

Accelerating change. For the annual report this means making it leaner and more connected. The first **Integrated Report 2016** brings transparency at Clariant to the next level. A redefined business model considers interdependencies of six kinds of capital within performance, people, and planet that support long-term value creation. The whole report follows this integrated approach, making it more cohesive, more holistic, more transparent.

Accelerate Change

DISCOVER VALUE

Chemistry is the science of change: The undiscovered is changed into the indispensable, the invisible into the tangible and the unbelievable into everyday life. Over the past few years Clariant has successfully embraced change. After extensive restructuring and reorganization, Clariant is now well underway to reach the top tier of the specialty chemicals industry. In order to reach its goals, Clariant does not only continuously change itself, but stays curious and searches for new impulses, ideas and perspectives. By digging deeper and understanding what is beneath the surface, Clariant becomes a discoverer of true value for all stakeholders.

In this spirit, Clariant has taken its first step to change its corporate reporting towards a more integrated format. This is the first time that Clariant's Annual Report is published in the form of an Integrated Report, and Clariant is committed to continuous improvement on this path over the coming years. Integrated Reporting enables Clariant to provide a deeper view on its holistic approach and commitment to create added value for customers, employees, shareholders and the environment. By focusing on a business model built upon three value creation phases, Clariant's strong foundations are consistently translated into sustainable growth.

Indicators

Performance

5 847 

Sales in CHF m

6 500 

Patents at year end

320 

Active innovation projects advanced

Indicators

People

17 442 

Total staff

2 693 

Customer survey participants

Indicators

Planet

2.82 

Raw materials procured in m t

2 950 

Total energy consumption in m kWh

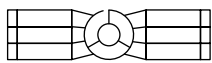
Glossary

AT A GLANCE



INTEGRATED REPORTING

Reporting that extends traditional formats of corporate disclosure in order to communicate the full range of factors that significantly affect an organization's ability to create value through its business model. An integrated report provides insight about the resources used and impacted by the company – collectively referred to as »the capitals« – and their interdependence. It reflects and supports integrated thinking and decision-making that focuses on the creation of value over the short, medium, and long term.



BUSINESS MODEL

The business model illustrates how a company draws on various capitals as inputs and converts them into outputs, such as products and services, through its business activities. The company's activities and outputs lead to outcomes that affect the capitals, thus impacting the company and its stakeholders.



PERFORMANCE, PEOPLE, PLANET

Clariant's three brand values, under which the different capitals considered in integrated reporting have been categorized in this report: Performance (financial and intellectual capital), People (human and relationship capital), and Planet (manufactured and natural capital).



IDEA TO MARKET

Core business activities that create additional value are structured into three value creation phases at Clariant. Idea to Market encompasses scouting global trends and ideas, scoping out customer needs, executing product development and commercializing, and monitoring product performance.



MARKET TO CUSTOMER

Market to Customer includes identifying market attractiveness, developing a clear value proposition and articulating it to the customers, and capturing the value created through relationship building and the sales process.



CUSTOMER TO CASH

Customer to Cash encompasses planning to balance demand and supply, optimizing sourcing for spend effectiveness, constantly monitoring production for high efficiency, and delivering finished goods on-time and in-full as required by the customer.



Financial Capital

The pool of funds available to the company for use in the production of goods or the provision of services. This can include funds obtained through financing, such as debt, equity, or grants, and funds generated by the company, for example through sales or investments.



Intellectual Capital

Knowledge-based intangibles used and created by the company, often in collaboration with partners. This can include intellectual property, such as patents, copyrights, software, rights, and licenses, and »organizational capital« such as tacit knowledge, systems, procedures, and protocols.



Human Capital

The company's staff and its composition, competencies, capabilities, experience, and motivation to innovate. This can include employees' alignment with corporate values and their ability to understand and implement the company's strategy.



Relationship Capital

Key relationships including those with significant groups of stakeholders and other networks. This can include shared values, the trust and willingness to engage that the company has developed, and related intangibles associated with its brand and reputation.



Manufactured Capital

Manufactured physical objects such as buildings, equipment, and products. These can include objects that are available to the company for use in the production of goods or the provision of services, or that the company produces for sale to customers or for its own use.



Natural Capital

Renewable and non-renewable environmental resources and processes that support the past, current, or future prosperity of the company or are affected by it. Examples can include resources related to air, water, and land that are utilized or impacted for example by emissions.

Summary

ON PERFORMANCE, PEOPLE, PLANET

Performance

FINANCIAL CAPITAL in CHF m

	2016	2015
Sales	5847	5807
EBITDA before exceptionals	887	853
EBITDA margin before exceptional items (%)	15.2	14.7
EBIT before exceptional items ¹	622	596
Net income	263	227
Basic earnings per share ¹ (in CHF)	0.78	0.67
Adjusted earnings per share ¹ (in CHF)	1.12	1.01
Operating cash flow	646	502
Investment in property, plant and equipment	297	374
Research & Development expenditures	206	206 ²
Personnel expenditures ³	1435	1391
Raw material procurement	2221	2252
Total assets	8365	7461
Equity	2546	2494
Equity ratio (%)	30.4	33.4
Net debt	1540	1312
Gearing ratio (%)	60	53

¹ Continued operations ² Reclassified ³ Including own employees and external staff

INTELLECTUAL CAPITAL

	2016	2015
Patents (year end)	6500	7100
Active innovation projects advanced	320	300
Of which Class 1 Projects with double-digit million sales potential or of strategic relevance	60	60
Scientific collaborations	125	130

SALES BY BUSINESS AREA in CHF m

	2016	2015
Care Chemicals	1465	1445
Catalysis	673	704
Natural Resources	1184	1217
Plastics & Coatings	2525	2441

People

HUMAN CAPITAL in FTE (Full Time Equivalents)

	2016	2015
Total staff	17442	17213
Employees	9881	9803
Of which male	6734 (68%)	6651 (68%)
Of which female	3147 (32%)	3152 (32%)
Workers	7560	7410
Of which male	6995 (93%)	6806 (92%)
Of which female	565 (7%)	604 (8%)
Total training hours	201884	182398 ¹
Training hours (Ø per participant)	19	20
Staff in Research & Development	-1100	-1100
Lost Time Accident Rate (LTAR; accidents with at least 1 day lost/200000 work hours)	0.19	0.17

¹ Restated after roll-out of global Learning Management System (LMS)

RELATIONSHIP CAPITAL

	2016	2015
Staff participating in »360-degree feedback«	975	1050
Raw material suppliers	5250	5431
Raw material supply base by spend covered by sustainability evaluations (%)	>60	>50
Survey responses from customer contacts obtained	2693	1430
Customers who want to continue doing business with Clariant (%)	91	79

Planet

MANUFACTURED CAPITAL

	2016	2015
Research & Development Centers	8	8
Technical Centers	>50	>50
Countries with production facilities	40	42
Raw materials procured (in m t)	2.82	2.75
Production (in m t)	4.09	3.66

The information regarding environment, health, and safety included in this Integrated Report 2016 is preliminary. The data are not yet externally assured as they are subject to changes up to the finalization of Clariant's Online Sustainability Reporting 2016.

NATURAL CAPITAL

	2016	2015
Total energy consumption (in m kWh)	2950	2866
Energy consumption (in kWh/t production)	719	782
Total water consumption (in m m ³)	48	49
Total waste water generation (in m m ³)	13	13
Total greenhouse gas emissions (scope 1 & 2 CO ₂ equivalents) (in m t)	0.89	0.85
Greenhouse gas emissions (scope 1 & 2 CO ₂ equivalents) (in kg/t production)	218	232
Total quantity of waste (in thousand t)	147	151

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INTEGRATED REPORT 2016

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»We Create Value IN MORE THAN ONE DIMENSION«

Clariant grew in both sales and profitability and significantly increased its cash flow despite challenging economic conditions. Rudolf Wehrli and Hariolf Kottmann discuss how this was achieved with an integrated approach that creates value in multiple, mutually reinforcing dimensions.

How do you evaluate Clariant's performance in 2016?

HARIOLF KOTTMANN In 2016, Clariant continued to grow in both sales and profitability. With sales growth in local currencies of 2% and a further expansion of the EBITDA margin before exceptional items to 15.2%, we achieved our goals. This good performance reflects the excellent execution of our strategy in all businesses to foster growth and improve returns. The advancement stems from our focus on innovation by delivering more added value to our customers, as well as volume increases and continued cost discipline. Throughout 2016 we also made great efforts to improve our operating cash flow and were able to increase it by CHF 144 million to CHF 646 million. Thus, not only can we give our shareholders an appropriate share in the company's success, we are even better equipped to grow both organically and by means of acquisitions.

Part of our global strategy is to seize business opportunities in key markets with excellent prospects through innovations and bolt-on acquisitions. In 2016, for example, the acquisition of Kel-Tech and X-Chem allowed us to strengthen our position in one of the world's largest specialty chemicals markets and benefit from the strong, innovation-driven growth perspective of the North American oil services industry. We complemented our product portfolio and technologies to add value for our customers in optimizing their oil and gas production

operations. In addition, we gained access to major oil basins where we had a lower market presence before. It was just the right moment to invest in a countercyclical manner and take advantage of the current crisis in the industry while future outlooks are promising.

RUDOLF WEHRLI With its resilient and diverse portfolio, Clariant was able to grow despite the increasingly challenging economic environment. This is not just a simple matter but a result of exceptional collective efforts. Although global macroeconomic developments are challenging, we have been successful in seizing opportunities at the regional level. In Asia/Pacific, for example, we could increase sales by 4% in local currencies which is mainly driven by India, China and Indonesia. We were able to »turn the tide« in China, with sales picking up by 7%. In Latin America we increased our sales by 1% in local currencies and outperformed our competitors. Although we faced lower demand in North America, especially in the Care Chemicals and Natural Resources business, North America remains a strategically important market for us. Last but not least, Europe shows solid positive growth, mainly driven by volume increases.

Over the last few years, your reports have included perspectives from different regional markets. This year's report includes a spotlight on Europe. Is the European market not losing importance?

HARIOLF KOTTMANN While opportunities for growth clearly lie in Asia and the Americas, Europe as a mature market remains very important to us. For example, when it comes to cosmetics, Europe stands as a global reference point. With the recovery of the European automotive industry, we also see growing demand in casting products from our Functional Minerals unit.



RUDOLF WEHRLI
Chairman of the Board of Directors

HARIOLF KOTTMANN
Chief Executive Officer



»With its resilient and diverse portfolio, Clariant was able to grow despite the increasingly challenging economic environment.«

—
RUDOLF WEHRLI
Chairman of the Board of Directors

With CHF 2 billion in sales, we earn our largest share in this region. 44 % of our employees are located in Europe. It is important to us to stay close to our European customers. Europe is a stable region and our business here is considered Clariant's backbone.

RUDOLF WEHRLI Europe is a frontrunner, especially when it comes to sustainability and innovation. Here we find highly trained employees, excellent infrastructure, and valuable partnerships. Our current innovation activities in Europe are promising, especially regarding bio-based raw materials. For example, in the personal and home care markets, our European customers choose EcoTain® products more often and we experience higher margins from these sales compared to the global average. In addition to being a fertile ground for new sustainable innovations, Europe is also the most active region in phasing out outdated products from a sustainability standpoint. The increasingly demanding regulatory landscape also represents business opportunities

that we are well equipped to seize given our firm commitment to sustainability as a focus topic across the organization. In fact, it is one of the five pillars of our overall corporate strategy, and Clariant was recognized as one of the most sustainable chemical companies by the world-renowned Dow Jones Sustainability Index (DJSI) for the fourth consecutive year in 2016.

Recently, Hariolf Kottman was appointed President of Cefic, the European Chemical Industry Council. What does that mean for Clariant, Mr. Wehrli?

RUDOLF WEHRLI As the voice of the European chemical industry, Cefic promotes strengthening the region for the chemical business. After all, the companies it represents directly provide 1.2 million jobs in Europe. Of course, a favorable business environment in Europe also benefits Clariant. As a partner to EU policymakers, Cefic contributes to the already progressive and commendable regulatory environment regarding industrial



»The chemical industry is central to solutions for global challenges such as climate change and resource scarcity.«

—
HARIOLF KOTTMANN
Chief Executive Officer

safety and environmental protection. However, Cefic also strongly advocates product stewardship and business sustainability. This focus fits well with Clariant's corporate strategy. On a final note, we are also proud that our CEO acts as president of Cefic, even though Switzerland, where Clariant is headquartered, is not part of the EU.

Sustainability is one of the five pillars of Clariant's corporate strategy. How does that pay off?

HARIOLF KOTTMANN Sustainability is not only one of our five strategic pillars, it is also embedded in our brand values of Performance, People, and Planet. The chemical industry is central to solutions for global challenges such as climate change and resource scarcity. By leading this change process we gain competitive advantage. Sustainability is actually a prerequisite to entrepreneurial thinking: By taking an outside-in perspective and

appreciating the needs of all our stakeholders, societal and environmental challenges become opportunities for innovative solutions that create added value. With our EcoTain® label and our Portfolio Value Program, for example, we systematically integrate sustainability into our offerings. To date, we offer more than 140 EcoTain® products that often outperform conventional products, not only in terms of profitability but also with respect to performance and sustainability.

This year for the first time, Clariant publishes the Annual Report in the form of an Integrated Report. This highlights how Clariant creates value through a holistic approach that includes all of its brand values - Performance, People, and Planet. Why did you decide to broaden the reporting perspective?

RUDOLF WEHRLI Corporate reporting is never an end in itself. Instead, it should clearly reflect how a company is managed and how it creates value over time. At

Clariant, we create value in more than one dimension. Our new, integrated reporting explicitly highlights how we are working with the financial, intellectual, human, relationship, manufactured and natural dimensions of capital. This integrated approach ultimately supports our long-term success and helps us differentiate ourselves in the marketplace. This gives shareholders and other key stakeholders a more complete picture for making decisions regarding their relationship with Clariant.

HARIOLF KOTTMANN We have a long-term and holistic management approach. While we pay close attention to the financial aspects of business, we also take other aspects of business into account. For the first time, our Integrated Report describes our comprehensive business model that revolves around three key value creation phases: »Idea to Market«, »Market to Customer«, and »Customer to Cash«. Accordingly, we are showing how different resources are incorporated and converted into valuable outcomes for our customers, employees, shareholders, and the environment.

What benefits does this integrated reporting have in your view?

RUDOLF WEHRLI Quite simply, it increases transparency. Over recent years, demands from the financial community for more transparent information have emerged. As the trend goes into the direction of sustainable investments, showing how we create value in the long run is important. Ultimately, our careful attention to financial as well as non-financial indicators also helps us realize increasing returns in the long run. We are convinced that long-term investors will appreciate our forward-looking approach, as it permits a holistic view on our business.

What can we expect from Clariant in the upcoming year?

RUDOLF WEHRLI There are various reasons why 2017 will be even more challenging and demanding than 2016. Strategically, to reach our goals we need to grow beyond the market and be present in the markets where growth is taking place. While our mature markets continue to play an important role, we shift our business focus to China and the Americas even further.

HARIOLF KOTTMANN Steering a chemical company to success calls for full dedication to generate cash by managing both costs and growth. In 2017, we will increase our focus on sales and marketing efforts. Our sales teams will be constantly on the lookout for opportunities to make customers aware of innovations that deliver value to them. We will also continue to invest in developing our people, as our sales teams play a key role in fueling sustainable growth.

HARIOLF KOTTMANN

Born in 1955
Chief Executive Officer (CEO) since 1 October 2008
Member of the Board of Directors since 10 April 2008

RUDOLF WEHRLI

Born in 1949
Chairman of the Board of Directors since 27 March 2012
2008 - 2012 Vice Chairman
2007 - 2012 Member of the Board of Directors

The Foundation **OF SUCCESS**



10.2%

ROIC

Return on invested capital increased from 9.7% in 2015 to 10.2%.

Vision, Mission and Values

To create added value for customers, employees, shareholders, and the environment, Clariant builds upon its strong foundation: a guiding vision, a clearly defined mission, and a value system that supports everyone at Clariant in exploring new ways to discover value for all stakeholders.

A dynamic vision and mission

Clariant's vision is to become the globally leading company for specialty chemicals, and to stand out through above-average value creation for all stakeholders. In order to make this vision a reality, Clariant is committed to building and maintaining leading positions in its businesses and adopting functional excellence as part of the corporate culture. Clariant's mission is to create value by appreciating the needs of:

- customers – by providing competitive and innovative solutions
- employees – by adhering to corporate values
- shareholders – by achieving above-average returns
- the environment – by acting sustainably

Appreciation as the motor of daily business

Clariant is convinced that appreciation is the basis for success in supporting customers to stay ahead in their markets. Appreciation lies at the core of everything

Clariant does, in every area it is active in or has an influence: performance, people and the planet. The company expresses appreciation in countless ways: through a fierce commitment to transparency and integrity; by fostering a spirit of dialog and mutual respect; and by using sustainable, cutting-edge technologies. Continuous dialog allows the company to understand all stakeholders' needs and develop corresponding solutions that help the company meet the most stringent standards and set new benchmarks in its industry. Clariant strives for exceptional performance in everything that it does, and works tirelessly to offer clients innovative, customized, and high-quality solutions.

CLEARLY DERIVED STRATEGY



»Our vision is to be the leading company for specialty chemicals.«

HAROLF KOTTMANN
Chief Executive Officer

Business performance is enhanced by culture and reputation

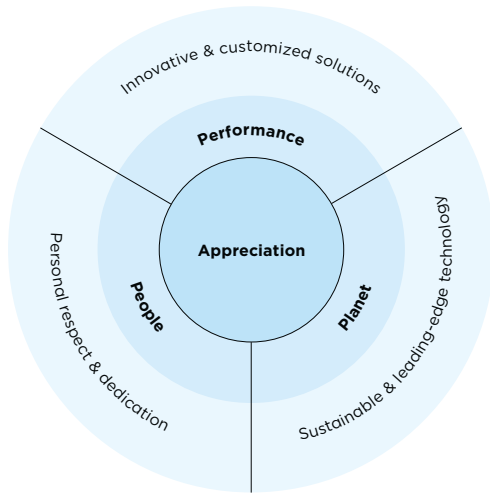
A corporate culture that achieves a balance between business performance, social interests, and environmental targets, and reflects the values of all stakeholders, is critical to value generation and sustainable

growth. Clariant's corporate values are fundamental for creating value and embedding appreciation in the company's culture. Six central values foster a shared and common set of behaviors amongst all employees and help make Clariant even stronger as a brand.

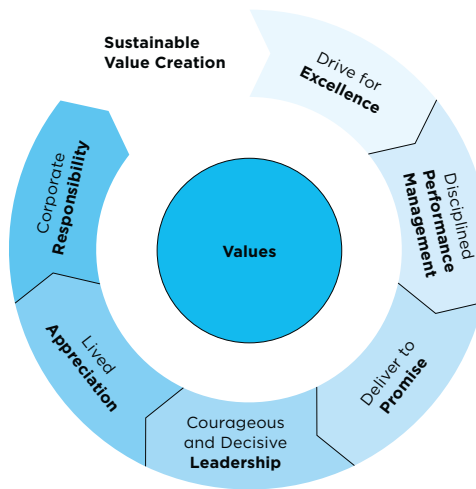
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—
basis points increase of margin, to 15.2%

BRAND VALUES WITH A FOCUS ON PERFORMANCE, PEOPLE, AND PLANET



CORPORATE VALUES FOR SUSTAINABLE VALUE CREATION



29%

cash flow increase to CHF 646 million

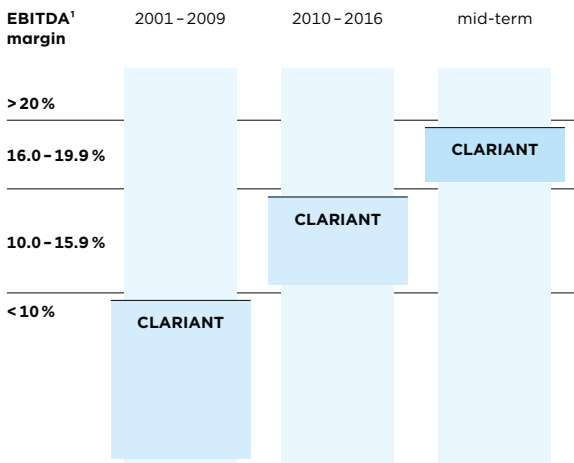
Objectives and Strategy

To focus Clariant as a whole and all its business areas on value creation, overall objectives and financial targets are complemented by material sustainability topics, supported with a five-pillar corporate strategy, and broken down to the Business Unit level.

Overall objectives and financial targets for achieving Clariant's vision

Clariant has defined overall objectives and financial targets to articulate the company's vision to become the globally leading company for specialty chemicals and to stand out through above-average value creation for all stakeholders. These objectives and financial targets pinpoint innovation, growth, return on investment, cash flow, industry positioning, investor, employee, and customer recognition, and sustainability.

FROM AVERAGE TO THE TOP - ADVANCING INTO THE TOP TIER IN SPECIALTY CHEMICALS



¹ before exceptional items

A key financial target is to achieve an EBITDA margin before exceptional items of 16 – 19% in the medium term. Clariant has made significant progress in that direction over the past few years, and against the backdrop of challenging economic conditions the increase of the EBITDA margin before exceptional items from 14.7% in 2015 to 15.2% in 2016 is considered a success.

The full set of company-wide overall objectives and financial targets is summarized in the table below. The table groups them with regard to the brand value – Performance, People, and Planet – they mainly support and the stakeholder group or topic they most closely relate to.

OVERALL OBJECTIVES AND FINANCIAL TARGETS

Performance

- Financials:
 - Organic growth (above GDP growth)
 - Profitability (EBITDA margin 16-19%)
 - Return on invested capital (ROIC) above peer group average
 - Strong cash flow generation
 - Advancing into the top tier in specialty chemicals

- Innovation:
 - Known as a powerhouse for R&D and innovation

People

- Customers:
 - Serving markets with future perspectives and strong growth rates
 - Focusing on businesses with competitive positions and pricing power

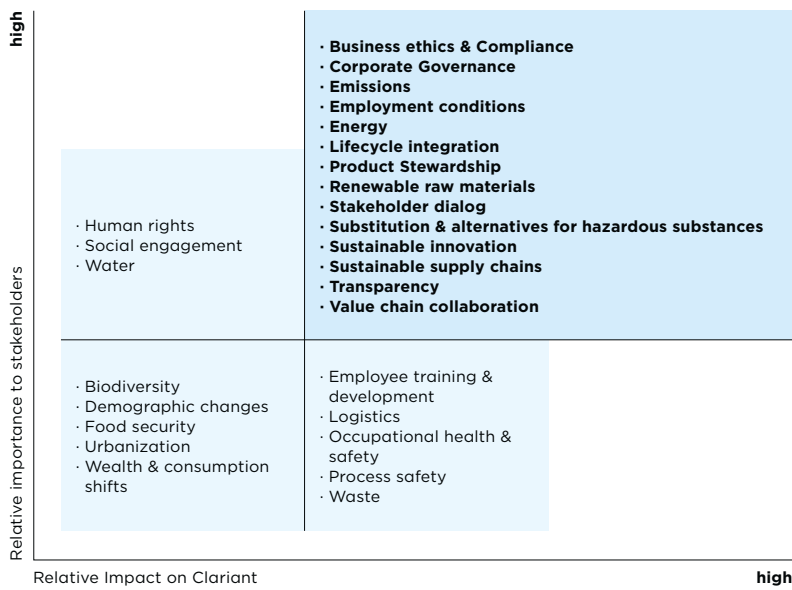
- Employees:
 - Becoming a preferred employer

- Shareholders:
 - Publicly listed with broad shareholder base and reliable long-term anchor shareholders
 - High reputation and known for above-industry average profitability, growth, and Total Return to Shareholders (TRS)

Planet

- Solutions:
 - Increasing value by applying sustainability

MATERIALITY MATRIX BY CLARIANT



Material sustainability topics

Complementing these overall objectives and financial targets when making strategic decisions, Clariant also considers relevant sustainability topics as part of the objective setting. To determine the most material topics and a number of slightly less material but still significant topics, a materiality assessment conducted in 2013 and refreshed in 2015 determined the level of impact of potential sustainability topics on the company and on its stakeholders.

The materiality assessment also showed the significance of external societal trends that Clariant has a limited ability to influence on its own, but that represent

important market drivers for long-term strategic consideration. With the growth of overall global wealth, consumption patterns are shifting. This shift is leading to growing demand for beauty, health, and lifestyle solutions. In addition, demographic changes such as the growing and aging world population are increasing demands related to food security, mobility, and safety. Lastly, increased urbanization is requiring innovative solutions in construction, energy production and use, and environmental protection. Clariant products and services offer a broad spectrum of solutions that respond to these global trends.



reports.clariant.com/2016/sustainability-report

»The chemical market in China is by far the largest in the world. It will also make up two-thirds of the growth of the global chemical market over the next five years.«

CHRISTIAN KOHLPAINTNER
Member of the Executive Committee

Interview
Strategic focus on China

In April 2016, Christian Kohlpaintner relocated to Shanghai to give the Executive Committee presence in the region to drive strategic execution and to accelerate growth. He discusses the increasing strategic role China plays for Clariant.

Mr. Kohlpaintner, from your first-hand perspective of living and working in Shanghai, what role do you see China playing in Clariant's ongoing success?

CHRISTIAN KOHLPAINTNER Living in China has been the most interesting and rewarding experience. China is extremely dynamic, young, and the rapid adoption of new technologies is very visible.

Even with the current decline in growth, described as the »New Normal«, China's economy is expected to grow between 5.5 % and 6.5 % annually. The chemical market in China is by far the largest in the world and will make up two-thirds of the total growth of the global chemical market over the next five years. A strong local presence in China is essential for our strategic pillar of intensifying growth.

How is Clariant positioning itself for growth in the region?

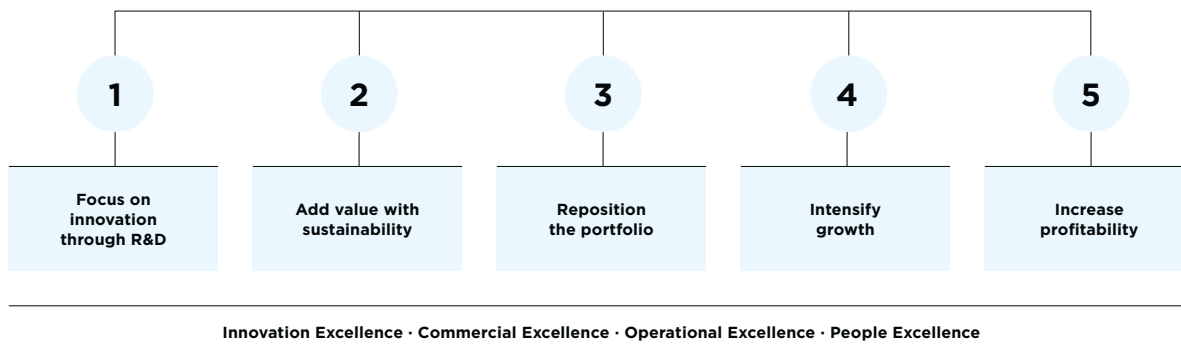
In 2016 we've been very busy putting China at the top of the agenda. We were developing solid strategies to bring China from »fringe to core« in our business ambitions and we are willing to make bold moves.



The Shanghai One Clariant Campus (OCC) opening in the beginning of 2019 will also encompass an innovation center allowing us to develop products from China for China but also for the world. To be able to compete in China this is a must for Clariant.

Also, for the first time, we have clearly defined China objectives for each Business Unit in 2017, with specific people accountable for delivering those plans. In a way, China will be treated similar to a Business Unit, with its own targets for profitability, growth and so on. The targets are ambitious but I'm confident that we'll get traction because performance management, roles and responsibilities, incentives, and resources are aligned. And the accomplished growth of about 7 % in 2016 is a good starting point.

THE FIVE-PILLAR STRATEGY



A key element of assessing the significance of topics was the first Sustainability Dialog 2015 in Frankfurt, where more than 150 representatives from industry, the media, the capital market, and public politics participated. The 2016 Sustainability Dialog revisited these topics when about 200 participants gathered in Shanghai. In 2017, Clariant plans to work with its stakeholders for the next iteration of the materiality assessment.

Five-pillar strategy

To summarize how to reach Clariant’s overall objectives and financial targets, five strategic pillars have been developed as guiding themes to orientate and focus strategy implementation.

Composed for the first time in 2010 these strategic pillars were reviewed and refined in 2016, with innovation seen as the starting point and sustainability the subsequent guidepost for future-oriented value generation. Repositioning the portfolio, intensifying growth, and

increasing profitability continue to be vital to further strengthen the focus on value generation for all stakeholders.

Clariant’s Business Units further detail out these five pillars for their respective BU strategies to a level of specific measures to ensure clear guidance on what matters most to achieve the respective financial targets of each BU.

Clariant Excellence supports strategy execution

Clariant Excellence (CLNX) has been developed into the Business Excellence program, comprising Innovation Excellence, Commercial Excellence and Operational Excellence, to support the Business Units in their strategy execution.

CLNX supports systematic value creation along the entire value chain, starting from ideation for new products, services or business models, defining commercial strategy to ultimately ensuring effective and efficient production and delivery of finished goods to our customers.



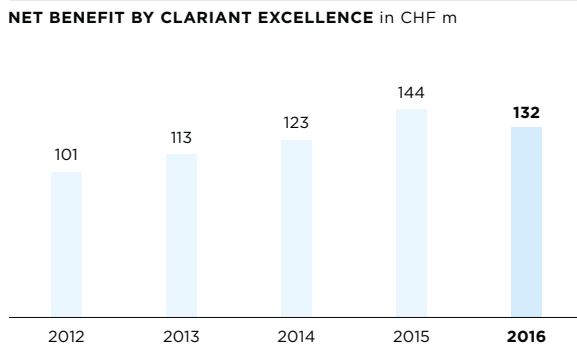
»Clariant’s five strategic pillars reinforce its overall objectives and financial targets with a strong guiding framework, giving direction and focus to the organization.«

BERND HÖGEMANN
Head of Corporate Planning & Strategy

4150

Training for Excellence

To ensure systematic capacity building, more than 4150 employees or roughly 24% of the workforce were trained in Clariant Excellence Programs by the end of 2016.



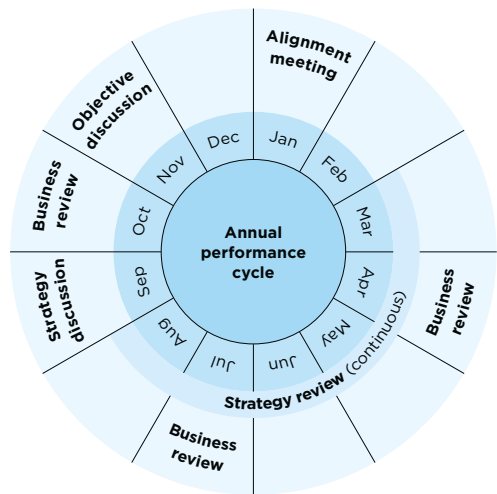
In total more than 1000 CLNX projects were active in 2016, resulting in an additional net benefit of CHF 132 million. Over the past five years, the positive effects just from cost savings and additional margin enhancement have accumulated considerably to approximately CHF 613 million with more than CHF 340 million of hard cost benefit.

People Excellence engages Clariant employees, among others, in leadership development and functional capability building (see also pages 15 – 17). More than 4150 Clariant employees or roughly 24% of the total workforce were trained using the Clariant Excellence Programs by the end of 2016. Systematic capability building is a cornerstone of anchoring the Clariant Excellence tool set and mind set to ensure the sustainability of the Clariant Excellence programs.

Breakdown to the Business Unit level

To monitor and ensure strategy execution and the achievement of the company’s overall objectives and financial targets Clariant’s Executive Committee (EC) conducts an Annual Performance Cycle. A formal Strategy Review in September of each year, stress-testing the validity of the assumptions underlying a three year BU Strategy Cycle, precedes the annual Objective Discussion for the then following year. The annual Objective Discussion operationalizes financial targets and the underlying strategic and tactical implementation for each year. Business Reviews are being conducted every quarter to ensure performance meets performance expectations, and supportive actions are being discussed and decided where required.

ANNUAL PERFORMANCE CYCLE



Employees and Leadership Culture

Empowering and equipping all employees at every level to create value for the company and its stakeholders are essential to success in the marketplace. Clariant's human resources practices, such as recruiting, learning, or performance management, are all designed to support the implementation of Clariant's business strategy.

Enabling leading performance

Clariant is striving to build a reputation as a preferred employer to attract, engage, and retain the right people on its journey toward a high-performing company. In 2016, Clariant hired 1 675 new employees (581 women and 1 094 men) to support this profitable growth strategy. During the same period, 629 women and 1 269 men left the organization. 38 % of new hires were in high-growth economies (Asia/Pacific and North America). In order to achieve this scale of growth and to successfully attract top global talent, Clariant changed the way it approaches recruitment. The new Global Recruitment Model delivers a more dedicated, targeted and cost effective way to attract and source high caliber talent in the Regions, while also optimizing our employer-branding efforts in these important locations.

To prepare for success and boost performance, Clariant has focused its activities in 2016 on enabling leading performance through best-in-class, cloud-based »MySuccess – Solutions for People« that integrate all people-related processes. It enables managers and employees to contribute successfully to company performance and further develop their skills and expertise. This is supported by easy access to HR data and HR processes and by opening up new ways of interacting

KEY PERFORMANCE INDICATORS REGARDING CLARIANT'S WORKFORCE

in full time equivalents (FTE) or headcount (heads) as indicated

	2016	2015
Total Staff (FTE)	17 442	17 213
Global Management ¹ (FTE)	814	817
Women in Global Management ¹ (FTE)	114 (14%)	104 (13%)
Men in Global Management ¹ (FTE)	700 (86%)	713 (87%)
General Staff ² (FTE)	16 628	16 396
Women in General Staff ² (FTE)	3 599 (22%)	3 652 (22%)
Men in General Staff ² (FTE)	13 029 (78%)	12 744 (78%)
Turnover rate ³	10.7%	10.4%
Participants (heads) in 360 degree feedbacks (ML 1- 5 +)	975	1 050
Staff (heads) participated in performance dialogs	9 000	7 880
Total training hours	201 884	182 398 ⁴
Training hours per participant (heads)	19	20
Personnel expenditures in m CHF⁵	1 383	1 345

¹ Management levels 1-5

² Excluding Global Management

³ Employees leaving the organization divided by staff at year end, not counting changes in the organization's boundary.

⁴ Restated after global roll-out of the Learning Management System

⁵ Salaries, social welfare contributions and extraordinary personnel costs for own employees. Another CHF 52 million was spent for external staff.

within the Group at all levels, including a new global internal job board that gives all employees the opportunity to view, apply for, or refer friends to one of Clariant's exciting job offers. As a next level of self-service, a new core HR digital solution system »EmployeeCentral@ Clariant« is currently being created as the single global

18%

Global Management
18% of employees in Management Level 1-5 are from emerging countries.



»Expectations of high performance, a unique excellence approach, and opportunities to drive change and create value in a respectful, open-minded environment are key elements to position Clariant as a preferred employer.«

MICHAEL RIEDEL
Head of Group Human Resources

90

Diversity
People from more than 90 nations form a diverse workforce.

source of HR records and key workforce data. It allows the company to accelerate HR efficiency by streamlining and simplifying HR processes through a globally harmonized application landscape.

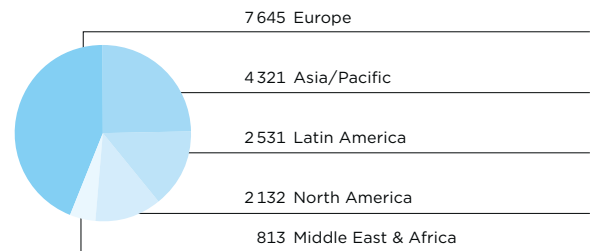
Focus on engagement, performance management and diversity

Since attracting and retaining engaged and motivated employees is vital for Clariant to achieve its goal of leadership and sustainable profitable growth, in November 2016, Clariant conducted its second employee engagement survey. 15 803 employees in 26 countries were invited to participate in 18 languages, corresponding to almost 90 % of the global workforce, and 69 % of those invited or nearly 11 000 employees took part. First results show that Clariant has significantly increased its engagement score and is steadily closing the gap to the global chemistry benchmark. In Latin America and selective SEAP countries, engagement scores are already above the country benchmark. Next steps will be to further analyze, understand, share and discuss results as well as to prioritize issues and plan actions including the monitoring of progress and communication.

An improved performance management tool as a key component of employee engagement and increased attention for a diverse workforce complements Clariant's approach to tackling the ongoing change agenda for a high-performing organization. Clariant employees represent more than 90 nationalities and 44 % of staff works in emerging markets. Across the organization, diversity is lived to ultimately ensure a strong customer service mind-set and triggers organizational growth worldwide. The thought diversity, which is created by the differences among the employee population, en-

FTE BY REGION

Total Staff 17 442



hances creativity and innovation. To Clariant, promoting diversity is not just a policy – it is closely linked to the overall organizational strategy.

Empowerment through training and development

People Excellence embodies Clariant's philosophy for leading people and translates business strategies into relevant people initiatives. A People Excellence strategy defines the capabilities, skills and mind-set needed to successfully execute a strategy – across the entire organization.

People Excellence contains the elements »Leadership Development«, »Culture and Engagement«, »Talent Management«, and »Learning and Capability Building«. In addition, People Excellence ensures that all Recruitment and Performance Management actions are closely linked to Talent Management and current and future organizational requirements.



»Clariant's People Excellence programs and initiatives strengthen consistent leadership behaviors and management practices across the organization.«

—
KLEMENTINA PEJIC

Head of Senior Management Development

Investing in Leadership Development

Demonstrating People Excellence in practice starts with our leaders in the organization – the way how they behave and how they lead and motivate their teams. During the past few years we have systematically defined competency requirements for all key positions to successfully implement strategies. Key position holders are being evaluated in a structured process, receive a factual feedback and benefit from customized learning measures to develop their capabilities.

Culture and Engagement enable strong results

A culture has to be proactively shaped and supported by lean and aligned leadership practices. Continuous learning and development are key pillars for all our employees to keep pace with the changing requirements and the increasing pace in the market. Clariant aims to create a high performance culture where leaders inspire and mobilize their teams and the entire organization with their passion for renewal and thus believe and strive for maximum performance in the company. We offer diverse programs to maximize individual, team and organizational performance.

Talent Management – positioning the company for the future

Today the business environment is highly dynamic – the way to do the job is constantly changing. For continuous success, individuals have to consistently develop new skills to meet the demands of the marketplace. This can be achieved most effectively in the context of business situations directly relevant for the company, which is why cultivating talents internally is often more sustainable than recruiting talents from outside the organization.

We have created a structured approach to Talent Management that links together business strategy, role requirements, recruitment, capability development and performance management. This allows us to effectively attract, identify and develop high quality internal candidates for our leadership positions. Today we have more than 1000 talents in the local, regional and global talent pools that are being systematically developed for broader roles. At Clariant, we have successfully filled more than 85 % of our senior management positions since 2012 with internal talent.

The key pillars in Talent Management are first to understand the right criteria for candidate selection and properly identify employee's future development potential. Implementing a system to develop talents and to measure the impact of leaders in the organization form the second pillar of Talent Management. Making sure that talents are deployed effectively is the third pillar in order to motivate and retain talents in the organization.

Learning & Capability Building – empowerment through learning

One of the key components in Clariant's People Excellence strategy is to offer tailored learning initiatives designed to improve competencies and strengthen individual performance. Clariant empowers its employees to constantly develop themselves through a wide range of learning opportunities. The Clariant Learning & Academy team uses the annual learning needs analysis to identify organizational and individual learning needs and adjust the training courses accordingly.

A Strong Engine
FOR VALUE CREATION



»At Clariant, we create value in the long run by paying attention to non-financial as well as financial indicators and to their interaction with each other. We are convinced that long-term investors will appreciate our forward-looking integrated reporting approach.«

RUDOLF WEHRLI

Chairman of the Board of Directors

Clariant constantly engages with its stakeholders to stay attuned to their needs and gain feedback on how to best create value for them. In 2016, these engagements included customer surveys with 2 693 responses (page 31), investor updates and presentations at analyst and investor conferences, a global employee engagement survey with 11 000 respondents (page 16), and the second Clariant Sustainability Dialog in Shanghai with over 200 participants (page 13).

The ultimate benefits Clariant's business model offers its stakeholders include delivering on-time in-full solutions to customers based on powerful R&D and innovation; providing above industry-average profitability, growth, and total return for shareholders; serving as a preferred employer that attracts and retains engaged and motivated employees; and adding value with sustainability. The company's overall objectives (page 10) firmly embed these beneficial outcomes for stakeholders within Clariant's strategy process (page 13).







Three phases turn challenges into opportunities

Within the company, the business model revolves around three key value-creation phases: Idea to Market, Market to Customer, and Customer to Cash. A well-filled innovation pipeline, customer-oriented sales and marketing processes, and efficient operations are key factors in achieving profitable growth. Externally, overarching societal trends, market drivers, and economic developments shape the environment in which the business model creates value.

The Group perspective on these external drivers is discussed further in the interview with Rudolf Wehrli, Chairman of the Board of Directors, and Hariolf Kottmann, CEO, (page 2) and in the Strategy chapter (page 11), while the business area angle is explored in the chapters on the specific business areas (pages 44, 50, 56, and 62).

Clariant helps to solve global societal and environmental challenges by taking an outside-in approach and viewing unmet stakeholder needs and global challenges as business opportunities. As discussed throughout the report, a clear strategy with ambitious objectives, a strong leadership culture focused on entrepreneurship, and leading businesses in four areas ensure that Clariant's strong foundations are consistently translated into sustainable growth.

Input (resources utilized)

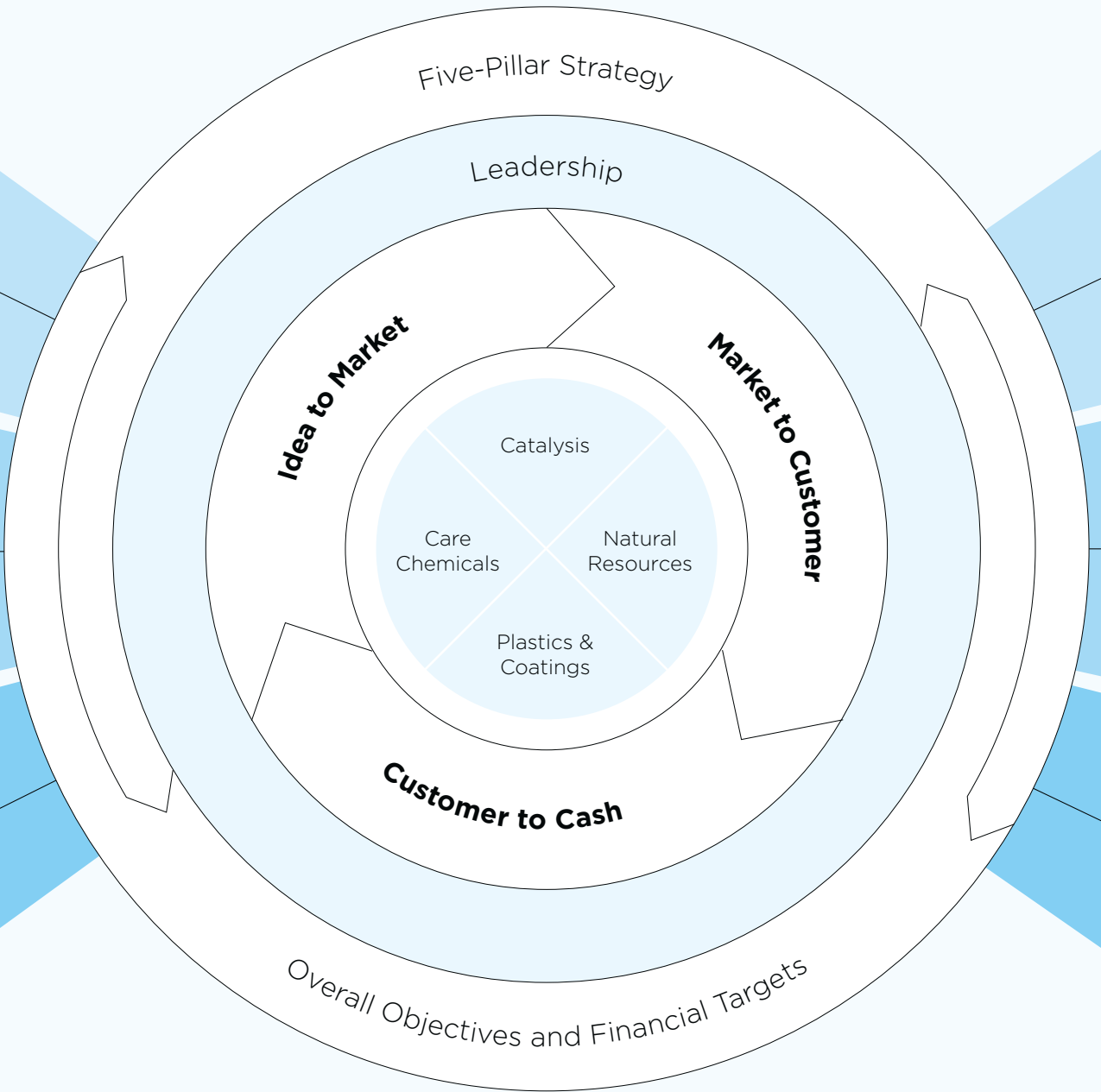
Performance	 Financial capital	206 R&D spend in CHF m (3.5% of Group sales)	297 Investments in property, plant and equipment in CHF m	1435 Personnel expenditures in CHF m (incl. external staff)	2221 Raw material procurement in CHF m
	 Intellectual capital	125 Scientific collaborations	320 Active innovation projects		
People	 Human capital	1675 New employees hired	201884 Training hours	~1100 Employees in R&D	
	 Relationship capital	975 Management members received 360° degree feedback	> 60% Raw material supply base by spend covered by sustainability evaluation	> 500 Client interviews	2693 Customer survey participants
Planet	 Manufactured capital	8 R&D Centers	> 50 Technical Centers	76 Production facilities	2.82 Raw materials procured in m t
	 Natural capital	2950 Energy consumption in m kWh	48 Water consumption in m m ³		

External Environment

Stakeholder Needs
Societal Trends and Market Drivers



Clariant - Vision, Mission, Corporate Values



STAKEHOLDER FEEDBACK

Resulting outputs

5 847

Sales in CHF m

15.2 %

EBITDA margin
before exceptional items

646

Operating cash flow
in CHF m

6 500

Patents at year-end

17 442

Staff in FTE at year-end

114

Women in Global Management

3 599

Women in general staff

0.19

Lost time accident rate
(LTAR)

91 %

Customers want to
continue doing business

81 %

Customers plan to intensify the
business relationship

4.09

Production volume
in m t

13

Waste water
in m m³

0.89

Greenhouse gas emission
(scope 1 & 2) in m t

147

Waste in thousand t

Outcome achieved for:

Environment

Employees

Shareholders

Customers

Business Model

At Clariant, discovering and creating value lie at the heart of everything. By following a business model built upon three value creation phases, knowledge is constantly transformed into sustainable and innovative solutions, creating added value for all stakeholders. This comprehensive approach to value creation is embodied in the brand values Performance, People, and Planet and communicated transparently through Clariant's new integrated reporting approach.

Integrated Reporting

In today's complex markets, companies create value by considering and managing a wide range of resources, tangible as well as intangible, and financial as well as non-financial. Integrated reporting provides a more accurate and comprehensive account of how this process takes place.

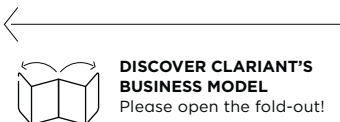
Clariant's integrated reporting takes inspiration from key elements of the International Integrated Reporting framework, developed and disseminated by the International Integrated Reporting Council (IIRC). The IIRC and others have engaged in global discussions about the importance of a more integrated approach to corporate reporting and have highlighted this framework's potential for change.

Integrated reporting helps organizations clearly articulate how their strategy, processes, performance, prospects, and governance lead to the creation of value by utilizing and transforming different forms of capital. This supports shareholders and other stakeholders in making more informed decisions about their relationship with a company.

From an internal perspective, integrated reporting is both founded on and enhances integrated thinking within a company, encouraging active consideration of the relationships between various operating and functional units and the capitals the organization uses or affects. This supports integrated decision making that creates value over the short, medium, and long term.

Strong value creation for all stakeholders

To create added value for its stakeholders Clariant employs six kinds of capital: financial, intellectual, human, relationship, manufactured, and natural. These six capitals are categorized under Performance (financial and intellectual capital), People (human and relationship capital), and Planet (manufactured and natural capital). Through Clariant's unique business model, these inputs are converted into valuable outputs for customers, employees, shareholders, and the environment.





Idea to Market

Clariant sets new standards in specialty chemicals by using leading technologies and developing innovative and sustainable solutions. Particular emphasis is put on processes and tools delivered by Innovation Excellence that systematically uncover unmet needs, enabling customers to address their challenges more effectively and conveniently.

Global trends as a driver for innovation

Global megatrends, such as the growing and aging world population, urbanization, digitization, and changing consumption patterns due to the growing middle class, drive Clariant's product and service innovations. These trends are expected to double the global demand for chemicals by 2030. To keep up with this burgeoning market, increasing production throughput and enhancing efficiency are vital.

The sources of specialty chemical products are also expected to change in the future. The Asian market's global role is increasing. Consequently, Clariant emphasizes its focus on regional innovations and solutions to meet local market needs. The regional innovation

center in India already conducts projects in close collaboration with the Business Units. A similar regional innovation center is currently under construction in China with planned opening for 2019.

In addition, a shift to bio-based solutions can already be seen in markets such as Personal Care and Home Care. Clariant estimates that 20% of chemical sales will be bio-based chemicals by 2030, a shift that is primarily driven by the sustainability considerations of consumers. Clariant believes that combining biotechnology with classical chemistry will provide the best and most competitive substitutes.

A great enabler is the ongoing digitization of the chemical industry, which allows for new business models to better serve customers. Furthermore, regulatory developments, such as the ban of Cr(VI), hexavalent chromium compounds, in Europe, the need for halogen-free flame retardants, and the requirement to reduce air pollutants are key areas where product and service developments allow Clariant to remain compliant and stay ahead of the curve.



OPEN INNOVATION INITIATIVE



Financing

We help start-ups and young companies overcome financial challenges.



Market access

Our global network helps to bring new innovations into the world.



Equipment/ infrastructure

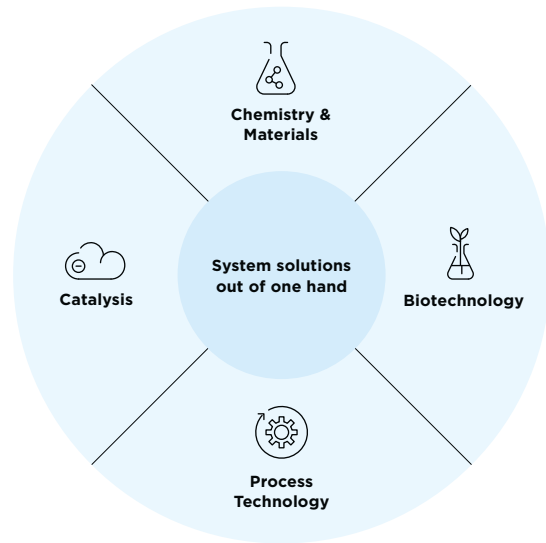
Finding suitable test and production equipment is a challenge for many innovators. We open our labs and facilities to foster innovation.



Knowledge/expertise

Our experts use their knowledge and expertise along the entire innovation chain.

TECHNOLOGY PLATFORMS



Clariant is well prepared to tap the full potential

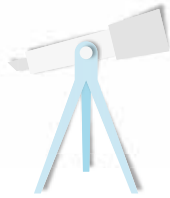
With an innovation pipeline filled with 320 active projects from all Business Units as well as Group Technology & Innovation, Clariant is well positioned for future growth. Currently, the innovation portfolio includes about 60 »Class 1 projects« that show a double-digit million sales potential or are of strategic importance. A total number of more than 6 500 patents underscores the advanced technology expertise. In the course of 2015 and 2016 Clariant revised its Intellectual Property strategy and thereby abandoned patents that are no longer of strategic relevance. Since 2012, Clariant has spent approximately CHF 1 billion in R&D, with CHF 206 million in 2016 alone.

To take advantage of synergies across the company, Research & Development is shaped along four technology platforms: Chemistry & Materials, Biotechnology, Process Technology, and Catalysis. 1100 employees in eight Research & Development Centers and 50 Technical

Centers strive daily to achieve clearly defined targets. Clariant participates in more than 125 active scientific collaborative projects with universities, research institutes, and external partners along the whole value chain. Already in 2012, Clariant entered into a partnership agreement with Emerald Technology Ventures by investing in Emerald Cleantech Fund III. Through Emerald, Clariant has access to more than 1 000 new companies per year. To profit from external knowledge and accelerate innovation, Clariant also runs an Open Innovation portal that was developed in partnership with the University of St. Gallen (Switzerland) and Stanford University (USA). The first focus field was dedicated to Smart Packaging which recently was accompanied by the second focus field Personal Care. Accordingly, submitting ideas on how to solve packaging-related problems or provide new and sustainable benefits to Personal Care products is welcomed.

IDEA TO MARKET

STEPS OF THE STEERING PROCESS



Scout - Megatrends & Ideas

Good ideas come from a deep understanding of current and future customer needs. To build the foundation for innovation, Clariant reaches out to analyze megatrends, market trends, and consumer needs. During ideation workshops with key customers, trends and needs are turned into ideas.



Scope - Cross-Functional Team Interaction & Design

Customer needs are systematically incorporated into the design of an offering. By constantly talking to customers, Clariant finds out which problems they want to solve. Their needs are the basis for the design criteria of all innovations, as laid out in the design scorecard.



Execute - Concept & Development

Clariant strives to accelerate Time to Market: Customer requirements are efficiently translated into product features; innovative concepts based on scientific principles are developed; the supply of the raw materials is secured; the supply chain and production process are set up; and the pilot plant is engineered. Customer feedback on commercially representative material is used for fine-tuning the product, its positioning on the market, as well as the product launch approach. Accordingly, the marketing materials are created and the sales force is trained.



Commercialize - Monitoring & Learning

After the launch, the product performance in the market is monitored in order to collect insights for further development.

Efficient and sustainable innovation project steering

Innovation at Clariant is managed according to the Clariant Innovation Excellence approach. A key corporate initiative that utilizes blueprints and tools to build innovation capabilities, while fostering a culture that translates knowledge and ideas into new products, services, business models and processes tailored according to customer and market needs. Innovation project managers of »Class 1 projects« are trained Innovation Black Belts, while managers of »Class 2 projects« are trained Innovation Green Belts. All Innovation Black and Green Belts are supported and coached by dedicated Innovation Master Black Belts to ensure process and tool know-how. In 2016, around 50 new Green Belts and 14 new Black Belts were trained, resulting in around 250 Innovation Green Belts and 26 active Innovation Black Belts at year end. All innovation projects need to pass the Stage Gate Process where deliverables for the respective stage are reviewed by a cross-functional team in order to progress from one stage to the next. The projects are required to be assessed on their relative sustainability based on Clariant's Sustainability Index for Research and Development projects (CSIR&D). The Portfolio Committee reviews the innovation project portfolio, prioritizes projects, and allocates resources in line with strategy.

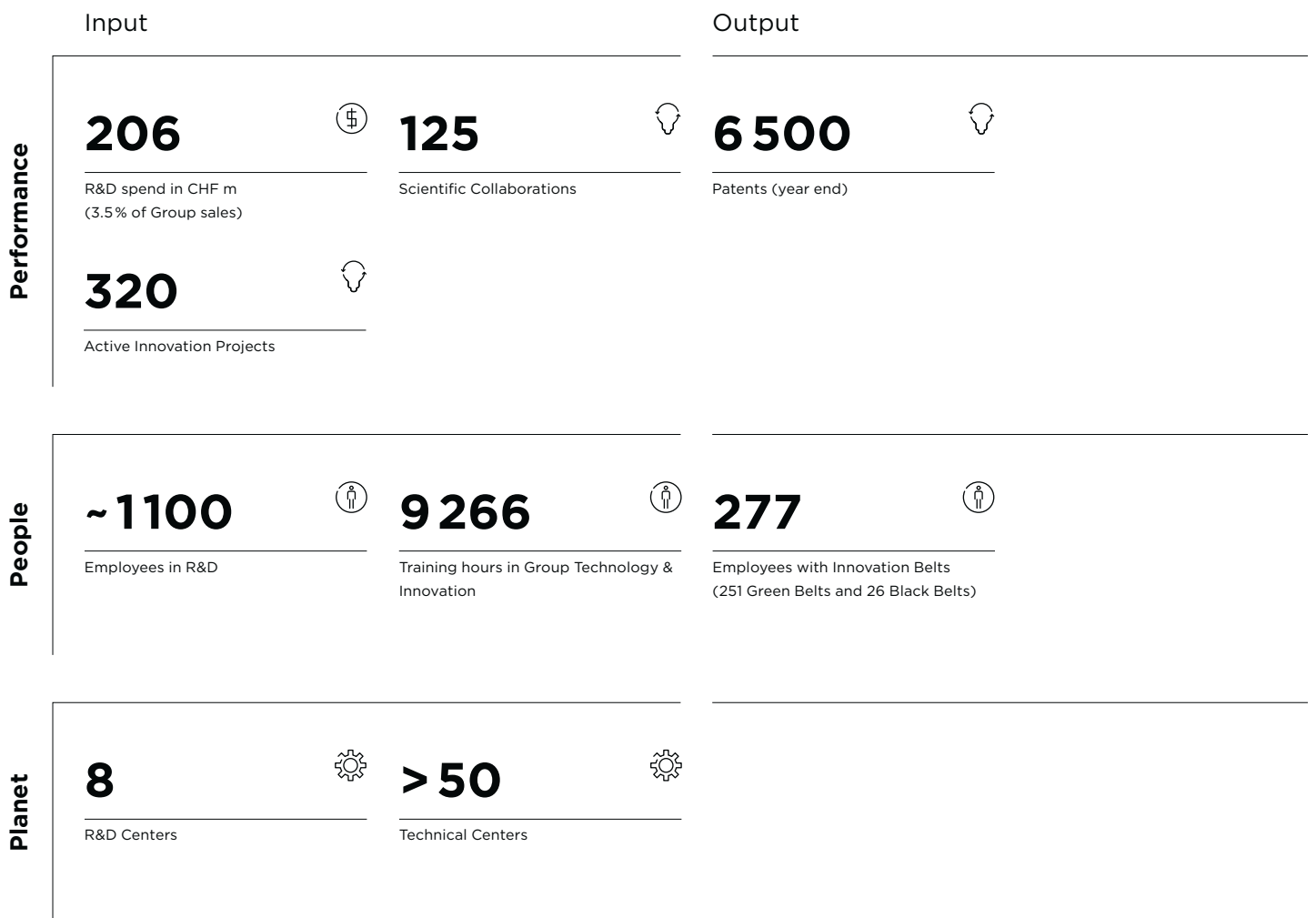








Business model
In the Idea to Market phase, ideas are transformed into market-ready solutions.

»Partnering with South Korean BioSpectrum helps us provide natural, sustainable and effective formulations to the Personal Care industry.«

CHRISTIAN VANG

Head of Business Unit Industrial & Consumer Specialties



-  Financial capital
-  Human capital
-  Manufactured capital
-  Intellectual capital
-  Relationship capital
-  Natural capital

DIGITIZATION ENABLES INNOVATIVE BUSINESS MODELS



reports.clariant.com/v01
Watch the VERITRAX™
movie



Digitization case **VERITRAX™**

The volatility of oil prices requires oil producers to update production processes and leverage automation to reduce costs. With the intelligent chemical management system VERITRAX™, Clariant now delivers the efficiency benefits of the digitized world to oil and gas chemical operations.

VERITRAX™ helps oil and gas operators obtain more frequent and accurate information about their chemical usage, product spend, and tank levels. The support platform takes advantage of industry-leading automation and cloud-based technologies to optimize the chemical supply chain, ensure maximum production uptime, and provide producers with an unprecedented understanding and control of their chemical spend. Behind the scenes, VERITRAX™ analytics collate and integrate key process parameters and data obtained from the field and laboratory, providing near real-time information directly to computers and smart phones. The system provides precise chemical pump control and data analy-

sis to help ensure that the correct chemical is delivered at the wellsite, at optimized ppm level dosages, to achieve the desired results at the expected costs.

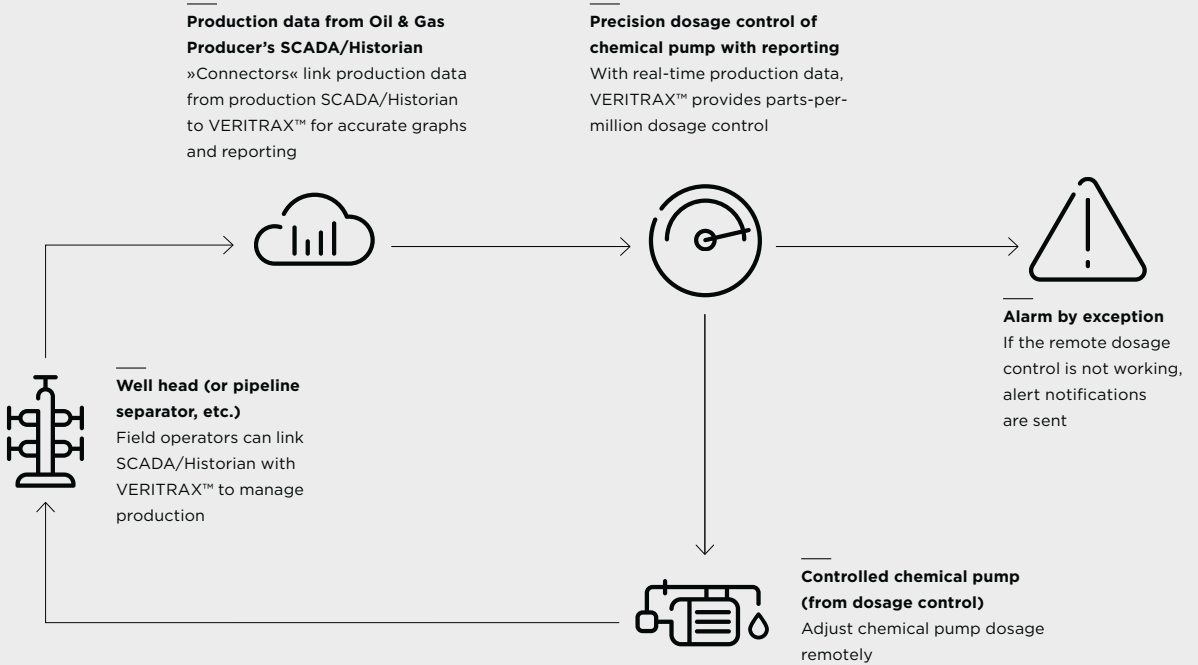
VERITRAX™ allows for significant reductions of total operating costs by

- lowering the risk of production interruptions
- increasing production efficiency
- optimizing inventory management
- improving the budgeting procedures



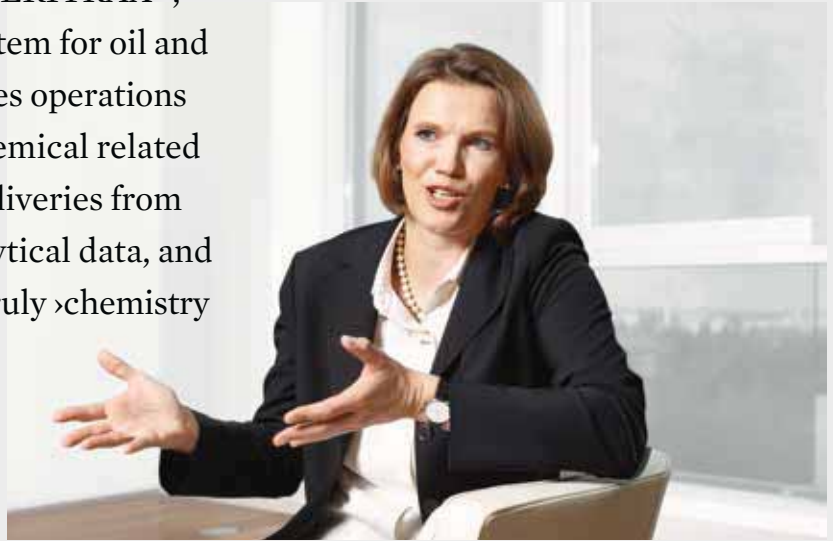
PRECISE CHEMICAL PUMP CONTROL

Significantly reduce probability of pipe blockage or well contamination through precision remote pump control and get high precision reporting in real time.



»In today's business environment, increasing digitization is key to efficient and clean production. VERITRAX™, the intelligent chemical management system for oil and gas producers, reduces risks and optimizes operations with real-time management of all the chemical related activities such as scheduling chemical deliveries from field based sensors, management of analytical data, and automating ordering and billing. This is truly ›chemistry management as a service‹.«

BRITTA FUENFSTUECK
Member of the Executive Committee



Interview

Digitization at Clariant

Ms. Fuenfstueck, are there unique aspects of digitization in the chemical industry compared to other sectors? And how do you see the digitization landscape in the chemical industry changing right now?

BRITTA FUENFSTUECK Compared with industries such as media, retail and telecommunications, the chemical industry is lagging behind. While some digital processes, such as control systems for plant operations, have been ingrained in the chemical industry for a while, the industry has only embraced the new digital wave more broadly over the last few years. The key focus lies in operations, from advanced operations management to predictive maintenance.

Are cost savings or increased service quality – or both – the main benefits of digitization?

In the chemical industry, the primary focus has been cost savings, although some companies are also looking into digital marketplaces. The service aspect of digital is less developed. However, at Clariant our focus will be in the opposite direction: We want to emphasize identifying new, differentiating offerings for customers. Of course, adding digital tools to our operational excellence approach is important as well.

Does successful digitization mean automating existing processes, or reinventing the entire business model?

Ideally, digital approaches make it possible to do things differently. Imagine the classic example of preventive maintenance. Instead of waiting for a part to deteriorate or conducting checks at standard intervals, digital tools can monitor processes constantly and trigger a maintenance activity at the right time to keep operations intact. On the customer-facing side of business models, the breadth of opportunities that digitization creates is even bigger, but realizing them is also harder.

Are radical digitization overhauls driven more by increasing customer expectations or by solution providers such as Clariant?

At the moment, only our customers in the area of oil production are starting to demand digital offerings, sometimes even in tenders. But innovation is not only about following a well-articulated need; it is about understanding the customer need more deeply, and addressing it proactively. The goal is to build a sustainable digital solution that meets real market issues instead of building offerings with hopes there is customer interest.

How do you expect the area of digitization to develop in the future?

Fastforwarding to 2030, we expect much broader adoption of digitization in personal and business processes. This will likely affect all areas of business, with the focus on turning the current digitization trend into tangible returns.

> 80 %

Portfolio Value Program (PVP)

>80 % of the product portfolio analyzed for sustainability performance

> 140

EcoTain*

>140 products awarded with the EcoTain* label for their excellent sustainability profile at the end of 2016.



Market to Customer

Offering products and services that customers value most is crucial for business success. Therefore, Clariant strives to understand customer needs along the entire value chain, develop solutions that address those needs, and capture the value created for profitable growth.

Market trends show heightened competition and opportunities for growth

Due to overcapacity, increasing commoditization in petrochemical and chemical markets, and current macro-economic trends, pricing pressure in the chemicals sector is high, especially in Asia. As a result, businesses that focus on specialty chemicals are diverging further from commodity chemicals providers. In order to capture the most benefit from the attractiveness of the specialty chemicals business, Clariant must pay as much attention to cost and supply chain competitiveness as it does to profitable growth. In addition, as sustainability is becoming an increasingly important buying criteria, it is integral to Clariant's business strategy. The Portfolio

Value Program (PVP) screens the product portfolio for sustainability performance on 36 criteria considering the entire full lifecycle. Clariant awards products that show an excellent sustainability profile based on the PVP criteria with its EcoTain® label.

Digitization will also continue to impact the commercial process for the foreseeable future. For example, multi-channel sales possibilities, advanced sales analytics, and new service models all provide opportunities to increase revenues. In November 2016, Clariant established the corporate initiative Digital4Clariant to explore these new avenues of growth. In a first step, a cross-functional team with people from all Business Units has been formed that now develops a digital roadmap and sets up a project pipeline.

Understanding true needs through continuous dialog

In recent years, Clariant has transformed itself from a mainly product-driven towards a customer-centric company. To deepen customer centricity Clariant launched the Clariant Commercial Excellence initiative in 2011. The initiative focuses on people, skills, and culture while supporting the Business Units in developing actionable commercial growth plans. The initiative also emphasizes continuous improvement of commercial



»Stringently and sustainably cultivating commercial skills is indispensable for customer centricity and further building our commercial DNA. Close collaboration across business functions is crucial for this.«

HARALD DIALER
Head of Clariant Excellence

strategies, customer engagement, and sales operations through ongoing dialog with existing customers, new prospects, and additional partners along the value chain. In this regard, Clariant conducted approximately 500 face-to-face interviews with customers in 2016.

An in-depth understanding of true customer needs is a prerequisite for developing compelling value propositions. By appreciating the customer's »job to be done«, Clariant can offer solutions that improve processes, save time, and optimize overall costs. For example, flame retardant customers asked for features such as low viscosity and consistent quality. Clariant not only met these direct requests, but was also able to capture the actual need beneath the surface: a desire for synchronized supply chains and reduced application costs. Constant and consistent customer dialog was key to this success.

Leveraging customer satisfaction for continuous improvement

As part of the Commercial Excellence Initiative, Clariant runs biannual customer satisfaction surveys. The surveys show that Clariant's reputation as an »innovative solution provider« has increased steadily

over the last few years. In 2016, Clariant received feedback from 2 693 customer contacts (compared to 1 430 in the previous survey) showing strong innovation performance improvements regarding both satisfaction and competitive performance. Of all survey participants, 65 % consider Clariant an innovative solution provider, 91 % intend to continue business with Clariant (prior survey: 79 %), and 81 % plan to intensify the business relationship. The net promoter score increased from 29 % to 37 % in 2016. All of these indicators represent performance above industry benchmark.

The feedback received through the surveys provides valuable »outside-in« information that is used to increase operational, commercial, and innovation performance. For example, based on survey feedback, the Executive Committee incorporated on-time, in-full (OTIF) customer delivery targets into Clariant's performance review meetings for all relevant staff, including Business Unit heads.

Developing compelling value propositions

Once customers' needs are well understood, insights are either fed back into the Idea to Market phase if Clariant does not have a suitable current offering, or are forwarded to Marketing Excellence professionals who articulate to existing and potential customers the value created

37 %

Net Promoter Score (NPS)

37 % in 2016, compared to 29 % in 2015. The NPS gauges the loyalty of a company's customers on a scale from -100 (no loyalty) to +100 (high loyalty). An NPS of >50 % is felt to be excellent.

**MARKET TO CUSTOMER
STEPS OF THE STEERING PROCESS**



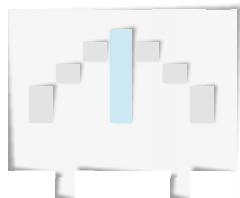
Find - Identifying & Focusing

Value Chain Analysis, Customer Interviews, and Market Modeling are employed to gain clear market insights. The market attractiveness is then assessed in order to identify the growth pockets needed to successfully place offerings on the market.



WIN - Value Proposition & Strategy

Identified customer needs, characteristics of products and services, and competitors' offerings are all considered in order to develop a value proposition. Growth plans then create a shared context and the accountability to deliver profitable growth.



Keep/Grow - Relationship & Selling

Sales professionals capture the value delivered to customers into profitable growth for Clariant. Continued focus on customer needs creates additional value throughout the sales process. Clariant engages in each sale based on value and optimizes pricing constantly.

with existing offerings. In this regard the Clariant value calculator is a helpful tool to demonstrate and visualize the monetary benefits of using Clariant solutions compared to the next best alternative. Evaluating sustainability aspects and the resulting benefits for customers is also an essential part of Clariant's value-based pricing approach. Since 2012, approximately 2 000 customer-facing employees were trained in value-based pricing. By carving out the savings or revenue upside in terms of total costs of ownership at a mutually beneficial price point, Clariant can transform value created for customers into profitable growth.

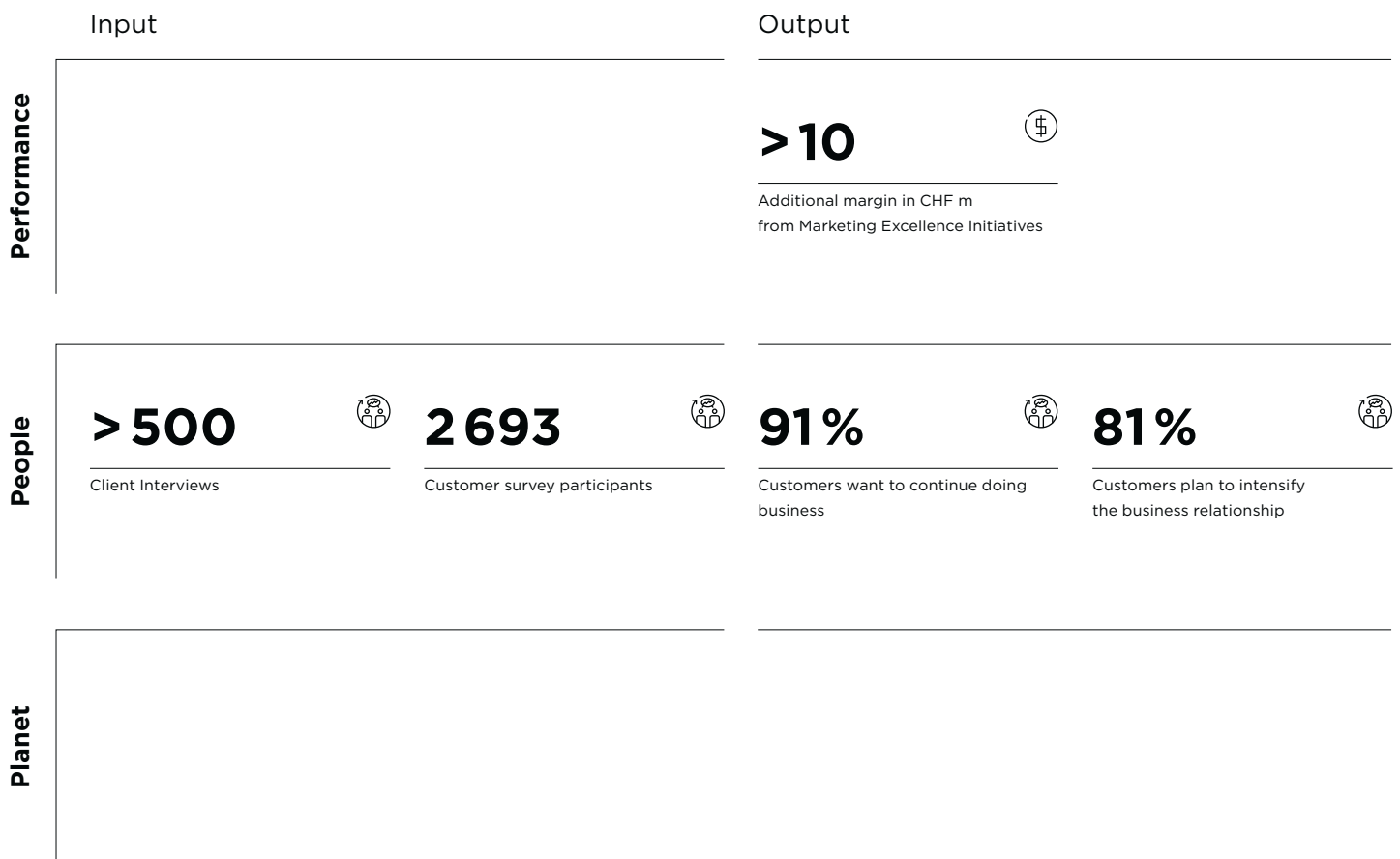
In 2016, Clariant conducted 22 Marketing Excellence projects across all Business Units. All projects targeted capability enhancements that could drive execution throughout the commercial organization in order to deliver on the Business Unit strategies. In the Business Unit Masterbatches in Belgium and the Netherlands, for example, identifying growth pockets and building an action plan in attractive market segments of the food and beverage packaging industry resulted in a sales growth of 31% compared to the previous year. Overall, growth benefits from Marketing Excellence initiatives in terms of additional margin accounted for more than CHF 10 million in 2016. In 2017, Clariant plans to conduct more than 30 dedicated Marketing Excellence projects across all Business Units to further develop organizational capabilities and enhance drivers for growth.









Business model
In the Market to Customer phase customer needs are transformed into additional sales potential.

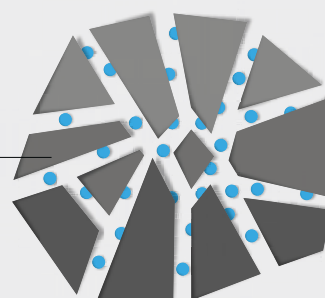
»Once we made the customer need the start of our action rather than the output of our process, we could create real value and true customer loyalty.«

STEPHAN LYNEN
Head of Business Unit Additives



-  Financial capital
-  Human capital
-  Manufactured capital
-  Intellectual capital
-  Relationship capital
-  Natural capital

CALCULATING VALUE FOR THE CUSTOMER



Value calculation case

Energy and cost savings through AmoMax®

Clariant solutions are designed to create additional value – for the customers and for Clariant. Take the example of AmoMax® 10, a highly efficient catalyst to produce fertilizers with less energy compared to conventional solutions.

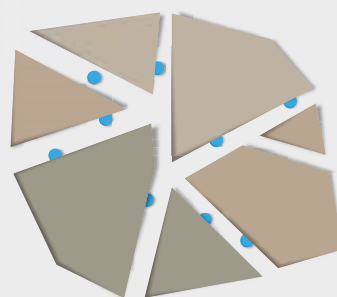
Reducing energy consumption is not only good for the environment, it also saves costs. Clariant is able to quantify this and other benefits to the customers, supporting mutually beneficial agreements at a price point that allows both the customer and Clariant to capture significant value from the collaboration.

With catalysts, reactions occur faster and require less activation energy than without them. Catalyst improvements are paramount for the energy intensive ammonia industry. Clariant offers the superior catalyst AmoMax® 10 for ammonia synthesis:

- AmoMax® 10 is based on the iron oxide wustite in combination with the special set of promoters that increase the catalytic activity.
- AmoMax® 10 shows a significantly higher activity compared to the standard magnetite catalysts.
- AmoMax® 10 has been installed in more than 100 reference ammonia plants globally.

AMOMAX® 10

Using Wustite, a mineral form of iron oxide, AmoMax® shows significantly increased surface area compared to traditional solutions and incorporates proprietary promoters in inter-granulate spaces and within the crystals. This brings significant change to the field of ammonia synthesis.



Conventional catalyst

Since their first commercial production in the early 1910s conventional ammonia synthesis catalysts are made of magnetite (Fe_3O_4).

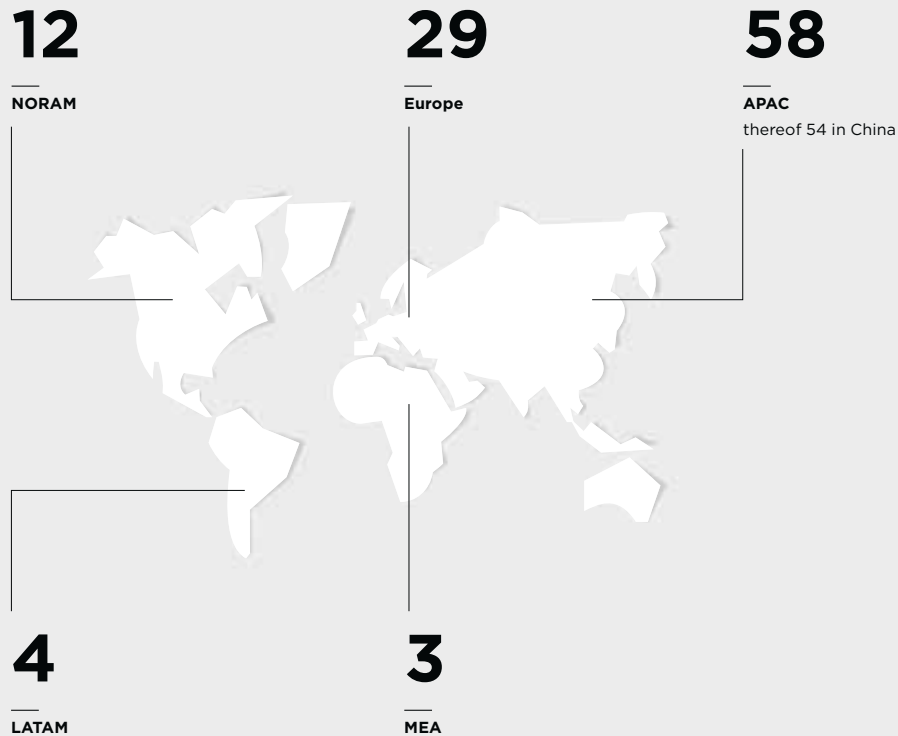


reports.clariant.com/v02

Watch the AmoMax® movie



MORE THAN 100 REFERENCES SINCE MARKET INTRODUCTION IN 2003 PROVEN AMOMAX® 10



Quantifying benefits Clariant Value Calculator

The Clariant Value Calculator is an analytical tool based on Clariant Commercial Excellence methodologies. Tailored to the specific circumstances of the intended application, the calculator quantifies the monetary benefits the customer experiences when using Clariant solutions such as Amomax® 10.

BENEFIT CALCULATIONS AND VALUE CREATION FOR A TYPICAL AMMONIA PLANT (1 600 MTPD) in TUSD

2 499	Total value creation
1 292	Lower energy consumption (lower loop pressure/lower recycle rate)
619	Quicker reduction time
588	Lower light-off temperature leading to faster restart time

Benefit calculations and value creation for a typical ammonia plant (1600 metric tons per day)

- Typical energy savings with Amomax® 10 of approx. 20 000 kcal/ton
- Financial savings from lower energy consumption:
 - Approx. USD 170 000 annual savings (based on energy prices of ca. USD 0.015 per thousand kcal, and 350 days of production per year)
 - Approx. USD 1.29 million net present value of savings over the lifetime of the catalyst (estimated as cumulated savings over 15 years, with discount factor of 10 %)
- Additional financial savings are a result of quicker catalyst reduction times and faster restart times after shut-downs

The overall total value creation adds up to approx. USD 2.49 million over the life time of the catalyst.



Mutual benefits for the customer and Clariant
The total value creation over the catalyst lifetime exceeds the purchase price for Amomax® 10.



Customer to Cash

To meet the increasing challenges in the chemicals industry, Clariant employs a deliberate, holistic approach to Operational Excellence that optimizes planning, procurement, production, and delivery. This creates not only benefits for the customer, such as on-time, in-full delivery, but also generates cost and revenue upsides for Clariant.

Increasing challenges across the industry

Clariant faces increasing volatility, uncertainty, and complexity in its business environment. Changes in demand are more sudden and dramatic than in the past, and competitive pressures are increasing customer service requirements. For example, long lead times for customer orders in the chemical industry were typical, but now customers often request products with only a few days turnaround.

While these demands exist around the globe, each region has specific experiences. For example, in China where competition is particularly fierce, short lead times for the customer are key to securing orders. In regions whose economies have a strong oil focus, such as the US, Brazil, or the Middle East, cost competitiveness is the major factor. Each scenario requires customized changes to the supply chain to be successful in the marketplace.

Meeting challenges with a holistic approach

Clariant builds on its earlier Operational Excellence initiatives to tackle Customer to Cash in a holistic way. Rather than optimizing planning, sourcing, production, and logistics separately, cross-functional teams connect the dots by optimizing the whole value chain. This process includes lean implementation plans to make sure a facility's door-to-door material and information flow operates efficiently. Improvements encompassing the overall process flow are visualized and translated into targeted kaizen activities for continuous improvement.

In 2016, an integrated planning landscape was rolled out in three of the seven Business Units. This consisted of organizational enhancements, best practice planning processes, and an advanced supply chain planning and optimization tool. Combined with the order management and manufacturing execution systems and continuous improvements, cost savings of more than CHF 1 million, additional sales of CHF 25 million and reduction in net working capital of more than CHF 15 million across the Group were achieved in 2016, while service levels also increased.

Working together to optimize a large supply chain

Clariant sources raw materials, capital goods, and other services and inputs from suppliers around the world. In 2016, Clariant purchased roughly CHF 2.2 billion worth of raw materials from around 5 250 suppliers and

18.6 %

Net working capital

With 18.6% the ratio of net working capital to sales is substantially below the Group's target of 20%.

»An optimized value chain is essential for business success. Clariant's new production plant for pigment preparations in Santa Clara, Mexico, produces closer to our customers in North and Latin America and supports on-time, in-full delivery.«

—
MICHAEL GROSSKOPF

Head of Business Unit Pigments

CHF 1.3 billion of other products and services, such as technical equipment or energy, from roughly another 26 250 suppliers. To reduce purchasing spend in such a large supply chain, Clariant Procurement Excellence (CPX) analyses the purchasing categories. Raw materials were harmonized wherever possible and de-specification was tested. Workshops conducted with suppliers explored win-win situations by looking into new business development and innovations.

Clariant selects its suppliers, outsourcing partners, and service providers based on extensive criteria that include not only economic and product-specific performance, but also sustainability factors. In 2014, Clariant joined the chemical industry's Together for Sustainability initiative for sustainable supplier management. Independent experts perform supplier evaluations and audits, and the participating companies have access to the results. This helped Clariant cover more than 60 % of its raw material supply base by spend with sustainability evaluations in 2016.

Ensuring safe and efficient production and delivery

Clariant integrates lean methodologies throughout the Customer to Cash process to achieve safe, sustainable, and profitable operations. By combining multiple initiatives, the company can create powerful synergies that benefit the Business Units. For example, in 2016 a value chain diagnostic for the Business Unit Functional Minerals was established. It integrates Clariant Supply

Chain System (CSS) and Clariant Production System (CPS) methods to uncover key levers for increased productivity, reduced conversion costs, and stronger demand planning and inventory management in Southeast Asia/Pacific. Investments such as the new pigment preparation plant in Santa Clara, Mexico, increase proximity between production and customers and thus support on-time, in-full delivery.

While the lean process is considered the engine of continuous improvement, the management of safety, health, and environmental aspects is the essential lubricant that enables the engine to function properly. By avoiding accidents, Clariant protects its employees while also ensuring that production disruptions are minimized. Training and investments in plant safety substantially improved the Lost Time Accident Rate (LTAR), which measures the number of occupational accidents with at least one day of work lost relative to 200 000 hours of work. The LTAR fell from 0.92 in 2007 to 0.19 in 2016 (2015: 0.17).

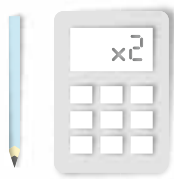
Optimizing inventory levels while ensuring high service levels

Clariant's Inventory Health Check program is a key initiative to optimize cash flow in the Customer to Cash phase. The Inventory Health Check starts with an analysis of inventory performance indicators to determine the health status of a Business Unit's inventories. With

TfS

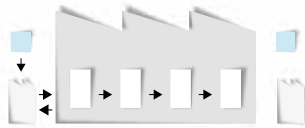
—
Clariant participates in the chemical industry's Together for Sustainability (TfS) initiative that provides access to supplier sustainability evaluations and audits conducted by independent experts.

CUSTOMER TO CASH
STEPS OF THE STEERING PROCESS



Plan – balance supply & demand

Accurate demand planning is undertaken to create a well-connected sales and production process. By focusing on balancing service, costs, and net working capital, integrated supply chains are established.



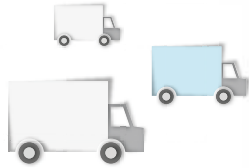
Source – optimizing spend effectiveness

Procurement Excellence seeks to increase spend effectiveness by optimizing commercial, technical, demand, and process levers.



Make – constant monitoring for high efficiency

To ensure continuous operational improvements, Clariant uses Value Stream Mapping and other diagnostic insights to monitor constantly the current situation, compare it to best practices, and run its assets at the highest possible level of efficiency.



Deliver – alignment of commercial and operations to ensure OTIF

The best possible cooperation between Commercial and Operations ultimately allows Clariant to deliver its finished goods on-time and in-full (OTIF) as required by the customer.

the assistance of experts from the Business Unit, it then pinpoints inefficiencies, identifies appropriate measures to improve inventory performance while ensuring high customer service levels, and determines the roadmap to improve the conversion of EBITDA to cash.

Inventory Health Check pilot projects carried out jointly between Clariant Operational Excellence and the Business Unit Oil & Mining Services have successfully optimized inventory levels. For example, after an Inventory Health Check at Oil & Mining Services in Latin America, stock levels dropped significantly without affecting on-time, in-full delivery. In fact, the IFR (inventory fill rate) – the fraction of customer demand that is met through immediately available stock – has increased steadily since the Inventory Health Check measures were implemented.

Based on the impact of the pilot projects, a number of additional projects across multiple Business Units have been conducted in Europe, the Americas and Asia where further success stories have been written. This includes a 50 % inventory reduction within a 12 months' period for a project in North America.

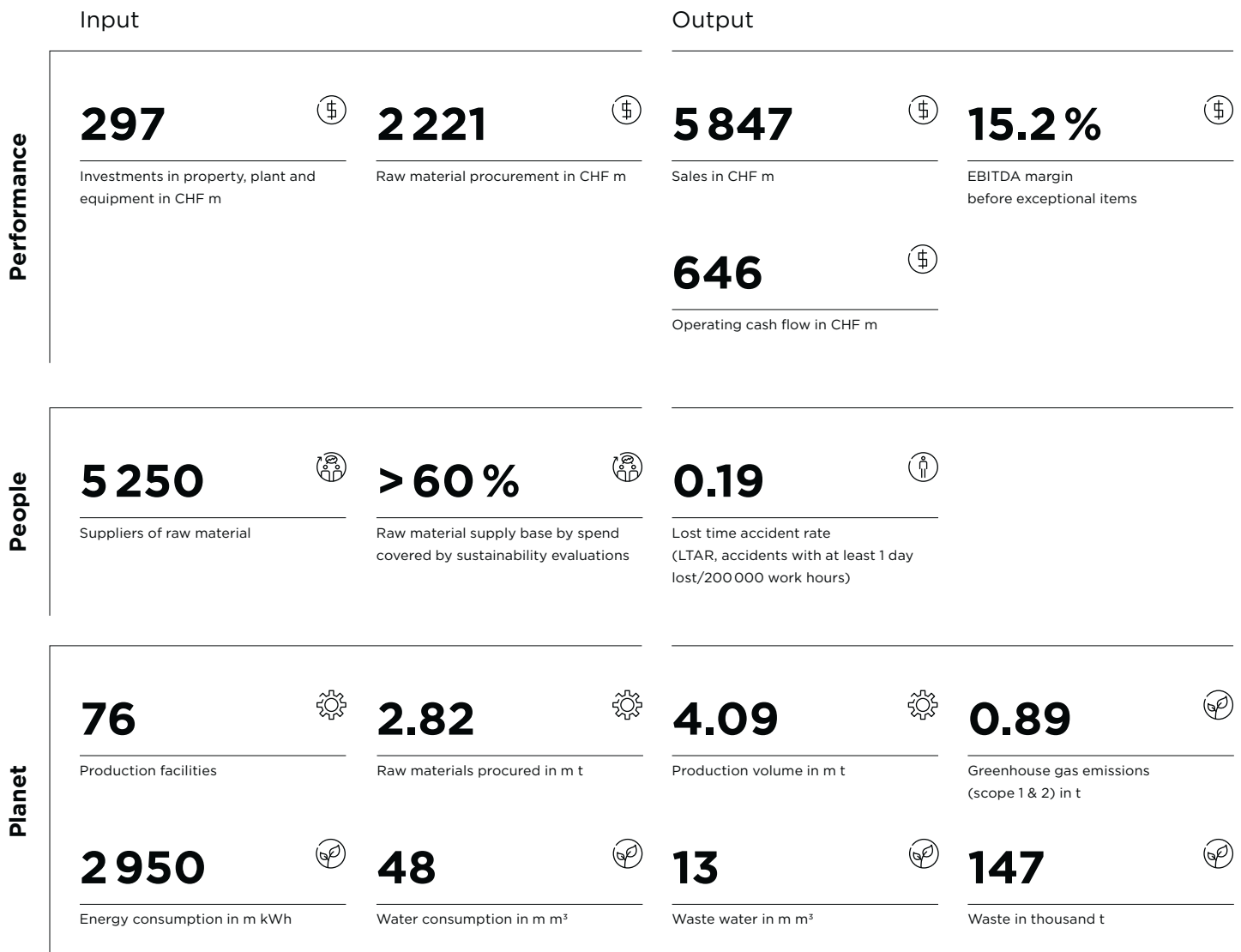








Business model
In the Customer to Cash phase process optimization creates added value.

»The Inventory Health Check improved our inventory levels and cooperation with the Clariant Supply Chain System team is excellent.«

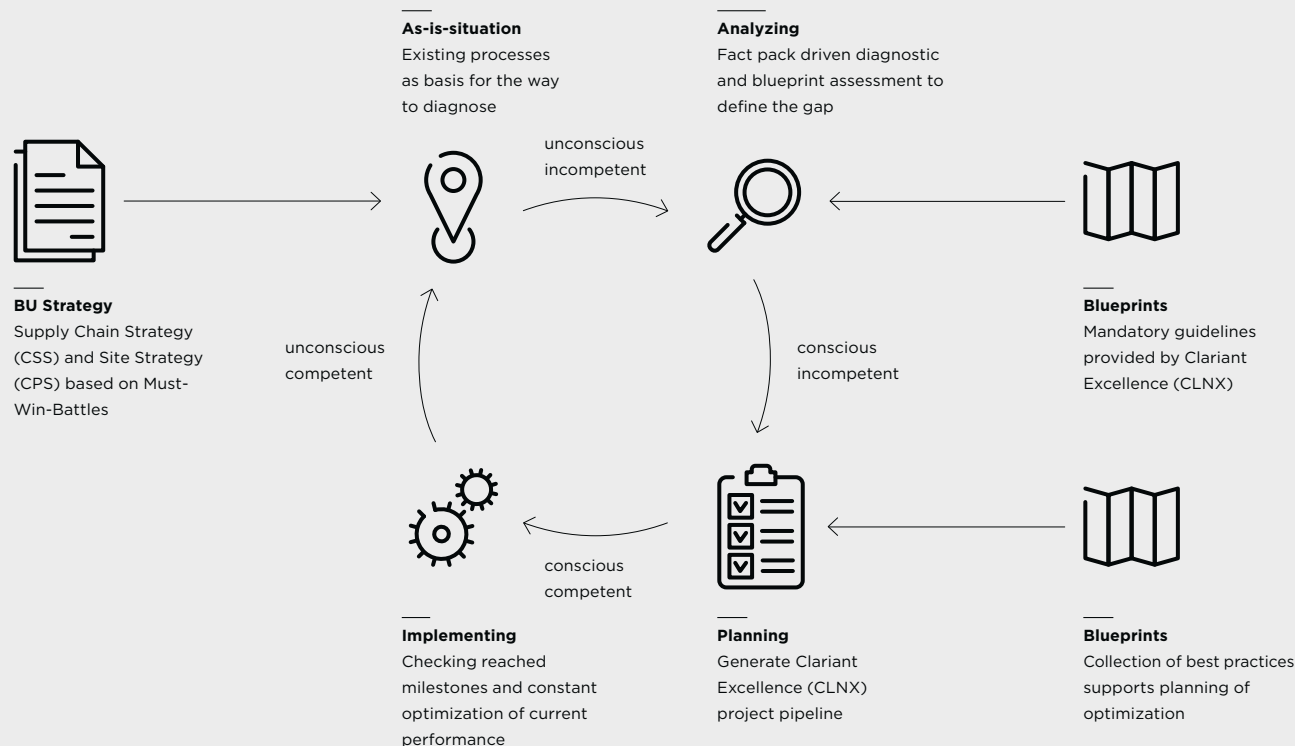
JOHN DUNNE

Head of Business Unit Oil & Mining Services



-  Financial capital
-  Human capital
-  Manufactured capital
-  Intellectual capital
-  Relationship capital
-  Natural capital

REDUCING COST AND ENVIRONMENTAL IMPACTS



Production efficiency case Addressing improvement potentials through YEE

One of Clariant’s strategic goals is to incrementally increase chemical yield while lowering energy and water consumption, and other environmental impacts (YEE). For this reason, Clariant established a dedicated YEE team in 2012 to analyze production plants with this goal in mind. The analysis follows a two-step approach, whereby the YEE specialists, chemical engineering expert, and the operations team perform intensive diag-

nostics of potential improvement areas. During the last four years, the program uncovered high benefit potential in about 25 plants in 15 different production sites, resulting in more than 600 improvement measures, most of which have already been implemented. As about 80 % of expenditures in Clariant’s Business Units are allocated to raw materials, energy, and environmental technology, there is a huge savings potential in this area.

Since the inception of YEE in 2012, the program led to savings of more than CHF 50 million.

POTENTIAL SAVINGS WITH CLARIANT’S YEE PROGRAM (BASED ON COSTS IN 2012)

	Costs in CHF m		Potential benefit		Total estimated benefits in CHF m
Raw material	2161	×	2.0 %¹	=	43
Energy	157	×	8.5 %²	=	13.3
Environment	32	×	8.5 %²	=	2.7

¹ Raw material cost savings through yield and cost improvement

² Based on previous experience in energy efficiency programs



»Clariant has set six ambitious environmental targets for 2025. While we have achieved progress toward all of them, this has also set the bar for further improvements even higher. In order to continue to advance and optimally align investments, our cross-company 2025 Target Team closely works together.«

JOACHIM KRÜGER

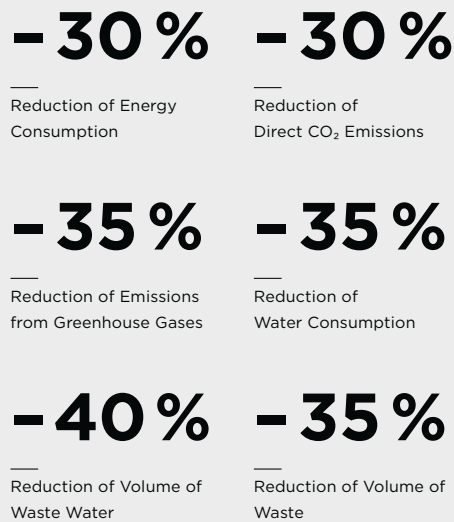
Head of Corporate Sustainability & Regulatory Affairs

Achieving progress

Environmental targets 2025

Initiatives such as Clariant's eWatch program on production facility optimization and employee training with regard to energy efficiency, and the Inspire Water program on waste water reduction currently being pilot tested in Spain, have contributed to Clariant's ambitious environmental targets. Using less raw material, consuming less energy, and reducing emissions and waste are essential for Clariant to reach its environmental targets. By 2025, Clariant wants to achieve significant improvements in six major parameters compared to the base year 2013. Relative to product volume and in comparison to the base year 2013, energy consumption and CO₂ emissions should be reduced by 30%. The emission of greenhouse gases should be reduced by 35%, to the same extent as the amount of water used and the volume of waste. The waste water volume should even be reduced by 40% within 12 years.

ENVIRONMENTAL TARGETS (per t produced goods)



Value Creation IN THE FOUR BUSINESS AREAS



EBITDA Margins¹

18.8%

Care Chemicals

23.8%

Catalysis

16.9%

Natural Resources

14.6%

Plastics & Coatings

¹ before exceptional items

The world is changing, and economic, social, and environmental transformation impact every sphere of life. Clariant's Business Areas constantly create value by translating customer and consumer needs into innovative solutions for the urgent questions of tomorrow.

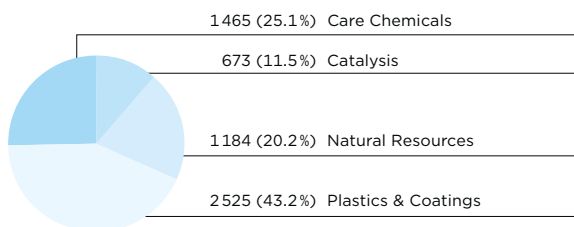
Addressing global trends in four areas for value creation

Clariant's four Business Areas are organized internally into seven Business Units. The Business Area **Care Chemicals** supports customers in improving the characteristics of products in areas such as personal care or crop protection. 90% of all chemical processes require catalysts, and the Business Area **Catalysis** offers a broad portfolio of catalysts that enable more efficient production and the use of biomass or other alternative raw materials. The Business Area **Natural Resources** supports oil and mining companies in step change innovation and provides products and solutions for industrial manufacturing and purification. The Business Area **Plastics & Coatings** develops products for customers in packaging, electronics, and paint and coatings, among many other industries.

The four Business Areas address major global trends, such as resource conservation, mobility, energy efficiency, and increasing urbanization, and contribute to achieving corporate goals.

SALES BY BUSINESS AREA in CHF m

Group sales: 5 847



»Questions are increasing about how we can live more sustainably.«

BINTAN TITISARI
Textile Designer
Bandung, Indonesia



reports.clariant.com/v03
Watch the TexCare® movie



Not only do industry solutions matter to the Business Area Care Chemicals, but the products are devoted to consumer needs as well. Whether it be in personal care, cleaning supplies, or food, consumer desire for a sustainable lifestyle is gaining speed.

And this is a global development. To illustrate, the Discover Value story provides an exemplary look into Indonesia, one of the most densely populated countries. More than just textile exporters, Indonesians themselves are demanding, fashion-conscious consumers, also concerned about sustainability: How are textiles produced? Which raw materials were used? How can I save energy and water during washing? Gone is the era in which the consumer doesn't think about the effect of his consumption.

This market shift means that relevant industries require a quick and satisfying response.



GABI OHLENDORF
 Technical Application Manager
 Business Unit Industrial & Consumer Specialties

Interview

Detergents that preserve textiles

Daily every household around the globe is doing laundry. Consumers increasingly desire a more gentle detergent. Gentle not only on their clothes, but also on the environment. A multi-functional detergent additive like TexCare® can handle these demands. Gabi Ohlendorf, Technical Application Manager at the Clariant Innovation Center in Frankfurt, explains how TexCare® works.

Did you know?

What does a t-shirt have to withstand?

Frequent washing gradually damages clothes. Everything starts with stains. Fabric stains are dirty marks comprised of fat, protein, starch, and dyes. Usually, these components penetrate deeply, making them diffi-

How do people in Europe do their washing?

GABI OHLENDORF European children love to eat chocolate and spaghetti with tomato sauce. Around the Mediterranean Sea, red pepper and olive oil are very popular and known to be hard to remove. Very tough stains found in all countries are sebum and sweat. In Germany, almost everyone uses front-loader washing machines and the washing temperature is usually 40°C. However, lower temperatures are being promoted in order to save energy and money. Both liquid and powder detergents are commonly used. In some parts of the Middle East and Africa, hand washing also plays a significant role. Soap bars are the common tool for this method of washing.

What does this mean for your daily work?

In our laundry lab, we adapt our tests to the different needs of our regional customers. We can modify the water hardness and perform our tests on different fabrics soiled with various standardized stains. To make the results most meaningful for our customers, we aim to simulate official test setups.

Can you actually prove that a product works?

Soil Release Polymers form a protecting film on the fibers. This can be proven by using special microscopy techniques. For the effect on detergency, we use both visual and photometric assessment of the stains after washing. The physical assessment for sure is more precise. However, in the end we are aiming for an effect that can be seen by the consumer. That's why it's important to combine both evaluation methods. The Soil Release effect tested with dirty motor oil is especially impressive and you don't need to be an expert to see the benefit of TexCare®.

What are the benefits to the consumer?

Soil Release Polymers protect the fabrics from graying and therefore consumers benefit from an increased lifetime of their clothes. Protection from stains, as well as soil-lifting activity, have a positive effect on the washing result. This increased washing power is something the consumers can directly see and enjoy.

cult to remove. Then the dirt floats in the washing water, penetrates the other fabrics and dazzlingly white t-shirts gradually turn gray. And finally, why do fabrics shrink in the washing machine after every first washing? The answer surprisingly is relaxation: New textiles are stretched before selling. When they are washed in hot water, the fibers relax.



Less energy

Due to a more powerful soil-release effect, TexCare® allows the consumer to wash clothes at lower temperatures, resulting in saving both energy and the planet.



Less wear & tear

TexCare® forms a protective layer that allows for lower temperatures and gentler washing. This helps your favorite clothes last longer.



Performance guarantee

TexCare® allows for more sustainable living with no compromise in performance.

How Care Chemicals creates value

By developing environmentally compatible products in response to lifestyle-driven megatrends, Care Chemicals has strengthened Clariant's market position and corporate image. Comprised of Industrial & Consumer Specialties, New Business Development, and the industrial Biotechnology business, Care Chemicals focuses on highly attractive, high-margin, and low-cyclical segments.

Shaping today and tomorrow

Market insights, cutting-edge technologies, and a forward-looking approach to business comprise the core of Care Chemicals. The Business Unit Industrial & Consumer Specialties is one of the largest providers of specialty chemicals and application solutions for consumer care and industrial markets.

New Business Development explores business opportunities beyond the current scope of the Business Units. New areas include for example conductive inks, electronic materials, and additives for the dairy, bakery, and meat industries. Group Biotechnology focuses on biobased processes and products from renewable resources. The sunliquid® process for the sustainable and economic conversion of lignocellulosic material to cellulosic ethanol or biobased chemicals is now fully developed and ready to launch in industrial plants with a production capacity of 50 000 to 150 000 tons of cellulosic ethanol per year. Its benefits are being demonstrated in the pre-commercial plant in Straubing, Germany.

Rising disposable incomes and sustainable buying behaviors as growth driver

Increasing urbanization, scarcer arable land, and the consequent need for increased agricultural productivity, emerging market growth, and rising disposable incomes are key growth drivers for Care Chemicals. The relevant market for the Business Area is growing by 4 to 5 % each year, which also represents the growth target for Care Chemicals. Since the average living standard in emerging market economies equalizes with living standards in developed economies, emerging markets offer rich opportunities for growth in all segments of Care Chemicals. Fast urbanization in emerging markets also creates a demand for more convenient and differentiated solutions that perform better at lower prices. In the home care market in China, for example, a switch from powder detergents to liquid detergents is underway.



sunliquid®
awarded
EcoTain® label



reports.clariant.com/v04
Watch the sunliquid®
movie



APPLICATIONS

Industrial & Consumer Specialties

· Automotive fluids	· Construction	· Heat transfer fluids	· Paints and coatings
· Aviation	· Crop solutions	· Industrial & home care	· Personal care
	· Gas treatment	· Industrial lubricants	· Special solvents

New Business Development

· Conductive inks	· Electronic materials	· Food additives for the dairy, bakery, and meat industries
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Biotechnology

· Bioethanol and alternative fuels	· Biobased chemicals
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The low oil price in 2016 created pressure for oil derivatives such as surfactants, resulting in a window of opportunity for sugar-based, renewable chemicals such as glucamides. The use of renewable resources, sustainable production processes, and biotechnological innovations is rapidly increasing in importance as markets try to capture consumers that are focused on a healthy lifestyle and respect for natural resources. While a shift to bio-based solutions can already be observed in the Personal Care and Home Care markets, Clariant estimates that by 2030 approximately 20 % of chemical sales will be bio-based chemicals.

The 2016 acquisition of Vivimed and strategic investments in Beraca and BioSpectrum enhanced Care Chemicals' ability to provide natural and renewable ingredients for personal care. Furthermore, these portfolio additions enable Care Chemicals to offer customers a one-stop shop experience with access to the unique Asian and Brazilian cosmetics know-how.

Increased consumer focus on personal well-being and adoption of more sustainable consumption behaviors also impact the home care market. Sustainable building materials, including water-borne paints that are free of air pollutants, hazardous substances, and allergens, are increasingly prioritized. Since keeping track of potentially harmful substances is difficult, consumers rely on eco-labels in their buying decisions. With the company's label EcoTain®, which awards products with excellent full life cycle sustainability profiles, Clariant clearly signals its commitment to sustainable offerings. Market traction is underscored by the rapid growth of EcoTain® labelled products over others in the portfolio.



Idea to Market

Focusing on sustainable solutions

To meet ambitious growth and profitability targets, close cooperation with customers, a high level of innovation, and dedicated evidence of sustainability are imperative. The use of renewable materials is a primary focus for Biotechnology research, as demand for environmentally compatible applications grows. Furthermore, since 2016, sustainability is the main focus of all opportunities pursued by New Business Development. At the Sustainability Trend Meeting, which is chaired by New Business Development and takes place two or three times a year, Clariant identifies sustainability challenges that can be developed into new innovation focus fields. In 2016, New Business Development launched the **PRELECT® TPS** Nano Silver Conductive Inks for printed electronics, opening up the sustainability and performance advantages of direct printing of high-conductivity electrical traces to new areas of the Electronics Manufacturing Industry. These nano silver formulations are cost-efficient, high-performance solutions for emerging printed electronics markets such as displays, photovoltaics, and touch screens.

Developing sustainable products from renewable resources without compromising – or even exceeding – performance has been a central innovation goal in 2016. Examples of the focus on high-performing, sustainable products include **Glucopure® SUN**, an extension of the renewable glucamide surfactants line that provides superior cleaning performance in hand dishwashing detergents, and **TexCare® SRN 260**, a multi-functional polymer that allows the formulation of laundry detergents that deliver outstanding cleaning results even under unfavorable washing conditions.



reports.clariant.com/v05

Watch the **PRELECT® TPS** movie



Glucopure® SUN

The sunflower oil based surfactant is the ideal blend for mild hand dishwashing liquid detergents. Its main component has a renewable carbon index of 96%.

VITIPURE®SR

VITIPURE®SR solutions enable customers to formulate healthier products by improving the nutritional profile while maintaining sensory characteristics.

Pressing customer needs are identified via structured customer workshops, particularly in Asia. These workshops help Clariant lay the groundwork for tailored regional and global innovation projects. The Business Unit Industrial & Consumer Specialties is moving global product development capabilities to regions such as Latin America and Asia/Pacific, where hair and skin care industries are setting worldwide trends. With global key customers, Clariant has entered a new phase of collaboration, namely co-location. By creating joint project teams on specific topics and utilizing the laboratory or office facilities of either Clariant or the customer, Clariant can better understand the way customers think, innovate, and operate.



Market to Customer

Effectively creating and capturing value

In the Business Area Care Chemicals, profound knowledge of market trends and customer and consumer needs is successfully combined with high-performance ingredients and formulation expertise to offer the best value. In addition to comprehensive customer needs analyses, leading market researchers are engaged and expert interviews are conducted to make sure a strong value proposition with clear market positioning is delivered. Value propositions are determined both in technical and marketing terms and include quantified benefits that demonstrate the additional value created by Clariant products. In this regard, Care Chemicals is taking a holistic approach, going beyond purely formulation-oriented advantages and including sensory and emotional benefits. With the **VITIPURE®** series, for example, Clariant has developed tailor-made solutions for the food and beverage industry that help succeed with a

»In our approach to solving the unmet performance needs of our customers with sustainable solutions, we overcome the notorious contradiction between ›green‹ and high-performing products.«

RALF ZERRER

Head of Strategic Marketing
Business Unit Industrial & Consumer Specialties

variety of challenges such as sugar reduction, coloring, juiciness, and texture, but also shelf life-extension, protein and fiber enrichment.

In the Personal Care segment in particular, Care Chemicals focuses on providing brandable concepts. For example, customers have greatly appreciated the **BeautyForward**[®] platform, which identifies early consumer trends and matches them with products and formulations they can use and customize. Although home care is a mature market, Care Chemicals has succeeded in 2016 by creating and capturing value through carefully pricing innovations. For example, by using the NanoCon[®] technology, a team in Latin America created a liquid emulsion of Carnuba Wax – used in furniture polishes – that allows the customer to produce in a continuous process instead of the traditional batch-to-batch process. By using the Clariant product – Hostapur[®] CP – customers were able to reduce production time, save energy, and generate more consistent quality. These benefits were captured in the price point.



Customer to Cash

Securing supply chains to compete effectively

A vital aspect of commercial success is ensuring that the product is available where it is needed, in the required quality, at the right time. For that reason, Care Chemicals collaborates closely not only with customers, but also with its suppliers. Trusted relationships ensure more secure supply chains and create added value across the value chains. Regarding sustainability in particular, value chain transparency is a key differentiating factor. Sourcing sustainable palm oil is of particular importance to Care Chemicals since it is the most widely used

renewable material. In 2016, Clariant achieved mass balance certification by the Roundtable for Sustainable Palm Oil (RSPO) for all production plants. A stringent process was implemented to identify single raw material supply situations and assess the associated operational and business risks in order to mitigate any issues. The initiative will become a fully-fledged supplier development process in 2017. The objective is to combine the sourcing and operations know-how to qualify new suppliers more quickly, increase competition, and avoid higher costs.

In order to ensure cost competitiveness, Care Chemicals is working on cost reductions in operations by improving productivity and offsetting inflation. Key measures include the application of asset-light backward integration models for raw materials, life cycle innovation projects for the existing product portfolio, and ›fill the mill‹ task forces. Furthermore, a global inventory task force has been set up to optimize stocks in consideration of cash flow, global asset footprint, and lead times, as well as customer requirements.

Over the course of 2015 and 2016, investments in major growth regions in Asia and North America have been finalized. Besides new capacities in China and Indonesia, two production lines for **Ethoxylates** that almost double the capacity in the United States were started in North America. In all production sites, Care Chemicals emphasizes good manufacturing practices. To support the goal of continual safety and security improvements, tailor-made safety awareness workshops have been developed based on the analysis of the accident and incident reporting.

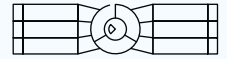


BeautyForward[®]

This new inspirational guide decodes current trends to help drive innovation in the Personal Care segment.

Ethoxylates

Ethoxylated products including Polyethylene Glycols (PEGs) are a cornerstone of the growth strategy in the Americas.



Business model
Care Chemicals transforms capitals for additional value creation.

Targets

4 - 5%

Growth potential per year

18 - 19%

EBITDA target margin

Performance

Input

3%

R&D spend of sales



771

Raw material procured in CHF m



80

Active innovation projects



Output

1465

Sales in CHF m



5%

Growth in local currencies



18.8%

EBITDA margin before exceptional items



People

30326

Training hours



1217

Raw material suppliers



2574

Staff in FTE at year end (2015: 2321)



91%

Customers want to continue doing business



84%

Customers plan to intensify business relationship



Planet

12

Production sites (in scope of current performance reporting)



3317

Number of raw materials procured



745

Energy consumption in m kWh



0.95

Production volume in m t



209

Greenhouse gas emissions in kg/t production



26.8

Waste in thousand t



- Financial capital
- Human capital
- Manufactured capital
- Intellectual capital
- Relationship capital
- Natural capital

»To meet societal needs, energy and emissions footprints will grow unless significant innovation occurs.«

ED RIGHTOR

Chemist, Dow Chemicals
Saginaw, Michigan, USA

The products and solutions of Business Area Catalysis guarantee efficient use of the raw materials and energy needed for the production of industry chemicals, plastics and fuels. Approximately 80 % of the chemical reactions in these supply chains implement catalysts. So, these little helpers are part of an answer to a big question: Where is our future energy going to come from to sustain the technology that increasingly interconnects our lives? This calls for creative problem solving on multiple levels. We don't just need new energy sources, but also brilliant ideas to manage our current resources more economically. Every individual habit and each industrial process is on trial. For even a tiny adjustment can tip the scale toward serious energy efficiency.



WOLF SPAETHER

Head of Market Segment Styrene/MTP
Business Unit Catalysts

Interview

Catalyzing energy efficiency

For a chemical reaction to work as desired, an external energy supply is often necessary. This is especially true for the petrochemical industry. Tires, CD cases, electronics housings, and plastics for toys all require the substance styrene. To produce it, a thermal energy of 800°C steam is necessary. Wolf Spaether, Head of Market Segment Styrene/MTP, BU Catalysts talks about the development of StyroMax® UL3, an innovative styrene catalyst.

Did you know?

What are »ultra-low steam-to-oil ratio« conditions?

The dehydrogenation of ethylbenzene to styrene monomer is an endothermic reaction, which means a large amount of energy is consumed. This energy is added

Which challenges do the industries face that StyroMax® UL3 serves?

WOLF SPAETHER Our customers are producers of styrene monomer (SM), which, in terms of volume, is the fourth-largest plastics building block in the petrochemical industry. Some of the major industry challenges are the volatile selling prices and the pressure on margins. The catalyst is decisive for optimizing production costs. It substantially determines SM yields and the amount of energy needed.

Previous generations of catalysts either showed good activity or good selectivity, but not both at the same time. Why hasn't this been possible so far?

With a higher activity, the customer can produce a larger product volume at the same operating temperature. A higher selectivity means, more of the desired product (styrene monomer) is produced and less of undesired by-products, such as benzene or toluene. Formulation adjustments in favor of higher activity normally entail losses in selectivity. Therefore, our R&D team in Toyama, Japan (with support from our high-throughput laboratory in Palo Alto, CA) tested a large number of formulation variants in parallel mode, and then transferred the most successful formulation to our catalyst plants. The result is our StyroMax® UL3 catalyst, which exhibits a unique combination of high activity and high selectivity in ultra low steam-to-oil (S/O) ratio operation conditions.

What can you say about the collaboration with Grand Pacific Petrochemical Corporation (GPPC)?

GPPC Taiwan is a fully integrated styrene player with two styrene monomer plants. Since the mid-1980s, Clariant has worked closely with GPPC. As a result of this collaboration, GPPC has successfully implemented different generations of our styrene catalysts. The trust between Clariant and GPPC was key to the first commercial implementation of StyroMax® UL3 and it has performed extremely well. After loading the catalyst, the plant reached full output very quickly. The reactor temperature could be decreased and selectivity was raised. As a result, less of the raw material is necessary and the energy consumption is lowered.



Less energy

Using ultra low steam-to-oil (S/O) ratio conditions in the styrene production process means considerably less steam needs to be generated, allowing for significant energy savings.



High performance

StyroMax® UL3 promotes the production of styrene monomer more efficiently than other catalysts due to its high activity and selectivity at ultra low steam-to-oil (S/O) ratio conditions.



Lower costs

StyroMax® UL3 reduces operational costs significantly with higher activity and selectivity and a reduced steam-to-oil (S/O) ratio.

primarily through overheated process steam, i.e., steam with a temperature of about 800°C. The ratio of process steam to ethylbenzene input material is called the steam-to-oil (S/O) ratio. An ultra-low S/O ratio of 1.0 means: Styrene monomer is produced in a very energy-efficient way, and, in turn, less fuel is needed to produce this energy.

How Catalysis creates value

The Business Area Catalysis is a market and technology leader, delivering solutions that add value for customers in the petrochemical, chemicals, plastics, and refining industries. Although Clariant's smallest Business Area in terms of sales, Catalysis is one of the company's most profitable with high growth rates.

Global approach with a local focus

The Business Area Catalysis, consisting of the Business Unit Catalysts, is a leading global catalyst supplier with a long history of innovation and expertise. Creating Performance Technology® is at the heart of the Business Area's mission, together with the core values of Performance, People, Planet. Innovative catalysts and adsorbents deliver significant and sustainable value to customers by enabling higher production throughput, while lowering energy consumption and reducing hazardous emissions from industrial processes and combustion engines. Clariant's catalysts and technologies also enable the use of alternative feedstock, such as natural gas, coal, and biomass, as raw materials for chemical and fuel production.

Catalysis operates globally but with a local focus, providing solutions that are driven by regional trends, requirements, and needs. The Business Area runs a global network of twelve production sites, with approximately 1548 employees serving customers across all regional markets.

To ensure above industry growth, the strategy of Catalysts focuses on leading in innovation, close partnership with process technology licensors, executive customized strategy and continuous efficiency improvement. In addition, Catalysis are in the forefront of new market and technology trends such as sustainability and digitalization.

Catalysis encountered challenging market conditions due to slow down in the Chinese economy, low commodity prices, postponement of new petrochemical and chemical projects due to low oil price and more. This has adversely affected both the replacement business and first fill sales, which led to a lower sales volume for the entire industry.



AmoMax® 10 saves energy and money in ammonia synthesis, used in fertilizer production for example.

Read more:
Chapter »A Strong Engine for Value Creation«
page 34



APPLICATIONS

· Ammonia	· Hydrogenation	· Refinery hydrogen
· Custom Catalysts	· Methanol	· Refinery stream purification
· Ethylene and derivatives	· Off-gas treatment for chemical plants and stationary engines	· Sour gas shift
· Fischer-Tropsch	· Oxidation	· Steam cracker/Olefin purification
· Fuel cell	· Polypropylene and on-purpose propylene	· Styrene and BTX, MTP
· Fuel upgrading		· Synthetic natural gas
· Gasoline desulfurization		· Zeolite powders
· Gas processing		

Global challenges as drivers for sustainable growth

Key global trends such as population growth, increased purchasing power, and rising wealth in emerging countries are driving demand for resources such as energy, nutrition, and land. At the same time, environmental issues such as climate change, loss of biodiversity, water supply challenges, and waste production are becoming more evident. Mastering those global challenges requires the support and advances of the chemical industry, particularly the catalyst business. By improving chemical process efficiency, enabling the use of alternative feedstocks, and developing environmentally compatible catalytic solutions, the Business Area Catalysis directly addresses the global challenges of raw material scarcity, energy efficiency, and environmental degradation. While growth in the catalyst industry primarily reflects GDP growth, but at a slightly higher level, environmental regulations and the need for resource conservation also drive growth even further, particularly with regard to environmental catalysts. The Business Area's solutions help customers reduce energy consumption and greenhouse gas emissions even when increasing chemical production.

Worldwide, the demand from customers, partners, and governments for sustainable products and solutions is increasing. Key drivers are mandated emission reductions, increasing waste volume and disposal costs, and adjusted waste classifications. **AmoMax® 10** catalyst is a great example of innovation and sustainability as it significantly reduces energy consumption in the production of nitrogen-based fertilizers. Fertilizer is needed to make arable land more productive, but its manufacturing requires high energy inputs and generates substantial CO₂ emissions. AmoMax® 10 is a highly active catalyst that, to date, has helped customers avoid the release of 500 000 tons of CO₂ and save approximately 1 000 gigawatt hours of energy annually – the energy need of an 80 000-household city.

A market leader in N₂O abatement technologies

The recently launched EnviCat® N₂O-S not only reduces N₂O emissions but also increases nitric acid yields.



Carbon2Chem

Clariant provides methanol catalysts and application know-how to this cross-industry project, sponsored by the German Federal Ministry of Education and Research.

Read more: Sustainability Report page 31



Idea to Market

Strong commitment to R&D

The Business Area Catalysis is a leading global developer and producer of catalysts and adsorbents for industrial processes. For Catalysis, leading in innovation requires a three-fold approach: focus – define, review, and prioritize key applications; speed – accelerate time-to-market; and expertise – nominate expert teams, implement a process technology organization, and protect intellectual property. With Catalysis’ strong commitment to innovation comes a significant investment in R&D. Globally, more than 300 R&D experts work in eleven R&D and Technical Centers. To further strengthen its leading position in innovation, the Business Area is committed to developing cutting-edge solutions that maximize customer value creation. Catalysis systematically observes, evaluates, and implements breakthrough technological innovations that open up new markets and applications. Additionally, the Business Area continuously improves the performance of existing products and processes in order to defend the leading market positions. With more than 100 ongoing projects for about 40 applications, the Business Area ensures that both money and time are used efficiently and in the most attractive fields.

In order to ensure that R&D activities provide the best service to customers and meet market demands, every innovation starts with asking what customers really need. The Business Area collaborates with approximately 20 academic institutions globally that are undertaking advanced research in catalysis. In 2016, customization activities in China were scaled up in order to deliver tailored products and solutions to Chinese customers.

Furthermore, in order to maintain the leading market position, accelerating time-to-market is a key success factor. In-house, pilot-scale facilities enable the verification of results at concept stage prior to full scale-up in a plant. The Business Area runs a lab in Palo Alto, California, that focuses entirely on high-throughput research and is fully integrated into Clariant’s Idea to Market process. The lab provides a headstart for Clariant’s catalyst R&D, reducing the discovery phase significantly, and is considered a time-to-market booster as it can save around three to four years of research time.



Market to Customer

Engineering services delivered by leading experts

The Business Area Catalysis attaches great importance to service orientation. In order to ensure safe, reliable and cost-effective plant operations, highly experienced technical service engineers assist customers and end-users in a variety of process catalyst operations. Engineering services provide a range from routine catalysts performance evaluation and monitoring to troubleshooting with – if requested – on site service and software provisioning as well as training and knowledge exchange.

»I'm confident that with our innovative portfolio and the talents we have around the world, we have a positive impact on our global environment and we can significantly contribute to Clariant's future success.«

STEFAN HEUSER

Head of Business Unit Catalysts



Louisville

The addition of a polypropylene catalyst facility further strengthens Louisville as Business Unit's Catalyst most important North American site.

To remain a market and technology leader, the Business Area also partners with leading technology licensors. Strong and successful partnerships with engineering companies, for example, enable the Business Area to further develop existing technical and catalytic solutions and to extend participation in new large-scale projects. Such partnerships contribute significantly to the development of products and solutions tailored to the needs of specific markets or key customers. On this front, Catalysis will be extending its cooperation with Chinese engineering companies, design institutes, and universities to capitalize on the opportunities offered in the Greater China region.

Clariant Catalysts believes in a global set-up with local focus: while functions like R&D and Engineering Services are global in their structure, the Business Unit also has a strong regional presence to cater to client needs, as these may be different from country to country. Overall, Clariant Catalysts has twelve production sites and eleven R&D and Technical Centers around the world. The Business Unit boasts an extensive network of offices in all regional markets.

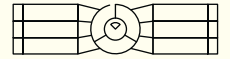


Customer to Cash

State-of-the-art production sites and procurement

In 2016, the Business Area Catalysis inaugurated a new polypropylene catalyst plant in **Louisville**, KY, USA. This project is part of Clariant's long-term strategic partnership with CB&I's Novolen Technology business. The addition of the polypropylene catalyst plant further strengthens Louisville as the most important site for Clariant's Business Unit Catalysts in North America. The innovative catalysts produced in Louisville will help to ensure that raw materials and energy are used efficiently in polypropylene production worldwide.

In 2016, Clariant also launched the Procurement Excellence Program (CPX) for the Business Unit Catalysts, analyzing the supply markets for metals and catalyst carriers. In this program, methods to strengthen the Business Unit's commercial position for buying raw materials and for reducing operational expenses were developed. Group Procurement Services and the BU Catalysts jointly developed an implementation plan that covers a 24-month period. By the end of 2016, the first commercial improvement levers had been achieved.



Business model
Catalysis transforms capitals for additional value creation.

Targets

6-7%


Growth potential per year

24-26%

EBITDA target margin

Performance

Input

>6.5% 

R&D spend of sales

218 

Raw materials procured in CHF m


90 

Active innovation projects


Output

673 

Sales in CHF m

-8% 

Growth in local currencies

23.8% 

EBITDA margin before exceptional items


People

29520 


Training hours

433 

Raw material suppliers

1548 

Staff in FTE at year end (2015: 1748)


90% 

Customers want to continue doing business


78% 

Customers plan to intensify business relationship

Planet

12 

Production sites (50:50 or minority joint ventures not included)

1070 

Number of raw materials procured

389 

Energy consumption in m kWh

0.04 







Production volume in m t

2819 

Greenhouse gas emissions in kg/t production

7.8 

Waste in thousand t

-  Financial capital
-  Human capital
-  Manufactured capital
-  Intellectual capital
-  Relationship capital
-  Natural capital

»How can we best restore and protect our planet without inhibiting modernization?«

FATMA YILDIZ
Art Historian
Istanbul, Turkey



reports.clariant.com/v06
Watch the INVOQUE™
movie



The products and solutions of Business Area Natural Resources aim at the efficient and careful use of Earth's raw materials, which is especially crucial when close to a dense population. The Discover Value story takes place in Istanbul where contrasting worlds meet each other: the European and Asian as well as the Ancient and Modern. But hanging over this melting pot of ages and cultures is a challenge: How can modernization harmonize with Istanbul to help it flourish for another 1000 years? Presently 150 ships pass through the Bosphorus each day. In the future, not only will this number increase, but so will the ship sizes. Construction projects on the harbor and waterways are unavoidable. So the development of new technologies is needed to protect Istanbul's people, heritage, and environment.



HANS HARTAN
Hydrochemistry consultant

Interview

Experimentation with mud

Industrial activity causes silt materials to collect in staggering volumes in our rivers, waterways and harbors. At a rate reaching into the hundreds of millions of tons globally, this sediment requires effective dewatering. Complex treatment is needed in order to accomplish complete recycling of the sediment both economically and with minimal damage to the environment. Hydrochemistry expert Hans Hartan introduces INVOQUE™, a more environmentally compatible dewatering alternative.

Did you know?

How much sediment requires dewatering?

Increasing human activity has dramatically raised both the rate of sedimentation and the total volume of sediments globally. Coastal and riverine dredging, mining

How did you get the idea for purifying mud?

HANS HARTAN My area of expertise lies in hydro-chemistry. I was determined to find a method of purifying and preparing sewage sludge and sapropel created in treatment plants, without having contaminated water afterwards. The primary focus of my work has always been developing environmentally compatible processes. So one day, I went to my hobby lab and got to work.

You really discovered it at home?

Yes. I've been retired for a few years now. But in my hobby lab, I have all the equipment I need. For example, I could conduct several experiments, aimed at measuring dewatering speed or regulating water clarity. Having my lab at home was also a way for me to relax.

How did you end up making the breakthrough?

Omya, an international manufacturer of industrial materials, developed a dispersant mineral for the paper industry with large surface area, but one that they had no use for. When I learned of that, I immediately thought it would be useful for dewatering sludge. So, I manufactured synthetic wastewater and then added the mineral. It worked! After just a few minutes, I had crystal clear water and I knew that I had discovered something big. I presented the technique in several places. In the end it was Clariant that recognized the potential and then in cooperation with Omya developed INVOQUE™.

The efficacy of INVOQUE™ is not just a matter of the right chemistry, correct? What else is decisive?

A good dewatering system hinges on numerous parameters. Depending on the type of sediment and its organic components, mixing speed, accurate dosing and desired filtration speed are essential. Therefore, it wasn't just chemists that worked on the development of INVOQUE™. Rather, it included process engineers, engineers and physicists.

and tunneling are typical areas of application. As silt materials are often contaminated by heavy metals and other substances, dewatering and reusing sediments is necessary and a challenging and costly process. Dealing with these sediments responsibly is not only a commitment to stakeholders, but a promise to minimize the impact on the environment.



Reduced regulatory pressure

Thanks to the improved environmental profile of INVOQUE™, we are able to reduce potential regulatory obstacles regarding the reuse of water and sediments.



Environmental protection

INVOQUE™ performance dewatering eliminates potentially harmful chemicals with no additional burden on the environment.

How Natural Resources creates value

Natural Resources is comprised of businesses that are based on the use of minerals and support efficient extraction of minerals, oil, and gas.

Typically characterized by high growth, low cyclicity, and a strong orientation toward promising industry trends, overall economic trends and developments in oil, gas, and mineral ore prices are key drivers for this business area.

A business based on minerals, oil, and gas

With Functional Minerals and Oil & Mining Services, Natural Resources brings two complementary Business Units under one roof. Functional minerals supplies customers with specialty products based on bentonite. This minerals family is comprised of clays that enhance a wide range of products and services. Its unique trait has a high surface area with strong absorption capacity allowing it to bond well with heavy metals and toxic substances. The strategic strength of Functional Minerals, which serves a broad range of industries, comes from a fully integrated value chain, from exploration to bentonite mine operation to processing the material for industrial and customized solutions.

Oil & Mining Services provides innovative chemistry, technology, and service solutions that meet customer needs safely and in compliance with environmental regulations. Oil Services is a world leader in the development, manufacturing, application, and supply of specialty chemicals and services across the whole value chain of oil production. Refinery Services is a leading provider of cold-flow additive applications for middle distillates including diesel, home heating oil, and biofuels. Mining Services is a leading provider of chemicals for flotation, pelletizing, anti-caking/anti-dusting, and filter aids, as well as emulsifiers for explosives used in mining worldwide.

Growth opportunities despite uneven economic development

As Functional Minerals serves customers in a broad range of industries from food to foundry, the overall economic development is its most relevant external driver. While the economic situation in Europe is stable albeit showing little growth, other regions demonstrate more change. Southeast Asia and both Americas are experiencing dynamic growth in contrast to North East Asia's moderate projections.

Purification products

Due to the high demand for bleaching earths we support that issue by capacity expansion.

This year we will open our new plant in Surabaya in Indonesia and offer more bleaching earth quantities in Turkey based on a new, dedicated milling unit.



Anti-scaling applications

The anti-scaling product platform based on environmentally compatible polyaspartates has been awarded the EcoTain® label.



APPLICATIONS

Functional Minerals

- Additives for animal feed
- Additives for paper and detergent
- Edible oil refining
- Metal casting
- Sediment management
- Special civil engineering and tunneling
- Stabilizers for the plastics industry

Oil & Mining Services

- Additive applications for refinery companies
- Process chemicals for the mining industry
- Specialty chemicals and services, including intelligent chemical management for the oil and gas industry

In Europe, the partial recovery of the automotive industry, the growing demand for purification products, and the need for innovative solutions in the detergent segment have generated new opportunities for Functional Minerals. In Southeast Asia, continued growth in palm oil production is predicted to trigger higher demand for **purification products**. Especially sediment processing and feed additives are expected to enhance Clariant's steady global growth. The areas of metal casting and edible oil refining are also seeing additional growth in emerging markets.

Low but recovering oil and ore prices, and upsides from regulation

For Oil & Mining, fluctuations in oil and mineral ore prices are critically important. Due to sustained low oil prices, the number of drilling rigs around the globe has decreased, particularly in North America. Fewer drill rigs means decreased demand for drilling-related technologies and chemicals. The drop in oil price has also impacted business with refinery customers, and low global mineral pricing presents challenges for our mining solutions business line. There are signals that there may be recovery ahead, however, markets will remain challenging through 2017 with the current forecast that the majority of improvement will be seen in the latter half of the year. Cost control and improved efficiency initiatives coupled with innovation will continue to be key drivers in 2017.

Regulatory developments are also presenting business opportunities. The environmental regulations for chemical additives demand strict environmental control. Oil Services has developed a range of chemical technologies that fulfill these regulatory requirements. For **anti-scaling applications** in the North Sea region, a special environmental product platform has been developed based on polyaspartates, a raw material that is derived from renewables, which produces enzymatically and biodegrades efficiently. These products have been awarded the EcoTain® label, as they display outstanding sustainability advantages and are best-in-class.

High-performance bleaching earths

Acidic activation of bentonite creates an enlarged surface area that binds with undesired substances and impurities in oil.



Laundroclin™

detergent additives are free-flowing, non-sticky granules of non-ionic surfactants that help formulators avoid risks of gel formation, reactions with other ingredients, or investment in processing capacity.



Idea to Market

Information leads to innovation

By engaging in direct, daily business interactions as well as custom-designed surveys tailored to specific market segments, Clariant can focus innovation on meeting the most pressing customer demands. These efforts include developments in digitization and automation, designed to improve customer service through efficiency improvement and cost reduction (page 28).

Functional Minerals also conducted major innovation activities in 2016, including the continued market introduction of INVOQUE™ products and solutions for sediment management and the ECOSIL® LE (low emission) technology to reduce foundry emissions from traditional carbon-based lustrous carbon generators in the green sand system. Other areas of R&D focus include **high-performance bleaching earths** to treat oils with high levels of chlorophyll and carotene for sustainable food production and to purify waste oil for green diesel production.



Market to Customer

Innovation leads to customer satisfaction

Across the Business Area Natural Resources, Clariant engages in regular dialogs with customers to determine their current and future needs, and translates this knowledge into specific customer projects. For example, in Functional Minerals, customer satisfaction surveys confirmed the appreciation of customers and also indi-

cated areas for improvement such as response times. In Oil & Mining Services, the global key account management team was developed and complemented by regional sales and business development teams. This includes the continued investment in processes to improve customer engagement, which has resulted in the successful development of Master Service Agreements with leading oil and gas operating and service companies.

Clariant is committed to enhancing customer benefits while also capitalizing on value-based pricing. In Functional Minerals, for example, simplifying powder detergent formulations with the use of **Laundroclin™**, a liquid detergent ingredient reformulated as a solid, streamlines the production processes of detergent manufacturers by eliminating at least one processing step. The ECOSIL® LE system for high-efficiency and eco-compatible mold binders not only significantly reduces emissions of aromatic hydrocarbons but in many cases also improves the bottom line for the customer. In Oil & Mining Services, the Clariant Commercial Excellence (CCE) approach to defining market segments with greatest opportunities for profitable growth and increased market share, led to the acquisition of Kel-Tech and X-Chem – two US-based suppliers of specialty chemicals products for land and offshore oilfield operators – to better serve customers in the North American oil and gas market.

»Creativity is a matter of culture and practice – being open to solutions that are not obvious, daring to think differently. Trying again and again to come up with other, better ideas – and once you have the ideas, bringing them to fruition with a stringently implemented, structured approach.«

SVEN SCHULTHEIS
Head of Business Unit
Functional Minerals



Customer to Cash

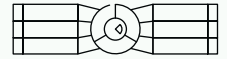
Customer satisfaction leads to cash



CPX for Base Chemicals
Procurement Excellence (CPX) for Base Chemicals in the BU Oil & Mining Services improves procurement effectiveness and category spend, and creates added value with suppliers through joint actions on innovation, growth, and sustainability.

An effective supply chain and a high-quality process for customer interactions are »must haves« in today's markets. In 2016, value chain improvements at Functional Minerals included the optimization of railcar fleet movements from Mexico to the US and Canada to avoid expensive emergency shipments by road truck, the change of the process lead system that automatically controls the production of activated earth at Moosburg, Germany, and the shift of customer service from local teams to Global Business Services (GBS). In future, the Integrated Planning Landscape project in Europe should lead to lower inventory levels without compromising fulfilment of customer needs on-time, in-full.

Similarly, Oil & Mining used Clariant Supply Chain Excellence to support the business and customers alike to reduce costs and increase efficiencies resulting in substantial benefits in 2016. For example, forecasting customer demand and addressing potential capacity constraints has improved due to applying two important processes, end-to-end Sales & Operational Planning and Demand & Inventory Planning. This, in turn, has improved the on-time delivery to customers to achieving over 95% performance.



Business model
Natural Resources transforms capitals for additional value creation.

Targets

6-7%

Growth potential per year

15-17%

EBITDA target margin

Performance

Input

> 2%

R&D spend of sales



347

Raw materials procured in CHF m



80

Active innovation projects



Output

1184

Sales in CHF m



2%

Growth in local currencies



16.9%

EBITDA margin before exceptional items



People

30284

Training hours



1145

Raw material suppliers



3235

Staff in FTE at year end (2015: 2931)



90%

Customers want to continue doing business



81%

Customers plan to intensify business relationship



Planet

31

Production sites (in scope of current performance reporting)



875

Number of raw materials procured



853

Energy consumption in m kWh



2.77

Production volume in m t



102

Greenhouse gas emissions in kg/t production



68

Waste in thousand t



- Financial capital
- Human capital
- Manufactured capital
- Intellectual capital
- Relationship capital
- Natural capital

»Every detail matters if you want a safe environment.«

NICOLAUS ROGGE
Carpenter
Schönhorst, Germany



reports.clariant.com/v07
Watch the Sustainable Additives movie



Along with their innovations for industrial applications, the Business Area Plastics & Coatings brings their solutions also into the home. Therefore, health and safety are of utmost importance. The Discover Value story describes how many crucial details are necessary for the inhabitants of a home to feel safe with respect to house construction. Humans have a natural desire to create safe shelter for themselves and their loved ones. The feeling of safety and comfort is what transforms a house into a home. However, as the world's population grows, this deep human need is intensifying the demand for innovative and sustainable materials that harmonize with the increasing demands for safety. After all, the house protects its inhabitants, but what protects the house?



WOLFGANG DIEGRITZ
Head of Marketing & Business Development
Nilit Plastics Europe

Interview

Tiny helper makes the difference in saving lives

Flame retardants are found throughout the house wherever fire could cause significant damage – from fuse boxes in the cellar to upholstery in the living room to insulation in the attic. Wolfgang Diegritz, Head of Marketing & Business Development at Nilit Plastics, explains how flame retardants work and whether non-halogenated products adequately do their job.

Did you know?

How did humanity get from cave to smart home?

The house has seen many shapes and forms in its evolution – each adding to its functionality, comfort, and aesthetics. The first insulated homes were pit houses, constructed using mammoth bones and animal hides. 3 000 years ago, humans started to use wood as material.

What are the most common causes of fire?

WOLFGANG DIEGRITZ In newspapers and other media, we surprisingly often read reports about fire accidents and combustion processes. From my perspective the main reasons for the break-out of fires are technical defects in electrical and electronic devices (e.g., short circuits) or industrial devices (e.g., malfunction of machinery) as well as human failure and inadvertence (e.g., burning candles).

How do flame retardants reduce the impact of fires on people, property and the environment?

In an early stage of the ignition process, flame retardants can substantially contribute to extinguishing a smoldering fire (e.g., overheated electric device). At a later stage of fire – or when the fire is spreading too strongly or quickly – the flame retardants cannot stop the flashover of a fire anymore. However, they can limit the impact and damage (e.g., flame retardant curtains not catching fire rapidly). And, providing a very important benefit, they can save human lives by increasing the time available for people to escape the fire (e.g., flame retardant-equipped plastics in public transportation).

What are the advantages of halogen-free flame retardants over halogenated alternatives?

Conventional halogenated flame retardants do their job. It's clear. But the »Achilles heel« of these chemicals are their toxicity and their side effects: On the one hand, some of these additives are listed as Substances of Very High Concern according to the EU regulatory framework. On the other hand, a fire can release many toxic substances from halogenated flame retardants, like brominated dioxins and furans. Halogen-free flame retardants have been developed to lower the smoke toxicity and to prevent the migration of the additives. Furthermore, there is no compromise in flame retardancy and little impact on technical parameters of the final application. In the meantime, rethinking leads to a significant variety of halogen-free flame retardants, most often tailor-made for individual polymers and applications.



No health hazard

Clariant is the pioneer in non-halogenated technologies. With this exclusive know-how, flame retardants have a significantly lower smoke toxicity.



Fire safety

Long-term, reliable products pass demanding fire safety standards and minimize secondary fire damages, all with multiple uses, from thick to thin-walled applications.



Environmental protection

The product portfolio consists of highly efficient, non-halogenated flame retardants with preferable environmental profiles.

How Plastics & Coatings creates value

Plastics & Coatings is comprised of sector-leading businesses that serve markets ranging from packaging, consumer goods, medical, and textile to transportation and agriculture. It serves both multinational and local customers. With such a broad scope, the overall growth potential of Plastics & Coatings is strongly linked to global gross domestic product growth.

Differentiated management to unlock value creation

Although Plastics & Coatings is Clariant's largest business area, it operates primarily in saturated markets and thus requires a differentiated management approach from other parts of the Group to meet the needs of customers and shareholders. In order to take full advantage of the business area's value creation potential, absolute profit and cash generation, rather than margin, need to be in focus here. By legally separating Plastics & Coatings into separate subsidiaries on 1 January 2016, while still maintaining the existing structures of its Business Units Additives, Masterbatches, and Pigments, Clariant has supported this **differentiated steering**. Corresponding benefits of recapturing and expanding business were already felt during this first year.

Additives offers solutions with functional effects for example for plastics, coatings and printing inks, adhesives, and textiles and fibers. Its products include a large variety of waxes and polymer additives that improve heat, light, and weather resistance, among other benefits. This Business Unit also offers innovative products, such as non-halogenated flame retardants providing environmental benefits, also for electrical and electronic equipment. Masterbatches, which includes the Healthcare Packaging business line, offers color and additive concentrates and small lot color compounding for engineering and high temperature resins, whilst the business line healthcare packaging offers moisture and oxygen protection solutions for the pharma industry. Pigments supplies organic pigments, pigment preparations, and dyes that meet the high standards for colors in industrial, decorative and automotive coatings. It also provides solutions for the plastics industry and special applications such as personal care, aluminum, fertilizer and seed treatment, stationery, etc. Solutions for traditional printing as well as inkjet and toner applications complete the strong portfolio of Pigments.



Differentiated steering

Since 2016, Plastics & Coatings is successfully steered towards higher absolute profitability and cash generation.



APPLICATIONS

Additives

· Flexible packaging films reducing waste and increasing recyclability	· Light and heat stabilization, flow properties improvements	· Light and thermal control of agricultural films for improved crop yield	· Waxes, flame retardants and polymer additives with functional effects in plastics, coatings and printing inks, adhesives, textiles and fibers and other applications
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Masterbatches

· Color and additive concentrate solutions for plastics processing	· Concentrates for functional packaging, medical devices & pharma packaging	· Protection against moisture and oxygen in drug packaging	· Small lot color plastic compounds for the use in automotive, electrical and electronics markets
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Pigments

· Applications for conventional printing inks, inkjet inks, and electro-photographic toners	· Coloration of plastic applications	· Decorative, industrial, and automotive coatings	· Special applications
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Increasing customer demands and challenges create opportunities

At its press conference at the K 2016 trade show for the plastics and rubber industry, Clariant focused on the global trends influencing the plastics industry, demonstrating how the company is bringing true value to its customers based on their real needs. For example, nutrition bottlenecks caused by population growth and urbanization are leading to growth in packaging needs in the agricultural sector, while lifestyle and mobility trends are driving the demand for miniaturized and lightweight solutions in transport technologies and environmental and energy applications. At the same time, in a global environment of increased emissions regulations and an intensified focus by customers on sustainability, such solutions must be developed in an ecologically compatible manner. These dual mandates present not just challenges, but rich opportunities for business growth.

In 2016, the business environment remained challenging, with limited, albeit stable economic growth. Each Business Unit assesses economic opportunities through the lens of its specific market environment. Additives sees growth options in Asia, especially China, and the United States. Masterbatches expects only marginal growth in Europe and North America, but more significant growth in Asia, particularly China and India where it continued to invest in new assets and leverages emerging opportunities. Pigments sees Chinese and Indian market players responding to an environment of increasing commoditization and become even more aggressive on pricing to keep and extend market position. It also witnessed oil countries in the Middle East refocusing their economic drivers to invest in industry and construction, and anticipates market opportunities in 2017 as a result.



Hostavin® NOW

The light stabilizer and flame retardant is an easy-to-handle granular product with improved processing and fiber-spinning properties without fiber discoloration.



Idea to Market

Systematic and deliberate approach to innovation

Clariant uses market deep-dives, customer innovation workshops, joint development agreements, and collaboration with its clients' customers to constantly fill the global innovation pipeline. One result of these efforts was Additives' commercialization of **Hostavin® NOW** – a light stabilizer and non-halogenated flame retardant for polyolefin fibers and films, which was awarded the EcoTain® label for its sustainability benefits. With optimum shielding properties, chemical resistance as well as retardancy effect, Hostavin® NOW brings agro films to a higher level of performance.

In addition to its regional innovation activities, Clariant made excellent progress on major innovation projects at the Project House facility, the first R&D facility of its kind for the Masterbatches industry. These projects all use Clariant Innovation Excellence methods to help manage and accelerate ideas to market, and are run by dedicated and trained Innovation Black Belts.

Initiatives in 2016 also included the implementation of a new Innovation Strategy by Pigments. This initiative highlighted cost leadership, game changers, and growth projects, focusing particularly on Preparations as well as on customer needs in the Indian and Chinese markets. Innovation projects included the Sanolin® Lave Liquid colorant range for brilliant color shades for liquid fabric and home care cleaning products. These non-staining colorants can easily be rinsed off textiles or skin or surfaces and are suitable even for children's paints.



Exolit® OP 1400

When plastic containing Exolit® OP burns, it releases gases that cause the plastic to foam and rapidly form a protective layer of noncombustible foamed char.



Market to Customer

Strong customer focus and benefits of differentiated steering

Plastics & Coatings fosters tight customer interaction, joint project work, and collaboration as essential aspects of creating value. To enhance customer-centricity, Additives strengthened its sales and marketing network, particularly in Asia and the United States. Masterbatches focused its efforts on growth in all regions, particularly focusing on strategic market segments and product lines, while Pigments' initiatives succeeded in significant market expansion in India, Greater China, and intensifying the production footprint in Mexico.

Differentiated steering is a powerful tool for net business expansion and has enabled Masterbatches to recapture previously lost business. With this lever as part of the strategy, Masterbatches has returned to a solid growth trajectory and is also able to increase the utilization rate of its assets, again contributing to improved performance. In a similar manner, by focusing on absolute earnings rather than just relative margin, and by matching pricing more closely to customer requirements, Pigments has regained position in a very competitive environment and is going after business that was previously difficult to secure. In addition, Pigments was a source of growth through dedicated projects with specific customers and an enhanced focus on product groups of strength, such as Pigment Preparations.

Other examples of increased customer focus include Additives' marketing excellence project on **Exolit® OP**, our patented halogen-free flame retardant for engineering plastics, which involved more than 50 customer interviews around the globe. These interviews allowed

»A specially formulated masterbatch for backing films used in photovoltaic panels makes clean, solar energy more affordable.«

MARCO CENISIO

Head of Business Unit
Masterbatches



Plastiward®

Incorporated into plastic products, a covert taggant additive is detectable with a platform available through Clariant's partnership with SICPA, a secured information provider.

Clariant to better understand unmet customer needs and to improve customers' understanding of Clariant's value proposition. Masterbatches collaborated with industry-leading machine manufacturer Brückner to co-develop Cesa®-Solar, a novel Masterbatch product providing a hydrolytically stable PET film for solar panels back sheets application, overcoming problems in conventional backing film technology and supporting the viability of clean energy for the needs of our planet's growing population. Masterbatches also formed a partnership with the industry leading security ink solution provider SICPA to provide **Plastiward®**, an in-plastic anti-counterfeit solution for the pharmaceutical packaging and medical devices markets. Pigments has been working with global and regional agricultural companies to support the growing demand for attractive and regulation-compliant seed colorations. Such colorations are mandated in many countries for safety reasons and support the seed industry in branding and marketing. Clariant's dedicated range of **Agrocer™** products, launched in the United States in 2016, meets international seed testing standard requirements and broadens the choice of colors for the customer.

Agrocer™

With Agrocer™, Clariant offers a dedicated range of pigment powders and pigment preparations for seed coloration. Every product meets strict U.S. EPA regulations covering inert ingredients.



Customer to Cash

Streamlining the value chain and eliminating bottlenecks

A key element of optimizing reliability throughout the value chain and ultimately benefiting the clients is the Integrated Planning Landscape (IPL). IPL is a multi-dimensional project that streamlines and harmonizes the planning processes to handle planning complexity and enhance capabilities in a new governance model for

supply chain management. Introduced in 2016 in the Business Units Additives and Pigments, IPL supports Clariant's goals to improve supply reliability to the client.

Since raw materials sourcing accounts for a large portion of formulation cost, Masterbatches worked with the Clariant Procurement Excellence (CPX) initiative to harmonize and optimize sourcing. Additives also worked with CPX to optimize procurement by reducing overseas logistics costs, designing a leaner process, and participating in the Together for Sustainability (Tfs) program for prudent supplier audits.

To ensure a reliable supply of scarce products for demanding markets, Additives has invested in overcoming capacity bottlenecks in key plants, and expects to make further investments in Asia in 2017. Safety enhancements also led to a record zero lost time accident rate (LTAR) in Additives' plants. As China is today the largest market for plastics, Masterbatches have invested in building capacity and capability not only for concentrates but also in small lot color compounding for engineering and high-temperature resins to address the growing market needs. In addition, further strategic investments in capacity were made in North America and the Middle East. Pigments expanded its preparations plant in Santa Clara, Mexico, to increase efficiency and on-time, in-full delivery to the client.



Business model
Plastics & Coatings transforms capitals for additional value creation.

Targets


≈ **global GDP**

steered for absolute EBITDA and cash flow generation

Growth potential per year

Performance

Input

~1.5% 

R&D spend of sales

875 

Raw materials procured in CHF m

70 

Active innovation projects

Output

2 525 

Sales in CHF m

4% 

Growth in local currencies

14.6% 

EBITDA margin before exceptional items

People

52153 


Training hours

3 410 

Raw material suppliers

6 737 

Staff in FTE at year end (2015: 6 878)

92% 

Customers want to continue doing business

81% 

Customers plan to intensify business relationship

Planet

21 

Production sites (in scope of current performance reporting)

9 729 

Number of raw materials procured

879 

Energy consumption in m kWh

0.33 







Production volume in m t

764 

Greenhouse gas emissions in kg/t production

42 

Waste in thousand t

-  Financial capital
-  Human capital
-  Manufactured capital
-  Intellectual capital
-  Relationship capital
-  Natural capital

Regional Perspectives
A SPOTLIGHT ON EUROPE



Key Figures Europe

2 004

Sales in CHF m

34 %

of Group sales

2 %

Sales growth in LC¹

38

Production sites

7 645

Employees

¹ LC = local currencies

To highlight Clariant's global activities, the report features one business region each year. This year, the focus is on Europe. Oliver Kinkel, Head of Region Europe, discusses the role Europe plays for Clariant today and in the future. The photo essay One Clariant shows how one of Clariant's European employees is driving change and creating value.

Interview

»Clariant is well positioned in Europe«

While growth expectations for the region are moderate, Europe is Clariant's backbone with 34 % of global sales, 44 % of the global workforce, and a decisive contribution to Clariant's global research and development.

Mr. Kinkel, how do you see the European business environment today and tomorrow? What does that mean for Clariant?

OLIVER KINKEL Clariant in Europe achieved record sales of CHF 2 billion with a local currency growth of 2 % in 2016. With this growth we were able to outperform the market. On the back of an overall solid global economic environment we are carefully optimistic also for 2017. However, there is no tailwind pushing toward strong growth of the region's chemical industry. Furthermore, in 2017 we will have elections in several European countries which might impact the macroeconomic

environment. That said, effects from the UK decision to leave the European Union can hardly be assessed at this point. Nevertheless, Clariant is well positioned in Europe to successfully serve the industries and markets in Europe. Additionally, we continue to grow our export business. With 38 sites, Europe is the region with the highest number of production sites. 44 % of all employees are based here. Equally important, we host the Center for R&D and Innovation. More than 80 % of Clariant's R&D investments are spent in Europe.

Is this similar across sectors and product groups, or are there significant differences?

When we ask our Country Heads and Business Unit leaders for major trends influencing the chemical industry in Europe, there is one single headline in common: sustainability! European consumers and legislators are really pushing hard toward higher ecological standards to improve the overall environmental situation as well as to safeguard their family's health in daily life. To be specific, people value the quality of their personal environment. Home care products ensuring that health and personal care products deliver convenience



»On the back of continued productivity improvements and innovation with a clear focus on the development of sustainable products and solutions, we will further grow our business in the region. Our employees in Europe are very well prepared and our most important asset to achieve our ambitious goals.«

OLIVER KINKEL
Head of Region Europe

Europe has some of the strictest environmental and social regulations in the world. How does that impact Clariant?

European legislators see themselves as forerunners in environmental protection and sustainability, which is a challenge for our industry as it creates an unfavorable cost position compared to other regions. The same is true for social regulations. But both areas also have a positive flipside. Standards set here force us to develop technologies that are globally state of the art. This provides us with a competitive edge when these standards are adopted in other regions. For our Business Unit Catalysts, Europe might no longer be the biggest market, but it still is the region where we develop technologies for demanding customers and partners, meeting standards that put us in the lead in emerging markets.

Social legislation and strong social partnerships create costs and complicated sequences. However, they have created social stability and predictability for decades. Investing in chemical production requires a long-term, stable framework. Europe's stable social and political system therefore is a strong magnet for our industry.

This leads me to the only drop of bitterness concerning our legislation. Short-term politics, for example in the field of energy legislation, have created a situation where, for example in Germany, we cannot project this important cost factor more than two to three years into the future.

and a new sensory experience are more sought after than ever before. With products such as GlucoTain® and others, we are benefitting from this change in mind-set. The same is true for our industrial solutions in the field of purification for the automotive industry or our new sustainable dewatering technology INVOQUE™ for sediment management. The most prominent example is our sunliquid® technology, producing cellulosic ethanol from agricultural residues. A pilot plant in Straubing, Bavaria, is proving its benefits such as a 95 % reduction of CO₂ emissions compared to gasoline, an energy self-sufficient process, and most importantly, is putting an end to the food versus fuel debate.

Wherever we can showcase that Clariant's products are part of the solution and are contributing to a sustainable future, economic success will follow.



One **CLARIANT**

Lorenzo's earth. The riches of the European soil mean a lot to Lorenzo Sechi. A Frenchman by passport and a Sardinian by ancestry, he enjoys a good wine if the time is right. And in his business life, he devotes himself to an alkaline clay used in foundries and other industries. It means traveling and talking his way through the old continent, to create value for the company – and being in his favorite spot: all over.

Concept and photography by Jo Röttger
Text by Bertram Job

Lorenzo Sechi no longer arrives by ferry when life leads him back to Sardinia. He lands by plane in Alghero in the northwest region of the island. From there, it is a short taxi ride to the hotel by the sea where his next appointment is scheduled. At sunset, he and several colleagues will welcome a small delegation from an important potential new customer on the terrace, followed by dinner together. The dinner will include an assortment of seafood, cold-pressed oils and wines, and the underlying hope on the part of the participants that a fruitful collaboration will take form.

The Sardinian soil yields much more than magnificent vines and gorgeous olives. Deposited here and there in its deeper layers, there is also high-quality bentonite – a clay mixture of different minerals and volcanic ash. Its absorbing properties can be used in a variety of applications, including pharmaceuticals, food purification, foundry industry and even in iron ore pelletization, which makes up part of the operations of the guests' company.

This big player, which is on the lookout for new suppliers, could signify a potential business case for Sechi and his company. The mineral known as calcium bentonite is mined almost exclusively in Clariant Ltd's mines on the island. The island could also be considered a very important part of Lorenzo's world, because Lorenzo, a man with gray-blond hair, born in 1967, comes full circle here personally.

It was much more difficult in the past when his father Vincenzo schlepped the entire family over from Lorraine to the port of Toulon by bus and train with all their suitcases and bags, and then onto the ship to Porto Torres, and then from there down the coast to Bosa. However, his three children didn't think much of it. They looked forward to the summer vacations in the place where the Sechi family originated. They got to enjoy the beach in Bosa Marina, the company of aunts and nieces, and Uncle Pietro's winery in the mountains.

»My father and I rode up on donkeys,« Sechi recalls, »and slept in a barn on fresh hay. It was really fantastic.«

Since then, life has taken on a much quicker pace. The lively boy who used to throw himself into each wave in the ocean around Sardinia now plays a key role for his company today. Sechi heads the Foundry Additives business group, whose products contribute significantly to the increasing sales of the BU Functional Minerals. He also brings his expertise and youthful charm to all matters related to value creation in clays. This is even the case now, during the two days of talks and visits.

Sechi – who is half Sardinian, carries a French passport, has a mother with German ancestry, and a Portuguese partner – is the quintessential European, and he is constantly zipping across the continent for his job.

On one particular morning, Sechi's travels bring him to Beauce, the wheat-producing region southwest of Paris. Here, a medium-sized foundry is tucked away among fields and villages. This is a customer visit without the need for rigid etiquette, as most of the participants have known each other for several years. Sechi recounts that he even found the managing director a job once. At the reception desk, Sechi is recognized immediately. For the rest of the time there, everyone will know and refer to him as Lorenzo.

The few matters that needed to be discussed could probably have been resolved over the phone. However, Sechi is convinced that in this industry, when in doubt, it is better to be there in person. And ultimately, he may also need to be there for his own reassurance. The tour passes through dim halls, which are illuminated by the glistening light of the liquid steel. The visitors exchange glances with the employees, who peer out through protective masks. Industry 1.0 with the most up-to-date technology and safety features.

»These people do not have time to spend hours discussing,« Sechi shared before the visit. »They get straight to the point, and they want to see the sparkle in your eyes when you're standing here. If you don't have that, forget it!«

Sechi already had that sparkle at 16 when his high school class in Lorraine took a field trip to a foundry. After that, it was clear where his path would lead – to the foundry trade school in Nancy. He followed in his father's footsteps, but took a courageous step further. Instead of becoming a shift worker, he became a technician and then a manager. He recounts that in doing so, he learned more than he ever expected, and that he even achieved far more than many thought he could.

Sechi has maintained a sense of respect and appreciation for the hard work involved. And he has obviously maintained the sparkle. You can see it in his face as plans and materials start to take concrete form, such as when brake discs for trucks and buses are manufactured with the help of »his« bentonite additives. These accomplishments are made possible by men who know how to get things done and appreciate the cigarette breaks during the process.

As Sechi explains quite amusedly, casting and smoking just seem to go hand in hand here. So Sechi happily smokes here too, more than usual, and enjoys the time away from the complexities of the world. The relationships that have been established here have since become as solid as the iron itself.

»These people would never take one gram of bentonite from anyone else. Not as long as we maintain this quality and deliver reliably.«

On another business trip, Sechi is whisked away for an entire day and a half to Moosburg, a town located in the province of Upper Bavaria. The zeitgeist that is reflected in the older parts of Clariant's local production and research facilities – like in the old villa of August Osterrieder, the »father of bleaching earth,« who founded the Moosburg clay factory in 1906 – is unmistakable. Today, the former villa has a meeting room that Sechi rarely uses because he is able to directly reach the handful of employees in his business group who are employed here.

Production, processing, testing, and optimization activities have continued for more than 100 years at this historic location, situated 20 kilometers from a bentonite mine. To ensure that operations continue smoothly, Sechi touches base in Moosburg every other week on average. He has become a regular customer in

»They get straight to the point, and they want to see the sparkle in your eyes when you're standing here. If you don't have that, forget it!«

the hotel at the train station and in the Italian restaurant in the center of town. Sechi points out excitedly that a Sardinian is a cook there, as if he were one of his fellow countrymen.

Coordination is key. Bentonite is produced at a dozen locations in Europe alone. But service, research and innovation play an equally important role. With the two most important additives in the product group, foundry emissions of toxic compounds such as benzene have already been reduced by over 50 %. This low-emission line continues to be expanded with additional products. This supports more sustainable production – and with it, future market success.

As the top manager, Sechi is constantly zipping back and forth between yesterday and tomorrow, and between engineers and sales managers. His speech is calm and his manner is not at all pompous. He is a leader who sees himself as a member of the team. He explains, »You have to show people respect if you want them to respect you. That's why I try to explain things instead of simply demanding things, which only adds pressure...«

A lot needs to happen before this approach is changed to a less gentle one. Only then does the stereotypically stubborn Sardinian personality show. This was the case when Sechi worked as a site manager in Bangkok, where at one time he replaced the entire workforce. This created a much-needed turnaround in operations. »But there was a weekend where, besides the secretary, I was alone at the company,« he recounts.

Lorenzo Sechi likes to be agreeable, but not at the cost of the successful outcome of his mission. »I always try to stay zen,« he says. »But it doesn't always work.«

A stopover during Sechi's travels brings him to Choisy-le-Roi, one of the amorphous suburbs south of Paris. On the second floor of the company's French headquarters, Sechi has an office without any family or vacation photos. The message being conveyed is: »This is strictly business!« From here, Sechi is able to plan and synchronize his activities and those of the business group. But Sechi hardly feels at home here. He is only on-site two or three days per month on average.

»If I had to be in the same office every day, I would die. I hate doing the same thing for more than two days in a row.«

Thus, Sechi has a home base that really isn't one, and a team that is set up mostly virtually. There is an office for Bruno, the sales manager whom Sechi stole away from a foundry, and one for Michel, who takes care of product management. Fabienne also works here. No one in the company, or even on this planet, knows Sechi's strengths and weaknesses as well as his trilingual assistant. She has scheduled his appointments for over 25 years. As Sechi likes to joke, she is not allowed to retire before him.

Nine sales managers are also part of his team. They hail from different corners of the EMEA region, including Sweden, Spain, Portugal and Turkey, in addition to Middle East. Thus, Sechi has an extensive network of employees from all over that Sechi trusts based on his positive experience from working with them. »My success is my team's success,« he says. »It's that simple.«

In the evening, there is still time to have dinner with his daughter Manon. She has just found her first job in the fashion industry in Paris and has so much to talk about. Over the next few days, he will call his son Vincent, who is studying in Reims. It is a difficult trip to Paris city center, which is nearly paralyzed with congestion due to an inordinate number of cars and heavily armed policemen. Nevertheless, the father and his daughter have their set meeting point on the Champs-Élysées, where they are able to enjoy their precious time together. After that, he's off again to the periphery of the city near Orly Airport, where Fabienne has booked him a room in a hotel that is reminiscent of a barracks for the international guard of frequent fliers.

Sechi explains that on such a wonderful evening, you can't be concerned with what just happened in the middle of Paris and what could still happen. »We have to live. Otherwise, we have already lost.«

Next, Sechi is off to northern Portugal for the inauguration of an international center for foundry technology. Here, he will act as a representative and deliver a speech in an old palacio. He then continues onward to Munich for the five-day Clariant Excellence Academy seminar,

which is regularly organized with the intention of providing managers within the company with new inspiration and continued training in methodologies. This is followed by a trip to Tyrol for the annual BU meeting, where the atmosphere among the participants is quite relaxed owing to the record-breaking annual results. And thus the travels continue.

The incessant back-and-forth has long become a true constant in this postmodern life, and the pace is quite rapid. This is reflected in Sechi's approximately 200 flights taken each year, and his more than 50 000 kilometers traveled on the road. But he is far from complaining. »If I had to be in the same office every day, I would die. I hate doing the same thing for more than two days in a row.«

One might have the impression that these words were uttered by someone who touts their strengths and then disappears in the critical moment when they're needed the most. But Sechi has earned the right to say that he has always delivered. This holds true to his favorite motto: »There are no problems. Only solutions.«

Sechi was 31 when he went with his young family to Bangkok to set up a new site for the company. In the beginning, there were only two employees, whom he hardly understood, and he had no office of his own. Eight years later, the site has become a profitable part of the company, and Sechi has become half Thai, which some customers and colleagues like to say in good fun. When he left, the staff was clearly going to miss him. »Even the sales managers cried,« he recounts.

Soon after that, there was another site to look after in the People's Republic of China, a few kilometers from the border with Mongolia. It was tedious but also rewarding to bring it up to European standards. Back in France, similar assignments followed, which Sechi tackled from Reims.

Wherever the committed Sechi appears – be it in Poland, Sweden, Mexico, Brazil, Milan or Sardinia – there will eventually be more solutions than problems. In Sardinia, Sechi has been a managing director for about two and a half years. The staff listens to him – and not just because of his Sardinian roots.

Something about his way of dealing with people might also play a role. »At the very least, I get people to follow me,« he says. »I don't know why. Perhaps it's because I'm quite natural. It's easy to see if I'm happy.«

As a child, Lorenzo Sechi learned to overcome linguistic and cultural differences so that he could step into the game and play alongside everyone else. The children of immigrants from different parts of the world – from Portugal to the Maghreb – would play together in the street in Custines, which is 15 minutes from Nancy by car. »It was a wonderful mix of people,« he says. Once the neighborhood's fathers sped off on their mopeds to the nearby foundries, the road was an open field for the kids to share adventures together. This street is still a place of refuge. Germaine Sechi still lives in the same house, and is cared for primarily by her daughter Sabrina. But her eldest, Lorenzo, now prefers to stay indoors. Outside, everything is deserted. There is nothing to see. As his mother remembers, Lorenzo was always on the move – and talked incessantly. A framed photo in the living room shows him as a cheerful boy with wiry hair. Another shows Lorenzo's father, who has passed, and who looks a lot like Lorenzo.

Vincenzo Sechi was a star in his son's eyes when he told him about the foundry. This world has disappeared from Lorraine, but Lorenzo has been able to preserve a few of the values of this world. After over 27 years in the same company, he continues to exhibit loyalty, respect and reliability.

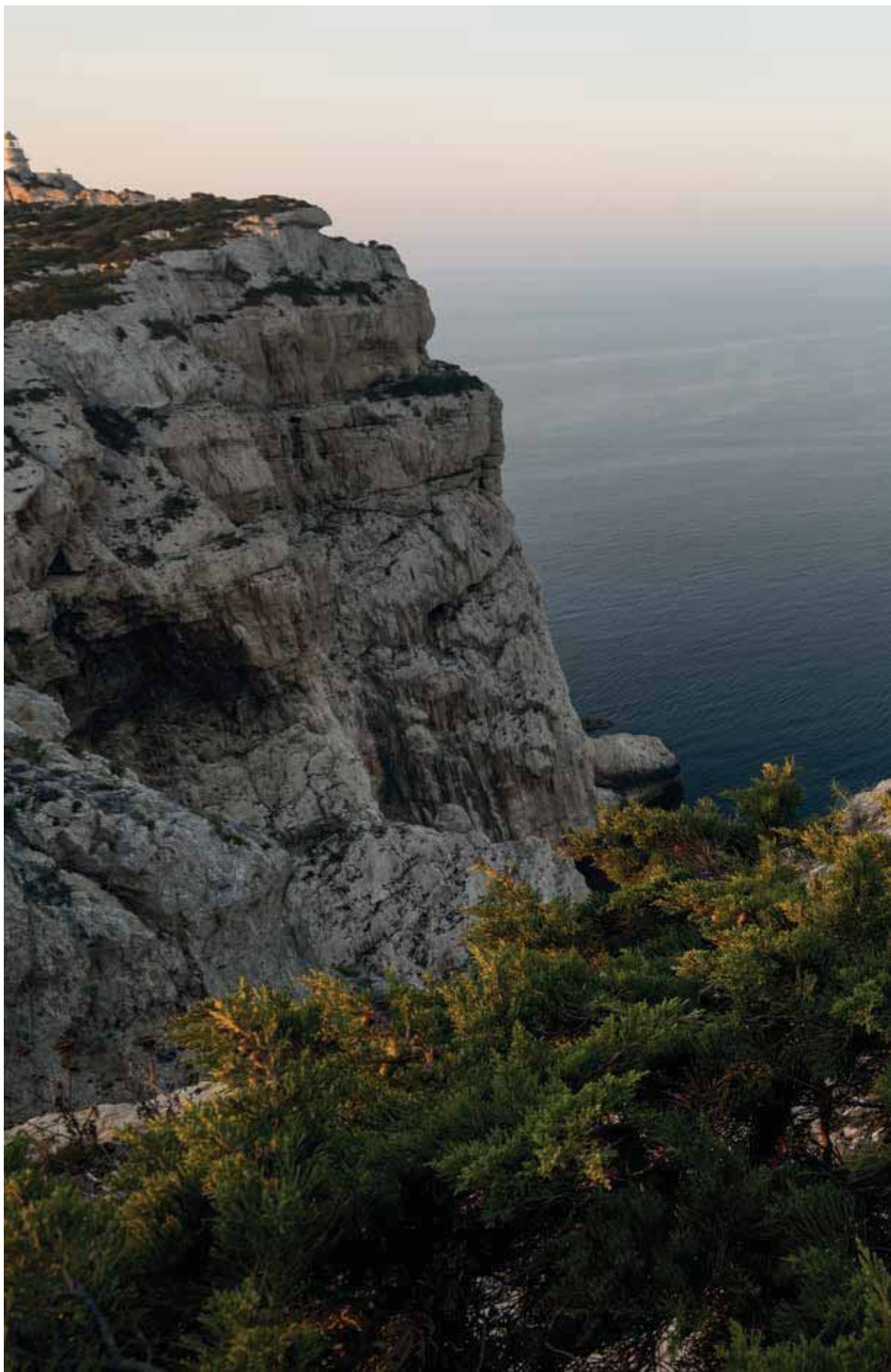
Communication has since become much faster. In almost any situation, one can react instantaneously. This benefit has come along with a certain cost for Sechi. Everyone produces mountains of e-mails instead of making decisions independently. Everyone is trying to be more and more like each other instead of venturing down their own paths. »People spend hours in front of their laptops and think that is the best way to make themselves understood. But people interact best when they meet in person, when feelings are able to be conveyed through body language in addition to words.«

»I feel at home when I'm with people who enjoy their time with me. Relationships are more important than places you can travel to.«

But how can one be at home when he is constantly »in transit« between two meetings or two locations? Together with Marie, his new partner, Sechi recently moved into a house in Bourgoin-Jallieu, a charming town between Lyon and Chambéry. There, they have been able to put down some roots without causing him any worry. »I feel at home when I'm with people who enjoy their time with me. Relationships are more important than places that you can travel to.«

There are no tangible results even on the third day Sechi spends in Sardinia with the delegation from the potential customer. But there are some initial signs. The guests have seen the mine above Alghero and the production process in Oristano. They are impressed by the meticulousness and sustainability of the operations. Now it comes down to the next steps. In the best case, it could be a sustainable deal. Sechi knows this, and yet he remains calm. It quickly looks promising though. For Sechi, the tour also served as a reunion with several employees he got to know during his time as managing director, including Franco, whom he considers a brother, and who took over his old position. If the deal comes to fruition, Sechi would be especially happy for the men and women who welcomed him on the island with open arms. »I'm doing this first and foremost for them and their families. Their jobs would be secured for years to come. There are not very many jobs here...«

The next morning, Sechi returns to Alghero Airport for the trip back to France. He will be at home with Marie for a half hour and will then visit two customers after that. But one day, he wants to take the ferry back to Sardinia again. »It's best to go to Genoa,« he thinks aloud, »to depart at night.« A whole night in the belly of the ship, floating along through the Mediterranean Sea: This is the dream of a man for whom things never go fast enough.



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ITALY
Sardinia, Capo Caccia





ITALY
Sardinia, S'Aliderru



ITALY
Sardinia, Bosa



ITALY
Sardinia, Bosa Marina





GERMANY
Munich, Clariant Academy



FRANCE
Paris, Quartier Latin



FRANCE
Paris, Metro





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GERMANY
Munich, Clariant Academy









FRANCE
Lorraine, Custines

FRANCE
Lorraine, Nancy









FRANCE

Hauts-de-France, Méru, EJ Picardie



FRANCE

Auvergne-Rhône-Alpes, Portes-lés-Valence



—
FRANCE
Gasville-Oisème, Samrev Foundry







FRANCE

Gasville-Oisème, Samrev Foundry



GERMANY
Bavaria, Clariant, Moosburg facility



GERMANY
Munich, Oktoberfest



GERMANY
Bavaria, Clariant, Moosburg facility



PORTUGAL
Porto, Maia, Sakthi Foundry





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PORTUGAL
Aveiro, Águeda, CITNM



About ONE CLARIANT

»Photography captures that something special in every moment. Something authentic that cannot be planned in advance.«

—
Jo Röttger

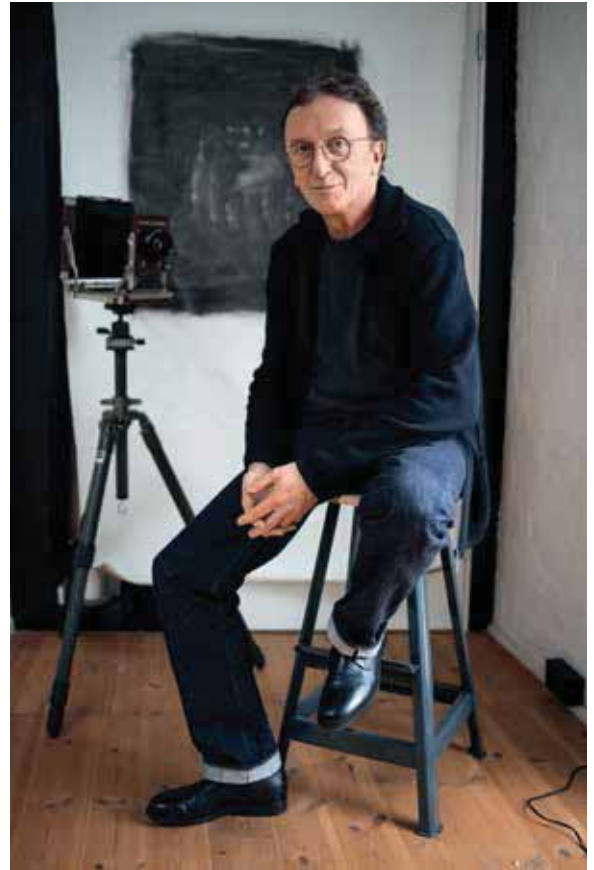
Photo reportage

Five people in five countries, infinite perspectives

For Jo Röttger, there is one basic rule: »You must not betray the trust of the people you are photographing.« In 2012, he developed the photo reportage »One Clariant« according to this premise.

Jo Röttger, born in 1954, studied photography in Dortmund; his photo series have been published in various international magazines. In addition, he is currently working for various clients in the Corporate Communications field and conceptualized his own freelance photo projects for many years. A private project led on to a cooperation with Clariant. In spring 2012, Röttger presented the work »Cross the Stream«, which focused on life near and on the Elbe in Hamburg. Among the visitors was Hariolf Kottmann, who was immediately struck by Röttger's images. The CEO and the photographer agreed to a joint collaboration for Clariant.

It quickly became clear what topic Röttger should address: What really connects the employees of Clariant? A simple question, but also a major challenge considering its colorful history. What holds a young company together, which is based on so many different traditions? To address this, Jo Röttger traveled to five different regions and met employees that reflect the cultural diversity and global orientation of Clariant. Planned as a series from the very beginning, One Clariant intends to tell real stories from real people in their real environment. After five years, it comes full circle – with the story »Lorenzo's Earth.«



Röttger is always looking for primitive moments. As such, the initial picture in all One Clariant series is always people in their original landscape. In the landscape of childhood and familiarity. The gaze of the protagonists in these images is directed out of the picture to the left, back into their own history. Where do the people come from? How have they become who they are? And what is important to them for the future? The answers of those portrayed are certainly different, but a common image can be shown in retrospect: Not only do they all have an intimate connection to their families and a deep identification with their home, but also the desire that their own children and future generations in general can lead fulfilling lives. That they discover a planet and a society who also want to preserve this for their children. The landscape represents their own childhood.

Qinglin Zheng, Marcia Rios, Mini Nair, James Begeal and Lorenzo Sechi go to work every day for this vision. Each person knows that a leadership position in

a global company also means global responsibility. All of them live globalization by aspiring to impart a similar awareness of sustainable value creation both in their field and in their colleagues. Do to so, they use their positions in the company and their international contacts. And all five meet the basic requirements for their visions: An openness to new ideas and the appreciation of the status quo.

One Clariant as a whole now comes home for Röttger – to Europe – as an award-winning success story. He sets off from the Elbe and it is here where he always returns, to his studio in Hamburg Ottensen. It is here where the photos were laid out on the wooden floor, discussed and made into a story. Into five stories – and to One Clariant. Since the introduction of the new brand in 2012, the photo series is an integral part of the Annual Report. Since then, the public perception of the annual reports has also continuously improved. After three years finishing with top rankings, the 2015 report has been named the best Swiss annual report for the second time after 2013.

This is certainly also thanks to the catchy photo spreads by Röttger, who can capture special moments in each story. Moments that you can't plan or prepare, that just happened. For example, Qinglin Zheng with his large family sitting at the dinner table and his brother spontaneously raises a toast to the mother. Or in São Paulo, as Marcia Rios shows a church from colonial times whose facade is covered with fungus, for which her department develops fungicides. As Mini Nair raves into the evening light of Bombay with her children on a ship or as James Begeal says grace with his family. Finally, Lorenzo Sechi, who proudly declares that he comes from a working class family while standing in the home he was raised in. All of them allowed Jo Röttger to photograph these intimate moments. Deep, multi-layered insights into life in and around Clariant.



—
LORENZO SECHI
2016



—
JAMES BEGEAL
2015



—
MINI NAIR
2014



—
MARCIA REGINA DA SILVA RIOS
2013



—
QINGLIN ZHENG
2012



In the past business year, Clariant was able to significantly increase its EBITDA margin before exceptional items as well as its cash flow, thus achieving the best result in years. Chief Financial Officer Patrick Jany explains how this was made possible, how the »new Clariant« is positioned, and why the company remains an interesting investment.

Summary on business performance in 2016

Clariant delivered Group sales from continuing operations of CHF 5 847 million in 2016. This is a 2 % growth in local currency (1 % in Swiss francs). The growth was driven by volume increases which offset the negative currency impact. All regions grew in 2016. The strongest demand came from Asia, mainly driven by China and India. Solid growth was seen in Europe, while Latin America though still growing reported a slow-down in growth against the previous year. North America showed solid growth, primarily due to acquisitions.

For the seventh year in succession, Clariant improved the EBITDA margin before exceptional items which rose to 15.2 % from 14.7 % in the previous year. The EBITDA before exceptional items was CHF 887 million, which is an increase of 4 % in Swiss francs against the previous year.

Operating cash flow again improved significantly by 29 % to CHF 646 million as a result of higher profit, lower cash out for exceptional items and lower income taxes paid.

Interview

Significant progress in profitability

Clariant significantly increased margin and cash flow despite challenging economic conditions. Chief Financial Officer, Patrick Jany, discusses the results achieved in 2016 and future priorities, including Clariant's relationship with financial market participants in Asia and globally.

Mr. Jany, as the CFO, are you satisfied with Clariant's performance in 2016?

PATRICK JANY Absolutely! In 2016, we increased our EBITDA margin by 50 basis points to 15.2% and more importantly we increased our operating cash flow by 29% to CHF 646 million. This was the highest operating margin since 2000 and the highest operating cash flow since 2009, which shows the progress made in the last years. We have repositioned our portfolio, optimized processes, reduced costs and are now focusing on sustainably growing the business through innovations.

Nevertheless, Clariant is still operating in a difficult economic environment. What challenges does the company have to face in this environment?

In general terms we continue to see a rather weak growth in our markets with the rebound in Asia being offset by the slowdown in Latin America. Two of our main growth markets, Oil Services and Catalysts, in particular, are still in a transition phase, which has slowed our growth down in 2016. While this situation is expected to continue for the major part of 2017, the mid-term

prospects are positive and we are actively investing to participate in the upturn of those industries. While those fluctuations are part of normal business and will not impede our growth over the cycle, the main risk is currently rather the political uncertainty.

In the past year, Clariant used various financial instruments, such as bonds and a syndicated loan. Why was this necessary?

In 2016, we completed the refinancing of the company and now have a well balanced long-term maturity profile at attractive conditions. This allows us to repay our largest euro-denominated bond of over EUR 500 million and to benefit from lower interest charges going forward.

How does the stock market perceive Clariant's performance? Did Clariant's shares decline slightly in 2016 compared to the previous year?

The Swiss stock market declined overall in 2016 following a strong performance in 2015, and Clariant was no exception. While the perception of Clariant has greatly improved over the years, the weak economic prospects weighed on the share price, as our performance is sometimes perceived to be more cyclical than it actually is. It is therefore important to continue to demonstrate that the quality of our portfolio and our operational excellence allow us to progress in terms of margins and cash generation quarter after quarter, even in a rather difficult economic environment.

»Our portfolio quality and operational excellence allow us to progress in terms of margins and cash generation, even in a rather difficult economic environment.«

PATRICK JANY
Chief Financial Officer

How will you convince the financial markets that Clariant is still a good investment?

We are on track to achieve our goal of an EBITDA margin of 16 – 19 % and to grow sales by 4 – 5 % annually in local currencies. Our Care Chemicals business is very well positioned. The decision to focus Plastics & Coatings on cash generation was the right one, and it has produced very good results. For 2017, we see even more potential in those areas while Catalysis and Oil & Mining Services will be important growth engines mid-term.

These growth and cash generation capabilities are certainly attractive and reflect our focus on long-term, sustainable value creation. As we take the social and environmental aspects of sustainability seriously and place them at the center of efforts, we also offer a unique investment platform combining a strong sustainability approach with a focused specialty portfolio, operational excellence and innovation. This year's integrated reporting is certainly an expression of this multi-dimensional approach.

Clariant is increasingly investing in China.

Are Chinese investors also investing in Clariant?

Asian investors have gained in importance over the years and are active investors around the world. We have implemented a structured approach to Asia, with roadshows in Shanghai, Hong Kong and Beijing for the first time in 2016, in order to establish closer ties. Our current presence and strong focus on Asia, and China



in particular, is certainly increasing our appeal to Asian investors. In general, it is important for us to broaden our investor basis in emerging markets, including for instance Latin America, as this better reflects our actual geographical presence, with close to 50 % of our revenues coming from emerging markets.

What are Clariant's objectives in 2017?

The overall outlook remains unchanged for 2017. We strive for top-line growth and intend to further increase our absolute EBITDA, the EBITDA margin, and our operating cash flow.

Profit and financial situation

KEY FIGURES FOR CONTINUING OPERATIONS in CHF m

	2016	2015	Change in %
Sales	5 847	5 807	1
Gross profit on sales	1 770	1 785	-1
EBITDA ¹	887	853	4
Margin ¹ (%)	15.2	14.7	-
EBIT ¹	622	596	4
Margin ¹ (%)	10.6	10.3	-
EBIT	512	496	3
Income before taxes	338	300	13
Net income	263	227	16
Basic earnings per share	0.78	0.67	16
Adjusted earnings per share	1.12	1.01	11

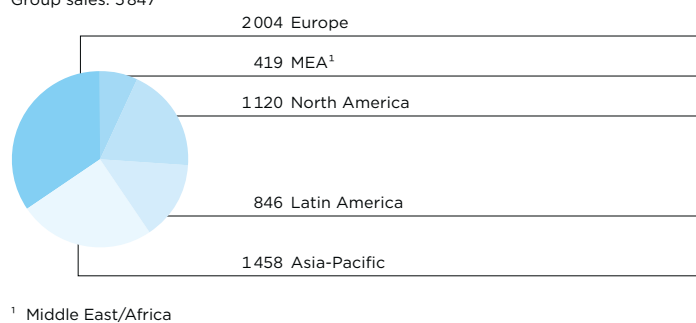
¹ before exceptional items

Continued sales growth in local currency supported by increased volumes

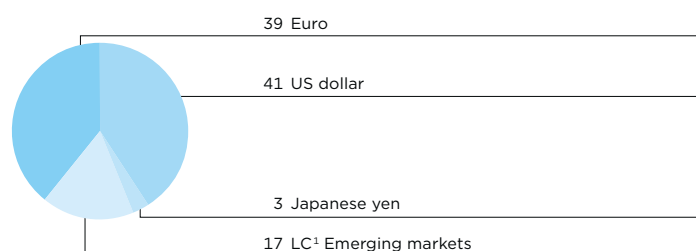
Group sales increased by 2% in local currency to CHF 5 847 (2015: CHF 5 807 million) in comparison to the previous year, led by consistent quarterly volume growth in 2016. The group encountered a negative exchange rate effect of 1% which therefore resulted in a growth rate of 1% in Swiss francs. The strongest sales growth performance was realized in the first quarter, mainly driven by volume increases and new product launches.

SALES BY REGION - CONTINUING OPERATIONS in CHF m

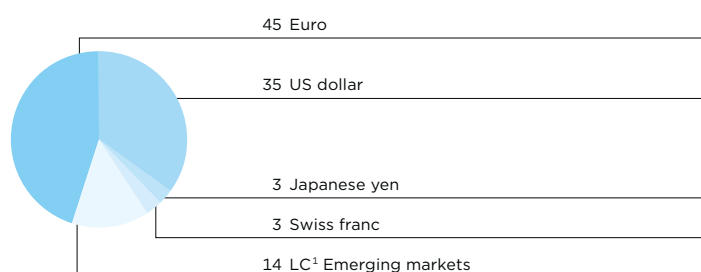
Group sales: 5 847



SALES STRUCTURE BY CURRENCIES 2016 in %



¹ LC = Local currency

COST STRUCTURE BY CURRENCIES 2016 in %

¹ LC = Local currency

SALES BY BUSINESS AREA in CHF m

	2016	2015	Change in %	Change in LC ¹ in %
Care Chemicals	1465	1445	1	5
Catalysis	673	704	-4	-8
Natural Resources	1184	1217	-3	2
Plastics & Coatings	2525	2441	3	4
Total	5847	5807	1	2

¹ LC = Local currency

Sales progression driven by the diversity of the business portfolio

The 2016 sales development across the portfolio was impacted by the different economic markets and businesses environments. Despite the volatile markets, group sales progressed for the full year, both in local currencies as well as in Swiss francs. Sales in Care Chemicals increased by 5% in local currency (1% in CHF) due to continued strong growth in the area of Consumer Care, mainly driv-

en by Personal Care. Sales in Catalysis decreased by 8% in local currency (-4% in CHF) impacted by a softer demand in North America and Asia. Natural Resources sales increased in local currency by 2% (-3% in CHF). Functional Minerals delivered good sales growth in 2016, while the Oil & Mining Services business reported a negative sales performance during the full year which, however, was less pronounced than the industry trend. The acquisitions in Oil & Mining Services in North America which were consolidated in the last quarter of the year had a positive impact on sales of the Business Area of 4%. Plastics and Coatings sales rose by 4% in local currency (3% in CHF) benefiting from the differentiated steering which was implemented at the beginning of 2016.

Further margin expansion in 2016

The gross margin declined from 30.7% in 2015 to 30.2% in 2016 due to a realignment of reporting. Excluding this effect, the margin was comparable to last year.

Clariant's EBITDA before exceptional items advanced by 4% in Swiss francs (5% in local currency) to CHF 887 million (2015: CHF 853 million). The EBITDA margin before exceptional items continued to expand by 50 basis points from 14.7% in the previous year to 15.2% for the full year of 2016.

The expansion of the EBITDA before exceptional items was primarily attributable to the Business Area Plastics & Coatings (+17% in local currency; +18% in CHF) and Care Chemicals (+2% in local currency; +1% in CHF). Despite the challenging industry environment, Natural Resources grew by 2% in local currency (-3% in CHF) while Catalysis was below the previous year (-12% in local currency; -10% in CHF).

»We increased profitability and significantly improved operating cash flow.«

HARIOLF KOTTMANN
Chief Executive Officer

EBITDA¹ BY BUSINESS AREA in CHF m

	2016	2015	Change in %	Change in LC ² in %
Care Chemicals	276	272	1	2
Catalysis ³	160	177	-10	-12
Natural Resources	200	206	-3	2
Plastics & Coatings	368	313	18	17
Total⁴	887	853	4	5

¹ before exceptional items

² LC = Local currency

³ »Catalysis & Energy« was renamed »Catalysis« after the Energy Storage business was sold. The transaction closed on 28 February 2015.

⁴ includes corporate costs of CHF 117 m in 2016 and CHF 115 m in 2015

The continued progress in EBITDA margin expansion before exceptional items was mainly the result of the Business Area Plastics & Coatings which reflects the better product mix, the higher capacity utilization and the effect of the differentiated business steering implemented at the beginning of 2016. Care Chemicals and Natural Resources both delivered stable EBITDA margins before exceptional items in 2016 versus the previous year. In Catalysis, the EBITDA margin before exceptional items declined compared to the previous year due to lower demand in Asia and North America.

Over the past years, Clariant has implemented a number of actions to continue to advance the group's performance in terms of profitability and cash flow generation.

EBITDA¹ MARGIN BY BUSINESS AREA in %

	2016	2015
Care Chemicals	18.8	18.8
Catalysis ²	23.8	25.1
Natural Resources	16.9	16.9
Plastics & Coatings	14.6	12.8
Total	15.2	14.7

¹ before exceptional items

² »Catalysis & Energy« was renamed »Catalysis« after the Energy Storage business was sold. The transaction closed on 28 February 2015.

The streamlining of business processes and structures generated expenses of CHF 107 million in 2016 (2015: CHF 115 million). The impairment loss recognized in 2016 of CHF 8 million was lower than in 2015 (CHF 14 million).

The operating income (EBIT) increased in 2016 to CHF 512 million (2015: CHF 496 million) as a result of an improved operating business performance and additional cost efficiencies.

The negative financial result decreased from CHF 196 million to CHF 174 million in 2016 mainly due to more favorable currency results. After taxes the net income increased by 16 % to CHF 263 million compared to CHF 227 million in 2015 as a result of the continued expansion in absolute EBITDA, lower finance costs, and an improvement in the tax rate.

Based on the solid business development delivered by Clariant in 2016, Clariant's Board of Directors has decided to make the proposal to the general assembly for an increased distribution of CHF 0.45 per share for 2016. The corresponding proposal will be presented at the 22nd Annual General Meeting on 20 March 2017.

Continued solid balance sheet

As of 31 December 2016, the balance sheets totals have been increased from CHF 7 461 million in the previous year to CHF 8 365 million, mainly due to the acquisition of the North American oilfield production chemicals business from Kel-Tech and X-Chem and an increase in cash and near cash assets. The Group's liquidity position increased from CHF 941 million to CHF 1 320 million, in order to repay the EUR 500 million bond in January 2017.

The investments in associates and joint ventures decreased in the year-to-year comparison from CHF 586 million to CHF 516 million due to equity repayment and dividends received from Stahl.

In the reporting period, Clariant's equity increased from CHF 2 494 million to CHF 2 546 million, predominantly due to the net profit for the period amounting to CHF 263 million. Other reasons for the increase are profits on treasury shares transactions of CHF 24 million and transactions with non-controlling interests in the amount of CHF 29 million.

Net debt increased from CHF 1 312 million to CHF 1 540 million as a consequence of acquisitions. This figure includes current and non-current financial debt, cash and cash equivalents, near-cash assets, and financial instruments with positive fair values. As a consequence, the gearing ratio (net financial debt to equity) increased from 53 % to 60 %.

Long-term structured maturity profile secures solid liquidity structure

In the fiscal year 2016, Clariant's financing structure was again on a very sound level. The company has a broadly diversified maturity structure of its financial liabilities with a long-term focus reaching until 2026. The Company was able to secure this with favorable financing terms.

On 26 April 2016, Clariant issued four certificates of indebtedness with a total sum of EUR 300 million. These certificates have a term of 4 years (EUR 212 million), 7 years (EUR 73 million) and 10 years (EUR 15 million).

On 5 August 2016, Clariant issued five Certificates of Indebtedness with a total sum of USD 277 million and EUR 95 million. These certificates have terms of 5 years (EUR 55 million and USD 227 million) and 7 years (EUR 40 million).

On 16 December 2016, Clariant signed an agreement for a new CHF 500 million five-year multi-currency Revolving Credit Facility (RCF) with two one-year extension options. The RCF is structured as a »back-stop« facility for rating purposes to maintain Clariant's liquidity headroom.

Continued substantial generation of operating cash flow

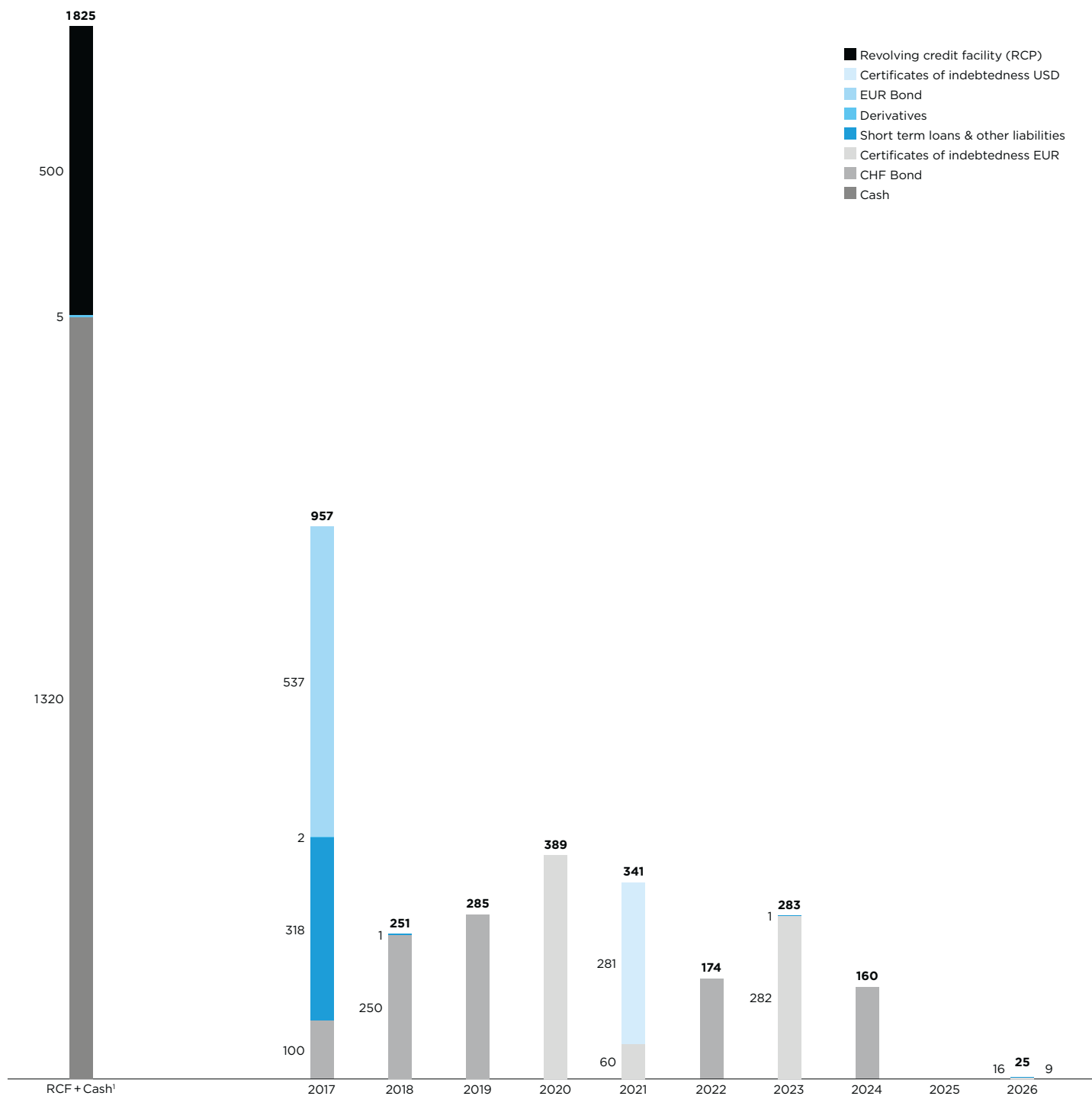
Cash flow before changes in net working capital increased from CHF 570 million in the previous year to CHF 664 million.

Net income climbed to CHF 263 million from CHF 227 million in the previous year. The increase came from the continued expansion in absolute EBITDA, lower finance costs, and an improvement in the tax rate.

DEBT MATURITY PROFILE PER 31 DECEMBER 2016 in CHF m

Liquidity Headroom

Maturities of Financial Debt



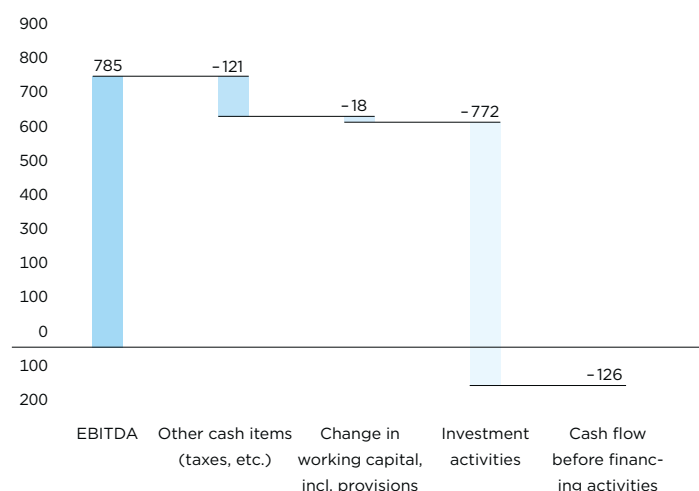
¹ incl. near cash assets and financial instruments at positive fair values

Changes in net working capital including provisions amounted to CHF – 18 million in 2016 (2015: CHF – 68 million). The ratio of net working capital to sales increased from 17.7 % to 18.6 %.

Cash flow from operating activities continued to rise to CHF 646 million versus CHF 502 million in 2015, coming from higher profit, lower cash out for exceptional items and lower income taxes paid.

Cash flow from investing activities decreased to CHF – 772 million (2015: CHF – 335 million). This figure was mainly influenced by capital expenditure of CHF 297 million (2015: CHF 374 million) and by the acquisitions realized during the year (2016: CHF 421 million; 2015: CHF 22 million). Free cash flow which equates to operating cash flow after capital expenditure and investments in intangible assets increased to CHF 310 million (2015: CHF 101 million).

CASH FLOW 2016 in CHF m



EXTRACT OF CASH FLOW STATEMENT in CHF m

	31.12.2016	31.12.2015
Net Income	263	239
Reversals of non-cash items	419	448
Cash flow before changes in net working capital and provisions	664	570
Operating cash flow	646	502
Cash flow from investing activities	- 772	- 335
Cash flow from financing activities	411	- 84
Net change in cash and cash equivalents	254	41
Cash and cash equivalents at the beginning of the period	789	748
Cash and cash equivalents at the end of the period	1 043	789

Business Areas

Care Chemicals

CARE CHEMICALS KEY FIGURES in CHF m

	2016	2015
Sales	1465	1445
EBITDA before exceptional items	276	272
Margin (%)	18.8	18.8
EBIT before exceptional items	221	226
Margin (%)	15.1	15.6
Full time equivalent (FTE)	2574	2321

- Continued strong growth in Consumer Care, mainly driven by Personal Care, Home Care as well as Crop Solutions
- EBITDA margin before exceptional items stable at top end of margin guidance

Sales in the Business Area Care Chemicals increased by 5 % in local currency and by 1 % in Swiss francs in 2016 compared to the previous year. Most regions had good sales performance, led by Asia and the Middle East & Africa which achieved double-digit growth rates. Europe and North America also showed good growth in the mid-single digit range. Latin America grew in sales but slowed down significantly throughout the year.

Consumer Care delivered high single digit sales growth, supported by strong performance in Personal Care, Home Care as well as in Crop Solutions. The Industrial Applications business also delivered good sales growth.

The EBITDA margin before exceptional items for the full year remained stable at 18.8 %, which is at the very high end of the margin guidance for the Business Area.

For 2017, Care Chemicals expects continued solid sales growth in both Consumer Care and Industrial Applications. There is still strong market demand for innovative and sustainable solutions that do not compromise performance, which Clariant continues to focus on. Examples of these solutions include natural extracts and organic certified ingredients from Brazil's biodiversity. Clariant, therefore, not only offers new and sustainable active ingredients but also supports local communities in the rainforest.

Catalysis

CATALYSIS KEY FIGURES in CHF m

	2016	2015
Sales	673	704
EBITDA before exceptional items	160	177
Margin (%)	23.8	25.1
EBIT before exceptional items	113	127
Margin (%)	16.8	18.0
Full time equivalent (FTE)	1548	1748

- Sales decline in local currency due to lower demand in North America and Asia
- EBITDA margin before exceptional items declines due to portfolio mix and project delays at customer level

In this transition year 2016, sales in the Business Area Catalysis declined by 8 % in local currency and by 4 % in Swiss francs in 2016. The decline in sales was due to the continued soft demand in Asia

as a result of project delays and a lower demand in North America which had a high comparable base against the previous year. The lower demand could not be offset by a good sales development in other regions.

The EBITDA margin before exceptional items of Catalysis decreased to 23.8 % in the full year of 2016 which is slightly below our margin guidance. The decline was due to a slow-down in demand and a lower contribution of Specialty Catalysts.

Even though for 2016 we saw a demand contraction in Catalysis as a result of the weak economic environment, fundamentals in the mid- to long-term remain positive based on Clariant's portfolio strength, innovation capability, global footprint, and growing partnerships. Partnerships include the CB&I's Lummus Novolen Technology for polypropylene catalysts. The inauguration of a new plant took place in the fourth quarter of 2016 and first revenues are expected in the first quarter of 2017.

Natural Resources

NATURAL RESOURCES KEY FIGURES in CHF m

	2016	2015
Sales	1 184	1 217
EBITDA before exceptional items	200	206
Margin (%)	16.9	16.9
EBIT before exceptional items	159	171
Margin (%)	13.4	14.1
Full time equivalent (FTE)	3 235	2 931

- Sales progression mainly supported by Functional Minerals and the acquisitions in Oil & Mining Services
- EBITDA margin before exceptional items stable at high end of margin guidance

Sales in the Business Area Natural Resources increased by 2 % in local currency and declined by 3 % in Swiss francs compared to the previous year.

The Oil & Mining Services business, excluding the acquisitions, had a single-digit negative sales performance during the full year, however, this was less pronounced than the industry trend.

Functional Minerals experienced good sales growth in local currency. Sales growth was primarily driven by emerging markets. Europe and North America also advanced above the prior year's level. Growth was largely driven by the expansion of the edible oil purification business in emerging markets.

The EBITDA margin before exceptional items was stable at 16.9 %, versus the previous year, which is at the higher end of the margin guidance. This was achieved with disciplined cost management across the Business Units.

While Functional Minerals is expected to continue to grow particularly in emerging markets in 2017, the weaker oil prices will continue to impact the short-term dynamics in Oil & Mining Services. In 2017, Oil & Mining Services will continue to focus on technologies to improve efficiency, sustainability and safety and expects to extract synergies from its acquisitions. The increase in oil price suggests a stabilization and a gradual increase in oil and gas activity in 2017.

Plastics & Coatings

PLASTICS & COATINGS KEY FIGURES in CHF m

	2016	2015
Sales	2525	2441
EBITDA before exceptional items	368	313
Margin (%)	14.6	12.8
EBIT before exceptional items	289	234
Margin (%)	11.4	9.6
Full time equivalent (FTE)	6737	6879

- Strong sales performance within all businesses
- Plastics & Coatings with significant absolute EBITDA increase reflecting a better product mix, higher capacity utilization and the effect of differentiated business steering

Sales in the Plastics & Coatings Business Area increased by 4 % in local currency and 3 % in Swiss francs in 2016 versus the previous year. In Masterbatches, sales increased across all regions. Europe, North America, Latin America, Asia, and India contributed most to the growth. Across the segments, the areas of Packaging, Fibers, Engineered Polymers, Additives and Medical Specialties performed particularly well.

In Pigments, all regions had a good sales performance with particular strength in Asia, mainly driven by India and China. In addition, the growth in Plastic Applications as well as in Special Applications contributed to the good development year-on-year. Additives achieved sales growth across all regions, mainly driven by strong demand in Europe and Asia. The good sales development was supported by all business lines.

The EBITDA before exceptional items grew significantly by 17 % in local currency to CHF 368 million year-on-year. This rise largely reflects a better product mix, a higher capacity utilization and the effect of the differentiated business steering implemented at the beginning of 2016.

Plastics & Coatings continues to develop customised solutions and products for the needs of its end markets. These offerings in combination with the focus on the differentiated business steering are expected to further enhance growth possibilities and overall performance in the businesses.

Outlook 2017: EBITDA margin before exceptional items and operating cash flow to progress

In a challenging and volatile business and economic environment, Clariant was able to deliver its targets in 2016 by focusing on the requirements of our customers by providing them with enhanced and sustainable solutions to enable them to create further value.

Clariant expects the uncertain environment, characterized by a high volatility in commodity prices, currencies as well as political uncertainties, to continue. In emerging markets, Clariant anticipates the economic environment to remain challenging and volatile; the company expects moderate growth in the United States, while growth in Europe is expected to remain stable.

For 2017, in spite of a continued challenging economic environment, Clariant is confident to be able to achieve growth in local currency, as well as progression in operating cash flow, absolute EBITDA, and EBITDA margin before exceptional items.

Clariant confirms its mid-term target of reaching a position in the top tier of the specialty chemicals industry. This corresponds to an EBITDA margin before exceptional items in the range of 16 % to 19 % and a return on invested capital (ROIC) above the peer group average.

Clariant stock

Stock market 2016

2016 was characterized by a number of political events which triggered significant pressure on the stock markets and hence also on the share price of Clariant. At the beginning of 2016, the Clariant share price mirrored the general market trends, including concerns about the global economic outlook. On the announcement of Full Year 2015 Results, the Clariant shares underperformed the SMI and fell from CHF 16.24 to CHF 15.79 on initial worries over the 2016 outlook. Until 4 March 2016, the Clariant shares rose to CHF 17.22, thereby outperforming the SMI by approximately 7 % since the closing on 17 February 2016. In April, the share price declined again as the financial markets became concerned that rising raw material prices could potentially put pressure on margins. With the publication of the first quarter numbers on 28 April 2016 the stock rose by more than 8 % on the back of a strong result. In May and June, the downside pressure on the stock markets increased over fears about the Brexit referendum, which also pushed the Clariant shares lower. Overall, the difficult environment in the Oil & Mining and Catalysis industry and its impact on our business overshadowed the good performance of Plastics & Coatings in 2017 and explains the lack-luster performance of the share price. The share price moved sideways for several weeks until uncertainties over the outcome of the US elections significantly burdened the stock markets as well as the Clariant share price. Following the elections, the Clariant share price recovered again and closed at CHF 17.57 on 31 December 2016.

WHY INVEST IN CLARIANT?

1. We are a leading Specialty Chemical company.
 2. We serve markets with future perspectives and above average growth rates
 - by offering solutions to the global challenges.
 - by helping our customers to create more value.
 - by focusing on the customers' needs in the different regions build on our innovation and R&D strategy as well as our sustainability offering.
 3. We strive for financial excellence.
 4. We have long and extensive experience.
-

Dividend payment

Clariant aims to increase or at least maintain dividends. Since 2011, Clariant increased the dividend by an average of 5 % per annum. Despite the more difficult economic environment, the continued improvement in performance allows the Board of Directors of Clariant Ltd to propose for the 2016 financial year a dividend distribution of CHF 0.45 per share at the Annual General Meeting on 20 March 2017. This proposal reflects an increase of 12.5 % compared to the previous year. The distribution is proposed to be made from the capital contribution reserve that is exempt from Swiss withholding tax.



Clariant is committed to international compliance standards, ensuring checks and balances between the Board and Management, as well as a sustainable approach to value creation.

Principles of corporate governance

In defining the management structure, organization, and processes of the Clariant Group, the corporate governance principles aim to provide stakeholder value and transparency to promote sustainable long-term success. The Group is committed to Swiss and international standards of corporate governance by following the respective statutory provisions, the rules issued by the SIX Swiss Exchange and by implementing the principles of the Swiss Code of Best Practices for Corporate Governance, revised in 2014. The principles and regulations on corporate governance are described in the Swiss Code of Obligations, the Directive on Information relating to Corporate Governance by SIX Swiss Exchange, the Ordinance Against Excessive Compensation in Listed Stock Corporations, the Articles of Association of Clariant Ltd, the Bylaws, the Organizational Group Regulations of the Clariant Group, and the Clariant Code of Conduct. The Board of Directors adapts the internal documents regularly. The Articles of Association, the Bylaws of the Board of Directors, and the Clariant Code of Conduct can be viewed on the internet at www.clariant.com/corporate-governance

Group structure and shareholders

Group structure

The registered address of Clariant Ltd is Rothausstrasse 61, 4132 Muttenz, Switzerland. The company's business operations are conducted through Clariant Group companies. Clariant Ltd, a holding

company organized under Swiss law, directly or indirectly owns all Clariant Group companies worldwide. With the exception of Clariant Chemicals (India) Ltd, these companies' shares are not publicly traded. Clariant owns 51 % of the publicly traded company Clariant Chemicals (India) Ltd, based in Airoli, Navi Mumbai, India, and listed on the Bombay Stock Exchange and the National Stock Exchange of India Limited under Stock ID »CLNINDIA« and having ISIN No. INE492A01020.

The important subsidiaries of Clariant Ltd are listed in Note 36 of the »Notes to the consolidated financial statements of the Clariant Group« (pages 220 to 222).

The Group conducts its business through seven Business Units (Additives; Catalysts; Functional Minerals; Industrial & Consumer Specialties; Masterbatches; Oil & Mining Services; Pigments) and reports in the following four Business Areas: Care Chemicals; Catalysis; Natural Resources; Plastics & Coatings.

Significant shareholdings of 3 % or more of total share capital

Based on the notifications received by Clariant and published by SIX Exchange Regulation, as at 31 December 2016 the following shareholders held more than 3 % of voting rights in Clariant Ltd:

Shareholders	Voting rights
Group of former shareholders of Süd-Chemie AG ¹	13.89%
Thereof (as a separate sub-group): Blue Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany) and Maple Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany) ²	3.73%
APG Asset Management N.V., Amsterdam, Netherlands	5.01%
BlackRock Inc., New York	3.08%
Cymbria, Canada EdgePoint Global Portfolio, Canada EdgePoint Canadian Growth and Income Portfolio, Canada EdgePoint Canadian Portfolio, Canada EdgePoint Global Growth and Income Portfolio, Canada St. James Place Global Equity Unit Trust, UK	3.06%
Citadel Multi-Strategy Equities Sàrl Citadel Global Equities Fund Sàrl Citadel Securities (Europe) Limited	3.02%
Norges Bank (the Central Bank of Norway)	3.003%
UBS Funds Management (Switzerland) AG	3.001%

¹ The following former shareholders of Süd-Chemie AG form a group:
 Wilhelm, Dr. Winterstein, Germany
 Dolf, Dr. Stockhausen, Switzerland
 Axel, Dr. Schweighart, Germany
 Rosemarie Schweighart, Germany
 Dominique Kraus, Germany
 Karl, Dr. Wamsler, Germany
 Irene W. Banning, United States
 Susanne Wamsler-Singer, Austria
 Caroline A., Dr. Wamsler, United States
 Amelie Ratjen, Germany
 Christof Ratjen, Germany
 Christopher Weithauer, Germany
 Johanna Bechtle, Germany
 Kaspar Bechtle, Germany
 Luisa Redetzki, Germany
 Karl T. Banning, United States
 Schuyler H. Joerger, United States
 Konstantin Alfred Winterstein, Germany
 Max-Theodor, Dr. Schweighart, Germany
 Peter, Dr. Schweighart, Germany
 Moritz Ostenrieder, Germany
 Christian Ratjen, Germany
 Bettina Wamsler, Germany
 Pauline Joerger, United States
 Marianne Kunisch, Germany
 Maximilian Ratjen, Germany
 Julius Ratjen, Germany
 Elisabeth Prinzessin zu Sayn-Wittgenstein, Germany
 Georg A. Weithauer, Germany
 Charlotte Bechtle, Germany
 Clara Redetzki, Germany
 Marie Redetzki, Germany
 Sophia P. Joerger, United States

² According to a disclosure notification published on 18 January 2013, a group consisting of Konstantin Winterstein, 80333 München, Germany and Elisabeth Prinzessin zu Sayn-Wittgenstein, 80333 München, Germany holds 3.73% partially through Blue Beteiligungsgesellschaft mbH, Grossdingharting (Germany) and partially through Maple Beteiligungsgesellschaft mbH, Grossdingharting (Germany). The 3.73% held by this group are included in the 13.89% mentioned under footnote 1, but build a separate sub-group.

Disclosure notifications during the financial year 2016 reported to the Stock Exchange Disclosure Office pursuant to Art. 120 of the Financial Markets Infrastructure Act (FMIA) as well as further information in relation to disclosure notifications can be found on the SIX Swiss Exchange reporting platform: www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html

As of 31 December 2016, former shareholders of Süd-Chemie AG, who had exchanged their shares against Clariant shares in April 2011, held a total of 13.89% of the share capital of Clariant Ltd. These shareholders are related to each other for family or other reasons (especially the Wamsler, Winterstein, Schweighart and Stockhausen families).

At 31 December 2016, Clariant AG itself held 7 887 728 shares in treasury, corresponding to 2.38% of the share capital.

Cross-shareholdings

There are no cross-shareholdings.

Capital structure

Capital

As of 31 December 2016, the fully paid nominal share capital of Clariant Ltd totaled CHF 1 228 175 036.30 and was divided into 331 939 199 registered shares, each with a par value of CHF 3.70. Clariant Ltd shares are listed on the SIX Swiss Exchange since 1995 (symbol: CLN, ISIN CH0012142631). Clariant Ltd does not issue non-voting equity securities (Genussscheine or Partizipations-scheine). Based on the closing price of the Clariant share of CHF 17.57 on 31 December 2016, the company's market capitalization at year-end amounted to CHF 5.8 billion.

Conditional capital

The company's share capital may be increased by no more than CHF 14 103 978.20 by issuing the remaining 3 811 886 registered shares each with a par value of CHF 3.70.

The details are set out in article 5 of the Articles of Association. The Articles of Association can be found on our website at www.clariant.com/en/Company/Corporate-Governance/Articles-of-Association

Distribution of capital reserves

In the 2016 calendar year, a distribution of CHF 0.40 per share from capital reserves was decided by the Annual General Meeting. The total amount of CHF 129 499 863.20 was paid out on 28 April 2016. A table with additional information on the distribution of capital reserves can be found on page 188 (Note 16) of this Integrated Report.

Transferability of shares

The transfer of registered shares requires the approval of the Board of Directors that may delegate this function. Approval is granted if the acquirer discloses his/her identity and confirms that the shares have been acquired in his/her own name and for his/her own account.

Nominee registrations and voting rights

Each registered share entitles the holder to one vote at the Annual General Meeting. Special rules according to Article 6 of the Articles of Association apply to nominees who fail to disclose the identity of the persons they represent and whose shareholding exceeds 2%.

Options

The Clariant option program for employees was terminated in 2013. Details of the option program can be found on page 215 (Note 31, »Employee Participation Plans«) of this Integrated Report.

Further information on the Clariant share can be found on page 117 of this Integrated Report.

The Board of Directors

The Board of Directors of Clariant Ltd comprises at least six and no more than twelve members pursuant to the Articles of Association of Clariant Ltd.

All members of the Board of Directors (except for the CEO Hariolf Kottmann) are considered to be independent in accordance with international best-practice standards, and no member of the Board of Directors exceeds any of the maximum number of mandates as stipulated in Article 38 of the Articles of Association.

Members of the Board of Directors

Rudolf Wehrli, Swiss citizen

Function at Clariant: Chairman, non-executive member of the Board of Directors
Born: 1949
Year of first election: 2007

Professional career: Following studies at the Universities of Zurich and Basel, where he earned doctorates in Theology, Philosophy, and German Literature, Rudolf Wehrli began his career at McKinsey & Co. in 1979. In 1984 he joined the Schweizerische Kreditanstalt (now Credit Suisse) as a member of the company's Senior Management. In 1986 he became Marketing Manager and member of the Executive Committee of the Silent Gliss Group. Five years later, he took over the management of the Group's German subsidiary. In 1995 he transferred to the Gurit-Heberlein Group as a member of the Executive Committee, and was promoted to Chief Operating Officer in 1998 and Chief Executive Officer in 2000. He remained in this position until the company split up in 2006. A Member of the Board of Directors of Clariant Ltd since 2007, he became Chairman in 2012.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:
Mandates according to Article 38 para 1 lit. a) Berner Kantonalbank (until May 2016).

Mandates according to Article 38 para 1 lit. b) five: Kambly AG, Switzerland; Rheinische Kunststoff-Werke SE, Germany; Chairman of the Board of Directors of Sefar Holding AG, Switzerland; Wipf AG, Switzerland; HK Gerodur AG, Switzerland.

Mandates according to Article 38 para 1 lit. c) seven (including member of the Board of Trustees of Avenir Suisse and member of the Board of Clariant Foundation).

Günter von Au, German citizen

Function at Clariant: Vice Chairman, non-executive member of the Board of Directors

Born: 1951

Year of first election: 2011¹

Professional career: After studying Textile and Polymer Chemistry at Reutlingen University and Chemistry at the University of Tübingen, where he obtained a doctorate, Günter von Au began his career in 1980 in Burghausen at Wacker-Chemie AG. He held a number of different management positions at the company through 2001 in Germany, Brazil, and the United States – most recently as Head of Wacker's division for polymers, specialty chemistry, and basic chemistry in Munich. He was also CEO of Wacker Polymer Systems GmbH & Co. KG in Burghausen, Germany. He joined Süd-Chemie in 2001 as President and CEO of Süd-Chemie Inc. In 2004 he became CEO of the Management Board of Süd-Chemie AG in Munich and held this position until 31 March 2012. On 1 April 2012, Mr. von Au joined the Board of Directors at Clariant Ltd and has, since then, acted as Vice Chairman of the Board of Directors.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:

Mandates according to Article 38 para 1 lit. a) none.

Mandates according to Article 38 para 1 lit. b) four: Member of the Supervisory Board of Bayernwerk AG, Regensburg; Member of the Advisory Committee of Gebr. Röchling KG, Mannheim; Member of the Advisory Board of Tyczka GmbH, Geretsried; Chairman of the Board of CeramTec GmbH, Plochingen.

Mandates according to Article 38 para 1 lit. c) two: Chairman of the Board of Directors of the Bavarian Chemical Industry Association, Munich; Vice President of the German Institute of Economic Research, Cologne.

Peter Chen, US and Swiss citizen

Function at Clariant: Non-executive member of the Board of Directors

Born: 1960

Year of first election: 2006

Professional career: Peter Chen studied chemistry at the University of Chicago and in 1987 received a doctorate from Yale University in New Haven, Connecticut. He then served as an assistant professor (1988 to 1991) and associate professor (1991 to 1994) at Harvard University in Cambridge, Massachusetts. Since September 1994 he has been a full Professor of Physical-Organic Chemistry at ETH Zurich. From 2007 to 2009 he was Vice President of Research and Corporate Relations at ETH Zurich.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:

Mandates according to Article 38 para 1 lit. a) none.

Mandates according to Article 38 para 1 lit. b) none.

Mandates according to Article 38 para 1 lit. c) two: Consultant at Givaudan, Switzerland; Gesellschaft zur Förderung von Forschung und Ausbildung im Bereich der Chemie (Zurich).

¹ Election was conditional to the termination of Günter von Au's position as the CEO of the Management Board of Süd-Chemie AG which took place 31 March 2012.

Peter R. Isler, Swiss citizen

Function at Clariant: Non-executive member of the Board of Directors

Born: 1946

Year of first election: 2004

Board member until 21st Annual General Meeting (21 April 2016)

Professional career: Peter R. Isler studied Law at the University of Zurich, completing his studies with a doctorate. He then attended a master's program for a LL.M. at Harvard Law School. From 1974 onward he worked for two Swiss law firms and in 1981 became a partner at the Zurich law firm Niederer Kraft & Frey AG. He has been a lecturer in Corporate and Commercial Law at the University of Zurich since 1978 and a member of the Anwaltsprüfungskommission (Bar Examination Commission) of the canton of Zurich since 1984.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:

Mandates according to Article 38 para 1 lit. a) none.

Mandates according to Article 38 para 1 lit. b) Schulthess Group AG, Switzerland.

Mandates according to Article 38 para 1 lit. c) nine (including Member of the Board of Trustees of the University of Zurich Foundation).

Hariolf Kottmann, German citizen

Function at Clariant: Chief Executive Officer (CEO) and executive member of the Board of Directors

Born: 1955

Year of first election: 2008

Professional career: Hariolf Kottmann earned his PhD in Organic Chemistry at the University of Stuttgart in 1984. In 1985 he launched his career at the former Hoechst AG in Frankfurt, where he held several key management positions across the company's chemical divisions and functions. In 1996 he was appointed Deputy

Head of the Basic Chemicals Division at Hoechst AG and took responsibility for the Inorganic Chemicals BU. In 1998 he joined Celanese Ltd in New Jersey (United States) as a member of the Executive Committee and Head of the Organic Chemicals BU. In April 2001, he was appointed as member of the Executive Committee of SGL Carbon AG, where he was responsible for the Graphite Specialties, Corrosion Protection and Advanced Materials Divisions as well as the Eastern Europe and Asia regions until 30 September 2008. He was also in charge of the SGL Excellence and Technology & Innovation corporate functions. He has been a member of the Board of Directors of Clariant Ltd since April 2008 and became CEO of Clariant on 1 October 2008.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:

Mandates according to Article 38 para 1 lit. a) none.

Mandates according to Article 38 para 1 lit. b) Plansee Holding AG, Austria.

Mandates according to Article 38 para 1 lit. c) seven: Member of the Board of Trustees of ETH Zurich Foundation; Member of the Board of Trustees of Aventis Foundation, Frankfurt; Member of the Executive Committee of Science Industries, Zurich; President of the Board of CEFIC (European Chemical Industry Council) and of its Executive Committee; Member of the Board of ICCA (International Council of Chemical Associations); Chairman of the Board of Clariant Foundation; Member of the Advisory Board of Deloitte, Zurich.

Eveline Saupper, Swiss citizen

Function at Clariant: Non-executive member of the Board of Directors

Born: 1958

Year of first election: 2016

Professional career: Eveline Saupper studied law at the University of St. Gallen, Switzerland (HSG). She is Of Counsel at the law firm Homburger AG, Zurich, Switzerland, where she was a partner until 2014. Before joining Homburger in 1985, she worked as a tax specialist with Peat Marwick Mitchell (today KPMG) in Zurich. She holds a PhD in law from the University of St. Gallen and is admitted to the Bar of Zurich. Eveline Saupper is also a certified tax expert.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:

Mandates according to Article 38 para 1 lit. a) three: Syngenta AG, Switzerland; Flughafen Zürich AG, Switzerland; Georg Fischer AG, Switzerland.

Mandates according to Article 38 para 1 lit. b) three: Stäubli Holding AG, Switzerland; Hoval Aktiengesellschaft, Liechtenstein; Interhoval AG, Switzerland.

Mandates according to Article 38 para 1 lit. c) two: hkp group AG, Switzerland; Mentex Holding AG, Switzerland.

Carlo G. Soave, British citizen

Function at Clariant: Non-executive member of the Board of Directors

Born: 1960

Year of first election: 2008

Professional career: Carlo G. Soave studied languages and Economics at Heriot-Watt University in Edinburgh, Scotland. He launched his career in 1982 at Oerlikon-Bührle in Switzerland, moving to Procter & Gamble in 1984. There he held various senior management positions, including Vice President of Global Purchasing for the Fabric and Home Care Division. In 2004 he founded Soave & Associates, a consulting company based in Brussels, Belgium. He is an Advisory Board member of MonoSol LLC, a company based in Indiana (United States) that belongs to the Kuraray Group (Japan).

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:

Mandates according to Article 38 para 1 lit. a): none

Mandates according to Article 38 para 1 lit. b) one: Advisory Board MonoSol LLC, United States.

Mandates according to Article 38 para 1 lit. c) two: Melior Innovations, Inc., United States; Managing Director of Soave & Associates, Belgium.

Peter Steiner, German citizen

Function at Clariant: Non-executive member of the Board of Directors

Born: 1959

Year of first election: 2016

Professional career: Peter Steiner studied business administration in Mannheim and Cologne, Germany, and finished with a Master degree. He is a German Certified Public Accountant, Tax Advisor and Business Consultant with a focus on mergers and acquisitions, financing and investment management. Peter Steiner was previously a partner of the investment company One Equity Partners LLC and worked for MG Technologies AG as its Chief Financial Officer. At Dyckerhoff AG, he was successively CFO, Chief Operating Officer and finally CEO. Following his many years as an auditor with Arthur Andersen & Co., he was also CFO of Süba Bau AG.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:

Mandates according to Article 38 para 1 lit. a) one: Zeal Network SE, Great Britain.

Mandates according to Article 38 para 1 lit. b) two: Xella International S.A., Germany; Fixit Trockenmörtel Holding AG, Switzerland.

Mandates according to Article 38 para 1 lit. c) none.

Claudia Suessmuth Dyckerhoff, German citizen

Function at Clariant: Non-executive member of the Board of Directors

Born: 1967

Year of first election: 2016

Professional career: Claudia Suessmuth Dyckerhoff holds a PhD in Business Administration from the University of St. Gallen/University of Michigan Ann Arbor, USA, focusing on strategy, organization and operational excellence. Claudia Suessmuth Dyckerhoff also holds a MBA from CEMS/ESADE. She joined McKinsey in 1995 in Switzerland and since then focused on advising mainly healthcare companies in Europe, the United States, Greater China and across Asia. She was a Senior Partner at McKinsey & Company and leading the Asia Health Services and Systems sector within McKinsey until March 2016 when she became a Senior External Advisor to McKinsey.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association:

Mandates according to Article 38 para 1 lit. a) one:
Roche Holding AG, Switzerland.

Mandates according to Article 38 para 1 lit. b) none.

Mandates according to Article 38 para 1 lit. c) none.

Susanne Wamsler, US citizen

Function at Clariant: Non-executive member of the Board of Directors

Born: 1961

Year of first election: 2015

Professional career: Ms. Susanne Wamsler studied at Princeton University in Princeton, New Jersey, USA, graduating with a degree in Political Economy. From 1984 to 1988 she held various positions with the Deutsche Bank AG in Munich and New York. In 1989 she received her MBA from INSEAD in Fontainebleau, France. Since

then she has been a successful entrepreneur in different fields, including retail, real estate, telecommunications and wealth management. In addition, she completed various professional education courses between 2012 and 2014, receiving certificates in board membership training from the University of St. Gallen, Switzerland, the Centrum für Strategie und Höhere Führung, Cologne, Germany, and INSEAD, Fontainebleau, France.

Susanne Wamsler was a member of the Supervisory Board of the Stiftung Haus der Kunst gemGmbH, Munich, Germany, until 30 June 2015.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association: none

Konstantin Winterstein, German citizen

Function at Clariant: Non-executive member of the Board of Directors

Born: 1969

Year of first election: 2011

Professional career: Konstantin Winterstein studied at the Technical Universities in Darmstadt and in Berlin, where he completed a degree in Production Engineering. In 2004 he received his MBA from INSEAD in Fontainebleau and Singapore. From 1997 to 2014 he has held various positions with the BMW Group. Since 2014 he is managing director of Ringmetall AG in Munich. From 2006 to 2011 he served on the Supervisory Board of Süd-Chemie AG.

Other activities: Board of Directors/Supervisory Board mandates as stipulated in Article 38 para 1 of the Articles of Association: none.

Cross-involvement

There are no cross-involvements.

Elections

The Board of Directors will stand for election or reelection for one-year terms. The Chairman of the Board of Directors of Clariant Ltd as well as the members of the Compensation Committee will be elected individually for a term of one year by the Annual General Meeting. Only members of the Board of Directors are eligible.

Internal organizational structure

The Board of Directors and its committees

The Board of Directors consists of the Chairman, one or more Vice Chairpersons, and the other members. With the exception of Mr. Günter von Au, who was Chairman of the Board of Directors at Süd-Chemie AG until 31 March 2012, no non-executive member of the Board of Directors held a senior management position at Clariant Ltd or any current or former Clariant Group company be-

tween 2011 and 2016 or has any significant business relationship with Clariant Ltd or any other Clariant Group company. The members of the Board of Directors constitute the following committees:

- Chairman's Committee
- Compensation Committee
- Audit Committee
- Technology and Innovation Committee

The **Board of Directors** appoints the members of the committees, except for the members of the Compensation Committee who are elected by the Annual General Meeting. The Board of Directors meets at least once a quarter. At the invitation of the Chairman, the CEO, the CFO, and other members of the Executive Committee and/or other employees and third parties attend the meetings of the Board of Directors for the purpose of reporting or imparting information. Each committee has a written charter outlining its duties and responsibilities. The committees' charters are published on

BOARD OF DIRECTORS - COMMITTEE RESPONSIBILITIES AND MEETINGS

Member of the Board of Directors	Chairman's Committee	Audit Committee	Compensation Committee	Technology and Innovation Committee
Number of meetings in 2016	3	¹ 7	¹ 3	¹ 4
Rudolf Wehrli	■ since 2012	3	■ since 2008	3
Günter von Au	■ since 2012	3 ■ since 2015	7	■ since 2012
Peter Chen				■ since 2006
Peter Isler		■ since 2012 until 21 April 2016	3 ■ since 2015 until 21 April 2016	1
Hariolf Kottmann				
Eveline Saupper		■ since 2016	4 ■ since 2016	2
Carlo G. Soave	■ since 2012	3	■ since 2012 ■ since 2015	3 ■ since 2008
Peter Steiner	■ since 2016	2 ■ since 2016	4	
Claudia Suessmuth Dyckerhoff				
Susanne Wamsler				■ since 2015
Konstantin Winterstein		■ since 2012 until 21 April 2016	3	

■ Chairman

■ Member

¹ = Number of meetings attended in 2016

Clariant's website (www.clariant.com/committees). The committees report on their activities and results to the Board of Directors. They prepare the business of the Board of Directors in their respective areas.

The **Chairman's Committee** (CC) comprises the Chairman, the Vice Chairman, and two other members of the Board of Directors. The CC prepares the meetings of the Board of Directors. The CC meets as needed. It makes decisions on financial and other matters delegated by the Board of Directors in accordance with the Bylaws of the Board of Directors. In addition, the CC passes resolutions for which the Board of Directors is responsible when matters cannot be postponed. The CC draws up principles for the selection of candidates for election and reelection to the Board of Directors and for the office of CEO, and prepares the corresponding recommendations. Furthermore, the CC considers and submits to the Board of Directors the CEO's proposals concerning candidates for Executive Committee positions.

www.clariant.com/committees

The **Compensation Committee** (CoC) comprises three members of the Board of Directors as elected by the Annual General Meeting. The majority of the members shall be non-executive members of the Board of Directors. The CoC meets at least twice a year. It reviews and proposes to the Board of Directors the compensation and benefits policies and programs, reviews the performance criteria relevant to compensation and determines individual executive compensation and benefits of the members of the Board of Directors and the Executive Committee, subject to the approvals of the total compensations by the Annual General Meeting. Furthermore, the CoC reviews fringe benefit regulations and dismissal regulations with the CEO, members of the Executive Committee, Heads of Global Functions and Global Business Units, and Region Heads always in accordance with the Articles of Association and the Ordinance Against Excessive Compensation in Stock Listed Corporations.

www.clariant.com/committees

The **Audit Committee** (AC) comprises three members of the Board of Directors. The Chairman must be an independent, non-executive member of the Board of Directors. A majority of the members of the AC must have financial and accounting experience.

The AC reviews the activities of the external auditors, their collaboration with the internal auditors, and their organizational adequacy. It also reviews the performance, compensation, and independence of the external auditors as well as the performance of the internal auditors and reports back to the Board of Directors. Furthermore, the AC reviews the company's internal control and risk management systems, and reviews compliance with the law and internal regulations – in particular with the Code of Conduct. In collaboration with the Group's external and internal auditors and financial and accounting management, the AC reviews the appropriateness, effectiveness, and the compliance of accounting policies and financial controls with applicable accounting standards. The AC meets at least six times a year. The AC reviews and recommends the Group's financial statements for the first three quarters of each year, and the annual financial results to the Board of Directors for approval.

www.clariant.com/committees

The **Technology and Innovation Committee** (TIC) comprises four members of the Board of Directors with experience in research, innovation management, and technology. The TIC meets at least twice a year. The tasks of the TIC include assessing the company's innovative activities on behalf of the Board of Directors. The TIC also reviews measures to stimulate research and development, and optimize innovative potential, as well as submitting appropriate recommendations to the Board of Directors.

www.clariant.com/committees

Definition of working methods and areas of responsibility

In accordance with the law and the Articles of Association, the Board of Directors is the ultimate decision-making authority for Clariant Ltd in all matters except those decisions reserved by law or the Articles of Association for the shareholders. In accordance with and supplementary to Article 716a of the Swiss Code of Obligations and Article 22 of the Articles of Association (www.clariant.com/corporate-governance) the Board of Directors has sole authority, particularly for the following, non-transferable and inalienable duties of the Board of Directors:

- Providing the strategic direction of the Group;
- Approving the basic outline of the Group's organization and its corporate governance;
- Supervising the overall business operations;
- Evaluating the performance of the CEO and members of the Executive Committee;
- Appointing and dismissing the CEO and members of the Executive Committee, the Head of Corporate Auditing, and other key executives;
- Approving the basic accounting system and financial planning and control of the Group;
- Approving the Group's annual budget;
- Reviewing and approving the quarterly financial statements and results release for Clariant Ltd and the Group;
- Approving the Group's consolidated financial statements at the end of the fiscal year for submission to the Annual General Meeting;
- Approving major M&A transactions and financial transactions of considerable scope or those involving special risks, particularly capital market transactions and other financing transactions (e.g. large loans) as well as changes in conditions associated therewith;
- Ensuring a management and corporate culture that is appropriate for the company's objectives;

- Ensuring an internal control system and adequate risk and compliance management, particularly with regard to financial, corporate governance and citizenship, personnel, and environmental protection matters;
- Ensuring succession planning and management development;
- Convening the Annual General Meeting (AGM), determining the items on the agenda and the proposals to be made to the AGM.

Working methods

In 2016 the Board of Directors held six meetings in person (of which one meeting lasted for two days) at the Corporate Center in Pratteln or at other locations, mainly in Switzerland, and also five meetings by phone. All eleven board meetings were attended by ten board members (except for the meetings of 27 January and 21 June that were attended by nine board members). The company's strategy is reviewed and further developed once a year during a two-day meeting. Members of the Executive Committee are invited to attend the meetings of the Board of Directors. For the September and October meetings the Board of Directors met in Munich, Germany, and Louisville, USA, respectively. The views of external and internal consultants are heard, if necessary, in the case of projects of considerable scope.

BOARD OF DIRECTORS MEETINGS

Number of meetings in 2016	11
Board of Directors	
Rudolf Wehrli	11
Günter von Au	11
Peter Chen	11
Peter R. Isler	2
Hariolf Kottmann	11
Eveline Saupper	8
Carlo G. Soave	11
Peter Steiner	8
Claudia Suessmuth Dyckerhoff	8
Susanne Wamsler	10
Konstantin Winterstein	11

Management of the Group

The Board of Directors has delegated the executive management of the Clariant Group to the CEO and the other members of the Executive Committee. The Executive Committee is mainly responsible for implementing and monitoring the Group strategy, for the financial and operational management of the Group, and for the efficiency of the Group's structure and organization. The members of the Executive Committee are appointed by the Board of Directors on the recommendation of the Chairman's Committee. Subject to the responsibility of the Board of Directors and the Annual General Meeting the CEO and, under his supervision, the Executive Committee are responsible for:

- Drawing up strategic plans and policies for approval by the Board of Directors;
- Implementing Group strategies and policies as well as strategies and action programs for individual Business Units and subsidiaries;
- Managing the Business Units and functions to ensure efficient operations, including regularly assessing the achievement of goals;
- Regularly informing the Board of Directors and its committees of all matters of fundamental significance to the Group and its businesses;
- Ensuring compliance with legal requirements and internal regulations;
- Establishing a management and corporate culture in line with the company's objectives;
- Promoting an active internal and external communications policy;
- Appointing and dismissing senior management, including appropriate succession planning.

The Executive Committee is supported by the Corporate Center that defines Group-wide policies and guidelines. Whilst reporting in the four Business Areas Care Chemicals (BU ICS), Catalysis (BU Catalysts), Natural Resources (BU Oil & Mining Services, BU Functional Minerals), and Plastics & Coatings (BU Additives, BU Mas-

terbatches, BU Pigments) the seven Business Units are the highest-level operating units within the Group. They have global responsibility for the activities assigned to them, particularly sales, marketing, product management, and production. The Business Units also have global responsibility for short- and long-term revenue and earnings generated from the operations and assets assigned to them. This includes fully exploiting existing business potential, identifying new business opportunities, and pursuing the active management of their products and services portfolio. The Business Units' activities are complemented and supported by global Group functions (e.g. Procurement, Finance, Information Technology, Legal, Human Resources, and Group Technology & Innovation), which are organized as service centers.

Information and control instruments vis-à-vis the Executive Committee

The Board of Directors ensures that it receives sufficient information from the Executive Committee to perform its supervisory duties and make decisions that are reserved for the Board of Directors. The Board of Directors obtains the information required to perform its duties in various ways:

- The CEO and the CFO inform all directors regularly about current developments, including through the regular submission of written reports, such as key performance indicators for each business;
- The minutes of the meetings of the Executive Committee are made available to the directors;
- Informal meetings and teleconferences are held, as required, between the CEO and the members of the Chairman's Committee;
- The members of the Executive Committee are invited to attend meetings of the Board of Directors to report on Business Units under their responsibility;
- The members of the Board of Directors are entitled to request information from members of the Executive Committee or any other Clariant senior manager.

Board committees

The Chairman’s Committee meets regularly with members of the Executive Committee and other members of senior management to review the business, better understand applicable laws and policies affecting the Group, and support the Executive Committee in meeting the requirements and expectations of stakeholders. The Technology and Innovation Committee invites members of the Executive Committee and members of senior management as necessary to discuss selected aspects of innovative activities. The CFO and representatives of the external auditor are invited to Audit Committee meetings. Furthermore, the Heads of Corporate Auditing and Risk Management, the Group Compliance Officer, and

Clariant’s General Counsel report on a regular basis to the Audit Committee. The Audit Committee reviews the financial reporting processes on behalf of the Board of Directors. For each quarterly and annual reporting of financial information an internal team reviews the information for accuracy and completeness of disclosures, reporting to the Audit Committee before publication. The Compensation Committee generally meets at least twice per year to adjust the development of the compensation structures to changing conditions, as necessary. In this context, the long-term incentive program for the Executive Committee and the senior management team is also aligned with current market and business developments and corresponding adjustments are made, if required.

BOARD OF DIRECTORS – COMMITTEES

	Number of meetings	Duration in h	Invited CEO/CFO	Other attendees
Board of Directors	11	6 – 8 ¹	Yes	Executive Committee
Chairman’s Committee	3	2 – 3	Yes	
Audit Committee	7	3 – 4	CFO	Auditors; Risk Management; Corporate Auditing; General Counsel and Group Compliance Officer in most meetings
Compensation Committee	3	2	Yes	CEO; Head of Group Human Resources
Technology and Innovation Committee	4	3 – 4	CEO	Head of Group Technology & Innovation; Executive Committee

¹ Per meeting day

Internal audit (Corporate Auditing)

Corporate Auditing carries out operational and system audits in accordance with a plan adopted by the Audit Committee. By assisting organizational units in the accomplishment of objectives, it provides an independent approach for the evaluation, improvement, and effectiveness of the internal control framework. The quality of Corporate Auditing is regularly assessed in accordance with the requirements of The Institute of Internal Auditors (IIA). Corporate

Auditing also prepares reports on the audits it has performed, and reports actual or suspected irregularities to the Audit Committee and the Chairman of the Board of Directors. The Audit Committee regularly reviews the scope, plans, and results of Corporate Auditing. The Group pursues a risk-oriented approach to auditing and coordinates internal audit activities with the external auditors on a regular basis. Detailed information on Clariant’s risk management system can be found on page 136 and 137 of this report.

The members of the Executive Committee and their responsibilities until 31 December 2016

HAROLF KOTTMANN, CEO

Responsibilities: Corporate Planning & Strategy, Corporate Sustainability & Regulatory Affairs, Group Communications, Group Human Resources, Investor Relations, Group Legal, and Clariant Excellence with a focus on People Excellence



BRITTA FUENFSTUECK

Responsibilities: Business Units Industrial & Consumer Specialties and Oil & Mining Services, Group IT, Group Procurement, Commercial Excellence, and the regions Latin America and North America



PATRICK JANY, CFO

Responsibilities: Business Units Masterbatches and Functional Minerals, Corporate Accounting, Corporate Auditing, Corporate Controlling, Corporate Tax, Corporate Treasury, Mergers & Acquisitions, Group Compliance, Global Business Services, Operational Excellence, Supply Chain Excellence, and the regions Europe and Middle East & Africa



CHRISTIAN KOHLPAINNER

Responsibilities: Business Units Additives, Catalysts and Pigments, Group Technology & Innovation, Innovation Excellence, and the regions Greater China, India, Japan, and South East Asia & Pacific



Group management

The Executive Committee

The Executive Committee consists of the CEO, the CFO, and two other members. The Executive Committee regularly holds meetings at the Corporate Center in Pratteln or at other Clariant sites worldwide. It uses such external meetings to discuss business performance with the management of the local companies in person.

Members of the Executive Committee

At the end of 2016, the Executive Committee comprised the following members:

Hariolf Kottmann, German citizen

Chief Executive Officer (CEO)

Professional career: Hariolf Kottmann earned his PhD in Organic Chemistry at the University of Stuttgart in 1984. In 1985 he launched his career at the former Hoechst AG in Frankfurt where he held several key management positions across the company's chemical divisions and functions. In 1996 he was appointed Deputy Head of the Basic Chemicals Division at Hoechst AG and took responsibility for the Inorganic Chemicals BU. In 1998 he joined Celanese Ltd in New Jersey (United States) as member of the Executive Committee and Head of the Organic Chemicals BU. In April 2001 he was appointed member of the Executive Committee of SGL Carbon AG, where he was responsible for the Graphite Specialties, Corrosion Protection, and Advanced Materials Divisions as well as the Eastern Europe and Asia regions until 30 September 2008. He was also in charge of the SGL Excellence and Technology & Innovation corporate functions. He became CEO of Clariant on 1 October 2008.

Britta Fuenfstueck, Austrian citizen

Britta Fuenfstueck, following an education in economics, studied engineering physics at the Johannes-Kepler-University of Linz (Austria), where she completed her MSc studies in 1998. In the same year, she began her career as a consultant at Boston Consulting Group in Vienna (Austria). Between 2000 and 2009 she held several positions in marketing and sales as well as director roles in strategy, planning, and mergers & acquisitions in the Healthcare division of Siemens AG in Germany and in the United States. In 2009, she became CEO of the Molecular Imaging Business Unit at Siemens in Chicago, USA. In 2013, she was appointed CEO of the Clinical Products division at Siemens in Erlangen (Germany) and member of the Executive Committee of Siemens Healthcare division. Since 1 April 2016, she has been member of the Executive Committee of Clariant.

Patrick Jany, German citizen

Chief Financial Officer (CFO)

Patrick Jany studied economics at the École Supérieure de Commerce de Paris. He has been Chief Financial Officer at Clariant since 1 January 2006. In 1990 he joined Sandoz – one of Clariant's predecessor companies. He held various positions in Finance and Controlling at Sandoz and Clariant, including Chief Financial Officer for the ASEAN region and Head of Controlling for the Pigments & Additives Division. From 2003 to 2004 he was Head of Country Organization for Clariant in Mexico. Prior to his appointment as CFO, he was Clariant's Head of Corporate Development with responsibility for Group strategy and mergers and acquisitions.

Christian Kohlpaintner, German citizen

Christian Kohlpaintner studied Chemistry at the Technical University of Munich and completed his PhD in 1992. Between 1993 and 1997 he worked in various research departments of Hoechst AG in Germany and the United States. In 1997 he joined Celanese Ltd and held a number of leadership roles at Celanese Chemicals Corporation. In 2002 he became Vice President, Innovation of Celanese Ltd and Executive Director of Celanese Ventures Corporation. From 2003 he was a member of the Executive Committee of Chemische Fabrik Budenheim. In 2005 he became CEO. On 1 October 2009 he was appointed a member of the Executive Committee of Clariant.

Other activities and functions

The members of the Executive Committee neither undertake other activities, nor hold consultancy functions or other offices, except for Hariolf Kottmann, who is a member of the Board of Directors of Clariant Ltd and whose other activities can be found on page 117, and of Christian Kohlpaintner, who is chairman of the university foundation of the Technische Universität München (TUM) in Munich, Germany, member of the Senior Advisory Board of Equity Capital Management GmbH (ECM) in Frankfurt, Germany, and member of the Board of Trustees of the scientific journal »Angewandte Chemie«, Weinheim, Germany.

Management contracts with third parties

There are no management contracts with third parties.

Contractual arrangements for members of the Executive Committee

All members of the Executive Committee hold employment contracts with Clariant International Ltd, the Clariant Group's management company. The contractual provisions are governed exclusively by Swiss law. Contracts of the members of the Executive Committee are subject to a standard notice period of 12 months.

Compensation, shareholdings and loans

Please refer to the Compensation Report, beginning on page 138 and Note 14 (pages 236 and 237) to the Financial Statements of Clariant Ltd.

Remuneration, shareholdings and loans

All information on the remuneration of the Board of Directors and the Executive Committee of Clariant Ltd can be found in the Compensation Report, beginning on page 138.

Shareholders' participation rights

Subject to Article 6 paragraph 2 of the Articles of Association, providing certain limitations on voting by nominees, each registered share entitles the holder to one vote at the Annual General Meeting. Shareholders have the right to receive dividends and such other rights as are granted by the Swiss Code of Obligations. However, only shareholders entered in the Clariant share register may exercise their voting rights.

Voting right restrictions and representation

A registered shareholder may be represented at the Annual General Meeting by another shareholder with the right to vote, a legal representative or by the independent proxy (unabhängiger Stimmrechtsvertreter). The shares held by any one shareholder may be represented by only one representative. There are no special rules for waiving any voting rights restrictions laid down in the Articles of Association. The Articles of Association also do not contain any rules on participation in the Annual General Meeting that differ from the standard terms proposed by law.

Statutory quorums

The quorums laid down in the Articles of Association correspond to those in Article 704 of the Swiss Code of Obligations.

Convocation of the Annual General Meeting

The Articles of Association do not contain any rules that differ from the standard terms proposed by law.

Proposal of agenda items for the 2018 Annual General Meeting

The Articles of Association do not contain any rules that differ from the standard terms proposed by law. Shareholders representing shares with a total par value of CHF 1 million have the right to submit written requests that an item be included on the agenda, at least 45 days prior to the 23rd Annual General Meeting on 19 March 2018. Items to be included on the agenda – with regard to the 2017 financial year – must be submitted no later than 31 January 2018. Such requests must specify the item(s) to be included on the agenda and must contain a proposal on which the shareholder requests a vote.

Entries in the share register

There are no statutory rules concerning deadlines for entry in the share register. However, for practical reasons, the share register will be closed to entries several days before a shareholder meeting. With regard to the financial year 2017, this applies as of Wednesday, 14 March 2018. Shareholders who have been entered into the share register by Tuesday, 13 March 2018, may exercise their right to vote at the Annual General Meeting on 19 March 2018. There are no voting rights restrictions except those mentioned above.

Change of control and defense measures

The limit beyond which the duty to make an offer applies is the same as the statutory minimum, 33 1/3%. There are no clauses on changes of control in agreements with members of the Board of Directors and the Executive Committee as well as other management executives, other than

a) with regard to the Performance Share Units (PSU): PSU invested at the date of change of control vest on a pro rata basis. The Board of Directors is authorized, at its discretion, to assess if the performance targets are met and to decide on settlement in shares or in cash;

b) with regard to the Matching Share Plan (MSP): The blocking period of the Investment Shares of the MSP terminate on the date of the change of control and entitles to receive Matching Shares on a pro rata basis;

c) those set forth in paragraph 4.8 of the Clariant Stock Option Plan (see remarks in Notes to the consolidated financial statements, Note 31 »Employee Participation Plans«, page 215 of the Integrated Report). This authorizes the Board of Directors, at its discretion, to transfer granted options early to participating staff (»accelerated vesting«) or enable the early exercise of the options (»accelerated exercise«) in the case of a change of control.

Information policy

Notices are published, in accordance with Article 42 of the Articles of Association, in the Swiss Official Gazette of Commerce and in daily newspapers specified by the Board of Directors (currently Basler Zeitung, Neue Zürcher Zeitung). Clariant releases its annual financial results in the form of an Integrated Report (formerly annual report) in printed and electronic form. In addition, detailed business figures for the first quarter, half year, nine months and full year are published in electronic form in April, July, October and February of the following year respectively. Current publication dates can be found online in English on our website (www.clariant.com/UpcomingEvents). All information pertaining to investor updates, and presentations at analyst and investor conferences can be obtained online (www.clariant.com) or from the following contact address:

Clariant International Ltd, Investor Relations, Hardstrasse 61,
4133 Pratteln, Switzerland, investor-relations@clariant.com,
Phone + 41 61 469 63 73, Fax + 41 61 469 67 67.

The results for the 2017 financial year will be published as follows:

- Interim Report on the first quarter 27 April 2017
- Interim Report on the first half 27 July 2017
- Interim Report on the nine months 31 October 2017
- Full-Year Results 14 February 2018

The Annual General Meeting for the 2017 financial year will take place on the following date:

19 March 2018

Weblinks:

Clariant website:
www.clariant.com

E-mail distribution list (push system):
www.clariant.com/SubscriptionForm

Adhoc messages (pull system):
www.clariant.com/AdHocNews

Financial reports:
www.clariant.com/Publications

Corporate calendar:
www.clariant.com/UpcomingEvents

Auditors

Duration of the mandate and term of office of the lead auditor

PricewaterhouseCoopers (PwC) has held the mandate since Clariant Ltd was established in 1995. The principle of rotation applies to the lead auditor, Rolf Johner, who was first appointed in April 2016. The Audit Committee ensures that the position of lead auditor is changed at least every seven years.

Auditing fees

PricewaterhouseCoopers received a fee of CHF 5.8 million for auditing the 2016 financial statements (2015: CHF 4.9 million).

Additional fees

PricewaterhouseCoopers received a total fee of CHF 1.8 million for additional services (2015: CHF 2.0 million). These services comprise audit-related services of CHF 0.2 million, consulting services of CHF 0.1 million and tax services of CHF 1.5 million.

Supervisory and control instruments vis-à-vis the auditors

The Audit Committee of the Board of Directors is responsible for overseeing and evaluating the performance of the external auditors on behalf of the Board of Directors and recommends to the Board of Directors whether PwC should be proposed to the Annual General Meeting for reelection. Criteria applied for the performance assessment of PwC include technical and operational competence, independent and objective view, employment of sufficient resources, focus on areas of significant risk to Clariant, ability to provide effective and practical recommendations, and open and effective communication and coordination with the Audit Committee, Cor-

porate Auditing, and management. In 2016, seven joint meetings were held with the external auditor's representatives. These meetings were attended by members of the Audit Committee, the partner and senior manager of the audit firm, Clariant's CFO, the Group Accountant, the Head of Corporate Auditing, the General Counsel and partly the Group Compliance Officer. Depending on the topics to be discussed, the meetings were also attended by the Group Risk Manager. The auditors communicate audit plans and findings to the Audit Committee and issue reports to the Board of Directors in accordance with article 728b of the Swiss Code of Obligations. The Audit Committee's approval is required for all services provided by PwC exceeding a fee volume of CHF 0.2 million. These services may include audit and audit-related services, as well as tax and other services. PwC and the Executive Committee report to the Audit Committee on a regular basis regarding the extent of services provided in conjunction with this approval.

Enterprise risk management (ERM)

Under the Enterprise Risk Management Policy, based on the risk management standard of the Institute of Risk Managers, a tool is used to prepare risk assessments every year by Business Units, Service Units and Regions by assessing threats and opportunities that will impact the objectives set for Clariant overall. These objectives are a result of the overall strategy of the company as set by the Board of Directors and implemented by the Executive Committee.

The Executive Committee is responsible for monitoring the risk management assessments for relevance and consistency.

Objective setting is finalized during the last quarter of the year. These objectives, considering the threats and opportunities, are subject to scrutiny by the Executive Committee during meetings with each Business Unit. Also reviewed and discussed are the measures proposed to maximize opportunities and reduce or contain threats. In that context, mitigation measures are defined and responsibilities are assigned.

The Group, the Business Units and the Regions are also required to make risk assessments on the same criteria. All stakeholders are required to report significant changes to existing identified risks and new threats and opportunities as they arise.

Risk Registers are maintained using an assessment of the financial, operational and reputational impact and the likelihood to score and rank all identified risks. The assessment also addresses the measures in place to manage the risk identified with dates for completion of the measures. Effectiveness of the measures is also assessed.

Once threats and opportunities have been identified and assessed, a qualified individual takes over responsibility for effective risk management. The nature of the risk classification requires different skills to be applied to risk management. The assessments are shared between the stakeholders on a regular basis.

A consolidated risk assessment is presented to the Executive Committee, the Audit Committee, and the Board of Directors. In case of new or changed risks reporting is accelerated.

Summaries of risk assessments from the Business Units, Regions, and Service Units are shared with senior managers of Clariant.

To support functional responsibility, certain functions have access to risk assessments to support them in their roles. Examples are Environmental Safety & Health Affairs (ESHA) to identify key sites for their property risk survey program, Internal Audit, and Group Procurement.

Examples of identified risks included in the risk register:

Regulation and Compliance: Clariant is subject to many rules and regulations as well as compliance standards. These include chemical industry, country, government and customer requirements as well as the European Union's (EU) Regulations on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Corporate Product Stewardship is responsible to manage this task. Specific matters are delegated to Legal, ESHA and Logistics functions.

Sites and Locations: This includes manufacturing plants and equipment that are important for the production of Clariant products for sale to customers. Also addressed are country and culture issues that could create threats and opportunities to business objectives. The objective is to maintain high quality production facilities. Risk management is delegated to ESHA and Regional Services.

Economic Development: The achievement of corporate targets depends on the economic development. Economic development is therefore continuously monitored in all markets. Should a market not develop in line with expectations, the organization will be adjusted accordingly.

Compensation **REPORT**



Clariant's compensation philosophy is aimed at promoting and reinforcing the quality and commitment of employees.

Compensation framework

The purpose of this Compensation Report is to provide a comprehensive overview of Clariant's compensation concept and programs. In addition, it includes the compensation levels of the Board of Directors and the Executive Committee; accordingly, some information given in Note 14, pages 236 to 237, of the Financial Statements of Clariant Ltd is repeated here.

1. Members and responsibilities of the Compensation Committee of the Board of Directors

The Compensation Committee (CoC) during the 2016 reporting year comprised three non-executive members of the Board of Directors: Carlo G. Soave (Chairman), Rudolf Wehrli and Peter Isler (until 21 April 2016). On 21 April 2016, Eveline Saupper was nominated as a new member of the Compensation Committee. The Secretary to the CoC is the Head of Corporate Human Resources. The Chairman of the CoC may invite the CEO to discussions on individual agenda items for consultation, taking into account potential conflicts of interest which would oblige him to abstain.

The CoC establishes principles for the compensation of members of the Board of Directors and submits these to the Board of Directors for approval. The Committee approves the employment contracts of the CEO and members of the Executive Committee (EC), subject to the approval of the total compensation by the Annual General Meeting (AGM). The Committee also takes note of employment contracts for the Heads of Global Functions, Global Business Units, and Region Heads, including their respective compensation.

All appointments and dismissals that are within the purview of the Board of Directors are submitted in advance to the CoC which, with regard to compensation aspects, makes a recommendation to the Board of Directors.

The CoC reviews global bonus, option, and share plans, and makes recommendations to the Board of Directors. Furthermore, the Committee reviews fringe benefit regulations, dismissal regulations, and contractual severance compensation with the CEO, members of the EC, Heads of Global Functions, Global Business Units and Region Heads (always in accordance with the Ordinance against Excessive Compensation in Stock Listed Corporations, OaEC).

As a rule the CoC holds at least three meetings per year:

- a) Winter:** Discussion regarding the executive bonus plan allocation, determination of bonus payments for members of the EC
- b) Summer:** Fundamental matters concerning the Group's HR priorities
- c) Autumn:** Preparation of the Compensation Report and planning of compensation changes in the following year.

The CoC also meets as needed. In 2016 the CoC met three times and held several bilateral discussions and telephone conferences.

2. Compensation concept

Clariant wants to be an attractive employer with the ability to attract and retain qualified employees and experts throughout the world. In particular, Clariant's compensation policy for management is based on the following main principles:

a) The level of total compensation should be competitive and in line with market conditions, and enable Clariant to recruit international, experienced managers and experts, as well as secure their long-standing commitment to the Group. Our understanding of competitiveness is defined in our Positioning Statement. We are aiming for a range between the median and upper quartile of total compensation in the relevant local markets. Through this ongoing benchmarking, we are able to define local compensation structures, e.g. annual pay bands, which will be applied as an important factor in all salary decisions. For the update and accuracy of market conditions, we participate in local compensation benchmarking in all major countries and align all activities through global contracts with the global compensation consultants Hay Group and Mercer. Mercer also has other assignments for Clariant, e.g. in the benefits area. In addition, we encourage local HR managers to participate in local compensation networks and club benchmarks within the chemical industry to ensure access to relevant market information.

POSITIONING STATEMENT

Benefits	Benefits represent local market practice and are aligned with Clariant's global policies.
Long-Term Incentives (LTI) (only ML ¹ 1-4)	Investment reflects long-term commitment and supports our strong dedication to sustainable performance orientation .
Short-Term Incentives (STI)	The annual cash bonus targets aim to be more aggressive than market norms.
Base Salary (BS)	In general, we aim to be at median level in our respective markets and use different sources of compensation surveys (country-oriented, conducted by external consultants, including relevant peer companies in the chemical industry).

¹ ML: Management Level

b) The structure of total remuneration should be highly performance- and success-oriented in order to ensure that shareholder and management interests are aligned. Clariant also defines in the global pay mix that with increasing responsibilities Short-Term and Long-Term Incentives will be increased. Success, in terms of bonus payouts, will generally be measured only in relevant financial Group Performance Indicators. Only if Clariant is successful, profits can be shared with our employees. Details are disclosed in chapter 3, beginning on page 141. Individual performance – measured through a consistent, global Performance Management system – is addressed in career development and annual salary reviews. Thus, each manager's or employee's performance is discussed on a yearly basis. In conjunction with other factors, such as internal and external market conditions, this results in transparency and consistent salary decisions. In general, we apply a four-eyes principle, which includes the involvement of the line manager and next level supervisor, for example, in addition to obtaining guidance from global or local HR processes.

GLOBAL PAY MIX (RELATIVE STRUCTURE) in % of total compensation

CEO	29	40	31
EC	36	33	31
ML 1	42	33	25
ML 2	47	30	23
ML 3	53	26	21
ML 4	65	26	9

■ Base Salary ■ Short-Term Incentives (STI) ■ Long-Term Incentives (LTI)

c) Compensation components should be straightforward, transparent and focused, so as to guarantee all participants (shareholders, members of the Board of Directors, the CEO, members of the EC, and all global Management Levels) the highest degree of clarity and objectives orientation.

In order to uphold these principles, the CoC analyzes and discusses market developments at regular intervals and considers the implications of these developments for Clariant. The Articles of Association (art. 26 ss) of Clariant Ltd – which have been approved in the AGM 2014 – therefore reflect Clariant’s commitment to market practice.

3. Overview of existing bonus plans

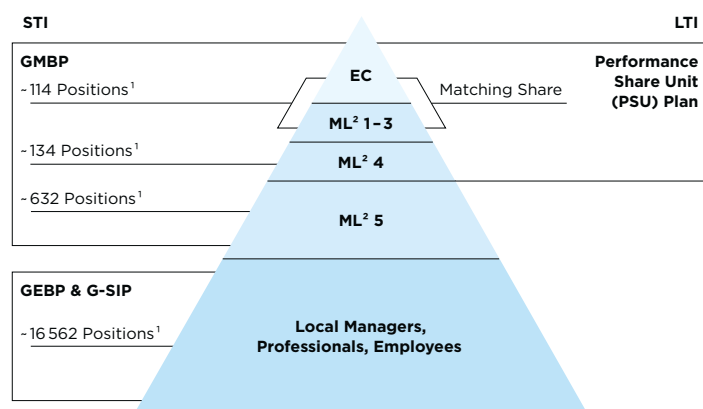
During the previous years, all relevant bonus plans for Short-Term Incentives (STI) and Long-Term Incentives (LTI) have been reviewed and redesigned to ensure the transition of Clariant, and to align with the new business model. The key principles have been to reduce complexity, increase transparency, and ensure a coordinated and unified »One Clariant« approach throughout all employee groups and countries.

The following variable programs are currently in place for Clariant:

3.1. STI: Short-Term Incentive Plans (cash bonus)

- a)** Group Management Bonus Plan (GMBP) – started in 2010
- b)** Group Employee Bonus Plan (GEBP) – started in 2010/2011
- c)** Global Sales Incentive Program (G-SIP) – started in 2011

BONUS LANDSCAPE OF CLARIANT



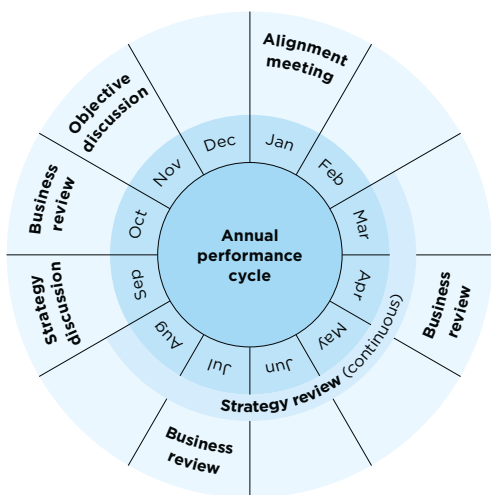
¹ Number of positions as at 31 December 2016
² ML: Management Level

3.2. LTI: Long-Term Incentive Plans (equity-linked bonus)

- a)** Performance Share Unit (PSU) Plan – started in 2013
- b)** Group Senior Management – Long-Term Incentive Plan (GSM-LTIP or Matching Share Plan) – started in 2010
- c)** Restricted shares for the Board of Directors – started in 2012

The **Performance Cycle of Clariant** is based on a 12-month rotation, which starts in November each year with objective discussions focusing on the next business year. Group Performance Indicators (GPI), top priorities, and related projects are included. In January, alignment meetings take place with key leaders of the company in order to cascade GPI objectives and priorities for the new year.

ANNUAL PERFORMANCE CYCLE



3.1. Short-Term Incentive Plans (cash bonus)

a) The **Group Management Bonus Plan (GMBP)** is anchored in the overall Performance Cycle at Clariant. Through intensive discussions and systematic alignment meetings, this cycle ensures a challenging business-specific target agreement for each Business Unit and Service Unit (BU/SU).

The individual amount of bonus payments generated in a year is determined by the achieved result of the Clariant Group measured against clear objectives. The achievement is calculated by means of three elements: financial result of the Group; financial results of Business and Service Units; and defined top priorities (Group Performance Indicators and strategic projects).

As Clariant Performance Cycle agreements with each BU lead to challenging business-specific target settings, and in order to exclude any »windfall profiting« or »hidden buffers«, the maximum bonus payout is explicitly capped at 100 % (= target). These target settings were defined in the fourth quarter of 2015. As outlined in our compensation concept, we aim for a more aggressive pay-mix than is the norm in international markets; thus, this 100-percent approach ensures competitive positioning compared with other companies.

GROUP MANAGEMENT BONUS PLAN (GMBP) 2016 - THREE PILLARS TO BALANCE THE BONUS PLAN

Group Performance Indicators

Group Achievement	Business/Service Achievement			TOP Priorities
How do we as a company perform against our targets?	What are the business results/ contributions of my unit?			Have we acted focused and aligned on our unit priorities?
All BUs and SUs	CC/Cat./NR	P&C	SUs	All BUs and SUs
ROIC (a.e.i.)	EBITDA (b.e.i.) ROS %	EBITDA (b.e.i.) in CHF	Costs	1) Improve Gross Margin IAS, ROS for CC/Cat./NR/all SUs, in CHF for P&C 2) Sustainable Inventory Management 3) CLN-X benefits 4) Productivity 5) Topline Innovation Sales 6) LTAR
Operating Cash Flow (a.e.i.)	BU Cash Flow (a.e.i.)	BU Cash Flow (a.e.i.)		
	LC Growth %			

Target Set (weighting)

Group Achievement	Business/Service Achievement			TOP Priorities
How do we as a company perform against our targets?	What are the business results/ contributions of my unit?			Have we acted focused and aligned on our unit priorities?
All BUs and SUs	CC/Cat./NR	P&C	SUs	All BUs and SUs

EC:

ROIC (a.e.i.): 30 %	40 %
Operating Cash Flow (a.e.i.): 30 %	

BUs:

ROIC (a.e.i.): 5 %	EBITDA (b.e.i.) ROS %: 15 %	EBITDA (b.e.i.) in CHF: 15 %	30 %
Operating Cash Flow (a.e.i.): 5 %	BU Cash Flow (a.e.i.): 30 %	BU Cash Flow (a.e.i.): 45 %	
	LC Growth: 15 %		

SUs:

ROIC (a.e.i.): 5 %	SU Costs: 60 %	30 %
Operating Cash Flow (a.e.i.): 5 %		

Legend:

- a.e.i. = after exceptional items
- b.e.i. = before exceptional items
- BU = Business Unit
- Cat. = Catalysis
- CC = Care Chemicals
- CLN-X = Clariant Excellence
- EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization
- LC = Local currency
- LTAR = Lost Time Accident Rate
- NR = Natural Resources
- NWC = Net Working Capital
- P&C = Plastics & Coatings
- ROIC = Return On Invested Capital
- ROS % = Return On Sales in %
- SU = Service Unit

Achievements & Payouts

Group Achievement	Business/Service Achievement			TOP Priorities
How do we as a company perform against our targets?	What are the business results/ contributions of my unit?			Have we acted focused and aligned on our unit priorities?
All BUs and SUs	CC/Cat./NR	P&C	SUs	All BUs and SUs
100 %	69 – 100 %			60 – 100 %

The corresponding bonus payouts range between **51–100 % (EC = 92 %)**

As a principle, only collective/management team-related target achievements can serve as the basis for individual bonus payouts. An employee's individual performance will be honored in the annual review of total compensation and his/her career development. The prerequisite for this is an integrated People Performance Management, which plays a key role in building a High Performing Workforce and High Performance Culture – as defined in our People Excellence Strategy. In 2012, an adjusted People Performance Cycle was re-launched, including 360-degree feedback for all ML 1 – 5 grades.

The annual evaluation of the achievement of objectives and allocation of funds for the GMBP is conducted by the CoC in February, following the financial year in question, and approved by the Board of Directors. This system ensures that the bonus payments made to employees are closely aligned with the Group's overall results.

b) Cash bonus for non-management-levels: The **Group Employee Bonus Plan (GEBP)** ensures further alignment and standardization to all local bonus plans of the legal entities around the world. In general (where legally compliant and possible), all legal entities will apply the global Group Achievement or a combination of Group results and local Top Priorities as the bonus payout. In selected blue-collar areas (mainly in Asia) we run first Pilots to evaluate the impact of small local productivity schemes to manage Site/Plant performance better.

c) For the sales force: The **Global Sales Incentive Plan (G-SIP)** aims to establish dedicated and globally aligned local Sales Incentive Plans (SIPs) for all Sales Representatives, Sales Managers, and Key Account Managers with clearly allocated annual sales budgets and commercial responsibilities (ML 1 – 4 excluded). The G-SIP focus is on the individual sales performance and underlying Key Performance Indicators in the areas of sales, margin and trade receivables. As an example, a Sales Representative will receive tailor-made individual objectives for his allocated set of clients, which means a concrete sales target in local currencies, a »Commercial Margin« target as an important indicator to measure the margin, and over-dues and receivables as an indicator for trade receivables. Each objective is weighted and can be monitored using existing reporting systems. Thus, the direct impact of individual success on payout can be easily calculated. In 2011 the global roll-out started, and in 2016, approximately 1100 employees from every region were included. Employees can participate only in one global bonus plan (G-SIP or GMBP/GEBP).

3.2. Long-Term Incentive Plans (equity-linked bonus)

Clariant uses equity-based income components for approximately 250 of its senior managers worldwide (EC and ML 1 – 4).

a) The Performance Share Unit (PSU) Plan was introduced in 2013 for all senior managers. Key objective is a strong commitment to a higher profitability for Clariant and therefore the achievement of our 2016 strategic targets.

The term of Clariant's Performance Share Unit Plan is a three-year vesting period. The vesting is conditional upon achievement of the performance target (check after three years). The relevant underlying Key Performance Indicator is EBITDA (before exceptional

items) in percentage of sales and the performance target is to be at or above the median of a defined peer group. If vesting and performance targets are achieved, one PSU will be converted to one Clariant share. The first PSUs were granted in 2013, and in Summer 2016, performance criteria were checked for the first time. The comparison with the peer group revealed that Clariant missed the relevant Performance hurdle (the median of the group) and therefore the PSU for all participants was forfeited (forfeiture took place in September 2016).

Membership is limited to the Executive Committee and selected senior managers of ML 1 – 4 (approximately 1.4 % of employees). Eligible participants will receive a fixed number of PSUs, in accordance with an underlying share price defined over a 10-day trading period. Eligibility and endowment will be reviewed each year that the scheme is in operation. For 2016, the Board of Directors had decided to grant PSUs again in September. The underlying share price was CHF 16.84. The grant was endorsed on 14 September 2016.

If an employee should voluntarily leave Clariant before the vesting period (three years) expires, all rights to shares which have not yet been transferred at that point in time become invalid. In case of retirement, disability or death of the participant, the employee (respectively the estate and/or heirs of the participant in case of death) will receive an immediate vesting on a pro-rata basis, in accordance with published regulations. The vested PSUs remain subject to the performance condition and will be allocated only at the end of the vesting period.

LIST OF RELEVANT PEERS 2016

Akzo	EMS	Mitsui
Albemarle	Evonik	Omnova
Altana	Ferro	Polyone
Ashland	H&R	PPG
Axiall	HB Fuller	RPM International
BASF	Honeywell	Schulman
Borealis	Huntsman	Sherwin Williams
Braskem	ICL	Shinetsu
Cabot	Jiangsu Yoke	Solvay
Celanese	Johnson Matthey	Symrise
Chemtura	Kemira	Teijin
Croda	Kraton	Toray Industries
DIC	Lanxess	Umicore
Dow	LG Chemicals	Valspar
DSM	Lonza	Wacker
DuPont	Lyondell Basell	West Lake Chem
Eastman	Mitsubishi	WR Grace

b) Group Senior Management – Long-Term Incentive Plan (GSM-LTIP) = Matching Share Plan

The Matching Share Plan requires a personal investment decision and fosters the commitment of key managers (approximately 114 positions; EC and ML 1 – 3) for the long-term success of Clariant. Under this plan, key managers have to invest part of their compensation in Clariant shares. Thus, this plan supports senior managers in meeting their requirement to permanently hold a minimum of 20 000 up to 100 000 shares depending on their management level. New participants will now have six years to catch up to the required investment thresholds.

Under the plan, eligible senior managers are entitled to receive a certain fixed percentage (investment quota of 20%) of their annual cash bonus for the respective bonus year in the form of investment shares. Title and ownership in the shares are transferred at allocation (grant in April 2016) of the investment shares. These investment shares will then be blocked and held in a custody account for a period of three years. At the end of the blocking period, the participant is entitled to obtain for each investment share an additional share free of charge (matching share). This matching is subject to the condition of continued employment with Clariant throughout the blocking period. In case of termination of employment before the end of the blocking period, the right to matching shares lapses and a cash amount will be paid instead, equal to the pro rata temporis portion (considering employment during the blocking period).

The senior managers who do not participate in this plan, or do not invest according to the plan regulations, will forfeit 50% of their annual cash bonus (with minimum level at 40% of target cash bonus) and the eligibility to participate in any Long-Term Incentive Programs (including the PSU Plan).

The decision to implement this plan was made to create a strong and sustainable link between the Clariant business cycle and the value development of the company. Senior managers therefore strengthen the entrepreneurial and value-creating spirit of the Clariant Group.

c) Restricted shares for the Board of Directors

This share plan introduced in 2012 allocates shares of Clariant Ltd to members of the Board of Directors. Board Members will receive a fixed portion of the annual fee allocated in the form of shares subject to a blocking period (»Restricted Shares«). The blocking period is three years from the date they are allocated. From the first business day after the blocking period, the Board member may freely dispose of and trade these shares without any further restrictions

(legal restrictions will remain applicable). The allocation is made once a year, at the end of the mandate year, four weeks prior to the Annual General Meeting (AGM).

The value of a grant is determined by the role and responsibility:

Chairman of the Board	CHF 200 000
Vice Chairman	CHF 150 000
Member of Board	CHF 100 000

4. Structure of compensation for members of the Board of Directors

The compensation structure for members of the Board of Directors follows the outlined compensation concept for the performance year 2016.

According to the aforementioned guidelines, remuneration of members of the Board of Directors is made up of the following components:

- a)** Annual basic fee
- b)** Committee membership fees
- c)** Share-based remuneration

Since the performance year 2012, the Board of Directors has decided to abandon option-based compensation for non-executive directors. It was replaced by the grant of restricted stock to enable the Board to participate in the long-term value creation of the company. In addition, a new compensation policy was implemented with effective date 1 April 2012, which focuses more on a stronger acknowledgment of responsibilities and activities inside the committees. The design principles as well as the overall remuneration of the Board of Directors have been kept unchanged since the performance year 2012.

The following graph illustrates the relative structure of the three components for 2016:

RELATIVE STRUCTURE OF TOTAL COMPENSATION (BOARD OF DIRECTORS) in % of total compensation

Chairman of the Board of Directors	46	23	31
Vice Chairman of the Board of Directors	45	20	35
Member of the Board of Directors ¹	43	14	43

■ Honorarium ■ Committee fee¹ ■ Shares (value at grant) ¹Activity-based (assumption for members is minimum = CHF 30 000)

ANNUAL COMPENSATION OF THE BOARD OF DIRECTORS (STRUCTURAL OVERVIEW ONLY) in CHF

	Chairman of the Board	Vice Chairman of the Board	Member of the Board of Directors	Total 2016	Total 2015
Cash compensation					
Honorarium ¹	300 000	200 000	100 000	1 200 000	1 100 000
Committee fee ¹	According to individual activity (see table below)			730 000	730 000
Social contribution					
Relevant amount	According to individual situation ²				
Shares					
Value (at grant) ³	200 000	150 000	100 000	1 050 000	950 000

¹ The Honorarium and fees are paid in cash, in equal parts in March and September.

² Actual details for 2016 see table page 148

³ Shares will be granted at end of the mandate year

COMMITTEE FEE

	Chair	Member
Chairman's Committee	120 000	60 000
Audit Committee	80 000	40 000
Compensation Committee	60 000	30 000
Technology & Innovation Committee	60 000	30 000

In order to fulfill the reporting needs outlined in the Ordinance against Excessive Compensation (OaEC) the relevant Fair Market Value (FMV) figures as earned by the BoD members for the calendar year are disclosed in the following audited table.

2016 ANNUAL COMPENSATION - EMOLUMENTS TO MEMBERS OF THE BOARD OF DIRECTORS (FAIR MARKET VALUE = FMV) in CHF

	Rudolf Wehrli	Günter von Au	Peter Chen	Hariolf Kottmann ¹	Eveline Saupper	Carlo G. Soave	Peter Steiner	Claudia Suessmuth Dyckerhoff	Susanne Wamsler	Konstantin Winterstein	Former BoD Members ³	Totals 2016
Cash compensation												
Honorarium	300 000	200 000	100 000	0	75 000	100 000	75 000	75 000	100 000	100 000	25 000	1 150 000
Committee fee	150 000	130 000	60 000	0	52 500	150 000	105 000	0	30 000	10 000	42 500	730 000
Social contribution												
Relevant amount ⁴	39 164	31 773	18 004	0	15 422	48 396 ²	19 306	11 425	15 899	0	5 508	204 896
Shares												
Fair market value (FMV)	200 005	150 008	100 011	0	75 008	100 011	75 008	75 008	100 011	100 011	25 003	1 000 084
Total 2016 (Fair market value 2016)	689 169	511 781	278 015	0	217 930	398 407	274 314	161 433	245 910	210 011	98 011	3 084 980

2015 ANNUAL COMPENSATION - EMOLUMENTS TO MEMBERS OF THE BOARD OF DIRECTORS (FAIR MARKET VALUE = FMV) in CHF

	Rudolf Wehrli	Günter von Au	Peter Chen	Hariolf Kottmann ¹	Eveline Saupper	Carlo G. Soave	Peter Steiner	Claudia Suessmuth Dyckerhoff	Susanne Wamsler	Konstantin Winterstein	Former BoD Members ³	Totals 2015
Cash compensation												
Honorarium	300 000	200 000	100 000	0	0	100 000	0	0	75 000	100 000	216 668	1 091 668
Committee fee	150 000	100 000	60 000	0	0	127 500	0	0	22 500	40 000	213 334	713 334
Social contribution												
Relevant amount	44 465	30 723	17 927	0	0	41 581 ²	0	0	10 302	0	38 592	183 590
Shares												
Fair market value (FMV) ⁵	200 006	150 008	100 011	0	0	100 011	0	0	75 008	100 011	150 017	875 072
Total 2015 (Fair market value 2015) ⁵	694 471	480 731	277 938	0	0	369 092	0	0	182 810	240 011	618 611	2 863 664

¹ After taking over the function as CEO, no further Board of Directors compensations are extended. Please refer to the Executive Committee table.

² Including additional compensation for project work

³ As former BoD members, the relevant data from Dolf Stockhausen (2015 only), Dominik Koechlin, and Peter Isler are included.

⁴ Includes estimation for future social contribution related to the year 2016

⁵ Correction needed due to adjustments of final share price at grant

In both years there were no payments to former members of the Board of Directors after the mandate year nor were any loans or credits outstanding and/or granted.

Please find on the next page the information about the actual share and option ownership of the Board of Directors.

SHARES HELD BY MEMBERS OF THE BOARD OF DIRECTORS

	Number of shares granted for 2016 ¹	Number of shares granted for 2015 ²	Number of privately held shares at 31 Dec. 2016	Number of privately held shares at 31 Dec. 2015
Rudolf Wehrli	11 765	11 541 (correction of 11 765)	66 438	54 897
Günter von Au	8 824	8 656 (correction of 8 824)	44 212	35 556
Peter Chen	5 883	5 771 (correction of 5 883)	24 475	18 704
Hariolf Kottmann	- ³	- ³	- ³	- ³
Eveline Saupper	5 883	-	6 000	na
Carlo G. Soave	5 883	5 771 (correction of 5 883)	39 575	33 804
Peter Steiner	5 883	-	0	na
Claudia Suessmuth Dyckerhoff	5 883	-	0	na
Susanne Wamsler	5 883	5 771 (correction of 5 883)	964 182 ⁴	955 171 ⁴
Konstantin Winterstein	5 883	5 771 (correction of 5 883)	6 014 515	6 008 744
Former BoD members ⁵	0	5 771 (correction of 5 883)	na	116 204
Total	61 770	49 052 (correction of 50 004)	7 159 397	7 223 080

¹ Number of shares for the mandate year will be defined in February 2017. Underlying assumption here is a share price of CHF 17.00.

² Correction needed due to adjustments of final share price at grant: Underlying assumption was CHF 17.00. Final allocation of shares with CHF 17.33, therefore the numbers of shares are different.

³ See EC overview on page 152

⁴ Thereof 240 271 held by »The Honoré T. Wamsler Trust«

⁵ As former BoD members the relevant data from Dolf Stockhausen (2015 only), Dominik Koechlin and Peter Isler are included.

The compensation for members of the Board of Directors is subject to the Swiss taxation and social security laws, with Clariant paying the employer contributions as required. The members of the Board of Directors do not receive any lump-sum reimbursement of entertainment expenses above and beyond actual expenditure on business trips. For additional information for the Board of Directors, refer to Note 14 of the Notes to the Financial Report of Clariant Ltd, on pages 236 to 237.

In 2016 no more options have been held by members of the Board of Directors, therefore no separate table is displayed. At 31 December 2015 Carlo G. Soave and Dominik Koechlin have held each 24 096 options.

5. Compensation of members of the Executive Committee

The CoC regularly reviews the level and structure of the compensation packages for members of the EC. In 2015/2016 Clariant conducted selected market benchmarks regarding the chemical peers for the EC and the Board of Directors and maintained the survey activities for all global positions around the world. In the Individualized Chemical Benchmark analysis, it was focused on companies which are defined in the relevant peer group of the introduced Performance Share Unit (PSU) Plan (see page 145).

Key focus elements are:

- a) Comparison of management remuneration packages of European chemical companies with global scope
- b) Comparison of management remuneration of Swiss-based multinational companies

The bonus amounts of the total compensation packages are paid out in relation to the achieved results for a particular financial year. The actual bonus amounts may vary between zero and target values (= 100 %) in the financial year in question.

Base salary and variable remuneration

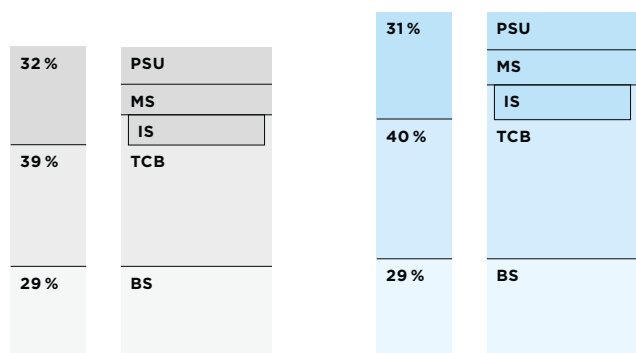
It is important to highlight that the Executive Committee participates in the same bonus programs as the senior managers.

Therefore, they participate in the GMBP, Performance Share Unit Plan and the GSM-LTIP.

As an outcome of the benchmarking exercise, the remuneration structure of the EC was adjusted in 2016 (after a fixation of terms in 2014 and 2015) to the following general structure for 2016 (see chart below).

REMUNERATION STRUCTURE OF THE CLARIANT EXECUTIVE COMMITTEE

CEO Compensation¹



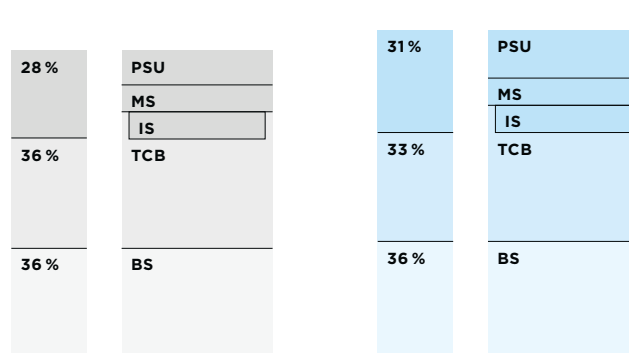
2015 Total target CHF 4.1 m

PSU	CHF 500 000
MS	CHF 400 000
TCB, thereof IS (20% Invest)	CHF 2 000 000 (CHF 400 000)
BS	CHF 1 200 000

2016 Total target CHF 4.56 m

PSU	CHF 500 000
MS	CHF 460 000
TCB, thereof IS (20% Invest)	CHF 2 300 000 (CHF 460 000)
BS	CHF 1 300 000

EC Compensation¹



2015 Total target CHF 2.25 m

PSU	CHF 250 000
MS	CHF 200 000
TCB, thereof IS (20% Invest)	CHF 1 000 000 (CHF 200 000)
BS	CHF 800 000

2016 Total target CHF 2.4 m

PSU	CHF 350 000
MS	CHF 200 000
TCB, thereof IS (20% Invest)	CHF 1 000 000 (CHF 200 000)
BS	CHF 850 000

Legend:

BS = Base salary
 TCB = Target Cash Bonus
 IS = Investment Share
 Investment (minimum 20%) from Actual Cash Bonus into 3 years blocked shares (Value at Grant)

MS = Matching Shares
 1:1 Match of Investment Shares after 3 years vesting period (Value at Grant)
 PSU = Performance Share Unit
 3 years vesting period with defined performance hurdle (Value at Grant)

¹ without other benefits

Other benefits

The members of the EC participate in the pension plans of the Clariant Group, notably the Clariant pension fund with an insured income of up to CHF 200 000 per annum, and the management pension fund with an insured income of up to a further CHF 646 000

per annum. The maximum insured income under the pension plans therefore stands at CHF 846 000 per annum. The CEO participates in Clariant's pension and insurance plans. Additional pension provisions are accrued over time in order to match contractually granted retirement plans.

Clariant's pension plans conform with the legal framework of the occupational pension scheme (BVG). In the future, the maximum contribution will be dynamically aligned with art. 79c BVG. For members of the EC and all other Clariant employees, the insured income is defined as the base salary plus 50% of target cash bonus. Equity-linked income components are not subject to pensionable income. The usual term insurance policies for death and disability form part of Clariant's pension plans. The total employer contribution is approximately 11% of the insured income in the case of the Clariant pension fund, and 22% of the insured income in the case of the Clariant management pension fund. These contributions cover both the contributions to the formation of retirement capital, and the risk components. Under IFRS, the Clariant pension fund is a de-

financed benefit plan. The management pension fund provides the members with retirement capital upon retirement. Pension payments are only accepted in exceptional cases.

The following personnel changes within the Executive Committee occurred: At the end of 2015 Mathias Lütgendorf left the Executive Committee. From April 2016 on, Britta Fuenfstueck joined the Executive Committee. In addition, Christian Kohlpaintner moved to China as an International Assignee.

In accordance with the reporting requirements outlined in the Ordinance against Excessive Compensation (OaEC), the relevant Fair Market Value (FMV) figures are shown in the following audited table.

2016 ANNUAL COMPENSATION TO MEMBERS OF THE EXECUTIVE COMMITTEE (FAIR MARKET VALUE, FMV) in CHF

	Hariolf Kottmann	Other EC members	Totals 2016
Base salary	1 300 000	2 337 500	3 637 500
Cash bonus ¹	1 692 800	2 024 000	3 716 800
Share-based bonus (FMV)	1 297 996	1 982 376	3 280 372
Other benefits ²	1 561 507	1 207 007	2 768 514
Subtotal	5 852 303	7 550 883	13 403 186
Contractual payments to former EC members		2 340 579	2 340 579
Total	5 852 303	9 891 462	15 743 765

2015 ANNUAL COMPENSATION TO MEMBERS OF THE EXECUTIVE COMMITTEE (FAIR MARKET VALUE, FMV) in CHF

	Hariolf Kottmann	Other EC members	Totals 2015
Base salary	1 200 000	2 400 000	3 600 000
Cash bonus ¹	1 585 600	2 576 600	4 162 200
Share-based bonus (FMV)	1 209 158	1 358 480	2 567 638
Other benefits ²	1 674 403	1 588 909	3 263 312
Total	5 669 161	7 923 989	13 593 150

¹ Mandatory to invest 20% of cash bonus into shares. Cash bonus displayed is already without the mandatory investments, which are included in the share-based bonus. Assumptions: share price at grant = CHF 17.00 (not fixed yet, final share price will be fixed in April 2017 and therefore the numbers of shares can change); cash bonus payout = 92.0%

² Other benefits include contributions to pension funds and accrued pension benefits using IAS 19 (67%) and social security (33%). It includes in addition costs related to the international assignment of Christian Kohlpaintner.

In 2016 there were only the contractual payments to leaving members of the Executive Committee made (in 2015 there were no payments). In both years there were no loans or credits outstanding and/or granted.

Including the compensation of Britta Fuenfstueck the total compensation of the Executive Committee sums up to CHF 15 743 765. The amount above CHF 15.0 million (CHF 743 765) is covered by the maximum additional budget for new Executive Committee members as described in article 28 of the Articles of Association.

Excluding Britta Fuenfstueck and including Mathias Lütgendorf the overall total compensation for 2016 of the Executive Committee was CHF 13 766 159 and therefore below the approved budget of CHF 15.0 million (92%). This budget approval was made for the year 2016 at the Annual General Meeting in 2015.

Please find on the next page the information about the actual share ownership of the members of the Executive Committee. No more options are held at 31 December 2015/2016.

EXPLANATION OF NUMBERS OF SHARES GRANTED

	Hariolf Kottmann	Britta Fuenfstueck	Patrick Jany	Christian Kohlpaintner	Total
Number of investment shares ¹	24 895	8 118	10 824	10 824	54 661
Number of matching shares ¹	24 895	8 118	10 824	10 824	54 661
Number of performance share units	29 692	20 784	20 784	20 784	92 044
Total number of shares	79 482	37 020	42 432	42 432	201 366

SHARES HELD BY THE MEMBERS OF THE EXECUTIVE COMMITTEE

	Number of shares granted for 2016 ¹	Number of shares granted for 2015 ²	Number of shares within vesting period for 2016	Number of shares within vesting period for 2015	Number of privately held shares at 31 Dec. 2016	Number of privately held shares at 31 Dec. 2015
Hariolf Kottmann	79 482	72 871 (correction of 72 815)	152 325	202 731	449 135	473 893
Britta Fuenfstueck	37 020	-	20 784	0	0	na
Patrick Jany	42 432	36 436 (correction of 36 408)	84 237	107 526	354 196	304 973
Christian Kohlpaintner	42 432	36 436 (correction of 36 408)	84 237	107 526	280 335	231 112
Former EC members	0	13 090	0	107 526	na	61 830
Total	201 366	158 833 (correction of 158 721)	341 583	525 309	1 083 666	1 071 808

¹ Number of shares only estimated (underlying assumption CHF 17.00 per share and 92.0% bonus payout), will need correction in next year's Annual Report.

² Correction needed due to adjustments of final share price at grant: Underlying assumption was CHF 17.00 per share. Final allocation was done at CHF 16.98.

Report of the statutory auditor to the General Meeting on the Compensation Report 2016

We have audited the Compensation Report of Clariant AG for the year ended 31 December 2016. The audit was limited to the information according to articles 14 – 16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance) contained in the tables labeled »audited« on pages 148 and page 151 of the Compensation Report.

Board of Directors' responsibility

The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance). The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

Auditor's responsibility

Our responsibility is to express an opinion on the accompanying Compensation Report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Compensation Report complies with Swiss law and articles 14 – 16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the Compensation Report with regard to compensation, loans and credits in accordance with articles 14 – 16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the Compensation Report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the pages 148 and 151 of the Compensation Report of Clariant AG for the year ended 31 December 2016 comply with Swiss law and articles 14 – 16 of the Ordinance.

PricewaterhouseCoopers AG



Rolf Johner
Audit expert
Auditor in charge



Ruth Sigel
Audit expert

Basel, 14 February 2017

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CONSOLIDATED BALANCE SHEETS

at 31 December 2016 and 2015

	Notes ¹	31.12.2016 in CHF m	in %	31.12.2015 in CHF m	in %
Assets					
Non-current assets					
Property, plant and equipment	5	2 205		2 083	
Intangible assets	6	1 700		1 350	
Investments in associates and joint ventures	7	516		586	
Financial assets	8	71		77	
Prepaid pension assets	19	36		47	
Deferred tax assets	9	298		256	
Total non-current assets		4 826	57.7	4 399	59.0
Current assets					
Inventories	10	816		811	
Trade receivables	11	1 011		934	
Other current assets	12	344		328	
Current income tax receivables		41		46	
Near-cash assets	13	277		152	
Cash and cash equivalents	14	1 043		789	
Total current assets		3 532	42.2	3 060	41.0
Assets held for sale	25	7	0.1	2	—
Total assets		8 365	100.0	7 461	100.0
Equity and liabilities					
Equity					
Share capital	16	1 228		1 228	
Treasury shares (par value)	16	-29		-34	
Other reserves		229		382	
Retained earnings		1 033		841	
Total capital and reserves attributable to Clariant shareholders		2 461		2 417	
Non-controlling interests		85		77	
Total equity		2 546	30.4	2 494	33.4
Liabilities					
Non-current liabilities					
Financial debts	17	1 908		1 859	
Deferred tax liabilities	9	33		71	
Retirement benefit obligations	19	918		829	
Provision for non-current liabilities	20	157		157	
Total non-current liabilities		3 016	36.1	2 916	39.1
Current liabilities					
Trade and other payables	21	1 228		1 093	
Financial debts	22	957		394	
Current income tax liabilities		305		276	
Provision for current liabilities	20	313		288	
Total current liabilities		2 803	33.5	2 051	27.5
Total liabilities		5 819	69.6	4 967	66.6
Total equity and liabilities		8 365	100.0	7 461	100.0

¹ The notes form an integral part of the consolidated financial statements.

CONSOLIDATED INCOME STATEMENTS

for the years ended 31 December 2016 and 2015

	Notes ¹	2016 in CHF m	in %	2015 ² in CHF m	in %
Sales	23	5 847	100.0	5 807	100.0
Costs of goods sold		-4 077		-4 022	
Gross profit		1 770	30.2	1 785	30.7
Selling, general and administrative costs		-1 138		-1 159	
Research and development costs		-206		-206	
Income from associates and joint ventures	7	86		76	
Operating income		512	8.8	496	8.5
Finance income	28	12		14	
Finance costs	28	-186		-210	
Income before taxes		338	5.8	300	5.2
Taxes	9	-75		-73	
Net result from continuing operations		263	4.5	227	3.9
Attributable to:					
Shareholders of Clariant Ltd		253		217	
Non-controlling interests		10		10	
Net result from discontinued operations	24	—		12	
Attributable to:					
Shareholders of Clariant Ltd		—		12	
Non-controlling interests		—		—	
Net income		263		239	
Attributable to:					
Shareholders of Clariant Ltd		253		229	
Non-controlling interests		10		10	
Basic earnings per share attributable to the shareholders of Clariant Ltd (CHF/share)					
Continuing operations	29	0.78		0.67	
Discontinued operations	29	—		0.04	
Total		0.78		0.71	
Diluted earnings per share attributable to the shareholders of Clariant Ltd (CHF/share)					
Continuing operations	29	0.78		0.67	
Discontinued operations	29	—		0.04	
Total		0.78		0.71	

¹ The notes form an integral part of the consolidated financial statements.

² Reclassified. »Gains from disposals not qualifying as discontinued operations« and »Restructuring, impairment and transaction-related costs« are presented in the functions. For information regarding »Gains from disposal not qualifying as discontinued operations« refer to note 25. For information regarding »Restructuring, impairment and transaction-related costs« refer to note 27.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

for the years ended 31 December 2016 and 2015

	Notes ¹	2016 in CHF m	2015 in CHF m
Net income		263	239
Other comprehensive income:			
Remeasurements:			
Actuarial gain/loss on retirement benefit obligations	19	-261	39
Return on retirement benefit plan assets, excluding amount included in interest expense	19	146	-32
Total items that will not be reclassified subsequently to the income statement, gross		-115	7
Deferred tax effect	9	26	-6
Total items that will not be reclassified subsequently to the income statement, net		-89	1
Net investment hedge	30	-6	66
Cash flow hedge		5	—
Currency translation differences		-24	-404
Share in other comprehensive income of associates and joint ventures	7	-4	1
Effect of the reclassification of foreign exchange differences on previously held net investments in foreign entities		3	-2
Total items that will be reclassified subsequently to the income statement, gross		-26	-339
Deferred tax effect		—	—
Total items that will be reclassified subsequently to the income statement, net		-26	-339
Other comprehensive income for the period, net of tax		-115	-338
Total comprehensive income for the period		148	-99
Attributable to:			
Shareholders of Clariant Ltd		136	-110
Non-controlling interests		12	11
Total comprehensive income for the period		148	-99

¹ The notes form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY in CHF m

at 31 December 2016 and 2015

	Other reserves						Retained earnings	Total attributable to equity holders	Non-controlling interests	Total equity
	Total share capital	Treasury shares (par value)	Share premium reserves	Hedging reserves	Cumulative translation reserves	Total other reserves				
Balance 31 December 2014	1 228	-45	1 577	—	-725	852	574	2 609	124	2 733
Net income							229	229	10	239
Net investment hedge					66	66		66		66
Remeasurements:										
Actuarial gain/loss on retirement benefit obligations (see note 19)						—	39	39		39
Return on retirement benefit plan assets, excluding amount included in interest expense (see note 19)						—	-32	-32		-32
Deferred tax on remeasurements (see note 9)						—	-6	-6		-6
Currency translation differences					-405	-405		-405	1	-404
Share in other comprehensive income of associates and joint ventures (see note 7)						—	1	1		1
Effect of the reclassification of foreign exchange differences on previously held net investments in foreign entities					-2	-2		-2		-2
Total comprehensive income for the period	—	—	—	—	-341	-341	231	-110	11	-99
Distributions			-129			-129		-129		-129
Dividends to non-controlling interests						—		—	-37	-37
Share buyback of non-controlling interests by Clariant Chemicals (India) Ltd (see note 16)						—		—	-21	-21
Employee share & option scheme:										
Effect of employee services						—	13	13		13
Treasury share transactions		11				—	23	34		34
Balance 31 December 2015	1 228	-34	1 448	—	-1 066	382	841	2 417	77	2 494
Net income							253	253	10	263
Cash flow hedge				5		5		5		5
Net investment hedge					-6	-6		-6		-6
Remeasurements:										
Actuarial gain/loss on retirement benefit obligations (see note 19)						—	-261	-261		-261
Return on retirement benefit plan assets, excluding amount included in interest expense (see note 19)						—	146	146		146
Deferred tax on remeasurements (see note 9)						—	26	26		26
Currency translation differences					-26	-26		-26	2	-24
Share in other comprehensive income of associates and joint ventures (see note 7)						—	-4	-4		-4
Effect of the reclassification of foreign exchange differences on previously held net investments in foreign entities					3	3		3		3
Total comprehensive income for the period	—	—	—	5	-29	-24	160	136	12	148
Distributions			-129			-129		-129		-129
Dividends to non-controlling interests						—		—	-17	-17
Transaction with non-controlling interests (see note 16)						—	16	16	13	29
Employee share & option scheme:										
Effect of employee services						—	-3	-3		-3
Treasury share transactions		5				—	19	24		24
Balance 31 December 2016	1 228	-29	1 319	5	-1 095	229	1 033	2 461	85	2 546

The notes form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended 31 December 2016 and 2015

	Notes ¹	2016 in CHF m	2015 in CHF m
Cash flow from operating activities	15	646	502
Investments in property, plant and equipment	5	-297	-374
Investments in financial assets, associates and joint ventures		-8	—
Investments in intangible assets	6	-39	-27
Changes in current financial assets and near-cash assets		-116	7
Sale of property, plant and equipment and intangible assets		43	7
Business acquisitions	26	-421	-22
Proceeds from equity repayment of associates and financial assets		69	—
Proceeds/payments associated to disposals of activities not qualifying as discontinued operations	25	-3	74
Cash flow from investing activities		-772	-335
Purchase of treasury shares		-15	-21
Sale of treasury shares		22	55
Distribution from the reserves to the shareholders of Clariant Ltd	16	-129	-129
Dividends paid to non-controlling interests		-17	-37
Proceeds/payments associated to transactions with non-controlling interests	16	29	-21
Proceeds from financial debts		794	497
Repayments of financial debts		-188	-350
Interest paid		-97	-90
Interest received		12	12
Cash flow from financing activities		411	-84
Currency translation effect on cash and cash equivalents		-31	-42
Net change in cash and cash equivalents		254	41
Cash and cash equivalents at the beginning of the period	14	789	748
Cash and cash equivalents at the end of the period	14	1 043	789

¹ The notes form an integral part of the consolidated financial statements.

Notes to the consolidated financial statements

1. Accounting policies

1.01 – General information

Clariant Ltd (the »Company«) and its consolidated subsidiaries (together the »Group«) are a global leader in the field of specialty chemicals. The Group develops, manufactures, distributes and sells a broad range of specialty chemicals which play a key role in its customers' manufacturing and treatment processes or add value to their end products. The Group has manufacturing plants around the world and sells mainly in countries within Europe, the Americas and Asia.

Clariant Ltd is a limited liability company incorporated and domiciled in Switzerland. The address of its registered office is Rothausstrasse 61, CH-4132 Muttenz, Switzerland. The Company is listed on the SIX Swiss Exchange.

The Board of Directors approved the consolidated financial statements for issue on 14 February 2017. They will be subject to approval by the Annual General Meeting of Shareholders scheduled for 20 March 2017.

1.02 – Basis of preparation

The consolidated financial statements of the Clariant Group have been prepared in accordance with the International Financial Reporting Standards (IFRS) and the IFRIC interpretations applicable to companies reporting under IFRS, and with the significant accounting policies set out below.

The consolidated financial statements have been prepared under the historical cost convention as modified by the revaluation of certain financial assets and liabilities (including derivative instruments) at fair value through profit or loss.

The preparation of financial statements in conformity with the IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. These estimates and judgment affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Although these are based on management's best knowledge of current events and circumstances, actual outcomes may ultimately differ from those estimates. The areas involving a higher degree of judgment or complexity, or areas where estimates are significant to the consolidated financial statements, are disclosed under note 4.

1.03 – Standards, interpretations and amendments effective in 2016

In 2016 amendments to the following accounting standards became effective:

- IFRS 10, Consolidated Financial Statements
- IFRS 11, Joint Arrangements
- IFRS 12, Disclosure of Interests in Other Entities
- IFRS 14, Regulatory Deferral Accounts
- IAS 16 and 38, Clarification of Acceptable Methods of Depreciation and Amortization
- IAS 28, Investments in Associates and Joint Ventures
- Annual improvements to IFRS 2012 to 2014 cycle – various standards

None of these amendments had an impact on Clariant's consolidated financial accounts.

1.04 – Standards, interpretations and amendments not yet effective

The following standards, interpretations and amendments already issued but not yet effective will be adopted by the Group as they become effective.

IFRS 9, Financial Instruments, addresses the classification, measurement and derecognition of financial assets and financial liabilities and introduces new rules for hedge accounting and a new impairment model. The complete version of IFRS 9 was issued in July 2014. It replaces the guidance in IAS 39 that relates to the classification and measurement of financial instruments. The standard is effective for accounting periods beginning on or after 1 January 2018. The Group is in the process of assessing the full impact of IFRS 9 on its consolidated financial statements. Currently it is estimated that the impact of the new standard will primarily be the valuation of certain financial assets.

IFRS 15, Revenue from contracts with customers, deals with revenue recognition and establishes principles for disclosing useful information about revenue and cash flows arising from these contracts. This standard replaces IAS 18, Revenue, and IAS 11, Construction Contracts, and related interpretations. It is effective for accounting periods beginning on or after 1 January 2018. The Group is in the process of assessing the impact of IFRS 15 on its consolidated financial statements. Currently it is estimated that the application of the recognition and valuation rules required by IFRS 15 will not have any material impact on the financial statements of the Group.

In January 2016, the IASB published the new lease standard. IFRS 16, Leases, introduces a new lessee accounting approach by which the lessee will be required to recognize its leases on the balance sheet, by way of the recognition of a »right of use« asset and a lease liability. It also provides new guidance on sale and lease back accounting and requires new and different disclosures. This new standard will replace the guidance of IAS 17, Leases, and is effective for accounting periods beginning on or after 1 January 2019. It is expected that the application of IFRS 16 will entail a substantial increase of Clariant's total assets and liabilities as well as an increase of its operating result and a decrease of its financial result.

There are no other standards, interpretations or amendments already issued but not yet effective that would be expected to have a material impact for the Group.

1.05 – Scope of consolidation

- **Subsidiaries:** Subsidiaries are those entities over which the Group has control. This is the case when it is exposed to, or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group and they are deconsolidated from the date the control ceases.
- **Associates:** Associates are entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method.
- **Joint arrangements:** The Group applies IFRS 11, Joint Arrangements, to all joint arrangements. Under IFRS 11, investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. Clariant has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

All associates and joint ventures apply the same accounting principles as the Group.

1.06 – Principles and methods of consolidation

The annual closing date of the individual financial statements is 31 December. The consolidated financial statements are prepared applying uniform presentation and valuation principles.

The results of non-controlling interests are separately disclosed in the income statement and in the balance sheet.

1.07 – Revenue recognition

Sales of goods, interest income and dividends are recognized in line with the requirements of IAS 18, Revenue.

1.08 – Exchange rate differences

Exchange rate differences are recognized in line with the requirements of IAS 21, The Effect of Changes in Foreign Exchange Rates. The consolidated financial statements are presented in Swiss francs, which is the functional and presentation currency of the parent company.

Income statements and cash flow statements of foreign entities are translated into the Group's presentation currency at sales-weighted average exchange rates for the year and their balance sheets are translated at the exchange rates prevailing on 31 December.

1.09 – Property, plant and equipment

Property, plant and equipment, except for the ones pertaining to mining activities, are valued at historical acquisition or production costs and depreciated on a straight-line basis to the income statement, using the following estimated useful lives in accordance with the Group guidelines:

· Buildings	15 to 40 years
· Machinery and equipment	10 to 16 years
· Furniture, vehicles, computer hardware	3 to 10 years
· Land is not depreciated	

Property, plant and equipment pertaining to mining activities are valued at historical costs and depreciated over their useful lives to the income statement using the units of production method.

When the entity has a present legal or constructive obligation to dismantle an item of property, plant and equipment or restore a site, its initial costs include an estimate of the costs of dismantling and removing the item and restoring the site on which it is located. A corresponding provision is recorded for the amount of the asset component.

Financing costs directly associated with the acquisition, construction or production of qualifying property, plant and equipment are capitalized as a part of the costs of these assets.

1.10 – Intangible assets

Goodwill is recognized as per the requirements of IFRS 3, Business Combinations, IAS 38, Intangible Assets and IFRS 11, Joint arrangements. Goodwill is not amortized, but tested annually for impairment as required by IAS 36, Impairment of Assets.

Trademarks and licenses are capitalized at historical costs and amortized on a straight-line basis to the income statement over their estimated useful lives, with a maximum of ten years.

Acquired computer software licenses are capitalized on the basis of the costs incurred to acquire and bring to use the specific software. They are amortized on a straight-line basis to the income statement over their estimated useful lives (three to five years).

Costs directly associated with the production of identifiable and unique software products controlled by the Group, that will probably generate economic benefits beyond one year, are recognized as intangible assets and depreciated over their useful life of three years. Direct costs include software development costs, personnel costs and advisory costs directly related to the software development and an appropriate portion of the relevant overheads. Costs associated with developing and maintaining common software programs are recognized as an expense when incurred.

Intangibles acquired in a business combination with the exception of mining rights are amortized using a straight-line method over their remaining useful lives as follows:

· Technology	3 to 15 years
· Customer relationships	6 to 20 years
· Tradenames	10 years
· Order backlog	2 years

Mining rights are depreciated over their useful lives using the units of production method.

On 1 June 2007, a European Union regulation on chemicals and their safe use came into effect. It deals with the Registration, Evaluation, Authorization and Restriction of Chemical Substances (REACH). REACH applies to all substances manufactured, placed on the market and used in the European Union, either on their own, in mixtures or in products. REACH requires the registration of certain substances, with annual volumes exceeding a consumption of 1 000 metric tons, by 2010 and various other substances depending on their category by 2018.

As a company active in the chemical industry, Clariant has incurred costs in connection with REACH. Due to their nature, these costs are considered within the context of IAS 38, Intangible Assets, and those qualifying for capitalization are reported as intangible assets. As the initial two phases of the registration were completed in 2010 and 2013 respectively, the corresponding costs capitalized as intangible assets are amortized since 2011 for the first phase and since January 2014 for the second phase on a straight-line basis to the income statement over their estimated useful lives of twelve years.

1.11 – Impairment of assets

Impairment of assets is recognized and disclosed as per the requirements of IAS 36, Impairment of Assets.

1.12 – Non-current assets and disposal groups held for sale

Non-current assets and disposal groups are classified as held for sale when their carrying amount is to be recovered through a sale transaction and a sale is considered highly probable. They are stated at the lower of the carrying amount and fair value less costs of disposal, as per the requirements of IFRS 5, Non-current Assets Held for Sale and Discontinued Operations.

1.13 – Inventories

Purchased goods are valued at acquisition costs, while self-manufactured products are valued at manufacturing costs including related production overhead costs. Inventory held at the balance sheet date is primarily valued at standard costs, which approximates actual costs on a weighted average basis. This valuation method is also used for valuing the costs of goods sold in the income statement. Adjustments are made for inventories with a lower net realizable value. Unsaleable inventories are fully written off. These adjustments are recorded as valuation allowances, which are deducted directly from the inventory value in the balance sheet. The allowances are reversed when the inventories concerned are either sold or destroyed and as a consequence are removed from the balance sheet.

1.14 – Trade receivables

Trade receivables are recognized in accordance with IAS 39, Financial Instruments: Recognition and Measurement.

1.15 – Cash and cash equivalents

Cash and cash equivalents comprise cash in hand, deposits and calls with banks, as well as short-term investment instruments with an initial lifetime of 90 days or less. Bank overdrafts are shown within financial debt in current liabilities on the balance sheet.

1.16 – Derivative financial instruments and hedging

Derivative financial instruments and hedges are recognized in accordance with IAS 39, Financial Instruments: Recognition and Measurement.

1.17 – Leasing

The Group classifies leases into finance and operating leases and recognizes them based on the requirements of IAS 17, Leases.

1.18 – Current income tax

The taxable profits (losses) of Group companies are calculated in accordance with the rules established by the taxation authorities of the countries in which they operate. They are the basis for the determination of income tax payments (reimbursements) for the reporting period in accordance with the prevailing local income tax rates. Current income tax is accounted for in accordance with the requirements of IAS 12, Income Taxes.

1.19 – Deferred income tax

Deferred income tax is calculated using the comprehensive liability method as per the requirements of IAS 12, Income Taxes.

No deferred income tax is calculated for the temporary differences on investments in Group companies, provided that the investor (parent company) is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

1.20 – Employee benefits

Group companies operate various post-employment schemes, including both defined benefit and defined contribution pension plans, post-employment health care plans and other benefits. Obligations for employee benefits are determined and recorded in line with the requirements of IAS 19, Employee Benefits.

Defined contribution plans: Contributions to defined contribution plans are recorded in the income statement in the period to which they relate.

Defined benefit plans: For defined benefit plans, the amount to be recognized in the provision is determined using the projected unit credit method. Independent actuaries perform the actuarial valuations for the defined benefit plans on a regular basis. For the larger plans these valuations take place annually. For the smaller ones valuations are performed at least every three years, with systematic roll-forwards in the years in between.

The retirement benefit obligations recognized in the balance sheet represent the present value of the obligations at the end of the reporting period less the fair value of the plan assets.

Actuarial gains and losses are charged or credited to equity in other comprehensive income in the period in which they arise. Past service costs are recognized immediately in the income statement.

Some Group companies **provide post-employment health care benefits** to their retirees. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment using an accounting method similar to that for the defined benefit pension plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

The charges for defined benefit plans, defined contribution plans and termination benefits are included in personnel expenses and reported in the income statement under the corresponding functions of the related employees or in restructuring expenses.

Other **long-term employee benefits** are employee benefits (other than post-employment benefits and termination benefits) which do not fall wholly due within twelve months after the end of the period in which the employees render the related service. These include long-term compensated absences such as long-service or sabbatical leave and jubilee or other long-service benefits. The accounting policy for other long-term employee benefits is equal to that for post-employment benefits, with the exception that actuarial gains and losses are recognized immediately in the income statement.

Short-term employee benefits are employee benefits (other than termination benefits) which fall due wholly within twelve months after the end of the period in which the employees render the related service.

1.21 – Provisions

Provisions are recognized as per the requirements of IAS 37, Provisions, Contingent Liabilities and Contingent Assets.

1.22 – Research and development

Development expenses are capitalized to the extent that the recognition criteria set up by IAS 38, Intangible Assets, are met.

Considering the uncertainties inherent to the development of new key products, Clariant does not capitalize the associated development costs. Experience has proven that the structure of research and development in the industries that Clariant engages in makes it difficult to demonstrate how single intangible assets (patents) will generate probable future economic benefits.

Laboratory buildings and equipment included in property, plant and equipment are depreciated over their estimated useful lives in accordance with the Group guidelines of note 1.09.

1.23 – Segment reporting

Segment information is presented in the same manner as in the internal reporting on behalf of the chief operating decision maker. The chief operating decision maker, responsible for strategic decisions, for the assessment of the segments' performance and for the allocation of resources to the segments, is the Executive Committee.

On 28 February 2015 Clariant sold its Energy Storage activities pertaining to the Business Area Catalysis & Energy to British-based Johnson Matthey. The assets and liabilities pertaining to that activity were reclassified to held for sale during the fourth quarter of 2014 and removed from the balance sheet on the disposal date.

Clariant has seven Business Units (BU) for external reporting purposes, grouped into four Business Areas (BA) (reportable segments), in accordance with IFRS 8, Operating Segments:

- Care Chemicals (BU ICS)
- Catalysis (BU Catalysts, Energy Storage activities sold in 2015)
- Natural Resources (BU Oil & Mining Services, BU Functional Minerals)
- Plastics & Coatings (BU Additives, BU Masterbatches, BU Pigments)

These four business areas have full responsibility for their operating results. The BUs were grouped into the business areas as a consequence of the common traits regarding products, markets, technologies and cyclicity, as described hereafter:

The Business Area **Care Chemicals** comprises the Industrial & Consumer Specialties (ICS) BU, food additives as well as the future Industrial Biotechnology business. It demonstrates a clear focus on highly attractive, high-margin, and low-cyclicity segments. The BA follows a lifestyle-driven megatrend and strengthens Clariant's image of being a supplier of green and sustainable products.

The Business Area **Catalysis** develops, manufactures, and sells a wide range of catalyst products for the chemical, fuel and automotive industries. The Energy storage activities were divested in 2015. This BA is the smallest within Clariant but is highly profitable with a low cyclicity in line with the investment cycle of the petrochemical industry.

The Business Area **Natural Resources** comprising BUs Oil & Mining Services and Functional Minerals, is characterized by high growth and low cyclicity as well as strong megatrend orientation. Main drivers are the rising demand for high-value added specialty chemicals used in the oil, mining, food and packaging industries, and increased consumption of oil, gas and base metals, driven by the fast-growing economies.

The Business Area **Plastics & Coatings** comprises the BUs Additives, Pigments and Masterbatches. The Business Area has a large exposure to Europe and, as such, is subject to lower growth and to economic cycles. Main drivers are the increasing use of plastics with tailor-made properties in applications such as mobile phones, cars, construction, as well as the rising consumption of plastics in line with increasing wealth.

Corporate: Income and expenses relating to Corporate include the costs of the Corporate headquarters and some of corporate coordination functions in major countries. In addition, Corporate includes certain items of income and expenses, which are not directly attributable to specific business areas, like central R&D costs.

The Group's business areas are segments offering different products. These segments are managed separately because they manufacture, distribute and sell distinct products, which require differing technologies and marketing strategies. These products are also subject to risks and returns that are different from those of other segments.

Segment sales are sales reported in the Group's income statement directly attributable to a segment and the relevant portion of the company income that can be allocated on a reasonable basis to a segment, whether from sales to external customers or from transactions with other segments.

Segment operating expenses are expenses resulting from the operating activities of a segment directly attributable to the segment and the relevant portion of an expense that can be allocated on a reasonable basis, including expenses relating to sales to external customers and expenses relating to transactions with other segments.

Inter-segment transactions are entered into under the normal circumstances and terms and conditions that would also be available to unrelated third parties.

The segment net assets consist of segment assets, primarily property, plant and equipment, intangible assets, inventories and receivables, less segment liabilities. Usually no allocation of Corporate items is made to the segments. Corporate assets and liabilities principally consist of net liquidity (cash, cash equivalents and other current financial assets less financial debts) and deferred and current income taxes.

The Executive Committee assesses the performance of the operating segments based on income statement parameters like third-party sales, EBITDA, operating result and cashflow. Interest income, interest expense and taxes are not allocated to the segments. The return on the capital invested in each segment is measured by the Return on Invested Capital (ROIC).

1.24 – Share capital and other reserves

All issued shares are ordinary shares and as such are classified as equity. Incremental costs, directly attributable to the issue of new shares or options, are shown in equity as a deduction, net of tax, from the proceeds.

Written put options, where Clariant Ltd shares are the underlying, are reported as obligations to purchase Clariant Ltd shares if the number of shares is fixed and physical settlement for a fixed amount of cash is required, in case the option is exercised. At inception, the obligation is recorded at the present value of the settlement amount of the option and the corresponding effect is recognized in shareholders' equity.

The liability is measured subsequently at amortized costs using the effective interest method. Upon settlement of such written put options, the liability is extinguished and the charge to equity is reclassified to the treasury shares.

Clariant Ltd shares, subject to such put options, are not considered to be outstanding for the purpose of basic earnings per share calculations, but are considered for the dilutive earnings per share calculations to the extent that they are dilutive.

Other reserves comprise the following items:

- **Share premium:** The share premium comprises the excess price paid over the par value of the share at the time of issuance of the share capital.
- **Cumulative translation reserves:** The translation reserves comprise the foreign exchange differences arising on the translation of the financial statements of the foreign subsidiaries stated in a currency other than the Group's functional currency. In addition, the cumulative translation reserves comprise the foreign exchange differences arising on the translation of financial liabilities denominated in a currency other than the functional currency of the parent company Clariant Ltd, which are at the same time designated as a hedge of a net investment in a foreign entity.

1.25 – Treasury shares

Treasury shares are deducted from equity at their par value of CHF 3.70 per share. Differences between this amount and the amount paid for acquiring, or received for disposing of treasury shares are recorded in retained earnings.

1.26 – Financial debt

Financial debt is recognized based on the requirements of IAS 39, Financial Instruments: Recognition and Measurement.

1.27 – Financial assets

Financial assets are classified, recognized, measured and, if necessary, impaired based on the requirements of IAS 39, Financial Instruments: Recognition and Measurement. Purchases and sales of financial assets are recognized on settlement date, which is the date on which the Group receives or delivers the assets.

1.28 – Business combinations

The Group applies the acquisition method to account for business combinations in accordance with IFRS 3, Business Combinations, and recognizes any non-controlling interests in the acquiree at fair value (full goodwill method). Acquisition-related costs are expensed as incurred.

2. Enterprise Risk Management Identification, Assessment and Management

Under the Enterprise Risk Management Policy, based on the risk management standard of the Institute of Risk Managers, a tool is used to prepare risk assessments every year by Business Units, Service Units and Regions assessing threats and opportunities that will impact the objectives set for Clariant overall. These objectives are a result of the overall strategy of the Group as set by the Board of Directors and implemented by the Executive Committee.

The Executive Committee is responsible for monitoring the risk management assessments for relevance and consistency.

The objectives are set in the fourth quarter of the year. These objectives together with the threats and opportunities to them are subject to scrutiny by the Executive Committee during meetings with each Business Unit. Also reviewed and discussed are the measures proposed to maximize opportunities and reduce or contain threats. In that context, mitigation measures are defined and responsibilities are assigned.

All stakeholders are required to report significant changes to existing identified risks and new threats and opportunities as they arise.

Risk registers are maintained using financial, operational, reputational impact and probability assessments to score and rank all identified risks. The assessments also address the measures in place to manage the risk identified with dates for completion of the measures. Effectiveness of the measures is also assessed.

When threats and opportunities have been identified and quantified, they are delegated to qualified individuals who are required to deliver effective risk management. Depending on the nature of the risks identified, specific skill sets may be required for the management of those particular risks. The assessments are shared between the stakeholders on a regular basis.

A consolidated risk assessment is submitted to the Executive Committee, the Audit Committee and the Board of Directors for review. In the case of new or changed risks, the reporting procedure is accelerated. Summaries of Business Units, Regions and Services risk assessments are shared with key managers.

To support functional responsibility, certain functions have access to risk assessments to assist them in their roles. Examples of such functions are Environmental Safety & Health Affairs (ESHA) to identify key sites for their property risk survey program, internal audit and group procurement.

Examples of identified risks included in the Risk Register:

2.1 – Regulation & Compliance: Environmental and product risks

Clariant is subject to many rules and regulations as well as compliance standards. These include chemical industry, country, government and customer requirements as well as the European Union's (EU) Regulations on Registration, Evaluation, Authorization and Restriction of Chemical substances (REACH). Corporate Product Stewardship is responsible for the management of this risk. Certain specific matters are delegated to Legal, ESHA and Logistics functions.

2.2 – Site and location

This includes manufacturing plants and equipment important for the production of Clariant products for sale to customers. Also addressed are country and culture issues that could create threats and opportunities to business objectives. The aim is to maintain high-quality production facilities. ESHA and Regional Services are responsible for the management of the associated risks.

2.3 – Economic development

The achievement of targets depends on the economic development, which is therefore continuously monitored in all markets. Should a market not develop in line with expectations, the organization will be adjusted accordingly.

3. Financial risk management

3.1 – Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk, liquidity risk, counterparty risk, (re-)financing and funding risk, and also settlement risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to reduce potential adverse effects on the Group's financial performance at reasonable hedging costs. The Group uses derivative financial instruments, non-derivative financial instruments and operating strategies to hedge certain risks.

Financial risk management is carried out by the central treasury department (Corporate Treasury) under policies approved by the Executive Committee and the Board of Directors. Corporate Treasury identifies, evaluates and hedges financial risks in close cooperation with the Group's operating units and functions. Written principles for the management of overall foreign exchange risk, credit risk for the use of derivative financial instruments, non-derivative financial instruments and investing excess liquidity (counterparty risk) are in place.

Market risk

Foreign exchange risk

· **Exposure to foreign exchange risk:** The Group operates internationally and is exposed to foreign exchange risks arising from various currency exposures, primarily with respect to the euro and the US-dollar and to some extent the currencies of emerging countries. Foreign exchange risks arise from future commercial transactions, recognized assets and liabilities and net investments in foreign operations, when they are denominated in a currency that is not the respective subsidiary's functional currency.

· **Foreign exchange risk management:** To manage the foreign exchange risk arising from future commercial transactions and recognized assets and liabilities, entities in the Group use spot transactions, FX forward contracts, FX options and FX swaps according to the Group's foreign exchange risk policy. Corporate Treasury is responsible, in close coordination with the Group's operating units, for managing the net position in each foreign currency and for putting in place the appropriate hedging actions.

The Group's foreign exchange risk management policy is to selectively hedge net transaction exposures in major foreign currencies.

Currency exposures arising from the net assets of the Group's foreign operations are managed primarily through borrowings denominated in the relevant foreign currency.

Detailed information regarding foreign exchange management is provided in note 30.

· **Foreign exchange risk sensitivity:** The estimated percentage change of the following foreign exchange rates used in this calculation is based on the historical foreign exchange rate volatility for a term of 360 days.

At 31 December 2016, if the euro had strengthened/weakened by 6 % (2015: 22 %) against the Swiss franc with all other variables held constant, pre-tax profit for the year would have been CHF 26 million higher/lower (2015: CHF 32 million lower/higher), mainly as a result of foreign exchange gains/losses on translation of the euro-denominated financing, cash and cash equivalents, intragroup financing and third-party trade receivables and payables. Equity would have been CHF 42 million lower/higher (2015: CHF 194 million lower/higher), arising mainly from foreign exchange gains/losses on translation of the euro-denominated hedging instruments.

At 31 December 2016, if the US-dollar had strengthened/weakened by 8% (2015: 23%) against the Swiss franc with all other variables held constant, pre-tax profit for the year would have been CHF 32 million higher/lower (2015: CHF 121 million higher/lower) mainly as a result of foreign exchange gains/losses on translation of US-dollar denominated cash and cash equivalents, intra-group financing and trade receivables. Equity would have been CHF 24 million lower/higher, arising mainly from foreign exchange gains/losses on the translation of the USD-denominated hedging instruments.

Interest rate risk

- **Exposure to interest rate risk:** Financial debt issued at variable rates and cash and cash equivalents expose the Group to cash-flow interest rate risk; the net exposure as per 31 December 2016 was not significant. Financial debt issued at fixed rates does not expose the Group to fair value interest rate risk because it is recorded at amortized costs. At the end of 2016 and 2015, 100% of the net financial debt was at fixed rates.
- **Interest rate risk management:** It is the Group's policy to manage the costs of interest using fixed and variable rate debt and interest-related derivatives. Corporate Treasury monitors the net debt fix-to-float mix on an ongoing basis.
- **Interest rate risk sensitivity:** To calculate the impact of a potential interest rate shift on profit and loss, a weighted average interest rate change was determined, based on the terms of the financial debt issued at variable rates, fix term deposits and the movements of the corresponding interest rates (interest rates comparison between end of 2016 and end of 2015).

At 31 December 2016, if the euro interest rates on net current financial debt issued at variable interest rates had been 19 basis points higher/lower with all other variables held constant, pre-tax profit for the year would have been CHF 0.8 million higher/lower (2015: CHF 0.3 million lower/higher for a euro interest rate shift of 24 basis points).

Other price risks

With regard to the financial statements as per 31 December 2016 and 2015, the Group was not exposed to other price risks in the sense of IFRS 7, Financial Instruments: Disclosures.

Credit risk

- **Exposures to credit risk:** Credit risk arises from deposits of cash and cash equivalents, from entering into derivative financial instruments and from deposits with banks and financial institutions, as well as from credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions with suppliers. Customer credit risk exposure is triggered by customer default risk and country risk. As per 31 December 2016, the Group had a diversified portfolio with more than 30 000 active credit accounts (2015: more than 28 000), with no significant concentration neither due to size of customers nor due to country risk.
- **Credit risk management:** Clariant has a Group credit risk policy in place to ensure that sales are made to customers only after an appropriate credit risk rating and credit line allocation process. Procedures are standardized within a customer credit risk policy and supported by the IT system with respective credit management tools. Credit lines are partially backed by credit risk insurance.

Ageing balance of trade receivables	31.12.2016	31.12.2015
Not due yet	89%	87%
Total overdue	11%	13%
- less than 30 days	8%	9%
- more than 30 days	3%	4%

Net trade receivables per Group - internal risk category	31.12.2016	31.12.2015
A - low credit risk	27%	21%
B - low to medium credit risk	32%	30%
C - medium to above-average risk	30%	32%
D - high credit risk	11%	16%
N - customers awaiting rating	0%	1%

Financial instruments contain an element of risk that the counterparty may be unable to either issue securities or to fulfill the settlement terms of a contract. Clariant therefore – whenever possible – only cooperates with counterparties or issuers that are at least rated »BB« when it comes to entering into deposits with such counterparties. The cumulative exposure to these counterparties is constantly monitored by Corporate Treasury. There is no expectation of a material loss due to counterparty risk.

The Group maintains a large cash pooling structure with a leading European bank, over which most European subsidiaries execute their cash transactions denominated in euro. As a result of this cash pool the Group at certain times has substantial current financial assets and at other times substantial current financial liabilities. In view of the bank being rated »A+« by the most important rating agencies, Clariant does not consider this to pose any particular counterparty risk.

At the balance sheet date 75 % (2015: 79 %) of the total cash and cash equivalents and near-cash assets were held with five (2015: four) banks, each with a position between CHF 74 million and CHF 494 million (2015: between CHF 75 million and CHF 351 million). All of these banks are rated »A« (2015: »A«) and better.

The table below shows in percentage of total cash and cash equivalents the share deposited with each of the three major counterparties at the balance sheet date (excluding the bank managing the euro cash pool):

Counterparty	Rating	31.12.2016
Bank 1	A	13%
Bank 2	A	9%
Bank 3	A+	9%

Counterparty	Rating	31.12.2015
Bank A	AA	18%
Bank B	A	16%
Bank C	A	8%

Liquidity risk

· **Liquidity risk management:** Cash flow forecasting is performed in the subsidiaries of the Group and in aggregate by Corporate Treasury. Corporate Treasury monitors the forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet its operational needs while maintaining sufficient headroom on its undrawn borrowing facilities. At all times the Group aims to meet the requirements set by the covenants of any of its borrowing facilities. Corporate Management therefore takes into consideration the Group's debt financing plans and financing options.

Cash which is not needed in the operating activities of the Group is invested in short-term money market deposits or marketable securities, if an interest income higher than the one on a regular bank deposit can be achieved. At 31 December 2016, the Group held money market funds of CHF 627 million (2015: CHF 373 million), thereof CHF 277 million with an initial tenor of more than 90 days (2015: CHF 152 million).

The following table analyzes the maturity profile of the Group's financial liabilities. The amounts disclosed are the contractual undiscounted cash flows and therefore do not reconcile with the financial liabilities presented in the consolidated balance sheets.

At 31 December 2016 CHF m	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Borrowings	955	251	1 014	643
Interest on borrowings	74	41	81	26
Finance lease liabilities	1	1	4	17
Trade and other payables	1 228	–	–	–
Derivative financial instruments	2	–	- 5	–

At 31 December 2015 CHF m	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Borrowings	394	654	697	508
Interest on borrowings	68	63	65	33
Finance lease liabilities	2	1	4	19
Trade and other payables	1 093	–	–	–
Derivative financial instruments	1	–	–	–

The Group covers its liabilities out of generated operating cash flow, liquidity reserves in form of cash and cash equivalents including money market deposits (31 December 2016: CHF 1 320 million vs. 31 December 2015: CHF 941 million), out of uncommitted open cash pool limits and bank credit lines (31 December 2016: CHF 132 million vs. 31 December 2015: CHF 173 million), as well as out of additional uncommitted net working capital facilities and through issuance of capital market instruments.

On 16 December 2016, Clariant Ltd signed an agreement for a new CHF 500 million five-year multi-currency revolving credit facility (RCF) with two one-year extension options. The RCF is structured as a club deal with ten key relationship banks with equal stakes and contains an accordion option for an increase up to CHF 600 million. The RCF is structured as a »back-stop« facility for rating purposes to maintain Clariant's liquidity headroom. It contains customary covenants such as negative pledge, cross default, ownership change and restriction on disposals, mergers and subsidiary debt. The Group is required to maintain one financial covenant (debt leverage) that is tested at the end of each financial half year.

3.2 – Fair value measurement

IFRS 13, Fair Value Measurement, requires the disclosure of fair value measurements for financial instruments that are measured at fair value in the balance sheets in accordance with the fair value measurement hierarchy.

The fair value hierarchies are defined as follows:

- **Level 1:** Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- **Level 2:** Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- **Level 3:** Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

Valuation methods

As per 31 December 2016, the open derivative financial instruments held were valued using the following valuation methods:

Forward exchange rate contracts: The valuation of forward exchange rate contracts are based on the discounted cash flow model, using observable inputs such as interest curves and spot rates.

Exchange rate Options: FX Options are valued based on a Black-Scholes model, using major observable inputs such as volatility and exercise prices.

The financial instruments measured at fair value through profit or loss were all classified as Level 2 (see note 30). There were no transfers between the levels in 2016 and 2015.

3.3 – Capital risk management

The Group's objectives when managing capital are to safeguard the ability to continue as a going concern in order to provide returns for the shareholders and benefits for other stakeholders and to maintain a capital structure suitable to optimize the cost of capital.

This includes aspects of the credit rating.

In order to maintain or adjust the capital structure, the Group may adjust the amount of payouts to the shareholders, return capital to the shareholders, issue new shares, or sell assets to reduce debt.

The Group monitors capital on the basis of invested capital as part of the return on invested capital concept. Invested capital is calculated as the sum of total equity as reported in the consolidated balance sheets plus current and non-current financial liabilities as reported in the consolidated balance sheets plus estimated liabilities from operating leases, plus estimated cash needed for operating purposes, less cash and cash equivalents and near-cash assets not needed for operating purposes.

Invested capital for the Group was as follows on 31 December 2016 and 2015 respectively:

CHF m	2016	2015
Total equity	2 546	2 494
Total current and non-current financial liabilities	2 865	2 253
Estimated operating lease liabilities	460	421
Less cash and cash equivalents and near-cash assets*	-1 320	-941
Cash needed for operating purposes	117	116
Invested capital	4 668	4 343

* Near-cash assets represent deposits over 90 days.

At the end of 2016, Clariant considers the invested capital to be adequate.

4. Critical accounting estimates and judgments

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations on future events that are believed to be reasonable under the circumstances.

The Group makes estimates and takes assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

4.1 – Estimated impairment of goodwill, intangibles and property, plant and equipment

The Group tests annually whether goodwill has suffered any impairment in accordance with the requirements of IAS 36, Impairment of Assets. The recoverable amounts of all cash generating units have been determined based on value-in-use calculations.

The recoverable value of intangibles and property, plant and equipment is also assessed applying value-in-use calculations. These calculations require the use of estimates, in particular in relation to the expected growth of sales, the discount rates, the development of raw material prices and the success of restructuring measures implemented (see notes 5 and 6).

4.2 – Environmental liabilities

The Group is exposed to environmental regulations in numerous jurisdictions. Significant judgment is required in determining the worldwide provision for environmental remediation. The Group constantly monitors its sites to ensure compliance with legislative requirements and to assess the liability arising from the need to adapt to changing legal demands. The Group recognizes liabilities for environmental remediation based on the latest assessment of the environmental situation of the individual sites and the most recent requirements of the respective legislation. Where the final remediation results in expenses that differ from the amounts previously recorded, such differences impact the income statement in the period in which such determination is made (see notes 20 and 34).

4.3 - Income tax and other taxes

The Group is subject to income tax and other taxes in numerous jurisdictions. Significant judgment is required in determining the worldwide provision for income tax and other taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain at the time a liability must be recorded. The Group recognizes liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts initially recorded, such differences impact the income tax and deferred tax provisions in the period in which such determination is made (see note 9).

As a substantial part of Clariant's activities are based in Germany, this is where the largest tax risks arise.

Some subsidiaries generate tax losses. Often these can be used to offset taxable gains of subsequent periods. The Group constantly monitors the development of such tax loss situations. Based on the business plans for the subsidiaries concerned, the recoverability of such tax losses is determined. In the case that a tax loss is deemed to be recoverable, the capitalization of a deferred tax asset for such a tax loss is then decided. The time horizon for such a calculation is in line with the mid-term planning scope of the Group.

4.4 - Estimates for the accounting for employee benefits

IAS 19, Employee Benefits, requires that certain assumptions are made in order to determine the amount to be recorded for retirement benefit obligations and pension plan assets, in particular for defined benefit plans. These are mainly actuarial assumptions such as expected future salary increases, long-term increase in health care costs, average life expectancy and discount rates. Substantial changes in the assumed development of any of these variables may significantly change the Group's retirement benefit obligation and pension assets (see note 19).

5. Property, plant and equipment

in CHF m	Land	Buildings	Machinery and equipment	Furniture, vehicles, computer hardware	Assets under construction	Total 2016
Cost						
As per 1 January	408	1 722	2 673	340	427	5 570
Additions	—	11	56	15	215	297
Acquired in business combinations (see note 26)	4	17	20	28	1	70
Reclassified to held for sale (see note 25)	-6	—	—	—	—	-6
Disposals	-13	-17	-27	-22	—	-79
Reclassifications	11	54	114	42	-221	—
Exchange rate differences	—	-2	-90	-7	5	-94
At 31 December	404	1 785	2 746	396	427	5 758
Accumulated depreciation and impairment						
As per 1 January	-108	-1 142	-1 975	-262	—	-3 487
Reclassified to held for sale (see note 25)	1	—	—	—	—	1
Disposals	1	7	26	21	—	55
Depreciation	—	-47	-133	-30	—	-210
Impairment (see note 27)	—	-3	-6	—	—	-9
Reclassifications	—	1	16	-17	—	—
Exchange rate differences	1	4	84	8	—	97
At 31 December	-105	-1 180	-1 988	-280	—	-3 553
Net book value	299	605	758	116	427	2 205

in CHF m	Land	Buildings	Machinery and equipment	Furniture, vehicles, computer hardware	Assets under construction	Total 2015
Cost						
As per 1 January	452	1 936	3 005	369	161	5 923
Additions	2	13	38	19	302	374
Acquired in business combinations	—	4	5	—	—	9
Disposals	-2	-72	-133	-24	—	-231
Reclassifications	1	23	13	14	-22	29
Exchange rate differences	-45	-182	-255	-38	-14	-534
At 31 December	408	1 722	2 673	340	427	5 570
Accumulated depreciation and impairment						
As per 1 January	-125	-1 292	-2 107	-282	-13	-3 819
Disposals	—	72	133	22	—	227
Depreciation	—	-47	-128	-28	—	-203
Impairment (see note 27)	—	-1	-1	—	—	-2
Reclassifications	7	13	-60	-2	13	-29
Exchange rate differences	10	113	188	28	—	339
At 31 December	-108	-1 142	-1 975	-262	—	-3 487
Net book value	300	580	698	78	427	2 083

Impairments recognized in 2016 and 2015 arose as a result of restructuring measures entailing site closures.

In 2016 Clariant sold office buildings in Germany and in China realizing a gain of CHF 23 million.

As at 31 December 2016, commitments for the purchase of property plant and equipment concerned various projects mainly in Germany, Saudi Arabia and in the United States and totalled CHF 49 million (2015: CHF 105 million).

As per 31 December 2016, property, plant and equipment acquired by way of finance lease, with costs of CHF 18 million (2015: CHF 24 million) and a net book value of CHF 9 million (2015: CHF 11 million) were recorded.

In a number of cases Clariant companies act as lessors in operating lease arrangements. This concerns exclusively land and buildings, mainly in Germany and Switzerland. The net book value of land and buildings subject to such arrangements amounted to CHF 167 million (gross book value of CHF 651 million, accumulated depreciation and impairment of CHF 484 million) on 31 December 2016 (2015: gross book value of CHF 667 million, accumulated depreciation and impairment of CHF 499 million and a net book value of CHF 168 million). Leasing income in the reporting period amounted to CHF 15 million (2015: CHF 16 million). Expected minimum lease income varies between CHF 8 million and CHF 13 million (2015: CHF 10 million and CHF 15 million) per annum for the next five years and amounts to CHF 107 million for later periods (2015: CHF 116 million).

6. Intangible assets

in CHF m	Goodwill	Technology	Customer relationships	Trade names	Other	Total 2016
Cost						
As per 1 January	1 263	192	270	108	330	2 163
Additions	—	—	—	—	39	39
Acquired in business combinations (see note 26)	176	31	114	2	22	345
Disposals	-7	—	-2	—	-10	-19
Exchange rate differences	5	—	7	—	-2	10
At 31 December	1 437	223	389	110	379	2 538
Accumulated amortization and impairment						
As per 1 January	-244	-121	-174	-69	-205	-813
Disposals	7	—	2	—	10	19
Amortization	—	-15	-10	-9	-21	-55
Exchange rate differences	10	—	-2	—	3	11
At 31 December	-227	-136	-184	-78	-213	-838
Net book value	1 210	87	205	32	166	1 700

in CHF m	Goodwill	Technology	Customer relationships	Trade names	Other	Total 2015
Cost						
As per 1 January	1 324	187	187	74	259	2 031
Additions	—	—	—	—	27	27
Acquired in business combinations (see note 26)	4	2	1	—	9	16
Disposals	—	-30	—	-3	-3	-36
Reclassifications	30	42	87	37	63	259
Exchange rate differences	-95	-9	-5	—	-25	-134
At 31 December	1 263	192	270	108	330	2 163
Accumulated amortization and impairment						
As per 1 January	-210	-86	-51	-38	-159	-544
Disposals	—	30	—	3	3	36
Amortization	—	-15	-8	-7	-24	-54
Impairment (see note 27)	-7	—	—	—	-4	-11
Reclassifications	-30	-53	-115	-27	-34	-259
Exchange rate differences	3	3	—	—	13	19
At 31 December	-244	-121	-174	-69	-205	-813
Net book value	1 019	71	96	39	125	1 350

Amortization is allocated to the line in the income statement, which represents the function to which the intangible asset pertains.

In 2016 no impairments were recognized. Impairments recognized in 2015 arose as a result of the restructuring measures and the disposal projects.

As per end of 2016, other intangible assets include costs in the amount of CHF 49 million (2015: CHF 44 million) capitalized in connection with the REACH regulation and CHF 46 million (2015: CHF 23 million) of capitalized internally generated intangibles.

Impairment test for goodwill. Goodwill is allocated to the Group's cash generating units (CGU). Cash generating units consist of Business Units which are for external reporting purposes reported under the corresponding business areas (reportable segments, see note 1.23).

Goodwill is allocated to the following CGUs:

in CHF m	31.12.2016	31.12.2015
Industrial & Consumer Specialties	70	46
Masterbatches	175	174
Pigments	18	18
Functional Minerals	143	143
Catalysis	628	622
Oil & Mining Services	176	16
Total net book value	1 210	1 019

The recoverable amount for all CGUs is determined based on their value-in-use. The value-in-use calculations use cash flow projections based on financial budgets approved by the Board of Directors covering a four-year period. Beyond this four-year period growth in accordance with market growth (2%) is assumed. The main assumptions used for cash flow projections are EBITDA in percent of sales and sales growth. The assumptions regarding these two variables are based on Management's past experience and future expectations of business performance. The pre-tax discount rates used are based on the Group's weighted average cost of capital. The assumed pre-tax discount rate was 10.27% for all cash generating units (2015: 11.31%).

For all CGUs it was assumed that they achieve sales growth in line with or higher than market growth based on the specific strategic plans for the respective CGUs. It was also assumed that the EBITDA in percent of sales will improve over present performance as a result of the continuous improvement measures implemented. The conclusion was that the net present value of the expected cash flows exceeds the carrying amount of the net assets allocated on a value-in-use basis of all CGUs.

The estimated recoverable amount of the CGU Catalysts exceeds its carrying amount including goodwill by CHF 247 million. The recoverable amount would be equal to the carrying amount if the assumed average annual sales growth rate during the planning period were reduced by 2.0%, or alternatively, if the operating margin was reduced by 2.6% of sales.

7. Investments in associates and joint ventures

in CHF m	2016	2015
As per 1 January	586	635
Change in the scope of consolidation	-6	-13
Additions	5	7
Impairment (see note 27)	1	-1
Share in profit	85	77
Equity repayment	-64	-
Share in other comprehensive income of associates and joint ventures	-4	1
Dividends received	-85	-57
Exchange rate differences	-2	-63
At 31 December	516	586
Thereof joint ventures	185	177

The key financial data of the Group's principal associates is as follows:

INVESTMENTS IN ASSOCIATES:										
	Stahl Lux 2 SA		Infraserv GmbH & Co. Höchst KG		Infraserv GmbH & Co. Gendorf KG		Infraserv GmbH & Co. Knapsack KG		Others	
	Luxembourg		Germany		Germany		Germany			
in CHF m	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Summarized financial information										
Interest held %	24%	24%	33%	32%	50%	50%	21%	21%	—	—
Revenue	661	619	1 030	1 112	240	231	202	193	329	289
Total comprehensive income	78	56	72	75	13	17	16	13	26	9
Net income	78	56	78	77	18	14	16	13	26	9
Other comprehensive income	—	—	-6	-2	-5	3	—	—	—	—
Current assets	367	342	295	300	67	57	58	57	253	214
Non-current assets	262	348	623	653	159	147	108	98	145	146
Current liabilities	-132	-143	-221	-220	-63	-37	-45	-41	-164	-150
Non-current liabilities	-607	-313	-417	-417	-64	-71	-29	-29	-97	-100
Net assets	-110	234	280	316	99	96	92	85	137	110
Reconciliation of book value										
Book value beginning of period	180	187	104	123	51	50	17	19	57	66
Additions	—	—	—	—	—	—	—	—	5	7
Change in the scope of consolidation	—	—	—	—	—	—	—	—	-6	-13
Impairment	—	—	—	—	—	—	—	—	1	-1
Share in profit for the period	18	11	26	26	9	10	4	3	16	10
Share in other comprehensive income	—	—	-2	-1	-2	2	—	—	—	—
Equity repayment	-64	—	—	—	—	—	—	—	—	—
Dividends received	-33	—	-30	-32	-6	-6	-3	-3	-8	-5
Foreign exchange rate differences	-1	-18	—	-12	-2	-5	—	-2	—	-7
Book value end of the period	100	180	98	104	50	51	18	17	65	57
Group's Share in net assets	-26	54	93	101	50	48	19	18	65	57
Fair value adjustment/Goodwill	124	124	—	—	—	—	—	—	—	—
Taxes, Minorities and other adjustments	2	2	5	3	—	3	-1	-1	—	—
Book value at the end of the period	100	180	98	104	50	51	18	17	65	57

In 2014 Clariant sold its Leather Service Business to the Netherlands-based Stahl group for a cash consideration and a 24 % stake in the acquiring group. Stahl is a producer of high-quality chemicals, dyes and coatings for leather and other applications and has about 1 700 employees.

The Infraserv companies were set up by the former Hoechst group to cater to the infrastructure needs of its subsidiaries in Germany prior to 1997. The shareholdings in associates summarized under »Others« concern mainly companies specializing in selling Clariant products.

On 31 December 2016, accumulated unrecognized losses amounted to CHF 12 million (2015: CHF 18 million).

The key financial data of the Group's principal joint ventures is as follows:

INVESTMENTS IN JOINT VENTURES:

in CHF m	Scientific Design Company Inc.		Süd-Chemie India Pvt Ltd.	
	USA		India	
	2016	2015	2016	2015
Summarized financial information				
Interest held %	50%	50%	50%	50%
Revenue	80	85	81	98
Total comprehensive income	8	8	15	21
Net income	8	8	15	23
Other comprehensive income	—	—	—	-2
Current assets	76	84	179	172
Non-current assets	30	29	13	14
Current liabilities	-19	-20	-87	-82
Non-current liabilities	-8	-8	-5	-5
Net assets	79	85	100	99
Reconciliation of book value				
Book value beginning of period	95	108	82	82
Share in profit for the period	4	5	8	12
Dividends received	—	-7	-5	-4
Foreign exchange rate differences	1	-11	—	-8
Book value end of the period	100	95	85	82
Group's Share in net assets at the end of the period	39	42	50	49
Fair value adjustment/Goodwill	66	66	28	28
Taxes, Minorities and other adjustments	-5	-13	7	5
Book value at the end of the period	100	95	85	82

Scientific Design Company Inc. is a producer of ethylene and oxide catalysts headquartered in the United States and has around 140 employees. Co-owner is the Saudi Arabia-based Sabic group.

Süd-Chemie India Pvt Ltd is a producer of syngas, air purification and refinery catalysts. It has around 400 employees and is headquartered in India. It is co-owned by private investors based in India.

8. Financial assets

in CHF m	2016	2015
As per 1 January	77	44
Additions	9	2
Reclassified to/from other current assets (see note 12)	—	38
Repayments and disposals	-17	-4
Exchange rate differences	2	-3
At 31 December	71	77

Financial assets include loans to joint ventures, loans arising on disposals and a number of small-scale participations in companies, mostly in Germany and in Switzerland, engaged in activities closely related to the ones of Clariant.

In 2016, Clariant acquired a 17% stake in BioSpectrum Inc, a South Korean leading developer and supplier of specialty active cosmetics' ingredients derived from Asia's diverse flora. The purchase price amounted to CHF 8 million.

Loans are carried at amortized cost.

Financial assets are mostly denominated in euros, US-dollars and in Swiss francs.

9. Taxes

in CHF m	2016	2015
Current income taxes	-119	-76
Deferred income taxes	44	2
Total taxes	-75	-74
Thereof reported under discontinued operations	—	1
Total continuing operations	-75	-73

The main elements contributing to the difference between the Group's overall expected tax expense/rate and the effective tax expense/rate are:

	2016		2015	
	in CHF m	in %	in CHF m	in %
Income before taxes from continuing operations	338		300	
Income before taxes from discontinued operations	—		13	
Income before taxes total	338		313	
Expected tax expense/rate¹	-55	16.3	-62	19.8
Effect of taxes on items not tax-deductible	-35	10.4	-24	7.7
Effect of utilization and changes in recognition of tax losses and tax credits	3	-0.9	13	-4.2
Effect of tax losses and tax credits of current year not recognized	-10	3.0	-8	2.6
Effect of adjustments to taxes recognized in prior periods	-13	3.8	-2	0.6
Effect of tax-exempt income	32	-9.5	14	-4.5
Effect of other items	3	-0.9	-5	1.6
Effective tax expense/rate	-75	22.2	-74	23.6
Thereof reported under discontinued operations	—	—	1	-0.3
Effective tax expense/rate continuing operations	-75	22.2	-73	23.3

¹ Calculated based on the income before tax of each subsidiary (weighted average).

In 2016, the effective tax rate compared to the expected tax rate was adversely impacted by the non-recognition of deferred tax asset on tax losses incurred by subsidiaries mainly in China and Canada and more expenses being considered as not tax deductible due to changes in legislation. On the other hand, the effective tax rate was positively influenced by the utilization of previously unrecognized tax losses/tax credits by subsidiaries in particular in Switzerland and newly recognized tax losses/tax credits in the United States.

The movement of the net deferred income tax balance is as follows:

in CHF m	PPE and intangible assets	Retirement benefit obligations	Tax losses and tax credits	Other accruals and provisions	Total	Thereof offset within the same jurisdiction	Total
Deferred tax assets at 31 December 2014	50	173	135	112	470	-199	271
Deferred tax liabilities at 31 December 2014	-253	—	—	-18	-271	199	-72
Net deferred tax balance at 1 January 2015	-203	173	135	94	199	—	199
Charged/credited to income from continuing operations	101	-11	-3	-86	1		
Effect of disposals	1	—	—	—	1		
Total charged/credited to income statement	102	-11	-3	-86	2		
Charged/credited to other comprehensive income	—	-6	—	—	-6		
Exchange rate differences	16	-10	-5	-11	-10		
Net deferred tax balance at 31 December 2015	-85	146	127	-3	185	—	185
Deferred tax assets at 31 December 2015	88	148	128	—	364	-108	256
Deferred tax liabilities at 31 December 2015	-173	-2	-1	-3	-179	108	-71
At 1 January 2016	-85	146	127	-3	185	—	185
Charged/credited to income statement	77	-2	-16	-5	54		
Effect of disposals	2	-8	—	-4	-10		
Total charged/credited to income statement	79	-10	-16	-9	44		
Charged/credited to other comprehensive income	—	26	—	—	26		
Effect of business combinations	—	—	—	1	1		
Exchange rate differences	-1	1	—	9	9		
Net deferred tax balance at 31 December 2016	-7	163	111	-2	265	—	265
Deferred tax assets at 31 December 2016	156	163	111	6	436	-138	298
Deferred tax liabilities at 31 December 2016	-163	—	—	-8	-171	138	-33
Net deferred tax balance at 31 December 2016	-7	163	111	-2	265	—	265

Of the deferred tax assets capitalized on tax losses, CHF 68 million refer to tax losses of the US subsidiaries (2015: CHF 76 million), CHF 8 million to tax losses of the Spanish subsidiaries (2015: CHF 10 million), CHF 6 million to tax losses of the Italian subsidiaries (2015: CHF 8 million). The capitalized tax losses of the Swiss subsidiaries (2015: CHF 4 million) were utilized in 2016. Clariant considers it is highly probable that these tax losses can be recovered.

Deferred income tax liabilities have not been established for withholding tax and other taxes that would be payable on the unremitted earnings of certain foreign subsidiaries, as such amounts are currently regarded as permanently reinvested. These unremitted earnings totaled CHF 2 317 million at the end of 2016 (2015: CHF 1 734 million). The change compared to the prior year is essentially the result of Group-internal transactions.

The tax losses on which no deferred tax assets are recognized are reviewed for recoverability at each balance sheet date. The largest part of these tax losses arose in Switzerland (with a weighted average tax rate of 20.7%), in France (with a tax rate of 33.3%), in China (with a tax rate of 25%) and in Luxembourg (with a tax rate of 27.1%). At present their recoverability is not considered probable.

Tax losses on which no deferred tax assets were recognized are as follows:

in CHF m	31.12.2016	31.12.2015
EXPIRY BY:		
2016	—	71
2017	56	60
2018	25	22
2019	32	32
2020	47	—
after 2020 (2015: after 2019)	291	260
Total	451	445

Tax credits amounting to CHF 16 million were entirely recognized in 2016. They expire in and after 2021.

Temporary differences on which no deferred tax was recognized amount to CHF 1 038 million in 2016 (2015: CHF 953 million).

10. Inventories

in CHF m	31.12.2016	31.12.2015
Raw material, consumables, work in progress	322	343
Finished products	494	468
Total	816	811

in CHF m	2016	2015
Movements in write-downs of inventories		
As per 1 January	-32	-35
Additions	-15	-21
Reversals	10	19
Exchange rate differences	—	5
At 31 December	-37	-32

As at 31 December 2016 and 2015, no inventories were pledged as collateral for liabilities.

The costs for raw materials and consumables recognized as an expense and included in »Costs of goods sold« amounted to CHF 2 454 million (2015: CHF 2 400 million).

11. Trade receivables

in CHF m	31.12.2016	31.12.2015
Gross accounts receivable – trade	1 032	949
Gross accounts receivable – associates and joint ventures	9	13
Less: provision for doubtful accounts receivable	-30	-28
Total	1 011	934

The following summarizes the movement in the provision for doubtful accounts receivable:

in CHF m	2016	2015
As per 1 January	-28	-31
Charged to the income statement	-13	-21
Amounts used	3	10
Acquired in business combinations	-2	—
Unused amounts reversed	9	8
Effect of disposals	—	1
Exchange rate differences	1	5
At 31 December	-30	-28

Of the total provision for doubtful accounts receivable, the following amounts concern trade receivables that were individually impaired:

in CHF m	31.12.2016	31.12.2015
Trade receivables aged up to six months	-4	-2
Trade receivables aged over six months	-15	-9
Total provision for individual impairment	-19	-11

There is no concentration of credit risk with respect to trade receivables, as the Group has a large number of internationally dispersed customers.

The Group recognizes the impairment of trade receivables in »Selling, general and administrative costs« in the income statement.

The maximum credit risk on trade receivables is equal to their fair value.

Collaterals are only required in rare cases (2016: CHF 2 million, 2015: CHF 1 million).

The carrying amounts of the Group's trade receivables are denominated in the following currencies:

in CHF m	31.12.2016	31.12.2015
EUR	347	360
USD	320	268
CNY	70	61
BRL	51	40
JPY	35	37
INR	23	22
Other	165	146
Total	1 011	934

As of 31 December 2016, »Total trade receivables – net« include an amount of CHF 143 million (2015: CHF 138 million) past due, but not impaired. These relate to a number of customers for whom there is no recent history of default.

The ageing analysis of these trade receivables is as follows:

in CHF m	31.12.2016	31.12.2015
Up to three months past due, but not impaired	120	119
Three to six months past due, but not impaired	10	10
More than six months past due, but not impaired	13	9
Total	143	138

12. Other current assets

Other current assets include the following:

in CHF m	31.12.2016	31.12.2015
Other receivables	238	228
Current financial assets	47	48
Prepaid expenses and accrued income	59	52
Total	344	328

Other receivables include, among others, staff loans and advances, VAT and sales tax receivables.

Other receivables are recognized at amortized cost in the balance sheet.

Current financial assets are mainly made up of notes receivables and short-term loans. These are classified as loans and receivables and recognized at amortized cost in the balance sheet.

The book value of current financial assets, recognized at amortized cost, equals their fair value.

There was no impairment of current financial assets in 2016 and 2015.

Other receivables are denominated in the following currencies:

in CHF m	31.12.2016	31.12.2015
CHF	34	23
EUR	70	77
USD	14	9
JPY	17	17
BRL	23	13
CNY	10	9
INR	9	13
Other	61	67
Total	238	228

Current financial assets are denominated in the following currencies:

in CHF m	31.12.2016	31.12.2015
CHF	29	29
USD	11	7
CNY	6	9
EUR	1	1
INR	—	2
Total	47	48

The maximum exposure to credit risk of other current assets at the reporting date is their fair value.

13. Near-cash assets

Near-cash assets include short-term deposits with an original maturity between 90 and 365 days.

Near-cash assets are denominated in the following currencies:

in CHF m	31.12.2016	31.12.2015
EUR	209	133
CHF	40	4
GBP	28	15
Total	277	152

14. Cash and cash equivalents

in CHF m	31.12.2016	31.12.2015
Cash at bank and on hand	693	568
Short-term bank deposits	350	221
Total	1 043	789

Cash and cash equivalents are denominated in the following currencies:

in CHF m	31.12.2016	31.12.2015
EUR	510	176
USD	174	300
CHF	182	108
GBP	47	96
CNY	30	32
JPY	10	8
INR	19	7
BRL	7	4
Other	64	58
Total	1 043	789

The effective average annual interest rate on short-term bank deposits in Swiss francs was 0.00 % (2015: 0.04 %); these deposits have an average maturity of 4 days (2015: 66 days).

The effective average annual interest rate on short-term bank deposits in euros was 0.05 % (2015: 0.05 %); these deposits have an average maturity of 53 days (2015: 90 days).

The effective average annual interest rate on short-term bank deposits in US-dollars was 0.73 % (2015: 0.28 %); these deposits have an average maturity of 30 days (2015: 38 days).

The effective average annual interest rate on short-term bank deposits in British pounds was 0.52 % (2015: 0.48 %); these deposits have an average maturity of 48 days (2015: 50 days).

There were no short-term bank deposits denominated in currencies other than the Swiss franc, the euro, the US-dollar and the British pound at the end of the reporting period.

The maximum exposure to credit risk on cash and cash equivalents is equal to their book value.

15. Cash flow from operating activities

for the years ended 31 December 2016 and 2015

	Notes		2016 in CHF m	2015 in CHF m
Net income			263	239
Adjustment for:				
Depreciation of property, plant and equipment	5	210		203
Impairment	27	8		14
Depreciation of intangible assets	6	55		54
Impairment of working capital		24		52
Income from associates and joint ventures	7	-85		-77
Tax expense	9	75		74
Net financial income and costs	28	109		100
Gain/loss from disposals not qualifying as discontinued operations	25	3		-15
Loss on disposals of discontinued operations	24	–		2
Other non-cash items		20		41
Total reversal of non-cash items			419	448
Dividends received from associates and joint ventures	7		85	57
Income taxes paid			-66	-96
Payments for restructuring	27		-37	-78
Cash flow before changes in net working capital and provisions			664	570
Changes in inventories			-20	-28
Changes in trade receivables			-80	-79
Changes in trade payables			17	39
Changes in other current assets and liabilities			12	-7
Changes in provisions (excluding payments for restructuring)			53	7
Cash flow from operating activities			646	502

16. Changes in share capital and treasury shares and changes in non-controlling interests

	Number of shares 2016	Par value 2016 in CHF m	Number of shares 2015	Par value 2015 in CHF m
Registered shares each with a par value of CHF 3.70 (2015: CHF 3.70)				
Share capital as per 1 January	331 939 199	1 228	331 939 199	1 228
Share capital at 31 December	331 939 199	1 228	331 939 199	1 228
Treasury shares	-7 887 728	-29	-9 195 810	-34
Outstanding share capital at 31 December	324 051 471	1 199	322 743 389	1 194
Treasury shares (number of shares)			2016	2015
Holdings as per 1 January			9 195 810	12 087 920
Shares purchased at market value			819 813	1 016 761
Shares sold to counterparty out of options (management options 2010)			—	-2 077 650
Shares sold at market value			-1 240 318	-1 016 741
Shares transferred to employees			-887 577	-814 480
Holdings at 31 December			7 887 728	9 195 810

All shares are duly authorized and fully paid in.

Dividends are paid out as and when declared equally on all shares, excluding treasury shares. The information concerning payments per share to the shareholders are disclosed in the notes to the financial statements of Clariant Ltd.

In accordance with article 5 of the company's Articles of Incorporation, no limitations exist with regard to the registration of shares which are acquired in one's own name and on one's own account. Special rules exist for nominees.

In accordance with article 13 of the company's Articles of Incorporation, each share has the right to one vote.

Significant shareholdings of 3% or more of total share capital

Based on the notifications received by Clariant and published by SIX Exchange Regulation, as at 31 December 2016 the following shareholders held more than 3% of voting rights in Clariant Ltd:

Shareholders	Voting rights
Group of former shareholders of Süd-Chemie AG ¹	13.89%
Thereof (as a separate sub-group): Blue Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany) and Maple Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany) ²	3.73%
APG Asset Management N.V., Amsterdam, Netherlands	5.01%
BlackRock Inc., New York	3.08%
Cymbria, Canada EdgePoint Global Portfolio, Canada EdgePoint Canadian Growth and Income Portfolio, Canada EdgePoint Canadian Portfolio, Canada EdgePoint Global Growth and Income Portfolio, Canada St. James Place Global Equity Unit Trust, UK	3.06%
Citadel Multi-Strategy Equities Sàrl Citadel Global Equities Fund Sàrl Citadel Securities (Europe) Limited	3.02%
Norges Bank (the Central Bank of Norway)	3.003%
UBS Funds Management (Switzerland) AG	3.001%

¹ The following former shareholders of Süd-Chemie AG form a group:
 Wilhelm, Dr. Winterstein, Germany
 Konstantin Alfred Winterstein, Germany
 Dolf, Dr. Stockhausen, Switzerland
 Max-Theodor, Dr. Schweighart, Germany
 Axel, Dr. Schweighart, Germany
 Peter, Dr. Schweighart, Germany
 Rosemarie Schweighart, Germany
 Moritz Ostenrieder, Germany
 Dominique Kraus, Germany
 Christian Ratjen, Germany
 Karl, Dr. Wamsler, Germany
 Bettina Wamsler, Germany
 Irene W. Banning, USA
 Pauline Joerger, USA
 Susanne Wamsler-Singer, Austria
 Marianne Kunisch, Germany
 Caroline A., Dr. Wamsler, USA
 Maximilian Ratjen, Germany
 Amelie Ratjen, Germany
 Julius Ratjen, Germany
 Christof Ratjen, Germany
 Elisabeth Prinzessin zu Sayn-Wittgenstein,
 Germany
 Christopher Weithauer, Germany
 Georg A. Weithauer, Germany
 Johanna Bechtle, Germany
 Charlotte Bechtle, Germany
 Kaspar Bechtle, Germany
 Clara Redetzki, Germany
 Luisa Redetzki, Germany
 Karl T. Banning, USA
 Marie Redetzki, Germany
 Schuyler H. Joerger, USA
 Sophia P. Joerger, USA

² According to a disclosure notification published on 18 January 2013, a group consisting of Konstantin Winterstein, 80333 München, Germany and Elisabeth Prinzessin zu Sayn-Wittgenstein, 80333 München, Germany holds 3.73% partially through Blue Beteiligungsgesellschaft mbH, Grossdingharting (Germany) and partially through Maple Beteiligungsgesellschaft mbH, Grossdingharting (Germany). The 3.73% held by this group are included in the 13.89% mentioned under footnote 1, but build a separate sub-group.

Disclosure notifications during the financial year 2016 reported to the Stock Exchange Disclosure Office pursuant to Art. 120 of the Financial Markets Infrastructure Act (FMIA) as well as further information in relation to disclosure notifications can be found on the SIX Swiss Exchange reporting platform: www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html

As of 31 December 2016, former shareholders of Süd-Chemie AG, who had exchanged their shares against Clariant shares in April 2011, held a total of 13.89% of the share capital of Clariant Ltd. These shareholders are related to each other for family or other reasons (especially the Wamsler, Winterstein, Schweighart and Stockhausen families).

In addition, at 31 December 2015, the following shareholders held a participation of 3% or more of the total share capital:

Group of former shareholders of Süd-Chemie AG: 13.89%, thereof (as a separate sub-group): Blue Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany) and Maple Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany): 3.73%; APG Asset Management N.V., Amsterdam, Netherlands: 5.01%; Cymbria, (Canada): 3.06%, Black Rock Inc., New York: 3.05%.

At 31 December 2016, Clariant AG itself held 7 887 728 shares in treasury, corresponding to 2.38% of the share capital.

Distribution to shareholders

On 21 April 2016 the Annual General Meeting of Clariant Ltd approved a distribution from the confirmed capital contribution reserves of CHF 0.40 per share. This was paid out on 28 April 2016 reducing the capital contribution reserves by CHF 129 million.

Non-controlling interests

In December 2016 Clariant sold shares of Clariant Chemicals (India) Ltd in the stock market for an amount of CHF 29 million. As a result the percentage of non-controlling interests in this company increased from 35.8% to 49%. The transaction resulted in a gain of CHF 16 million, which was recognized in equity.

In October 2015 Clariant Chemicals (India) Ltd engaged in a share buyback. This resulted in the amount of CHF 21 million being paid out to minority shareholders and CHF 29 million to Group-internal parent companies. As a consequence the percentage of non-controlling interests in this company decreased from 36.6% to 35.8%.

At 31 December 2016, non-controlling interests reported are primarily made up of those of the three following companies. They amount to more than 65% of the minority shares reported:

Clariant Huajin Catalysts (Panjin) Ltd, reported sales in the amount of CHF 28 million in the reporting period and total assets in the amount of CHF 35 million as per 31 December 2016. The non-controlling interests of 40% of the shares outstanding is held by Northern Huajin Chemical Industry Group Co. Ltd.

Clariant Chemicals (India) Ltd reported sales in the amount of CHF 140 million in the reporting period and CHF 135 million of total assets as per 31 December 2016. The non-controlling interests of 49% of the shares outstanding is traded on the Bombay Stock Exchange (BSE) in Mumbai.

Clariant Catalysts (Japan) K.K. reported sales in the amount of CHF 148 million in the reporting period and CHF 96 million of total assets as per 31 December 2016. The non-controlling interests of 38.6% of the shares outstanding are held by Nissan Chemicals Industries Ltd.

17. Non-current financial debts

in CHF m	Interest rate in %	Term	Notional amount	Net amount 31.12.2016	Net amount 31.12.2015
Certificate of indebtedness	mixed	2011-2016	123 EUR m	—	134
Straight bond	5.625	2012-2017	500 EUR m	537	540
Straight bond	3.125	2011-2017	100 CHF m	100	100
Straight bond	2.500	2012-2018	250 CHF m	250	249
Straight bond	3.250	2012-2019	285 CHF m	285	285
Certificate of indebtedness	mixed	2015-2020	150 EUR m	161	162
Certificate of indebtedness	1.012	2016-2020	157 EUR m	169	—
Certificate of indebtedness	6 m EURIBOR +1.05	2016-2020	55 EUR m	59	—
Certificate of indebtedness	0.779	2016-2021	55 EUR m	59	—
Certificate of indebtedness	3 m LIBOR + 1.5	2016-2021	166 USD m	169	—
Certificate of indebtedness	2.618	2016-2021	111 USD m	112	—
Straight bond	3.500	2012-2022	175 CHF m	174	174
Certificate of indebtedness	mixed	2015-2023	150 EUR m	161	162
Certificate of indebtedness	6 m EURIBOR +1.1	2016-2023	13 EUR m	14	—
Certificate of indebtedness	1.137	2016-2023	27 EUR m	28	—
Certificate of indebtedness	1.501	2016-2023	73 EUR m	79	—
Straight bond	2.125	2014-2024	160 CHF m	160	160
Certificate of indebtedness	2.010	2016-2026	15 EUR m	16	—
Total straight bonds and certificates of indebtedness				2 533	1 966
Liabilities to banks and other financial institutions				1	16
Obligations under finance leases				11	11
Subtotal				2 545	1 993
Less: current portion (see note 22)				-637	-134
Total				1 908	1 859
Breakdown by maturity					
			2017	—	654
			2018	251	250
			2019	285	285
			2020	389	162
			2021	341	—
			after 2021 (2015: after 2020)	642	508
Total				1 908	1 859
Breakdown by currency					
			CHF	869	968
			EUR	756	888
			USD	281	—
			Others	2	3
Total				1 908	1 859
Fair value comparison (including current portion)					
Straight bonds				1 569	1 600
Certificates of indebtedness				1 026	458
Others				12	27
Total				2 607	2 085

On 21 April 2016, the certificate of indebtedness in 2011 with a notional amount of EUR 123 million reached maturity and was repaid.

On 26 April 2016, Clariant issued four certificates of indebtedness with a total amount of EUR 300 million. These certificates have a term of 4 years (EUR 212 million), 7 years (EUR 73 million) and 10 years (EUR 15 million) respectively. The interest varies between 1.012 % and 2.010 %.

On 5 August 2016 Clariant issued five certificates of indebtedness with total amounts of EUR 95 million and USD 277 million. These certificates have terms of 5 years (EUR 55 million and USD 277 million) and 7 years (EUR 40 million). The interest varies between 0.779 % and 2.618 %, while a tranche of EUR 13 million has a variable interest of 6 months EURIBOR plus 1.1 % and a tranche in the amount of USD 166 million has a variable interest of 3 months LIBOR plus 1.5 %.

On 17 April 2015, Clariant issued four certificates of indebtedness with a total amount of EUR 300 million. These certificates have a term of 5 years (EUR 150 million) and 8 years (EUR 150 million) respectively. For each term there is one certificate with a fixed (based on mid-swap) and one with a floating (based on six months EURIBOR) coupon.

On 9 December 2015, the straight bond issued in 2011 with a notional amount of CHF 200 million reached maturity and was repaid.

Valuation. Non-current financial debt is recognized initially at fair value, net of transaction costs incurred. Financial debt is subsequently stated at amortized cost. There are no long-term financial liabilities valued at fair value through profit and loss.

Fair values of straight bonds are determined by quoted market prices (Level 1 in the fair value hierarchy).

Certificates of indebtedness and other financial debts are recorded at notional amounts, which are a reasonable approximation of the fair values.

Covenants. For the covenants please refer to note 3.1 Financial risk factors.

Exposure of the Group's borrowings to interest rate changes

- Bonds: the interest rates of all bonds are fixed.
- Certificates of indebtedness: the major part of the existing certificates of indebtedness has a fixed coupon.
- Liabilities to banks and other financial institutions consist of bank loans with fixed interest rates mainly.

Collateral. In 2016 and 2015, no assets were pledged as collateral.

18. Reconciliation of net debt

CHF m	31.12.2015	Movements in cash flow	Exchange rate differences	Other non-cash movements	31.12.2016
Cash and cash equivalents	789	285	-31	—	1 043
Near-cash assets	152	127	-2	—	277
Financial instruments with positive fair values	—	5	—	—	5
Total cash and liquid investments	941	417	-33	—	1 325
Non-current financial debt	-1 859	-700	14	637	-1 908
Current financial debt	-394	94	-20	-637	-957
Borrowings and other financial liabilities	-2 253	-606	-6	—	-2 865
Net debt	-1 312	-189	-39	—	-1 540

CHF m	31.12.2014	Movements in cash flow	Exchange rate differences	Other non-cash movements	31.12.2015
Cash and cash equivalents	748	84	-43	—	789
Near-cash assets	180	-23	-5	—	152
Total cash and cash equivalent	928	61	-48	—	941
Non-current financial debt	-1 761	-311	79	134	-1 859
Current financial debt	-430	164	6	-134	-394
Borrowings and other financial liabilities	-2 191	-147	85	—	-2 253
Net debt	-1 263	-86	37	—	-1 312

19. Retirement benefit obligations

Apart from the legally required social security schemes, the Group has numerous independent pension plans. The assets are principally held externally. For certain Group companies however, no independent assets exist for the pension and other non-current employee benefit obligations. In these cases the related liability is included in the balance sheet as part of the non-current liabilities.

Defined benefit post-employment plans. Defined benefit pensions and termination plans cover the majority of the Group's employees. Future obligations and the corresponding assets of those plans considered as defined benefit plans under IAS 19 (revised) are reappraised annually and reassessed at least every three years by independent actuaries. Assets are valued at fair value.

Pension assets for funded defined benefit pension plans are managed according to local rules and legislation in each country.

The actual asset allocation is determined by current and expected economic and market conditions and in consideration of specific asset class risks in the risk profile. For this purpose Asset Liability Matching studies are conducted by third-party experts on a regular basis to ensure that investment strategies for pension assets are in line with the structure of the plan members of the pension plan concerned.

In all countries with funded defined benefit plans the body governing the investment policy is constituted in accordance with local legal requirements. To the extent legally permitted Clariant Corporate exercises influence to ensure that the investment policy is set in a way to serve best the needs of the pension plan and its members.

The largest defined benefit plans are operated in Switzerland, the United Kingdom, the United States and Germany. These plans make up 94 % of the total defined benefit obligation.

The most important German plan is unfunded and covers the supplementary pension liabilities for plan members whose salaries exceed the level of the German mandatory social security coverage. Contributions are made primarily by the employer and vary depending on the salary level of the plan members. Employees contribute to the plan up to 2 % of pensionable earnings on a voluntary basis, to which the employer contributes an equal amount on top of the regular contributions. Benefits are paid out as annual pensions amounting to 20 % of total contributions. Lump sum payments to employees are possible to the extent of the voluntary contributions. In addition there exists a smaller, similarly structured funded defined benefit plan for former employees of the Süd-Chemie group, acquired in 2011. All other pension liabilities regarding German staff members are covered by a funded multi-employer plan which is accounted for as a defined contribution plan.

The defined benefit obligation in the United Kingdom is a funded plan covering the pension liabilities of UK employees who joined the company before 31 December 2001 and was closed to further accruals in April 2016. All staff members are now covered by a defined contribution plan. The defined benefit pension plan is fully funded according to legal requirements. Yet, in view of the high number of non-active plan members, additional contributions may be necessary in future years.

In the United States Clariant operates a funded defined benefit pension plan covering the pension liabilities of employees who joined the company before 31 December 2000. Contributions are paid by the employer exclusively. Benefits are paid out as lifetime pensions determined on the basis of a final/career average calculation. Staff members who joined on 1 January 2001 or later are covered by a defined contribution plan. For members of Management whose annual salaries exceed the amount of CHF 265 000 an additional pension scheme is in place in the form of an unfunded defined benefit obligation, which covers the part exceeding this amount. The US pension plan is currently underfunded according to local legal requirements. Additional funding measures in the amount of up to CHF 51 million are scheduled over the next six years. US- employees transferred to Clariant with the Hoechst Specialty Chemicals business remain insured with Hoechst for their pension claims incurred prior to 30 June 1997.

In Switzerland, Clariant operates a funded defined benefit pension plan that covers the pension liabilities of all employees of the Swiss Clariant companies up to a salary level of CHF 200 000.

Both the employer and the employees contribute to the plan, the employer paying two thirds of the total contributions. The pension plan provides lifetime pensions determined based on cumulative savings of the individual plan member and converted into an annual pension at a fixed conversion rate. Lump sum payments are possible up to 40 % of the total individual cumulative savings.

The Swiss pension plan is marked by a shrinking operating basis, and as a result, an increasing share of retired members. Additional funding measures in the amount of CHF 38 million are therefore scheduled over the next nine years.

For members of Management whose annual salaries exceed the amount of CHF 200 000, an additional pension scheme is in place in the form of a funded defined benefit obligation.

Any shortfalls in funded provisions for pension commitments to members of the Executive Committee are accounted for as an unfunded defined benefit obligation.

Post-employment medical benefits. The Group operates a number of post-employment medical benefit schemes in the United States, Canada and France. The method of accounting for the liabilities associated with these plans is largely equal to the one used for defined benefit pension schemes. These plans are not externally funded, but are recognized as provisions in the balance sheets of the Group companies concerned.

Expenses for net benefits are recorded in the same line and function in which the personnel costs are recorded.

Changes in the present value of defined benefit obligations are as follows:

in CHF m	Pension plans (funded and unfunded)		Post-employment medical benefits (unfunded)	
	2016	2015	2016	2015
As per 1 January	2 551	2 714	81	88
Current service cost	38	39	1	1
Past service cost/gain including curtailments	5	-22	—	—
Gain/loss on settlements	-2	—	—	—
Interest costs on obligation	54	58	3	3
Contributions to plan by employees	11	11	—	—
Benefits paid out to personnel in reporting period	-121	-113	-4	-5
Remeasurements:				
Actuarial gain/loss arising from changes in demographic assumptions	37	-6	2	-1
Actuarial gain/loss arising from changes in financial assumptions	188	-27	2	-2
Actuarial gain/loss due to experience adjustments	33	-1	-1	-2
Effect of disposals	—	-1	—	—
Effect of settlements	-1	-7	—	—
Exchange rate differences	-64	-94	3	-1
At 31 December	2 729	2 551	87	81

Changes in the fair value of plan assets are as follows:

in CHF m	2016	2015
As per 1 January	1 850	1 896
Interest income on plan assets	38	43
Contributions to plan by employees	11	11
Contributions to plan by employer	56	59
Benefits paid out to personnel in reporting period	-100	-90
Remeasurements:		
Return on plan assets (excluding amount included in interest expense)	146	-32
Effect of settlements	-1	-5
Effect of disposals	—	-1
Exchange rate differences	-66	-31
At 31 December	1 934	1 850

As at 31 December 2016 and 2015, the pension plan assets did not include any directly held registered shares or bonds issued by Clariant Ltd.

The amounts recognized in the balance sheets are as follows:

in CHF m	Defined benefit pension plans		Post-employment medical benefits		Total	
	31.12.2016	31.12.2015	31.12.2016	31.12.2015	31.12.2016	31.12.2015
Present value of funded obligations	-2 123	-1 988	—	—	-2 123	-1 988
Fair value of plan assets	1 934	1 850	—	—	1 934	1 850
Overfunding/Deficit	-189	-138	—	—	-189	-138
Present value of unfunded obligations	-606	-563	-87	-81	-693	-644
Net liabilities in the balance sheet	-795	-701	-87	-81	-882	-782

Thereof recognized in:

in CHF m	31.12.2016	31.12.2015	31.12.2016	31.12.2015	31.12.2016	31.12.2015
	Retirement benefit obligations	-831	-748	-87	-81	-918
Prepaid pension assets	36	47	—	—	36	47
Net liabilities in the balance sheet for defined benefit plans	-795	-701	-87	-81	-882	-782

The amounts recognized in the income statement and in other comprehensive income are as follows:

in CHF m	Defined benefit pension plans		Post-employment medical benefits		Total	
	2016	2015	2016	2015	2016	2015
Current service cost	-38	-39	-1	-1	-39	-40
Net interest cost	-16	-15	-3	-3	-19	-18
Past service cost/gain including curtailments	-5	22	—	—	-5	22
Gain/loss on settlements	2	—	—	—	2	—
Components of defined benefit expense reported in the income statement	-57	-32	-4	-4	-61	-36
Actuarial gain/loss arising from changes in demographic assumptions	-37	6	-2	1	-39	7
Actuarial gain/loss arising from changes in financial assumptions	-188	27	-2	2	-190	29
Actuarial gain/loss due to experience adjustments	-33	1	1	2	-32	3
Return on plan assets (excluding amount included in net interest expense)	146	-32	—	—	146	-32
Components of defined benefit expense reported in other comprehensive income	-112	2	-3	5	-115	7
Total defined benefit expense	-169	-30	-7	1	-176	-29

The fair value of the plan assets is split into the major assets categories as follows:

in CHF m	31.12.2016	31.12.2015
Equities	533	541
<i>thereof based on quoted market prices</i>	523	541
Bonds	627	611
<i>thereof based on quoted market prices</i>	613	499
Cash	66	64
<i>thereof based on quoted market prices</i>	66	64
Property	295	290
<i>thereof based on quoted market prices</i>	207	280
Alternative investments	413	344
<i>thereof based on quoted market prices</i>	237	299
Total fair value of plan assets	1 934	1 850

The principal actuarial assumptions at the balance sheet dates in percent are as follows:

		2016					2015				
		in %					in %				
		Group	Most important countries				Group	Most important countries			
	Weighted average	Switzerland	United Kingdom	United States	Germany	Weighted average	Switzerland	United Kingdom	United States	Germany	
Discount rate		1.7	0.5	2.9	4.1	1.8	2.2	0.8	3.8	4.2	2.3
Future salary increases		1.7	1.5	—	3.0	2.5	2.5	1.5	4.5	3.0	2.5
Long-term increase in health care costs		6.5	—	—	7.5	—	7.3	—	—	8.0	—
Current average life expectancy for a 65 year old male	in years	19	22	23	21	19	19	20	22	21	19
Current average life expectancy for a 65 year old female	in years	22	23	25	23	23	21	22	24	23	23

A one percentage-point change in health care cost trend rates would have the following effects on the obligation for post-employment medical benefits:

2016		One percentage-point increase	One percentage-point decrease
in CHF m			
	Effect on the aggregate of the service cost and interest cost	1	-1
	Effect on defined benefit obligation	7	-6
2015		One percentage-point increase	One percentage-point decrease
in CHF m			
	Effect on the aggregate of the service cost and interest cost	1	-1
	Effect on defined benefit obligation	7	-6

A 25 basis-point change in discount rate would have the following effects on the obligation for pension plans:

in CHF m	25 basis-point increase	25 basis-point decrease		
	2016	2015	2016	2015
Effect on defined benefit obligation	-83	-85	99	90

Would life expectancy increase by one year, the defined benefit obligation would increase by CHF 104 million (2015: CHF 71 million).

Defined contribution post-employment plans. In 2016, CHF 24 million were charged to the income statement as contributions to defined contribution plans (2015: CHF 21 million).

In Germany, approximately 4 900 Clariant employees are insured in a defined benefit plan which is a multi-employer plan and as such is accounted for as a defined contribution plan. The reason for this accounting practice is that the plan exposes the participating Clariant companies to actuarial risks associated with the current and former employees of other companies which are members of the same pension plan. There is no consistent or reliable basis for allocating the obligation, plan assets and cost to individual companies participating in the plan.

Based on the statutory actuarial calculation of 2016, the pension fund's obligations are fully funded. Also for 2017, it is anticipated that the pension plan liabilities are covered by the respective assets.

In the case where the multi-employer plan faces a situation in which the pension plan liabilities exceed the assets, this can be remedied either by increasing the employer's contributions to the pension plan or by reducing the benefits paid out to the entitled parties. In the case of a reduction of the benefits this must be compensated by the employer according to German legislation. If the pension plan were unwound the remaining funds would be distributed among the plan members. In case there are no plan members left, the remaining funds would be transferred to social institutions.

If Clariant withdrew from the pension fund, all rights and obligations of the employer against the pension plan would remain in force as long as the pension plan continues to render pension services to the group's plan members. Based on the number of plan members (active and passive) Clariant's share in the pension plan amounts to approximately 8 percent.

Clariant's contribution to this pension plan amounted to CHF 16 million in 2016 (CHF 15 million in 2015) and is expected to be CHF 16 million in 2017.

The multi-employer plan originates in the pension plan scheme of the German companies of the former Hoechst group, to which a part of the activities of Clariant pertained until 1997. Several of the companies which were formerly part of the Hoechst Group continue to participate in this multi-employer plan.

in CHF m	Pension plans		Post-employment medical benefits	
	2016	2015	2016	2015
Clariant Group regular and supplemental contributions (employer's contributions):				
Actual contributions in 2015		59		—
Actual contributions in 2016 (2015: estimated)	56	59	—	—
Estimated contributions in 2017	53	53	—	—
Estimated contributions in 2018	53	53	—	—
Estimated contributions in 2019	37	45	—	—
Estimated contributions in 2020	47	45	—	—
Estimated contributions in 2021	37	—	—	—
Payments to beneficiaries:				
Actual payments in 2015		-113		-5
Actual payments in 2016 (2015: estimated)	-121	-112	-4	-5
Estimated payments in 2017	-114	-110	-5	-5
Estimated payments in 2018	-113	-113	-6	-5
Estimated payments in 2019	-114	-114	-6	-5
Estimated payments in 2020	-116	-117	-6	-5
Estimated payments in 2021	-117	—	-6	—
Allocation of defined benefit obligation to plan members (in CHF m):				
Active members	824	764	40	34
Deferred members	349	286	6	4
Retired members	1 556	1 501	41	43
Total funded and unfunded obligations at 31 December	2 729	2 551	87	81
Weighted average duration of the defined benefit obligation at the end of reporting period (in years):				
At 31 December	14.9	14.1	11.0	10.9

20. Movements in provisions

in CHF m	Environmental provisions	Personnel provisions	Restructuring provisions	Other provisions	Total provisions 2016	Total provisions 2015
As per 1 January	105	157	62	121	445	525
Additions	16	163	53	65	297	385
Effect of business combinations	—	3	—	—	3	—
Amounts used	-17	-139	-37	-33	-226	-361
Unused amounts reversed	—	-16	-5	-26	-47	-47
Changes due to the passage of time and changes in discount rates	3	—	—	1	4	4
Exchange rate differences	2	-1	-1	-6	-6	-61
At 31 December	109	167	72	122	470	445
Of which						
- Current portion	30	146	58	79	313	288
- Non-current portion	79	21	14	43	157	157
Total provisions	109	167	72	122	470	445
Expected outflow of resources						
Within 1 year	30	146	58	79	313	288
Between 1 and 3 years	26	2	11	22	61	81
Between 3 and 5 years	11	3	3	5	22	19
Over 5 years	42	16	—	16	74	57
Total provisions	109	167	72	122	470	445

Environmental provisions. Provisions for environmental liabilities are made when there is a legal or constructive obligation for the Group which will result in an outflow of economic resources. It is difficult to estimate the action required by Clariant in the future to correct the effects on the environment of prior disposal or release of chemical substances by Clariant or other parties and the associated costs, pursuant to environmental laws and regulations.

The material components of the environmental provisions consist of the costs to fully clean and refurbish contaminated sites and to treat and contain contamination at sites where the environmental exposure is less severe. The Group's future remediation expenses are affected by a number of uncertainties which include, but are not limited to, the method and extent of remediation and the percentage of material attributable to Clariant at the remediation sites relative to that attributable to other parties.

The environmental provisions reported in the balance sheet concern a number of different obligations, mainly in Switzerland, the United States, Germany, Brazil and Italy.

Provisions are made for remedial work where there is an obligation to remedy environmental damage, as well as for containment work where required by environmental regulations. All provisions relate to environmental liabilities arising in connection with activities that occurred prior to the date when Clariant took control of the relevant site. At each balance sheet date, Clariant critically reviews all provisions and makes adjustments where required.

Personnel provisions. Personnel provisions include holiday entitlements, compensated absences such as sabbatical leave, jubilee, annual leave or other long-service benefits, profit sharing and bonuses. Such provisions are established in proportion to the services rendered by the employee concerned.

Restructuring provisions. Restructuring provisions are established where there is a legal or constructive obligation for the Group that will result in the outflow of economic resources. The term restructuring refers to the activities that have as a consequence staff redundancies and the shutdown of production lines or entire sites.

When the Group has approved a formal plan and has either started to implement the plan or announced its main features to the public, a restructuring provision is created. The restructuring provisions newly added in 2016 concern site closures and headcount reductions in various countries with the largest amounts incurred in Germany, China and Switzerland.

For further information regarding restructuring measures refer to note 27.

21. Trade and other payables

in CHF m	31.12.2016	31.12.2015
Trade payables	683	670
Payables to associates and joint ventures	57	48
Accruals	304	253
Other payables	184	122
Total	1 228	1 093

The amount recognized for trade payables is equal to their fair value.

22. Current financial debts

in CHF m	31.12.2016	31.12.2015
Banks and other financial institutions	320	260
Current portion of non-current financial debts (see note 17)	637	134
Total	957	394
Breakdown by maturity:		
in CHF m	31.12.2016	31.12.2015
Up to three months after the balance sheet date	812	203
Three to six months after the balance sheet date	122	150
Six to twelve months after the balance sheet date	23	41
Total	957	394

Current financial debt is recognized initially at fair value, net of transaction costs incurred. Financial debt is subsequently stated at amortized cost. Except for the derivatives, there are no current financial liabilities valued at fair value through profit and loss.

A bond issued in 2012 with a nominal value of EUR 500 million and a book value of CHF 537 million per end of 2016 and a bond issued in 2011 with a nominal value of CHF 100 million, will fall due in 2017 and as a consequence were reclassified to current financial debt.

Other provisions. Other provisions include provisions for obligations relating to tax (other than income tax) and legal cases and other items in various countries for which the amount can be reliably estimated.

All non-current provisions are discounted to reflect the time value of money where material. Discount rates reflect current market assessments of the time value of money and the risk specific to the provisions in the respective countries.

A Certificate of Indebtedness with a nominal value of EUR 123 million and a book value of CHF 134 million, reported as current portion of non-current financial debts in 2015, reached maturity in April 2016 and was repaid.

The fair value of financial debt at banks and other financial institutions approximates its carrying amount due to the short-term nature of these instruments.

23. Segment information

Clariant has grouped its activities into four Business Areas (reportable segments): Care Chemicals (BU ICS), Catalysis (BU Catalysts), Natural Resources (BU Oil & Mining Services, BU Functional Minerals) and Plastics & Coatings (BU Additives, BU Masterbatches, BU Pigments). The Energy Storage business which pertained to the BA Catalysis was sold in 2015.

Intersegment transactions are entered into under the normal circumstances and terms and conditions that would also be available to unrelated third parties.

Segment assets consist of property, plant and equipment, goodwill, intangible assets, inventories, receivables and investments in associates. They exclude deferred tax assets, financial assets and operating cash. Segment liabilities comprise trade payables. They exclude items such as tax liabilities, provisions, pension liabilities and corporate borrowings. Capital expenditure comprises additions to property, plant and equipment and intangibles.

SEGMENTS in CHF m	Care Chemicals		Catalysis		Natural Resources		Plastics & Coatings		Corporate		Total Group	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Segment sales	1 473	1 446	673	704	1 190	1 219	2 547	2 458	—	—	5 883	5 827
Sales to other segments	-8	-1	—	—	-6	-2	-22	-17	—	—	-36	-20
Total sales	1 465	1 445	673	704	1 184	1 217	2 525	2 441	—	—	5 847	5 807
Operating expenses	-1 254	-1 225	-571	-565	-1 039	-1 044	-2 256	-2 230	-215	-247	-5 335	-5 311
Thereof:												
Income from associates and joint ventures	9	9	13	18	12	9	34	30	17	11	85	77
Gain/loss from disposals not qualifying as discontinued operations	—	—	—	12	—	3	-2	—	-1	—	-3	15
Restructuring, impairment and transaction-related costs	-10	-6	-11	—	-14	-1	-18	-23	-54	-85	-107	-115
Operating income	211	220	102	139	145	173	269	211	-215	-247	512	496
Net financial expenses and taxes											-249	-269
Net result from continuing operations											263	227
Result from discontinued operations											—	12
Net income											263	239
Segment assets	1 096	982	1 673	1 631	1 296	872	1 693	1 700			5 758	5 185
Segment liabilities	-206	-200	-95	-123	-135	-109	-249	-228			-685	-660
Net operating assets	890	782	1 578	1 508	1 161	763	1 444	1 472	—	—	5 073	4 525
Net assets held for sale	—	—	5	—	—	—	2	2	—	—	7	2
Corporate assets without cash									1 275	1 333	1 275	1 333
Corporate liabilities without financial liabilities									-2 269	-2 054	-2 269	-2 054
Net debt (see note18)									-1 540	-1 312	-1 540	-1 312
Total net assets	890	782	1 583	1 508	1 161	763	1 446	1 474	-2 534	-2 033	2 546	2 494
Thereof:												
Investments in PPE and intangibles for the period	79	97	87	148	40	33	82	78	48	45	336	401
Investments in associates and joint ventures at the end of the period	56	57	193	187	14	15	148	143	105	184	516	586
Reconciliation of key figures												
Operating income	211	220	102	139	145	173	269	211	-215	-247	512	496
Add: systematic depreciation of PPE	49	42	30	33	27	24	69	68	35	36	210	203
Add: impairment	—	—	5	—	—	—	3	13	—	1	8	14
Add: amortization of intangible assets	6	4	17	17	14	11	10	11	8	11	55	54
EBITDA¹	266	266	154	189	186	208	351	303	-172	-199	785	767
Add: restructuring, impairment and transaction-related costs	10	6	11	—	14	1	18	23	54	85	107	115
Less: impairment	—	—	-5	—	—	—	-3	-13	—	-1	-8	-14
Less: gain/loss from disposals not qualifying as discontinued operations	—	—	—	-12	—	-3	2	—	1	—	3	-15
EBITDA before exceptional items	276	272	160	177	200	206	368	313	-117	-115	887	853
Operating income	211	220	102	139	145	173	269	211	-215	-247	512	496
Add: restructuring, impairment and transaction-related costs	10	6	11	—	14	1	18	23	54	85	107	115
Less: gain/loss from disposals not qualifying as discontinued operations	—	—	—	-12	—	-3	2	—	1	—	3	-15
Operating income before exceptional items	221	226	113	127	159	171	289	234	-160	-162	622	596

¹ EBITDA is earning before interest, tax, depreciation and amortization.

Reconciliation of segment assets to total assets		
in CHF m		
	31.12.2016	31.12.2015
Segment assets	5 758	5 185
Segment assets reported as assets held for sale	7	2
Corporate assets without cash	1 275	1 333
Cash	1 043	789
Near-cash assets	277	152
Financial instruments with positive fair values	5	—
Total Assets	8 365	7 461

Geographic information				
in CHF m				
		Sales ¹		Non-current assets ²
	2016	2015	31.12.2016	31.12.2015
EMEA	2 423	2 336	2 368	2 484
<i>of which Germany</i>	672	654	1 470	1 559
<i>of which Switzerland</i>	36	38	512	574
<i>of which MEA</i>	419	405	74	71
North America	1 120	1 077	1 321	893
<i>of which USA</i>	1 030	981	1 299	872
Latin America	846	1 021	253	224
<i>of which Brazil</i>	327	336	156	110
Asia/Pacific	1 458	1 373	550	495
<i>of which China</i>	474	450	185	217
<i>of which India</i>	182	159	103	63
Total	5 847	5 807	4 492	4 096

¹ Allocated by region of third-party sale's destination.

² Non-current assets exclude deferred tax assets and pension plan assets.

All of the Group's segments generate their revenues to the largest extent from the sale of products. These come in such a great variety that a meaningful grouping below the segment information is not possible.

For a description of the Business Units see note 1.23.

24. Discontinued operations

The amounts reported under discontinued operations in 2015 concerned final adjustments, primarily reversals of provisions no longer needed associated to the sales of the Leather Services business and of the Detergents & Intermediates business that took place in 2014. These did not result in any cash flow impact for the Group.

DISCONTINUED OPERATIONS	
in CHF m	
	2015
Restructuring and impairment	15
Operating result	15
Financial result and taxes	-1
Result from discontinued operations after taxes	14
Loss on the disposal of discontinued operations	-2
Net result from of discontinued operations	12

25. Disposals

Activities not qualifying as discontinued operations

In this section, disposals of subsidiaries, associates and activities are reported that do not qualify as discontinued operations in the sense of IFRS 5. The following disposals took place in 2016 and 2015:

On 31 October 2016 Clariant sold its POS tinter colorants business pertaining to the Business Unit Pigments to the Canada-based ICTC Group. The transaction comprised assets in Italy and India mainly. The transaction price amounted to less than CHF 1 million and resulted in a loss of CHF 2 million.

On 30 December 2016 Clariant sold its 100% shareholding in Clariant Insurance Ltd (Liechtenstein) to R&Q Insurance (Malta) Ltd for a total consideration of CHF 9 million. The purchase price was received in January 2017. Therefore per end of 2016 an open receivable exists for this transaction in the consolidated accounts. A loss of CHF 1 million was realized on the transaction.

On 28 February 2015 Clariant sold its Energy Storage Activities pertaining to the Business Area Catalysis & Energy to the UK-based Johnson Matthey for a total consideration of CHF 73 million. After the impairment charge of CHF 30 million recorded in 2014, the pertaining net assets sold, including the costs of disposal, amounted to CHF 62 million. Therefore, the after-tax profit recorded on the transaction in 2015 amounts to CHF 12 million. In 2016, the final purchase price settlement was made by Clariant to Johnson Matthey for an amount of CHF 3 million which had been fully provided for in 2015.

The result of the disposal of activities not qualifying as discontinued operations in 2015 was as follows:

in CHF m	2015
Total consideration received, from the disposal of activities not qualifying as discontinued operations, as of 31 December 2015	78
Cash transferred in the transaction	-4
Total cash proceeds received from the disposal of activities not qualifying as discontinued operations	74
Net assets sold, after impairment, including disposal-related expenses and accumulated amounts in equity recycled through the income statement upon disposal	-59
Profit before taxes on the disposal of activities not qualifying as discontinued operations	15
Taxes (current and deferred)	-1
After tax profit on disposal	14

The result from disposals not qualifying as discontinued operations is reported under »Selling, general and administrative costs« in the income statement.

Other assets held for sale

An amount of CHF 7 million relates to property, plant and equipment held for sale in Italy and in China (2015: CHF 2 million).

26. Acquisitions

Acquisition of Kel-Tech Inc.

On 1 October 2016 Clariant acquired from Arsenal Capital Partners 100% of the shares of Kel-Tech Inc. for a total consideration of CHF 224 million, out of which CHF 203 million were paid in 2016 and CHF 21 million are considered as contingent consideration.

If certain sales goals are met in 2017, an earn-out up to a maximum of CHF 35 million will become payable in 2018. The acquired company is based in Midland, Texas, USA and is a manufacturer and supplier of specialty chemicals for production, field stimulation and drilling applications in the oil-service business throughout

onshore United States. This acquisition pertains to the Business Unit Oil & Mining Services. Since its acquisition, Kel-Tech Inc. is fully consolidated in Clariant's financial statements. The summary of the financial impact of consolidating Kel-Tech Inc. in the accounts at the acquisition date, using the provisional fair values of identified assets and liabilities is as reported below. The acquired intangible assets comprise mainly customer relationships, developed technology, know-how and the trade name. As some of the allocated values are still under assessment, this overview should be considered as preliminary.

in CHF m	2016 (at fair value)
Total cash outflow for the acquisition in 2016	203
Contingent consideration/allocated earn-out payable in 2018	21
Total consideration for purchase	224
Recognized amounts of identifiable assets and liabilities assumed:	
Property, plant and equipment	28
Intangible assets	52
Inventories	10
Receivables	10
Other assets and liabilities	-9
Fair value of net assets acquired	91
Goodwill	133

For this acquisition, costs of CHF 2 million, comprising M&A, legal costs, tax advisory and consulting charges, were recognized in »Selling, general and administrative costs« in the year 2016.

From the acquisition date up to the end of the year 2016, Kel-Tech Inc. reported net sales of CHF 20 million and a breakeven operating result including CHF 2 million of depreciation and amortization. This result includes the above-mentioned items of a one-time nature which were incurred in connection with the takeover by Clariant. If the acquisition had occurred on 1 January 2016, Group sales would have been CHF 59 million higher and the operating result would have been CHF 5 million higher.

Acquisition of X-Chem LLC

On 1 October 2016 Clariant acquired from NCH Corporation the activities of X-Chem LLC in a combined asset and share deal for a total consideration of CHF 140 million. The acquired company is based in Irving, Texas, USA and is a provider of specialty oilfield chemicals for the production, completion and stimulation of oil wells, gas wells and pipelines focused on land and offshore United States. This acquisition pertains to the Business Unit Oil & Mining Services.

Since its acquisition, X-Chem LLC is fully consolidated in Clariant's financial statements. The summary of the financial impact of consolidating X-Chem LLC in the accounts at the acquisition date, using the provisional fair values of identified assets and liabilities is as reported below. The acquired intangible assets comprise mainly customer relationships, developed technology, know-how and the trade name. As some of the allocated values are still under assessment, this overview should be considered as preliminary.

in CHF m	2016 (at fair value)
Total cash outflow for the acquisition in 2016	140
Total consideration for purchase	140
Recognized amounts of identifiable assets and liabilities assumed:	
Property, plant and equipment	24
Intangible assets	76
Inventories	13
Receivables	17
Other assets and liabilities	-4
Fair value of net assets acquired	126
Goodwill	14

For this acquisition costs of CHF 3 million, comprising M&A, legal costs, tax advisory and consulting charges, were recognized in »Selling, general and administrative costs« in the year 2016.

From the acquisition date up to the end of the year 2016, X-Chem LLC reported net sales of CHF 20 million and a breakeven operating result including CHF 2 million of depreciation and amortization. This result includes the above-mentioned items of a one-time nature which were incurred in connection with the takeover by Clariant. If the acquisition had occurred on 1 January 2016, Group sales would have been CHF 64 million higher and the operating result would have remained at the same level.

The goodwill arising from the acquisition of Kel-Tech Inc. and X-Chem LLC is attributable to a number of factors such as future growth potential in line with historical levels, significant cost synergies and the acquired workforce.

Acquisition of Vivimed personal care portfolio

On 8 January 2016 Clariant acquired the specialty chemicals segment of Vivimed Labs Ltd, India. This acquisition complements Clariant's personal care portfolio in India with actives to formulate broader solutions within the sun, skin, hair and oral care range as well as antimicrobial preservatives. It will expand Clariant footprint in the region of the Business Unit Industrial & Consumer Specialties (ICS).

Since its acquisition by Clariant India Ltd, the acquired business is fully consolidated in its financial statements. The summary of the financial impact at the acquisition date on Clariant consolidated accounts, using the fair values of identified assets and liabilities, is as reported below. The intangible assets acquired consist of customer relationships, technical know-how and in-process research and development projects.

in CHF m	2016 (at fair value)
Total cash outflow for the acquisition in 2016	53
Total consideration for purchase	53
Recognized amounts of identifiable assets and liabilities assumed:	
Property, plant and equipment	9
Intangible assets	19
Inventories	2
Receivables	4
Other assets and liabilities	-2
Fair value of net assets acquired	32
Goodwill	21

For this acquisition costs of CHF 0.5 million, comprising M&A and consulting charges, were recognized in »Selling, general and administrative costs« in the year 2016.

The goodwill resulting from this acquisition is attributable to a number of factors such as future growth potential, cost synergies and the acquired workforce.

Acquisition of the remaining shares in the Consortium with Carboflex

On 13 June 2016 Clariant acquired the Carboflex 50 % stake in the consortium that built and operates a plant in Rio de Janeiro in Brazil. The facility produces chemicals used in oil and gas wells. The purchase price for the remaining 50 % shares totals CHF 11 million, out of which CHF 8 million were paid in June 2016 and the remaining CHF 3 million are held back for potential indemnifications by Clariant on behalf of Carboflex. The assets acquired mainly consist of customer relationships and property, plant and equipment.

The transaction was treated as a two-step acquisition. The 50 % shares already held were remeasured to fair value, which led to an income of CHF 7 million, recognized in Income from associates and joint ventures. No material goodwill arose on the acquisition. This acquisition pertains to the Business Unit Oil & Mining Services.

Acquisition of SQE Olivene S.r.l.

On 1 March 2016 Clariant acquired 100 % of the shares of SQE Olivene S.r.l., Italy from a private owner. The company specializes in the manufacture of squalenes and squalanes used in the cosmetics industry. The purchase price amounted to CHF 3 million. The assets acquired mainly consist of intangibles (customer lists, trade-names and a non-compete clause) and inventories. The generated goodwill amounts to CHF 1 million. This acquisition pertains to the Business Unit Industrial & Consumer Specialties (ICS).

Acquisition of the Mining Service Business of Flomin Inc.

On 31 October 2016 Clariant purchased from Flomin Inc., Delaware, USA, the Mining Service activities consisting of customer relationships, developed technology and inventories. The business consists of the manufacture and sale of specialty reagents including collectors, frothers and solvent extractants for the global mining industry. The purchase price amounted to CHF 11 million and resulted in a goodwill of CHF 5 million. This acquisition pertains to the Business Unit Oil & Mining Services.

Acquisition of Chemical & Mining Services Pty Ltd

On 1 November 2016 Clariant purchased 100 % of the shares of Chemical & Mining Services Pty Ltd, Australia, from private investors. The company is a supplier of flotation reagents and technical services relating to base and precious metals flotation to the mineral processing industry. The purchase price totals CHF 5 million out of which CHF 3 million were paid in 2016 and the remaining CHF 2 million represent a contingent consideration that will be due if certain sales targets are met in 2017 and 2018. The purchase price allocation is still in progress and should be finalized in the first quarter of 2017. No goodwill is expected to arise from this acquisition. This acquisition pertains to the Business Unit Oil & Mining Services.

Acquisition of remaining shares of Companhia Brasileira de Bentonita

On 1 July 2015 Clariant acquired the remaining 50 % shares of Companhia Brasileira de Bentonita (CBB) from the Brazilian-based company Geosol. This transaction was treated as a two-step acquisition and therefore, according to IFRS 3, the 50 % shares already held were remeasured to fair value which resulted in a CHF 4 million gain recorded as income from associates and joint ventures in the income statement.

The acquisition of the remaining 50 % shares for an amount of CHF 5 million paid in cash resulted in a gain on a bargain purchase in the amount of CHF 3 million, mainly from a remeasurement of mining rights, which was recognized in the income statement. This acquisition pertains to the Business Unit Functional Minerals.

Acquisition of the de-icing activities from Kilfrost Ltd

On 30 September 2015 Clariant acquired from the British-based Kilfrost Ltd the de-icing activities in the United States, China and Korea, consisting mainly of customer relationships, know-how and inventories. Total consideration paid was CHF 10 million and the goodwill amounts to CHF 3 million. This acquisition pertains to the Business Unit Industrial & Consumer Specialties (ICS).

Various smaller acquisitions were made in 2015 totalling a purchase price of CHF 7 million and generating a goodwill of CHF 1 million.

27. Restructuring, impairment and transaction-related costs

in CHF m	2016	2015
Restructuring expenses	-53	-51
Payments for restructuring	-37	-78
Impairment loss	-8	-14
<i>thereof charged to PPE (see note 5)</i>	-9	-2
<i>thereof charged to intangible assets (see note 6)</i>	—	-11
<i>thereof credited/charged to investments in associates and joint ventures (see note 7)</i>	1	-1
Transaction-related costs	-46	-35
Total restructuring, impairment and transaction-related costs	-107	-100
thereof reported under discontinued operations (see note 24)	—	-15
Total continuing operations	-107	-115

In order to increase profitability over a sustained period, Clariant implements measures designed to improve the Group's performance. The aim of these efforts is to increase the Group's operating result and to reduce net working capital. The changes made to the processes and structures result in a loss of jobs across the Group.

Restructuring. In 2016, Clariant recorded expenses for restructuring in the amount of CHF 53 million (2015: CHF 51 million). This concerned restructuring measures mainly in Germany, China and Switzerland.

Impairment. The impairment loss recorded in 2016 concerned site closures in China. The one recognized in 2015 relates to disposal projects.

Transaction-related costs comprise expenses incurred in connection with acquisition or disposal projects and also costs incurred in connection with the implementation of internal reorganizational measures.

The total amount of CHF 107 million of Restructuring, impairment and transaction-related costs (2015: CHF 115 million) is reported in the income statement as follows: CHF 28 million in Costs of goods sold (2015: 2 million), CHF 73 million in Selling, general and administrative costs (2015: 110 million), CHF 7 million in Research & Development costs (2015: CHF 2 million) and an income of CHF 1 million in Income from associates and joint ventures (2015: CHF 1 million expense).

28. Finance income and costs

FINANCE INCOME		
in CHF m	2016	2015
Interest income	9	11
<i>thereof interest on loans, receivables and deposits</i>	9	11
Other financial income	3	3
Total finance income	12	14
FINANCE COSTS		
in CHF m	2016	2015
Interest expense	-109	-104
<i>thereof effect of discounting of non-current provisions</i>	-4	-4
<i>thereof net interest component of pension provisions</i>	-19	-18
Other financial expenses	-12	-10
Currency result, net	-65	-96
Total finance costs	-186	-210

Other financial expenses include bank charges and miscellaneous financial expenses.

In 2016 and 2015, no foreign exchange gains pertaining to the ineffective part of hedges on net investments were recognized in the income statement.

Interest expense, other than the effect of discounting non-current provisions and the interest component of pension provisions, pertain to financial debts measured at amortized cost.

Interest costs capitalized on qualifying assets for 2016 was CHF 7 million (2015: CHF 1 million).

29. Earnings per share (EPS)

Earnings per share are calculated by dividing the Group net income by the average number of outstanding shares (issued shares less treasury shares).

	2016	2015
Net income attributable to shareholders of Clariant Ltd undiluted and diluted (CHF m)		
Continuing operations	253	217
Discontinued operations	–	12
Total	253	229
Weighted average number of shares outstanding		
As per 1 January	322 202 845	319 689 210
Effect of transactions with treasury shares on weighted average number of shares outstanding	1 509 693	2 513 635
Weighted average number of shares outstanding at 31 December	323 712 538	322 202 845
Adjustment for granted Clariant shares	1 645 919	2 089 675
Adjustment for dilutive share options	16 322	90 692
Weighted average diluted number of shares outstanding at 31 December	325 374 779	324 383 212
Basic earnings per share attributable to shareholders of Clariant Ltd (CHF/share)		
Continuing operations	0.78	0.67
Discontinued operations	–	0.04
Total	0.78	0.71
Diluted earnings per share attributable to shareholders of Clariant Ltd (CHF/share)		
Continuing operations	0.78	0.67
Discontinued operations	–	0.04
Total	0.78	0.71

The dilution effect is triggered by two different items. One is the effect of Clariant shares granted as part of the share-based payment plan, which have not yet vested. To calculate this dilutive potential it is assumed that they had vested on 1 January of the respective period.

The second item is the effect of options granted as part of the share-based payment plan, which have not yet vested. To calculate this dilutive potential, it is assumed that all options which were in the money at the end of the respective period had been exercised on 1 January of the same period.

The effect of the services still to be rendered during the vesting period were taken into consideration.

Diluted earnings per share are calculated adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares.

In 2016, a payout of CHF 0.40 per share was made out of the capital contribution reserves (see note 16).

30. Derivative financial instruments

Risk management (hedging) instruments and off-balance sheet risks. Clariant uses forward foreign exchange rate and option contracts, currency options as well as other financial instruments to hedge the Group's risk exposure to volatility in interest rates, currencies and prices and to manage the return on cash and cash equivalents. Risk exposures from existing assets and liabilities as well as anticipated transactions are managed centrally.

Interest rate management. It is the Group's policy to manage the costs of interest using fixed and variable rate debt and interest-related derivatives.

Foreign exchange management. To manage the exposure to the fluctuations in foreign currency exchange rates, the Group follows a strategy of hedging both balance sheet and revenue risk, partially through the use of forward contracts and currency swaps in various currencies. In order to contain costs, the Group does not hedge the entire exposure.

The following tables show the contract or underlying principal amounts and the respective fair value of derivative financial instruments by type at year-end.

The contract or underlying principal amounts indicate the volume of business outstanding at the balance sheet date and do not represent the amount at risk.

DERIVATIVE FINANCIAL INSTRUMENTS

in CHF m	Contract or underlying principal amount		Positive fair values		Negative fair values	
	31.12.2016	31.12.2015	31.12.2016	31.12.2015	31.12.2016	31.12.2015
Interest-related instruments						
Interest rate swaps	169	—	5	—	—	—
Currency-related instruments						
Forward foreign exchange rate contracts	98	76	—	2	-2	-1
Currency options	—	20	—	—	—	—
Total derivative financial instruments	267	96	5	2	-2	-1

The fair value of these derivative financial instruments is recorded in Other current assets in the balance sheet in the case of a positive value or as Current financial debts in the case of a negative value and if the instruments expire within the next twelve months.

If the remaining lifetime exceeds twelve months, the value is recorded in Financial assets in case it is positive and in Non-current financial debts in case it is negative.

DERIVATIVE FINANCIAL INSTRUMENTS BY MATURITY

in CHF m	31.12.2016	31.12.2015
Breakdown by maturity:		
Up to one month after the balance sheet date	28	44
More than one and up to three months after the balance sheet date	53	48
More than three and up to twelve months after the balance sheet date	17	4
More than one and up to five years after the balance sheet date	169	—
Total derivative financial instruments	267	96

DERIVATIVE FINANCIAL INSTRUMENTS BY CURRENCY

in CHF m	31.12.2016	31.12.2015
USD	260	95
EUR	1	1
JPY	6	—
Total derivative financial instruments	267	96

FINANCIAL INSTRUMENTS EFFECTIVE FOR HEDGE-ACCOUNTING PURPOSES

in CHF m	31.12.2016	31.12.2015
Interest rate swaps	5	—
Borrowings denominated in foreign currencies	-1 027	-998

In 2012, Clariant issued a bond in the amount of EUR 500 million (see note 17), which was designated as a hedge of a net investment in some of Clariant's European subsidiaries in that same year. In the course of 2016 the whole bond was de-designated. The unrealized foreign exchange rate loss resulting from the translation of the bond into Swiss francs as per the de-designation date amounted to CHF 3 million (2015: CHF 60 million loss) and remains frozen in the cumulative translation difference in shareholders' equity.

In 2015, Clariant issued four certificates of indebtedness amounting to EUR 300 million (see note 17). They were designated as a hedge of a net investment in some of Clariant's European subsidiaries. The unrealized foreign exchange rate gain resulting from the translation of the new certificates of indebtedness into Swiss francs amounted to CHF 2 million for 2016 (2015: CHF 15 million loss) and is recorded in the cumulative translation difference in shareholders' equity.

In 2016, Clariant issued seven more certificates of indebtedness amounting to EUR 395 million and two certificates of indebtedness amounting to USD 277 million (see note 17). These certificates were also designated as a hedge of a net investment in some of Clariant's European and US-American subsidiaries. The unrealized foreign exchange rate result calculated from the translation of the new certificates of indebtedness into Swiss francs amounted to a gain of CHF 7 million for the EUR positions and to a loss of CHF 12 million for the USD positions and is recorded in the cumulative translation difference in shareholders' equity.

Clariant is hedging the interest rate risk resulting from the certificates of indebtedness in the amount of USD 166 million issued at a variable interest rate. For this purpose interest rate swaps amounting to USD 166 million have been established in 2016. Their clean price amounted to a positive CHF 5 million for 2016. They are accounted for as a cash flow hedge and as a consequence the result was recorded in other comprehensive income.

31. Employee participation plans

Under the Group Senior Management – Long Term Incentive Plan (GSM-LTIP) a certain percentage of the actual bonus is granted to the plan participants in the form of registered shares of Clariant Ltd (investment shares). These shares vest immediately upon grant, but are subject to a three-year blocking period. The plan participants receive an additional share free of cost (matching share) for each investment share held at the end of the blocking period.

These shares were granted for the first time in 2011, based on the performance achieved in the base year 2010. Similar plans were launched in all subsequent years. The number of shares not yet vested and thus disclosed are the matching shares already granted.

The options granted under the Clariant Executive Stock Option Plan (CESOP) established in 1999 entitle the holder to acquire registered shares of Clariant Ltd (one share per option) at a predetermined strike price. They become vested and are exercisable after three years and expire after ten years. This stock option plan expired at the end of 2015.

In April 2008, Clariant established a stock option plan for members of management and the Board of Directors. Options granted under this plan entitle the holder to acquire registered shares of Clariant Ltd (one share per option) at a predetermined strike price. Clariant contracted a third-party bank to issue tradable options to the plan participants in accordance with the rules of the plan. The plan participants can sell the options back to this bank after they have vested. The bank in return has the right to claim a share from Clariant at the pre-determined strike price for each option that is sold to it by plan participants. The options become vested and are exercisable after two years and expire after five years. The last grant of the stock option plan to members of Management and the Board of Directors took place in April 2012.

The Restricted Plan for members of the Board of Directors replacing the Option Plan had its first grant date in early 2014.

For the first time in 2013, the Performance Share Unit (PSU) Plan was introduced for all senior managers to replace the former Tradable Option Plan. The term of Clariant's Performance Share Unit Plan is a three-year vesting period. The vesting is conditional upon achievement of the performance targets at the end of the vesting period. If the performance targets are achieved, each PSU will be converted into one Clariant share.

A new grant took place in September 2016. The review of the target achievements (vesting criteria) for this plan will be held in summer 2019 and vesting is scheduled to take place in September 2019.

The expense recorded in the income statement spreads the costs of each grant over the measurement period and the vesting period. Assumptions are made concerning the forfeiture rate which is adjusted during the vesting period so that at the end of the vesting period there is only a charge for the vested amounts.

During 2016, CHF 9 million (2015: CHF 15 million) were charged to the income statement for equity-settled share-based payments exclusively. The expense for 2016 is lower than the one of the prior year because the goals determined for the PSU plan of 2013 were not achieved and the shares did not vest. All expenses recorded through equity for this plan were reversed.

As of 31 December 2016, the total carrying value of liabilities arising from equity-settled share-based payments, entirely recognized in equity, is CHF 25 million (2015: CHF 29 million).

OPTIONS FOR BOARD OF DIRECTORS (NON-EXECUTIVE MEMBERS)¹

	Granted	Exercisable from	Expiry date	Exercise price	Share price at grant date	Number 31.12.2016	Number 31.12.2015
	2011	2013	2016	18.00	15.02	—	138 553
						—	138 553

¹ Past and current members.

OPTIONS FOR MEMBERS OF MANAGEMENT AND EXECUTIVE COMMITTEE¹

Base year	Granted	Exercisable from	Expiry date	Exercise price	Share price at grant date	Number 31.12.2016	Number 31.12.2015
2011	2011	2013	2016	18.00	15.02	—	230 775
2012	2012	2014	2017	16.50	12.59	660 243	864 343
Total						660 243	1 095 118

¹ Past and current members.

As per 31 December 2016, the weighted average remaining contractual life of all share options was 0.24 years (2015: 0.94 years).

SHARES FOR MEMBERS OF MANAGEMENT AND THE EXECUTIVE COMMITTEE

Base year	Granted	Vesting in	Share price at grant date	Number 31.12.2016	Number 31.12.2015
2012	2012	2016	9.49	—	32 000
2012	2013	2016	13.12	—	556 414
2013	2013	2016	13.74	—	637 242
2013	2013	2016	15.61	—	5 000
2013	2014	2017	17.24	221 607	247 707
2014	2014	2017	17.35	489 798	517 000
2014	2014	2017	17.35	2 741	2 741
2014	2015	2018	19.71	186 848	201 060
2015	2015	2018	19.70	5 000	5 000
2015	2015	2018	17.39	13 813	13 813
2015	2015	2018	19.08	—	3 000
2015	2015	2018	19.10	441 847	464 926
2015	2016	2019	16.98	250 325	—
2016	2016	2019	16.84	556 798	—
2016	2016	2019	16.87	5 000	—
Total				2 173 777	2 685 903

	Weighted average exercise price	Options 2016	Shares 2016	Weighted average exercise price	Options 2015	Shares 2015
Shares/options outstanding at 1 January	16.95	1 233 671	2 685 903	16.85	4 376 973	2 673 860
Granted			1 122 258			967 522
Exercised/distributed*	17.23	-303 414	-887 577	19.21	-2 997 065	-814 480
Cancelled/forfeited		-270 014	-746 807		-146 237	-140 999
Outstanding at 31 December	16.50	660 243	2 173 777	16.95	1 233 671	2 685 903
Exercisable at 31 December	16.50	660 243		16.95	1 233 671	
Fair value of shares/options outstanding in CHF		921 038	38 193 253		3 201 355	51 059 007

* Options exercised include 215 648 options (2015: 2 267 276) pertaining to the 2011 and 2012 Option Plans, which were sold by the plan participants in the market and are currently held by third parties. Total outstanding options of these plans sold in the market at 31 December 2016 are 3 373 700 (31 December 2015: 4 723 048) with a fair value at 31 December 2016 of CHF 4 706 312 (31 December 2015: CHF 12 141 634).

The fair value of shares granted during 2016 is CHF 19 million (2015: CHF 19 million) calculated based on market value of shares at grant date.

No options were granted in 2016 and 2015.

32. Personnel expenses

in CHF m	2016	2015
Wages and salaries	-1 062	-1 036
Social welfare costs	-246	-255
Shares and options granted to directors and employees	-9	-15
Pension costs – defined contribution plans	-24	-21
Pension costs – defined benefit plans	-41	-17
Other post-employment benefits	-1	-1
Total personnel expenses	-1 383	-1 345

33. Related party transactions

Clariant maintains business relationships with related parties. One group consists of the associates and joint ventures, of which the most important ones are described in note 7. The most important business with these companies is the purchase of services by Clariant (e.g. energy and rental of land and buildings) in Germany, the rendering of services to the Stahl group following the disposal of the Leather Business and the rendering of services to Global Amines.

The second group of related parties is key management comprising the Board of Directors and the Executive Committee. The information required by the ordinance against excessive compensation in stock exchange-listed companies regarding the emoluments for the members of the Board of Directors and the Executive Committee is disclosed in the Compensation Report on pages 139 to 152 of this report.

More information on the relationship with the Board of Directors is given in the chapter **Corporate Governance** (non-audited).

The third group of related parties are the pension plans of major subsidiaries. Clariant provides services to its pension plans in Switzerland, the United Kingdom, and the United States. These services comprise mainly administrative and trustee services. The total costs in 2016 of these services is CHF 1 million (2015: CHF 1 million), of which approximately half is charged back to the pension plans. The number of full-time employees corresponding to these is approximately four (2015: approximately five).

TRANSACTIONS WITH RELATED PARTIES

in CHF m	2016	2015
Income from the sale of goods to related parties	35	36
<i>thereof to joint ventures</i>	6	2
<i>thereof to associates</i>	29	34
Income from the rendering of services to related parties	48	50
<i>thereof to associates</i>	48	50
Expenses from the purchase of goods from related parties	-56	-114
<i>thereof from joint ventures</i>	-15	-13
<i>thereof from associates</i>	-41	-101
Expenses from services rendered by related parties	-208	-205
<i>thereof by associates</i>	-208	-205
Expense from the purchase of property, plant and equipment from related parties	-3	-5
<i>thereof from associates</i>	-3	-5
Expense from lease contracts with related parties	-7	-7
<i>thereof with associates</i>	-7	-7

PAYABLES AND RECEIVABLES WITH RELATED PARTIES

in CHF m	31.12.2016	31.12.2015
Receivables from related parties	9	13
<i>thereof from joint ventures</i>	2	2
<i>thereof from associates</i>	7	11
Allowance for amounts overdue from joint ventures	-2	—
Payables to related parties	57	48
<i>thereof to joint ventures</i>	5	3
<i>thereof to associates</i>	52	45
Loans to related parties	55	67
<i>thereof to associates</i>	55	67
Guarantees to third parties on behalf of related parties ¹	77	75
<i>thereof on behalf of joint ventures</i>	77	75

¹ The guarantee extended on behalf of a related party concerns a bank loan to a US joint venture.

TRANSACTIONS WITH KEY MANAGEMENT

in CHF m	2016	2015
Salaries and other short-term benefits	11	10
Post-employment benefits	3	3
Share-based payments	3	3
Total	17	16

There are no outstanding loans by the Group to any members of the Board of Directors or Executive Committee.

34. Commitments and contingencies

Leasing commitments. The Group leases land, buildings, machinery and equipment, furniture and vehicles under fixed-term agreements. The leases have varying terms, escalation clauses and renewal rights.

Commitments arising from fixed-term operating leases mainly concern buildings in Germany and in the United States. The most important partners for operating leases of buildings in Germany are the Infraser companies. There exist no particular renewal options other than annual prolongations in case there is no explicit termination of the lease contract.

Expected expenses for operating leases breakdown by maturities as follows:

in CHF m	31.12.2016	31.12.2015
2016	—	44
2017	51	30
2018	37	21
2019	24	16
2020	15	12
2021	12	—
Thereafter	25	30
Total	164	153

Expenses for operating leases were CHF 74 million in 2016 (2015: CHF 73 million).

Guarantees. No guarantees on behalf of third parties were issued in 2016 and 2015.

Purchase commitments. In the regular course of business, Clariant enters into relationships with suppliers whereby the Group commits itself to purchase certain minimum quantities of materials in order to benefit from better pricing conditions. These commitments are not in excess of current market prices and reflect normal business operations.

Clariant is engaged in contracts to buy a minimum quantity of ethylene starting in 2015 for the next years (between four to ten years depending on the contract) and in two contracts to buy a minimum quantity of propylenoxide in the years 2016 – 2018. This implies a total purchase commitment of about CHF 1.26 billion (2015: CHF 1.35 billion).

Contingencies. Clariant operates in countries where political, economic, social, legal, and regulatory developments can have an impact on the operational activities. The effects of such risks on the company's results, which arise during the normal course of business, are not foreseeable and are therefore not included in the accompanying financial statements.

In the aftermath of the procedure to acquire subsequent to the acquisition of Süd-Chemie, the 1.36 % of shares still in possession of third parties (squeeze-out) at the time, several minority shareholders initiated appraisal proceedings to reassess the adequacy of the cash compensation paid to the minority shareholders. Clariant opines that the cash compensation agreed is fair and complies with all legal and economic requirements. At this time it cannot be determined to what extent these proceedings will lead to additional financial liabilities.

In connection with the dismantlement of a wastewater treatment plant in France Clariant is faced with a claim by the Swiss-based group Novartis in the amount of CHF 15 million. Clariant has the view that this claim is unfounded. The case is currently pending at court.

In the ordinary course of business, Clariant is involved in lawsuits, claims, investigations and proceedings, including product liability, intellectual property, commercial, environmental, and health and safety matters. Although the outcome of any legal proceedings cannot be predicted with certainty, Management is of the opinion that, apart from those cases where a provision has already been recognized, there are no such matters pending which would likely have any material adverse effect in relation to its business, financial position, or results of operations.

Environmental risks. Clariant is exposed to environmental liabilities and risks relating to its past operations, principally in respect of remediation costs. Provisions for non-recurring remediation costs are made when there is a legal or constructive obligation and the costs can be reliably estimated. It is difficult to estimate the action required by Clariant in the future to correct the effects on the environment of prior disposal or release of chemical substances by Clariant or other parties, and the associated costs, pursuant to environmental laws and regulations. The material components of the environmental provisions consist of costs to fully clean and refurbish contaminated sites and to treat and contain contamination at sites where the environmental exposure is less severe.

35. Exchange rates of principal currencies

Rates used to translate the consolidated balance sheets (closing rate):

	31.12.2016	31.12.2015
1 USD	1.02	0.99
1 EUR	1.07	1.08
1 BRL	0.31	0.25
1 CNY	0.15	0.15
100 INR	1.50	1.50
100 JPY	0.87	0.82

Sales-weighted average exchange rates used to translate the consolidated income statements and consolidated statements of cash flows:

	2016	2015
1 USD	0.99	0.96
1 EUR	1.09	1.07
1 BRL	0.28	0.29
1 CNY	0.15	0.15
100 INR	1.47	1.50
100 JPY	0.91	0.80

36. Important subsidiaries

Country	Company name	Currency	Share-/paid in capital (in thousands)	Partici- pation ¹ in %	Holding/ Finance/ Service	Sales	Production	Research
Argentina	Clariant (Argentina) SA, Lomas de Zamora	ARS	54 605	100.0		■	■	
	Clariant Plastics & Coatings (Argentina), Lomas de Zamora	ARS	1 090	100.0		■	■	
Australia	Clariant (Australia) Pty. Ltd, Notting Hill	AUD	1 902	100.0	■	■	■	
	Clariant Plastics & Coatings (Australia), Notting Hill	AUD	2 500	100.0	■	■		
Austria	Clariant (Österreich) GmbH, Vienna	EUR	1 000	100.0		■		
Belgium	Clariant Masterbatches Benelux SA, Louvain-La-Neuve	EUR	9 629	100.0		■	■	
Brazil	Clariant S.A., São Paulo	BRL	184 863	100.0	■	■	■	■
	Clariant Administração de Bens Ltda., São Paulo	BRL	7 696	100.0	■			
	Companhia Brasileira de Bentonita Ltd, São Paulo	BRL	17 470	100.0		■	■	
	Consórcio CCPN, Rio de Janeiro	BRL	26 113	100.0		■		
	Clariant Plastics & Coatings Brasil Indústria Química Ltda. São Paulo	BRL	100 850	100.0		■	■	■
British Virgin Islands	Clariant Clearwater Technologies Ltd, Tortola	USD	6	100.0	■			
Canada	Clariant (Canada) Inc., Toronto	CAD	10 415	100.0		■	■	
	Clariant Plastics & Coatings Canada Inc., Toronto	CAD	1	100.0		■	■	
Chile	Clariant Colorquímica (Chile) Ltda., Maipú-Santiago de Chile	CLP	15 000	100.0		■	■	
	Clariant Plastics & Coatings (Chile) Ltd, Maipú-Santiago de Chile	CLP	3 842 000	100.0		■	■	
China	Clariant (China) Ltd, Hong Kong	HKD	93 250	100.0	■	■		
	Clariant Bohai Pigments Preparations (Tianjin) Ltd, Tianjin	CNY	49 176	90.0		■	■	■
	Clariant Catalysts (Nanjing) Ltd, Nanjing	CNY	321 822	100.0		■	■	
	Clariant Chemicals (China) Ltd, Shanghai	CNY	55 407	100.0		■	■	■
	Clariant Chemicals (Guangzhou) Ltd, Guangzhou	CNY	70 345	100.0		■	■	
	Clariant Chemicals (Huizhou) Ltd, Daya Bay, Huizhou	CNY	183 039	100.0		■	■	
	Clariant China Holding Limited, Hong Kong	HKD	67 251	100.0	■			
	Clariant Huajin Catalysts (Panjin) Ltd, Panjin City	CNY	69 511	60.0		■	■	
	Clariant Masterbatches (Beijing) Ltd, Beijing	CNY	9 096	100.0			■	
	Clariant Masterbatches (Shanghai) Ltd, Shanghai	CNY	26 087	100.0		■	■	
	Clariant Redhill Bentonite (Liaoning) Ltd, Jianping	CNY	28 525	100.0		■	■	
	Clariant Specialty Chemicals (Zhenjiang) Co., Ltd, Zhenjiang	CNY	149 503	100.0		■	■	
	Jiangsu Süd-Chemie Chemical Materials Co., Ltd, Zhenjiang	CNY	79 058	100.0		■	■	
	Jiangsu Süd-Chemie Performance Packaging Material Co., Ltd, Changshu	CNY	44 266	100.0		■	■	
	Clariant Coating (Shanghai) Ltd, Shanghai	CNY	17 497	100.0		■	■	
	Clariant Chemicals Technology (Shanghai) Ltd, Shanghai	CNY	6 920	100.0	■			
Colombia	Clariant (Colombia) SA, Cota (Cundinamarca)	COP	2 264 786	100.0		■	■	
	Clariant Plastics & Coatings (Colombia), S.A.S Cota (Cundinamarca)	COP	21 505 618	100.0		■	■	
Finland	Clariant Masterbatches (Finland) Oy, Vantaa	EUR	169	100.0		■		
France	Clariant Masterbatches (France), Choisy-le-Roi	EUR	1 561	100.0		■	■	
	Clariant Production (France), Choisy-le-Roi	EUR	6 273	100.0	■	■	■	■
	Clariant Services (France), Choisy-le-Roi	EUR	21 200	100.0	■			
	CRM International S.A.S., Puget-sur-Argens	EUR	650	100.0		■	■	■
	Clariant Healthcare Packaging , Choisy-le-Roi	EUR	1	100.0		■	■	■
Germany	Clariant Advanced Materials GmbH, Frankfurt a.M.	EUR	102	100.0		■	■	■
	Clariant Plastics & Coatings (Deutschland) GmbH, Frankfurt a.M.	EUR	149	100.0	■	■	■	■
	Clariant Produkte (Deutschland) GmbH, Frankfurt a.M.	EUR	9 348	100.0	■	■	■	■
	Clariant SE, Frankfurt a.M.	EUR	916	100.0	■	■		

Country	Company name	Currency	Share-/paid in capital (in thousands)	Participa- tion ¹ in %	Holding/ Finance/ Service	Sales	Production	Research
	Clariant Verwaltungsgesellschaft mbH, Frankfurt a.M.	EUR	2 560	100.0	■			
	Süd-Chemie IP GmbH & Co KG, Munich	EUR	803	100.0	■			
Great Britain	Clariant Distribution UK Limited, Yeadon, Leeds	GBP	500	100.0	■			
	Clariant Horsforth Limited, Yeadon, Leeds	GBP	13	100.0	■			
	Clariant Masterbatches UK Ltd, Yeadon, Leeds	GBP	500	100.0		■		
	Clariant Oil Services UK Ltd, Yeadon, Leeds	GBP	400	100.0		■	■	■
	Clariant Production UK Ltd, Yeadon, Leeds	GBP	500	100.0	■	■	■	
	Clariant Services UK Ltd, Yeadon, Leeds	GBP	500	100.0	■			
Greece	Süd-Chemie Hellas Monoprosopi E.P.E., Adamas, Milos	EUR	555	100.0		■	■	
Guatemala	Clariant (Guatemala) SA, Guatemala City	GTQ	14 000	100.0		■	■	
	Clariant Specialties (Guatemala), S. A.	GTQ	100	100.0		■		
India	Clariant Chemicals (India) Ltd, Thane	INR	230 818	51.0		■	■	
	Clariant India Private Limited, New Delhi	INR	1 500 475	100.0	■	■	■	■
	Clariant Medical Specialties India Limited, New Delhi	INR	500	100.0		■		
Indonesia	PT. Clariant Indonesia, Tangerang	IDR	59 047 000	100.0	■	■	■	
	P.T. Clariant Kujang Süd-Chemie Catalysts, Cikampek	USD	3 447	53.9		■	■	
	P.T. Clariant Plastics & Coatings Indonesia, Cibodas	IDR	96 220 000	100.0		■	■	
	P.T. Clariant Plastics & Coatings, Cibodas	IDR	10 282 000	100.0		■		
	P.T. Clariant Specialties Indonesia, Tangerang	IDR	4 803 000	100.0		■		
	P.T. Clariant Adsorbents Indonesia, Cileungsi, Bogor	IDR	12 375 000	100.0		■	■	
Ireland	Clariant Masterbatches Ireland Limited, Naas	EUR	411	100.0		■	■	
Italy	Clariant (Italia) S.p.A., Milano	EUR	36 000	100.0	■			
	Clariant Masterbatches (Italia) S.p.A., Milano	EUR	3 000	100.0		■	■	■
	Clariant Prodotti (Italia) S.p.A., Milano	EUR	1 000	100.0		■	■	■
	Società Sarda di Bentonite S.r.l., Santa Giusta	EUR	2 050	100.0		■	■	
	SQE Olivene srl, Milano	EUR	10	100.0		■	■	
Japan	Clariant (Japan) K.K., Tokyo	JPY	450 000	100.0		■	■	■
	Clariant Catalysts (Japan) K.K., Tokyo	JPY	544 000	61.4	■	■	■	■
	Clariant Plastics & Coatings (Japan) K.K., Tokyo	JPY	250 000	100.0		■	■	■
Korea	Clariant Plastics & Coatings Ltd Pohang, Gyeongbuk	KRW	8 508 660	100.0		■	■	
	Clariant (Korea) Ltd, Pohang	KRW	6 361 000	100.0		■	■	
Luxembourg	Clariant Finance (Luxembourg) S.A., Luxembourg	EUR	52 990	100.0	■			
Malaysia	Clariant (Malaysia) Sdn. Bhd., Kuala Lumpur	MYR	12 347	100.0		■		
	Clariant Masterbatches (Malaysia) Sdn Bhd, Petaling Jaya	MYR	2 000	60.0		■	■	■
	Clariant Oil Services (Malaysia) Sdn Bhd, Selangor	MYR	137	48.9		■		
	Clariant Specialty Chemicals (M) Sdn Bhd, Shah Alam	MYR	3 300	100.0	■	■		
Mexico	Clariant (Mexico) S.A. de C.V., Ecatepec de Morelos	MXN	22 189	100.0	■	■	■	■
	Clariant Productos Químicos S.A. de C.V., Ecatepec de Morelos	MXN	2 475	100.0	■			
	Clariant Plastics & Coatings México, S.A., Ecatepec de Morelos	MXN	916	100.0	■	■	■	■
	Clariant Servicios Integrales México, S.de R.L. de C.V., Ecatepec de Morelos	MXN	3	100.0	■			
Morocco	Clariant (Maroc) S.A., Casablanca	MAD	107 669	100.0		■	■	
Netherlands	Clariant Participations (The Netherlands) B.V., Maastricht	EUR	20	100.0		■	■	
New Zealand	Clariant (New Zealand) Ltd, Auckland	NZD	1 000	100.0	■	■	■	
Norway	Clariant Oil Services Scandinavia AS, Bergen	NOK	4 725	100.0		■		
Pakistan	Clariant Chemicals Pakistan (Pvt) Ltd, Karachi-Korangi	PKR	1 130 226	100.0		■	■	
Peru	Clariant (Perú) SA, Lima	PEN	20 566	100.0	■	■	■	
	Clariant Plastics & Coatings S.A.C., Lima	PEN	2 010	100.0		■	■	
Poland	Clariant Polska Spolka z.o.o., Konstantynów Łódzki	PLN	29 000	100.0		■	■	
	CLARIANT POLAND SPÓŁKA z.o.o., Konstantynów Łódzki	PLN	3 000	100.0		■	■	

Country	Company name	Currency	Share-/paid in capital (in thousands)	Participation ¹ in %	Holding/ Finance/ Service	Sales	Production	Research
Qatar	Clariant Qatar W.L.L., Mesaieed	QAR	60 000	65.0		■	■	
Romania	Clariant Products RO SRL, Bucurest	EUR	23 600	100.0	■	■		
Russia	Clariant (RUS) LLC, Moscow	RUB	16 200	100.0		■		
Saudi Arabia	Clariant Masterbatches (Saudi Arabia) Ltd, Riyadh	SAR	50 000	53.0		■	■	
Singapore	Clariant (Singapore) Pte. Ltd, Singapore	SGD	3 500	100.0	■	■	■	■
	Clariant South East Asia Pte. Ltd, Singapore	SGD	1 560	100.0	■	■		
South Africa	Clariant Sasol Catalysts (Proprietary) Limited, Chloorkop, Gauteng	ZAR	1 417	80.0		■	■	
	Clariant Southern Africa (Pty) Ltd. Chloorkop, Gauteng	ZAR	6	100.0	■	■	■	
	Clariant Plastics & Coatings Southern Africa, Chloorkop, Gauteng	ZAR	70 000	100.0		■	■	
Spain	Clariant Ibérica Producción S.A., El Prat de Llobregat	EUR	6 023	100.0	■	■	■	■
	Clariant Ibérica Servicios S.L., El Prat de Llobregat	EUR	358	100.0	■			
	Clariant Masterbatch Ibérica S.A., Sant Andreu de la Barca		2 525	100.0		■	■	■
Sweden	Clariant Masterbatches Norden AB, Malmö	SEK	3 200	100.0		■	■	
	Clariant Production Sweden AB, Mölndal	EUR	500	100.0		■	■	
Switzerland	Clariant Consulting AG, MuttENZ	CHF	200	100.0	■			
	Clariant International AG, MuttENZ	CHF	150 000	100.0	■	■	■	■
	Clariant Oil Services AG, MuttENZ	CHF	300	100.0	■			
	Clariant Reinsurance AG, MuttENZ	CHF	3 000	100.0	■			
	EBITO Chemiebeteteiligungen AG, MuttENZ	CHF	202	100.0	■			
	Infrapark Baselland AG, MuttENZ	CHF	5 000	100.0	■		■	
	Clariant Produkte (Schweiz) AG, MuttENZ	CHF	5 000	100.0	■	■	■	
	Clariant Plastics&Coatings AG, MuttENZ (formerly: Clariant Beteiligungen AG)	CHF	30 804	100.0	■	■	■	■
Taiwan	Clariant Chemicals (Taiwan) Co., Ltd, Taipei	TWD	23 888	100.0		■	■	
	Clariant Specialty Chemicals (Taiwan) Co, Ltd, Taipei	TWD	1 000	100.0		■	■	
Thailand	Clariant (Thailand) Ltd, Klongton, Bangkok	THB	250 000	100.0		■		
	Clariant Masterbatches (Thailand) Ltd, Chonburi	THB	325 000	100.0		■	■	■
Turkey	Clariant (Türkiye) A.S., Gebze	TRY	17 538	100.0		■	■	
	CLARIANT TURKEY PLASTIK BOYA VE KIMYEVİ MADDELER SANAYİ VE TICARET A.S., Gebze	TRY	8 562	100.0		■	■	
UAE	Clariant (Gulf) FZE, Jebel Ali, Dubai	AED	1 000	100.0		■		
	Clariant Plastics & Coatings (UAE) FZE, Jebel Ali, Dubai	AED	45 000	100.0	■	■		
Ukraine	Clariant Ukraine LLC, Severodonetsk	UAH	28 688	100.0		■	■	
USA	Clariant Corporation, Charlotte, NC	USD	749 499	100.0	■	■	■	■
	Katapultt LLC, Albany, NY	USD	1	100.0				
	Octagon Process, L.L.C., Las Vegas, NV	USD	1	100.0		■	■	
	Clariant Plastics & Coating USA Inc., Charlotte, NC	USD	50	100.0		■	■	■
	Kel-Tech, Inc., Midland	USD	273 192	100.0		■	■	
	X-Chem, LLC, Irving	USD	1	100.0		■		
Venezuela	Clariant Venezuela, S.A., Maracay	VEF	67 085	100.0		■	■	
	Clariant Plastics & Coating Venezuela, S.A., Maracay	VEF	95 100	100.0		■	■	

¹ The participation in % reflects the capital- and voting rights in %.

37. Events subsequent to the balance sheet date

There were no major events subsequent to the balance sheet date.

Report of the statutory auditor to the General Meeting of Clariant Ltd. Muttenz

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Clariant Ltd and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2016 and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (pages 156 to 222) give a true and fair view of the consolidated financial position of the Group as at 31 December 2016 and its consolidated financial performance and its consolidated cash flows for the year

then ended in accordance with the International Financial Reporting Standards (IFRS) and comply with Swiss law.

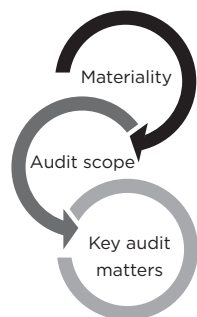
Basis for opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the »Auditor's responsibilities for the audit of the consolidated financial statements« section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

OUR AUDIT APPROACH

OVERVIEW



Overall Group materiality: CHF 30 million

We concluded full scope audit work at 18 reporting units in nine countries and we audited the accounting for the sales and procurement processes in two shared service centers for various other reporting units.

Our full audit scope addressed over 66% of the Group's revenue and 70% of the Group's assets; 5% of the Group's assets were addressed by specified audit procedures.

In addition, we performed analytical procedures on the remaining components.

As key audit matters the following areas of focus have been identified:

- Management's assumptions and estimates used in the impairment test for goodwill
- Cut-off for revenue recognition
- Current income tax payables

Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the consolidated financial statements. In particular, we considered where subjective judgments were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry

in which the Group operates. From the 145 reporting units in 48 countries, we identified 18 reporting units (components) to be the largest contributors to the Group's financial statements (amounting to 66% of the Group's revenue and 70% of the Group's assets, addressing all geographical areas of the Group's business). These reporting units were subject to a full scope audit by local PwC network firms. Besides in-person meetings, we held regular calls during all audit phases to discuss material audit topics with the component auditors of the most significant reporting units. Another major part was audited by the central PwC team in Switzerland. 5% of the Group's assets were addressed by specified audit procedures. In addition, two PwC network firms performed specific audit procedures related to sales and procurement and the financial closing cycle at the Company's shared service centers on behalf of PwC Switzerland and assisting other PwC network firms.

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgment, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall Group materiality	CHF 30 million
How we determined it	2.5% of the Group's EBITDA, weighted at 75%, and 1% of the Group's total assets weighted at 25%
Rationale for the materiality benchmark applied	We chose EBITDA as the benchmark because the Group assesses its profitability mainly based on this measure of profit and we took the Group's assets into consideration because the chemical industry is highly capital intensive with a lower net profit margin compared with other industries.

We agreed with the Audit Committee that we would report to them misstatements above CHF 1.5 million identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

MANAGEMENT'S ASSUMPTIONS AND ESTIMATES USED IN THE IMPAIRMENT TEST FOR GOODWILL

Key audit matter

We consider impairment testing of goodwill to be a key audit matter because of the significant scope for judgment with respect to assumptions concerning the future results of the businesses and the discount rates applied to future cash flow forecasts. Specifically, we focused on goodwill relating to the Functional Minerals business unit, which amounts to CHF 143 million, and the Catalysts business unit, which amounts to CHF 628 million, as the risk of impairment is higher for these units compared with other business units.

Please refer to page 172 (Critical accounting estimates and judgments, 4.1 Estimated impairment of goodwill, intangibles and property, plant and equipment), and page 178 (Goodwill allocation) in the notes.

How our audit addressed the key audit matter

We evaluated and challenged management's assumptions as described on pages 172 and 178 of the notes to the consolidated financial statements.

Management followed a clearly documented process for forecasting future cash flows, which was subject to timely oversight and challenges by the Board of Directors and which was consistent with the business plans as approved by the Board of Directors.

We compared the actual results of the year under review with the figures used to make the forecasts in the prior year in order to assess with hindsight whether any of the assumptions underlying the forecasts might have been too optimistic. In some cases, actual performance was found to be lower than forecast. Management analysed the underlying drivers and considered actual revenue growth rates and operating margins against those in the business plans prepared in the year under review.

We discussed with the business unit leaders management's assumptions regarding revenue, long-term growth rates and profit margins. We involved PwC's own valuation specialists to assess the model and the weighted average cost of capital (WACC) used. The WACC was assessed using comparable industry peers and data available from external sources. In addition, we assessed for reasonableness the expectations of movements in working capital and of investments in property, plant and equipment.

We found the assumptions to be balanced and reasonable.

We reformed thorough sensitivity analyses on the key assumptions to ascertain the extent of change in those assumptions that either individually or collectively would be required for the goodwill to be impaired. We discussed the results of our audit work as well as the headroom of the sensitivity analyses with management and the Audit Committee.

On the basis of the procedures performed and the evidence obtained, we identified no significant issues with respect to the assumptions used in the impairment test for goodwill.

CUT OFF FOR REVENUE RECOGNITION

Key audit matter

There is a risk that revenue is not recognized in accordance with the requirements of IFRS, mainly with regard to the timing of revenue recognition, which depends on the transfer of risks and rewards. We consider this to be a key audit matter because a number of large transactions occur close to yearend.

How our audit addressed the key audit matter

We identified transactions occurring close to the balance sheet date of 31 December 2016 and checked the appropriate timing of revenue recognition by examining the third party documentation and the contractual delivery terms.

On the basis of the procedures performed and the evidence obtained, we identified no significant issues with respect to revenue cut-off.

CURRENT INCOME TAX PAYABLES

Key audit matter

We consider current income tax payables to be a key audit matter as income tax audits are being carried out currently (particularly in Germany) and the outcome of these audits is uncertain. The Group has estimated the amounts that may be due and made provisions for these estimated amounts.

Please refer to page 173 (Critical accounting estimates and judgments, 4.3, Income tax and other taxes).

How our audit addressed the key audit matter

We involved PwC's own tax specialists to assess the current status of these investigations and to assess the reasonableness of the amounts provided for. We discussed the outcome with management and the Audit Committee.

On the basis of procedures performed and the evidence obtained, we identified no significant issues with respect to the Group's assessments of current income tax payables.

Other information in the annual report (integrated report)

The Board of Directors is responsible for the other information in the annual report (integrated report). The other information comprises all information included in the annual report (integrated report), but does not include the consolidated financial statements, the standalone financial statements and the remuneration report of Clariant Ltd and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report (integrated report) and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report (integrated report) and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors intends either to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Swiss law, ISAs and Swiss Auditing Standards, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in

the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate to them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers AG



Rolf Johner
Audit expert
Auditor in charge



Ruth Sigel
Audit expert

Basel, 14 February 2017

Review of trends

FIVE-YEAR GROUP OVERVIEW 2012-2016

		2016	2015	2014	2013	2012 ² (restated)	2012
Segment sales	CHF m	5 883	5 827	6 142	6 113	6 073	6 073
Change relative to preceding year							
in Swiss francs	%	1	-5	1	1	8	8
in local currency	%	2	3	5	4	8	8
Group sales¹	CHF m	5 847	5 807	6 116	6 076	6 038	6 038
Change relative to preceding year							
in Swiss francs	%	1	-5	1	1	8	8
in local currency	%	2	3	5	4	8	8
Operating income before exceptionals	CHF m	622	596	585	574	546	531
Change relative to preceding year	%	4	2	2	5	-13	-15
as a % of sales		10.6	10.3	9.6	9.4	9.0	8.8
Operating income	CHF m	512	496	525	470	411	396
Change relative to preceding year	%	3	-6	12	14	-5	-8
as a % of sales		8.8	8.5	8.6	7.7	6.8	6.6
EBITDA	CHF m	785	767	923	797	690	675
Change relative to preceding year	%	2	-17	16	16	7	5
as a % of sales		13.4	13.2	15.1	13.1	11.4	11.2
EBITDA before exceptionals	CHF m	887	853	867	858	817	802
Change relative to preceding year	%	4	-2	1	5	-2	-4
as a % of sales		15.2	14.7	14.2	14.1	13.5	13.3
Net income	CHF m	263	239	217	5	228	238
Change relative to preceding year	%	10	10	—	-98	-9	-5
as a % of sales		4.5	4.1	3.5	0.1	3.8	3.9
Investment in property, plant and equipment	CHF m	297	374	310	292	311	311
Change relative to preceding year	%	-21	21	6	-6	-16	-16
as a % of sales		5	6	5	5	5	5
Personnel costs	CHF m	1 383	1 345	1 435	1 407	1 434	1 452
Change relative to preceding year	%	3	-6	2	-2	7	8
as a % of sales		24	23	23	23	24	24
Employees at year-end	number	17 442	17 213	17 003	18 099	21 202	21 202
Change relative to preceding year	%	1	1	-6	-15	-4	-4

¹ Including trading.

² Restated for the effects of the revised IAS 19 - see note 1.03 of Annual Report 2013.

Financial statements of Clariant Ltd, Muttenz

FINANCIAL STATEMENTS OF CLARIANT LTD, MUTTENZ

Clariant Ltd balance sheets at 31 December 2016 and 2015

	Notes	31.12.2016 in CHF	in %	31.12.2015 in CHF	in %
Assets					
Current assets					
Cash and cash equivalents	3	541 317 980		398 747 988	
Near-cash assets	3	406 293 900		127 215 961	
Other short-term receivables	4	54 209 246		39 215 525	
Accrued income and prepaid expenses		7 573 966		3 898 118	
Total current assets		1 009 395 092	17.7	569 077 592	11.1
Non-current assets					
Loans to Group companies		2 856 598 527		2 901 979 563	
Other financial assets		2 571 434		3 060 000	
Shareholdings in Group companies	5	1 830 936 683		1 626 320 473	
Intangible assets		16 754 107		18 338 298	
Total non-current assets		4 706 860 751	82.3	4 549 698 334	88.9
Total assets		5 716 255 843	100.0	5 118 775 926	100.0
Liabilities and equity					
Liabilities					
Current liabilities					
Other current non-interest-bearing liabilities	6	72 012 820		79 762 703	
Other current interest-bearing liabilities	7	237 477 899		200 053 322	
Current provision		128 487 452		774 057	
Accrued expenses		3 567 719		4 686 179	
Total current liabilities		441 545 890	7.7	285 276 261	5.6
Non-current liabilities					
Non-current interest-bearing liabilities to third parties		1 904 429 071		1 328 685 920	
Non-current interest-bearing liabilities to Group companies		7 271 714		177 639 212	
Total non-current interest-bearing liabilities	12	1 911 700 785	33.4	1 506 325 132	29.4
Total liabilities		2 353 246 675		1 791 601 393	
Equity					
Total share capital	11	1 228 175 036		1 228 175 036	
Reserves from capital contribution ¹	9,11	2 588 117 282		2 717 619 073	
Reserves from retained earnings ²	9,11	-1 264 297 991		-1 264 297 991	
Total statutory capital reserves	11	1 323 819 291		1 453 321 082	
Voluntary retained earnings	11	779 629 894		629 186 906	
Total reserves	9,11	2 103 449 185		2 082 507 988	
Profit for the financial year		144 897 331		150 442 988	
Treasury shares against reserves from capital contribution		—		-21 607 230	
Other treasury shares		-113 512 384		-112 344 249	
Total treasury shares	10,11	-113 512 384		-133 951 479	
Total equity		3 363 009 168	58.9	3 327 174 533	65.0
Total equity and liabilities		5 716 255 843	100.0	5 118 775 926	100.0

¹ In 2012, the Swiss Federal Tax Administration confirmed qualifying capital contribution reserves of approximately CHF 1.7 billion (as per 31 December 2016 due to distributions still amounting of approximately CHF 1.3 billion). For further information see also note 9 to the financial statements of Clariant Ltd.

² This amount corresponds to capital contribution reserves formerly offset with losses. For further information see also note 9 to the financial statements of Clariant Ltd.

CLARIANT LTD INCOME STATEMENTS

for the years 2016 and 2015

	Notes	2016 in CHF	2015 in CHF
Income			
Income from shareholdings in Group companies		202 414 298	1 168 811 853
Income from interest on loans to Group companies		69 073 416	58 440 507
Other financial income		6 302 946	9 516 653
Exchange rate gains realized		186 914 543	359 577 182
Reversal of devaluations on shareholdings in Group companies	5	179 500 000	74 600 000
Other income		12 006 741	6 323 014
Total income		656 211 944	1 677 269 209
Expenses			
Financial expenses		250 869 581	480 145 804
Administrative expenses		61 630 732	76 501 055
Devaluations of shareholdings and other expenses related to Group companies	5	193 300 000	920 600 000
Exceptional expenses	2	—	34 592 993
Other expenses		4 600 974	14 094 907
Taxes		913 326	891 462
Total expenses		511 314 613	1 526 826 221
Profit for the financial year		144 897 331	150 442 988

Notes to the financial statements of Clariant Ltd

1. Accounting policies

Introduction. The statutory financial statements of Clariant Ltd comply with the regulations on financial accounting of the Swiss Code of Obligations.

Revenue recognition. Interest income is recognized on a time proportion basis, taking into account the principal outstanding and the effective rate over the period to maturity, when it is determined that such income will accrue to the company. Dividends are recognized when the right to receive payment is established.

Exchange rate differences. Balance sheet items denominated in foreign currencies are converted at year-end exchange rates. Realized exchange gains and losses as well as unrealized exchange losses are recorded in the income statement.

Intangible assets. Patents are capitalized at cost and amortized on a straight-line basis to the income statement over their estimated useful lives with a maximum of 20 years.

Capital increase costs are directly charged to the income statement.

The Board of Directors approved the stand-alone financial statements of Clariant Ltd for issue on 14 February 2017. It will be subject to approval by the Annual General Meeting of Shareholders scheduled for 20 March 2017.

2. Basis of preparation

The statutory financial statements of Clariant Ltd have been prepared according to the provisions of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations).

Exceptional expenses include in the year 2015 the revaluation of treasury shares from the market price to historical purchase price. The losses on disposal of shareholdings are included in this position.

Clariant Ltd has no employees, except the members of the Board of Directors of the Clariant Group.

3. Cash and cash equivalents and near-cash assets

Cash and cash equivalents amount to CHF 541 317 980 at the end of 2016 compared with CHF 398 747 988 at the end of 2015 and comprised cash in hand denominated mainly in euro and to a lesser extent in Swiss francs and British pounds.

Near-cash assets amount to CHF 406 293 900 at the end of 2016 compared to CHF 127 215 961 at the end of 2015 and includes short-term deposits with an original maturity between 90 and 365 days.

4. Other short-term receivables

Other short-term receivables amount to CHF 54 209 246 at the end of 2016 compared to CHF 39 215 525 at the end of 2015. They comprise third-party receivables of CHF 10 574 980 (compared to CHF 1 665 477 at the end of 2015) and intragroup receivables for CHF 43 634 266 (compared with CHF 37 550 048 at the end of 2015).

5. Shareholdings in Group companies

Shareholdings in Group companies are reviewed on a yearly basis to assess their cash generating capabilities by applying either a mixed calculation method based on the equity value and the net result or, alternatively, the discounted cash flow model. In that review, the investments are classified and grouped in terms of sales and Business Areas.

The following shareholdings in Group companies were valued using the discounted cash flow method: Clariant S.A. (Brazil), Clariant South East Asia Pte Ltd, Clariant Southern Africa Pty. and Clariant Finance (Luxembourg) S.A.

At the end of 2016, shareholdings in Group companies amount to CHF 1 830 936 683 compared to CHF 1 626 320 473 at the end of 2015. After this review, the following was recorded in the income statement: A reversal of devaluation of CHF 179 500 000 in »Reversal of devaluations on shareholdings in Group companies« and a devaluation of CHF 65 300 000 and other expenses related to Group companies in »Devaluations of shareholdings and other expenses related to Group companies« in the income statement.

In the year 2016, no hidden reserves were reversed (2015: nil).

The table below shows the shareholdings directly held by Clariant Ltd.

Country	Company name		Capital interest (%)	Voting rights (%)	Capital interest (%)	Voting rights (%)
			2016	2016	2015	2015
Belgium	Clariant Masterbatches Benelux SA	Louvain-la-Neuve	—	—	100.00%	100.00%
Brazil	Clariant S.A.	Sao Paulo	46.32%	46.32%	46.32%	46.32%
Canada	Clariant (Canada) Inc.	Toronto	100.00%	100.00%	100.00%	100.00%
China	Clariant (China) Ltd	Hong Kong	100.00%	100.00%	100.00%	100.00%
Colombia	Clariant (Colombia) SA	Cota	5.13%	5.13%	5.13%	5.13%
Ecuador	Clariant (Ecuador) S.A.	Quito	0.03%	0.03%	0.03%	0.03%
Finland	Clariant Masterbatches (Finland) Oy	Vantaa	—	—	100.00%	100.00%
France	Clariant Services (France)	Choisy-le-Roi	43.00%	43.00%	43.00%	43.00%
Germany	Clariant Verwaltungsgesellschaft mbH	Sulzbach	100.00%	100.00%	100.00%	100.00%
Great Britain	Clariant Horsforth Ltd	Leeds	100.00%	100.00%	100.00%	100.00%
	Clariant Services UK Ltd	Leeds	100.00%	100.00%	100.00%	100.00%
Guatemala	Clariant (Guatemala) SA	Guatemala City	—	—	10.00%	10.00%
	Clariant Specialties (Guatemala) SA	Guatemala City	10.00%	10.00%	—	—
Ireland	Clariant Masterbatches Ireland Ltd	Naas	—	—	100.00%	100.00%
Japan	Clariant (Japan) K.K.	Tokyo	100.00%	100.00%	100.00%	100.00%
	Clariant Catalysts (Japan) K.K.	Tokyo	61.45%	61.45%	61.45%	61.45%
Korea	Clariant Plastics & Coatings Ltd	Pohang, Gyeongbuk	17.50%	17.50%	17.50%	17.50%
	Clariant (Korea) Ltd	Pohang, Gyeongbuk	17.50%	17.50%	—	—
Liechtenstein	Clariant Insurance AG	Triesen	—	—	100.00%	100.00%
Luxembourg	Clariant Finance (Luxembourg) SA	Luxembourg	100.00%	100.00%	100.00%	100.00%
Malaysia	Clariant (Malaysia) Sdn Bhd	Kuala Lumpur	—	—	100.00%	100.00%
Morocco	Clariant (Maroc) SA	Casablanca	0.05%	0.05%	0.05%	0.05%
Mexico	Clariant (Mexico) SA de CV	Ecatepec de Morelos	99.99%	99.99%	99.99%	99.99%
	Clariant Plastics & Coatings Mexico SA de CV	Ecatepec de Morelos	99.99%	99.99%	—	—
New Zealand	Clariant (New Zealand) Ltd	Auckland	—	—	100.00%	100.00%
Norway	Clariant Oil Services Scandinavia AS	Bergen	100.00%	100.00%	100.00%	100.00%
Peru	Clariant (Peru) SA	Lima	0.23%	0.23%	0.23%	0.23%
Singapore	Clariant (Singapore) Pte Ltd	Singapore	—	—	100.00%	100.00%
	Clariant South East Asia Ltd	Singapore	100.00%	100.00%	100.00%	100.00%
South Africa	Clariant Southern Africa Pty	Chloorkop	100.00%	100.00%	—	—
Spain	Clariant Ibérica Servicios S.L.	El Prat de Llobregat	85.03%	85.03%	85.03%	85.03%
Sweden	Clariant Masterbatches Norden AB	Malmö	—	—	100.00%	100.00%
	Clariant Production Sweden	Möndal	100.00%	100.00%	100.00%	100.00%
Switzerland	Clariant Plastics & Coatings AG (formerly: Clariant Beteiligungen AG)	Muttenz	99.00%	99.00%	99.00%	99.00%
	Clariant Produkte (Schweiz) AG	Muttenz	—	—	100.00%	100.00%
	Clariant Reinsurance AG	Muttenz	100.00%	100.00%	100.00%	100.00%
	Infrapark Baselland AG	Muttenz	—	—	100.00%	100.00%
	Clariant International AG	Muttenz	100.00%	100.00%	100.00%	100.00%
	Clariant Oil Services AG	Muttenz	80.00%	80.00%	20.00%	20.00%
Thailand	Clariant (Thailand) Ltd	Klongton, Bangkok	100.00%	100.00%	100.00%	100.00%
Turkey	Clariant (Türkiye) AS	Gebze	100.00%	100.00%	100.00%	100.00%
UAE	Clariant (Gulf) FZE	Dubai	100.00%	100.00%	100.00%	100.00%
USA	Clariant Corporation	Charlotte	100.00%	100.00%	100.00%	100.00%

For further details on shareholdings indirectly held by Clariant Ltd, see note 36 Important subsidiaries on pages 220 – 222 of this report.

6. Other current non-interest bearing liabilities

Other current non-interest-bearing liabilities amount to CHF 72 012 820 at the end of 2016 compared to CHF 79 762 703 at the end of 2015. They comprise third-party liabilities of CHF 19 187 604 (compared to CHF 20 125 688 at the end of 2015) and intragroup liabilities of CHF 52 825 216 (compared with CHF 59 637 015 at the end of 2015). The intragroup liabilities comprise shareholder costs payable to Clariant International Ltd.

7. Other current interest-bearing liabilities

Other current interest-bearing liabilities amounted to CHF 237 477 899 at the end of 2016 compared to CHF 200 053 322 at the end of 2015. They comprise third-party liabilities of CHF 115 472 542 (compared to CHF 148 058 195 at the end of 2015) and intragroup liabilities of CHF 122 005 357 (compared with CHF 51 995 127 at the end of 2015).

On 21 April 2016, the certificate of indebtedness issued in 2011 with a notional amount of EUR 123 million reached maturity and was repaid.

8. Share capital

Capital issued	31.12.2016	31.12.2015
Number of registered shares each with a par value of CHF 3.70 (2015: CHF 3.70)	331 939 199	331 939 199
In CHF	1 228 175 036	1 228 175 036
Conditional capital	31.12.2016	31.12.2015
Number of registered shares each with a par value of CHF 3.70 (2015: CHF 3.70)	3 811 886	3 811 886
In CHF	14 103 978	14 103 978

9. Reserves

General reserves must be at least 20 % of the share capital of Clariant Ltd as this is the minimum amount required by the Swiss Code of Obligations. As from 2011, if certain conditions are met, qualifying capital contributions made to Clariant Ltd by its shareholders since 1997 can be distributed without being subject to Swiss withholding tax. Qualifying capital contribution reserves of approximately CHF 1.7 billion are confirmed by the Swiss Federal Tax Administration (SFTA).

A bond issued in 2011 with a nominal value of CHF 100 million will fall due in 2017 and as a consequence was reclassified to current financial debt.

On 16 December 2016, Clariant Ltd signed an agreement for a new CHF 500 million five-year multi-currency revolving credit facility (RCF) with two one-year extension options. The RCF is structured as a club deal with ten key relationship banks with equal stakes and contains an accordion option for an increase up to CHF 600 million. The RCF is structured as a »back-stop« facility for rating purposes to maintain Clariant's liquidity headroom. It contains customary covenants such as negative pledge, cross default, ownership change and restriction on disposals, mergers and subsidiary debt. The Group is required to maintain one financial covenant (debt leverage) that is tested at the end of each financial half year.

The intragroup liabilities comprise the cash pool accounts and current accounts between Group companies.

The SFTA is of the opinion that capital contribution reserves which were formerly offset with losses of CHF 1.26 billion will not qualify as capital contribution reserves anymore (even if compensated with newly generated retained earnings). The Swiss Administrative Court confirmed the SFTA's view in a particular case (decision of 4 June 2015, A-6072/2013), whilst the Swiss Supreme Court (as the highest Swiss court level) has up to now not dealt with this question. Clariant Ltd does not unconditionally share the above mentioned opinion. This is why potential capital contribution reserves are also documented as capital contribution reserves in the balance sheet.

10. Treasury shares

	2016	2015
Holdings at 1 January	9 195 810	12 087 920
Shares purchased at fair market value	819 813	1 016 761
Shares sold to counterparty out of options (management options 2010)	—	-2 077 650
Shares sold at fair market value	-1 240 318	-1 016 741
Shares transferred to employees	-887 577	-814 480
Holdings on 31 December	7 887 728	9 195 810

Each registered share has a par value of CHF 3.70 (2015: CHF 3.70).

The average price of shares bought in 2016 was CHF 18.26 (2015: CHF 20.69).

The average price of shares sold in 2016 was CHF 18.06 (2015: CHF 17.19).

The profit or loss from the sale of own shares is recorded in the income statement as other income or other expenses.

11. Reconciliation of equity

in CHF	Share capital	Statutory capital reserves		Voluntary retained earnings	Treasury shares		Net income	Total
		From capital contribution ¹	From retained earnings ²		Against reserves from capital contribution	Others		
Balance 31 December 2015	1 228 175 036	2 717 619 073	-1 264 297 991	629 186 906	-21 607 230	-112 344 249	150 442 988	3 327 174 533
Reclassification of profit carryforward to voluntary retained earnings				150 442 988			-150 442 988	—
Reclassification		-129 501 791		129 501 791				—
Distribution				-129 501 791				-129 501 791
Changes in treasury shares					21 607 230	-1 168 135		20 439 095
Profit for the financial year							144 897 331	144 897 331
Balance 31 December 2016	1 228 175 036	2 588 117 282	-1 264 297 991	779 629 894	—	-113 512 384	144 897 331	3 363 009 168

¹ In 2012, the Swiss Federal Tax Administration confirmed qualifying capital contribution reserves of approximately CHF 1.7 billion (as per 31 December 2016 due to distributions still amounting of approximately CHF 1.3 billion). For further information see also note 9 to the financial statements of Clariant Ltd.

² This amount corresponds to capital contribution reserves formerly offset with losses. For further information see also note 9 to the financial statements of Clariant Ltd.

12. Non-current interest bearing financial liabilities

in CHF	Interest rate	Term	Amount 31.12.2016	Amount 31.12.2015
Non-current interest-bearing liabilities to third parties				
Certificate of indebtedness	mixed	2015-2020	160 838 646	181 225 967
Certificate of indebtedness	mixed	2015-2023	160 796 297	164 026 004
Certificate of indebtedness	2.010	2016-2026	15 879 028	—
Certificate of indebtedness	1.137	2016-2023	28 680 394	—
Certificate of indebtedness	mixed	2016-2023	14 069 627	—
Certificate of indebtedness	0.779	2016-2021	60 066 485	—
Certificate of indebtedness	1.501	2016-2023	80 490 247	—
Certificate of indebtedness	1.012	2016-2020	171 383 995	—
Certificate of indebtedness	mixed	2016-2020	60 778 350	—
Certificate of indebtedness	2.618	2016-2021	112 469 944	—
Certificate of indebtedness	mixed	2016-2021	168 976 058	—
Bank loans with fixed interest rates	3.000	2012-2017	—	13 433 949
Straight bond	3.125	2011-2017	—	100 000 000
Straight bond	3.250	2012-2019	285 000 000	285 000 000
Straight bond	2.500	2012-2018	250 000 000	250 000 000
Straight bond	3.500	2012-2022	175 000 000	175 000 000
Straight bond	2.125	2014-2024	160 000 000	160 000 000
Total non-current interest-bearing liabilities to third parties			1 904 429 071	1 328 685 920
Non-current interest-bearing liabilities to Group Companies				
Financial liabilities to Clariant Produkte (Deutschland) GmbH	5.000	2014-2018	1 570 000	2 355 000
Financial liabilities to Clariant Service (France) SA	5.000	2014-2018	1 490 000	2 235 000
Financial liabilities to Clariant Oil Service Ltd	0.750	—	237 054	424 079
Financial liabilities to Clariant Plastics & Coatings Ltd	mixed	—	3 974 660	172 625 133
Non-current interest-bearing liabilities to Group Companies			7 271 714	177 639 212
Total non-current interest-bearing liabilities			1 911 700 785	1 506 325 132
Breakdown by maturity				
one to five years			1 451 785 192	1 171 325 132
more than five years			459 915 593	335 000 000
Total non-current interest-bearing liabilities			1 911 700 785	1 506 325 132

On 26 April 2016, Clariant Ltd issued four certificates of indebtedness with a total amount of EUR 300 million. These certificates have a term of 4 years (EUR 212 million), 7 years (EUR 73 million) and

10 years (EUR 15 million) respectively. The interest varies between 1.012 % and 2.010 %.

On 5 August 2016 Clariant issued five certificates of indebtedness with total amounts of EUR 95 million and USD 277 million. These certificates have terms of five years (EUR 55 million and USD 277 million) and seven years (EUR 40 million). The interest varies between 0.779% and 2.618%, while a tranche of EUR 13 million has a variable interest of six months EURIBOR plus 1.1% and a tranche in the amount of USD 166 million has a variable interest of three months LIBOR plus 1.5%.

On 17 April 2015, Clariant Ltd issued four certificates of indebtedness with a total amount of EUR 300 million. These certificates have a term of five years (EUR 150 million) and eight years (EUR 150 million) respectively. For each term there is one certificate with a fixed (based on mid-swap) and one with a floating (based on six months Euribor) coupon. The interest costs of the tranches range from 0.9% to 1.6% per year.

13. Contingent liabilities

in CHF m	Outstanding liabilities 31.12.2016	Outstanding liabilities 31.12.2015
Outstanding liabilities as guarantees in favor of Group companies	751	770

Clariant Ltd belongs to the Swiss value-added tax (VAT) group of Clariant, and thus carries joint liability to the Swiss federal tax authority for value-added tax.

In connection with the dismantlement of a waste water treatment plant in France Clariant is faced with a claim by the Swiss-based group Novartis in the amount of EUR 15 million. Clariant has the view that this claim is unfounded. The case is currently pending at court.

14. Shareholdings of members of the Board of Directors and the Executive Committee

1. Board of Directors

SHARES HELD						
Name	Number of shares granted ¹	Value of shares granted ¹	Number of shares granted	Value of shares granted	Number of privately held shares	Number of privately held shares
	31.12.2016	31.12.2016	31.12.2015	31.12.2015	31.12.2016	31.12.2015
Rudolf Wehrli	11 765	200 005	11 541	200 006	66 438	54 897
Günter von Au	8 824	150 008	8 656	150 008	44 212	35 556
Peter Chen	5 883	100 011	5 771	100 011	24 475	18 704
Hariolf Kottmann ²			See EC Overview			
Eveline Saupper	5 883	100 011	–	–	6 000	–
Carlo G. Soave	5 883	100 011	5 771	100 011	39 575	33 804
Peter Steiner	5 883	100 011	–	–	–	–
Claudia Suessmuth Dyckerhoff	5 883	100 011	–	–	–	–
Susanne Wamsler	5 883	100 011	5 771	100 011	964 182 ³	955 171 ³
Konstantin Winterstein	5 883	100 011	5 771	100 011	6 014 515	6 008 744
Former member	–	–	5 771	100 011	–	116 204
Total	61 770	1 050 090	49 052	850 069	7 159 397	7 223 080

¹ The number of shares granted for the period from annual general meeting to annual general meeting (April to March) as part of the BoD share program will be determined after the balance sheet date. The number disclosed is based on the amount of an estimated fair value of the shares at the grant date. Therefore corrections for the prior-year period were necessary.

² After taking over the function as CEO, no further Board of Directors' compensations are extended. Please refer to the Executive Committee table.

³ Thereof: 240 271 held by »The Honoré T. Wamsler Trust«

In 2016 no options were held by members of the Board of Directors. At 31 December 2015 Carlo G. Soave and Dominik Koechlin held 24 096 exercisable options each.

For detailed information regarding emoluments of the Board of Directors and the Executive Committee, please refer to the Compensation Report on pages 139 to 152.

2. Executive Committee

SHARES HELD

Name	Number of shares granted ¹ for 2016	Value of shares granted ¹ for 2016	Number of shares granted for 2015	Value of shares granted for 2015	Number of shares within vesting period 31.12.2016	Number of shares within vesting period 31.12.2015	Number of privately held shares 31.12.2016	Number of privately held shares 31.12.2015
Hariolf Kottmann	79 482	1 297 996	72 871	1 209 158	152 325	202 731	449 135	473 893
Britta Fuenfstueck	37 020	601 224	—	—	20 784	—	0	—
Patrick Jany	42 432	690 576	36 436	569 611	84 237	107 526	354 196	304 973
Christian Kohlpaintner	42 432	690 576	36 436	569 611	84 237	107 526	280 335	231 112
Former member	—	—	13 090	219 258	—	107 526	—	61 830
Total	201 366	3 280 372	158 833	2 567 638	341 583	525 309	1 083 666	1 071 808

¹ The number of shares granted as part of the matching share program will be determined after the balance sheet date. The number disclosed is based on a bonus payout of 92%, the amount of variable estimated remuneration accrued and an estimated fair value of the shares at the grant date. Therefore corrections are necessary.

No options were granted to members of the Executive Committee for the years 2016 and 2015, nor did any member of the Executive Committee hold any options in those years.

For detailed information regarding emoluments of the Board of Directors and the Executive Committee, please refer to the Compensation Report on pages 139 to 152.

15. Voting and legal registration limitations

In accordance with article 5 of the Articles of Incorporation, no limitations exist with regard to registration of shares which are acquired in one's own name and on one's own account. Special rules exist for nominees.

In accordance with article 13 of the Articles of Incorporation, each share has the right to one vote.

16. Significant shareholdings of 3 % or more of total share capital

Based on the notifications received by Clariant and published by SIX Exchange Regulation, as at 31 December 2016 the following shareholders held more than 3 % of voting rights in Clariant Ltd:

Shareholders	Voting rights
Group of former shareholders of Süd-Chemie AG ¹	13.89%
Thereof (as a separate sub-group): Blue Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany) and Maple Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany) ²	3.73%
APG Asset Management N.V., Amsterdam, Netherlands	5.01%
BlackRock Inc., New York	3.08%
Cymbria, Canada EdgePoint Global Portfolio, Canada EdgePoint Canadian Growth and Income Portfolio, Canada EdgePoint Canadian Portfolio, Canada EdgePoint Global Growth and Income Portfolio, Canada St. James Place Global Equity Unit Trust, UK	3.06%
Citadel Multi-Strategy Equities Sàrl Citadel Global Equities Fund Sàrl Citadel Securities (Europe) Limited	3.02%
Norges Bank (the Central Bank of Norway)	3.003%
UBS Funds Management (Switzerland) AG	3.001%

¹ The following former shareholders of Süd-Chemie AG form a group:
 Wilhelm, Dr. Winterstein, Germany
 Dolf, Dr. Stockhausen, Switzerland
 Axel, Dr. Schweighart, Germany
 Rosemarie Schweighart, Germany
 Dominique Kraus, Germany
 Karl, Dr. Wamsler, Germany
 Irene W. Banning, USA
 Susanne Wamsler-Singer, Austria
 Caroline A., Dr. Wamsler, USA
 Amelie Ratjen, Germany
 Christof Ratjen, Germany
 Christopher Weithauer, Germany
 Johanna Bechtle, Germany
 Kaspar Bechtle, Germany
 Luisa Redetzki, Germany
 Karl T. Banning, USA
 Schuyler H. Joerger, USA
 Konstantin Alfred Winterstein, Germany
 Max-Theodor, Dr. Schweighart, Germany
 Peter, Dr. Schweighart, Germany
 Moritz Ostenrieder, Germany
 Christian Ratjen, Germany
 Bettina Wamsler, Germany
 Pauline Joerger, USA
 Marianne Kunisch, Germany
 Maximilian Ratjen, Germany
 Julius Ratjen, Germany
 Elisabeth Prinzessin zu Sayn-Wittgenstein, Germany
 Georg A. Weithauer, Germany
 Charlotte Bechtle, Germany
 Clara Redetzki, Germany
 Marie Redetzki, Germany
 Sophia P. Joerger, USA

² According to a disclosure notification published on 18 January 2013, a group consisting of Konstantin Winterstein, 80333 München, Germany and Elisabeth Prinzessin zu Sayn-Wittgenstein, 80333 München, Germany holds 3.73 % partially through Blue Beteiligungsgesellschaft mbH, Grossdingharting (Germany) and partially through Maple Beteiligungsgesellschaft mbH, Grossdingharting (Germany). The 3.73 % held by this group are included in the 13.89 % mentioned under footnote 1, but build a separate sub-group.

Disclosure notifications during the financial year 2016 reported to the Stock Exchange Disclosure Office pursuant to Art. 120 of the Financial Markets Infrastructure Act (FMIA) as well as further information in relation to disclosure notifications can be found on the SIX Swiss Exchange reporting platform:
www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html

As of 31 December 2016, former shareholders of Süd-Chemie AG, who had exchanged their shares against Clariant shares in April 2011, held a total of 13.89 % of the share capital of Clariant Ltd. These shareholders are related to each other for family or other reasons (especially the Wamsler, Winterstein, Schweighart and Stockhausen families).

In addition, at 31 December 2015, the following shareholders held a participation of 3 % or more of the total share capital:
 Group of former shareholders of Süd-Chemie AG: 13.89 %, thereof (as a separate sub-group): Blue Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany) and Maple Beteiligungsgesellschaft mbH, Am Holzmaierfeld, 82064 Grossdingharting (Germany): 3.73 %; APG Asset Management N.V., Amsterdam, Netherlands: 5.01 %; Cymbria, Canada: 3.06 %; Black Rock Inc., New York: 3.05 %.

At 31 December 2016, Clariant AG itself held 7 887 728 shares in treasury, corresponding to 2.38 % of the share capital.

Appropriation of available earnings

The Board of Directors proposes to appropriate the profit of 2016 of Clariant Ltd in the amount of CHF 144 897 331 as follows.

Annual result	in CHF
Carried forward from previous year	—
Profit for the year 2016	144 897 331
Total available earnings	144 897 331

Appropriation	in CHF
Voluntary retained earnings as at Dec. 31, 2016	779 629 894
Transfer to voluntary retained earnings	144 897 331
Voluntary retained earnings as at Jan. 1, 2017	924 527 225
Balance to be carried forward	—
Distribution of CHF 0.45 per share from reserves from capital contribution¹	145 800 000

¹ Depending on the number of issued shares on the date of the distribution. Shares held by Clariant Ltd or its subsidiaries are not entitled to a distribution and are not taken into account. The distribution amount is therefore expected to be in the region of CHF 145 800 000.

Distribution of reserves from capital contribution

The Board of Directors proposes a distribution from the confirmed capital contribution reserves of CHF 0.45 per share (following reclassification of the full distribution amount from reserves from capital contribution to voluntary retained earnings).

Report of the statutory auditor to the General Meeting of Clariant Ltd. Muttenz

Report on the audit of the financial statements

Opinion

We have audited the financial statements of Clariant Ltd, which comprise the balance sheet as at 31 December 2016, income statement and notes for the year then ended, including a summary of significant accounting policies.

In our opinion, the financial statements (pages 228 to 238) as at 31 December 2016 comply with Swiss law and the company's articles of incorporation.

Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the »Auditor's responsibilities for the audit of the financial statements« section of our report.

We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

OUR AUDIT APPROACH

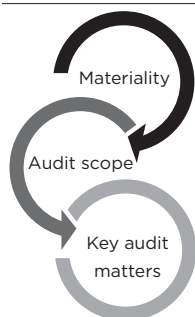
Overview

Overall materiality: CHF 22.5 million

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the entity, the accounting processes and controls, and the industry in which the entity operates.

As a key audit matter, the following area of focus was identified:

Valuation of shareholdings in Group companies



Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement.

Misstatements may arise due to fraud or error. They are considered

material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

Overall materiality	CHF 22.5 million
How we determined it	0.4% of total assets
Rationale for the materiality benchmark applied	We chose total assets as benchmark because, in our view, it is the most relevant measure for the activities of Clariant AG as holding company.

We agreed with the Audit Committee that we would report to them misstatements above CHF 1.1 million identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

VALUATION OF SHAREHOLDINGS IN GROUP COMPANIES

Key audit matter	How our audit addressed the key audit matter
We consider the valuation of shareholdings in Group companies to be a key audit matter due both to the significant scope for judgment involved with respect to the assumptions and the discount rates applied for the valuations, and to the significance of these investments on the balance sheet.	We evaluated and challenged management's assumptions and the discount rates applied for valuation purposes. Management followed a clearly documented process to group certain investments and, using generally accepted valuation methods, to calculate their value. We tested the calculation method and we compared the input figures used with the Group's accounting records. We also compared the actual results of the year under review with the figures included in the forecasts in the prior year in order to assess with hindsight whether any of the assumptions underlying the forecasts might have been too optimistic. We assessed the assumptions relating to the forecasts and found them to be consistent with actual developments and reasonable.
Please refer to page 230 (Shareholdings in Group companies, note 5).	We involved PwC valuation specialists to assess the discount rate by comparing the rates with market information. We found the assumptions and the discount rates to be appropriate and reasonable.

Responsibilities of the Board of Directors for the financial statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors intends either to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted

in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Swiss law and Swiss Auditing Standards, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate to them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of financial statements according to the instructions of the Board of Directors. We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG



Rolf Johner
Audit expert
Auditor in charge



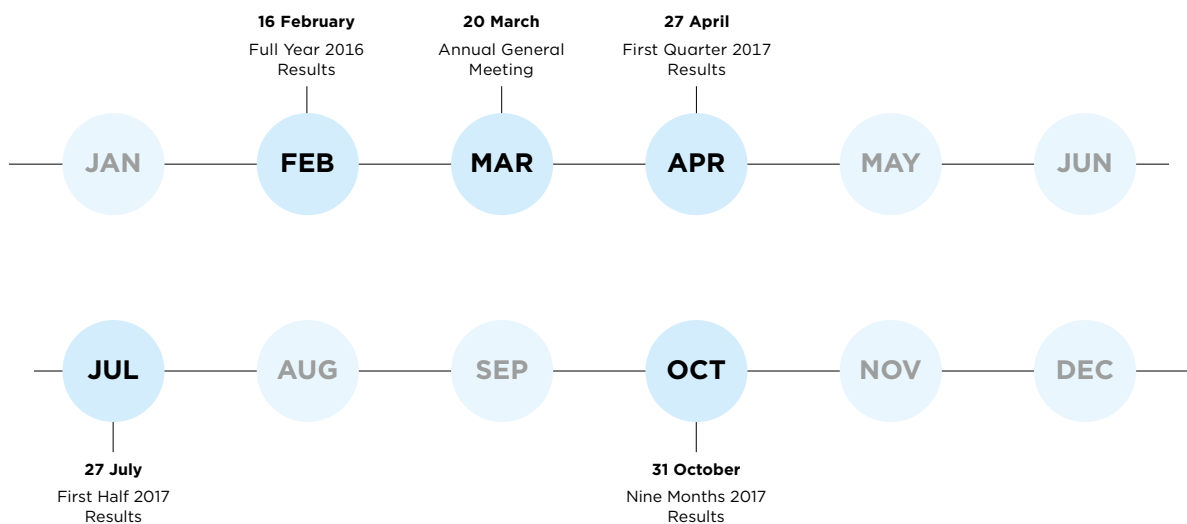
Ruth Sigel
Audit expert

Basel, 14 February 2017

Forward-looking statements

Forward-looking statements contained herein 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 uncertainty. In addition to the factors discussed above, among the factors that could cause actual results to differ materially are the following: 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.

Financial CALENDAR 2017



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Editor and integrated reporting consultant

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Concept and design

Mutabor Design GmbH, Hamburg

Design, graphics and layout

Kammann Rossi GmbH, Cologne

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Printing

Neidhart + Schön, Zurich

Note about forward-looking statements

This report contains forward-looking statements based on current assumptions and projections made by management. Such statements are subject to known and unknown risks, uncertainties and other factors which may cause the actual results and performance of Clariant International Ltd to differ from those expressed in, implied or projected by the forward-looking information and statements. The information published in this report is provided by Clariant International Ltd and corresponds to the status as of the date of publication of this report.

Disclaimer

Clariant International Ltd published the Integrated Report in English and German. The English version is legally binding.



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Print | ID 53232-1702-1016



Five-Year Group Overview

2012 - 2016

CHF m	2016	2015	2014	2013	2012
Group sales	5 847	5 807	6 116 ¹	6 076 ¹	6 038 ¹
Change relative to preceding year					
in Swiss francs (%)	1	-5	1	1	8
in local currencies (%)	2	3	5	4	8
Operating income before exceptionals	622	596	585 ¹	574 ¹	546 ^{1,2}
Operating income	512	496	525 ¹	470 ¹	411 ^{1,2}
EBITDA before exceptionals	887	853	867 ¹	858 ¹	817 ^{1,2}
EBITDA	785	767	923 ¹	797 ¹	690 ^{1,2}
Net income	263	227	235 ¹	323 ¹	203 ^{1,2}
Basic earnings per share (in CHF)	0.78	0.67	0.55 ¹	0.98 ¹	0.68 ^{1,2}
Distribution per share (in CHF)	0.45	0.40	0.40	0.36	0.33
EBITDA margin before exceptionals (%)	15.2	14.7	14.2	14.1	13.5 ²
Return on invested capital (ROIC) (%)	10.2	9.7	9.4 ¹	9.5 ¹	9.4 ¹
Operating cash flow	646	502	334	301	468
Investment in property, plant and equipment	297	374	310	292	311
Research & Development expenditures	206	206 ³	213 ¹	199 ¹	175 ¹
Depreciation and amortization	265	257	282	284	316
Net working capital	1 087	1 027	1 169 ¹	1 036 ¹	1 079 ¹
in % of sales	18.6	17.7	19.1 ¹	17.1 ¹	17.9 ¹
Total assets	8 365	7 461	7 915	8 174	9 467 ²
Equity (including non-controlling interests)	2 546	2 494	2 733	2 780	2 666 ²
Equity ratio (%)	30.4	33.4	34.5	34.0	28.2 ²
Net financial debt	1 540	1 312	1 263	1 500	1 789
Gearing ratio (%)	60	53	46	54	67 ²
Employees	17 442	17 213	17 003	18 099	21 202

¹ Continuing operations (see note 1.04 in the Financial Report of the 2012 Annual Report)

² Restated (see note 1.03 of the Financial Report of the 2013 Annual Report)

³ Reclassified

Never stop asking.

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