(2)	0	0	0	0	0	0	0	(2)
<b>Profit for the period, attributable to the equity holders of the parent</b>	<b>726</b>	<b>(187)</b>	<b>539</b>	<b>97</b>	<b>20</b>	<b>(2)</b>	<b>12</b>	<b>177</b>	<b>30</b>	<b>(69)</b>	<b>804</b>
Number of shares basic	67,878,060										67,878,060
Number of shares diluted	68,460,234										68,460,234
Basic earnings per share	10.70										11.84
Diluted earnings per share	10.60										11.74

<sup>1</sup> In the CORE results for the items "EBITDA", "Result from operating activities (EBIT)", "Profit for the period" and "Earnings per share", the impacts of exceptional expenses and income related to e.g. restructuring, environmental-remediation, acquisitions and divestitures, impairments and amortization of acquisition-related intangible assets are eliminated.

<sup>2</sup> Excluding the impact from tax reform in US/Belgium, an average Group tax rate of 6.8% results, which is used for the calculation of income taxes on CORE reconciliation items.

<sup>3</sup> Income / Expense Resulting from Acquisition and Divestitures.

Result from operating activities (EBIT):

- Capsugel: CHF 77 Million related to the fair value step-up of acquired Capsugel inventories as well as CHF 26 million for acquisition and integration-related costs
- Peptides business: accumulated exchange rate translation reserve losses of CHF 35 million
- Other acquisitions: acquisition and integration costs of CHF 3 million.

Net financing costs:

- Capsugel: Amortization of fees on bridge financing (see note 14) of CHF 37 million as well as option premium paid of CHF 19 million for derivative financial instrument to manage foreign currency exposure
- InterHealth: Favorable impact from fair value adjustment on contingent purchase price consideration of CHF 7 million.

<sup>4</sup> See note 6 of the 2017 Financial Report.

## Reconciliation of IFRS Results to CORE Results 2016

million CHF	IFRS results	Amortization of intangible assets from acquisitions	Impairments	Reversal of impairments	Restructuring costs / income	Income/expense from acquisition and divestitures	Environment-related expenses	Other	CORE results <sup>1</sup>
<b>Sales</b>	<b>4,132</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,132</b>
Cost of goods sold	(2,731)	0	15	(2)	12	3	26	0	(2,677)
<b>Gross profit</b>	<b>1,401</b>	<b>0</b>	<b>15</b>	<b>(2)</b>	<b>12</b>	<b>3</b>	<b>26</b>	<b>0</b>	<b>1,455</b>
Marketing and distribution	(281)	0	0	0	0	0	0	0	(281)
Research and development	(84)	0	0	0	0	0	0	0	(84)
Administration and general overheads	(478)	40	0	0	2	13	0	0	(423)
Other operating income	32	0	0	0	0	0	0	0	32
Other operating expenses	(104)	0	42	0	13	1	0	0	(48)
<b>Result from operating activities (EBIT)</b>	<b>486</b>	<b>40</b>	<b>57</b>	<b>(2)</b>	<b>27</b>	<b>17</b>	<b>26</b>	<b>0</b>	<b>651</b>
Financial income	2	0	0	0	0	0	0	0	2
Financial expenses	(114)	0	0	0	0	10	0	0	(104)
<b>Net financing costs</b>	<b>(112)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>(102)</b>
Share of loss of associates / joint ventures	(1)	0	0	0	0	0	0	1	0
<b>Profit before income taxes</b>	<b>373</b>	<b>40</b>	<b>57</b>	<b>(2)</b>	<b>27</b>	<b>27</b>	<b>26</b>	<b>1</b>	<b>549</b>
Income taxes <sup>2</sup>	(72)	(8)	(11)	0	(5)	(5)	(5)	0	(106)
<b>Profit for the period, attributable to the equity holders of the parent</b>	<b>301</b>	<b>32</b>	<b>46</b>	<b>(2)</b>	<b>22</b>	<b>22</b>	<b>21</b>	<b>1</b>	<b>443</b>
Number of shares basic	56,719,245								56,719,245
Number of shares diluted	57,046,652								57,046,652
Basic earnings per share <sup>3</sup>	5.31								7.81
Diluted earnings per share <sup>3</sup>	5.28								7.77

<sup>1</sup>In the CORE results for the items "EBITDA", "Result from operating activities (EBIT)", "Profit for the period" and "Earnings per share", the impacts of exceptional expenses and income related to e.g. restructuring, environmental-remediation, acquisitions and divestitures, impairments and amortization of acquisition-related intangible assets are eliminated.

<sup>2</sup>Tax impact calculated based on average Group tax rate.

<sup>3</sup>As a consequence of the capital increase of 10 May 2017, the calculation of the earnings per share and the diluted earnings per share have been adjusted by the factor resulting from the rights offering.

## Reconciliation of EBITDA to CORE EDITDA

million CHF	2017	2016
<b>Earnings before interests, taxes and depreciation (EBITDA)</b>	<b>1,153</b>	<b>848</b>
Restructuring costs / income	13	27
Income / expense resulting from acquisition and divestitures	141	17
Environment-related expenses	32	26
Gain from Guangzhou (CN) land transaction	(74)	0
<b>CORE EBITDA</b>	<b>1,265</b>	<b>918</b>



# Remuneration Report

Using sustainability of the company as a guiding principle

Establishing competitive compensation programs to attract and retain talent

Aligning executive compensation with Lonza's short-term and long-term objectives

Outlining compensation components: base, variable, benefits



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# Compensation and Performance Overview 2017

Lonza's compensation philosophy is designed to attract and retain talent through competitive compensation programs. Lonza's compensation programs are performance based, linking employee rewards with company and individual performance. Executive compensation is aligned with the short-term and long-term objectives of Lonza; results are measured based on achievement of specific goals that are aligned with the short-term and long-term objectives. Our performance goals are selected to achieve a balance between desired short-term and long-term outcomes. In this way, we encourage strategic decisions for competitive advantage and discourage executives from taking unnecessary or excessive risks that would threaten the reputation or sustainability of the Company. The financial impact of the Capsugel integration was excluded from the CORE results which are relevant for the STIP payout and LTIP vesting.

For 2017 Lonza's overall financial performance vs. short-term incentive plan (STIP) targets was as follows:

## 2017 STIP Payout<sup>1</sup>: Financial Targets<sup>2</sup>

million CHF	Actual performance in 2017 <sup>3</sup>	Target weighting in %	Achieved in %	Proposed 2017 payout % (weighted)
CORE EBIT	823.7	50.0	200	100.00
Sales (at target FX rates)	4,459.7	15.0	200	30
Operational cash flow	650.6	15.0	200	30

<sup>1</sup> See Section 4.3 – Performance-Related vs. Fixed Compensation

<sup>2</sup> Financial targets account for 80% of the total STIP weighting; individual performance accounts for the remaining 20% weight. For Executive Committee members only financial targets apply, the overall target achievement was in 2017: 200% (2016: 174.08%).

<sup>3</sup> Results before acquisition of Capsugel

Lonza's overall financial performance in 2017 vs. long-term incentive plan (LTIP) targets for 2015 was determined by the Nomination and Compensation Committee (NCC) to approximate the financial performance required to meet Lonza's challenging strategic goals and support Lonza's three-year plan. The 2015 LTIP performance was as follows (plan vested on 31 January 2018):

## 2015 LTIP Financial Performance<sup>4</sup>

	Actual performance	Payout in %
CORE EPS (Earnings Per Share)	CHF 11.1	200
CORE RONOA (Return on Net Operating Assets)	27.1%	200

<sup>4</sup> Three-year cycle completed 31 December 2017. See Section 4.6 – Long-Term Incentive (LTIP) for more details.



# 1. Compensation-Setting Process

## 1.1 Rules in the Articles of Association Relating to Remuneration

Lonza's Articles of Association contain rules regarding the approval of compensation by the Shareholders' Meeting (Article 22), the supplementary amount in the event of changes in the Executive Committee (Article 23), compensation of the members of the Board of Directors and the Executive Committee, including the principles applicable to performance-related compensation (Article 24), the agreements with members of the Board of Directors and the Executive Committee (Article 25) and loans to members of the Board of Directors and the Executive Committee (Article 27).

## 1.2 Responsibilities of Company Bodies Relating to Remuneration

### Board of Directors

As outlined in the [Organizational Regulations](#) (Article 2.8), the Board of Directors takes decisions on the following matters:

1. The determination of the remuneration for the members of the Board of Directors in accordance with the Articles of Association, subject to approval of the compensation of the Board by the Shareholders' Meeting pursuant to the Articles of Association;
2. The proposals to the Shareholders' Meeting regarding approval of the compensation of the Board of Directors and the Executive Committee; and
3. The preparation of the Remuneration Report.

# Nomination and Compensation Committee

The Nomination and Compensation Committee (NCC) has the following roles and responsibilities as outlined in the [Nomination and Compensation Committee Charter](#):

1. To recommend and review compensation policies and plans for approval by the full Board of Directors;
2. To review periodically and make recommendations to the Board of Directors regarding any variable incentive and the extent to which the plans meet their objectives;
3. To advise the Board of Directors on the compensation of its members;
4. To review and approve the objectives relevant to the CEO's compensation, to evaluate the performance on a regular basis and to determine the CEO's remuneration based on performance, subject to approval of the compensation of the Executive Committee by the Shareholders' Meeting pursuant to the Articles of Association;
5. To review and approve the remuneration proposals for members of the Executive Committee subject to approval by the Shareholders' Meeting pursuant to the Articles of Association;
6. To recommend to the Board of Directors proposals to be submitted to the Annual Shareholders' Meeting for approval regarding total amounts of compensation of the Board and the Executive Committee pursuant to the Articles of Association;
7. To support the Board of Directors in preparing the remuneration report;
8. To inform the Board of Directors about compensation policies and programs as well as benchmark compensation of key peer companies; and
9. To inform the Board of Directors about the terms of employment for the members of the Executive Committee based on the proposal of the NCC.

The NCC continuously reviews the aspects of executive compensation and compliance with good governance standards. As a result of the continuous growth, transformation of the Company and inclusion in the Swiss Market Index (SMI) in 2017, Lonza reviewed the overall competitive and governance best practice positioning. Within this analysis, feedback from shareholders, members of the investment community, policy recommendations provided by institutional shareholder advisory organizations and the Swiss Ordinance Against Excessive Compensation for Stock-Exchange-Listed Companies was considered.

The Chief Human Resources Officer and the relevant HR specialists prepare the NCC meeting materials and provide the related materials for such meetings. These individuals have an advisory function without voting rights. The Chief Human Resources Officer acts as secretary to the NCC and attends all NCC meetings.

## Shareholders' Meeting

The Shareholders' Meeting approves annually the compensation of the Board of Directors and the Executive Committee in accordance with Article 22 of [Lonza's Articles of Association](#).

## 1.3 Nomination and Compensation Committee and Board of Directors Meetings

The 2017 meetings of the NCC and the Board of Directors relating to compensation took place in January, February, April, July, October and December. An additional meeting dealing with 2017 compensation matters was held in January 2018.

At these meetings the NCC and/or the Board of Directors finalized:

- Plan provisions, grants, financial targets and target achievements for the STIP and LTIP plans;
- Progress report outlining interim ownership guidelines achievement for the Executive Committee;
- Recommendations relating to compensation motions to be submitted to the Annual General Meeting.

The NCC held six meetings in 2017. All members of the NCC participated in all meetings. The NCC informs the Board of Directors on a regular basis about its activities and decisions. The discussions and the decisions of the Board of Directors and the NCC regarding compensation of the members of the Executive Committee are resolved in the absence of the affected members of the Executive Committee. All members of the Board of Directors are non-executive members. All members of the Board of Directors took part and voted at its meetings regarding compensation matters.

## 1.4 External Advisers and Benchmarks

As part of the ongoing commitment to review the competitive environment for 2017 compensation, Lonza reviews compensation for all employees including the Board of Directors and Executive Committee through regular competitive benchmarking. Lonza continues to engage with New Bridge Street (NBS) as needed. The peer companies used for the Board of Directors and the Executive Committee are described in greater details in [Section 3.1](#) and [Section 4.1](#).

**NBS** is part of AON Hewitt's Performance, Reward and Talent Group. AON Hewitt has further consulting arrangements with Lonza Human Resources.

## 2. Compensation Components

The compensation of Lonza employees includes the following components (total compensation):

### Base Pay

The base pay of Lonza employees is established by assessing the scope of the job within the context of the relevant market, as well as individual performance. The base pay should be in general comparable with the median of similar positions in the pharmaceutical, chemical and general industries. Potential increases in base pay are evaluated on a regular basis and are typically based on relevant market economic developments, benchmarks and the employee's performance.

### Variable Compensation

The variable compensation is designed to provide employees with the opportunity to participate in the company's overall success and earn a competitive total compensation. The majority of employees participate in a short-term incentive plan (STIP). Senior management and key employees also participate in a long-term incentive plan (LTIP). The guiding principle for these plans is to motivate, reward and retain employees for the company's short-term and long-term financial success.

### Benefits

The benefits programs are specified by country, taking into consideration local legislation as well as competitive market practices within our industry. Benefit packages are reviewed on a regular basis.

# 3. Compensation of the Board of Directors

## 3.1 Principles

### Objective and Benchmarks

The NCC determined that they would again in 2017 use benchmark data of Swiss companies (various sectors) that are comparable in type of business, complexity, size and global presence to Lonza in determining competitive Board of Directors' Compensation. Lonza's objective is to pay the members of the Board of Directors at the median of this benchmark group in accordance with their respective duties and responsibilities. The NCC and Board of Directors recently amended the peer group to reflect Lonza's inclusion in the SMI (Swiss Market Index for the Twenty Largest Listed Swiss Companies). The amended peer group more directly reflects our strategic business direction along the healthcare continuum as well as the transformational organic and inorganic growth of the Company.

### Overall Structure and Level of Compensation

The position and the associated compensation of Vice-Chairperson of the Board of Directors was approved by the 2017 AGM. All other levels of compensation of the Board of Directors remained unchanged between 2016 and 2017.

## 3.2 Compensation Components

For the period from the Annual General Meeting (AGM) 2017 to the AGM 2018, the members of the Board of Directors receive fixed gross compensation for Board of Directors membership and additional compensation for committee chairperson and committee memberships as described in the table below.

### Compensation for Board of Directors AGM 2017 to AGM 2018<sup>1</sup>

CHF	Annual fee	Additional committee membership fee	Additional committee chairperson fee
Board of Directors Member	200,000	40,000	80,000
Vice-Chairperson of the Board of Directors	300,000		
Chairperson of the Board of Directors	450,000		

<sup>1</sup> Refer to Section 3.3 regarding total compensation (including national employer social contributions) provided to the Board of Directors in the financial year 2017. The table above represents the period from AGM 2017 to AGM 2018 and does not include social contributions of the employer.

The compensation of the Chairperson of the Board of Directors includes his remuneration as a member of the Innovation and Technology Committee of the Board of Directors. The compensation of the Vice-Chairman of the Board of Directors includes remuneration for guest participation in any Committee meetings.

The total compensation of the Committee chairpersons amounts to CHF 280,000 and includes the Committee membership fee.

Board of Directors' compensation for 2017 is paid quarterly; 50% of the compensation is paid in cash and 50% in Lonza restricted shares. The number of shares granted for Board of Directors' compensation is based on the average closing share price of the last five business days of each quarter. Share restrictions lapse after three years from the grant date. Shares are eligible for a dividend. This structure of Board of Directors compensation is closely aligned with our shareholders' interests.

The members of the Board of Directors do not receive variable compensation. The members of the Board of Directors are reimbursed for travel and other related expenses associated with their responsibilities as members of the Board of Directors of Lonza.

## 3.3 Aggregate Compensation of the Board of Directors

### Board of Directors' Compensation

	2017					2016				
	Net cash payment CHF	Number of shares	Value of shares <sup>2</sup> CHF	Social security and taxes <sup>3</sup> CHF	Total <sup>4</sup> CHF	Net cash payment CHF	Number of shares	Value of shares <sup>2</sup> CHF	Social security and taxes <sup>3</sup> CHF	Total <sup>4</sup> CHF
Rolf Soiron <sup>1</sup> Chairperson	204,657	1,010	224,619	40,686	469,962	204,648	1,329	224,723	40,704	470,075
Albert M. Baehny <sup>5</sup> Vice Chairperson	101,631	471	112,081	21,170	234,882					
Patrick Aebischer <sup>6</sup>	124,638	628	139,626	28,549	292,813	124,624	826	139,683	28,576	292,883
Werner Bauer	109,558	538	119,656	20,884	250,098	109,547	707	119,539	20,905	249,991
Thomas Ebeling <sup>7</sup>	26,599	161	29,901	6,229	62,729	106,693	707	119,539	24,620	250,852
Jean-Daniel Gerber <sup>6</sup>	127,674	628	139,626	24,651	291,951	127,662	826	139,683	24,677	292,022
Christoph Mäder	106,705	538	119,656	24,598	250,959	80,094	521	89,596	18,391	188,081
Barbara Richmond	60,063	538	119,656	91,454	271,173	60,011	707	119,538	93,109	272,658
Margot Scheltema <sup>6</sup>	75,674	628	139,626	64,328	279,628	75,613	826	139,684	64,386	279,683
Jürgen Steinemann	64,863	538	119,656	55,137	239,656	61,411	707	119,538	61,418	242,367
Antonio Trius <sup>8</sup>	64,863	538	119,656	55,137	239,656	64,812	707	119,538	137,515	321,865
<b>Total</b>	<b>1,066,925</b>	<b>6,216</b>	<b>1,383,759</b>	<b>432,823</b>	<b>2,883,507</b>	<b>1,015,115</b>	<b>7,863</b>	<b>1,331,061</b>	<b>514,301</b>	<b>2,860,477</b>

<sup>1</sup> This compensation includes Mr Soiron's committee membership. Mr Soiron is a member of the Innovation and Technology Committee.

<sup>2</sup> The fair values were calculated using the average closing share price of the last five business days of each quarter, see [note 25](#) in the Lonza Financial Report 2017.

<sup>3</sup> The social security amounts disclosed in this column represent the full costs of the employer and employee social security contributions and withholding tax.

<sup>4</sup> Total compensation amounts refer to gross payments, including social security and withholding tax, except where stated otherwise.

<sup>5</sup> Albert Baehny was elected to the Board of Directors and appointed as Vice-Chairperson of the Board at the AGM 2017

<sup>6</sup> Patrick Aebischer, Jean-Daniel Gerber and Margot Scheltema are Chairpersons of a Board of Directors Committee.

<sup>7</sup> Thomas Ebeling did not stand for re-election at the AGM 2017.

<sup>8</sup> Includes additional social security provision for Antonio Trius in 2016.

The slight increase in Board compensation in 2017 was due primarily to the addition of Albert Baehny to the Board of Directors in April 2017 in the position of Vice-Chairperson of the Board of Directors and Thomas Ebeling not standing for re-election at the AGM 2017.

No loans or credits were granted to current or former members of the Board of Directors during 2017 (nor in 2016). No loans or credits were outstanding as of 31 December 2017. During 2017, no payments (or waiver of claims) were made to current or former Board members nor to persons closely linked to them. No member of the Board of Directors benefits materially from any contract between a Lonza company and a third party.

For a full review of the historical development of compensation for the Board of Directors, see [note 25](#) in the Lonza Financial Report.

# 4. Compensation of the Executive Committee

Principles

Remuneration Components

Aggregate Compensation of the Executive Committee

Highest Compensation Paid to a Member of the Executive Committee

Compensation to Departing Members of the Executive Committee

Details of Incentive Plans

Compensation in Case of Termination



# 4.1 Principles

## Objective and Benchmarks

Lonza's objective is to pay the members of the Executive Committee (EC) a base salary in line with the median for the market as described below, with the potential for executives to earn above-median compensation through a combination of competitive short-term and long-term incentive programs if the company outperforms its financial targets. These incentive plans are designed to align the Executive Committee's objectives with the interests of our shareholders. The total compensation (base salary, variable elements and fringe benefits) of the members of the Executive Committee is benchmarked on a regular basis against a peer group of the relevant industry.

The following peer groups were used in 2017 to assess total compensation for the Executive Committee.

## Peer Groups

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Primary peer group	Secondary peer groups
European pharmaceutical / chemical sector businesses (all data adjusted to reflect differences in revenue and market value) <sup>1</sup>	Swiss companies similar in size to Lonza in other sectors <sup>2</sup> US pharmaceutical <sup>3</sup> or chemical <sup>4</sup> companies similar in size to Lonza

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<sup>1</sup> Arkema, Astra Zeneca, BASF, Bayer, Beiersdorf, Clariant, Croda International, DSM Koninklijke, Evonik Industries, Givaudan, Henkel, Hikma Pharmaceuticals, Merck, Novartis, Qiagen, Reckitt Benckiser, Roche Holdings, Sonova, Symrise, UCB, Umicore, Wacker Chemie

<sup>2</sup> ARYZTA AG, Barry Callebaut AG, Emmi AG, Forbo Holding AG, Geberit AG, Georg Fischer AG, Logitech International S.A., OC Oerlikon Corporation AG, Panalpina Welttransport (Holding) AG, Sonova Holding AG, Sulzer

<sup>3</sup> Allergan plc, Endo Health Solutions Inc., Mylan Inc., Perrigo Company, Zoetis Inc.

<sup>4</sup> Cabot Corporation, Celanese Corporation, Chemtura Corporation, The Chlorox Company, Coty Inc., Eastman Chemical Company, FMC Corporation, International Flavors and Fragrances Inc., Methanex Corporation, Sigma-Aldrich Corporation, Westlake Chemical Corporation, W.R. Grace and Company.

The overall structure of compensation for the Executive Committee remained unchanged in 2017. For the alignments made to the base salary of the EC and the CEO please refer to the applicable charts in [Section 4.3](#) and [Section 4.4](#).

## 4.2 Remuneration Components

The compensation of the members of the Executive Committee consists of the following components:

### Base Salary

The base salary is paid in cash and determined for each position considering the responsibilities of the position and performance of each member of the Executive Committee.

### Short-Term Incentive (STIP)

The company provides the members of the Executive Committee with a Short-Term Incentive Plan. Performance metrics are defined for each financial year; achievement determines the payout of STIP. The STIP in principle pays out in cash, though it is conveyed in 50% shares when shareholding requirements are not met. For details regarding the STIP, please refer to [Section 4.6 – Short-Term Incentive Plans \(STIP\)](#).

### Long-Term Incentive (LTIP)

The LTIP is designed to align the interests of the Executive Committee with those of Lonza's shareholders and to serve as a retention incentive for the executives. The LTIP is a 100% equity-based plan with conditional equity awards vesting after three years according to performance conditions. Executive Committee members are awarded the right to receive a number of shares in Lonza in the future, provided that certain performance-related conditions are achieved. For more details regarding the LTIP, please refer to [Section 4.6 – Long-Term Incentive Plans \(LTIP\)](#).

### Benefits

The Executive Committee's compensation package also includes certain benefits, e.g. pension plans and other benefits, such as a car, expenses allowance, health insurance and (if applicable) tuition fees. Please note for 2016, pension benefits reflect the adoption of Lonza's retirement plans based on a Swiss-specific pension review to ensure market competitiveness and retention of executives and the increase in employer pension contributions. These plans were approved by shareholders at the AGM 2016 and again at the AGM 2017 as part of the total compensation budget.

## 4.3 Aggregate Compensation of the Executive Committee

The table below shows the breakout of the Executive Committee Compensation.

### Executive Committee's Compensation <sup>1</sup>

million CHF	2017	2016
<b>Cash payments and benefits</b>		
Base salary	3.312	2.708
Short-term incentive (cash) <sup>2</sup>	4.458	3.573
Post-employment benefits / other benefits <sup>3</sup>	1.741	1.444
<b>Share-based payments</b>		
Value of STIP paid out in shares <sup>4</sup>	1.238	0.441
Value of LTIP equity at market value <sup>5</sup> (number of equity awards 2017: 17,805 / 2016: 18,872)	3.221	2.950
<b>Total</b>	<b>13.970</b>	<b>11.116</b>
<b>Ratio of fixed compensation to the performance-related components of compensation (without termination payment)</b>	<b>47.45%</b>	<b>50.11%</b>

<sup>1</sup> Average of 4.92 members in 2017 and average of 4.0 members in 2016. Rodolfo Savitzky succeeded Toralf Haag as CFO as of October 2016. Fridtjof Helemann was appointed to the Executive Committee effective 1 February 2017.

<sup>2</sup> The achievement for 2017 was 200% (2016: 174.08%) and will be paid out in May 2018 after the approval of the Shareholder's Meeting.

<sup>3</sup> Social security, pension fund and other benefits (see Section 4.2). The social security and pension fund amounts disclosed on this line represent the full costs of the employer contributions for 2016 and 2017. The table shows the fair value of the other benefits.

<sup>4</sup> Actual number of shares relating to the STIP payout will be determined in March 2018. This STIP payout in shares was made in application of the new minimum shareholding requirement according to which the STIP payout will be 50% in shares if an EC member does not meet the minimum shareholding requirement (see Section 4.6).

<sup>5</sup> The fair value in 2017 and 2016 was calculated using the market value at grant date. It is possible that the eventual value at vesting will be higher or lower (or even zero).

The increase in base salary in the aggregate is due to an increase in the number of EC members in 2017 as well as salary increases to current Executive Committee members as approved by shareholders at the AGM 2017.

Throughout 2017 Lonza continued to deliver record financial results with outstanding improvements across all key performance indicators, leading to the best full-year results in Lonza's history. The strong sales growth and high margin improvement are the result of diligent and disciplined application of Lonza's successful strategy. Compared with the STIP target achievement for the financial year 2016, the proposed STIP payout for the financial year 2017 represents an increase of 41.9%. This increase in its entirety is due to the improved business performance and underlines the sustained overall performance of the past years and is attributable to the increase of the number of Executive Committee members in 2017.

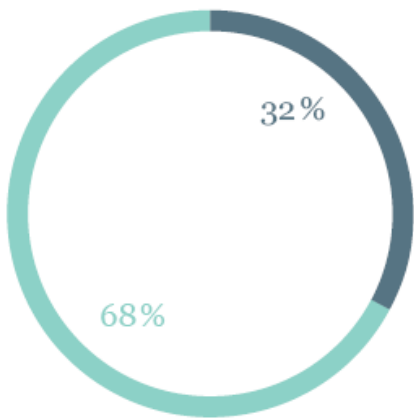
The number of LTIP Equity Awards decreased in 2017 (2016: 18,872 versus 2017: 17,805) due to an increase in share price on the date of grant of CHF (2016: CHF 156.30 and 2017: CHF 180.90). Note that the value of LTIP Equity Awards in CHF increased from CHF 2.950 million in 2016 to CHF 3.221 million in 2017. The 2017 LTIP Equity Award budget was approved by shareholders in April 2017.

No loans or credits were granted to current or former members of the Executive Committee during 2017 (nor in 2016). No loans or credits were outstanding as of 31 December 2017. During 2017, no payments (or waiver of claims) were made to current or former Executive Committee members nor to persons closely linked to them. No member of the Executive Committee benefits materially from any contract between a Lonza company and a third party.

## Performance-Related vs. Fixed Compensation

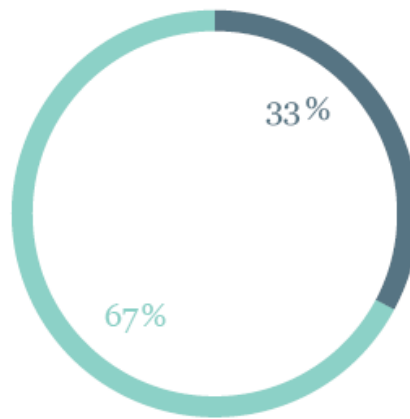
As illustrated below (in million CHF), Lonza's excellent financial performance has increased the ratio of performance-related vs. fixed compensation.

2017



■ Fixed **4.495**  
■ Performance-related **9.475**

2016



■ Fixed **3.710**  
■ Performance-related **7.406**

## 4.4 Highest Compensation Paid to a Member of the Executive Committee

The table below shows the breakout of the compensation of the highest-paid individual.

### Compensation of the Highest-Paid Individual (Richard Ridinger, CEO)

million CHF	2017	2016
<b>Cash payments and benefits</b>		
Base salary	1.055	1.005
Short-term incentive (cash) <sup>1</sup>	2.200	1.758
Post-employment benefits / other benefits <sup>2</sup>	0.514	0.489
<b>Share-based payments</b>		
Value of LTIP equity at market value <sup>3</sup> (number of equity awards 2017: 5.583, 2016: 6,398)	1.010	1.000
<b>Total</b>	<b>4.779</b>	<b>4.252</b>
<b>Ratio of fixed compensation to the performance-related components of compensation (without termination payment)</b>	<b>41.61%</b>	<b>46.60%</b>

<sup>1</sup> Incentive (STIP) for the reporting year. The 2016 STIP was paid in April 2017; the 2017 STIP will be paid in May 2018 after AGM shareholders' approval. The CEO has met his shareholding requirement and will therefore receive full cash payout of STIP 2017. The STIP was calculated using base salary of 31 December 2017.

<sup>2</sup> Social security and pension fund as well as company car and health insurance. The social security and pension fund amounts disclosed on this line represent the full costs of the employer contributions for 2016 and 2017. The table shows the fair value of the other benefits.

<sup>3</sup> The fair value in 2017 and 2016 was calculated using base salary and market value at grant date (31 January 2017). It is possible that the eventual value will be higher or lower (or even zero).

The proposed STIP payment for 2017 reflects Lonza's outstanding improvements across all key performance indicators, leading to the best full-year results in Lonza's history. Compared with the STIP payout for the financial year 2016, the proposed STIP amount for the financial year 2017 represents an increase of 25.1%.

The strong sales growth and high margin improvement are the result of diligent and disciplined application of Lonza's successful strategy.

## 4.5 Compensation to Departing Members of the Executive Committee

There were no departing members of the Executive Committee in 2017. In 2016, Toralf Haag, CFO and member of the Executive Committee, left the company, receiving benefits and payments in accordance with his executive agreement.

## 4.6 Details of Incentive Plans

This subsection describes the plan details of the Short-Term Incentive Plan (STIP) and the Long-Term Incentive Plan (LTIP):

### Short-Term Incentive (STIP)

#### History and Participation

The Board of Directors implemented the current STIP for the majority of the Group's employees, including the members of the Executive Committee. More than 95% of our employees participate in short-term incentive plans, either in the STIP program or in a local bonus program.

Effective 2016 the NCC made the decision to introduce shareholding requirements for the Executive Committee and further align the Executive Committee with the interests of shareholders. In support of this strategy, the STIP will pay out in cash or in shares based on the Executive's individual holdings of Lonza shares.

The 2017 STIP Program operates for Executive Committee members as follows:

#### Objective

The STIP provides the potential for an annual incentive based on the financial performance of the Group and the performance of the participant.

#### Definition of Targets

The performance criteria are set annually based on the company's short-term objectives and assessed for achievement at the end of the year against the defined financial performance results. Defined financial performance results are derived from the audited financial results 2017. Note: the financial impact of the Capsugel integration was excluded from the CORE results which are relevant for the STIP payout.

STIP	CEO	Other Executive Committee members
STIP target as % of base salary <sup>1</sup>	100%	75%
Performance targets	<ul style="list-style-type: none"> <li>• 50% CORE <sup>2</sup> EBIT</li> <li>• 15% Lonza sales</li> <li>• 15% Operational free cash flow</li> <li>• 20% Individual targets for Executive Committee members (for 2017: CORE EBIT 10%, sales 5% and operational free cash flow 5%)</li> </ul>	
Form of payout	<ul style="list-style-type: none"> <li>• 100% in cash if CEO holds shares equivalent to 2 times base salary (CEO) and other Executive Committee members 1 times base salary <sup>3</sup> in Lonza shares</li> <li>• 50% in cash and 50% in Lonza shares if Executive Committee member does not meet minimum requirements</li> </ul>	
Payment timing	The STIP is paid to the members of the Executive Committee in May 2018 after the approval of the Shareholders' Meeting	

<sup>1</sup> Payout range equals 0% – 200%.

<sup>2</sup> CORE results exclude exceptional items such as restructuring charges, impairments and amortization of acquisition-related intangible assets, which can differ from year to year.

<sup>3</sup> As measured on 31 December of the plan year.

## Long-Term Incentive (LTIP)

### History and Participation

The LTIP is an equity-based plan introduced in 2006 for the Executive Committee and a segment of key employees.

### Objective

The LTIP has been designed to align the interests of participants with those of Lonza's shareholders and to serve as a retention tool. LTIP participants are eligible to receive a number of Lonza shares at the end of the vesting period, provided that certain challenging performance conditions are met at the end of the three-year performance period.

### Equity Awards

Under the LTIP, participants are awarded the right to receive a number of Lonza registered shares in the future. Depending on the level of the job, the target equity award grant is between 10% and 100% of the annual base salary. The grant is made at target and the payout level can be between 0% and 200%. The Executive Committee members, including the CEO, have a target of 100% of base salary with payout levels between 0% and 200% maximum. Any proration is applied in relation to the entire length of the three-year performance period.

The LTIP plan design is determined at the beginning of the three-year performance period. For 2017 the plan design included minimum, target and stretch goals. The 2017 LTIP budget value for the Executive Committee was approved as submitted at the AGM 2017 and administered in accordance with this approval.



Vesting will depend on achievement of the performance conditions and cannot exceed the maximum amount (200%) of granted equity awards.

## Restriction and Vesting

The central feature of the plan is that key participants will only receive title and ownership of the shares after a three-year vesting period and only if the performance metrics required for vesting are partially or fully met.

## Vesting Targets

For the 2017 and 2016 LTIP the performance metrics were CORE EPS and CORE RONO A with 50% weight for each measure. For more details, see note 25 in the Financial Report.

With the payout value directly linked to these key financial metrics, these two measures focus on Lonza's financial performance that will drive the valuation of Lonza with investors. The value of the LTIP will be ultimately driven by the share price at the time of payout, further linking the LTIP to the interests of the shareholders.

## Overview of Vesting Conditions for LTIP

For the years 2017 and 2016, the vesting of up to 50% of the granted equity awards depends on growth of CORE EPS achieved during Lonza's three fiscal years and the vesting of up to 50% of the granted equity awards depends on growth of CORE RONO A achieved during Lonza's three fiscal years.

### Performance Metrics for CORE EPS Approved at AGM 2017 (LTIP 2017)<sup>1</sup>

- The minimum threshold to be reached at year-end 2019 was determined by the NCC to be significantly higher than the CORE EPS achieved on 31 December 2016 (which was CHF 7.81). If this minimum threshold is not reached, the payout will be zero. If this threshold is reached, 50% of the equity awards granted under CORE EPS will vest.
- If the target is reached, 100% of the equity awards granted under CORE EPS will vest. CORE EPS is an internal, sensitive financial target which is not disclosed at this time.
- The maximum was determined to approximate 110% of the CORE EPS at target. If such level of CORE EPS is reached, 200% of the equity awards granted under CORE EPS will vest.

### Performance Metrics for CORE RONO A Approved at AGM 2017 (LTIP 2017)<sup>1</sup>

- The minimum threshold to be reached at year-end 2019 was determined by the NCC to be significantly higher than the CORE RONO A achieved on 31 December 2016 (which was 21.5%). If this minimum threshold is not reached, the payout will be zero. If this threshold is reached, 50% of the equity awards granted under CORE RONO A will vest.
- If the target is reached, 100% of the equity awards granted under CORE RONO A will vest. CORE RONO A is an internal, sensitive financial target which is not disclosed at this time.
- The maximum was determined to approximate 110% of the CORE RONO A at target. If such level of CORE RONO A is reached, 200% of the equity awards granted under CORE RONO A will vest.

<sup>1</sup> As a result of the acquisition of Capsugel, Lonza management deemed that the performance targets previously set in the LTIPs shall be adjusted to reflect and consider the Capsugel integration and contribution to the Group's future performance. The financial budget information of Lonza (EBIT, CORE EBIT, Net Income and CORE Net Income) and Net Operating Assets (NOA) used in the calculation of the Forecast Information agrees to the Lonza financial budget information (EBIT, CORE EBIT, Net Income and CORE Net Income) and NOA used in the calculation of the original LTIP performance targets for FY18 and FY19 as approved by the Board of Directors when establishing the 2016 and 2017 LTIPs. This information has been amended by the financial budget information of Capsugel for FY 18 and FY19 based on the forecasted information derived from calculations in connection with the acquisition. The methodology applied to incorporate the acquired Capsugel business and supporting calculations into the LTIPs has been validated by an external party.

## Treatment of LTIP in Change of Control Situations

Under the LTIP rules, if a Change of Control occurs, all unvested granted shares shall immediately vest and the granted price shall be the price at which the shares are sold in the transaction resulting in the Change of Control.

## Actual Performance and Payout for the LTIP 2015

The total 2014 LTIP payout equaled 100%.

Performance under the 2015 LTIP exceeded the target for CORE EPS, generating a 200% payout on 50% of the total award. Performance under the 2015 LTIP exceeded the target for CORE RONOA, generating a 200% payout on the remaining 50% of the total award. The total 2015 LTIP payout equals 200%. The financial impact of the Capsugel integration was excluded from the CORE results which are relevant for the LTIP payout.

## 2015 LTIP

	Actual performance	Payout in %
CORE EPS (Earnings Per Share) <sup>1</sup>	CHF 11.1	200
CORE RONOA (Return on Net Operating Assets) <sup>1</sup>	27.1%	200
<b>Total payout</b>		<b>200</b>

<sup>1</sup> CORE results exclude exceptional items such as restructuring charges, impairments and amortization of acquisition-related intangible assets, which can differ from year to year.

## 4.7 Compensation in Case of Termination<sup>1</sup>

All executive agreements comply with the Swiss Ordinance Against Excessive Pay for Stock-Exchange-Listed Companies. The following outlines the specific termination-related topics included in the agreements of the Executive Committee members and the STIP and LTIP rules and administrative guidelines and practices.

### Notice Period

All members of the Executive Committee are subject to a 12-month notice period.

### Base Pay and Benefits

All members of the Executive Committee who terminate their employment will receive their base pay during the 12-month notice period and will be eligible for the benefits relating to the 12-month notice period, such as lump-sum expenses, pension fund plans, health and accident insurance, company car, family/children allowances according to their respective employment agreement.

<sup>1</sup> Cases such as death, disability and retirement are not covered in this section.

## STIP Payouts in the Event of Termination<sup>2</sup>

### Resignation by the Executive

Subject to applicable law, if a member of the Executive Committee resigns at any time prior to distribution of STIP awards such member will not be entitled to any award with respect to the plan year in which their employment is terminated, except if (i) the termination as a result of such resignation occurs after 31 December of the plan year and (ii) the executive was not released from his obligation to work.

### Termination by the Company Without Cause

Any member of the Executive Committee whose employment is terminated by the Company without cause will be entitled to a prorated STIP payment relating to the notice period.

### Termination by the Company for Cause

Any member of the Executive Committee whose employment is terminated by the Company for cause will not be entitled to the STIP payment relating to the current year (year of termination).

## STIP in Change of Control

Any member of the Executive Committee whose employment is terminated by the Company without cause or who terminates the employment due to good reason (such as his function/duties/responsibilities being altered or the Company or the successor to Lonza Group Ltd failing to confirm to the executive in writing that no such alteration is intended) within 18 months following a change in control will be entitled to a STIP payment during the termination notice period (pro-rata) based on actual (to the extent it may be determined) or presumed achievement and, if and to the extent the executive is released from an obligation to work, based on assumed target achievement (100%).

<sup>2</sup> This summary of consequences in case of termination is based on plan rules applicable to STIP 2017.

## LTIP Payouts in the Event of Termination

### Resignation by the Executive

Any member of the Executive Committee who resigns will forfeit the right to receive a transfer of any unvested LTIP awards.

### Termination by the Company Without Cause

Any member of the Executive Committee whose employment is terminated by the Company without cause have unvested shares vest on a pro rata basis based on the number of months worked (including the notice period) during the 36-month performance period for grants 2016 and 2017.

### Termination by the Company for Cause

Any member of the Executive Committee whose employment is terminated by the Company for cause will forfeit the right to receive a transfer of any unvested LTIP shares.

### LTIP in Change of Control

Under the LTIP rules, if a Change of Control occurs, all unvested granted shares shall vest immediately and the granted price shall be the price at which the shares are sold in the transaction resulting in the Change of Control.

## Non-Compete Clause

Under the terms of the employment agreement of the Executive Committee, members whose employment is terminated agrees that he will not for a period of 6 months following the end of the notice period, be partially or fully employed by any entity that materially competes with the Company or any of its business segments. In case

of a breach of the non-competition clause, the executive shall pay damages to the Company. As compensation for the period of non-competition, the executive will receive a monthly consideration equal to the executive's last monthly base salary minus any new income the executive earns in the relevant month.

The Company may elect to fully or partially release the departing Executive Committee member from this non-competition obligation no later than ten (10) months prior to the end of the notice period.

## Claw-Back

Any compensation (including fringe benefits) under the employment agreement of the Executive Committee members is subject to claw-back or forfeiture if the compensation is not approved at the AGM.

# 5. Share Ownership of the Members of the Board of Directors and the Executive Committee

Based on information available to Lonza, the members of the Board of Directors and parties closely associated with them held, as of 31 December 2017, a total of 166,736 (2016: 135,180)<sup>1</sup> registered shares in Lonza Group Ltd and controlled 0.22% (2016: 0.26%) of the share capital. None of the members of the Board of Directors or Executive Committee owns shares in the Group's subsidiaries or associates.

The Company feels strongly that our Executive Committee and other senior managers should have a defined shareholding in Lonza to strengthen their alignment with our shareholders' interests. Starting in 2016 Lonza established minimum shareholding requirements for the Executive Committee and other senior managers based on level in the organization and specified a five-year period to achieve these minimum requirements. Shareholding levels were reviewed annually beginning in January 2016. The NCC may periodically review the minimum shareholding requirements.

The members of the Executive Committee and parties closely associated with them held 93,728 (2016: 67,335) shares and controlled 0.13% (2016: 0.13%) of the share capital. The individual control rights are proportional to the holdings shown below.

<sup>1</sup> Spouse, children below 18, any legal entities that they own or otherwise control, or any legal or natural person who is acting as their fiduciary.

Share ownership of acting members of the Board of Directors and Executive Committee as of 31 December 2017:

## Board of Directors

Lonza shares (numbers)	2017	2016
Rolf Soiron, Chairperson	85,649	69,683
Albert Baehny, Vice-Chairperson	329	n/a
Patrick Aebischer	11,464	10,574
Werner Bauer	25,350	19,180
Thomas Ebeling	n/a	4,255
Jean-Daniel Gerber	17,312	12,840
Christoph Mäder	2,207	351
Barbara Richmond	3,496	2,184
Margot Scheltema	9,255	7,561
Jürgen Steinemann	5,592	4,356
Antonio Trius	6,082	4,196

## Executive Committee

Lonza shares (numbers)	2017	2016
Richard Ridinger, CEO	52,446	41,564
Sven Abend	5,000	1,373
Marc Funk	35,046	24,398
Fridtjof Helemann	0	n/a
Rodolfo Savitzky	1,236	0

### Minimum shareholding requirements:

- CEO: 2 times base salary
- Other Executive Committee: 1 times base salary
- Other senior managers: Annual LTIP grant value
- Shareholdings measured at the end of January in each calendar year
- Five years to achieve minimum requirements



# Report of the Statutory Auditor

To the General Meeting of Lonza Group Ltd, Basel

We have audited the accompanying remuneration report dated 31 December 2017 of Lonza Group Ltd for the year ended 31 December 2017. The audit was limited to the information according to articles 14-16 of the Ordinance against Excessive compensation in Stock Exchange Listed Companies (Ordinance) contained in the sections 3.3, 4.3, 4.4 and 4.5 of the remuneration report.

## Responsibility of the Board of Directors

The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance against Excessive compensation in Stock Exchange Listed Companies (Ordinance). The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

## Auditor's Responsibility

Our responsibility is to express an opinion on the accompanying remuneration report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report complies with Swiss law and articles 14 – 16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the remuneration report with regard to compensation, loans and credits in accordance with articles 14 – 16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the remuneration report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## Opinion

In our opinion, the remuneration report for the year ended 31 December 2017 of Lonza Group Ltd complies with Swiss law and articles 14 – 16 of the Ordinance.

KPMG AG

Michael Blume  
Licensed Audit Expert  
Auditor in Charge

Florin Janine Krapp  
Licensed Audit Expert

Zurich, 7 March 2018

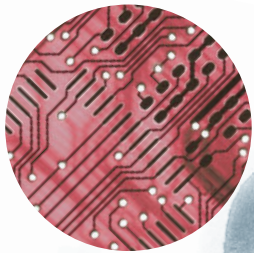
KPMG AG, Badenerstrasse 172, PO Box, CH-8036 Zurich [3]

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# Corporate Governance Report

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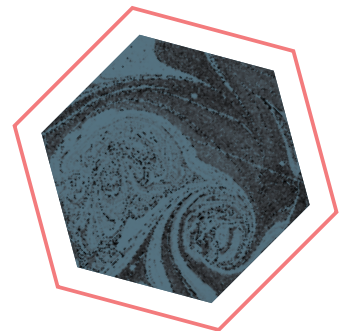


Building on corporate governance as a cornerstone for Lonza's long-term success

Defining and executing Lonza's strategy for future growth

Overseeing and steering Lonza's sustainable growth path

Engaging with our shareholders as Lonza's owners



**74,468,752**

Total Number of Shares



**Annual Report  
2017**

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# Group Structure and Shareholders

## Operational Group Structure



<sup>1</sup>As of 1 February 2017 Fridtjof Helemann joined the Executive Committee as Chief Human Resources Officer, extending the Executive Committee to five members. As of July 2017, Guido Driesen became a permanent guest to the Executive Committee.

<sup>2</sup>Lonza operated with two segments in the first half of 2017. When Capsugel was acquired on 5 July 2017, it remained a separate operational segment for the balance of the year. From 1 January 2018, Capsugel has been fully integrated into Lonza Pharma&Biotech and Lonza Specialty Ingredients.



# Segments<sup>1</sup>

Lonza's activities are organized into the following segments:

The **Pharma&Biotech** segment covers Custom Development and Manufacturing offerings directed to pharmaceutical markets, as well as offerings from Lonza's Bioscience Solutions business for the bioresearch market. In the reporting year, it included five business units: **Mammalian Manufacturing, Chemical and Microbial Manufacturing, Clinical Development and Manufacturing, Emerging Technologies and Bioscience Solutions.**<sup>2</sup> This all-encompassing segment offers pharmaceutical and biotech industries Lonza's recognized development and manufacturing know-how and broad technology platform.

The **Specialty Ingredients** segment includes consumer-oriented offerings with four business units in the reporting year: **Consumer Health, Agro Ingredients, Coatings and Composites, and Water Care.**<sup>3</sup>

<sup>1</sup>Lonza operated with two segments in the first half of 2017. When Capsugel was acquired on 5 July 2017, it remained a separate operational segment for the balance of the year. From 1 January 2018, Capsugel has been fully integrated into Lonza Pharma&Biotech and Lonza Specialty Ingredients.

<sup>2</sup>As of 1 January 2018, the Pharma&Biotech segment is operating with a Chemical Division and a Biologics Division, as well as the existing Bioscience Solutions Business Unit and a new Capsule Delivery Solutions Business Unit. The latter business unit will cover the capsules business for pharma markets. Capsugel's dosage forms and development services have been integrated in the newly formed Dosage Forms and Delivery Systems (DFDS) Business Unit within the Chemical Division.

<sup>3</sup>As of 1 January 2018, the Specialty Ingredients segment is operating in three distinctive units: a Consumer Health Division, a Consumer & Resources Protection Division and a Water Care Business Unit. The former Consumer Health and Nutrition business of Capsugel has been integrated within the existing Consumer Health & Nutrition business of Lonza's Specialty Ingredients segment, and together they have formed the new Consumer Health and Nutrition Business Unit. Together with the Consumer Product Ingredients Business Unit, they have formed the new Consumer Health Division, Coatings & Composites and Agro Ingredients are continuing to operate in their current structures under the new umbrella of a Consumer & Resources Protection Division.

## Operational Units

Operational Units are divided into four: Pharma&Biotech Operations and Research & Development, along with Specialty Ingredients Operations and Research & Technology. After closing of the Capsugel acquisition on 5 July 2017, Capsugel remained an independent operational unit within the Lonza structure to prepare functional and business integration. From 1 January 2018, Capsugel has been fully integrated within the Lonza Operational Units mentioned above.

## Corporate Functions

The Corporate Functions include Human Resources, Finance & Controlling, IT, Corporate Development, Engineering, Legal / Ethics & Compliance/ IP, Procurement, Quality, Corporate Communications and Investor Relations and Environment, Health and Safety.

## Global Business Service Organization

The Global Business Service Organization (GBSO) supports our market activities by implementing corporate guidelines and driving service excellence. The GBSO is helping to facilitate Lonza's profitable growth by establishing standardized and harmonized solutions that enable the implementation of innovations at pace and scale. Key focus areas are on the critical business support functions.

# Holding Company and Listed Companies

Lonza Group Ltd, with registered office in Basel (CH), is the ultimate parent company of the Lonza Group. Except for Lonza Group Ltd, no company belonging to the Lonza Group is listed. Please refer to the Shares and Participation Certificates section, for information on the listed shares, the stock exchanges on which Lonza Group Ltd is listed and the market capitalization.

## Principal Subsidiaries and Joint Ventures

The principal subsidiaries and joint ventures of the Lonza Group are shown in [Note 33: Principal Subsidiaries and Joint Ventures](#).

## Significant Shareholders

According to disclosure notifications filed with Lonza, the following shareholders held more than 3% of the Lonza share capital as of 31 December 2017.

Principal shareholders	%
BlackRock, Inc., New York, NY (USA)	9.67
Massachusetts Mutual Life Insurance Company, Springfield, MA (USA)	4.06

## Cross-Shareholdings

Lonza Group Ltd has not entered into any cross-shareholdings.

# Capital Structure

## Share Capital

As of 31 December 2017, Lonza's share capital amounted to CHF 74,468,752, fully paid-in and divided into 74,468,752 registered shares with a par value of CHF 1 each.

## Shareholder Structure

	31 December 2017		31 December 2016	
	Shareholders in %	Shares in %	Shareholders in %	Shares in %
Switzerland	88.05	18.47	85.61	20.82
United Kingdom	0.74	18.96	1.12	21.28
USA	2.84	5.80	3.98	3.62
Others	8.36	10.60	9.28	12.61
Shares in transit		45.87		41.43
Treasury shares without voting rights	0.01	0.30	0.01	0.24
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Total number of shares		74,468,752		52,920,140

## Share Register

	31 December 2017	31 December 2016
Registered shareholders	15,110	11,569
Registered shares	38,321,348	30,996,771
<b>Share distribution:</b>		
1-100	5,868	4,933
101-1,000	7,844	5,681
1,001-50,000	1,312	920
50,001- 100,000	38	31
100,001- 1,000,000	44	28
over 1,000,000	4	3
Total registered shareholders	15,110	11,596

# Authorized Conditional Capital

The Board of Directors is authorized to increase, at any time until 25 April 2019, the share capital of Lonza through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000. This authorized capital was created by the Annual General Meeting held on 25 April 2017. The additional terms and conditions of the authorized capital (including the group of beneficiaries who have the right to subscribe for this additional capital) are set out in Article 4<sup>ter</sup> of the [Lonza Articles of Association](#).

Contingent Capital: Lonza's share capital may be increased through the issuance of a maximum of 7,500,000 fully paid-in registered shares with a par value of CHF 1 each up to a maximum aggregate amount of CHF 7,500,000. This contingent capital (also called conditional capital) was created by the Annual General Meeting on 25 April 2017. The additional terms and conditions of the conditional capital (including the group of beneficiaries who have the right to subscribe for this additional capital) are set out in Article 4<sup>bis</sup> of the [Lonza Articles of Association](#).

According to Article 4<sup>quater</sup> of the [Lonza Articles of Association](#), the capital increases in the form of contingent capital and authorized capital may increase Lonza's share capital by a maximum aggregate amount of CHF 7,500,000.

## Changes in Capital

Lonza has successfully placed 5 million new shares (Authorized Capital), which were listed and admitted to trading on the SIX Swiss Exchange on 3 February 2017 (see [note 4.4](#) of the Financial Report 2016). The share capital has further been increased in May 2017 by an issuance of 16,548,612 new registered shares with a par value of CHF 1 each in the form of an ordinary capital increase, as approved by the Annual General Meeting held on 25 April 2017.

as of 31 December	2017	2016	2015	2014
Share capital in CHF	74,468,752	52,920,140	52,920,140	52,920,140
Registered shares	74,468,752	52,920,140	52,920,140	52,920,140
Par value in CHF / share	1	1	1	1

## Shares and Participation Certificates

Lonza registered shares, with a par value of CHF 1 each, are listed on the SIX Swiss Exchange (SIX), with secondary listing on the SGX Singapore Exchange. In Switzerland they have been included in the Swiss Market Index (SMI) since 3 May 2017.

Lonza has not issued any participation certificates (Partizipationscheine, non-voting shares).

## Stock Exchange Listing / Trading:

- SIX Swiss Exchange
- SGX Singapore Exchange

## Common Stock Symbols

- Bloomberg LONN SW
- Reuters LONN.S
- SIX Financial Information LONN
- SGX O6Z

## Security Number

- Valor 001384101
- ISIN CH0013841017

On 31 December 2017, Lonza had a market capitalization of CHF 19,607 billion (2016: CHF 9,330 billion).

## Profit-Sharing Certificates

Lonza has not issued any non-voting equity security (Genussscheine, profit-sharing certificates).

## Limitations on Transferability and Nominee Registrations

Purchasers of registered shares declaring that they have acquired these shares in their own name and for their own account will be entered without limitation as shareholders with voting rights in the share register. Persons who do not declare to have acquired the respective shares in their own name and for their own account are considered “nominees” and will be entered with voting rights in the share register up to a maximum of 2% of the share capital, unless the actually entitled persons are revealed. The details are set out in Article 6 of the [Lonza Articles of Association](#). This restriction may only be removed by a resolution of the Shareholders’ Meeting with a quorum in accordance with Swiss law.

## Convertible Bonds

Neither Lonza Group Ltd nor any of its subsidiaries has outstanding convertible bonds.

# Options

As of 31 December 2017, no options or warrants to acquire shares issued by or on behalf of Lonza Group Ltd were outstanding.



# Board of Directors

The Board of Directors is made up of ten non-executive members.

Name	Nationality	Year of birth	Year of initial appointment	Expiration of current term of office	Independence
Rolf Soiron <sup>1</sup>	Swiss	1945	2005	2018	Independent
Patrick Aebischer	Swiss	1954	2008	2018	Independent
Albert M. Baehny <sup>2</sup>	Swiss	1952	2017	2018	Independent
Werner Bauer	Swiss	1950	2013	2018	Independent
Jean-Daniel Gerber <sup>1</sup>	Swiss	1946	2011	2018	Independent
Christoph Mäder	Swiss	1959	2016	2018	Independent
Barbara Richmond	British	1960	2014	2018	Independent
Margot Scheltema	Dutch	1954	2012	2018	Independent
Jürgen Steinemann	German	1958	2014	2018	Independent
Antonio Trius	Spanish	1955	2013	2018	Independent

<sup>1</sup> Rolf Soiron and Jean-Daniel Gerber will not stand for re-election at the AGM this year (see [Letter to Shareholders](#))

<sup>2</sup> Albert M. Baehny was elected to the Board of Directors by the AGM 2017 and holds the position of Vice-Chairperson of the Board of Directors.

The assessment of the independence of the members of the Board of Directors is made pursuant to Article 14 of the Swiss Code of Best Practice for Corporate Governance. Independent members shall mean non-executive members of the Board of Directors who have never been members of the Executive Committee, or were members thereof more than three years ago, and who have no or comparatively minor business relations with the company.

Since 2017, Dr Patrick Aebischer has been a Senior Partner and Member of the Investment Advisory Committee of NanoDimension Management Limited. In 2017 Lonza decided to commit to a limited investment in a venture fund managed by NanoDimension Management Limited. Dr Aebischer abstained from voting on this item. The indirect business relations between Lonza and Dr Aebischer resulting from said commitment are considered comparatively minor; and pursuant to the principles set forth in the preceding paragraph, Dr Aebischer is considered independent.

## Limitation of Number of Mandates

According to Article 26 of [Lonza's Articles of Association](#), no member of the Board of Directors may hold more than:

- eight additional mandates in listed and non-listed companies, out of which not more than four mandates may be in listed companies;
- five mandates held at the request of Lonza or companies controlled by it; and
- ten mandates in associations, charitable foundations, trusts and employee welfare foundations.

The Chairperson of the Board of Directors may not hold more than eight additional mandates in listed and non-listed companies, out of which no more than three may be in listed companies.

Mandates shall mean mandates in the supreme governing body of a legal entity that is required to be registered in the commercial register or a comparable foreign register. Mandates in different legal entities that are under joint control or in the same beneficial ownership are deemed to be a single mandate. Mandates in companies that are controlled by Lonza or that control Lonza are not subject to the limitation set forth above.

All Board members comply with the provisions regarding their mandates. This is verified by Lonza on a regular basis.

## Elections and Terms of Office

Each member of the Board of Directors is individually elected by the Annual General Meeting for a term of office of one year until the end of the next Annual General Meeting. Board members may not serve more than nine complete terms of office on the Board of Directors. If deemed in the best interest of the Company, the Board of Directors can extend this limit.

The Chairperson of the Board of Directors is elected by the Shareholders' Meeting. The Vice-Chairperson is appointed by the Board of Directors. The members of the Nomination and Compensation Committee are elected by the Shareholders' Meeting on an annual basis. The members of the other Board Committees are appointed by the Board of Directors. The Chairpersons of the Board Committees are nominated by the members of the respective Board Committees, except the Chairperson of the Nomination and Compensation Committee that is elected by the Board in corpore.

## Internal Organizational Structure

The Board of Directors consists of the Chairperson, the Vice Chairperson and the other Board members. In accordance with Lonza's Articles of Association, the number of members must be at least five.

The members of the Board of Directors sat on the following committees in 2017<sup>3</sup>:

Name	Audit and Compliance Committee	Nomination and Compensation Committee	Innovation and Technology Committee
Rolf Soiron			Member
Patrick Aebischer			Chairperson
Werner Bauer			Member
Jean-Daniel Gerber		Chairperson	
Christoph Mäder		Member	
Barbara Richmond	Member		
Margot Scheltema	Chairperson		
Jürgen Steinemann		Member	
Antonio Trius	Member		

<sup>3</sup>Albert M. Baehny does not sit on any of the committees of the Board of Directors.

The Board of Directors strives to select the committee members based on their professional background and experience.

## Audit and Compliance Committee

The Audit and Compliance Committee meets and consults regularly with the Executive Committee, the Lonza Audit Services and the external auditors to review the scope and results of their work and their performance, according to the [Audit and Compliance Committee Charter](#). Among other responsibilities, the Audit and Compliance Committee reviews (i) the external auditors' independence, (ii) the systems of internal control and financial reporting, (iii) the risk management system, (iv) compliance with laws, regulations and policies and (v) Lonza's financial statements and results (including releases). The Audit and Compliance Committee is empowered to decide the tasks assigned to it, and it regularly informs the full Board of Directors on all matters discussed and decided in its meetings. The members of the ACC benefit from their broad professional backgrounds and experience as finance director, CFO and CEO for their committee work. Internal and external auditors have full and free access to the Audit and Compliance Committee, which also oversees the Lonza Audit Services. The Lonza Audit Services have a direct reporting line to the Chairperson of the Audit and Compliance Committee.

## Nomination and Compensation Committee

The Nomination and Compensation Committee is entrusted with responsibilities that include the review and recommendation of compensation policies and plans (e.g. incentive compensation and equity plans) and the compensation of the members of the Executive Committee. This Committee also makes an assessment to ensure that the area of nomination and compensation is in compliance with the standards set forth in the associated charter. Further, the Nomination and Compensation Committee evaluates potential members of the Board of Directors. The Nomination and Compensation Committee is empowered to decide the tasks assigned to it and regularly informs the full Board of Directors on matters discussed in its meetings and submits proposals for Board decision in accordance with the [Nomination and Compensation Committee Charter](#).

## Innovation and Technology Committee

The Innovation and Technology Committee monitors potential technology breakthroughs, supports management in driving innovation projects and provides and facilitates contacts, e.g. with academia and research institutions. With regard to the tasks assigned to it, the Innovation and Technology Committee regularly informs the full Board of Directors on all matters discussed and decided in its meetings, in accordance with the [Innovation and Technology Committee Charter](#).

## Number of Meetings, Duration and Attendance

	Board of Directors	Audit and Compliance Committee (ACC)	Nomination and Compensation Committee (NCC)	Innovation and Technology Committee (ITC)
Number of meetings	9 (6 ordinary meetings and 2 extraordinary conference calls) and 1 extraordinary meeting	6 (5 ordinary and 1 extraordinary meeting)	6	5
Average duration	Conference calls: 1 hour Ordinary meetings: 6:30 hours	2:15 hours	2:15 hours	2 hours
Overall attendance	89%	94%	100%	100%

The Regulations Governing Internal Organization and Board Committees set out in detail the powers and responsibilities of the Board of Directors, its Committees and the Executive Committee. These standing Board Committees provide support to the Board of Directors in their respective areas of responsibility.

The Board of Directors meets with all members of the Executive Committee at each ordinary Board meeting for business updates and decisions to be taken. The CEO is a permanent guest of the Innovation and Technology Committee and is regularly invited to the meetings of the Nomination and Compensation Committee. The CFO attends all meetings of the Audit and Compliance Committee.

## Areas of Responsibility

In accordance with the law and the [Lonza Articles of Association](#), the Board of Directors is the supreme governance body of the Group. The Board of Directors is responsible for the tasks assigned to it according to (i) Article 18 of the [Lonza Articles of Association](#) and (ii) the [Regulations Governing Internal Organization and Board Committees \(Article 2.8\)](#). The Board of Directors defines the strategic direction and is responsible for the ultimate management of Lonza as well as the supervision of the persons entrusted with Group management. It is responsible for issuing the necessary instructions especially with regard to compliance with the law, the Articles of Association, the regulations and directives. In compliance with law and the Articles of Association, the Board of Directors has – with the exception of non-delegable and inalienable duties – delegated the management of the company to the Executive Committee.

The Board of Directors commits itself to maintaining the highest standards of integrity and transparency in its governance of Lonza. On an annual basis, the Board undertakes a self-assessment process. The aim is to achieve continuous improvement in the functioning of the Board.

# Information and Control Instruments

The Board of Directors ensures that it receives sufficient information from the Executive Committee to perform its supervisory duty and to make the decisions that are reserved for the Board of Directors through several means.

## Board Information

The [Regulations Governing Internal Organization](#) and Board Committees confer on the CEO the duty to inform the Executive Committee and – together with the Chairperson – the Board of Directors on the business activities and all important business transactions, including risk issues. In addition, during Board meetings, each member of the Board may request information from the other members of the Board, as well as from the members of the Executive Committee present on all affairs of the Company and the Group. Outside of Board meetings, each member of the Board may request from the members of the Executive Committee information concerning the course of business of the Company and the Group.

## Regular Reports to the Board

In addition to the documents required to pass resolutions, the Board of Directors receives the following reports:

- Monthly reports on the sales and earnings performance of the Group structured by segments.
- Reports on the cash flows, debt and debt-equity ratio, plus other relevant key figures for the Group on a quarterly basis.
- Qualitative assessments of the segments on a quarterly basis.
- Reports of the external audits for the full-year and half-year results (through the Audit and Compliance Committee).
- In cases involving extraordinary events of considerable commercial relevance, the Board of Directors receives direct, immediate information.
- Risk assessment reports submitted at least once per year; they are designed to provide the Board with a consistent, Group-wide perspective of key risks.

## Internal Audit

The Board of Directors, through the Audit and Compliance Committee, is supported by Lonza Audit Services. The Lonza Audit Services group comprises 12 internal audit positions, reviewing financial, operational and information technology-related activities of the entire Lonza Group with a risk-based audit program.

They continually evaluate the adequacy and effectiveness of the system of internal controls as well as compliance with company policies and procedures, and they recommend appropriate actions to correct deficiencies identified. In 2017, they delivered 48 internal audit reports to the Audit and Compliance Committee.

## Internal Control System

Lonza has a system of internal financial and accounting policies, procedures and controls to provide a reasonable assurance – given the inherent limitations of all internal control systems to be implemented at an appropriate cost – that transactions are executed in accordance with company authorization, that they are properly recorded and reported in the financial statements, and that assets are properly safeguarded.

## Compliance Instruments

In addition to the above-mentioned control instruments, Lonza has implemented various other measures to improve compliance within the Group. The implementation of these measures is supervised by the Audit and Compliance Committee. One of these measures is the issuance of a Code of Conduct that expresses Lonza's core principles and values in regard to professional business behavior. It also provides assistance in recognizing, understanding and complying with the laws and ethical standards that govern Lonza's business activities. The Code of Conduct is available to all employees and information about it has been widely circulated within the Group. Lonza employees have to pass iComply tests in online training courses, dealing with topics such as those addressed by the Code of Conduct, in particular antibribery, competition law, insider trading and conflicts of interest. In addition to these measures, Lonza offers a "whistleblower" hotline (known as "Lonza Ethics Hotline"), which is operated by an external company. Cases disclosed through the "whistleblower" hotline are ultimately reported to the Audit and Compliance Committee. Lonza periodically reviews and updates its policies to address changes of laws and regulations and strengthen compliance.

## Risk Assessment

The Board of Directors carries out risk assessments at least on an annual basis. The objective of the risk assessments is to make the principal risks to which Lonza is exposed more transparent and to improve the risk mitigations. In its risk assessment for 2017, the Board of Directors of Lonza identified inter alia the following risks:

- Long-term Contracts – Lonza depends and will depend on its ability to secure and maintain profitable long-term commercial relationships and contracts with customers.
- Quality – Failure to provide quality offerings to customers could have an adverse effect on Lonza's business and could subject it to regulatory actions, product recalls, and costly litigation.
- Competitive Market – Lonza's markets, in particular those with higher profit margins, may become more intensely competitive, and may be characterized by significant pricing and margin pressure.
- Cybersecurity – Lonza relies on the proper functioning of its computer and data processing systems, and a large-scale malfunction or potential unauthorized access to critical and sensitive information could result in disruptions to Lonza's business.

For more details on risk management policy, financial risks (credit, liquidity and market risks) and enterprise risk management, please refer to financial [note 29](#) and [note 31](#) of the Consolidated Financial Statements.

# Rolf Soiron



Rolf Soiron holds a PhD in history from the University of Basel and a PMD from the Harvard Business School.

Chairperson of the Board of Directors of Lonza Group Ltd (since 2005)

## Current Activities and Functions:

- Chairman of the Council of the Foundation of the Graduate Institute of International and Development Studies, Geneva (since 2014) and Member of the Council (since 2010)
- Chairman of the LafargeHolcim Foundation for Sustainable Construction (since 2003)
- Member of the Board of Directors of Jungbunzlauer Holding AG (since 1993)

## Former Activities and Functions:

- Member of the Assembly Council of the International Committee of the Red Cross, Geneva (2010–2017) and Member of the International Committee of the Red Cross, Geneva (2009–2017)
- Member of the Board of economiesuisse (2009–2015)
- Chairman of the Board of Directors of Holcim Ltd (2003–2014) and member of the Board (1994–2014)
- Chairman of the Foundation Council of Avenir Suisse (2009–2014)
- CEO ad interim of Lonza Group Ltd, Basel (January 2012 – April 2012)
- Chairman of the Board of Directors of Nobel Biocare Holding Ltd (2003–2010)
- Chairman of the Basel University Council (1995–2005)
- Managing Director of Jungbunzlauer Group (2001–2003)
- CEO of Jungbunzlauer Group (1993–2001)
- Sandoz Group – COO and Head of Pharma in Basel (1992–1993), Group Vice-President Agribusiness USA in New York (1988–1992)
- Protek Group (orthopedic implants) – President and CEO (1983–1987)
- Sandoz Group – various functions in Human Resources, Finance and Corporate (1972–1983)

# Patrick Aebischer



Patrick Aebischer holds a doctorate in medicine from the University of Geneva. He has received numerous honors, including the Robert Bing Prize of the Swiss Academy of Medicine and the Pfizer Foundation Prize for Clinical Neurosciences.

Member of the Board of Directors (since March 2008)

## Current Activities and Functions:

- Senior Partner of NanoDimension Management Limited (since 2017)
- Member of the Board of Directors of Logitech SA (since 2016)
- Member of the Board of Directors of Nestlé SA (since 2015)
- Scientific technical committee member of the Italian Institute of Technology (since 2015)
- Chairman of the Board of the Novartis Venture Fund (since 2014)
- Member of the Singapore Biomedical Sciences International Advisory Council (since 2013)
- Chairman of the Board of Amazentis SA (since 2007)
- Professor of Neurosciences, Swiss Federal Institute of Technology Lausanne (EPFL) (since 2000)

## Former Activities and Functions:

- President of the Swiss Federal Institute of Technology of Lausanne (EPFL) (2000–2016)
- Member of the Foundation Board of the World Economic Forum (2013–2016)



# Albert M. Baehny



Albert M. Baehny, a Swiss citizen, holds a degree in biology from the University of Fribourg, Switzerland.

Member of the Board of Directors (since April 2017)

## Current Activities and Functions:

- Member of the Board of Investis Group Holding SA (since June 2016)
- Chairman of the Board of Directors of Geberit (since 2011)

## Former Activities and Functions:

- CEO of Geberit Group (2005–2014)
- Head of Group Division Marketing and Sales Europe for Geberit Group (2003–2004)
- Senior Vice-President at Wacker Chemie AG (2001–2002)

## Various Marketing, Sales, Strategic Planning and Global Management Positions with:

- Vantico (2000–2001)
- Ciba-Geigy / Ciba Specialty Chemicals (1994–2000)
- Dow Chemicals Europe (1981–1993)
- Serono-Hypolab (1979–1981)

# Werner Bauer



Werner Bauer holds a diploma and PhD in Chemical Engineering from the University Erlangen-Nürnberg. He has received several scientific honors, among others the BioAlps Award 2011 and Honorary Senator from the Technical University of Munich.

Member of the Board of Directors of Lonza Group Ltd (since April 2013)

## Current Activities and Functions:

- Vice-Chairman of the Board of Directors of Givaudan SA (since 2014)
- Vice-Chairman of the Supervisory Board of Bertelsmann SE & Co. KGaA (since 2012) and Chairman of the Board of Trustees of the Bertelsmann Foundation (since 2011)
- Member of the Supervisory Board of GEA Group AG (since 2011)

## Former Activities and Functions:

- Chairman of the Supervisory Board of Nestlé Deutschland AG (2007–2017)
- Executive Vice-President of Nestlé S.A., Head of Innovation, Technology, Research and Development (2007–2013)
- Executive Vice-President of Nestlé S.A., Head of Technical, Production, Environment, Research & Development (2002–2007)
- Various managerial positions of increasing responsibility at Nestlé (1990–2002)
- Chairman of the Board of Directors of Galderma Pharma SA (2011–2014)
- Chairman of the Board of Directors of Sofinol SA (2006–2012)
- Member of the Board of Directors of L'OREAL, France (2005–2012)
- Member of the Board of Directors of Alcon Inc., Switzerland (2002–2010)
- Director of the Fraunhofer Institute for Food Technology & Packaging (1985–1990)
- Professor of Chemical Engineering at the Technical University of Hamburg (1980–1985)

# Jean-Daniel Gerber



Jean-Daniel Gerber holds a lic. rer. pol. in economics from the University of Bern. He was awarded an honorary doctorate by the Faculty of Economics and Social Sciences of the University of Bern.

Member of the Board of Directors of Lonza Group Ltd (since April 2011)

## Current Activities and Functions:

- Chairman of the Association “Swiss Sustainable Finance” (since 2015)
- Vice-President of the Association “Platform Switzerland Europe” (since 2015)
- Member of the AO Alliance Foundation (since 2015)
- Chairman of the Board of the Swiss Investment Fund for Emerging Markets (SIFEM) (since 2011)
- Chairman of the Swiss Society for Public Good (since 2011)

## Former Activities and Functions:

- Member of the Board of Directors of Credit Suisse Group Ltd (2012–2015)
- Director of the State Secretariat for Economic Affairs (SECO) with the title of State Secretary (2004–2011)
- Director of the Federal Office for Migration (then Federal Office for Refugees) in the Federal Department of Justice and Police (1997–2004)
- Executive Director at the World Bank (1993–1997) and Dean of the Executive Directors of the World Bank Group (1996–1997)
- Chief of Section for Developing Countries in the former Federal Office for Foreign Economic Affairs (1991–1992)

# Christoph Mäder



Christoph Mäder (1959) holds a Master's degree in Law from the University of Basel and is admitted to the Swiss Bar.

Member of the Board of Directors of Lonza Group Ltd (since April 2016)

## Current Activities and Functions:

- Member of the Board Committee of economiesuisse (since 2017)
- Member of the Board of scienceindustries (since 2003)
- Member of the Board of the Basel Chamber of Commerce (since 2002)
- Member of the Group Executive Committee of Syngenta (since 2000)

## Former Activities and Functions:

- Vice Chairman of economiesuisse (2011–2017)
- Member of the Executive Board of the Business and Industry Advisory Committee (BIAC) for the Organization for Economic Co-operation and Development (OECD) (2012–2016)
- Head of Legal & Public Affairs for Novartis Crop Protection AG (1999–2000)
- Senior Corporate Counsel for Novartis International AG (1992–1998)

# Barbara Richmond



Barbara Richmond holds a first-class degree in Management Science from the University of Manchester Institute of Science and Technology in England. Barbara Richmond has substantial knowledge as financial expert, demonstrated by her roles as CFO for various companies. She is a Fellow of the Institute of Chartered Accountants in England and Wales.

Member of the Board of Directors of Lonza Group Ltd (since April 2014)

## Current Activities and Functions:

- Group CFO of Redrow plc (since 2010)

## Former Activities and Functions:

- Group CFO of Inchcape plc, (2006–2009)
- Non-Executive Director and Audit Committee Chair of Scarborough Building Society until its merger with The Skipton Building Society (2005–2009)
- Non-Executive Director, Senior Independent Director and Audit Committee Chair of Carclo Group plc (2000–2006)
- Group CFO of Croda International plc (1997–2006) with dual role as Group CFO and President of Active Ingredients and Industrial Chemicals from 2002 to 2006
- Group CFO of Whessoe plc in 1993 (1993–1997)
- Various financial roles in Alstom Group SA (1987–1992)
- Auditor and management consultant for Arthur Andersen (1981–1984)

# Margot Scheltema



Margot Scheltema holds a doctorate in international law from the University of Amsterdam and a master of international affairs (MIA) from Columbia University in New York.

Member of the Board of Directors of Lonza Group Ltd (since April 2012)

## Current Activities and Functions:

- Member of the Supervisory Board of the Dutch Central Bank (since 2015)
- Member of the Central Plan Committee Dutch Planning Bureau (since 2014)
- Chair of the Monitoring Committee of the Dutch Pension Fund Code (since 2014)
- Council to the Enterprise Chamber of the Amsterdam Court of Appeal (since 2013)
- Member of the Supervisory Board of Warmtebedrijf Rotterdam NV (since 2011)
- Member of the Supervisory Board of TNT Express BV (since 2011)
- Member of the Supervisory Board of Schiphol NV (since 2010)

## Former Activities and Functions:

- Vice-Chair of the Supervisory Board of Triodos Bank (2006–2015)
- Member of the Supervisory Board of ASR NV (2008–2015)
- Member of the Supervisory Board of the Rijksmuseum (2007–2015)
- External Member of the Audit Committee of the Dutch pension fund ABP (2010 to July 2014)
- Member of the Supervisory Board of ECN (2009–2013)
- Member of the AFM External Reporting Committee (2006–2012)
- Financial Director of Shell Nederland BV (2004–2008)
- Various managerial positions within the Shell Group (1985–2004)

# Jürgen Steinemann



Jürgen Steinemann holds a degree in Economics and Business Management from the European Business School in Wiesbaden, London and Paris.

Member of the Board of Directors of Lonza Group Ltd (since April 2014)

## Current Activities and Functions:

- Investor in food and agri businesses
- Managing Director of JBS Holding GmbH (since 2017)
- Chairman of the Supervisory Board of Bankiva B.V. (since 2017)
- Member of the Advisory Board of Tower Brook Capital Partners LP (since 2017)
- Member of the Board of Directors of Barry Callebaut AG (since 2015)
- Chairman of the Supervisory Board of Metro Group AG (since 2015)
- Member of the Supervisory Board of Big Dutchman AG (since 2015)

## Former Activities and Functions:

- Chief Executive Officer of Barry Callebaut Ltd (2009–2015)
- Member of the Board of the Swiss-American Chamber of Commerce (2011–2015)
- Member of the Executive Board and Chief Operating Officer of Nutreco (2001–2009)
- Chief Executive Officer of Loders Croklaan (1999–2001)
- Various senior positions in business-to-business marketing and sales with the former Eridania Béghin-Say Group, ultimately in the “Corporate Plan et Stratégie” unit at the head office in Paris (1990–1998)

# Antonio Trius



Antonio Trius holds a Bachelor's degree in Organic Chemistry from the University of Barcelona, a PhD in Chemistry from the Autonomous University of Barcelona and a PDD in Business Administration from the IESE Barcelona.

Member of the Board of Directors of Lonza Group Ltd (since April 2013)

## Current Activities and Functions:

- Member of the Advisory Board of Naturally Scientific Technologies Ltd. (since 2017)
- Member of the Board of Directors of Quantum Medical & Cosmetics S.L. (since 2015)
- Member of the Board of Directors of MaxamCorp Holding S.L. (since 2014)
- Member of the Board of Directors of Azelis SA (since 2014)
- Member of the Supervisory Board of Altana AG (since 2012)

## Former Activities and Functions:

- Member of the Board of Directors of Mauser Group BV (2015–2017)
- Member of the Board of Directors of Nubiola SL (2011–2015)
- CEO of Cognis GmbH (2001–2010)
- Executive Vice-President Care Chemicals North America Cognis BV (1999–2001)
- Vice-President Care Chemicals at Henkel KGa A (1997–1999)



# Executive Committee

The members of the Executive Committee are appointed by the Board of Directors. Lonza's Executive Committee performs the duties assigned to it by the Board of Directors under the terms of the [Regulations Governing Internal Organization and Board Committees](#). It is responsible for managing Lonza worldwide and for implementing policies and strategies as defined by the Board of Directors. The Executive Committee supports and coordinates the activities of the segments, the operational units, the corporate functions and the global business service organization. The Executive Committee is also responsible for leadership development.

## Members of the Executive Committee

### New Member of the Executive Committee

As of 1 February 2017 [Fridtjof Helemann](#) joined the Executive Committee as Chief Human Resources Officer, extending the Executive Committee to five members.

The Executive Committee is made up of five members.<sup>1</sup>

Name	Nationality	Year of Birth	Function
<a href="#">Richard Ridinger</a>	German	1958	Chief Executive Officer
<a href="#">Rodolfo Savitzky</a>	Swiss	1962	Chief Financial Officer
<a href="#">Sven Abend</a>	German	1968	Chief Operating Officer Specialty Ingredients Segment
<a href="#">Marc Funk</a>	Swiss	1960	Chief Operating Officer Pharma&Biotech Segment
<a href="#">Fridtjof Helemann</a>	German	1954	Chief Human Resources Officer

<sup>1</sup> As of July 2017, Guido Driesen became a permanent guest to the Executive Committee.

## Limitation of Number of Mandates

According to Article 26 of the [Lonza Articles of Association](#), no member of the Executive Committee may hold more than:

- one additional mandate in a listed company;
- two additional mandates in non-listed companies;
- five mandates held at the request of Lonza or companies controlled by it; and
- ten mandates in associations, charitable foundations, trusts and employee welfare foundations.

Mandates shall mean mandates in the supreme governing body of a legal entity that is required to be registered in the commercial register or a comparable foreign register. Mandates in different legal entities that are under joint control or in the same beneficial ownership are deemed to be a single mandate. Mandates in companies that are controlled by Lonza or that control Lonza are not subject to the limitation set forth above.

# Management Contracts

Lonza Group Ltd has not entered into management contracts with companies or natural persons not belonging to the Group.

# Richard Ridinger



Richard Ridinger holds a degree in chemical engineering from the University of Karlsruhe.

Chief Executive Officer (CEO) and Member of the Executive Committee (since May 2012)

## Current Activities and Functions:

- Member of the Board of Directors of Firmenich International SA (since October 2016)

## Former Activities and Functions:

- Transfer and integration of Cognis GmbH into BASF (2011)
- Member of the Management Board and Executive Vice-President “Care Chemicals” of Cognis GmbH (2006–2010)
- SBU Head of “Cognis Care Chemicals” and member of the Cognis Executive Committee (2002–2006)
- Vice-President of the global “Care Chemicals Specialties” business of Cognis GmbH (2000–2002)
- Director of the global Skin Care Ingredients business at Henkel KGaA / Cognis GmbH (1999–2000)
- Various positions at Henkel KGaA in R&D, Engineering and Production Management (1986–1999)

# Sven Abend



Sven Abend holds a PhD in Chemistry from the Christian-Albrechts-Universität in Kiel, Germany and a post-doctorate from the Department of Physics & Astronomy at the University of New York in Stony Brook in the United States.

Chief Operating Officer (COO) Specialty Ingredients Segment (since January 2016) and Member of the Executive Committee (since July 2014)

## Former Activities and Functions:

- CEO of Kolb Ltd in Hedingen, Switzerland (2012–2014)
- Business Manager for Kolb's divisions focusing on specialty surfactants and custom manufacturing (2010–2012)
- Several senior positions in Global Product Management and ultimately as Director of Corporate Key Account Management at Cognis GmbH in Germany (2003–2010)
- Project Scientist for the R&D Home & Personal Care business at Unilever in the UK (2000–2003)

# Marc Funk



Marc Funk holds a Master of Law from the University of Geneva and a Master of Law and Diplomacy from the Fletcher School (Tuft University, MA).

Chief Operating Officer (COO) Pharma&Biotech Segment (since May 2014) and Member of the Executive Committee (since April 2012)

## Former Activities and Functions:

- Group General Counsel and Board Secretary Lonza Group Ltd (2009–2014)
- Associate General Counsel of Merck Serono (formerly Serono) (2004–2008)
- Co-CEO and General Counsel of GeneProt (2000–2004)

# Fridtjof Helemann



Fridtjof Helemann holds a degree in Engineering from the University of Siegen (DE)

Chief Human Resource Officer (CHRO) (since 2016) and Member of the Executive Committee (since February 2017)

## Former Activities and Functions:

- Managing Partner and President of Oxford Leadership (2014–2016)
- Partner and CEO Mercer Inc. Central Europe (2011–2014)
- Vice-President and General Manager Central and Eastern Europe at Right Management (2010–2011)
- Corporate Vice-President HR Henkel AG (2003–2009)
- Various HR consulting roles: Partner Hay Group and MD Kienbaum

# Rodolfo Savitzky



Rodolfo Savitzky holds a degree in Industrial and Systems Engineering from the Monterrey Institute of Technology and an MBA in Finance and Economics from the University of Chicago

Chief Financial Officer (CFO) and Member of the Executive Committee (since October 2016)

## Former Activities and Functions:

- Vice-President, Controller Lonza Pharma&Biotech (2015–2016)
- Division CFO, Novartis Animal Health (2011–2015)
- Business Unit Head of Finance Novartis Animal Health (2006–2011)
- Head of Strategy Planning and Analysis, Novartis Pharmaceuticals (2004–2005)
- Head of Business Planning and Analysis, Novartis Pharmaceuticals (2003–2004)
- Head of Finance Ophthalmic Business Unit, Novartis Pharmaceuticals (2002–2003)
- Various positions at P&G (1990–2001)

# Compensation, Shareholdings and Loans

Details of Board and Executive Committee compensation are contained in the [Remuneration Report](#).



# Shareholders' Participation Rights

## Voting-Rights Restrictions and Representation

Only persons with valid entries in the share register are recognized as shareholders or usufructuaries. A shareholder may only be represented at the Annual General Meeting by a legal representative, another shareholder entitled to vote or the independent proxy. Persons who do not declare to have acquired their shares in their own name and for their own account are considered “nominees” and will only be entered with voting rights in the share register up to a maximum of 2% of the share [Lonza Articles of Association](#) capital, unless the actually entitled persons are revealed. The details are set out in Article 6 of the Lonza Articles of Association. This restriction may only be removed by a resolution of a Shareholders' Meeting with a quorum in accordance with Swiss law.

Each share has the right to one vote. The shares held by Lonza are not entitled to vote at the Annual General Meeting and bear no dividend.

Lonza may use an electronic voting system for all the resolutions to be taken at its Annual General Meetings. The Lonza Articles of Association do not contain any other rules on electronic participation in the Shareholders' Meeting, nor specific rules on the issue of instructions to the independent proxy.

## Statutory Quora

Except as otherwise stipulated by law, an absolute majority of the votes represented at the Annual General Meeting is required for resolutions and elections.

For certain important matters such as a change of the company purpose and domicile, the dissolution of the company without liquidation, and certain matters relating to capital changes, Article 704 of the Swiss Code of Obligations requires at least two-thirds of the voting rights represented and an absolute majority of the nominal value of shares represented.

## Convocation of Shareholders' Meetings

Ordinary Shareholders' Meetings are called in accordance with the law and the Lonza Articles of Association. Extraordinary Shareholders' Meetings must be called upon resolution of a Shareholders' Meeting or if demanded by one or more shareholders representing at least 5% of the share capital. Lonza posts the invitation to shareholders at least 20 days before the Annual General Meeting and publishes it on its website, as well as in the Swiss Official Gazette of Commerce.

# Agenda

One or more shareholders representing together shares with a par value of CHF 100,000 may request an item to be included in the agenda of a Shareholders' Meeting. The request to include an item must be submitted in writing at least 40 days before the meeting, stating the item to be included and the motions.

## Entry in the Share Register

Purchasers of Lonza shares may submit a request to be entered, without limitation, as shareholders with voting rights in the share register, provided they expressly declare that they have acquired these shares in their own name and on their own account. Special rules exist for persons who do not expressly declare in the entry application that they hold the shares on their own account (nominees) (see Limitations on Transferability and Nominee Registrations).

There are no special rules in the [Lonza Articles of Association](#) concerning a deadline for entry in the share register. The share register will this year be closed on 20 April 2018 at 17:00 Swiss time.

# Changes of Control and Defense Measures

## Duty to Make an Offer

According to the Swiss Federal Act on Financial Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FMIA), an investor who acquires more than 33⅓ % of all voting rights (directly, indirectly or in concert with third parties) whether they are exercisable or not, is required to submit a takeover offer for all shares outstanding. No special opting-out or opting-up dispositions are contained in the [Lonza Articles of Association](#).

## Clauses on Change of Control

The employment agreements of the Executive Committee members contain certain clauses on change of control, which are outlined in the [Compensation of the Executive Committee](#) section of the Remuneration Report. In addition, Lonza's share-based compensation programs (E-STIP and LTIP) provide that unvested awards / blocked shares unconditionally vest upon change of control (see [Compensation of the Executive Committee](#) section of the Remuneration Report).

# Auditors

## Duration of the Mandate and Term of Office of the Auditor in Charge

Duration of the Mandate and Term of Office of the Auditor in Charge KPMG Ltd, Badenerstrasse 172, 8026 Zurich 4, Switzerland, has held the mandate as the external statutory auditors of Lonza Group Ltd and the Group since 1999.

The auditing company is elected for a term of one year. Michael Blume from KPMG Ltd has been the auditor in charge since April 2014. The Board of Directors proposes that KPMG Ltd be re-elected as auditors for the 2018 business year.

## Auditing Honorarium

Lonza Group paid KPMG Ltd CHF 5.3 million in 2017 (2016: CHF 3.4 million) for professional services rendered in connection with the audit of the Group's annual financial statements and other audit-related activities. The increase in 2017 is related to the audit of Capsugel and additional audit related activities, required by Lonza's 2017 capital market transactions.

## Additional Honorarium

KPMG Ltd received a total fee of CHF 0.1 million in 2017 (2016: CHF 0.1 million) for services not related to the audit of Group's annual financial statements. These services related to tax and other consulting.

## Supervisory and Control Instruments vis-à-vis the Auditors

The Audit and Compliance Committee is responsible for evaluating the performance and independence of the external auditors on behalf of the Board of Directors. This evaluation occurs at least once a year. The criteria applied for the assessment include professional competence, sufficiency of resources, the ability to provide effective and practical recommendations and coordination of the external auditors with the Audit and Compliance Committee and senior management. In the reporting year, KPMG Ltd attended five Audit and Compliance meetings. In those meetings, the external auditors presented the 2017 audit strategy and their 2017 results. The Comprehensive Auditor's Report to the Board of Directors prepared by KPMG summarizes the reports presented to the Audit and Compliance Committee throughout the year.

Within the yearly approved budget, there is an amount permissible for non-audit services that the external auditors may perform. Within the scope of the approved and budgeted amount, the Chief Financial Officer can delegate non-audit-related mandates to the external auditors, subject to all applicable auditor independence regulations.

The Board of Directors has determined the rotation interval for the auditor in charge to be seven years, as defined by the Swiss Code of Obligations.

The Audit and Compliance Committee reviews Lonza's financial reporting process on behalf of the Board of Directors. Lonza's management is responsible for preparing the financial statements and the reporting process, including the system of internal controls. The Audit and Compliance Committee is also responsible for overseeing the conduct of the activities by Lonza management and the external auditors.

The external auditor, KPMG Ltd, is responsible for expressing an opinion on the accounting records and the financial statements prepared in accordance with Swiss law and the Lonza Articles of Association. KPMG Ltd is also responsible for expressing an opinion on the consolidated financial statements (balance sheet, income statement, statement of comprehensive income, cash flow statement, statement of changes in equity and notes) prepared in accordance with the International Financial Reporting Standards (IFRS), which is issued by the International Accounting Standards Board (IASB), and with Swiss law.

KPMG also audited the Lonza Remuneration Report 2017 with respect to the information required by Articles 14 to 16 of the Swiss Ordinance Against Excessive Compensation in Stock-Exchange-Listed Companies.

# Information Policy and Key Reporting Dates

Lonza pursues a proactive and professional communication policy. Lonza publishes price-sensitive information in accordance with the obligation to disclose price-sensitive facts as required by the SIX Swiss Exchange. Ad hoc notices are made available on its [news site](#). Lonza's website also provides a [news and subscription service](#) that allows interested parties to receive, via e-mail distribution, free and timely notification of price-sensitive facts.

Corporate Communications reports directly to the Chief Human Resources Officer, while Investor Relations reports to the Chief Financial Officer. On basic matters of general corporate policy, Corporate Communications receives its directives from the Executive Committee.

Lonza makes the Annual Report, the Half-Year Results and Full-Year Results available to all interested parties as a [PDF download](#). The invitation to the Annual General Meeting is published on Lonza's website and in the Swiss Official Gazette of Commerce. It is also sent by mail to the shareholders entered in the share register.

Lonza's website is regularly updated and provides relevant information such as share-price development, news releases and presentations.

Media conferences and analyst meetings generally take place at Lonza's headquarters or by conference call. Lonza manages an annual program of investor meetings. Investors, potential investors and financial analysts are also welcomed at Lonza's headquarters in Basel.

## Anticipated Key Reporting Dates

The list of all corporate events of special interest is subject to change during the year as dates are adjusted and added. Updated information is found on the [Investor Relations](#) page of Lonza's website.

## Upcoming Financial Events

Date and time	Event
04 May 2018, 10:00 am CET	Annual General Meeting for the Financial Year 2017 Congress Center Basel, Switzerland
04 May 2018	Q1 2018 Qualitative Business Update
08 May 2018	Ex-Dividend Date
09 May 2018	Record-Dividend Date
11 May 2018	Dividend Payment Date
25 July 2018	Half-Year Results 2018
24-26 Sep 2018	Capital Markets Day (Zurich, Switzerland)
25 October 2018	Q3 2018 Qualitative Business Update
18 April 2019, 10:00 am CET	Annual General Meeting for the Financial Year 2018 Congress Center Basel, Switzerland

# Contact Us

Corporate inquiries and further information, please contact:

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### Production Details

Production  
Design and Illustration  
Website and Programming

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Lonza Design Team  
Lonza Digital Team