



Annual Report 2015
Corporate Overview



Annual Report 2015

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About This Report

Lonza's Annual Report 2015 covers the period from 1 January 2015 to 31 December 2015. In it we aim to present a balanced and concise overview of our strategy and performance.

The two-part report is written for our employees, shareholders, customers, suppliers, business partners, community members, financial institutions, journalists, governmental and non-governmental organizations and other stakeholders. It includes comprehensive information about Lonza's two main segments: Pharma&Biotech and Specialty Ingredients.

In the first part of the Annual Report, the Corporate Overview section, we seek to provide a transparent summary of our corporate structure, practices and processes and to highlight the challenges and successes of 2015. The second part of the report, the Financial Overview section, includes financial statements and notes, investor background, remuneration details and corporate governance information for Lonza.

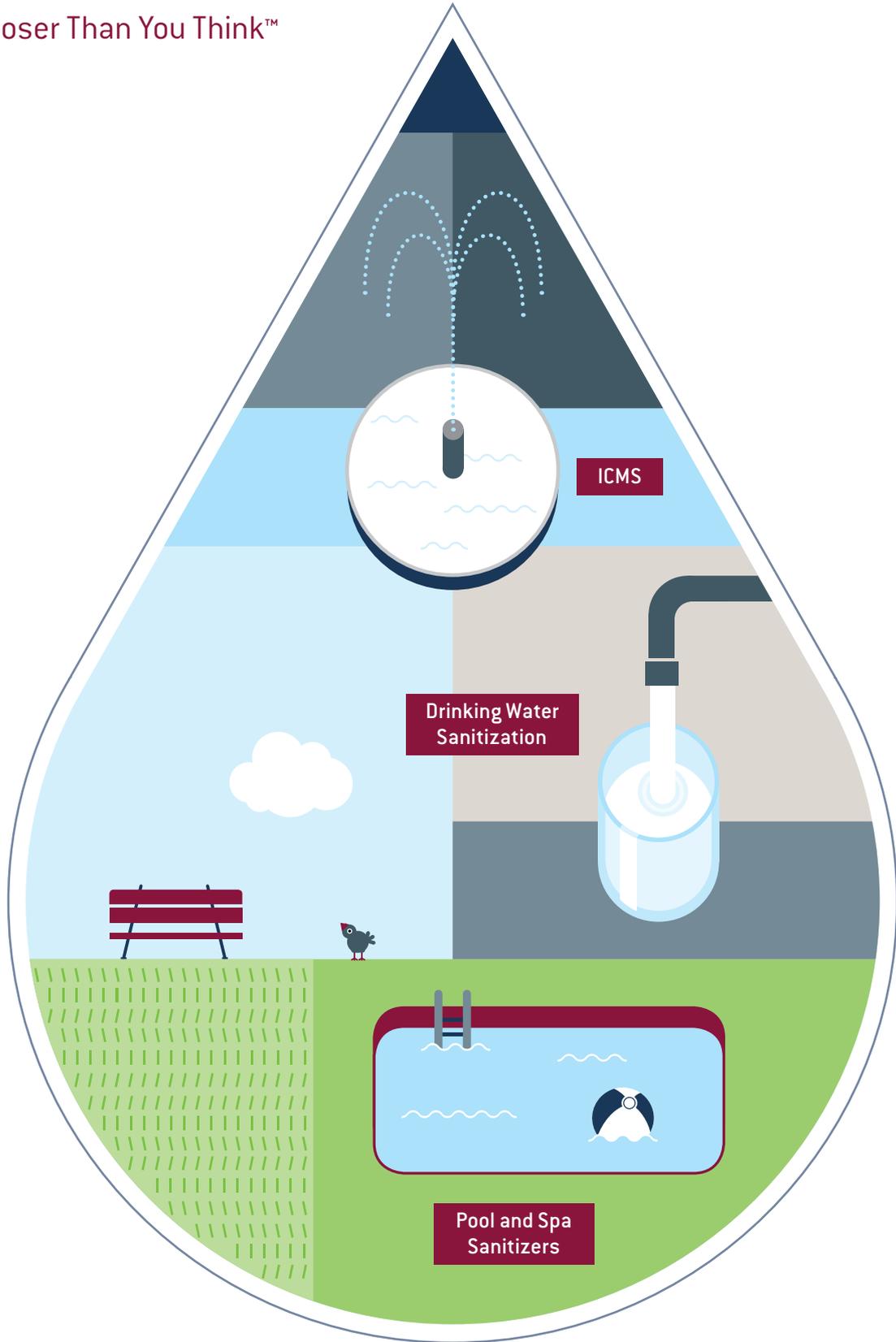
Lonza's Annual Report is primarily an online report with a parallel print version that includes the same information as the digital version. We adopted this format as an interactive pdf that allows readers to engage with the material online in an effort to save paper.

By encouraging readers to go online first for background about Lonza in general and in 2015, we can reduce the number of hard copies of the report that we need to print.

The Financial Overview section, which includes the Financial Report, Remuneration Report and Corporate Governance Report, is again being offered online as a downloadable pdf.



Closer Than You Think™



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Rolf Soiron
Chairman of the Board of Directors

Richard Ridinger
Chief Executive Officer

Dear Shareholders

Normally in our Annual Report, we review the last year and look ahead to the future. But in 2015 we also took some time to look further back – back to the commitments we made to you, our shareholders, during 2012.

In 2012 we embarked on our transformational journey, and we now view 2015 as the end of the “era of heavy lifting” as we are on a much more stable path toward the future compared with 2012. Reaching this important milestone was thanks to the support, hard work and commitment of our employees and our other stakeholders. Of course, further improvements are needed as we continue working in the direction of our goal of being a fully customer- and market-focused company and a top player in our peer group. However, the last four years show that we have achieved some remarkable successes.

What Goals We Have Reached ...

With the full-year 2015 results, Lonza concluded the guidance cycle of 2012–2015. When we started our journey in 2012, Lonza was a traditional asset- and production-focused company with mediocre financial results and a stretched balance sheet. We then announced a challenging set of key performance indicators (KPIs) and set out to reach them. The company has successfully delivered on our KPIs, as reflected in both quantitative and qualitative measures of success.

“Focus and deliver” was our motto at the beginning of our journey. With our focus on core activities, we gave up many projects that were not critical to our success. We reviewed process after process, evaluated teams and our organizational set-up and launched or intensified many initiatives such as the Visp Challenge, the Business Service Excellence project and the Go-to-Market-Excellence initiative. Along the way we took a critical look at our portfolio and our site network and took some tough decisions.

The stronger focus on our company’s critical success factors, such as operational implementation and excellence in execution, also led to a continuous improvement in our operational delivery, which was an important element of the strong performance of our Pharma&Biotech segment in 2015.

All of these actions helped us deliver on our financial KPIs and thereby stabilize the company. Evidence of how stable the company was during the year 2015 was our ability to balance macroeconomic challenges, such as the strong Swiss franc and the volatile raw-material prices.

For you, our shareholders, this successful transformation was evident in the steadily rising share price and a continued improvement of our balance sheet, which provided financial stability and resulted in a stable dividend policy.

The transformation also helped us to get closer to our customers and build stronger relationships, to expand into new markets and to develop new marketing approaches. We made strides in optimizing our portfolio and applied new business models and approaches to strengthen our position in our chosen markets.

For employees the transformation has brought a more challenging, yet satisfying, work environment as it ushers in a new era for our company – a company that is more agile and flexible to adapt to the future demands of our customers and the changing marketplace.

With the strong 2015 results, we have a rock-solid foundation for the future. We have delivered – for the fourth year in a row – on our promises to transform Lonza into a more productive, market-focused and profitable company. And we will continue to do so.

KPI

million CHF	Actual 2012	Actual 2015	Guidance 2015
CORE EBITDA-Margin	17.6%	20.9%	20.0%
CORE EBIT	392	524 ¹	>5% growth/yr
CORE RONOA	11.0%	16.4%	15%
Net debt	2 647 ²	1 660	1 850

1 | 10.2% average per year

2 | 1 January 2012

How Our Segments Performed ...

During 2015 both of our segments contributed financially and operationally to achieving our strong results, with sales growth that fully met our expectations.

Driven by a better product mix and value-chain improvements, Specialty Ingredients delivered solid results and managed to counterbalance currency-exchange effects with improved portfolio management and new customer offerings.

Consumer Care performed as expected based on firm demand. Benefiting from the good development of the specialty portfolio was the Industrial Solutions business, which delivered strong results. Effective 1 January 2016, Industrial Solutions was renamed Coatings and Composites and was expanded to include the Wood Protection business unit. Water Treatment grew on the top and the bottom line.

Good demand resulted in high capacity utilization in most technologies. Innovative solutions provided to Specialty Ingredients customers were highly appreciated, and new product launches gained traction.

The foreign-exchange rate development influenced the majority of the Specialty Ingredients businesses, especially the Swiss-based Agro Ingredients and industrial products businesses. However, additional sales, price increases and productivity improvements largely compensated for this impact in 2015.

Our Pharma&Biotech segment benefited from positive momentum due to favorable market conditions, especially in biologics, and delivered a significantly better operational performance. This enhanced operational performance and solid demand in the mammalian businesses drove the segment's greatly improved results in 2015. The made-to-stock Bioscience Solutions business delivered strong growth in both sales and profits.

A firm market demand for commercial therapies and products in clinical trials was observed throughout the year, and the outsourcing and multi-sourcing trends continued. New contracts were signed in 2015 on the back of positive developments of various product candidates' moving forward in clinical trials and for new technologies, driven by a high level of market-driven activities.

Coming back to our initial comments about our cycle 2012–2015, we would like to emphasize that our Specialty Ingredients segment was the stabilizing factor of the company during this period. That strong and steady performance gave us the opportunity to re-structure and re-build our Pharma&Biotech segment, which now is stabilized and set up for further profitable growth.

How We Are Continuously Improving...

We applied the concept of continuous improvement broadly in 2015, not just to performance factors but also to ourselves as leaders. For example, our Board of Directors and Executive Committee members all took part in educational seminars and workshops on topics such as trends in modern leadership and the value of corporate social media.

Also our corporate governance approaches and management systems, which are necessary to deliver such good results and which will help to further advance the company, have been actively managed and strengthened during 2015. Our Board of Directors and Executive Committee, for instance, continue to fully support a comprehensive risk management program as an essential element of sound corporate governance and are committed to embedding robust risk management processes in Lonza's daily culture.

How We Are Managing Our Business Environment ...

Over the last years, Lonza has significantly increased the balance of our businesses, activities and assets across the globe and accordingly reduced our dependency on Switzerland. However, with our Basel headquarters and our Visp site located in Switzerland, we are still affected by regulatory and economic developments in our country of origin.

For this reason we have become more vocal about our apprehension over the increasing burdens being placed on Swiss industry by tightened regulations and laws. We feel that the industry's competitive position has additionally been challenged by the strength of the Swiss franc, particularly following the lifting of the EUR/CHF ceiling by the Swiss National Bank (SNB) in mid-January 2015. If Switzerland does not want to further erode its industrial base, we believe that politicians and regulators need to apply prudence and measured approaches.

How We Are Addressing Our Environmental Responsibility ...

Another important topic on our agenda remains our approach to our environmental responsibility. We strive to manage our ecological footprint and to constantly reduce our emissions and energy consumption. In the Environment, Health and Safety (EHS) section of our Annual Report, you can read how well we performed in 2015.

Not unexpectedly, the examination and the handling of our industrial heritage in Visp have remained complex matters we are dealing with on an ongoing basis. The technical examinations of the soils in residential areas have been concluded to a large extent; and we support the remediation of contaminated parcels and the additional clarifications on topics such as groundwater, risk analysis for food and feed and examinations of farm land. We can only solve this issue together with a collaborative and constructive approach with the different stakeholders; and we continue to be active in discussions with the Canton of Valais, the municipalities and other involved parties.

Lonza wants to drive forward effective and pragmatic solutions to address this legacy of industrial production, notwithstanding the repartition of responsibility among the various parties involved in the contaminations.

Where We Are Headed Next ...

This year's Annual Report will provide evidence of the sound progress we are making in our transformation into a more customer-focused and market-driven organization in 2015. Improving our market orientation will help us better manage the short-, medium- and long-term time horizons. We will continue to work on balancing our portfolio and proactively seeking to adjust business models to the current market and economic situations.

To stay ahead of the rapidly evolving markets and our own customers' needs, we must focus on innovation in all areas where Lonza is involved. Among the innovative approaches are business model innovation, product and service innovation for customers, value-chain and manufacturing process innovation and, last but not least, business service innovation.

One of our main priorities for 2016 will be safety as our performance in 2015 was far from satisfactory. We will move from reactive into proactive mode in other areas, too. For example, we need to take an early and active stance for responding to upcoming new technologies and developments, such as digital technologies, so that we are ahead of our customers and prepared to meet their needs.

Financially, we want to become a best-in-class company in relation to our return on capital and be continuously in the top group of our peers. With the firm foundation laid by 2015's successful financial performance and the excellent operational performance of our businesses, Lonza is set to grow profitably in the future.

Therefore, and based on the present macro-economic environment and current visibility, as well as the strongly improved results of 2015, Lonza is re-confirming the 2018 guidance of:

- CORE EBITDA approaching CHF 1 billion in 2018.
- CORE RONOA of 20% in 2018.
- Sales growth of low- to mid-single digits on average per year until 2018.

In 2016 Lonza is expected to grow sales in line with the 2018 guidance and targets a CORE EBIT growth of above 5%, based on the same conditions.

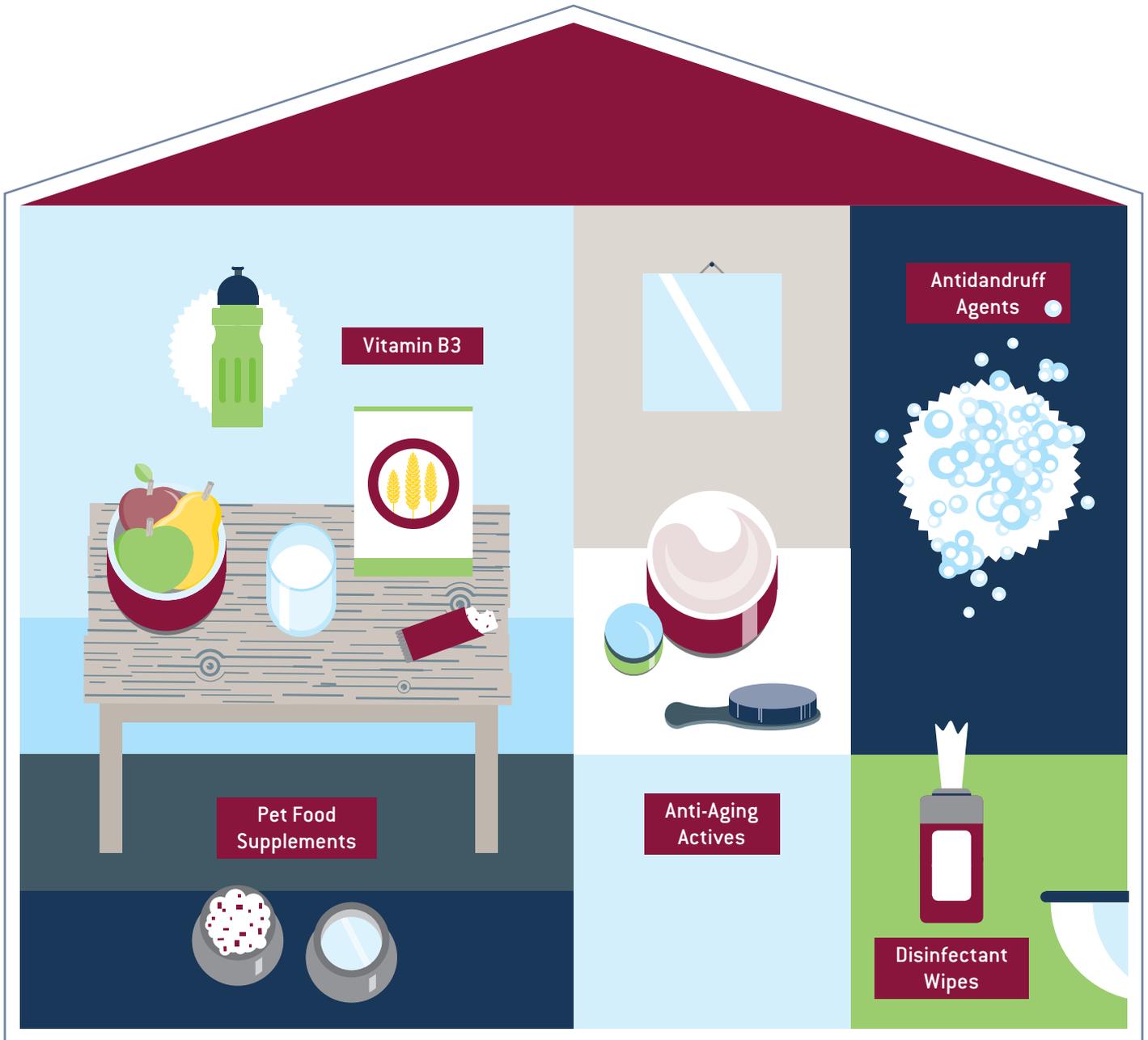
Why We Are Thankful ...

Obviously, the Board of Directors and the Executive Committee did not achieve these significantly improved results by ourselves. For that reason we want to thank you, Lonza's shareholders, for your support and investment, which we take as a token of confidence in our capability to deliver. We also would like to thank our customers, suppliers and other business partners for their trust in our products and services. And above all, our gratitude goes to our employees around the world. Their professionalism, productivity and commitment made our progress possible and helped to make Lonza the place to go, stay and grow.

With our best regards,

Rolf Soiron
Chairman of the
Board of Directors

Richard Ridinger
Chief Executive Officer



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Financial Highlights 2015

Key Figures Lonza

million CHF	2015	Change in %	2014
Sales	3 803	4.5	3 640
CORE result from operating activities (CORE EBIT) ¹	524	10.3	475
CORE EBITDA ¹	793	6.7	743
Capital expenditures	264	46.7	180
Net debt	1 660	(17.5)	2 011
Headcount	9 829	0.2	9 809

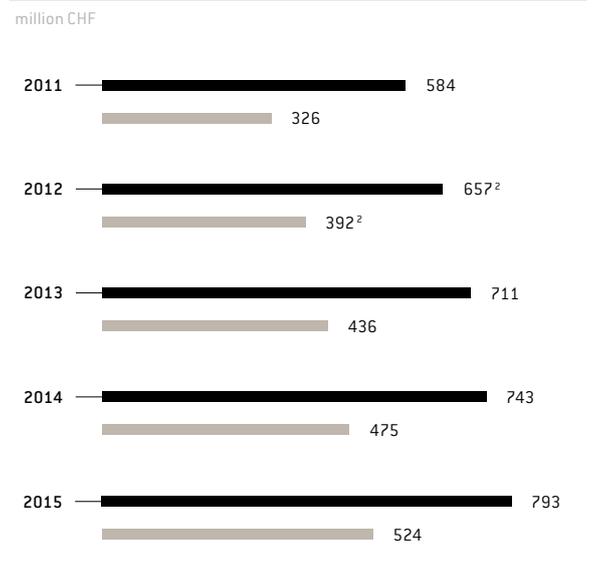
Sales Progression



Specialty Ingredients Segment

million CHF	2015	Change in %	2014
Sales	2 167	0.6	2 154
CORE result from operating activities (EBIT) ¹	298	9.6	272
CORE EBIT margin in %	13.8		12.6
CORE EBITDA ¹	390	8.3	360
CORE EBITDA margin in %	18.0		16.7

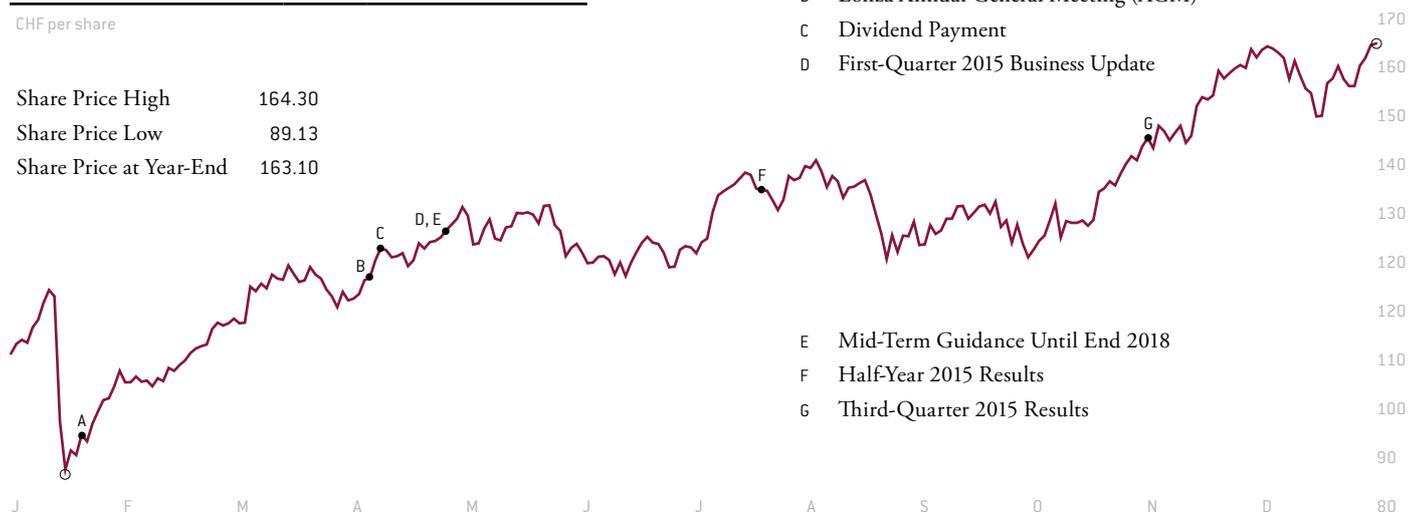
■ CORE EBITDA ■ CORE EBIT



Share Price Development 2015

CHF per share

Share Price High 164.30
 Share Price Low 89.13
 Share Price at Year-End 163.10



- A Full-Year 2014 Results
- B Lonza Annual General Meeting (AGM)
- C Dividend Payment
- D First-Quarter 2015 Business Update

- E Mid-Term Guidance Until End 2018
- F Half-Year 2015 Results
- G Third-Quarter 2015 Results

Pharma&Biotech Segment

million CHF	2015	Change in %	2014
Sales	1 596	10.4	1 446
CORE result from operating activities (EBIT) ¹	284	15.9	245
CORE EBIT margin in %	17.8		16.9
CORE EBITDA ¹	418	8.6	385
CORE EBITDA margin in %	26.2		26.6

- 1 In the CORE results for the items "EBITDA" and "Result from operating activities (EBIT)", the impact of amortization of acquisition-related intangible assets, impairment and reversal of impairment of assets, results from associates and other special charges/ income from restructuring are eliminated.
- 2 Restated to exclude Performance Products, divested at the end of 2012.

CAPEX

million CHF



Net Debt

million CHF



Governance

Board of Directors

Executive Committee

Audit and Compliance Committee
Nomination and Compensation Committee
Innovation and Technology Committee



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

Board of Directors

The Board of Directors is the supreme management body of Lonza, consisting of the Chairman, the Vice-Chairman and the other members. All Board members are elected by the Annual General Meeting. The 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 leading Lonza and for developing and implementing the Lonza policy and strategy as defined by the Board of Directors. It supports and coordinates the activities of the segments, operational units, corporate functions and the business service organization. Appointed by the Board of Directors, the Executive Committee performs the duties delegated to it by the Board. The Executive Committee consists of the Chief Executive Officer, the Chief Financial Officer, two Chief Operating Officers and the Chief Strategy Officer¹.

Audit and Compliance Committee

Meets and consults regularly with the Executive Committee, the Lonza Audit Services and the independent auditors to review the scope and results of their work and performance, according to the Audit and Compliance Committee Charter. The Audit and Compliance Committee reviews the systems of internal control and financial reporting, as well as compliance with laws and regulations.

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, the Nomination and Compensation Committee evaluates potential members of the Board of Directors.

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.

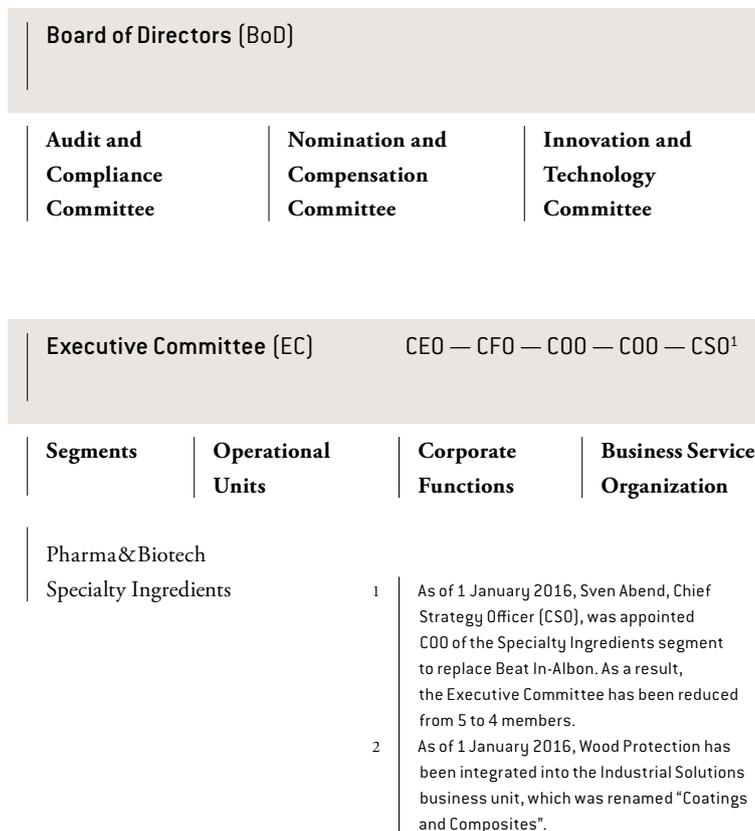
For more information, please see the 2015 Corporate Governance Report.

¹ As of 1 January 2016, Sven Abend, Chief Strategy Officer (CSO), was appointed COO of the Specialty Ingredients segment to replace Beat In-Albon. As a result, the Executive Committee has been reduced from 5 to 4 members.

Management and Company Structure

Lonza’s organizational structure, consisting of the two market-focused segments Pharma&Biotech and Specialty Ingredients, enables a dedicated approach to our target markets and allows us to serve our customers’ needs in the most efficient way possible.

Lonza’s Organizational Structure:



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. Lonza participates in the following segments:

Pharma&Biotech Segment
Custom Development and Manufacturing
Bioscience Solutions

Specialty Ingredients Segment
Consumer Care
Agro Ingredients
Industrial Solutions²
Wood Protection²
Water Treatment

Operational Units

include Operations and Research & Technology groups that support the two segments.

Corporate Functions

include groups such as EHS, HR, Finance, Sourcing, Corporate Communications and IT, which act as corporate internal service providers, setting targets, providing guidelines and enforcing standards. Also, they have the clear goal of fulfilling the global governance role for all enabling functions of the company.

Business Service Organization

is a global organization that supports our market activities by implementing corporate guidelines and driving service excellence.

Leadership



Patrick Aebischer

Thomas Ebeling

Toralf Haag

Andreas Bohrer

Margot Scheltema

Marc Funk

Rolf Soiron



Richard Ridinger

Jürgen Steinemann

Barbara Richmond

Sven Abend

Werner Bauer

Jean-Daniel Gerber

Antonio Trius

Executive Committee

Board of Directors

Group Secretary

Lonza at a Glance

7

Markets
served

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 and specialty ingredients markets.

Drawing on more than a century of experience, we apply our biotech expertise and fine chemical know-how to create customer solutions that contribute to healthier living and that enhance the overall quality of life.

Our services and products range from active pharmaceutical ingredients and stem-cell therapies to drinking water sanitizers, from vitamin B3 compounds and organic personal-care ingredients to agricultural products, and from industrial preservatives to microbial control solutions that combat dangerous viruses, bacteria and other pathogens.

1897

Year founded

~9 800

Employees end of 2015

2

Market-focused
Lonza segments

1000

Trademarks globally

>40

Major manufacturing
and R&D facilities
worldwide



Lonza

>160

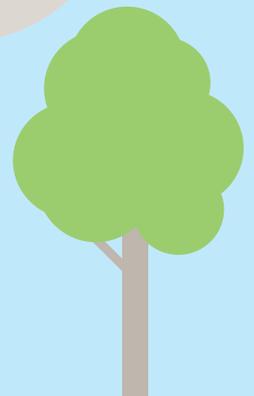
Successful product-related
audits in 2015

~3.8 bn

Sales in 2015 in CHF

~30

Countries with
offices/sites



Global Footprint 2015

Total

Sales 3803 mn

Sales 2015 in CHF

Employees 9829

This world map shows the Lonza sites with 15 employees or more. Lonza also has a sophisticated network of sales offices around the world where Lonza representatives are in close proximity to our customers, understand their needs and speak their language. We operate about 90 sites and offices in approximately 30 countries, which enables us to provide production, research and development (R&D), and sales services to customers worldwide.

- Production
- R&D
- Production + R&D
- Sales and Support
- ◆ Headquarters Basel (CH)

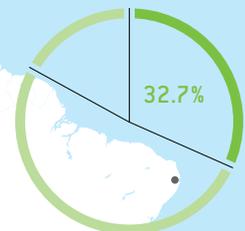
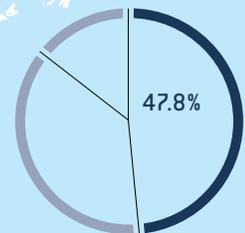
Americas

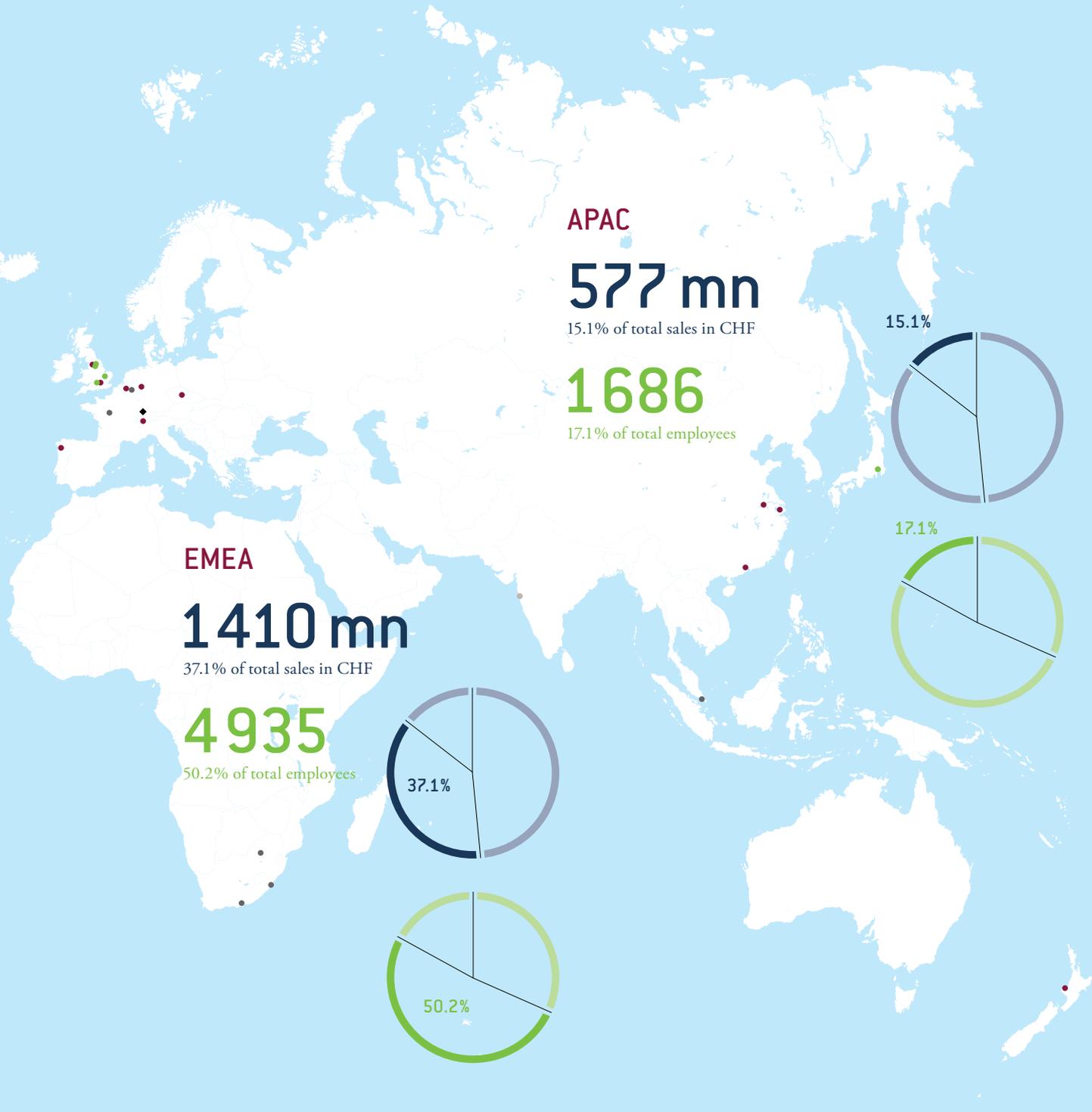
1816 mn

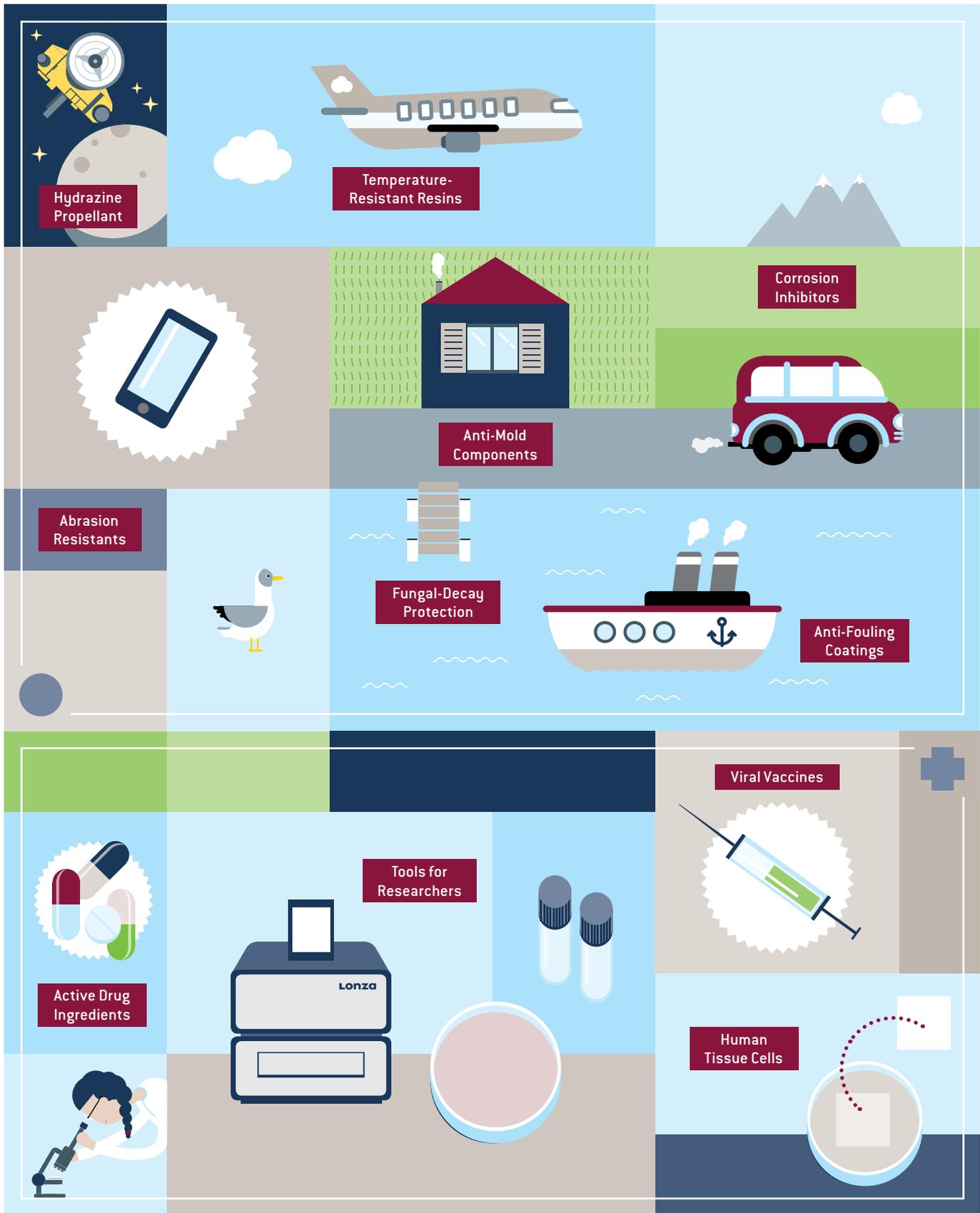
47.8% of total sales in CHF

3208

32.7% of total employees





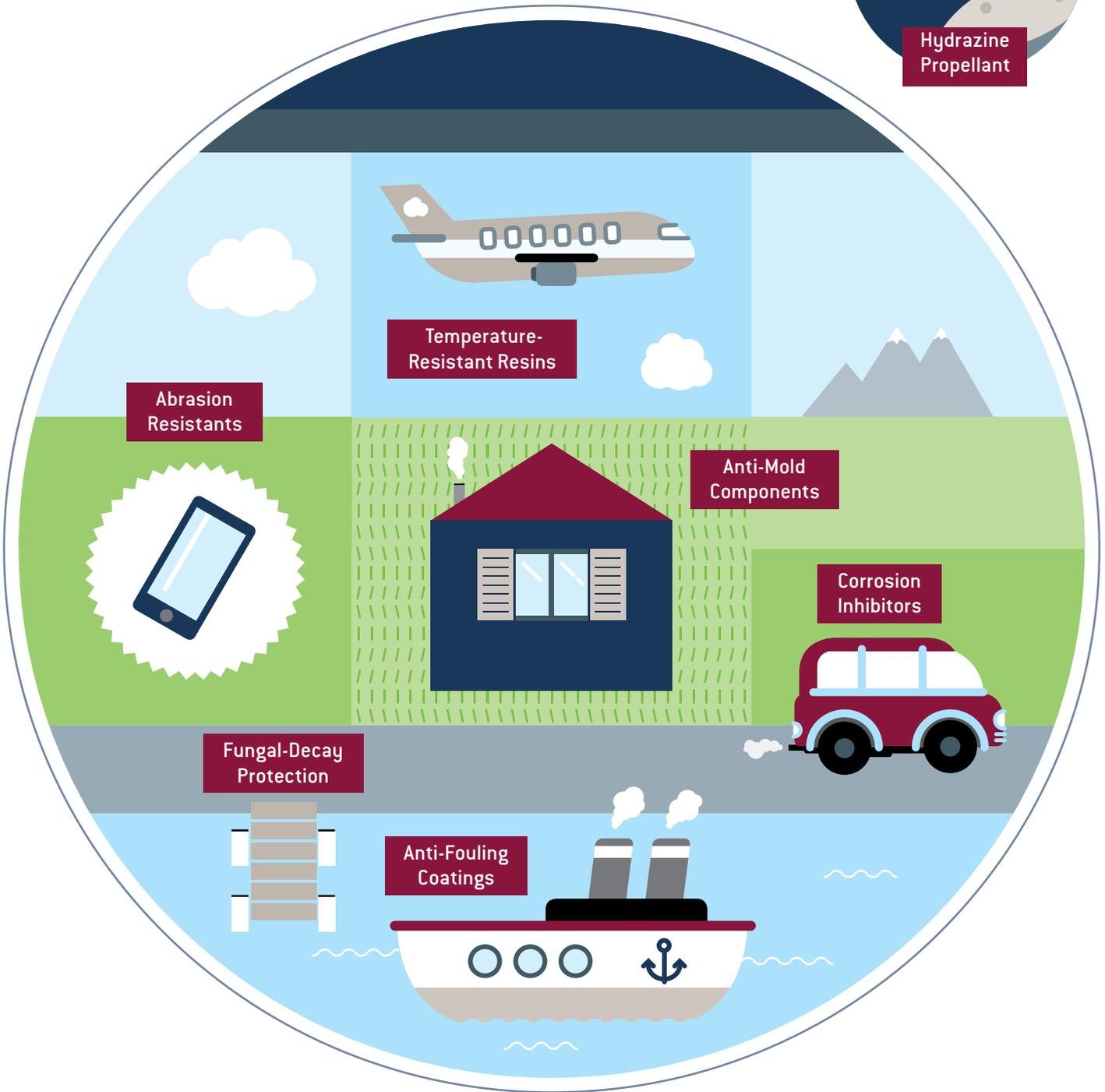


Closer Than You Think™

Lonza

The grid consists of 12 panels, each with a specific product application:

- Top Left:** A dark red circle containing the text "Closer Than You Think™".
- Top Middle:** A farm scene with a barn, a bird, and a cloud. A label "Slug Control" is positioned below the barn.
- Top Right:** A field with a tractor and a basket of fruit. A label "Food Preservatives" is positioned above the fruit basket.
- Middle Left:** A glass of water with a water tap above it. A label "Drinking Water Sanitization" is positioned to the left of the glass.
- Middle Middle:** A field of cabbages with a magnifying glass over one. A label "Crop Protection" is positioned to the right of the field.
- Middle Right:** A tractor in a field. A label "Crop Protection" is positioned below the tractor.
- Bottom Left:** A swimming pool with a fountain and a bench. A label "ICMS" is positioned to the left of the pool.
- Bottom Middle:** A table with a bag of grain, a water bottle, a glass of milk, and a cat. A label "Vitamin B3" is positioned above the table.
- Bottom Right:** A bowl of food, a brush, and a jar. A label "Anti-Aging Actives" is positioned above the bowl.
- Bottom Far Left:** A swimming pool with a person. A label "Pool and Spa Sanitizers" is positioned below the pool.
- Bottom Far Middle:** A bowl of pet food and a pet. A label "Pet Food Supplements" is positioned above the bowl.
- Bottom Far Right:** A bottle of disinfectant wipes. A label "Disinfectant Wipes" is positioned above the bottle.
- Bottom Center:** A cluster of blue bubbles. A label "Antidandruff Agents" is positioned below the bubbles.



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Delivering on Our Strategy

Supporting Our Growth as a Top-Tier Company

Founded in 1897 in the Swiss Alps, Lonza today is one of the world's leading and most-trusted suppliers to the pharmaceutical, biotech and specialty ingredients markets – with more than 40 major manufacturing and R&D facilities and approximately 9 800 employees worldwide. We harness science and technology to create products that contribute to health and well-being and that enhance the overall quality of life.

Lonza has a unique capability to connect our biotech expertise with fine chemical know-how to provide the best solutions for our customers' needs. By continuously developing our technologies, we enable our customers to meet some of the world's greatest challenges, such as the vital need for disease prevention and treatment, clean water, abundant food, advanced materials and enhanced hygiene and wellness.

Not only are we a custom developer and manufacturer, Lonza also offers services and products ranging from active pharmaceutical ingredients and stem-cell therapies to drinking water sanitizers, from the vitamin B3 compounds and organic personal-care ingredients to agricultural products, and from industrial preservatives to microbial-control solutions that combat dangerous viruses, bacteria and other pathogens.

The company operates in two segments. Lonza's Pharma&Biotech (LPB) segment clusters all of our offerings for pharmaceutical markets, with strong Lonza positions in Custom Development, Custom Manufacturing, Cell Therapy, Viral Therapy and Bioscience Solutions. Our Lonza Specialty Ingredients (LSI) segment includes consumer-oriented offerings in our Consumer Care business. Specialty Ingredients also benefits from market-leadership positions in Agro Ingredients, Industrial Solutions, Wood Protection and Water Treatment. Effective January 2016 Industrial Solutions was renamed "Coatings and Composites" and was expanded to include Wood Protection.

Throughout 2015 both of our segments continued to work on and to benefit from our three Corporate Strategic Projects, which are important elements for the success of the company: Manufacturing Footprint Optimization, Business Services Excellence and Go-to-Market Excellence. The common goals of these major change projects are improving Lonza's productivity and profitability, reducing our complexity and costs, increasing transparency and accountability, capturing synergies and initiating a new, broader market focus with an emphasis on innovation.

Lonza generated sales of about CHF 3.8 billion in 2015, and our stock is publicly traded on the Swiss stock exchange and secondarily listed on the Singapore stock exchange.

Cross-Business Synergies

Our strategic approach to our segments is twofold: capitalizing on cross-business synergies offered by vital technology links and balancing the risk profile between a more volatile, demanding Pharma&Biotech segment and the more stable, GDP-plus growth Specialty Ingredients segment. Lonza offers our target markets many capabilities that are strongly linked to the technology platforms of biotechnology, fine chemicals or a combination of both. We also have successful experience and an excellent reputation for navigating difficult regulatory environments.

Global Megatrends

With more than a century of experience, we have a unique capability to connect our biotech expertise with our fine chemical know-how to provide the best solutions for our customers now and in the future. As part of our overall strategy, Lonza wants to play a significant role as a global player in target market segments that have a natural growth dynamic, following the megatrends that we can see and anticipate for the 21st century. These megatrends include the need for appropriate medical treatment, growing consumer needs for high-end preventive healthcare and well-being, intelligent use and protection of our resources and the need for clean, potable water. As we continuously develop our technologies, Lonza is well positioned to address these global megatrends and thereby generate sustainable, long-term rewards for all our stakeholders.

Enabling Stakeholders

Lonza's strategic stakeholder groups are diverse with a wide range of needs, expectations, opinions, priorities and concerns, all of which require different approaches and responsive actions from our side. We strive to meet those needs with tailored approaches that enable their – and our – success.

Enterprise Risk Management

Our enterprise risk management (ERM) program is a critical strategic platform for Lonza's global organization and business. It provides a mechanism and a structure for prudently addressing risk responsibility and management in each and every part of the organization.

Quality Initiatives

Another key strategic focus is quality. Around the world we are driven by our firm commitment to quality as we strive for operational excellence across regions and functions, every day. We are harnessing continuous improvement principles and practices to provide a safe working environment for our employees and to ensure our products and services are the best they can be.

Leveraging Cross-Business Synergies

Applying Knowledge Across the Business

One of the goals of Lonza's transformational efforts is to improve our ability to transfer knowledge, experience, technology and best-in-class business practices throughout the organization. A main focus of our three Corporate Strategic Projects is to fully capture cross-segment and cross-business synergies that we can offer our customers.

For example, the Global Manufacturing Footprint project is aimed at consolidating technologies in centers of excellence and improving the productivity and profitability of our major sites so that the customer benefits from these efficiencies. The Business Services Excellence project is focused on creating bottom-line benefits for our customers by streamlining and improving the support services that corporate functions provide to our businesses. And the Go-to-Market Excellence initiative aims to create a broader, more customer-centric focus in our target markets across all businesses. As an example, we are collaborating more effectively and sharing best practices throughout the organization, which enables us to better serve our customers.

- Global Manufacturing Footprint
- Business Services Excellence
- Go-to-Market Excellence

Applying Expertise Across Businesses and Capitalizing on Cross-Business Selling

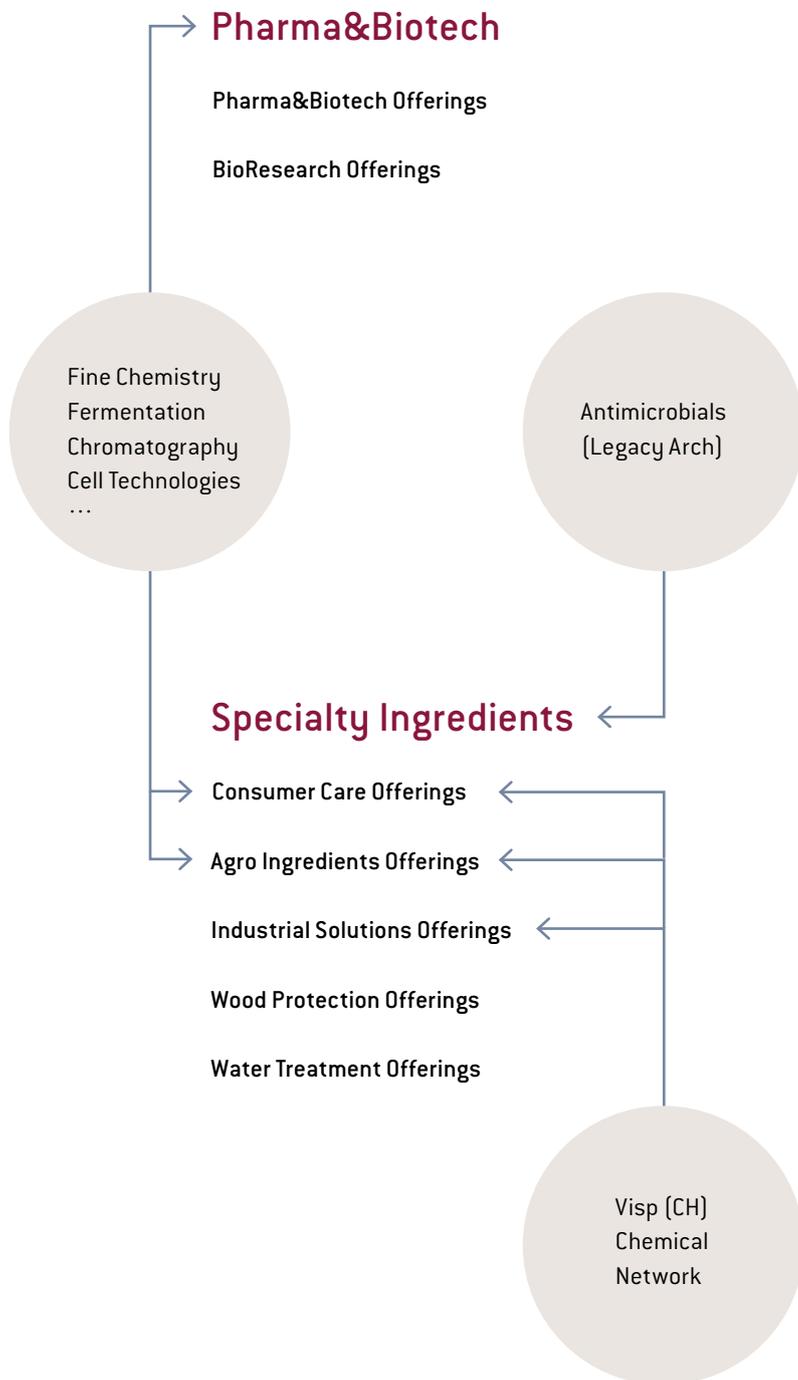
Over the years Lonza teams have shared technical expertise and business practices across the company. For example, we have decades of expertise in current Good Manufacturing Practices (cGMP) within the highly regulated environments of Pharma&Biotech. We have applied this expertise to non-cGMP but still regulated environments in Specialty Ingredients.

Similarly Lonza's outstanding knowledge and deep expertise in the Pharma&Biotech segment has led to the creation of innovative cross-business solutions offered by our Personal Care, Nutrition and Agro Ingredients businesses.

For instance, many of the new cross-business products being offered by Agro Ingredients are a direct outcome of Lonza's new market-oriented approach to doing business. Agro Ingredients benefits from the available expertise and the range of formulation additives and technologies that Lonza offers in allied industries. This knowledge can then be combined with the development and regulatory expertise in the agricultural industry to best market those cross-business products.

Our Lonza Agro Ingredients formulation brochure explains in more detail how we are making use of the existing, cross-business portfolio from Consumer Care, Water Treatment and Industrial Solutions.

Also, a cross-functional Research and Technology (R&T) group – with representatives from Pharma&Biotech and Specialty Ingredients – is actively exploring mutually beneficial solutions across the business segments and finding ways to facilitate sharing of technologies, raw materials and intermediates.



Sharing Technical Expertise Across Specialty Ingredients and Pharma&Biotech Segments

The Agro Ingredients business profits from Lonza's global experience in other Specialty Ingredients and Pharma&Biotech market segments. Our new generation of agricultural products, for example, has become more selective in the use of active ingredients. This evolution comes in response to regulatory pressure and consumer preferences. Because these products are highly complex, they require sophisticated support for development, production and regulatory approval.

Here, Lonza brings to the table our expertise in custom synthesis, integrated project management capabilities, broad chemical and biological technology, a flexible market-launch process and customized contracts for the financing of investments and development efforts.

Capturing Synergies Between Segments – Consumer Care Example

The Consumer Care team is working to capitalize on cross-selling synergies to serve exciting new markets. For example, our Laracare® Quat is a hair-conditioning agent derived from a Nutrition ingredient.

In another example, the Specialty Ingredients team is drawing on "white biotechnology" (industrial biotechnology) as a platform to expand into new bio-based offerings.

Additionally, Lonza teams are already working with skin-care customers to explore the opportunity of utilizing our Pharma&Biotech technology for their manufacturing needs or using our formulating experience for their advanced skin-care products.

Using Biocide Expertise in the Agricultural Sector – Agro Ingredients Example

Lonza is harnessing key biocides elsewhere in our portfolio, as well as associated formulation expertise to expand the formulated products and services that we supply to agrochemical customers. One good example of how Lonza's microbial-control formulation expertise is opening up new opportunities lies in Agro Ingredients' use of specific biocides for the pre- and post-harvest treatment of seeds and crops.

Preventing losses starts with sowing and does not end with the harvest. Treatment with Lonza's special biocides just before or after harvesting helps to ensure that the harvested fruits and vegetables are delivered fresh to distributors and end consumers.

Capitalizing on Global Megatrends

Finding Profitable Solutions for Urgent Needs

With more than a century of experience, we at Lonza are uniquely equipped to harness our biotech expertise along with our fine chemical know-how to help our customers meet some of the world's greatest megatrend challenges, including disease prevention and treatment, clean water, abundant food, and enhanced hygiene and wellness.

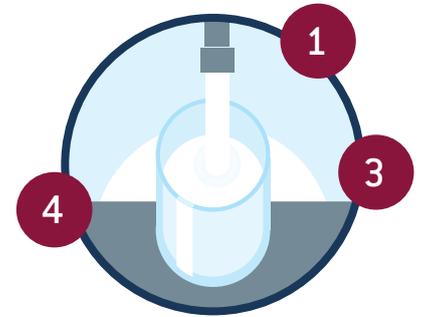
Specifically, Lonza's businesses are strategically positioned to help address the demands created by the following four global megatrends:

- 1 Growing World Population
- 2 Aging of Global Populations
- 3 Rapid Growth of Megacities
- 4 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.



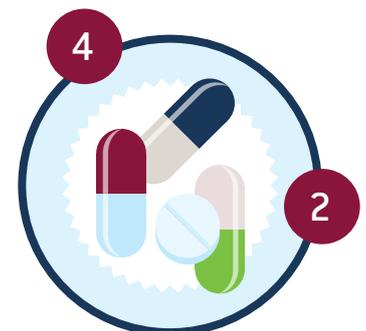
Reliable Food



Clean Water



Personal Care



Medication



Energy Conservation & Sustainability



Hygiene

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, significant high-growth opportunities exist for leading global companies like Lonza.

Meeting the increasing demand for clean water:

Whether for drinking, cooking, agricultural irrigation, beverage production, food processing or industrial applications, water is an increasingly scarce and valuable resource. To meet that need, Lonza is pursuing growth opportunities created by an increasingly urgent need for clean water across multiple market segments in both developed and emerging nations.

Lonza Water Treatment's Industrial, Commercial, Municipal and Surface Water (ICMS) business offers Constant Chlor® calcium hypochlorite drinking-water sanitizers and feeder systems, which have a strong presence in North America and a growing position in the Caribbean. For example, on New York's Long Island peninsula, Lonza's feeders treat the majority of the well sites.

We also provide algacides to address toxic algae blooms in drinking water reservoirs that can affect the taste, odor and quality of water and even pose health threats.

Meeting the need for safe, healthful and abundant foods:

Our Agro Ingredients and Nutrition businesses are at the forefront of helping address consumers' growing need for safe, healthful and abundant food. For example, our Consumer Care Nutrition business is capitalizing on this trend by supplying vitamin B3 so that our customers can create pre-mixes for poultry, swine and cattle to supplement protein-based diets as emerging markets seek to balance agrarian-based diets. Lonza, in fact, provides vitamin B3 compounds used throughout the world in human and animal nutritional markets. Our niacin and niacinamide (vitamin B3) compounds are produced at our new facility in Nansha (CN) and at our manufacturing site in Visp (CH).

Agro Ingredients' custom-manufactured crop growth and protection products help our customers optimize yields, often with less water and a reduced need for pesticides. Lonza is a world leader in molluscicides, with proprietary products that protect lettuce, other greens and rice from the damage caused by slugs and snails.

Malaysian registration authorities, for example, are evaluating metaldehyde-coated rice seed for the control of the golden apple snail in order to prevent the destruction of rice, a staple food for people in Asia. Malaysia would be the first Asian country where this innovative product could be offered once regulatory approvals are finalized.

Water

Droughts triggered by climate change and other pressures on drinking water supplies have increased the value of and need for desalination water treatment plants, which remove salt from ocean waters. Essentially, our sanitizing system treats the water once salt is removed to help make it safe to drink.

For example, at a major resort in the Caribbean, our Constant Chlor® sanitizers and feeder systems treat the resort island's drinking water, which is produced by two desalination plants.

Food

Keeping chickens and other poultry clean from harvest to table is where the megatrend needs for both clean water and safe, abundant food intersect – and where Lonza is an industry leader with our decades of expertise in water treatment and microbial control. The need is enormous and growing, as Purdue University's Food Animal Education Network estimates that 8 billion chickens are consumed just in the United States each year.

One of the newest poultry customers in the United States for Lonza Water Treatment's sanitizing feeder systems sells a premium, natural brand of chicken that is free of antibiotics and growth hormones. At this customer's site in the U.S. Midwest, the Lonza MC4-150P feeder system creates a sanitizing solution out of our dedicated DryTec® FG calcium hypochlorite briquettes, made in Charleston, TN (USA). The sanitizing solution is applied by many spray nozzles onto the processing equipment, which helps to protect the chickens from potential pathogens. Our feeder system comes complete with pH control and a reverse osmosis device to filter the feed water coming into the system.

The Aging of Global Populations

Rapid growth of elderly populations in the West and in Asian nations such as China and Japan is driving ever-rising demand for healthful foods and nutritional supplements, affordable medicines, anti-aging cosmetics and other personal-care products.

Meeting the need for effective, affordable medications and therapies:

Lonza's Pharma&Biotech segment is a world leader in the custom development and manufacturing of chemical and biological active pharmaceutical ingredients, advanced cell culture therapies and other life-saving and life-enhancing treatments. Our efficiency and expertise in process development, technology transfer and manufacturing help us reduce time and costs for our customers who are seeking regulatory approval of their drug candidates.

Life-expectancy rates are increasing; and the prevalence of cancer, heart disease, diabetes and many other age-related illnesses is growing. To extend and improve the quality of life in aging populations, Lonza's Pharma&Biotech segment, for example, has played a major role in the development of one of the world's most widely used anti-plaque statins that reduce cholesterol levels associated with heart disease and stroke.

Advanced Cell Cultures

For many years research scientists working on cell-based therapies have been hampered by traditional 2D cell culture systems. These systems do not allow cells to interact as they would in real life with adjacent cells and other molecules, thus limiting the value of the experiments performed. The RAFT™ 3D cell cultures are much closer to a true in-vivo model. These 3D cell cultures are tissue-like structures that are embedded in high-density collagen scaffolds, all of which more closely represent a native, in-vivo like environment where cells behave and interact more efficiently.

Several human primary cell types – such as coronary artery endothelial cells, corneal cells, dermal fibroblasts, and astrocytes, as well as different human breast, liver and lung cancer cell lines – have already been successfully cultured in the RAFT™ system. The established models reach from single-cell type models to complex co-culture models mimicking the human blood-brain barrier or the human cornea.

Cancer Treatment

Lonza is an innovative leader in developing antibody drug conjugates (ADCs) that provide targeted treatment of cancer cells and tumors, which helps to avoid the often severe, negative side effects of traditional chemotherapy regimens. We are one of the few custom manufacturers that can make and combine all elements of ADCs, from the cytotoxic chemicals to the antibodies that carry them into the targeted cancer cells.

Meeting the need for enhanced personal care:

Demand is surging among the aging for cosmetic and personal-care products that help make them look and feel their best. Our Consumer Care business is capitalizing on this trend by supplying natural, organic and other hair- and skin-care treatments that benefit people of all ages.

Reflecting the old adage that “We are what we eat”, our Nutrition business within Consumer Care provides vitamins and nutritional supplements that provide many benefits, from optimizing the immune system and improving fat-burning energy levels to aiding cardiovascular health.

Skin Care

Launched in 2015 Lonza Consumer Care's ReGeniStem® Brightening ingredient for facial and skin creams is based on licorice root extract and apricot kernel oil. Designed to brighten and tone skin without irritation, this latest skin-care active from Lonza is a sustainable, meristematic cell culture product produced in bioreactors at our plant in Rochester, NY (USA). It visibly brightens skin, enhances skin-tone balance and targets skin imperfections. An oil-based active, one version of this product has been tailored for use in China and another is available for use elsewhere in the world.

Nutrition

In 2015 Lonza's Nutrition business celebrated its 30th anniversary of producing our Carnipure® L-Carnitine supplement. Present in human breast milk and certain other food, our L-Carnitine was first utilized as an essential ingredient in infant formulas.

Over the last three decades, we have conducted studies in collaboration with universities and research centers that have shown that L-Carnitine also offers other benefits in the areas of energy metabolism, sports nutrition, weight management, animal feeds and pet care.

An essential element for fat breakdown and energy generation, our Carnipure® ingredient has been shown to assist with weight management and quicker recovery from exercise. That is one reason why it is available in the world's most popular energy drinks, as well as in dietary supplements and other functional foods and beverages.

The Rapid Growth of Megacities

The movement of populations from rural areas to megacities is generating a need for improved hygiene and protection products, as well as for water and sanitization systems. Consumer Care addresses the hygiene market by offering single-use wipes, sprays, janitorial liquids and other tools for tackling the public threat of dangerous viruses, germs and other pathogens. 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.

In crowded urban areas, municipalities and industries are conserving precious water resources by treating and recycling wastewater so that it can be used for other purposes. We provide both sanitizers and organic coagulants that treat the water and reduce the amount of sludge, which in turn means less waste disposal. Our simple, reliable drinking-water sanitizing systems also are providing clean drinking water in urban areas throughout the world.

The threat of fire in densely developed cities helps explain the growing use of our Dricon® fire-retardant treatments for wood used in schools, apartment complexes, homes, train stations, hospitals and other areas. Also our Industrial Solutions business is fighting mold and the “sick-building syndrome” in facilities by providing protective biocides and fungicides for paints, wallboard, ceiling tiles, adhesives and other building products.

In rural areas, particularly in emerging countries, we are actively seeking innovative ways to bring affordable medicines to these people.

Protection

The rapidly growing city of London (UK) served as the backdrop in 2015 when BARamine® application technologies, developed by Wood Protection research teams in the UK and the United States, won the prestigious Market Innovation Award at the Timber Trades Journal Annual Awards.

Incorporated into our latest generation TANALITH® wood preservative formulations, the unique blend of components in our BARamine® products works together to offer increased decay protection against certain copper-tolerant organisms and allow a greater penetration and distribution of the TANALITH® preservative into the wood. The BARamine® product also provides a solution-management system that ensures the preservative actives are balanced correctly every time our customers treat timber.

Emerging Countries

With low per capita incomes and other serious financial challenges, emerging nations in Africa and other developing regions need to provide affordable medicines and therapies for their people. Biosimilar/biobetter development is the initial focus of many biopharmaceutical companies in these countries.

Lonza's Pharma&Biotech segment supplies Advanced Protein Services (APS) immunogenicity and developability services to support the development of competitive products, and in some cases customers are using our gene-expression technologies to produce these products.

The Growth of Middle Classes in BRIC and VISTA Countries

The rising number of affluent consumers in the developing world is driving demand for everything from better nutrition and hygiene to cosmetic ingredients that enhance beauty and well-being. Lonza is well situated to meet the needs of these new consumers, including a strong presence in China, Brazil, India, Singapore and other growing nations. With modern facilities in Singapore and China, our Pharma&Biotech segment is capitalizing on rising demand in Asia Pacific and elsewhere for affordable medicines and biotech therapies.

Our Consumer Care business has long been the world's largest supplier of active antidandruff agents for shampoos, with our Zinc Omadine® (zinc pyrithione) ingredient considered a "gold standard" in the industry. Capitalizing on fast-growing demand for antidandruff shampoos in China, India and other nations with a growing middle class, our Specialty Ingredients plant in Suzhou (CN) supplies antidandruff agents that are often tailored to satisfy unique consumer preferences. For example, in Japan we tailor our compound to satisfy the preference there for thicker shampoos with higher viscosity. In addition, we supply one of the world's largest shampoo factories, which is located in India.

The growing middle classes in BRIC and VISTA countries will generate increasing demand for medication. By 2030, for example, the Asia-Pacific middle class is projected to make up two-thirds of the global middle class, according to a report by Ernst & Young. This growth will necessitate a substantial increase in production of pharmaceuticals, such as vaccines, within the next 10 to 15 years.

Required testing of any pharmaceutical administered to the blood stream includes endotoxin detection, which traditionally relies on the horseshoe crab lysate or LAL as the natural resource for the assay. Lonza is currently the only LAL provider that produces a recombinant alternative to this animal-based conventional LAL assay, thus offering a vital and sustainable alternative to assure that the growing global demand for endotoxin testing tests can be performed independent of horseshoe crabs.

Meeting the need for energy conservation and sustainability: Conservation and sustainability are key drivers for Lonza, as demonstrated by two recent technical acquisitions that support our Wood Protection and Agro Ingredients businesses.

Lonza is playing a vital role in helping customers to develop new energy resources and alternative fuels and to conserve energy. For example, our marine anti-fouling products in our Industrial Solutions portfolio help ships travel more quickly and efficiently by keeping their hulls clear of algae and other foulants.

In addition, with our broad water treatment experience, we can help protect groundwater in shale oil and gas hydraulic fracturing or fracking operations. We also provide biocides to Brazilian energy producers to protect renewable, sugarcane-based ethanol fuels from bacteria.

Technical Acquisitions

During the second half of 2015, Lonza acquired two companies – Diacon Technologies Ltd. in Canada and Zelum Holdings Ltd in New Zealand – that strengthen our global technologies and products in the growing mold-control and engineered-wood treatment markets.

Diacon is a leading formulator and supplier of anti-sapstain chemicals and ancillary sawmill products. The acquisition strengthens Lonza's global initiative in mold control and supports Lonza's role as a leader in the anti-sapstain business in North America. Anti-sapstain formulations protect freshly cut logs and lumber from mold and blue stain during storage, seasoning and transport.

With operations in Australia and the United States, as well as New Zealand, Zelum's wood-treatment products and technologies immediately strengthen our wood R&D capability in Asia Pacific and provide access to high-growth engineered wood products markets. Zelum also specializes in crop-protection fungicides, insecticides, herbicides, foliar nutrients and additives. Its acquisition will help propel growth in our Agro Ingredients business by providing entry into new strategic markets and products that are complementary to our existing Meta® molluscicide business.

Enabling Our Stakeholders' Success

Building Engagement and Trust

Lonza stakeholder groups are diverse with a wide range of needs, expectations, opinions, priorities and concerns. Lonza's employees are our internal stakeholders, and our Human Resources (HR) team is focused on building engagement and trust within this key stakeholder group. We empower our employees to help our clients, and in turn their customers or end consumers, to succeed.

Our external stakeholders include, among others, customers; media, shareholders, investors and analysts; and the communities where we operate.

Being in open dialogue with our stakeholders allows us to use tailored information and engagement channels suitable to each audience. We ensure that information stakeholders need is available when they want it and where they can easily access it.

Employees

Lonza's management and the HR team are committed to ensuring that every employee has the opportunity to contribute to the success of the company. Building engagement and trust is key to aligning our employees with the company's philosophy and business strategies. Because employees are vital to our success, the HR team's top priorities include:

- Attracting external talent
- Engaging existing employees
- Developing and retaining internal talent
- Recognizing and rewarding employees

Lonza fosters a spirit of entrepreneurialism within our corporate culture to engender higher levels of employee performance and involvement. Our results-focused leadership team knows that disciplined innovation among our internal stakeholders can be a key driver of our ability to deliver the highest-quality products and services.

Accordingly, Lonza employees are regarded as trusted business partners at every level of the organization and are encouraged to think strategically about our business goals. This partnership dynamic strengthens engagement and trust, which are further reinforced through performance-based financial rewards and recognition programs.

Customers

At Lonza we transform our practical knowledge and technical expertise into the delivery of a portfolio of products, services and technologies to meet the critical needs of all our customer stakeholder groups.

In our Pharma&Biotech segment, for example, we enable our customers – whether small, mid-sized or large – to provide patients state-of-the-art, cost-effective therapies. We help these external stakeholders select the most-promising drug candidates and decrease development time to bring compliant products to market faster. In addition, we help our customers manufacture high-quality products that meet all regulatory requirements. This offering allows customers to focus on drug discovery and on marketing their therapies rather than on development and manufacturing.

Our Specialty Ingredients team enables our customers to provide end consumers better products for everyday life. Specialty Ingredients customers benefit from the combination of quality manufacturing, regulatory know-how, marketing expertise and unique formulations. With Lonza's global presence, these external stakeholders have access to our experts around the world, as well as local expertise in operations, regulatory affairs, research and technology, etc.

An example of our success in building stronger relationships with our customers came as a result of our quality strategy. An enhanced Customer Interaction Model, launched in 2015, helped establish new relationships with our customers' senior Quality Assurance people and allowed us to efficiently address common topics. We received positive feedback from customers who reported on the advantages of having a single point of contact for their entire product portfolio, as well as for all interactions at the project-team level.

Media, Shareholders, Investors and Analysts

We engage our stakeholders in the media with open dialogue through face-to-face meetings and interviews. Full-year and half-year financial results are presented at face-to-face news conferences for media and teleconferences for investors and analysts. First- and third-quarter qualitative results are also presented to these groups via teleconferences.

Corporate news releases are sent regularly to mass media journalists and interested investors and analysts, while product news releases are sent to trade media.

We also engage with shareholders, investors and analysts at roadshows, site visits, Capital Markets Days, the Annual General Meeting and other face-to-face meetings or events.

Communities

At Lonza we have special responsibility to our external stakeholders who live in the communities where we operate. In consideration of our neighbors, we cultivate good relationships and contribute our knowledge, expertise, logistics and financial support for local communities. As evidence of our commitment, please refer to the Communities section on page 83.

Lonza is a member of a broad range of scientific and professional organizations around the world. We also ensure that we are legally compliant with locally applicable laws and regulations while we carefully use our natural resources to create sustainable value for our communities around the world.

Stakeholder Group

Sample Engagement Channels

Employees

Intranet
 Employee surveys
 Townhall meetings
 Dialogue platforms
 Walk-the-talk activities
 In-house publications / videos

**Customers /
Consumers**

Social media
 Customer satisfaction survey
 Customer audits
 Customer / consumer hotlines
 Brand and corporate websites
 Ads, brochures, manuals, tech guides
 Exhibitions, congresses, summits
 Webinars, workshops, training courses
 Scientific studies

**Investors /
Analysts /
Shareholders /
Debt Holders**

Annual General Meeting
 Annual Report and supplements
 Quarterly financial reporting and conferences
 Individual investor meetings
 Investor roadshows
 Capital Markets Day

**Commercial
Partners**

Supplier audits
 Ongoing dialogue

**Local
Communities**

Sponsoring activities
 Support measures
 Open days at Lonza sites
 Ongoing dialogue

**Government /
Authorities**

Regulatory audits
 Ongoing dialogue

**NGOs /
Trade
Associations**

Ongoing dialogue

**Trade Unions /
Employee
Representatives**

Contract negotiations
 Ongoing dialogue

Media

News releases
 Media conferences and events
 Interviews and features

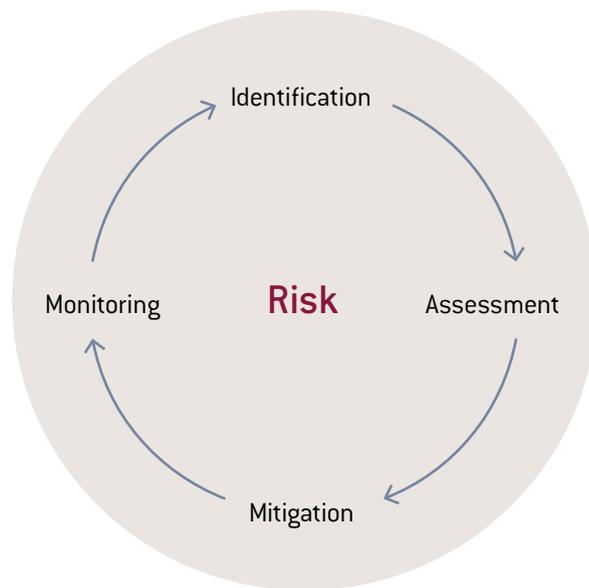
Managing Enterprise Risk Carefully

Investing in Enterprise Risk Management

The Enterprise Risk Management (ERM) program is a critical platform for Lonza's global organization and business as it provides a mechanism and a structure for prudently addressing risk responsibility and management in each and every organization. The Board of Directors and the Executive Committee fully support a comprehensive risk management program as an essential element of sound corporate governance and are committed to continuously embedding risk management in Lonza's daily culture.

Process

Enterprise Risk Management is the process of identification, assessment, mitigation and monitoring of risks that may affect Lonza's strategic and financial targets or jeopardize our long-term business success.



In 2015 Lonza's ERM process was revised and is currently performed in four steps:

- **Step 1:** Identification (through detailed risk discussions with risk owners), assessment and assignment of risks
- **Step 2:** Consolidation, review and prioritization of risks
- **Step 3:** Presentation of consolidated risk overview to the Executive Committee and Board of Directors
- **Step 4:** Update on risks and mitigation measures

Risk Categories

Lonza has identified six risk categories:

1. Strategic risks are those risks that can potentially affect the ability of Lonza to achieve our business objectives or risks that are related to inadequate business strategy.
2. Risks with a financial impact are those risks related to financial reporting, balance-sheet management, tax, treasury, and insurance and pension funding, which could lead to a loss in revenue, increased liabilities, corrections of asset valuation or an adverse effect on the share price.
3. Corporate governance and reputation risks are risks related to inappropriate corporate governance within Lonza and/or risks that jeopardize the good reputation of Lonza.
4. Political, legal and regulatory risks are related to political actions or material legislation or risks arising from a failure to act in accordance with rules, regulations, ethical standards, our Code of Conduct and policies / procedures.
5. Products and services risks are ones that may affect the sales, launch and positioning of products and services of the business units.
6. Operational and performance risks are those risks resulting from inadequate or failed internal processes, people or systems.

Risk Assessment

Each identified risk is assessed according to its probability of occurrence and its negative impact on Lonza. The probability of occurrence is assessed for the period until year-end 2018, with a risk range from unlikely to highly probable.

Any potential negative effect of a risk is assessed according to its impact on Lonza's annual EBIT, reputation and operations. For example, risks with financial impacts can range from 1 million CHF to more than 100 million CHF. Reputational risks can vary from a localized effect with a short-lived impact to a major reputational crisis that involves extensive, negative, international media coverage and significant financial impacts on Lonza and/or one of our businesses. And operational impacts can range from a minor business interruption with no impact on customer satisfaction to a major event that would likely interrupt certain business operations for more than one year.

Risk Universe

Through the above-described process, we have drawn up a universe of the risks to which Lonza is exposed. Risks have been identified for each segment and for the corporate functions. These risks were presented to the Executive Committee and to the Board of Directors at their meetings in October 2015. The most significant risks in the Specialty Ingredients segment consist mainly of the potential dependency on a relatively few large products and customers and our ability to respond to ever-changing environment, health and safety (EHS) and regulatory laws and requirements. In the Pharma&Biotech segment, the most significant risks relate to quality, operational execution and the securing of long-term profitable contracts.

Embedding Quality

Becoming the Industry-Recognized Quality Leader

Producing products for our global pharma and consumer healthcare customers requires going beyond just meeting the quality standards established by the regulatory bodies that govern us. Because our products are key ingredients in so many products that aim to help improve the quality of life for people everywhere, we at Lonza are working to become the “Industry-Recognized Quality Leader”, setting the standard for the industry.

What does it mean to become the industry-recognized quality leader? It means manufacturing products without deviations, delivering products at the right time with the right quality and having flawless regulatory inspections and customer audits. We set this three- to five-year mission in 2014 with the following critical success factors:

- **Customer Satisfaction:** Be a trusted and reliable partner for our customers and regulators, as well as deliver safe and effective products and services in an excellent and efficient manner.
- **Proactive Quality Culture:** Integrate quality through all areas of the organization by implementing a proactive culture focused on “Right First Time”, continuous improvement and increased productivity.
- **Effective Workforce:** Build an efficient and capable workforce by attracting, engaging and developing high-performing people and by providing clear guidance that supports and motivates.
- **Regulatory and Compliance Excellence:** Adhere to regulatory expectations and identify/evaluate industry trends while continually ensuring audit readiness.

Our ideas and expectations have been communicated at every level – from top leadership to site managers, front-line employees and their managers. We are two years into our mission and have made great progress. These efforts are paying off.

By the close of 2015, we saw improved quality-related key performance indicators (KPIs) across sites and improved inspection results by health authorities and customers, as well as early signs of increased customer satisfaction. We learned that by engaging employees in the fundamentals of error prevention and together focusing our efforts around a small yet significant set of targets, we were able to take major steps towards our mission. In 2016 we will establish other global measures to track and affirm our progress.

During 2015 we continued to work to ensure our products are not only safe but also can bear the seal of highest quality. We are headed in the right direction toward being the industry-recognized quality leader. But it’s not about the recognition – it’s about doing the right thing for our customers and ultimately the consumers and patients they serve.

Customer Satisfaction

During 2015 we developed an improved model for customer interaction to support a consistent approach for quality, program management and operations. We also developed a generic project governance model that could be applied for all key accounts and established the process to harmonize and improve quality agreements. To build our relationships with customers, we announced our efforts by preparing customer communications tailored to their situation.

Proactive Quality Culture

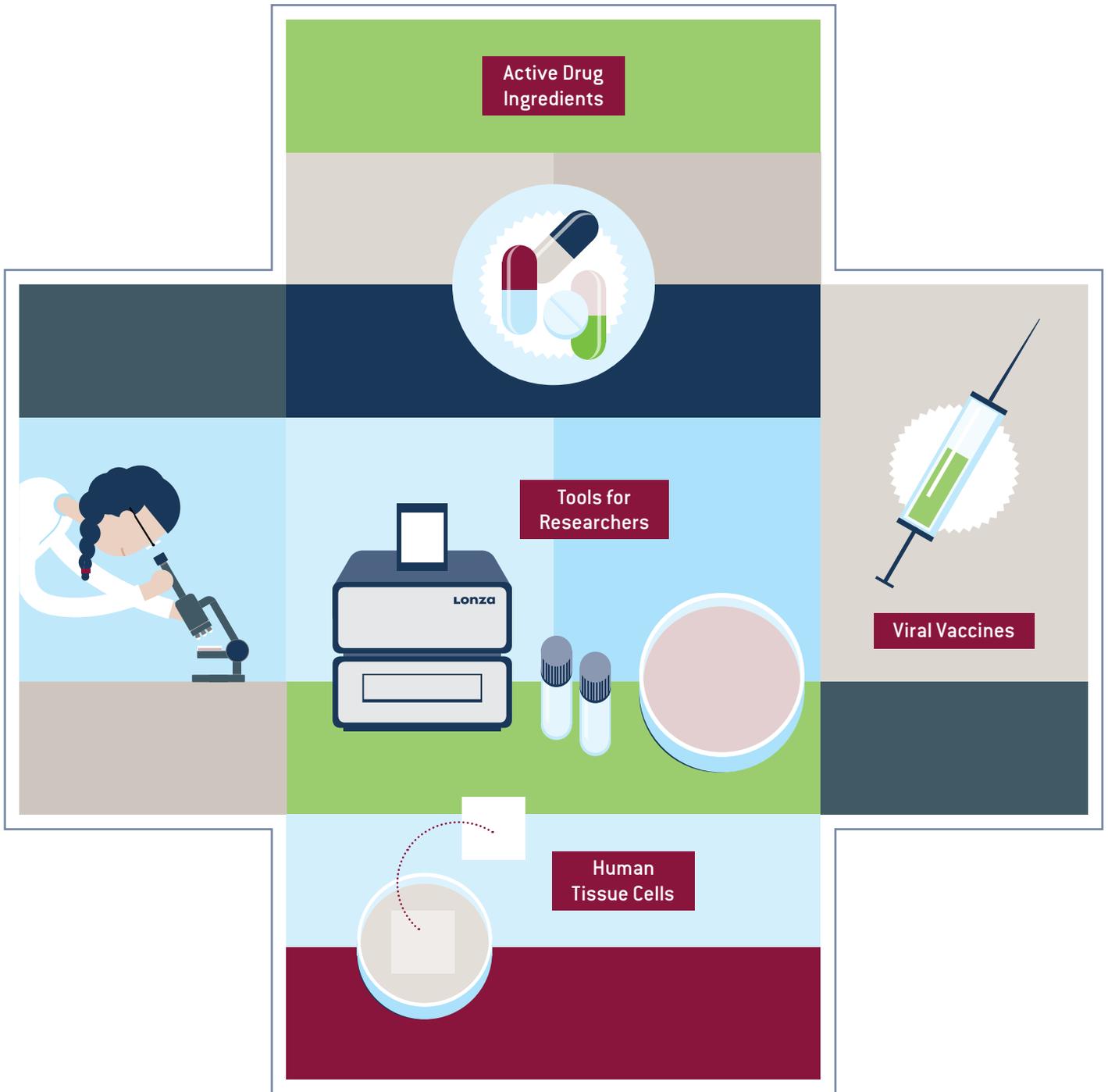
Internally, we tried to improve our proactive quality culture by linking leader compensation to implementation of our rigorous Error Prevention System (EPS), which focuses on collective responsibility. As part of that effort, we formed a global team to brainstorm culture-shifting efforts and then to foster face-to-face and two-way communications throughout the organization. We also implemented a GMP-awareness campaign to keep the fundamentals of cGMP top of mind for all employees.

Effective Workforce

To make our workforce more effective in quality matters, we created “Lonza Academy” training packages for employees around the world in their local language. We also started an initiative called “Quality on the Shop Floor” to provide fully dedicated Quality personnel who support employees on the shop floor. In addition, we launched a global quality recognition program to reward individual and team successes.

Regulatory and Compliance Excellence

The year 2015 was one of implementation to reinforce our focus on regulatory and compliance excellence. We not only implemented a new data-integrity audit program, but also revised our auditor-training program to include all audit types. To more effectively engage management earlier in any inspection process, we implemented an enhanced inspection management procedure, which includes the principles for preparing and reviewing responses to regulatory inspections. Finally, we also implemented a centralized system for monitoring and publishing regulatory updates and an enhanced procedure for the escalation of quality issues.



Lonza Segments

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Specialty Ingredients Overview

In the Specialty Ingredients segment, we supply innovative solutions that promote health, wellness, beauty, nutrition, hygiene and materials protection.

Consumer Care

Lonza's Consumer Care business is a global leader in several important chemical ingredient categories, including actives for antidandruff shampoos, natural and organic 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. These ubiquitous materials provide health, wellness, beauty and protection claims for our fast-moving consumer goods customers.

Agro Ingredients

Capitalizing on our broad experience in custom manufacturing in our Pharma&Biotech and Specialty Ingredients segments, 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.

Industrial Solutions¹

Specialty Ingredients also offers a wide array of Industrial Solutions, including preservatives and biocide blends that deter the growth of mold, mildew and/or other contaminants on painted and coated surfaces, bath mats, carpeting, wallboard, flooring and ceiling materials, and in adhesives and sealants.

Wood Protection¹

Lonza's Wood Protection business supplies products and services that enhance the quality of wood and protect this sustainable, renewable resource from termites and other insects, mold, fungus, moisture and fire.

Water Treatment

Our Water Treatment business within Specialty Ingredients is one of the world's largest 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. In addition, we offer top-of-the-line feeder systems to deliver clean drinking water, maintain and enhance surface water, and provide sanitizing solutions within the agriculture industry.

1 | As of 1 January 2016, Wood Protection has been integrated into the Industrial Solutions business unit, which was renamed "Coatings and Composites".

Consumer Care

Focusing on Health, Wellness, Beauty and Protection



Consumer Care within Specialty Ingredients is focused on becoming the leading partner for the fast-moving consumer goods industry by elevating beauty and ensuring health and wellness through science and technology. The Consumer Care business includes hygiene products, nutrition ingredients and personal-care offerings.

Together, the teams in Consumer Care are capitalizing on people's desire for nutritious food, 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, we also offer innovative hair- and skin-care formulations and ingredients for the Personal Care market and are the global leaders in zinc pyrithione, quaternary ammonium actives and L-Carnitine.

Business Overview

Aligned with megatrends and market drivers, Consumer Care provides exceptional customer value to the Hygiene, Nutrition and Personal Care markets for fast-moving consumer goods. Lonza's science-based actives utilize our biotechnology and fine chemistry know-how. With operational excellence, we then apply that know-how to develop concepts for convenience and differentiated performance factors in predominately regulated markets.

Our market-oriented, collaborative approach to delivering the ingredients our customers need is further strengthened by Lonza's regulatory expertise. This advantage means that our customers have the regulatory support to obtain approvals required by local governmental agencies and products backed by science in order to make marketable claims that deliver commercial success.

We enable our customers to improve the lives of their consumers by ensuring healthier environments, delivering more nutritional foodstuffs, and offering more-advanced hair-, scalp- and skin-care products.

Hygiene

Lonza's Hygiene products are used to disinfect and sanitize industrial 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 home-care and institutional cleaning markets.

Our extensive portfolio of products includes 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 many other regulatory agencies around the world.

Nutrition

For the Nutrition market, Lonza supplies branded health ingredients that are supported by scientific research, regulatory compliance and marketing expertise. Clear benefits and a broad array of product applications make our products attractive for the dietary supplement, food and beverage, nutrition and pharmaceutical industries.

For instance, Lonza has been the world's leading supplier of vitamin B3 (niacin and niacinamide) for more than 40 years. Vitamin B3 is an essential vitamin normally supplied to the body through diet or direct supplementation. Another example is our ResistAid® ingredient, a natural immune-support ingredient formulated to contribute to immune health year round.

Over the last three decades, our Carnipure® brand has become synonymous with high quality and innovation. Still today we continue to pioneer new benefits of L-Carnitine, a nutrient essential for energy metabolism, in various health applications via extensive clinical research.

Personal Care

In the Personal Care market, Lonza is a leading supplier of traditional and non-traditional preservation and protection systems, custom-developed fermentation, biotechnological and natural botanical actives, proteins and specialty emollients and emulsifiers. With our extensive portfolio of innovative hair-, scalp- and skin-care technologies, we are creating a broader and more strategic orientation toward markets and customers, versus the more traditional, product-centric approach.

We also remain the world's largest supplier of antidandruff actives with our Zinc Omadine™ product portfolio. Lonza Consumer Care has strong capabilities in peptides, amino acids and niche bio-products, all of which play an important role in the development of advanced personal-care products and applications.

Applying the expertise of our global manufacturing and R&D centers, which include three Global Centers of Excellence, Lonza is poised to meet the beauty and preservation needs of our customers and their consumers.

Business Highlights 2015

Strong hygiene and antidandruff sales resulted in high capacity utilization of our operating facilities in 2015, thereby increasing our financial performance as a business unit.

In Consumer Care's Hygiene and Personal Care businesses, 2015 saw the launch of a host of new products that were well received by the markets we serve. Additionally, the Carnipure® L-Carnitine franchise within the Nutrition business was extended into hair care with the inclusion of this ingredient in Personal Care products.

In anticipation of U.S. EPA's data call-ins (DCI) and the requirements of the EU Biocidal Product Regulation (BPR), Lonza this year successfully assisted our customers in meeting the demands required by these government-driven initiatives. Our comprehensive technology and regulatory expertise guided our customers as they responded to the tightening regulations.

Hygiene

One of the key events of 2015 for the Hygiene business was our launch of an alternative to triclosan, which will soon be banned in some markets. This innovation helped to bolster the antibacterial hand-wash category.

Among other innovations in 2015 was the development of a new disinfecting wipe with short contact time. The market success confirmed Lonza's leading position in registered disinfecting wipes. We also launched a new generation of hard-surface liquid disinfectants. In 2015 we focused our Hygiene efforts and improved our asset utilization in the formulated solutions portfolio, too.

Nutrition

In 2015 our Nutrition business initiated some strategic changes to our portfolio. We discontinued smaller non-performing products and shifted our focus to core franchises, namely L-Carnitine, vitamin B3 compounds and food emulsifiers. In the future we expect to accelerate growth of these ingredients through new innovations and clinical research designed to broaden our targeted markets and applications.

The year 2015 marked the 30th anniversary of the Carnipure® brand. Lonza's Nutrition team celebrated the fact that with the growth of our scientific knowledge about L-Carnitine, we have been able to help pioneer new products to deliver to a market that demands high quality and high purity.

Personal Care

In September 2015 Lonza entered in Italy into a long-term commercial collaboration with Lamberti under which Lonza will have exclusive access to Lamberti's complete portfolio of hair-care, personal-care and home-care products for sale in South America.

Also in 2015 our Personal Care business launched a new product to expand our cosmetic preservation portfolio, Geogard® LSA. The product category continues to experience growth against a background of regulatory and consumer pressure on well-known, traditional chemistries. This trend affords Lonza the opportunity to continue offering solutions for unmet needs. The launch of the Polyaldo® emulsifier platform was another important highlight in 2015 with the ingredient's key benefits for structuring and thickening.

Global Centers of Excellence

The highlight of 2015 for the Personal Care business was the launch of the Global Hair Care Technology Center in Blackley (UK), with a state-of-the-art laboratory dedicated to expanding the application and innovation focus of our hair-care ingredient portfolio. Two other Lonza Consumer Care Global Centers of Excellence are based in the United States. Our Center of Excellence for Skin Care is in New Jersey, and our Center of Excellence for Preservation is in Georgia.

Triclosan

Responding to the U.S. Food and Drug Administration's (FDA's) impending ruling to ban triclosan from all consumer antibacterial hand-washes, Lonza launched Lonzagard® BKC cGMP benzalkonium chloride. Together with Lonzagard® benzethonium chloride, the new Hygiene product line gives the individual consumer and the healthcare markets an alternative that meets FDA pharmaceutical active ingredient standards for topical antimicrobial drug products for over-the-counter human use. Personal Care also offered expanded alternatives to triclosan for products needing odor control in rinse-off applications, such as our leading antidandruff active zinc pyrithione.

Agro Ingredients

Helping Customers Do More with Less



Lonza's Agro Ingredients business is growing by helping our customers do more with less – meaning optimizing the use of increasingly scarce natural resources such as arable land and clean irrigation water.

The aim of the value-added chain in the agricultural sector is to make every effort to cut losses and boost productivity. This target would be impossible to achieve without more and better agro-chemistry. Meeting these requirements will take huge efforts in the research and development of essential, efficient and sustainable solutions. It will require innovation – and cutting-edge technology companies like Lonza are making an important contribution in this regard.

Business Overview

Lonza's offerings to the agricultural market are based on a strong chemical and biological technology background. With broad experience, high professionalism and unremitting passion to satisfy our customers, Lonza provides state-of-the-art custom manufacturing for modern herbicides, insecticides and fungicides, including biologically derived products such as biopesticides, biostimulants and other microbial active ingredients and intermediates. Additional offers include preservatives and additives for crop-protection formulations.

We have remained the chemical fermentation development and manufacturing partner for leading innovative agrochemical companies by providing full life-cycle management for their products out of our facilities in Visp (CH) for development and Kouřim (CZ) for development and manufacturing.

Besides our chemical custom manufacturing services, we provide small- and large-scale fermentation capacity for fermentation-derived biopesticides used by leading agro companies. Our services also include providing full life-cycle management for our customers' products.

Lonza is also the world's market leader in molluscicides as we offer the Meta™ metaldehyde active ingredient and Meta™-based, formulated products. For example, with Lonza's new, innovative formulation technology, we serve the professional and home & garden market with our Axcela™ fully formulated end-use molluscicide.

In all main markets, we collaborate with strategic partners and leading local distribution companies to support the growth of our premium-quality products. For instance, we sell finished commercial products under the Frexus™ brand name in Brazil, one of the main agricultures in the world. Frexus™ products in Brazil are sold as fertilizers and as disinfectants for fruits and vegetables (post-harvest treatments).

In addition, we offer sanitizing agents for the agricultural industry and fertilizers. The many options we provide make Lonza Agro Ingredients a unique partner specifically for the crop-protection industry.

Business Highlights 2015

Much like medicines, consumer-care disinfectants and other products where Lonza has expertise, agro active ingredients must be formulated in such a way that they can be applied by the end-user in a safe and user-friendly manner, while achieving maximum efficacy and satisfying rigorous regulatory requirements.

Lonza's Agro Ingredients business is doing just that, reflected by high capacity utilization in our chemical multi-purpose and fermentation plants in 2015. The growing capacity utilization and strong project pipeline in our biopesticide development and manufacturing services also highlight the increased interest in this sector during the year.

One key development in 2015 was Lonza's acquisition of Zelam Holdings Ltd, a research-focused chemical company based in New Zealand. Besides developing and manufacturing products for wood protection, Zelam also develops and manufactures products for crop protection and specializes in fungicides, insecticides, herbicides, foliar nutrients and additives. This acquisition provides Lonza a thriving business in New Zealand and Australia and builds an additional base for marketing Lonza ingredients and products, like our Meta™ and Axcela™ offerings.

Our strategic geographic expansion proceeded according to plan in 2015 for our molluscicide business focused on our Meta™ active ingredient. In Japan and South Africa, we received registrations for our Axcela™ product in 2015. We also experienced a strong demand in the main molluscicide markets, especially in the Asia-Pacific region and in Europe – where favorable wet weather conditions in spring 2015 caused heavy slug infestation.

In 2015 we have also progressed with the project with INCOTEC to develop, register and market Meta™ coated rice seeds for the control of the golden apple snail pest on paddy rice in Asia.

In the first days of growth after direct-seeding, this technology protects the plant against attack from the rapidly growing and economically devastating golden apple snail. We are in the phase of registering this product in Malaysia and awaiting feedback from the authorities. If the registration is granted in time, the launch is scheduled to take place in 2016. Farmers then will have access to an innovative product that allows them to fight this important rice pest while reducing their labor resources.

Biologically Derived Products

Lonza is taking part in the Fusion Protein research project, in collaboration with the University of Durham, Fera Science Ltd. and i2L Research Ltd. It is a three-year research project, co-financed by the UK government, which aims to explore the development of an environmentally benign pesticide that is harmless to non-target species including bees.

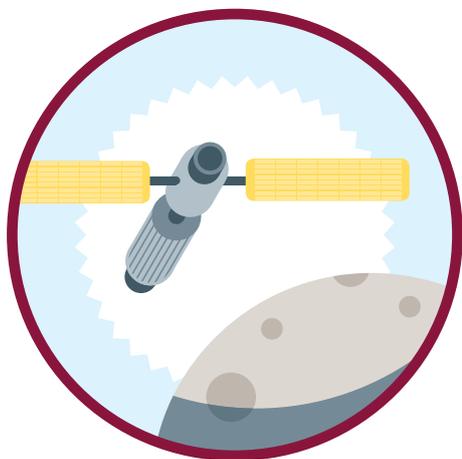
This next-generation pesticide will use naturally occurring peptides found in spider venom, which are known to be harmless to mammals. The peptides are then fused to a "carrier" protein that can then be applied to crops on a large scale. When treated crops are eaten by pests, such as slugs or beetles, the "carrier" protein transports the spider toxin from the pest's gut and into the nervous system – killing the pest without having an impact on other species.

Frexus™ in Brazil

Our Frexus™ Ceres Plus™ product line is a new, innovative combination of Lonza quats and copper phosphite that extends the Frexus™ product line in Brazil. Frexus™ Ceres Plus™ products strengthen the plant's vigor by promoting plant health and metabolic function and stimulating a plant's natural defense mechanisms, including phytoalexin and antioxidant production. Applied as part of an integrated production system to improve productivity, our Frexus™ Ceres Plus™ products have already been launched in cooperation with a Lonza distribution partner.

Industrial Solutions

Conserving Energy and Improving the Quality of Life



Lonza's Industrial Solutions is organized into two distinct business areas: Coatings and Composites is the group that drives growth through innovation, and Performance Ingredients is the preferred supplier of our more "mature" products and delivers value to Lonza through excellence in portfolio and asset management.

Effective 1 January 2016, we re-named the overall group Coatings and Composites and are including three business units focused on the target markets of Wood Protection, Performance Ingredients and Materials Performance and Protection.

Business Overview

Coatings and Composites

The Coatings and Composites business group is the leading innovative partner for our customers in the materials protection and high-tech composites markets where we are active. We offer the widest 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, wallboards and emulsions and also improve performance of plastics, textiles and inks. By preventing fouling on ocean-going ships, we help to preserve fuel and reduce maintenance costs.

Using our Primaset™ and Lonzacure™ thermoset resin systems, our high-tech composite customers build lighter, more fuel-efficient and more comfortable aircraft and produce faster, smarter mobile phones, tablets, computers, routers and telecommunications equipment. The major growth and innovation areas of our Coatings and Composites business are in paints and coatings, anti-fouling paints, metal-working fluids, plastics and building products, as well as high-tech composites for electronics and aerospace.

Performance Ingredients

With our Performance Ingredients products, our customers can reduce their environmental impact when producing vitamins, pharmaceuticals and crop-protection products through efficient high-yield processes. We also offer an innovative portfolio of performance chemicals to the oil-and-gas industry to increase efficiency and safety of production.

The Performance Ingredients team focuses on continual optimization of the product portfolio, on excellence in asset management and on controlling production costs to maintain profitability.

Significant application areas include chemical intermediates for production of pharmaceuticals and crop protection active ingredients, as well as lubricants and enhancers in the production of precision automotive parts, plastics, inks, pigments, optical brighteners, coin production and flexible circuit boards for electronic devices.

Business Highlights 2015

Our experienced team of regulatory and technical experts offers support to our customers as they navigate through the regulatory changes and challenges that continued to intensify during 2015 with key milestones for the Global Harmonisation System (GHS) and with changes in regulatory guidelines and laws in almost all regions where we do business.

For example, regulatory changes in Europe have created opportunities for our biocides businesses, especially in paints and plastics markets. The European Classification, Labeling and Packaging (CLP) regulation represents the European implementation of GHS. From 1 June 2015, the requirements of CLP applied to all chemicals products, including mixtures. As a result, many current biocidal formulations will require allergenic labeling. Using carefully designed and tested combinations of key active substances, we are able to give customers an alternative solution that will avoid such labeling requirements.

The generally favorable demand situation in most of our target regions enabled us to continue our success story in 2015. Good operational performance helped us to deliver in some high-demand situations, particularly when other large suppliers either exited the market or faced significant production issues.

New product launches during 2015 met with market success, specifically in the paint industry and the electronics and industrial composites markets. Our Coatings and Composites business also captured growth from the upswing of anti-fouling paints for the shipbuilding and repair industry.

For instance, our Suzhou (CN) site was able to respond to a surge in demand during the year for Omadine™ anti-fouling paint biocide actives by de-bottlenecking the plant and reorganizing the production team. At the same time, we were able to offer many customers regulatory support and advice on how to prepare for and conform to the latest GHS labeling and documentation guidelines.

Our Performance Ingredients team has been working with key customers to track and project the growth in demand for products that consume our malonodinitrile (MDN). As a response to increasing demand in several regions, we have approved a capacity expansion at our production site in Visp (CH).

Further capacity expansions have been approved for other key products like a new product form of cyanuric chloride liquid and pyromellitic dianhydride acid (PMDA), and we also improved the process for our PMDA production during 2015.

Primaset™ Products

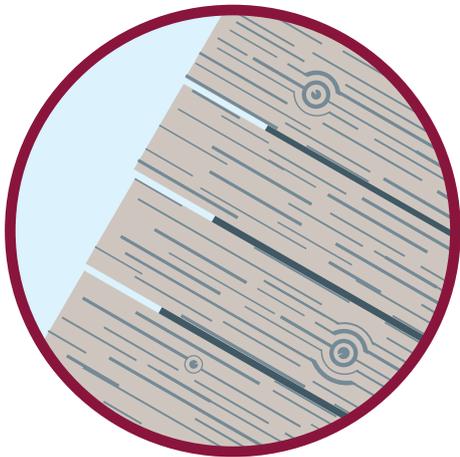
Our latest product development for high-end electronics markets, Primaset™ ULL-950S continues to gain traction in the market. This new thermoset resin offers an interesting performance profile, such as low dielectric properties among others; and it targets different applications like the next-generation telecommunication network system 4G and beyond. Primaset™ CE-320 is a new infusion resin that features short curing times that facilitate high-volume fiber-reinforced parts manufacturing, such as is required in the growing automotive composite market. Currently still in the pilot phase is Primaset™ HTL-300, with its product characteristics being tailored for special aerospace and industrial applications.

Oil-and-Gas Industry

Decreasing oil prices force some of our customers to look for cheaper alternatives in order to stay profitable. Our Oil-and-Gas chemicals team launched two new products (Uniquat™ 7060W and Uniquat™ 7158F) to support our customers' need to reduce costs in the anti-corrosion segment. In addition, we identified products in our current portfolio (Vantocil® IB) that would treat systems more efficiently than other products available in the market.

Wood Protection

Growing Through Product Innovation and Global Expertise



Over the last 80 years, Lonza's Wood Protection business has become a leading name in the industrial pre-treatment and surface protection of wood. Lonza offers the world's broadest portfolio of wood protection chemistries, with operations spanning North and South America, Europe, Asia Pacific and Africa.

Our products and services enhance the beauty and versatility of wood – the only sustainable, renewable building material – making it resistant to termites, fungi, mold, fire and moisture.

Business Overview

Lonza's Wood Protection business supplies copper azole wood preservative technology, which is the most widely used in the world, as well as industrial preservatives, fire retardants, water repellents, mold inhibitors, pole-climbing enhancers, sapstain-control chemicals, and other pressure and non-pressure treatments.

We also provide engineering, technical, regulatory, marketing and environmental health and safety services to help our customers succeed. Not only do we help customers design new treatment plants and conduct full audits on their treatment practices, we also offer expert advice in areas such as incorporating new technologies and achieving the optimal production and drying practices for different wood species.

In addition, we offer customized marketing services to customers needing support. All of these services are aimed at helping both the customers and Lonza to prosper. Furthermore, this advisory capacity is an area that sets Lonza's Wood Protection business apart from our competitors.

With R&D facilities around the globe, Lonza's Wood Protection business continues to be a leader in diverse markets in the wood preservative industry. In applications from decks, marinas, railroads and utility poles to roof sheathing, millwork and framing, our products serve not only the construction market but also infrastructure preservation and development. Among our more recent developments are specialty products or ingredients that further enhance existing technologies and allow us to break into new competitive markets with our broad portfolio of products.

Lonza's product portfolio offers protection to a wide variety of wood products for residential, commercial, agricultural and industrial uses.

Business Highlights 2015

In 2015 we have continued to draw on the industry-leading products in our portfolio, as well as our strong partnerships with customers, to capitalize on the promising growth in relevant construction, industrial and agricultural wood markets in the midst of the prolonged global economic downturn.

To bolster our growth, Lonza made two acquisitions during 2015. The first was the acquisition of a New Zealand company Zelum Holdings Ltd. This acquisition immediately strengthened our wood R&D capability in Asia Pacific and provided access to additional markets for high-growth, engineered-wood products.

Diacon Technologies Ltd., a privately held anti-sapstain business based in Richmond, British Columbia (CA), was Lonza's second acquisition. This Canadian acquisition strengthened Lonza's global initiative in mold control and supported Lonza's role as a leader in the anti-sapstain business in North America.

Five innovation platforms for strategic growth were defined in 2015, all of which are oriented toward one or more of our key growth markets. This initiative adheres closely to our "Think Globally, Act Regionally" approach.

The roll-out of new, innovative products – such as metal-free wood protection and next-generation fire-retardant products – was initiated in 2015.

In addition, in the United States and Europe, Lonza continued to roll out a BARamine® additive for improved treatment of the Western Timber and Southern Yellow Pine species. This product allows for better penetration of chemicals into wood, provides a broader spectrum of coverage against rot and decay and reduces cycle time for those customers who are treating the wood.

The successful commercialization of the BARamine® family of products not only strengthens our market position, but it also opens doors with customers not currently in our portfolio. Our BARamine® program was recognized by the *Timber Trades Journal*, which gave Lonza the innovation award for market development in 2015.

During 2015 in the Asia-Pacific region, which includes Australia, New Zealand, Malaysia and Japan, we also continued to roll out Tanalith TI™, a product that provides improved protection at a lower cost for soft-wood framing applications.

On the regulatory side, full compliance was achieved in 2015 with the Globally Harmonized System (GHS) for our global product portfolio.

Zelum

Our acquisition of Zelum Holdings Ltd in 2015 strengthened our Wood Protection and our Agro Ingredients businesses. Zelum is a research-focused chemical company based in New Zealand that develops and manufactures products for wood protection, as well as products for crop protection with a specialization in fungicides, insecticides, herbicides, foliar nutrients and additives. For more than 25 years, Zelum has researched and developed smart products that meet specific needs of the agrochemical and timber treatment markets.

Zelum has world-class facilities based in New Plymouth (NZ) with field research and timber facilities elsewhere in New Zealand, as well as in Australia and the United States. In fact, Zelum's manufacturing facilities include New Zealand's first micro-encapsulation plant with pollen tube growth testing and glue-line treatment of engineered-wood products. Additionally, product brand names like TAG G2™, Vixen™, Taratek™ and Permatek™ are widely known in New Zealand.

Diacon

In 2015 Lonza acquired Diacon Technologies Ltd., a privately held anti-sapstain business based in Richmond, British Columbia (CA), with approximately 25 employees. Diacon provides us access to unique application, automation and monitoring technologies.

As a leading formulator and supplier of anti-sapstain chemicals and ancillary sawmill products, Diacon brings a strong product portfolio. Diacon's anti-sapstain formulations protect freshly cut logs and lumber from mold and blue stain during storage, seasoning and transport.

Key products include our Mycostat™ family of cost-effective anti-sapstain and mold-control formulations; our Diaplex™ industry-leading spray application equipment; and our unique Smart Flow™ process to automate and monitor application equipment.

Water Treatment

Growing by Quenching Megatrend “Thirst” for Clean Water



Water treatment is a major growth market for Lonza with our strong market-leadership positions around the world. With a long heritage and more than a century of experience in developing innovative water treatment solutions, the Lonza Water Treatment business is one of the leading suppliers of treatment chemicals, sanitizer feeder systems and services to the global water treatment market. From drinking-water supplies and industrial applications to backyard swimming pools, our products aim to keep water clean.

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

Business Overview

The Water Treatment business is categorized by customer need into Residential, which encompasses Pro Dealer and Mass channels, and Industrial, Commercial, Municipal and Surface Water (ICMS) chemicals and services.

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

Residential

The Mass channel maintains focus on the strength, consumer trust and long-standing heritage of our flagship HTH® brand to reinforce our dedication to superior quality and value for the customer and consumer. We continue to focus on improving the consumer experience, both at the shelf and in the pool, while delivering high-quality and innovative products; so we are recognized as a trusted supplier for our key customers. The Pro Dealer channel competes with strong brands that feature differentiated products and customer-targeted programs. This approach enables us to serve multiple outlets within a market. Customer relationships play a vital role in this channel. Our Pro Dealer channel is anchored by our cornerstone brands: poolife®, Baquacil® and HTH® brands.

Industrial, Commercial, Municipal and Surface Water (ICMS)

The Industrial, Commercial, Municipal and Surface Water (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 on-site 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, and steel industries.

As part of our broad portfolio, numerous products are dedicated to the treatment of cooling systems. These products can be used to kill the organism that causes legionella or to stop the growth of biofilm in equipment.

As one of the leaders in this application, Lonza is also developing, through our Center of Excellence based in Alpharetta, GA (USA), complete solutions and services for the aquatic plant management in ornamental ponds, lakes and fountains, too.

Our calcium hypochlorite sanitization solutions, which are delivered via patented feed technologies, are present on all continents. Offering market-specific products that fulfill complex needs has allowed Lonza's ICMS business to expand into niche markets and to showcase the unique features and benefits of our portfolio of products and services.

Customer focus, regulatory expertise, technical support and product performance are key factors in growing this market. Brands include Bardac®, Barquat®, Dantoin®, Dantobrom®, Equinox®, Pulsar®, Constant Chlor®, Dry Tec®, Easiflo® Frexus® and Applied Biochemists® products.

Business Highlights 2015

Unfavorable weather again had a negative impact on the Residential Water business in North America, the largest residential water treatment market for Lonza. To help balance the weather-related factors, we continue to focus on growing our non-residential ICMS business. We are also building strong new relationships with customers in other markets, expanding our geographic reach and launching differentiated new products and services.

Residential

One key highlight for 2015 was the HTH® brand re-stage initiated for the U.S. market. The team worked with key customers and consumers in the development of new graphics and packaging in order to improve the consumer's shopping experience and to simplify at-home use of the products. Packaging updates for our HTH® products also included the usage of new flexible packaging, which is the first brand within our portfolio to move to this more-sustainable packaging.

To grow our share of the All-in-1 Sanitizer category in 2015, we also re-launched HTH® Clear4Weeks in South Africa. This product capitalized on our HTH® heritage as we targeted emerging markets. Also the launch of the innovative 10in1 HTH® Mineral Brilliance™ product line in Brazil continues to enjoy great success.

As a service to our customers, we provide sales tools and both online and in-person education formats to our network of professional pool and spa dealers. These tools and trainings enable them to promote our products and grow their respective businesses. We also reach out directly to the public with educational materials on social media, such as our "Salt or Chlorine?" campaign and our "Clean Water – Brighter Future" campaign.

Industrial, Commercial, Municipal and Surface Water (ICMS)

For Lonza's Industrial, Commercial, Municipal and Surface Water (ICMS) business, 2015 was the year of globalization, leading to a comprehensive offer for ICMS on a worldwide basis. We more clearly defined our future strategy in major segments like drinking water, aquatic-plant management and industrial services.

Key successes in 2015 included our management of the entire water cycle at a prominent resort in the Bahamas. ICMS demonstrated innovation by integrating a complete water disinfection solution based on calcium hypochlorite to treat drinking water, as well as water for the pool and resort attractions. We also were chosen to treat drinking water in Puerto Rico.

In Europe the Biocidal Products Regulation (BPR) is coming into force, and those regulatory challenges have been presenting opportunities for Lonza. Only companies supporting the actives are now authorized to place biocide products on the market. Lonza is recognized as a partner of choice for water treatment-related products and solutions because of our position as an expert company in terms of regulatory compliance.

Salt or Chlorine?

Lonza launched a national educational campaign named "Salt or Chlorine?" in 2015 to inform our internal stakeholders, our customers and consumers about the myths and misconceptions about salt chlorine generators (SCGs) used in what are popularly known as "saltwater pools."

The campaign debunked key myths – such as "saltwater pools are chlorine-free and maintenance-free" – and explained the pros and cons of SCGs versus treatment with traditional chlorine or other chemicals. Throughout the summer Lonza posted videos and information about the environmental impact of saltwater pools on our Twitter, Facebook and LinkedIn pages to reach our B2C and B2B customers.

We also provided our dealers in-store tools such as entertaining and informative videos and signage for their stores so they could help their customers better understand the pros and cons of SCG systems.

Clean Water – Brighter Future

Lonza provides sustainable, reliable and high-quality solutions to address global megatrends like the need for clean water and to enable people all over the world to live better and healthier lives. One way that we are approaching this task is through a campaign that will increase awareness of water issues globally through our social media campaign "Clean Water – Brighter Future."

The goals of this program are to raise public awareness that water is an increasingly scarce and valuable resource; to educate people about water, sanitation and hygiene concerns around the world; and to create a call to action by giving people advice on what they can do personally to fight the scarcity of clean water. At the same time, we are promoting our own industrial water applications, solutions and innovations to tackle these problems.

We will continue to publicize the campaign widely in 2016 with stories and visuals like info graphics through our website and our active social media channels, including Twitter, Facebook and LinkedIn.



As of 1 January 2016, Wood Protection has been integrated into the Industrial Solutions business unit, which was renamed "Coatings and Composites".

Pharma&Biotech Overview

Lonza's Pharma&Biotech segment encompasses Custom Development and Custom Manufacturing offerings to the Pharma&Biotech market, as well as offerings from our Bioscience Solutions business to our BioResearch market. In 2015 Lonza continued our journey toward a customer-centric organization and invested in building new customer relationships, while at the same time strengthening existing relations.

Alongside these important activities, Lonza Pharma&Biotech focused on further improving our operational performance. The positive quality track record continued in 2015. With our solid 2015 financial results and strong customer relationships, we are well positioned to profitably capture a growing share as a supplier to the global pharmaceutical market.

To enable us to meet the expectations of our customers in the future, we are strengthening our innovation approach and market-leadership position by focusing on new technology trends and services. In addition, we are building our world-leading strengths in induced pluripotent stem cell (iPSC) lines and platforms, antibody drug conjugates (ADCs) and cytotoxics, along with our proprietary GS Xceed™ and XS Expression System™ technologies and new endotoxin testing systems.

Custom Development and Manufacturing

It is Lonza's goal as a Custom Development and Manufacturing organization to leverage our experience in expression technologies, development and scale-up of robust production processes, analytical services, regulatory compliance and licensing options to provide our customers with complete solutions for their short- and long-term objectives.

Bioscience Solutions

Bioscience Solutions has long set the industry standard for product quality and customer support in life-science research. We deliver biologically relevant and convenient cell-culture solutions to enhance research findings, including custom primary-cell isolation, cell expansion and immortalization, and transfection services.

Custom Development and Manufacturing

Turning Promising Discoveries into Viable Products



For more than 30 years, Lonza has been helping emerging and established pharmaceutical and biotech companies increase product quality, improve production processes, navigate development and regulatory processes, lower the cost of goods and get to market faster. We help our customers advance their therapeutics through the clinical pipeline and ultimately to the patient.

As service providers we understand the day-to-day challenges that pharmaceutical and biotechnology innovators face. We leverage our broad experience as we provide our customers complete solutions for their short- and long-term objectives.

Because we recognize that every organization has unique needs and those needs are likely to change over time, we innovate and remain flexible to align with our client's goals throughout the development and manufacturing partnership. Lonza offers small-, mid- and large-scale commercial manufacturing capabilities that provide vital support as our customers move through the clinical development pathway. Smooth and quick transitions through each clinical phase, along with having a secure commercial supplier, are all critical factors for drug success.

Business Description

The pharmaceutical industry is facing a growing number of challenges, including escalating R&D costs and more stringent regulatory scrutiny. Lonza can conduct a Developability Screening of potential candidates in the drug development process, which can contribute to reducing R&D costs, risk of attrition and overall development time.

Being able to assess the manufacturability and safety at the pre-clinical stage, before large investments are made, allows companies to focus on the candidate with the highest probability of success, which maximizes the return on the company's R&D spending. Our Custom Development and Licensing business includes services to address these potential risks at the start of drug development.

Through our Custom Manufacturing business, we are able to offer our clients synergies between chemical synthesis and biotechnology to enable the production of tailor-made intermediates and active pharmaceutical ingredients (APIs) for use as pharmaceuticals, biotherapies, nutraceuticals, cosmetics and animal health products. Collectively, with our technological expertise, solid track-record, process development and innovation, proprietary technologies, regulatory experience and global footprint, we are well positioned to meet therapeutic needs at any scale.

Biological Development and Manufacturing

Mammalian interest remained high in 2015 driven by continued growth of innovator products in late phase to commercialization. In July Alexion and Lonza announced a long-term manufacturing supply agreement, under which Lonza will construct and launch a new suite in Portsmouth, NH (USA), dedicated to Alexion.

Across our entire network, Lonza experienced strong demand for development and manufacturing of biologics for clinical and commercial supplies. In Singapore (SG) our full-scope development capabilities are creating more interest from European customers. The site is fully booked for the near term with good mix of mid-sized pharma and small biotech companies from the United States, Europe and Asia.

Increased interest was observed in our disposable manufacturing technology, with our second and third 1 × 1000L bioreactors being commissioned in 2015. We continue to invest in automation to improve project throughput and product quality from cell-line construction through process development.

Two new products using the GS Expression™ Technology were approved in 2015, bringing the total number on the market to 20 products. Furthermore, in 2015 Lonza and arGEN-X entered a multi-product GS Xceed™ License Agreement, which allows both companies the flexibility to move forward to commercial production.

In the microbial segment, the XS Expression™ Technology is successfully expressing next-generation antibody molecules, including bi-specifics. Demand for this service is increasing, as well as the number of requests for biosimilar products and process characterization studies.

In Applied Protein Sciences (APS), the value of our Development Assessment offering is recognized by customers, consultants and venture capitalists. The increasing demand for this service is a result of its success in assessing a drug candidate's manufacturability and safety, which enables customers to optimize their lead drug candidates.

Lonza is focusing on expanding our value-chain offerings to customers. In late 2015 Lonza began introducing our Drug Product Formulation capabilities that will be based in Basel (CH) and built stepwise over the coming years.

Custom Development and Licensing

In Custom Development we allow our customers to access our proven expression technologies, such as our Mammalian GS Xceed™ and Microbial XS™ Systems, in their own research facilities through both research and commercial licenses. These technologies, together with our protein design services offering, allow for early assessment of our client's lead drug candidates in a rapid and cost-effective manner.

Following molecule selection, we offer custom contract services for mammalian and microbial cell line and strain construction, in addition to process development and optimization for robust and predictable scale-up through clinical development.

In our Chemical Development business, we have extended this licensing model to our small-molecule Microreaction Technology (MRT) platform. Continuous Flow Manufacturing using microreaction technology allows customers to perform hazardous, high-temperature and high-pressure reactions in a controlled and safe environment. Lonza's Development Services business is an extension of our customer's R&D team and allows them to remain focused on the clinical success of their therapeutic.

Custom Manufacturing

As one of the first companies to custom manufacture active pharmaceutical ingredients (APIs) for drug companies, Lonza's biological manufacturing services range from vector construction and cell-line development to full-scale manufacturing, all backed by a complete range of analytical services and regulatory support for clinical trials and in-market supply.

Lonza's experience in microbial fermentation began in 1983 in Visp to support the development of industrial enzymes, biotransformation technologies and other fermented ingredients. We then entered the microbial biopharmaceutical business, where we have successfully delivered a wide range of microbial parenteral API, including antibody fragments, vaccines, cytokines, plasmid DNA, fusion proteins and PEGylated products.

The custom manufacturing landscape continues to evolve and grow with each new therapeutic discovery. As a committed partner to the pharmaceutical and biotechnology industry, Lonza recognizes the need for established and dependable global manufacturing facilities. Lonza has 14 contract development and manufacturing sites worldwide, spanning three continents.

Business Highlights 2015

Custom Development's continuous focus in 2015 on selling our R&D capabilities resulted in bringing in new early-phase customers, as well as landing additional development work with existing customers on late-phase projects, across all technologies.

Our Custom Manufacturing team contracted new early-phase, late-phase and commercial projects across all technologies, such as peptides, bioconjugates, small molecules, highly potent active pharmaceutical ingredients (HPAPIs) and mammalian. And this year we continued to have an excellent track record for successful facility inspections by authorities around the world, with a total of 21 regulatory inspections and 143 customer audits.

Lonza's Custom Development and Custom Manufacturing teams continued to enhance Lonza's visibility through their presence at key industry conferences across all technologies and in all geographies. For example, at more than 20 major cell therapy manufacturing conferences globally, our cell therapy team presented our Custom Development capabilities for scaling-up cells to meet commercial demand by using bioreactors.

Chemical Development and Manufacturing

In 2015 Lonza experienced increased demand for chemical development and manufacturing. Strong growth for oncology products, in particular, was experienced where high containment assets (such as HPAPIs) are critical to success and Lonza has demonstrated expertise and track record. Contract manufacturing benefited from our customers' product launches that already started in the second half of 2014 and continued throughout 2015; our customers are planning further product launches in 2016.

Lonza's small molecules team is strongly involved in U.S. Food and Drug Administration (FDA) designated breakthrough therapies, with a significant share of these products being produced at Lonza. These products are notable for the speed they need to reach the market, and Lonza received excellent customer feedback on how these products have been managed throughout the accelerated process.

During 2015 Lonza also worked on innovative solutions in small molecules, such as a project in flow chemistry spanning from development to manufacturing, which we led in close collaboration with our customer. Also our milling capabilities were expanded in 2015 as a new supply-chain service.

Viral Therapy Manufacturing

In 2015 Lonza continued to advance our industry-leading process development and cGMP-manufacturing track record across several vectors including Adeno-Associated Virus (AAV), Lentiviral and Adenoviral. Lonza has delivered multiple large-scale 2000L suspension culture batches of an AAV-based gene therapy in a single-use bioreactor. cGMP processing of virally modified autologous cell therapies continued to grow as a vital part of our Viral Therapy business.

Customers with products at the most advanced stages of development can benefit from Lonza's industry-leading commercialization regulatory track record in biologics. Lonza has established modern and efficient commercial facility designs and, in line with customer needs, has plans to offer commercial supply in the coming years.

Cell Therapy Development and Manufacturing

Our innovative induced pluripotent stem cell (iPSC) therapy represents a major scientific breakthrough in that it avoids the controversial need to use embryonic stem cells to develop targeted cell therapies for a variety of disease indications. During 2015 we further developed the L7™ Pluripotent Stem Cell Culture System that was launched by Lonza's Bioscience Solutions team in 2014.

In 2015 we completed the manufacturing of the first cGMP iPSC master cell bank with one of our customers. No other Custom Manufacturing Organization (CMO) has been able to make clinical-grade iPSCs.

Following initial research studies, a customer can come to Lonza for development and manufacture of these cells for clinical trials. For example, our Custom Development business is working diligently with a client to bring iPSC therapy to the clinic by 2016.

We are evaluating new technologies to address growing demand and to solve the technology challenges in patient-specific manufacturing, such as costs of goods, quality standards and development timelines. Our Octane Cocoon™ technology platform is undergoing evaluation by Lonza to address key challenges in personalized cell therapy and has the potential to enable the automated manufacturing of patient-specific cell therapies for maximum efficiency, traceability and scale-up.

The global reach of the regenerative medicine market and the advancement of stem-cell manufacturing have driven an exclusive collaboration with Nikon for cell and gene therapy manufacturing in Japan, which will enable Lonza to capitalize on market opportunities after the country's new regulatory initiatives to support regenerative medicines. We are seeing significant demand for our services in Japan.

Bioscience Solutions

Providing Industry-Leading Research, Discovery and Manufacturing Tools



Lonza Bioscience Solutions provides tools for two distinct business areas: research and disease-discovery tools for innovative research in academic and industrial research facilities across the world, as well as solutions for pharmaceutical and biopharmaceutical manufacturing, which includes emerging technologies such as cell and viral therapy.

Business Description

Our BioResearch offerings include cell-culture, transfection and molecular biology tools for life-science research. We serve customers across the world in academic and government institutions and in major biotech and pharmaceutical organizations.

Lonza Bioscience Solutions sets the industry standard for product quality and customer support in life-science research with our Clonetics™ and Poietics™ primary cells and stem cells; cell-culture media; Nucleofector™ transfection technology; electrophoresis devices and reagents; and services.

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

Our Testing and Therapeutic Cell-Culture Media businesses serve customers in the pharmaceutical and biotech industry. Therapeutic cell-culture media is used in the production of therapeutics like antibodies, antibody drug conjugates (ADC), vaccines and other biologics.

Lonza's endotoxin-detection assays are applied in pharmaceutical product release testing to assure the safety of injectable drugs, implantable medical devices and dialysis samples. Our fully integrated software solutions streamline Quality Control processes and offer complete insight into manufacturing operations, with quick access to management, compliance and trending data.

Business Highlights 2015

One of the main business highlights of 2015 was our successful entry into the 3D cell-culture market with the introduction of the new RAFT™ 3D Culture System, a stepping stone for Lonza into the rapidly expanding 3D cell-culture market.

The RAFT™ System uses a patented absorber technology to create cell layers in high-density collagen that mimic the *in vivo* environment. In combination with Lonza's human primary cells and media solutions, the RAFT™ 3D Cell Culture System empowers researchers to create physiologically relevant cell-culture models for use across drug discovery and research applications.

Another highlight was the introduction of the CytoSMART™ System. It addresses an unmet market need for personal, low-budget, live-cell imaging devices that allow monitoring of cell cultures in the incubator. While high-end technologies have been on the market for years, low-budget devices have not been available, which has limited the application to laboratories with access to core imaging units.

With the new CytoSMART™ System, however, live-cell monitoring and imaging can now be performed in regular laboratories. And with the innovative cloud storage of CytoSMART™ System images, Lonza introduced a new product concept to the research market. Similar to social networks, this cloud storage allows researchers to easily share their data and to monitor and access cell-culture data remotely.

To complement the primary-cell portfolio, we also re-introduced our Cells On Demand™ Services, which exceeded target expectations in 2015. Cells On Demand™ Services were established to expand our cell biology offering and to meet each customer's unique research needs based on custom requests for specialized cell products.

Also during 2015 our therapeutic media collaboration with Sartorius Stedim Biotech continued to contribute to our growth as a business; and we expanded our media portfolio with new products for the research and therapeutic markets.

In the informatics field, our MODA™ Software solution experienced significant industry adoption in 2015. Growth followed market trends in the industry overall, with the addition of several new biotechnology customers, as well as key new customers in emerging markets. MODA™ Software is also being adopted as the QC Microbiology standard for a number of global pharmaceutical firms, with expansion to several new site installations this year.

Customer-driven product innovation, focus on strategic partnerships, and entry into new markets contributed to positive performance in 2015 and will be the basis for future growth and success.

The growing trend in the industry to reduce animal usage and work with sustainable supplies has led to a greatly increased interest in animal-independent methods. Our PyroGene™ recombinant Factor C (rFC) assay provides a sustainable, animal-independent and robust alternative to conventional Limulus Amebocyte Lysate-based (LAL-based) endotoxin-detection kits.

The publication of the European Pharmacopeia draft monograph (Issue 26.4), which accepted the recombinant Factor C assay as an alternative LAL method, again underlines the growing importance of this product in the testing market.

Endotoxin-Detection Assays

For nearly 40 years, Lonza has been the trusted provider of endotoxin-detection solutions within the pharmaceutical and medical-device industries. As a manufacturer ourselves, we understand the challenges of a regulated manufacturing environment. Since the introduction of our first endotoxin-detection assay, we delivered an innovative portfolio of products and services that supports our customers' critical needs within highly regulated manufacturing environments.

During Lonza's First Global Endotoxin Summit, the endotoxin-testing community of customers, vendors and regulatory bodies met in June 2015 to discuss the latest trends and topics in endotoxin testing, including the need for alternative testing methods. As a highlight of the event, summit delegates had the opportunity to participate in the Just Flip 'em® program run by the Ecological Research and Development Group, Inc. (ERDG), whose mission is to conserve the world's four horseshoe crab species. At Pickering Beach, DE (USA), delegates had the chance to experience horseshoe crabs in their natural habitat; and by helping to flip them, delegates saved hundreds of stranded horseshoe crabs so that they could return safely to the ocean.

RAFT™ 3D Cell-Culture System

Our new RAFT™ System has been designed with usability in mind, with simple easy-to-follow protocols that allow researchers to set up 3D cell cultures in less than an hour. The patented RAFT™ System technology creates cell cultures inside high-density collagen scaffolds that mimic the in vivo environment.

Each RAFT™ Kit includes a collagen type I solution and bio-compatible absorbers, which remove the medium from cell-seeded collagen hydrogels and allow researchers to control both cell concentration and matrix density. This flexibility enables researchers to generate more biologically meaningful data from their cell culture studies. The versatile RAFT™ Kit is suitable for analysis using a wide variety of imaging, biochemical and histological techniques.

Features include:

- A user-friendly system with optimized protocols to create 3D layers
- Robust cell layers that are thin (contact lens-like structure) and easy to handle
- Flexible formats – 24-well plate, 96-well plate, or 24-well cell-culture inserts
- RAFT™ 3D Kits with primary cells provide a complete solution for use with leading manufacturer's products

CytoSMART™ System

Among other applications for the CytoSMART™ System, it also enables documentation of cell cultures as needed for clinical research, as well as easy cell-culture standardization and remote monitoring of cell cultures under cGMP.

Our new CytoSMART™ System offers small, easy and affordable live-cell imaging:

- Small size – Easily fits in virtually any incubator
- Easy handling – System can be set up within minutes
- Low cost – Affordable live-cell monitoring and imaging tool for small budgets
- Cloud technology – Can monitor cell cultures using internet access anywhere and anytime

Cells On Demand™ Services

As more competition invades the primary cell and media market, we continue to successfully grow the business by offering our Cells On Demand™ Services. These services extend our offering by delivering upon-request cells our customers need that are not commercially available. As we grow our business, these services are helping to strengthen our relationships with customers and protect our market share for standard catalog products.

MODA™ Paperless QC Micro Solution

MODA™ Software is a best-in-class informatics solution for Quality Control (QC) Microbiology because it eliminates the time, cost and errors associated with paper-based QC methods. It automates the full spectrum of QC activities in regulated manufacturing, including environmental monitoring, utility testing and product testing.

Paper-based QC micro laboratory processes can be expensive and error prone, as well as time and labor intensive, with a negative impact on regulatory compliance.

With the MODA™ Software solution, QC organizations can:

- Make sound product-quality and release decisions with comprehensive analysis and reporting
- Automate data collection from devices and people to eliminate redundant data entry and transcription errors
- Increase worker efficiency (focusing QC professionals on science, not paper)
- Improve regulatory compliance and "right-first-time" performance
- Advance their green initiatives more quickly

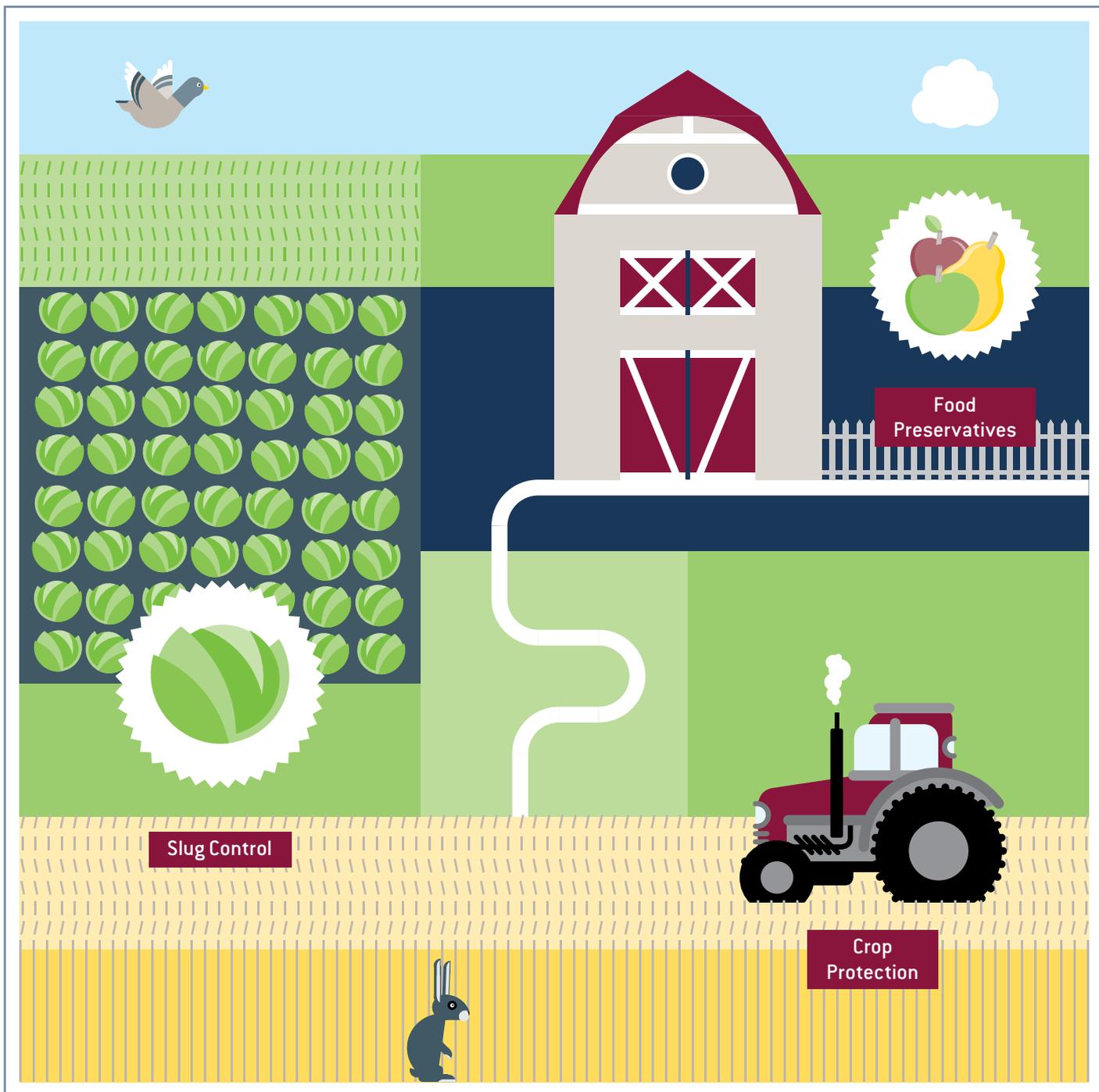
The MODA™ Software portfolio provides a complete solution with hardware, software and implementation services designed to get projects into production quickly, while directing time and resources to higher-value initiatives and achieving operational excellence.

Our PyroGene™ rFC Assay

The PyroGene™ recombinant Factor C (rFC) Assay is the next stage in the evolution of endotoxin-detection testing. Lonza scientists have produced a recombinant form of Factor C, the first component in the horseshoe crab clotting cascade activated by endotoxin. Recombinant Factor C is activated by endotoxin binding; and the active enzyme then cleaves a synthetic substrate, which results in the generation of a fluorogenic compound.

Advantages of the PyroGene™ rFC include the following:

- Endotoxin-specific, recombinant technology eliminates false-positive glucan reactions
- Predictable and reliable lot-to-lot assay performance
- Sustainable resource – no animal utilization
- Comparable performance to other quantitative Limulus Amebocyte Lysate (LAL) methods
- FDA and European Pharmacopeia acknowledge it as an alternative method



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Sustainable Values Overview

As a leading custom developer and manufacturer of products that promote health, well-being and the overall quality of life, Lonza has identified sustainability as one of its most vital, fundamental values. We strive to develop products that not only benefit our customers and consumers but that also are environmentally sound and, in many cases, socially beneficial.

Throughout the year we constantly looked for ways to increase the sustainability of our products and processes, including improvements in innovation, raw material sourcing, energy and water use, manufacturing, transportation, packaging and product use. We also worked hard to use recyclable packaging materials for our products and either to use byproduct chemicals in our own manufacturing processes or to sell them to other companies for productive re-use.

In addition, we invested in our communities, with sponsorships and philanthropic donations that promote educational excellence, safety and emergency response and other needs identified by community members and partners.

Overall, in 2015 we made noteworthy progress in sustainability by strengthening the present in order to secure the future for the benefit of our customers, our stakeholders and the world we share. We are sharing some of these efforts in this section of the Annual Report within the following articles:

Investing in Sustainability

In the Investing in Sustainability article, we explain how sustainability is a key focus at Lonza as we source, manufacture, transport and recycle our products.

Investing in Responsible Sourcing

The article on Investing in Responsible Sourcing describes how our Global Strategic Sourcing function helps secure raw materials for our businesses that are sustainably produced and sourced. In many cases this approach means satisfying strict customer, industry and regulatory standards in terms of everything from kosher and halal food quality to natural and organic ingredients for our cosmetic and personal care products.

Investing in Environment, Health and Safety

The extensive section on Investing in Environment, Health and Safety explains how the principles of continuous improvement drive progress in how we use resources, advance environmental quality and help achieve our vision of zero workplace accidents and injuries.

Investing in Our People

We also provide compelling examples of how our Human Resources team is Investing in Our People – including young people who may become future Lonza employees – through innovative apprenticeship training, talent acquisition, leadership development and incentive programs.

Investing in Our Communities

In the Investing in Our Communities section, we provide a wide range of examples of ways we are improving the quality of life in our communities and the world at large, both through philanthropic sponsorships and the invaluable work of Lonza employee-volunteers.

Investing in Sustainability

Strengthening the Present to Secure the Future

Sustainability is top of mind at Lonza as we source, manufacture, transport and recycle our products and is at the core of our activities 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 we include in 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 continuously improve

Overall, our actions are aimed at strengthening the present in order to secure the future for our customers and other stakeholders. We take into account the effects of our actions on the local community and the global environment, with the important guiding principle that what we do today should not compromise the well-being of generations to come.

Many of Lonza's products help sustain and enhance life. These products and ingredients certainly include the medicines, cell therapies and other treatments provided by our Pharma&Biotech market segment. And in our Specialty Ingredients' businesses, our Consumer Care business, for example, provides disinfectants and sanitizers that are used to protect people from dangerous viruses and pathogens, including the deadly ebola virus and the norovirus that causes acute gastrointestinal illnesses.

Our Industrial Solutions business also helps to promote energy conservation and otherwise improve the quality of life by making aircraft, satellites and automobiles lighter and stronger; by reducing algae and other foulants on ships hulls to improve fuel efficiency and reduce maintenance costs; and by improving yields and protecting workers and the environment in the production of oil and gas.

Relying on Innovative Sourcing and R&D

At Lonza sustainability begins from the moment that we conceive and begin development of new products or improvements to existing products. Our Research & Development (R&D) teams and our Process Technology organizations draw on well-regarded sustainability systems and frameworks, such as the "12 Principles of Green Chemistry" as defined by the U.S. Environmental Protection Agency (EPA).

One vital goal for our R&D scientists is to design products that satisfy customer needs while also addressing safety and environmental quality. A sterling example is a collaboration with our customer to provide rice seeds with a coating of our metaldehyde-based molluscicide to combat the invasive golden apple snail in Malaysia. This SnailWise™ technology protects the rice plants from this voracious pest that threatens the livelihood of paddy rice farmers, as well as this vital source of food in Asia.

Another example comes from the Consumer Care business at Lonza. Faced with consumer desires for natural and organic ingredients in their personal-care products, research and product development scientists from our Personal Care team have created a sustainable source for the innovative ReGeniStem® skin-care ingredient. As an additional benefit, the use of the bioreactor technology eliminates the need to rely on farmed crops as source material.

Maximizing Sustainability During Manufacturing

Many of our plants are ChemStewards® certified or compliant, and each location pursues improvement goals and projects to positively influence its environmental footprint. We also have an excellent Operations staff that focuses on improving the efficiency and sustainability of our manufacturing operations worldwide.

For example, our Custom Development business unit within the Pharma&Biotech segment has proprietary microreaction manufacturing processes that greatly reduce the volume of solvents required and waste in typical active pharmaceutical ingredients manufacturing operations.

The Lonza CFO Award for Innovation was awarded in 2015 to a multi-faceted Operations team that dramatically improved both our sustainability and productivity at our Specialty Ingredients site in Nansha (CN), where we produce L-Carnitine, a vital nutritional supplement. The team members, for instance, used an advanced energy analysis to identify ways to significantly reduce steam consumption and related energy usage across the manufacturing process.

Proprietary Microreaction Manufacturing Technology

Manufacturing in the pharmaceutical industry typically generates a significant amount of waste for every kilogram of product. To help customers reduce that waste, we have developed innovative FlowPlate® Reactors and Flash Chemistry™ technologies to replace traditional and wasteful batch processing with continuous flow as often as possible.

Drawing on our proprietary microreaction manufacturing technology, the Flash Chemistry™ approach is based on high-resolution reaction time control, which serves as a powerful tool for the synthesis of organic compounds. This approach means that multiple steps of a traditional chemical process can be replaced by a single Flash Chemistry™ step, leading to shorter synthetic routes, reduced processing time, decreased waste byproducts and lower cost of goods. The use of this chemistry also creates processes that are inherently safer due to their higher level of containment.

Reducing Steam Consumption and Energy Usage

Facing strong competitive price pressures for our L-Carnitine nutritional ingredient in Asia, team members from both Visp (CH) and Nansha (CN) were charged with dramatically reducing this product's base costs across its entire value chain. Visp supplies a major raw material for the L-Carnitine made in Nansha.

Drawing on a variety of operational excellence tools, the team identified and helped implement ways to improve the raw material production process, to optimize the manufacturing organization, and to drive down overall operating costs. To reduce the amount of energy used to produce steam, the team used a methodology for minimizing energy consumption of chemical processes in order to optimize heat-recovery systems, energy-supply methods and process-operating conditions.

Transporting Products Sustainably

Our Logistics team is constantly working to maximize product load and route efficiency while we continue to deliver needed products to customers in a timely manner. This commitment to safe, sustainable product transport spans Lonza's warehousing and shipping operations, as well as our carrier base used in transporting product to customers. One of our major freight and logistics suppliers, for example, is a SmartWay™ certified provider under a joint program with the U.S. EPA.

No Lonza business ships more products than our Recreational Water Treatment business for pools and spas. Water Treatment's biggest factory is in Charleston, TN (USA), where the Logistics team has consistently achieved superior product distribution safety performance. Through late 2015 we had a positive performance that continued a favorable trend that began in 2012. The Logistics team pursues continuous improvement by thoroughly investigating all incidents, including any release of product in transit, to determine root causes and corrective actions.

Our Wood Protection business also helps protect the environment in North America by using dedicated, custom-made tank trucks to safely transport our wood preservatives to saw mills and other customers.

SmartWay™

Under the SmartWay™ Transport Partnership with the U.S. EPA, participating logistics firms help businesses such as Lonza move goods in the cleanest, most-efficient ways possible. This approach involves everything from maximizing loads to using the least energy-intensive transportation modes possible. Since 2004 SmartWay™ partners like Lonza have significantly reduced carbon and other greenhouse gases and reduced costs by sharply cutting fuel usage.

Dedicated Tank Trucks Safely Transport Wood Preservatives

Designed exclusively for the environmentally safe shipment of liquid wood preservatives, our custom-made tank trucks have extra-thick steel hull containers and redundant safety controls built into the product-unloading apparatus, among other safety features. Our drivers also receive intensive training in safe driving, product loading and unloading procedures and responding to emergencies. Some drivers have accumulated millions of hours on the roads without a single accident.

Product Use and Recycling

Lonza products – and the packaging they come in – have concise and clear directions for use and recycling. Our industrial hygienists and technical sales support personnel work closely with customers to ensure that they are handling, using and recycling our products and packaging in the safest and most advantageous ways possible. We also work in close collaboration with customers to respond in creative and proactive ways to their own green-product and sourcing initiatives.

For example, Lonza's Water Treatment business offers pool and spa owners toll-free hotlines and online chat rooms where they can get expert advice about product use, dosage, storage, recycling and solving pool-chemistry challenges, such as ridding pools of algae, properly adjusting pH or dealing with other water-quality issues.

Packaging

In North America our Residential Water Treatment team has transitioned all corrugated boxes used for HTH® Shock products to a more efficient flat-bottom bag design. This transition has resulted in an average 73% reduction in material weight and 13-fold increase in storage efficiency.

We can now ship 12 000 packaging components per pallet, which is exponentially more than the previous 850 per pallet. This project not only greatly reduces packaging material, but also the frequency of truck trips needed, which means less fuel and fewer related emissions.

Investing in Responsible Sourcing

Serving as a Business Partner for Sustainability

The Global Strategic Sourcing (GSS) function is part of the glue that helps bind together and create an efficient network out of our 40 major R&D and manufacturing sites worldwide. In 2015 this function delivered significant cost savings and reacted creatively to supply constraints and pricing pressures, thereby supporting Lonza's competitive market positions, as well as our top-line growth and bottom-line profitability.

Working in close partnership with our businesses and with Operations to respond to customer needs, GSS purchases a diverse range of strategic raw materials and indirect products and services, with an annual spend in excess of CHF 1 billion. One of GSS's most innovative and strategically valuable actions in 2015 was changing the LPG sourcing strategy for our largest plant in Visp (CH) by securing a robust, cost-effective supply through a large global trader. The vital importance of replacing our reliance on individual and unreliable refineries was underscored when a regional LPG supplier that we had used for many years shut down. More broadly, GSS took advantage of reduced oil-and-energy costs to drive lower raw-material prices in 2015.

GSS is also working with other key functions, such as Quality Assurance, to improve productivity and assure raw materials meet Lonza's exacting standards. Both of these functions, for example, have worked together to create automated IT solutions to replace manual processes, which has led to greater efficiency, accuracy and traceability of sourcing.

Responding to Customers' Needs

In GSS we help our Specialty Ingredients businesses respond to consumers' and customers' desires for natural, organic and certified ingredients. We also ensure that Specialty Ingredients' suppliers meet the requirements of food, cosmetic and biocide regulations across the globe. Sourcing also works hand in hand with Quality Assurance personnel in our Pharma&Biotech market segment to ensure that the raw materials purchased for medicines and biotech products adhere to stringent cGMP quality standards and regulatory requirements.

Looking to the future, GSS is working with Quality Assurance to upgrade supplier quality management programs, to further bundle indirect spend sourcing to capture additional cost savings and to expand raw-material price forecasting in order to enable better product-pricing decisions. These efforts build on recent projects, such as improved new systems for raw-material spend reporting, that allow for greater automation, less manual report creation and more detailed insights.

Ingredients

Lonza secures raw materials for food additives that satisfy strict kosher, halal or non-genetically modified organism certifications. This approach also applies to the sourcing of natural and organic raw materials, such as botanical extracts, for our cosmetics and personal-care businesses.

Purchasing

At Lonza the GSS team manages more than 400 suppliers worldwide who provide in excess of 400 vital raw materials. Reflecting the global nature of our businesses, the majority of our suppliers are spread across the United States, European Union, China and Switzerland.

We source approximately 25% of our company-wide purchasing spend with our 20 largest suppliers, which gives us the ability to negotiate favorable pricing and terms in return for substantial purchase volumes and other elements of mutually beneficial strategic relationships.

In 2015 GSS was able to play a vital role in helping our businesses deal with some tight raw material markets. For example, we helped strengthen our position with customers after this function secured scarce raw materials – such as durene for pyromellitic dianhydride (PMDA) produced for Lonza Industrial Solutions in our plant in Nanjing (CN) – when our competitors could not obtain these raw materials. Our PMDA is used as a monomer in heat-resistant polyimide resins, films and coatings, as a curing agent for epoxy resins, as well as a chain extender in polyester materials. Such efforts to secure qualified sources enhance our supply security to support future business growth.

Strategic Relationships

In 2015 Global Strategic Sourcing formalized a Supplier Relationship Management process to increase the value derived from key suppliers. These relationships are all the more crucial given industry consolidation within the biopharma supplier base. By coordinating the management of key suppliers across multiple regions and categories, the GSS team has successfully leveraged global Lonza spend to secure the most favorable pricing, terms and conditions.

Raw-Material Markets

To help our businesses better react to and plan for volatile and ever-changing supply conditions, the Global Strategic Sourcing function in 2015 enhanced the analysis and reporting of key raw material price variances and future price projections. Also created in 2015 was a standardized risk analysis process to identify high-risk materials so that our businesses can take mitigation actions.

In addition to meeting raw material specifications, suppliers to Lonza must adhere to the requirements defined in our Supplier Code of Conduct. This code defines standards of business ethics, labor practices and health and safety that all suppliers must meet. We routinely conduct audits of suppliers to ensure they continue to meet Lonza's standards.

Investing in Environment, Health and Safety

Protecting Our Stakeholders

The ethical principle that underscores all our efforts in the realm of the environment, health and safety (EHS) is our “Vision Zero” program, which sets the ultimate goals of achieving zero injuries, zero manufacturing process incidents, zero distribution incidents and zero environmental incidents.

Of course, under our “Vision Zero” ethic, even one lost-time incident is one too many. Despite a several-year trend of steadily improving safety performance, we are not immune to setbacks and to sad reminders of what is at stake. In March 2015 one of our employees tragically lost his life during a process incident at our Visp (CH) site. We have conducted an intense root-cause investigation and implemented vital new preventive measures. In addition, we have created a new, centralized process safety department, whose expertise will help keep our processes safe.

The Visp fatality was part of a disappointing overall safety performance in 2015, with a consolidated lost-time injury rate (LTIFR) of 1.44. That result was far below our goal of a 1.0 LTIFR. We are employing new safety programs and tools to get us back on track to a strong safety performance. In 2015 we defined challenging medium-term goals from 2016 to 2020, with the aim to be at or below a 0.6 lost-time injury rate in 2020. By that time we will be able to demonstrate that “Vision Zero” is far more than a slogan – it is an achievable reality.

The EHS function also oversees our company-wide sustainability efforts because the same continuous improvement tools and disciplines that drive improved safety and environmental quality can also be applied to making sustainable use of natural resources, reducing our carbon footprint, minimizing hazardous waste and otherwise improving the quality of life for our stakeholders.

We made further progress in 2015 on implementing critical EHS process guidelines to harmonize and standardize Lonza’s approach to safe chemical and pharmaceutical manufacturing. Six of our 20 corporate guidelines that control the implementation of our global EHS policy are considered critical, and they get enhanced selective attention during our site audits. They include such activities as working from heights; protecting workers against unexpected fall risks; working in confined spaces; and preventing any exposure of employees to harmful, toxic or asphyxiating atmospheres while working in egress-restricted environments.

EHS risk assessments also 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.

Other than the Visp site, none of Lonza’s other sites reported any material incidents or breakdowns, nor were there any severe accidents or damage inflicted on the public or the environment in connection with the transportation of Lonza products and raw materials. In the unfortunate case that hazardous Lonza products would be involved in a transportation incident or a manufacturing plant experienced a significant breakdown with associated threats to stakeholders, Lonza maintains a proven and tested hazard communication and crisis management system to keep harmful effects to a minimum.

Safety Performance

Starting out from a record year in 2014, we were aware it would be a challenge in 2015 to reach our primary safety goal – a 1.0 frequency rate of lost-time injuries and illnesses (LTIFR). That proved to be the case, as we ended 2015 with a 1.44 LTIFR.

We have responded by reaffirming our absolute commitment to safety, which is embodied in our medium-term goal of reaching a 0.6 LTIFR by 2020. To achieve that goal, we must continue 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 the “Vision Zero” principles as set forth in our EHS policy is a central element in Lonza’s leadership, project management and team cooperation.

So we are confident that we can meet our medium-term safety goals through new training initiatives and other new programs and processes. For example, we continue to reinforce the learning effects by reviewing every safety incident – including challenging assumptions about causes and remedies. We continue to widely share the results of safety incident reviews to foster awareness and make insights applicable 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 performance and the objective of the safety culture remain to ensure that at the end of each day, every employee returns home safely and unharmed to their families and friends. “Vision Zero” will be our guide.

Safety Culture

Establishing and maintaining a safety culture throughout a globally diverse company is an essential and challenging task. Important building blocks of our safety culture are training programs that empower employees to speak up when they see a potential hazard and require supervisors to intervene when production deadlines and other pressures compromise worker safety. Site leaders and supervisors regularly conduct safety rounds and plant inspections. Safety topics are the primary message of top-level internal town hall information events, as well as business and site-leadership meetings and team meetings on the shop floor. Line managers at production sites receive support from internal EHS experts; and all manufacturing and R&D sites are regularly audited regarding their safety, environmental and health performance.

Vision Zero

Our vision is “zero” – zero injuries, zero process incidents, zero distribution incidents and zero environmental incidents. “Vision Zero” is at the heart of our EHS policy: Lonza is committed to operations and practices that prevent harm to people and damage to the environment or property. The principles for environment, health, safety and security (EHSS) set forth in the policy and resulting from the company’s ethical conviction take precedence and apply throughout Lonza.

Environmental Commitments

In 2015 Lonza committed considerable financial resources for measures related to environment, health, safety and security (EHSS). Out of the CHF 39 million investment-spend for EHSS in 2015, about 80% was absorbed by the site in Visp (CH), where the top five projects included:

- Various measures in the course of a major conversion of a plant to accommodate multi-product status
- Revamping and replacement of critical equipment and control for a generator turbine
- Overhaul of control installations for the thermal incinerator
- Fire protection and sprinkler equipment
- Emission-control upgrade in a key production plant

These special projects, together with the EHSS-related measures during the biennial maintenance shutdown of plants at Visp, absorbed a volume of CHF 11.6 million.

Projects at other sites also required significant investment in EHSS:

- Braine (BE), where a plant revamping and further investment in air-emission handling required a capital investment of more than CHF 2 million
- China (CN), where the capacity of a wastewater treatment plant was significantly increased
- Porriño (ES), where efficiency measures for water and energy use were realized
- Williamsport, PA (USA), where the installation of safety gates in the mezzanine, a small but important safety project, required investing in EHSS.

Together, these four projects absorbed more than CHF 3.5 million and exemplify the many instances where EHSS measures are tightly woven into nearly all investment activities.

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 regulations.

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. Pre-registered 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 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.

Global Regulatory Expertise

Lonza employs a team of more than 60 regulatory experts at locations in Europe, the Americas and Asia Pacific. They 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.

Corporate Responsibility

Providing transparent evidence of corporate sustainability practices is part of our commitment to excellence. In addition to information shared on our corporate website, we disclose climate data and activity assessments in the framework of the Carbon Disclosure Project and as an active participant in the UN Global Compact foundation. We also participate in and respond to a variety of 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.

Sustainability Assessments

Lonza takes part in sustainability assessments and surveys such as that conducted by the Carbon Disclosure Project (CDP), an organization that works to transform the way the world does business to prevent dangerous climate change and protect our natural resources.

Lonza Group Ltd completed the annual request for information from CDP. We scored in the upper-middle field with strengths in Corporate Governance and Strategy and in Emissions Management.

Our U.S. facilities are third-party certified under the Society of Chemical Manufacturers and Affiliates (SOCMA) ChemStewards™ initiative. Lonza Ltd in Switzerland is a Responsible Care® 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™ program, and address all aspects of environment, health, safety and security.

Alternatives to Animal Tests

For many decades the primary endotoxin test used to assess the safety of injectable medicines and medical devices has relied on blood drawn from live horseshoe crabs. This well-established approach has placed a strain on the four species of these crabs in places around the world.

Concerned about the future of this valuable prehistoric species, Lonza Bioscience Solutions offers the synthetic PyroGene™ endotoxin-detection method that does not rely on the use of horseshoe crab blood as the raw material. The PyroGene™ assay's recombinant technology is endotoxin specific, so it eliminates false-positive glucan reactions; and it offers exceptional performance and reliable lot-to-lot consistency, compared with biologically based products.

Industrial Heritage at Swiss Manufacturing Site

In 2015 Lonza's site in Visp (CH) made progress as planned to address mercury contamination in an old 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.

Lonza was never the owner of the canal, and various parties were involved in its maintenance by dredging and excavating sediments from the canal. The removed material was used as fill material on various land properties. Only during the 1970s did people become aware of the full problem in connection with mercury. In 1976 Lonza commissioned its wastewater treatment plant, where mercury-containing effluent has subsequently been treated.

Since 2013 Lonza has worked closely with the community and pre-financed a number of technical investigations in residential areas and agricultural zones between Visp and Niedergesteln. During 2015 the additional detailed investigations to identify and characterize potential contaminated terrains have essentially been concluded, and the soil conditions of the majority of the residential area are well known and documented.

We are now planning the remediation activities, which will take place in 2016 and coming years. Remediation activities will first start in residential areas, followed by agricultural and other land uses. No remediation activity can start without written consent of the competent authorities and involvement of the concerned land owners.

According to currently available data, 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. To obtain a scientific evaluation on possible health effects, an epidemiological study by experts of the University of Zurich was launched in late 2014 and continued through 2015; the results are expected to be available in the first half of 2016. In the meantime the current land-use restrictions that were issued by the authorities remain in place. The upcoming remedial actions will continue to protect the safety of the residents of the area, including the thousands of Lonza employees and family members in the Visp area.

Lonza, the Canton of Valais, the municipalities and other parties involved are continuing their discussions to solve the mercury issue. In addition, experts are discussing the required technical measures and the remediation planning in their regular meetings. We have continued the voluntary pre-financing of on-going necessary technical investigations, without prejudice, because we recognize the need for a quick and efficient rehabilitation, in particular in the residential areas.

In spring 2015 the Swiss authorities lowered the remediation limit value to 2 mg mercury per kilogram soil in residential areas. This decision clarified the situation for many remediation candidates, and it facilitates the required decision-making process. Notwithstanding the repartition of responsibility among the various parties involved with the existing widespread contaminations, Lonza wants to drive forward effective and efficient solutions to address this legacy of industrial production.

Visp Community Outreach

Throughout 2015 we conducted press conferences, held community meetings, interacted with key stakeholders and continued to issue a series of newsletters developed to keep Visp area residents up to date on the status and progress of the remediation activities and related efforts.

Technical Investigations

In 2015 we continued the technical investigations in the residential areas to establish the basis for the remediation concept. Particularly in addition to the Visp West, Kleegärten and Visp South neighborhoods, we expanded the investigation perimeter to some eastern areas of Visp. Land parcels adjoining the Grossgrundkanal and on the total remediation area between Raron and Visp were the focus in agricultural areas. The updated, comprehensive 2015 inventory of the existing mercury pollution in the defined investigation perimeter covers a land area of about 10 square kilometers (2 500 acres).

EHS Scope

Lonza commits considerable resources to EHS activities. At the end of the reporting year, a total of 156 people (full-time equivalents), 1.6% of our employees, worked in the core EHS field, a percentage that has been fairly stable over the years. EHS operating costs amounted to CHF 50 million in 2015, 2% up on the previous year. Capital expenditure on EHS was CHF 39 million, equivalent to 1% of sales and 15% of the Group's total investment in fixed assets. (Note: compared with previous Annual Reports, EHS scope no longer includes regulatory activities.)

Goals

At the end of the five-year cycle 2010–2015, we must note that Lonza partly missed our primary safety goal. Whereas the lost-time frequency goal could not be met, we succeeded with the statistical severity goal.

On the environmental side, we were able to meet the air-impurities goal; however, we did not reach the other goals. These results have to be evaluated in light of the fact that the original absolute emissions goals that were set in 2010 were not modified to account for the acquisition of Arch Chemicals in late 2011.

Lonza's executive management decided in the third quarter of 2015 on the 2016-2020 medium-term sustainability goals. The safety goal was set with a 40% reduction on the 2015 goal. A material change has been adopted in conjunction with the environmental goals, which are now intensity goals relative to the economic performance expressed in sales. This decision was made on the basis of the challenges that lie ahead in terms of pressure on the climate change front and the diversity of the Lonza portfolio while at the same time, it attempts to partly neutralize potential changes in the business-asset portfolio. The goals were set with an intensity reduction of 10% on the achieved 2015 intensities.

These newly defined goals include direct (scope-1) and indirect (scope-2) greenhouse gas emissions (GHG), established lead emission parameters, as well as energy and water consumption.

In parallel we are continuing to report on the time series of absolute emissions, as well as the comparison of current to previous-year mass intensities in relation to production volume in metric tons.

Five-Year Cycle 2010–2015

Safety¹

	Basis	Goal	Status end	Goal	Status end
	2000	2010	2010	2015	2015
LTIFR ² (frequency)	9.5	2.0	1.5	1.0	1.44
LTISR ³ (severity)	1 460	330	183	250	223

Environment¹

metric tons (mt)	Basis	Goal	Status end	Goal	Status end
	2000	2010	2010	2015	2015
CO ₂ e scope-1 emissions ⁴ (1000 mt)	930	400	445	360	410
VOC emissions ⁵ (mt)	759	300	549	270	400
Air impurities ⁶ (mt)	1 485	900	1 014	810	810

New Medium-Term Goals for 2020

Safety¹

		Goal 2020	Status 2015
LTIFR ² (frequency)	LTI/mn hrs	0.6	1.44

Environment¹

		Goal 2020	Status 2015
CO ₂ e (scope 1+2)	t/mn CHF	167	185
Air impurities	kg/mn CHF	192	213

Resources¹

		Goal 2020	Status 2015
Energy (total)	GJ/mn CHF	2 340	2 610
Industrial water	m ³ /mn CHF	1 580	1 750

Intensities on Production Volume 2015

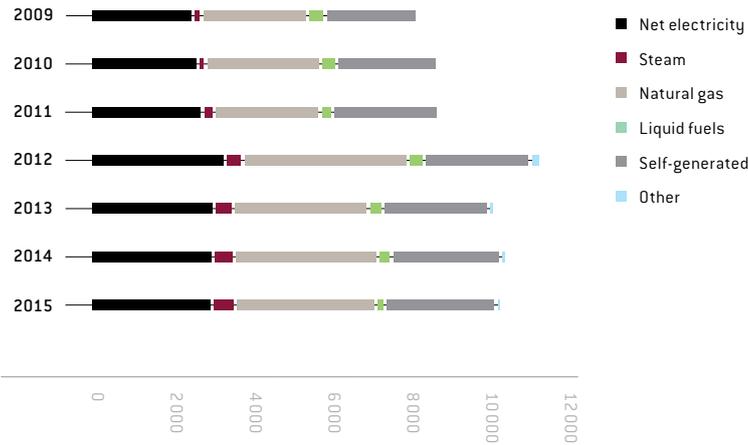
Intensities⁷

			Change on 2014
Energy consumption	GJ/t	16.2	0%
Industrial water	m ³ /t	10.9	11%
CO ₂ e scope-1	kg/t	671	3%
Air impurities	kg/t	1.33	-5%
Hazardous waste	kg/t	177	61%

- 1 Includes all active production and R&D sites, as well as headquarters in the referenced years
- 2 Lost-time injury frequency rate: number of accidents per 1 million hours worked
- 3 Lost-time injury severity rate: number of hours lost by accidents per 1 million hours worked
- 4 Carbon dioxide equivalents
- 5 Volatile organic compounds (VOC)
- 6 Air impurities comprise VOC, nitrogen oxides (NO_x), sulphur dioxide (SO₂) and particulate matter
- 7 Intensity: consumption of a resource or emission of a pollutant in relation to the production of one metric ton of finished goods

Energy

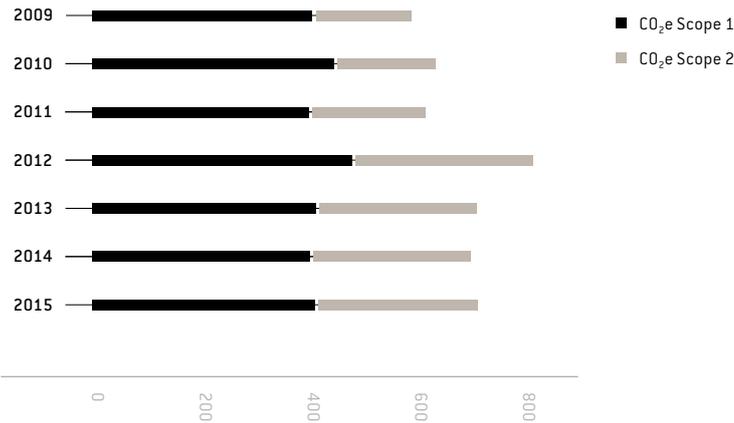
in terajoules (TJ)



The total energy requirement in 2015 was 9 900 Terajoules (TJ) (2 750 GWh), 1% down on the previous year. This essentially stable consumption parallels a similarly stable production volume. The main energy sources used by Lonza in 2015 were natural gas (35%), electricity (30%) 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

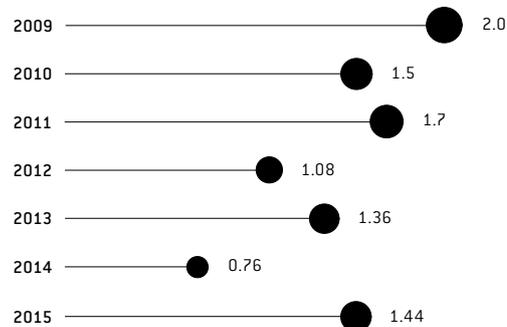
in 1 000 metric tons of CO₂e



Total output of greenhouse gas (GHG) emissions in 2015 was 704 000 metric tons of carbon dioxide equivalents (CO₂e), 2% up on the previous year. Direct emissions (scope-1) amounted to 410 000 metric tons, while indirect emissions (scope-2) remained essentially constant. Over half of all scope-1 CO₂e (55%) emitted is generated by the thermal treatment of waste materials or by chemical reactions during normal production processes; stationary fuel incineration accounted for 44%. Indirect scope-2 emissions are calculated by standard emission factors from the consumption of purchased electricity, and amounted to 294 000 metric tons.

Occupational Accidents

per 1 000 000 hours worked (LTIFR)



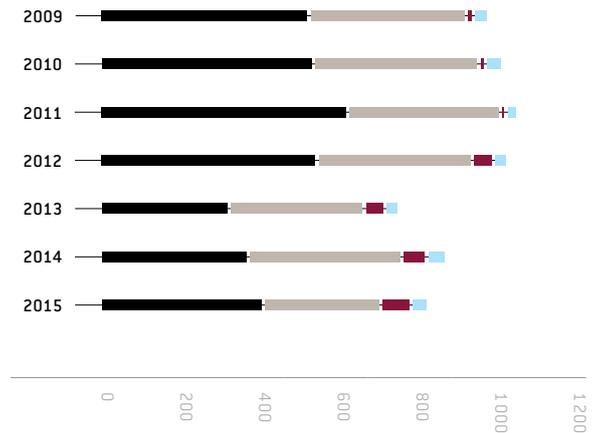
Our safety performance in 2015 could not meet the record of the previous year. The year 2015 was unsatisfactory and ended with a rate of 1.44. In addition, we incurred a severe process incident in the course of which one employee lost his life. As a consequence we want to intensify even further the global co-operation across 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 new medium-term goal of a LTIFR rate of 0.6.

Volatile organic compounds (VOC) and nitrogen oxides (NO_x) were responsible for 87% of all air impurities, totaling 810 metric tons in 2015, down 6% on the previous year. Technical measures have been realized in recent years and contributed to the reduction, which is particularly visible in the 22% decrease of nitrogen oxides emissions. VOC emissions are mainly the result of solvent use in production, cleaning and maintenance processes. Halogenated VOC made up only 8% of total VOC, a significant reduction on the previous year.



Air Impurities

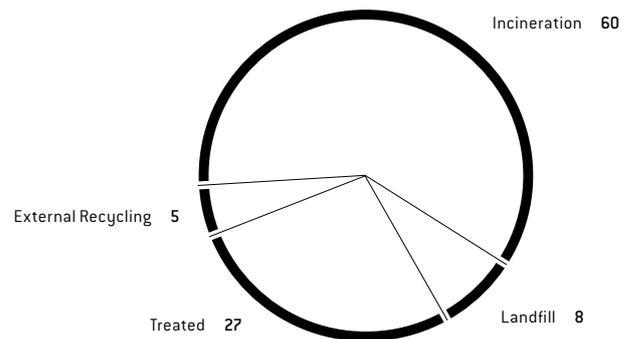
in metric tons



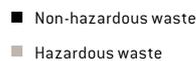
In the reporting year, 92% of hazardous waste materials were incinerated, externally recycled or treated to render them non-hazardous; and 8% went to secured landfills. All companies involved in the transportation, processing and final disposal of wastes are known to Lonza. In all countries hazardous waste is handled by institutionalized manifest systems. Waste treatment is a matter of trust; so 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 all legal requirements.

Final Treatment of Special Waste

in %

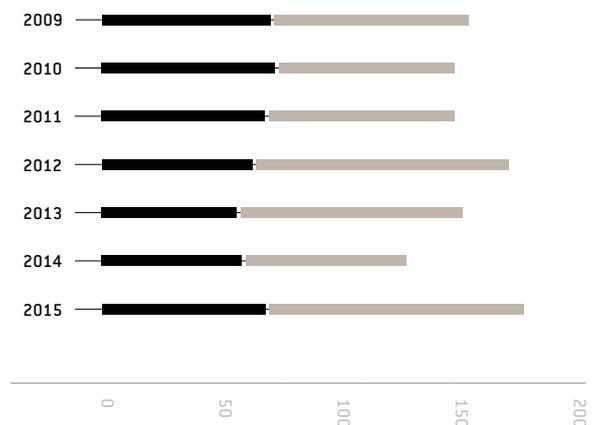


The total quantity of waste generated by Lonza in 2015 was 177 000 metric tons, of which 108 000 metric tons consisted of special (hazardous) wastes and 69 000 metric tons of non-hazardous wastes or inert materials. Variations of waste generated year on year are under investigation although this behavior is not atypical for a highly complex chemical custom manufacturing portfolio. At all our sites, Lonza has a specialized waste-disposal concept dedicated to the principles of avoidance, reduction, recycling or recovery and environmentally sound disposal. The categorization into special (hazardous) waste and non-hazardous waste at all sites conforms to the applicable national legislation.



Waste Categories

in 1 000 metric tons



Investing in Our People

Making Lonza the Place to Go, Stay and Grow

We regard our employees as a key competitive advantage. The Human Resources (HR) team at Lonza is working to strengthen that advantage by ensuring that Lonza is “The Place to Go, Stay and Grow.” Working closely with business partners, we are striving to better align our people strategies and systems with vital business and company strategies – all part of our blueprint to build a stronger Lonza.

The HR team sees opportunities to build on the foundation of strength already in place through providing employees with various forms of trainings, updated policies and streamlined processes, clearly defined competencies and a modern HR information system. These updates and improvements will enhance our ability to attract, engage, develop, retain and reward Lonza employees.

We are investing in our valuable human capital in many ways, from providing enhanced development opportunities and apprenticeship programs that help build our future workforce to devising new sales competencies and training that will help our people embrace the broader market orientation recognized as a key growth driver for our business.

At Lonza we recognize that global talent management and succession planning are critical to our long-term success as an organization. Accordingly, existing initiatives like our Leadership Acceleration Project (LXP) and the Lonza Academy remain vital components of our strategic plan to engage, develop and retain employees, as does offering competitive compensation and benefits aligned with our pay-for-performance approach.

As we continue to grow, attracting the best and brightest people to Lonza rises in importance. We have made significant improvements in the way we source talent, and we are providing managers with the tools they need to identify top performers during the interview process. Such HR programs bring us closer to making Lonza “The Place to Go, Stay and Grow” in the minds of our employees and candidates, and we see significant employer-branding opportunities that will further build our reputation in a competitive talent market.

Partnering with Our Businesses

Lonza’s major Pharma&Biotech site in Portsmouth, NH (USA), is undergoing sustained growth and clearly demonstrates the success of HR’s approach to partnering with our businesses. Recently, a business analysis was completed to identify ways to sustain the site’s growth and to cement Portsmouth’s reputation as the premiere biologics manufacturing partner in the world. Under the name Journey to Excellence, Portsmouth is implementing a transformational strategy focused on three key areas: culture, management systems and continuous improvement.

Aided by HR and other key functions, site leaders are revitalizing their management system. The enhanced management model is designed to ensure subject matter experts have the tools and work environment they need to achieve key customer and business objectives. New communications processes have been implemented from the shop floor to the site-leader level to facilitate fast and simple problem resolution. As individuals throughout the organization grow and develop their skills and experiences, the never-ending Journey to Excellence will continue to drive higher levels of performance.

Global Apprenticeship Programs

Lonza is finding creative ways to deal with various HR challenges, such as the competition our Singapore (SG) Pharma&Biotech Operations team is facing for skilled biotech workers. In response we are partnering with Singapore's Economic Development Board, its Workforce Development Agency and Temasek Polytechnica to offer targeted training and development programs. Under this collaborative effort, we have recruited scores of trainees in Singapore through the Singaporean Biologics Overseas Skills Training Programme (BOOST) program. These trainees receive on-the-job training in Singapore and at various Lonza manufacturing sites globally, including Portsmouth and Slough (UK).

Similarly, we are working with the government in Spain to provide on-the-job training for future chemical operators at our Lonza Biologics plant in Porriño (ES). This effort is akin to our long-standing apprenticeship programs at our major complex in Visp (CH). In all of these efforts, our goal is to strengthen our pipeline of highly trained future talent and enable them to grow by providing them the best on-the-job and professional training.

Journey-to-Excellence Program

In 2015 Portsmouth, NH (USA), began implementation of our transformative Journey to Excellence program, which promotes investments in people, processes and other vital systems. As part of the program, Portsmouth teams embarked on a continuous improvement effort in quality-variance reductions, cycle-time improvements and enhanced safety. These improvements were fostered by foundational changes in their management system and workplace culture. They contributed to significant improvement in on-time delivery and reductions in quality deviations per batch supplied, which translated into greater customer satisfaction and improved financial returns for Lonza.

Porriño (ES) Apprenticeship Program

In 2015 Lonza Biologics Porriño (ES) and the Regional Ministry of Education signed an agreement to launch an apprenticeship program under Spain's dual-education system in collaboration with a noted professional training institute. So far, 12 apprentices have been selected to train as manufacturing operators. The recruitment process was completed in September, and the selected trainees began six months of training in October. After training, these apprentices will receive a scholarship from Lonza and put their learning into practice for a six-month period. They will receive additional training and scholarships in 2016, after which they will earn an Associate's degree in Industrial Chemistry. Each apprentice will become technically proficient in several processes relevant to working at Lonza, such as electro-mechanical maintenance, chemical handling, formulation and mixtures preparation, and automatic regulation and control.

Visp (CH) Apprenticeship Program

To maintain a pipeline of highly trained future talent, our Visp (CH) apprenticeship program provides on-the-job training and workshops for people who have completed the prerequisite education and who choose to go on to apprenticeship programs. These apprentices complete their training after three or four years and then are awarded a Swiss-government certification.

Each year a dedicated team of trainers provides hands-on training to more than 150 apprentices in 13 different professional areas. After their years of learning at Lonza, the apprenticeship graduates can apply for employment in the laboratories, factories and workshops where they worked and gained real-world experience. Some graduates decide to go on to university and return to Lonza after completion of their studies.

These talent-sourcing and employee-development examples illustrate our commitment to strengthening our talent pool. We continue to seek new ways to partner with organizations and develop innovative training and education programs that make us attractive to candidates. These kinds of investments will help drive our future growth as an organization.

Sales Competencies and Training

Working in conjunction with the Go-to-Market Excellence and Sales leadership teams, HR is an integral partner with our newly formed Sales Excellence Council. Together we are building a training academy to equip our Sales organization to be best in class and have defined sales competencies that complement the Lonza core competencies. We also have strengthened our talent-acquisition process, which now includes candidate assessments that identify highly sought after sales competencies.

In addition, we have defined career ladders and a consistent job-grading system for our Sales teams; and we are developing training programs for our commercial organizations to ensure their team members are armed with the vital new skills and competencies they need to excel at Lonza.

Global Job Grading

Our ability to manage our talent on a global scale and align our reward systems depends on our ability to compare jobs accurately across Lonza. Accordingly, in 2014 we rolled out a globally aligned job-grading system for all positions that are not subject to a collective bargaining agreement.

We continued with this global job-grading system, which classifies jobs based on each position's accountabilities, complexity and impact on the business, in 2015. A vital part of our talent development and performance management system, the global-grading tool continues to ensure that jobs are assessed in a fair, objective and culturally neutral manner – creating a common language about jobs across different business areas and geographies.

This approach, in turn, sets the foundation for defining appropriate career ladders, creating effective development programs and designing transparent and consistent reward programs.

Global Talent Management

To attract and retain the best and brightest employees, we are strengthening our global talent management and succession planning processes by offering developmental opportunities, by applying new learning strategies and courses and by developing new policies and practices.

New Learning Strategies

In 2015 we conducted our second annual Leadership Acceleration Program (LXP). We placed 14 high-potential employees in a training program designed to enhance their leadership skills. Each participant completed coursework on business strategy, personal leadership skills and business-relevant projects.

Throughout 2015 the participants worked in three groups on topics related to the Residential Water Treatment business (for pools and spas), to the Active Pharmaceutical Ingredients Intermediates business, and to the Mammalian Manufacturing business. Each project team had an Executive Committee (EC) sponsor; the groups shared their analyses and recommendations with the EC in December.

New Policies and Practices

A strong employee development program has enabled us in 2015 to fill key positions with internal talent, which is driving progress toward our goal to fill 70% of our positions internally. We have dedicated considerable resources to ensure the staffing of key positions in our Pharma&Biotech organization and to establish programs that will reduce turnover in key sites.

Our Portsmouth, NH (USA), site has a strong internship program, and multiple Portsmouth employees have benefited from job-development assignments at our sister Lonza sites in Singapore (SG) and in Porriño (ES). Portsmouth also has continued to support the BOOST program alongside Singapore, and we are now planning for the fourth round of trainees to arrive in Portsmouth in early 2016.

Throughout 2015 we laid the groundwork for our 2016 efforts to address a significant area of opportunity – updating and refining our HR Information Systems. An upgrade will enable us to achieve greater global alignment and to make systems easier to use, more efficient and cost-effective. We have selected Workday, a cloud-based tool, as the new Lonza HR system of record.

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 three areas:

- Science, schools, education
- Charity, health, social welfare
- Culture, community, youth

In the communities where we operate, Lonza is much more than a faceless corporation. We are neighbors, a vital source of jobs, a charitable sponsor of local schools and civic and cultural projects, and often a significant contributor to local economies. In short, Lonza and our employees are “citizens” of these communities; and we do our utmost to contribute to the quality of the life that we share.

Sustainable value for Lonza comes not only from investing in the communities where we live and work, but also from investing in the wider world where we see opportunities to contribute to sustainability and the greater good. Sponsorships and philanthropic donations are an integral part of how we express our corporate social responsibility.

We want to be a reliable long-term and active partner and 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 significant difference, rather than on a vast number of projects.

While our financial donations are vital, our employees also play a critical role by volunteering in programs and projects in our priority areas of education, the environment, culture, health and social welfare.

Science, Schools, Education

Encouraging Students to Pursue Careers in Science

In 2015 our Pharma&Biotech site in Slough (UK) continued their long-term partnership with the local Burnham Grammar School, which was first initiated in 2002. Now, more than a decade later, Lonza employee-volunteers are still engaged at the school in a range of activities from sponsoring and judging science competitions to offering career advice, running science practice sessions and lectures, offering internship work experiences and donating lab equipment.

Partnering with Swiss Youth in Science

Another continuing project in 2015 is Lonza's three-year 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 to awaken joy and fascination for scientific work.

Lonza's support is focused on helping to organize four annual study weeks for 10- to 13-year-old girls (girls@science) and boys (boys@science) each year. Two study-week topics – “Chemistry and Material Science” and “Biology and Medicine” – are geared for young people at the high-school level. Approximately 300 children and adolescents participate in the study weeks each year.

In subjects such as mathematics, computer science, natural sciences and technology, Switzerland often faces a deficit of qualified talent leaving the local schools. With the foundation's series of courses, children and young people become more interested in those subjects and learn about options for their future studies or professional careers. During the study weeks, the children and young people develop a project at a university or in a company to solve a given scientific issue and to build their expertise in using active scientific methods.

With this engagement Lonza contributes to the promotion of science and helps in the development of the next generation of scientific professionals.

Rebuilding Two Primary Schools

Lonza sponsored the rebuilding of two primary schools in two rural areas in Guangdong Province of China in 2010 and 2012, respectively. Lonza not only provided monetary support for school renovation, but also we continue to organize voluntary activities in these two schools every year on a regular basis, including science experiments, English teaching, computer skills, etc. With these interactions, we maintain a long-term, strong relationship with the schools and their students and teachers.

Charity, Health, Social Welfare

Supporting Vitamin Angels Programs

Lonza Nutrition supports Vitamin Angels, a global organization that helps at-risk populations in need. Specifically, pregnant women, new mothers and children under five can gain access to lifesaving and life-changing vitamins and minerals. Millions of children around the world suffer from “hidden hunger”, a lack of micronutrients that can lead to disease and even death. Lonza has been a supporter of Vitamin Angels since 2005.

In 2015 Lonza donated some of our vitamin B3 compounds for inclusion in the prenatal multivitamins Vitamin Angels distributed to more than 300 000 expecting and new mothers in nearly 40 countries, including the United States and Canada.

One recent success was supporting Vitamin Angels at the SupplySide West tradeshow that took place in October. We displayed our World of Care map, and participants signed a Donation Magnet that would be placed on the wall to pledge support for Vitamin Angels. In addition, we have participated in fundraising activities such as the League of Angels, an event that publicizes the charity’s mission at a large industry tradeshow.

Supporting Annual Local Blood Drive on Site

Every year Lonza’s Allendale, NJ (USA), site hosts an all-day, on-site Blood Drive to support the New Jersey Blood Services, a division of the New York Blood Center.

Employees schedule their appointments during the work day and offer about one hour of their time for the entire blood-donation process. In addition, several Lonza employees also volunteer to help coordinate and manage various integrated operational activities in order to implement an efficient donation procedure, as well as provide support for donors and blood-collection technicians.

At the Allendale Blood Drive, whole-blood donations are collected from multiple donors and vital red cells are also extracted from the blood for use in targeted medical treatments. New Jersey Blood Services provides lifesaving blood products and services to nearly 200 hospitals in New York, New Jersey, Long Island, the Hudson Valley and parts of Connecticut and Pennsylvania.

Supporting Local Charities During the Holidays

In 2015 Lonza’s Allendale, NJ (USA), site also participated in the “All Wrapped Up Gift Giving Program”, where a total of more than 4 500 USD was collected in the form of gifts and gift cards. This extraordinary effort benefited the local Bergen County area and helped to make the holidays brighter for more than 80 individuals.

Building Opportunities for Action

Our employees in Porriño (ES) contribute their time to express our concern for corporate social responsibility in a myriad of ways.

One successful project in place is run by the site’s donations team. Employees from different departments are connected to identify reusable and recyclable goods such as crystal bottles or test tubes, equipment like weighing scales or PH-meters, reagents and gels, or used office material that is unwanted or expired but is perfectly usable for educational purposes. In 2015 we also collected plastic caps that can be recycled for cash and then donated them to a local institution dedicated to mentally disabled people.

Cleaning the Path to a Healthier Future

In 2014 the Lonza Corporate Charitable Sponsorship team challenged business units to propose a major, long-term charitable project that would draw on Lonza technologies to enhance the quality of life in an area of desperate need. Ideas began circulating; and after much thought and deliberation, approval was given to Lonza Water Treatment South Africa to address an urgent health threat and concern in Uganda.

One of the poorest countries in the world, Uganda 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 poor African nation. Clean Habitat Uganda will distribute our sanitizing tablets to communities serving 5 000 homes.

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. Comprised of dry calcium hypochlorite, one or two of our sanitizing tablets are placed into each latrine (depending on the pit size), where they help combat bacteria, foul odors and insect growth, which in turn helps to control diseases that can be carried by the insects.

With much careful planning, a “Sanitation for Africa” kick-off summit was held in Kampala (UG) in December 2015. Attending were key persons from the Ugandan Ministry of Health, the Ugandan Ministry of Water, Clean Habitat Uganda and Lonza personnel.

Culture, Community, Youth

Determining Community Needs

Lonza’s Rochester, NY (USA), manufacturing plant has been committed to a Community Advisory Panel, which was established in 1990. One purpose of the Community Advisory Panel is to promote a valuable, two-way dialogue with the community, which includes plant staff, neighbors, civic, educational and community leaders, as well as experts in industrial safety, environmental health and public safety. The agenda addresses the plant’s workplace health, safety, environmental and security profile, along with Lonza’s role in the local economy, the nature of our products and markets, and charitable outreach opportunities. This active panel meets 10 times per year and often invites outside speakers and experts to attend.

The Lonza Rochester plant also has a long partnership with the nearby Theodore Roosevelt School #43, where it donates funds, computers and lab equipment to improve scientific education. Lonza employees also volunteer their time to provide scientific demonstrations and lectures for students at the school.

Bringing Classical Music Closer to Kids and Teens

In September 2015 Lonza initiated a new sponsoring partnership with the Basel Chamber Orchestra to support its newest project called “Classroom Piece”, which has a unique educational and cultural value for children between the ages of 11 and 15 in Basel (CH).

The “Classroom Piece” was produced in cooperation with a theater pedagogue and four musicians from the Basel Chamber Orchestra with the goal of giving kids and teens the necessary impetus to develop their musical personality, independent of social and cultural backgrounds. Since most children and teens rarely have the opportunity to visit theaters or classical music concerts, the “Classroom Piece” is a completely new experience for most of them that enables them to hear and appreciate the value of live music, as well as feel its power and energy in the room.

In 2016 the Basel Chamber Orchestra plans on further developing the existing “Classroom Piece” to make it attractive and appealing to older students between the ages of 16 and 18. For 2017 a new makeover is planned to apply the concept to hospitals, retirement homes and other public and private institutions. 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.

Participating in Community Service Projects

Lonza’s Charleston, TN (USA), facility has continued our long tradition of community outreach and support. During a site-wide meeting in February 2015, employees divided into teams and assembled 50 rocking chairs that were distributed to disabled veterans and low-income families in the community. The teamwork exercise not only resulted in developing employee camaraderie, but also was a great community-service project.

In addition, Charleston employees volunteered during the United Way’s “Day of Action”. Employees put in “sweat equity” at the Tri-State Therapeutic Riding Center. The center’s programs provide therapy for individuals with mental and physical disabilities through horseback riding. Other programs focus on at-risk youth through social interaction with horses as well as physical therapy through horseback riding. Lonza employees washed the area fences, landscaped an area of the riding trail and donated much-needed supplies.

Getting Fit While Having Fun

In cooperation with the organizers of the Gornergrat Zermatt Marathon, the project “Lonza Makes You Fit” was initiated in Visp (CH) and Basel (CH) in September 2015. As the name already suggests, the project aims to make Lonza employees fit for the half marathon of the Gornergrat Zermatt Marathon on 2 July 2016. After the kickoff event in September, almost 300 employees registered, which represents approximately 10% of all employees in Switzerland.

Under the guidance of running experts, employees at the Visp and Basel sites have 10 months to prepare for the half marathon. The program is primarily designed for beginning runners, but experienced runners and competitive athletes can also benefit from the comprehensive fitness program.

All participants benefit from a medical check and a fitness test and receive a personalized training plan based on the test results and their personal needs. Once a month a group training session is conducted, led by running experts who pass on their experience to the participants.

Besides these training sessions, presentations and courses around topics such as equipment or diet are regularly taking place. About one month before the race, all participants will have the opportunity to participate in an organized test run to get to know the running trail.

The Gornergrat Zermatt Marathon annually attracts more than 2 500 runners who want to reach the finish line on top of the Riffelberg at an altitude of 2 158 metres. The Gornergrat Zermatt Marathon is not only the marathon with the highest finish line in Europe, but also one of the most beautiful mountain races in the world.

Company health
management
has never been
so much fun!

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Forward-Looking Statements

Forward-looking statements contained herein, which can be identified by terms like “believe”, “assume”, “expect” or similar expressions or implied discussion of potential new projects or future revenues, plans or intentions, are qualified in their entirety as there are certain factors that could cause results to differ materially from those anticipated. Investors are cautioned that all forward-looking statements involve risks and uncertainties. In addition to those discussed above, factors that could cause actual results to differ materially include the timing and strength of new product offerings; pricing strategies of competitors; the company’s ability to continue to receive adequate products from its vendors on acceptable terms, or at all, and to continue to obtain sufficient financing to meet its liquidity needs; and changes in the political, social and regulatory framework in which the company operates, or in economic or technological trends or conditions, including currency fluctuations, inflation and consumer confidence, on a global, regional or national basis. All forward-looking statements are based on data available to Lonza at the time of preparation of this Annual Report. Lonza does not undertake to update any forward-looking statements contained in this Annual Report as a result of new information, future events or otherwise.

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Anticipated Key Reporting Dates

Annual General Meeting for the Financial Year 2015
22 April 2016, 10:00 am
Congress Center Basel Switzerland

Half-Year Report 2016: **20 July 2016**
Full-Year Report 2016: **25 January 2017**

Annual General Meeting for the Financial Year 2016
25 April 2017
Congress Center Basel, Switzerland

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