

2021

# Business Report



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The Integrated Report consists of five reports that covers important aspects of our business. They can be read in conjunction with each other. Together, the reports provide a full picture of our ability to create long-term value.

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**The Business Report is integral to Clariant’s Reporting Hub 2021, which provides comprehensive information about Clariant’s long-term value creation. The report explains Clariant’s integrated business model and purpose-led strategy, demonstrating the company’s integrated thinking. For the three business areas and for the Group overall, the report reviews the financial year, including the leadership’s perspective on Clariant’s short- and long-term profitability.**

**As one of the world's leading specialty chemicals companies, Clariant contributes to value creation with innovative and sustainable solutions for customers from many industries. The company portfolio is designed to meet very specific needs with as much precision as possible.**

**At the same time, Clariant's research and development is focused on addressing the key trends of our time. These include energy efficiency, renewable raw materials, emission-free mobility, and the conservation of finite resources. The corporate strategy is guided by the overarching purpose of »Greater chemistry - between people and planet« and reflects the importance of connecting customer focus, innovation, sustainability, and people. Clariant reports in three business areas: Care Chemicals, Natural Resources, and Catalysis.**



## Clariant Key Figures (continuing operations)

**11 537**

Total staff (FTEs)

**0.16**

LTAR<sup>1</sup>

**3**

Core business areas

**67**

Production sites

**4 372**

Sales (CHF m)

**708**

EBITDA (CHF m)

**16.2 %**

EBITDA margin

**15 %**

Sales growth in local currency

**0.71**

Scope 1 & 2 GHG emissions in m t CO<sub>2</sub>e

**2.70**

Scope 3 GHG emissions for purchased goods and services (cat. 1) in m t CO<sub>2</sub>e

<sup>1</sup> Including discontinued operations



# Letter to Stakeholders

Dear Stakeholders,

Granted, Clariant's financial results 2021 took a long time to reach you. On behalf of the entire Board of Directors, I would like to apologize for the late publication and the delayed General Annual Meeting. This was due to an investigation of accounting issues related to provisions and accruals. Based on the results of this investigation, we have determined the need for a restatement of the 2020 financial statements. We are also updating the quarterly reporting of key financial data for 2020 and 2021. The Board of Directors has reviewed the Integrated Report 2021 and proposes its approval to the Annual General Meeting.

The investigation confirmed what we had issued as guidance in February 2022: Under the leadership of Conrad Keijzer, who started as CEO on 1 January 2021, Clariant has delivered a strong set of results in 2021. The company has shown strong sales growth and increased profitability, concluded the planned divestments, and executed its efficiency improvement programs. On this basis, the Board of Directors proposes a distribution of CHF 0.40 per share for the 2021 financial year to give all shareholders a due share in Clariant's success.

The results are particularly noteworthy because our leadership had to deal with extraordinary challenges. The pandemic and supply chain disruptions led to an unprecedented situation. The availability and price level of raw materials, the shortage of labor, greatly inflated energy prices and logistics costs – all these have required the full commitment of our employees. Our numbers demonstrate that Clariant, supported by its new, more focused, and higher value specialty portfolio, has become more crisisproof and is able to turn to a profitable growth path even in a challenging environment.

In 2021, the Board of Directors, together with the Executive Committee, created a new, purpose-led strategy. This strategy is more strongly focused on customers and attractive market segments than before. This shift is important, as our customers deserve to be at the center of our thinking. The more we provide them with superior product offerings to help them improve their



**Günter von Au**  
Chairman of the Board of Directors

sustainability profile, the more we strengthen our position as a relevant business partner. We are in the process of adapting the organization to this new strategic focus. The strategy will enhance organic growth, supported by a series of smaller, high-value bolt-on acquisitions. Equally important will be our investments in growth by expanding our footprint, our R&D facilities, and our production capacities. Our biggest focus here is China, which accounts for roughly 35 % of the world's specialty chemical markets. All these investments are part of our contribution to the



global efforts to stop climate change. The sustainability transformation will trigger huge investments and, above all, innovations. This concerns the replacement of fossil raw materials with biomass, the expansion of a circular economy, and the development of hydrogen technology. Clariant is a leader in low-carbon intensity, already has solutions on offer for these megatrends, and is working on further innovations.

Our strong commitment to sustainability is duly reflected in our new purpose statement, »Greater chemistry – between people and planet.« Customers and employees participated in the definition of this purpose. This shows that we see our customers as partners and co-creators, while we help them to achieve their climate targets with our innovative and sustainable products and solutions.

We have set new goals to become a preferred employer in our industry. This starts with a working environment based on a strong corporate culture that recognizes performance, offers opportunities to learn and grow, and appreciates diversity and inclusion. We want to ensure that diversity is systematically promoted in all dimensions and at all levels in the organization. Ethics also play an important role in our culture, as is evidenced by the fact that the investigation into accounting issues was initiated by employees who had the courage to speak up. Our behaviors are guided by clear and binding principles: Our revised Code of Ethics, »Reflect Ourselves,« was rolled out by the Executive and Senior Management across the entire organization in 2021.

Clariant is well prepared to enter a profitable growth path. Our objective is to strengthen our existing market positions and to achieve above-average growth in our three business areas. Strengthening production »in China for China« will continue to play a crucial role in our growth strategy. These ambitions are reflected in our new strategy, which is based on four themes: customer focus, innovative chemistry, leading in sustainability, people engagement. Executing our new purpose-led strategy will help us achieve our 2025 financial and 2030 non-financial targets. It will also help us advance in environmental, social, and governance

**»Clariant has become more crisis-proof and is able to turn to a profitable growth path even in a challenging environment.«**

dimensions, including our science-based targets to stop climate change and to contribute to the UN Sustainable Development Goals (SDG). Therefore, we welcome the fact that ESG issues are becoming increasingly important for our stakeholders. We have adopted a Sustainability framework, which includes all three dimensions.

The Board of Directors as well as the Clariant management are fully committed to these targets and to creating value for all our stakeholders. My colleagues on the Board of Directors and I thank everyone who contributed to the success of Clariant in 2021.

Sincerely,

Günther von Au  
Chairman of the Board of Directors



# Interview with the CEO

## How growth at Clariant is driven by a new purpose

### **Clariant's Integrated Report was published later than planned due to an investigation into accounting issues. What can you tell us about the result of this investigation?**

The investigation was related to provisions and accruals, and it was conducted by independent advisors and external counsel. As a result of the investigation, we had to restate our 2020 financial statements and we had to make corrections to the quarterly reporting of key financial data for 2020 and 2021. Our 2020 continuing operations EBITDA is higher than previously but there has not been any impact on our sales, cash, and cash equivalents for 2020 and 2021.

### **What does this mean for the company and its stakeholders?**

I am grateful that our own colleagues spoke up. This shows that we have an open climate built on trust where our employees feel encouraged to speak up. We will continue to build a culture based on the highest ethical standards, and we will further strengthen our controls and processes. The operational performance of Clariant, and our ability to serve our clients, was not impacted by what happened internally. We have been and will continue to be a reliable partner.

### **Why has Clariant's Chief Financial Officer Stephan Lynen stepped down?**

With the investigation now completed, Stephan Lynen's decision to step down allows for a fresh start for our finance function. I thank him for his dedicated collaboration and for his contributions in various leadership positions. I am very pleased to welcome his successor Bill Collins, who most recently served as the North American CEO and CFO for ENGIE. Bill is a highly regarded finance leader, with a successful track record in our industry.

### **The last months have brought about so many changes all around the world. How would you describe the current situation in the chemicals industry?**

Obviously, the geopolitical situation has changed dramatically. By attacking Ukraine, the Russian state inflicted horrific suffering on its neighboring country, but also brought dramatic consequences for its own country and the world. The world may be facing the worst food crisis in decades, driven by the compounded effects of



**Conrad Keijzer**  
Chief Executive Officer (CEO)

COVID-19, climate change and the war in Ukraine, exacerbating already skyrocketing food and energy prices and severe hunger. The war in Ukraine also has a substantial significance for our sector and for the European economy. The chemicals industry, especially in Europe, now has to deal with potential shortages in the supply of Russian oil and natural gas and some metals like palladium and nickel. Moreover, problems like increasing raw material prices, higher energy costs, labor shortages, and supply disruptions remain on the agenda of many companies with significant efforts required to manage operations and margins.



Nevertheless, chemicals industry output recovered with growth of 6.8% in 2021 and is expected to deliver further growth of 2.9% in 2022. We also saw a more active merger and acquisitions environment in 2021. Transaction values were up 125% versus 2020 and have been comparable to the 2007 record.

**How does Clariant deal with these challenges?**

We are continuously expanding activities which enable us to move away from natural gas and towards CO<sub>2</sub> neutrality. Since we are a specialty chemicals company, our production is less energy-intensive compared to large-scale commodity chemical companies. However, we are currently still depending on natural gas, and we are preparing as best as we can for potential supply changes. Generally speaking, our now more focused specialty chemicals portfolio has proven to be more resilient and crisis-proof than before. It is addressing key growth trends like bio-based products, decarbonization, and circularity.

**How does this show in the numbers?**

In the financial year 2021, we experienced a broad demand recovery across all businesses and across all regions. Our revenues increased by 15% in local currencies and 13% in Swiss francs. Volume growth had a positive impact on the Group of 7%. Core organic sales growth, excluding the consolidation of our joint ventures with India Glycols and Beraca, our natural ingredients acquisition in Brazil, was 13% in local currencies. This was the result of true teamwork, customer focus and disciplined cost management, and we can all be proud of these results. Our

specialty chemicals portfolio allowed us to increase prices by 8% and recover around two thirds of the raw material price increases.

Our EBITDA margin has improved from the – restated – 15.5% in 2020 to 16.2% in 2021, which is well above the 2019 pre-Covid level at 15.7%, excluding the European Commission provision. This result has been positively influenced by strong volume expansion, pricing measures, contributions from M&A, and great cost discipline. Our performance improvement programs have delivered CHF 50 million in savings until the end of 2021. Starting in 2021, the rightsizing of the service units, regional organization, and Corporate Center as well as the elimination of remnant cost are also on track leading to additional savings of approximately CHF 100 million until 2025.

**Which other developments have contributed to Clariant’s performance?**

In 2021, we established a joint venture with India Glycols, which has made us the world leader in green ethylene oxide derivatives. These products are used to make surfactants based on bioethanol, which allow personal care companies to move their product offerings away from fossil-based to renewable feedstocks. We further acquired the remaining 70% of the shares in the Beraca joint venture, our naturals and botanicals business in Brazil. The Beraca products allow cosmetics companies to source 100% natural ingredients, with a demonstrable performance. These two strategic transactions contributed CHF 73 million to our sales in 2021.

During the year 2021, we stepped up our commitment to deliver organic growth. We celebrated the opening of the »One Clariant Campus« in Shanghai, including the inauguration of our local Clariant Innovation Center. This will include 50 scientists working on the development of products tailored for the local market – in China, for China. We are planning to expand this group to 120 scientists, working on local product development, by 2025. We invested CHF 80 million in a new plant for Catofin® catalysts in Jiaxing, Zhejiang, China, which recently started production. We further invested CHF 60 million in a plant in Daya Bay, Guangdong, China, for sustainable, halogen-free flame retardants, which we expect to deliver in the first half of 2023. In October 2021, we announced the completion of the first-of-its kind second-generation bioethanol plant in Podari, Romania. Production is currently ramping up.

**How did Clariant deal with the ongoing COVID-19 pandemic in 2021?**

I am proud that our people managed to keep our factories up and running in the face of this pandemic. In order to protect our staff, we enforced strict hygiene protocols, provided personal protective equipment and supported vaccinations. We further supported our employees on topics such as working from home, staying healthy, and staying in touch with their teams.

These steps are part of the bigger program to ensure the health and safety of our employees. We aim to achieve zero accidents worldwide, and in 2021, we managed to keep our lost-time accident rate at a low value of 0.16 days lost per 200 000 hours of work. Our lost workday rate has decreased, indicating that job-related injuries were less severe than in the previous year.

**Can you give us a rough idea of the business outlook in 2022?**

For the full year 2022 we expect to generate strong local currency sales growth on a year-on-year comparison, driven by a strong first quarter of 2022. We aim to improve our year-on-year EBITDA margin level through operating leverage from growth, pricing actions to mitigate raw material inflation, and continued cost savings and cost discipline. We expect the high inflationary

**»We are building an attractive, well-filled innovation pipeline, which is strongly linked to customer-driven sustainability developments.«**

**Conrad Keijzer**  
Chief Executive Officer (CEO)



environment with regard to raw material, energy, and logistic cost as well as supply chain challenges to continue into the second half of 2022.

**Both innovation and sustainability are strategic pillars of Clariant. How do you assess the strategy execution in these fields?**

Due to global population growth and a growing middle class, demand for materials is expected to at least double by 2050 while at the same time the transition to a net zero economy is required. Sustainability is an important priority for our society, and it requires innovation to make this transition happen. To strengthen the link between innovation and sustainability, we have re-organized our innovation and sustainability functions in a new combined Innovation & Sustainability unit under the leadership of Richard Haldimann, who now serves as our Chief Technology & Sustainability Officer.

We are building an attractive, well-filled innovation pipeline, which is strongly linked to customer-driven sustainability priorities. As part of our new strategy 2025, we have a target that one fifth of our 4-6% annual growth will be generated by innovations that are strongly linked to customer-driven sustainability developments, like our bio-based cosmetics and our renewables-based surfactants.

**Sustainability is not only driven by Clariant and its customers, but by all stakeholder groups. What does Clariant have to offer to them?**

We ensure a broad stakeholder view with a clear focus on the long-term perspective. Our Integrated Report 2021 features information on climate risks in line with the Task Force on Climate-related Financial Disclosures (TCFD). We now also report in accordance with the guidelines of the Sustainability Accounting Standards Board (SASB). We remain committed to the United Nations Global Compact and its Ten Principles, and we contribute to the United Nations' Sustainable Development Goals (SDGs).



**In 2021, Clariant introduced a new purpose: »Greater chemistry – between people and planet«. How does this statement relate to this new strategy?**

Our purpose is the guiding star of our new turning back to growth strategy. The statement provides inspiration: It captures who we are and our important role in helping to transform our industry. »Greater chemistry« stands for innovation and for the important mission to help our industry achieving its sustainability targets. »Chemistry« also refers to the intangible positive interactions between people. Greater chemistry between us and our customers provides the basis to collaborate for meaningful impact and to shape the future together. »Greater chemistry between people« also describes our company culture which promotes diversity, equity, inclusion, mutual appreciation and empowerment. Finally,

»Greater chemistry – between people and planet« – means sustainability. It is the greater chemistry that serves a greater purpose. It expresses our ambition to enable the transition towards a more sustainable world.

**But is the purpose more than just words?**

Yes, it is. These words that were developed by our own colleagues, describe both our heritage and future direction.

The purpose statement is reflected in our strategy and in our target setting. We defined new financial targets for 2025, and – for the first time – non-financial targets. This reflects our ambition to achieve top quartile results in specialty chemicals in terms of growth, profitability, sustainability, and people.

**What are these commitments exactly?**

By 2025, we are targeting to grow our topline by 4-6% on average per year, to increase our EBITDA margins to 19-21%, and to reach a free cashflow conversion of around 40%. Also, we have set ourselves science-based carbon reduction targets: By 2030, we want to reduce our scope 1&2 emissions by 40%, and our scope 3 emissions by 14%. And finally, we want to position Clariant in the top quartile of employee engagement, measured by the Employee Net Promoter Score (eNPS).

**Why have you introduced non-financial targets?**

Climate change is the biggest environmental challenge for humanity. At the COP26 in Glasgow in November 2021, 153 countries put forward new 2030 emission targets as part of their nationally determined contribution (NDC). These initiatives are backed by a USD 100 billion climate finance goal which will trigger significant investments and further promote sustainable developments. Clariant's sustainability targets are aligned with the ambition to achieve climate neutrality by 2050 at the latest and reflect our aspiration to be industry leaders through sustainability and innovation.



# Introducing the Executive Committee



**Bernd Hoegemann**  
Executive Vice President &  
Chief Transformation Officer (CTO)



**Conrad Keijzer**  
Chief Executive Officer (CEO)



**Hans Bohnen**  
Executive Vice President &  
Chief Operating Officer (COO)



**Stephan Lynen**  
Executive Vice President &  
Chief Financial Officer (CFO)



# Clariant on the Capital Markets

## The Clariant Share at a Glance

### SHARE DETAILS

Valor symbol	CLN
Valor number	1 214 263
ISIN	CH0012142631
Trading currency	CHF
Stock exchange	SIX Swiss Exchange
Nominal value	CHF 3.00
Security type	Registered share
Dividend 2021	CHF 0.40
Free float (%)	68.5
Bloomberg	CLN SW
Reuters	CLN.VX
Index member	Dow Jones Sustainability Index Europe Dow Jones Sustainability Index World MSCI Equity Switzerland Index SMI Mid SMI Expanded SPI SPI Extra SPI ex SLI SPI ESG Weighted SPI ESG Swiss All Share Index SXI Switzerland Sustainability 25 Index UBS 100 Index
Country	Switzerland

## Strong stock market performance

Stock market performance in 2021 exhibited an upward trend until September. With the increasing availability of COVID-19 vaccines, the stock markets continued to recover for the first months, and only entered a sideways movement at the end of the year with the rebound of COVID-19 infection rates. In addition, the raw material price inflation and supply disruptions have led to a higher and broader-based general inflation in the 2021 financial year than expected, particularly affecting the United States and many emerging and developing economies. The continued contraction of the Chinese real estate sector and the slower-than-expected recovery of private consumption have also limited the outlook for growth.

The SMIM (SMI Mid) closed the 2021 financial year with 3 438.41 points on 31 December 2021, which corresponds to an increase of 20.2% compared to the end of the previous year. Closing at 1 366,92 points, the STOXX® Europe 600 Chemicals (SX4P) recorded an increase of 22.7% across the same period.

### DATA PER SHARE

Five-year overview and dividend	2021	2020	2019	2018	2017
Number of registered shares issued	331 939 199	331 939 199	331 939 199	331 939 199	331 939 199
Number of shares eligible for a dividend	329 116 487	329 553 690	329 352 434	329 688 535	329 297 620
Price at the end of the year (CHF)	19.00	18.82	21.60	18.09	27.25
High of the year (CHF)	20.50	23.82	22.40	29.38	27.80
Low of the year (CHF)	17.07	14.39	17.10	17.65	17.67
Market capitalization at year-end (CHF m)	6 307	6 247	7 170	6 005	9 045
Basic earnings per share (CHF)	0.81 <sup>1</sup>	0.32 <sup>1,6</sup>	-0.17 <sup>1,4</sup>	1.02	0.84
Distribution per share (CHF)	0.40 <sup>2</sup>	0.70 <sup>3</sup>		0.55 <sup>5</sup>	0.50 <sup>5</sup>

<sup>1</sup> Continuing operations

<sup>2</sup> To be made through capital reduction by way of par value reduction

<sup>3</sup> Of which CHF 0.55 relates to the 2019 financial year (dividend payout withheld due to COVID-19 uncertainties) and CHF 0.15 relates to the 2020 financial year; distribution through a capital reduction by way of a par value reduction of CHF 0.70 per registered share

<sup>4</sup> Including CHF 231 m provision for a competition law investigation by the European Commission

<sup>5</sup> Payout from capital contribution reserves

<sup>6</sup> Restated



### Clariant share price increased by 1% in the course of the year

The Clariant share price ended the year 2021 at CHF 19.00. This corresponds to an increase of 1.0% compared to the closing price of the previous year (CHF 18.82). Including the distribution to shareholders of CHF 0.70, the total shareholder return (TSR) amounted to 4.7% in 2021. With an opening price of CHF 18.82 on 2 January 2021, the share moved sideways in the first quarter. In mid-March, the share price dropped to CHF 18.71 on 19 March 2021. Afterwards, the share slowly recovered and reached its annual

high on 16 April 2021 at CHF 20.50 (closing price). Continuing this directionless progression, the Clariant share price fell to CHF 18.85 on 4 May 2021, and entered into a sideways movement until the beginning of September. On 20 September 2021, the share price fell to CHF 17.70. It then slightly increased again before it recorded a drop to its annual low at CHF 17.07 (closing price) on 6 October 2021. Subsequently, the share price gradually rose until reaching the mark of CHF 17.96 on 15 October 2021. It entered into a sideways movement until 27 October 2021, closing at CHF 18.08. Following the release of the third quarter 2021 results on 28 Octo-

ber 2021, stating that Clariant had significantly increased its sales and profitability in the quarter, the share price rose to CHF 18.98 and reached a level of CHF 19.26 on 29 October 2021. Until the end of November, the share price remained largely unchanged. Due to the weak equity markets, the Clariant share was initially unable to benefit from the announcement of its new 2025 targets on 23 November 2021, but almost completely compensated for the weakness in December with a year-end closing price of CHF 19.00.

### Dividend

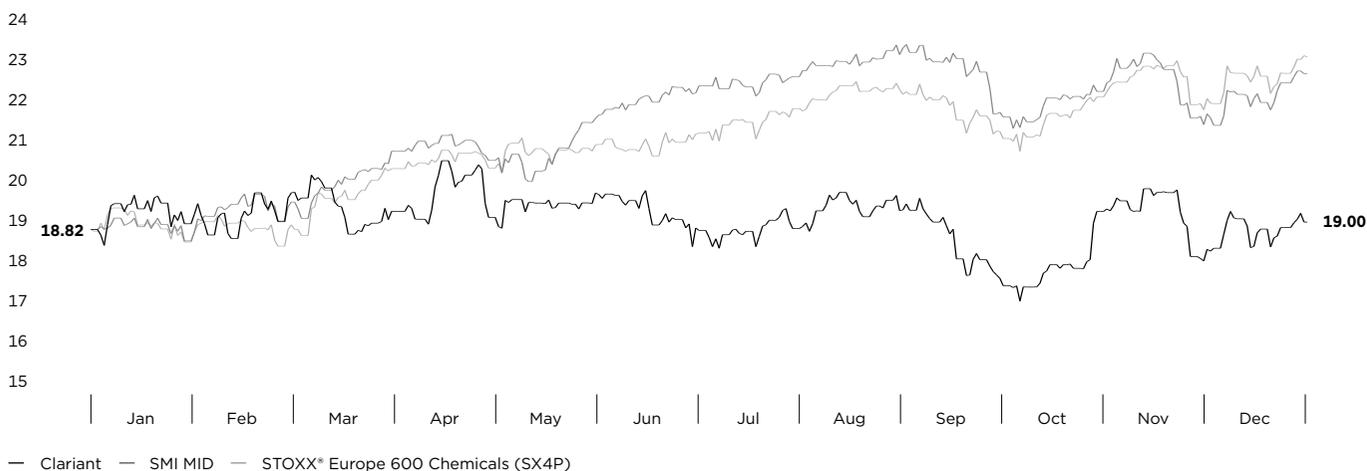
#### Dividend policy

While the divestments of approximately one-third of the company's sales have led to a recalibration in the absolute amount of the dividends, Clariant's dividend policy remains unchanged. Clariant is committed to increasing the absolute dividend in Swiss francs on the back of profitable growth, while maintaining an attractive payout ratio.

#### Dividend proposal for 2021

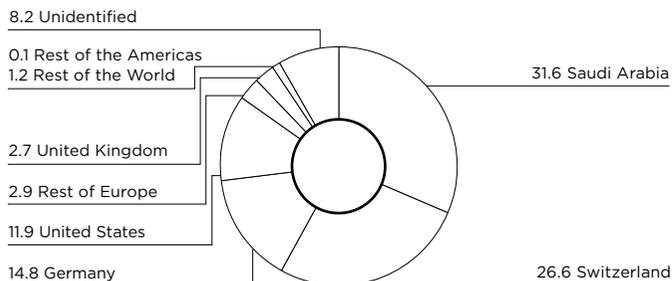
The Board of Directors recommends a regular distribution of CHF 0.40 per share to the Annual General Meeting 2022 based on the Group's improved underlying performance in 2021. This proposal takes into consideration the Group's strong performance in 2021, as well as all shareholder commitments. The distribution is proposed to be made through share capital reduction by way of a par value reduction.

001 CLARIANT SHARE PRICE PERFORMANCE 1 JANUARY - 31 DECEMBER 2021 IN CHF





002 **GEOGRAPHIC DISTRIBUTION OF SHAREHOLDINGS IN %**



**Shareholder structure (Shareholders/Distribution of free float)**

In the 2021 financial year, Clariant maintained its well-diversified and stable shareholder structure.

SABIC acquired 24.99% of the shares of Clariant Ltd on 17 September 2018 and increased its participation by 6.51% to 31.5% on 9 September 2020. The difference between this figure (i.e., 31.5%) and the 32.35% mentioned below corresponds to the amount of treasury shares held by Clariant Ltd as of 31 December 2021, which have to be aggregated to the shares held by SABIC solely for regulatory disclosure purposes due to the Governance Agreement entered into by SABIC and Clariant on 17 September 2018.

As of 31 December 2021, the following shareholders held 3% or more of voting rights in Clariant Ltd: SABIC International Holdings B.V., 32.35%; BlackRock Inc., 3.8%; Blue Beteiligungsgesellschaft mbH and Maple Beteiligungsgesellschaft mbH, 3.49% and PSquared Asset Management AG, 3.04%.

Subject to certain limitations on voting by nominees, each registered share entitles the holder to one vote at the shareholders' meetings. 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. 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 27th Annual General Meeting on 24 June 2022.

**Analyst coverage**

In the 2021 financial year, Clariant was actively covered by 17 sell-side analysts tracking the financial performance of Clariant Ltd on behalf of their respective companies. As of 31 December 2021, two additional sell-side analysts were restricted from publishing a rating for Clariant by their institutions. Their analyses served as the basis for the performance estimates and recommendations published in the 2021 financial year.

At the end of 2021, ten analysts had a neutral recommendation on Clariant, while six analysts recommended buying the share and one analyst recommended selling. The average target price of the 17 actively covering analysts was CHF 21.11, representing an upside of 11.1% from the 2021 closing price of CHF 19.00. The target price range was between CHF 18.00 and CHF 25.00 as of 31 December 2021.

In order to facilitate an independent and transparent assessment of performance, Clariant provides analysts and investors with market consensus figures. This consensus is based solely on analyst estimates and in no way reflects the opinion of Clariant.

An up-to-date analyst consensus is available online on the →CLARIANT WEBSITE. This information reflects analyst forecasts as of 26 January 2022 and may change on a continuing basis.

**Ratings**

An overview of the most recent ratings of the Clariant share and bonds can be found on the →CLARIANT WEBSITE.

**Dialogue with the capital market**

Clariant's corporate strategy is aimed at long-term value enhancement. That is why continuous and open communication with all capital market participants is important. In light of the COVID-19 pandemic, Clariant primarily used virtual formats, such as video or telephone conferences for the dialogue in 2021. Clariant connects with institutional investors and rating agencies in various one-on-one meetings as well as at roadshows and conferences worldwide. For private investors, the company provides insight at the Annual General Meeting.

Clariant's largest event for investors, analysts, and bank representatives was the Capital Markets Day, which was held virtually on 23 November 2021. At the event, the company announced new 2025 financial targets in conjunction with its new purpose-led strategy »Greater chemistry – between people and planet.« Building on its high-growth, high-margin specialty portfolio, Clariant has adopted several strategic initiatives for value creation and profitable growth. This has included accelerating sustainability-driven innovation, expanding the global footprint with a focus on China, and ensuring the disciplined execution of potential bolt-on acquisitions. Further information on the 2021 Capital Markets Day is available →ONLINE.

**Clariant – A sustainable investment**

The Clariant share is attractive for investors focusing on companies with a strong ESG performance. Leading ESG rating agencies consider Clariant best in class within the chemical industry. Their ratings particularly recognize the company's innovation power for sustainable products, Clariant's business ethics, and the comprehensive measures to address relevant sustainability issues.

Clariant actively participates in a large number of ESG ratings, and is listed in several sustainability indices. →READ MORE ABOUT RATINGS AND RANKINGS.



# Clariant Culture

## A WORLD OF POSSIBILITIES

Clariant’s unique role as an innovative specialty chemical company and its contribution to society are enhanced by a clear company purpose. Striving to achieve this purpose, Clariant is led by a guiding vision and a well-defined mission. Actions are derived from a culture that encourages every employee to earn the trust of Clariant’s key stakeholders and to continuously explore opportunities for value creation.

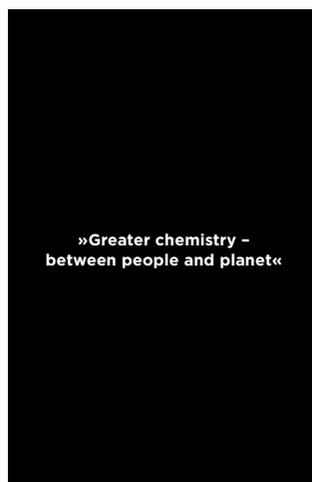
Clariant’s purpose, »Greater chemistry – between people and planet,« puts customers, employees, and the planet at the center of every business activity. The statement was defined by the Clariant leadership team together with colleagues from all over the world and with key customers. It comprises several themes in a crisp and differentiated way: it stands for Clariant’s

- distinct customer focus;
- strong innovation capability;
- profound commitment to sustainability in its operations and products;
- uniquely talented people in a culture of empowerment and inclusiveness.

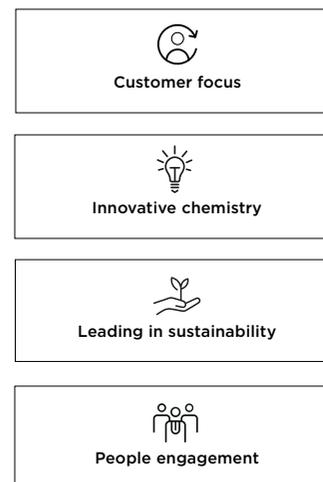
As the chemical industry touches on more than 90% of all the products that society uses in its daily life, it has the opportunity and the responsibility to create a truly meaningful impact. Clariant has an attractive innovation pipeline that is strongly linked to customer requirements. Interactions between uniquely talented and highly motivated employees with an entrepreneurial spirit drive a high-performance culture. This enables Clariant to deliver products and solutions with an outstanding technical and sustainable performance. Innovative and customer-driven chemistry, paired with people empowerment and leadership in sustainability, serves the interests of Clariant’s key stakeholders. It leads to greater chemistry – between people and planet – and thus provides for a long-term approach to sustained value creation.

### 003 GUIDED BY THE CORPORATE PURPOSE

Clariant’s purpose



Purpose-led strategy



Vision

We aim to be the globally leading company for specialty chemicals and to stand out for above-average value creation for all of our stakeholders.



Mission

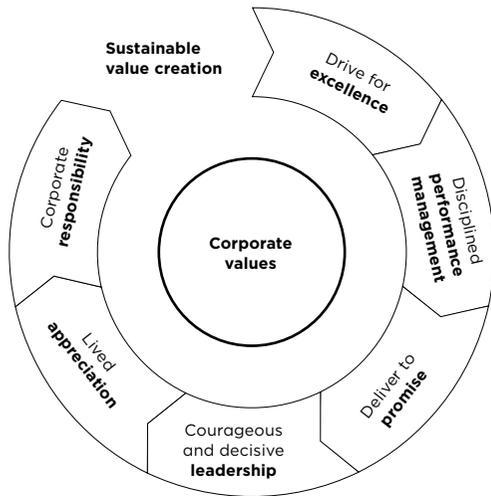
We build leading positions in the businesses we are active in, and we adopt functional excellence as part of our culture. We also create value by appreciating the needs of our customers, employees, shareholders, and the environment. For our customers, we provide competitive and innovative solutions. For our employees, we adhere to our corporate values. For our shareholders, we achieve above-average returns. For our environment, we act sustainably.



## VISION AND MISSION

Clariant aspires to be the globally leading company for specialty chemicals, achieving above-average value creation for its stakeholders. To fulfill this vision, the company builds and maintains leading positions in all its businesses, while defining its corporate culture through functional excellence in innovation, commercialization, and operations.

### 004 CORPORATE VALUES FOR SUSTAINABLE VALUE CREATION



Clariant's vision is underpinned by its mission 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; and
- the environment, by acting sustainably.



## Q&A

**Tatiana Berardinelli**  
Chief Human Resources Officer  
and Head of Group HR

**Clariant is changing: The company has become smaller and is still transforming. From your view, what is the role of HR in this process and what are the opportunities you see?**

Due to the ongoing transformation process of the company, there are certain areas we need to focus on to enable growth and increase value. We will work on a stronger performance driven culture, on enhancing talent management to deliver business results. We will support Clariant's transformation and we will lead engagement and DE&I initiatives in alignment with our purpose. I have started working with my team on these opportunities and am excited about taking this work forward along the line of the company strategy and the company purpose.

**Referring to the company purpose »Greater chemistry – between people and planet«: Are you going to bring that purpose to life within the existing Clariant culture, or does it define a new culture?**

I think the purpose is the starting point for a changing culture. What changes is the behavior of people as it defines the culture. I see the future Clariant culture as entrepreneurial, embedded in a nimble organization – less hierarchical, less bureaucratic, more agile, where people feel included. There is innovation driven by the desire to contribute

to society. I see a lot of trust as well, based on the corporate ethics and values. Another essential cultural component results from diversity, equity, and inclusion. We will cover all three dimensions: diversity, which is about the differences within our team, equity referring to the company's processes and policies, and inclusion, reflecting a sense of belonging.

**Clariant stands for courageous and decisive leadership. From your point of view, what are the most important next steps to further and strengthen leadership skills?**

Strong leaders create effective teams, deliver results and demonstrate the right behaviours. At Clariant, we believe we need to invest in our leaders to help us drive the transformation, culture change, execute on our strategy and engage our people. We plan to continue developing our leaders through relevant and challenging experiences in the job, leadership training and learning through others. We will focus on the capabilities and skills needed not just for today but for the future of Clariant in alignment to our purpose.



## KEY DRIVER: APPRECIATION

Appreciation is embedded in the company's culture, defining the expectations for employee behavior and building the company's reputation and brand. The culture of appreciation commits to corporate values and puts them at the center of everything the company does in each area where it has an influence. → [READ MORE IN OUR REVIEW ON PERFORMANCE, PEOPLE, AND PLANET](#)

In addition, Clariant's corporate values recognize critical interdependencies and align the company culture with business partners' and stakeholders' expectations. The corporate values include

- **Drive for Excellence:** Clariant applies the highest standards to profitably meet customer needs while aspiring to achieve even more.
- **Disciplined Performance Management:** People at Clariant seek challenging and achievable targets. Employees give and invite open feedback on measured progress.
- **Deliver to Promise:** Clariant cultivates motivated employees who fully leverage their capabilities while avoiding overpromising or underdelivering.
- **Courageous and Decisive Leadership:** Clariant selects the right people for the right jobs and is committed to support risk-taking, accepting failure, and learning from results.
- **Lived Appreciation:** People at Clariant acknowledge strength, seek improvement, acknowledge outstanding contributions, and celebrate success.
- **Corporate Responsibility:** People at Clariant support the welfare of all stakeholders, protect the environment, and respect communities where they work. They live Clariant's Code of Ethics and uphold all safety procedures.



# Business Model and Strategy

**The »Business Model and Strategy« chapter presents Clariant’s holistic approach to value creation. After showing the company’s business model, it introduces the new purpose-led strategy and outlines Clariant’s contribution to the Sustainable Development Goals (SDGs) of the United Nations. Lastly, the chapter describes Clariant’s new materiality assessment.**

## OPERATING AN INTEGRATED BUSINESS MODEL

This chapter provides an in-depth overview of Clariant’s integrated business model. It presents the company’s holistic approach to creating value, providing an overall understanding of the different aspects of Clariant’s business, which are depicted in more detail in the subsequent sections of this report and in the Review on Performance, People, and Planet. The chapter also explores the company’s external environment and its organizational structure, two important parameters affecting business activities. In addition, it portrays Clariant’s core processes for creating value.

### A holistic approach to value creation

#### Long-term value for all stakeholders

Clariant’s business model reflects how the company creates long-term value for all stakeholders – customers, employees, shareholders, and the environment. → FIGURE 005. It offers a detailed overview of the company’s multidimensional approach to value creation, covering both tangible and intangible, financial and non-financial aspects of the business – categorized under Performance, People, and Planet:

#### Performance

Performance covers the pool of funds to produce goods and provide services, which is available through both financing and sales. Moreover, Performance includes knowledge-based intangibles used and created by the company and its partners: intellectual property (e.g., patents, trademarks, copyrights, software rights, or licenses) and »organizational capital« (e.g., tacit knowledge, systems, procedures, and protocols). In addition, Performance covers physical objects owned by the company (e.g., buildings, equipment, and products).

#### People

People includes Clariant’s employees and their competencies, capabilities, experience, and drive to innovate, as well as their identification with the corporate values and their ability to understand and implement Clariant’s strategy. Furthermore, People covers the company’s key relationships with primary stakeholders and network partners, in particular, Clariant’s strong customer relationships. This can include shared values, trust, engagement, and related intangibles associated with Clariant’s brand and reputation.

#### Planet

Planet includes the renewable and nonrenewable environmental resources and processes that support or affect the company’s prosperity. Examples include air, water, and land resources that Clariant utilizes for its activities.

### External environment

Clariant’s integrated business model provides a strong foundation for the company to successfully navigate the current market dynamics in the specialty chemical market, including the ongoing challenges posed by the COVID-19 pandemic. → READ MORE IN EXTERNAL ENVIRONMENT

### Core processes for value creation

Idea to Market, Market to Customer, and Customer to Cash – these are the three key value-creation processes at the core of Clariant’s business model. By turning customer needs into innovative and sustainable solutions, the company creates value for all stakeholders. Clariant’s Innovation Excellence, Commercial Excellence, and Operational Excellence initiatives support these processes.



005 BUSINESS MODEL

**Input** (Continuing operations)

Resources and relationships that Clariant draws upon for its business activities

**PERFORMANCE**

<b>155</b> R&D spend in CHF m	<b>325</b> Active innovation projects
<b>80</b> Scientific collaborations	<b>1859</b> Raw material procurement in CHF m
<b>3.49</b> Raw materials procured in m t	<b>67</b> Production sites
<b>87%</b> Raw material supply base by spend covered by sustainability evaluation	

**PEOPLE**

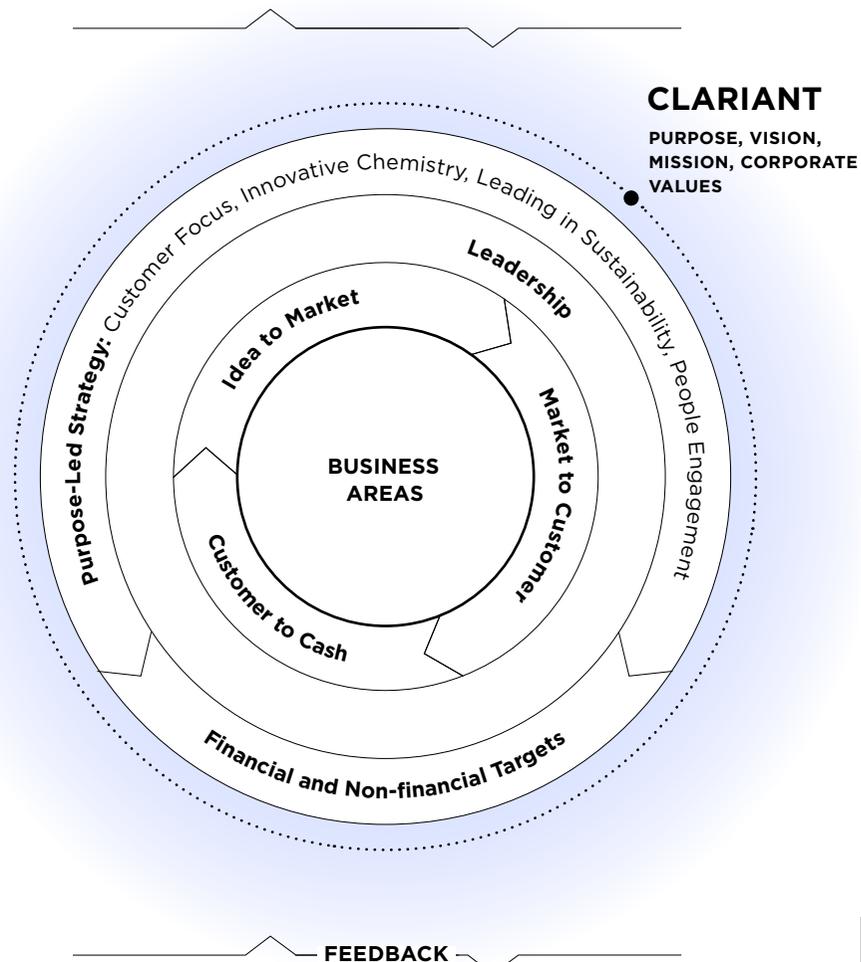
<b>1356</b> New employees hired	<b>152 565</b> Training hours
<b>287</b> Client interviews	

**PLANET**

<b>627</b> Energy consumption in kWh/t production	<b>2.17<sup>1</sup></b> Water intake in m <sup>3</sup> /t production
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**External Environment**

Societal trends and market drivers



**FEEDBACK**

**Stakeholders**

Clariant constantly engages with its stakeholders to stay attuned to their needs and gain feedback on how to best create value for them.

**IMPACT ON GLOBAL SUSTAINABLE DEVELOPMENT**

Clariant's contribution to global sustainable development is further illustrated in the chapter → CONTRIBUTING TO THE SDGS



**Output** (Continuing operations)

Results from Clariant's business activities

**PERFORMANCE**

<b>4 372</b> Sales in CHF m	<b>15%</b> Growth in local currencies
<b>16.2%</b> EBITDA margin	<b>9.9%</b> Return on invested capital (ROIC)
<b>&gt; 3.5%<sup>2</sup></b> Growth through innovation	<b>&gt; 4 900</b> Patents at year-end
<b>4.33</b> Production volume in m t	

**PEOPLE**

<b>11537</b> Staff in FTEs at year-end	<b>0.16<sup>3</sup></b> Lost-time accident rate (LTAR)
<b>42<sup>4</sup></b> Net Promoter Score (NPS)	

**PLANET**

<b>0.71</b> Scope 1 & 2 GHG emissions in m t CO <sub>2</sub> e	<b>1.48</b> Wastewater in m <sup>3</sup> /t production
<b>2.70</b> Scope 3 GHG emissions for purchased goods and services (cat.1) in m t CO <sub>2</sub> e	

<sup>1</sup> New definition of this KPI excludes »pass through« water, therefore limited comparability to 2020

<sup>2</sup> Contains the contribution to growth of the innovation portfolio from both Top Line Innovation and Life Cycle Innovation. Potential cannibalization of existing sales by Life Cycle Innovation has not been excluded.

<sup>3</sup> Total Group, including Business Unit Pigments

<sup>4</sup> Figure from 2020, as survey is only conducted every two years.



- **Idea to Market:** This process involves scouting global trends, identifying business opportunities, exploring unmet customer needs, developing products, as well as commercializing and monitoring business performance. It is essential for developing a well-filled product and service pipeline that delivers innovations to address customer needs. → [READ MORE IN CORE PROCESSES FOR VALUE CREATION](#)
- **Market to Customer:** This process includes assessing market attractiveness, developing clear value propositions, and capturing the value created through the relationship-building and sales processes. To achieve a seamless customer experience, these steps are well connected and focused on customer needs. → [READ MORE IN MARKET TO CUSTOMER](#)
- **Customer to Cash:** This process balances supply and demand, optimizing sourcing for spend effectiveness, monitoring production efficiency, and delivering finished goods to customers on time and in full to achieve safe, reliable, and efficient operations that support profitable growth. → [READ MORE IN CUSTOMER TO CASH](#)

### Input

To create value, Clariant draws upon a variety of resources and relationships for its business activities. For three areas, Clariant identified key performance indicators to monitor its performance.

- **Performance:** e.g., R&D spend, raw material spend, active innovation projects, scientific collaborations, production facilities, raw material procurement
- **People:** e.g., new employees hired, training hours provided, client interviews conducted, percentage of raw material supply base by spend covered by sustainability evaluation
- **Planet:** e.g., energy consumption, water consumption

### Output

In line with the inputs, Clariant also monitors the outputs of its business activities. The company identified key performance indicators for three areas.

- **Performance:** e.g., sales growth, return on invested capital (ROIC), EBITDA margin, patents at year-end, production volume, products awarded the EcoTain® label
- **People:** e.g., lost-time accident rate (LTAR), staff at year-end, net promoter score, outcomes of the biennial customer satisfaction survey
- **Planet:** e.g., greenhouse gases, wastewater

### Purpose-led strategy with ambitious financial and non-financial targets

Based on Clariant's newly developed purpose »Greater chemistry – between people and planet,« and based on its clear vision, mission, and strong corporate values, Clariant developed a new strategy. With this purpose-led strategy and the related financial and non-financial targets, the company is committed to creating value while striving to achieve top-quartile performance compared to specialty chemical peers. → [READ MORE IN PURPOSE-LED STRATEGY](#)

### Impact on global sustainable development

In addition to Clariant's strategic objectives, the company follows the objectives set by the United Nations Sustainable Development Goals (SDGs). In relation to the SDGs, Clariant evaluates the positive and negative impacts of its products and services, operations, value chain, corporate citizenship activities, and collaborations. → [READ MORE IN CONTRIBUTING TO THE SDGS](#)

While contributing to all 17 SDGs in varying degrees, Clariant identified six priority SDGs: SDG 3 »Good Health and Well-being,« SDG 7 »Affordable and Clean Energy,« SDG 9 »Industry, Innovation, and Infrastructure,« SDG 12 »Responsible Consumption and Production,« SDG 13 »Climate Action,« and SDG 17 »Partnerships for the Goals.«

### Value creation in the financial year

With customer-oriented products and solutions, Clariant and its business areas created value for the company and its stakeholders in the 2021 financial year, enhancing Clariant's growth and profitability. → [READ MORE IN VALUE CREATION](#)

### Reviewing value creation

To measure and track the financial and non-financial value that Clariant creates for all stakeholders, the company monitors key performance indicators, including the ones mentioned under »Inputs« and »Outputs.« These indicators are associated with Clariant's material topics, which were identified through a comprehensive materiality assessment.

- **Performance:** »Business Growth & Profitability,« »Engaging in Growing and Emerging Markets,« »Corporate Governance,« »Risk and Crisis Management,« »Business Ethics and Compliance,« »Supply Chain Resiliency,« »Innovation and Technological Advances,« »Product Stewardship,« and »Growth Opportunities from Sustainable Products and Solutions.«
- **People:** »Employee Engagement and Well-being,« »Diversity, Equity, and Inclusion,« »Occupational Health and Safety,« »Customer Relationships,« and »Human and Labor Rights.«
- **Planet:** »Resource Efficiency and Environmental Protection,« »Climate Protection,« »Circular Economy,« and »Bio-Based Economy.«

→ [READ MORE IN OUR REVIEW ON PEOPLE, PERFORMANCE, AND PLANET](#)



### External environment

Clariant had to navigate a dynamic business environment in 2021. Enduring trends, such as the increasing industry focus on sustainability, continued to shape the business agenda, while high inflation and COVID-19 continued to significantly impact the value chains we are operating in.

### Global economic setting

In 2021, the global economy recovered strongly from its low level in 2020, especially in Europe and North America, although momentum decreased slightly at year-end due to renewed COVID-19 outbreaks. Strongly increasing demand for goods combined with some COVID-19 induced constraints caused disruptions in supply chains with strong global effects, such as inflated commodity prices, constrained production due to missing components in some sectors, low inventories of natural gas and oil, shortage of labor, logistical delays, and massively increased transport costs. These factors in combination with fiscal policy contributed to rising consumer prices across the globe. On an annual basis, global consumer price inflation increased from 2.2% in 2020 to 3.8% in 2021.

### Impact on the chemical industry

Typical raw materials for the chemical industry include crude oil, natural gas, metals, and minerals. → FIGURE 006 Supply chain difficulties arising from the pandemic caused a shortage in these primary products such that prices increased significantly. Strong demand for chemical products and restocking led to strong order books, rising prices, and a strong recovery in sales and margins in the chemical industry, with capacities often well utilized, with a few exceptions where supply or demand was constrained by stretched supply chains, notably in the automotive sector.

Even under these dynamic trading conditions, customers and suppliers continued to develop their sustainability road maps, with alternative future feedstocks and sustainable products and solutions looking more attractive in both sustainability and economic terms.

### COVID-19 challenges attenuated

Apart from supply chain issues, the overall chemical market evolved to overcome COVID-19 difficulties in 2021. Based on their 2020 experiences, many companies established open lines of communication with their customers through well-tried digital channels. They also learned to switch to remote work and operations as needed.

### Focus on sustainability and performance

Globally, the chemical industry is one of the largest consumers of energy. This results in significant contributions to global greenhouse gas emissions. Chemical companies also use oil and gas as feedstock and handle hazardous materials. While this confers great responsibility, it also creates opportunities for companies to become industry leaders in sustainable development, capturing competitive advantage in the process.

Despite the challenges from the pandemic, the trend toward increased sustainability continued in 2021 with new proposed legislative initiatives and increasing customer and investor focus on the topic. Chemical companies are expected to substitute unsustainable products, while offering innovations for a low-carbon, circular economy. Consequently, an increasing number of companies set new sustainability targets and announced sustainability initiatives.

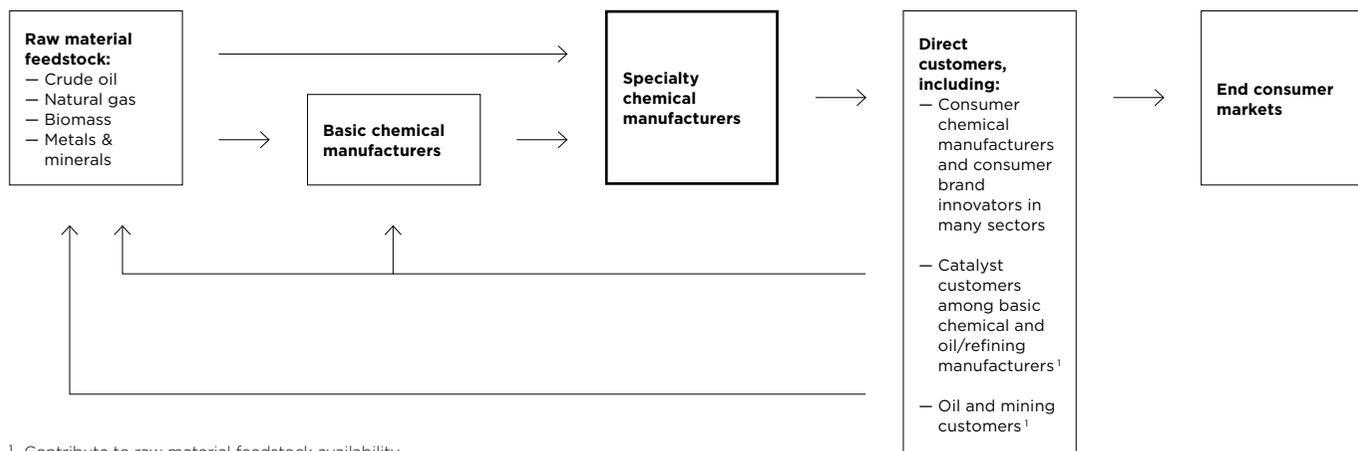
### Mounting importance of the Chinese market and industry

China is the world's largest market for chemical sales. It accounts for about 35% of the global specialty chemical markets. There is a particularly high demand in its growing petrochemical industry. China's current five-year plan centers on innovation as the core concept to drive the country's modernization, promoting high-end, intelligent, and green production.

Local presence on the ground is a key to success in the Chinese market. This goes for manufacturing, lab support, products, and management. Therefore, chemical companies are making increased efforts to be close to their Chinese customers and partners and to work locally.

While chemical markets rebounded from the lows of 2020, recording growth in all regions, the Chinese market outperformed the other regions, increasing its relative market share compared to Europe and the U.S. in 2021.

006 THE ROLE OF SPECIALTY CHEMICAL FIRMS IN THE CHEMICAL INDUSTRY VALUE CHAIN



<sup>1</sup> Contribute to raw material feedstock availability



## Organizational structure

Clariant is headquartered in Muttenz, Switzerland. The Group's continuing operations comprise five business units: Industrial & Consumer Specialties, Catalysts, Oil and Mining Services, Functional Minerals, and Additives. These business units and the Business Line Biofuels & Derivatives are reported in the three Business Areas Care Chemicals, Catalysis, and Natural Resources. The business areas form the basis for Clariant's reporting on a quarterly basis. For the former Business Unit Pigments, which had been reclassified as discontinued operations in 2019, Clariant signed a divestment agreement in 2021. The closing of the transaction was completed on 3 January 2022.

The organizational structure further comprises nine service units, and eight corporate functions. The responsibilities of the Executive Committee include the financial and operational management of the Group. → FIGURE 007

The composition of the three business areas is shown in → FIGURE 008.

### Corporate Governance Report

Beyond the organizational structure, the Corporate Governance Report provides detailed information on the governance aspects underlying Clariant's business.

→ READ MORE ABOUT CORPORATE GOVERNANCE

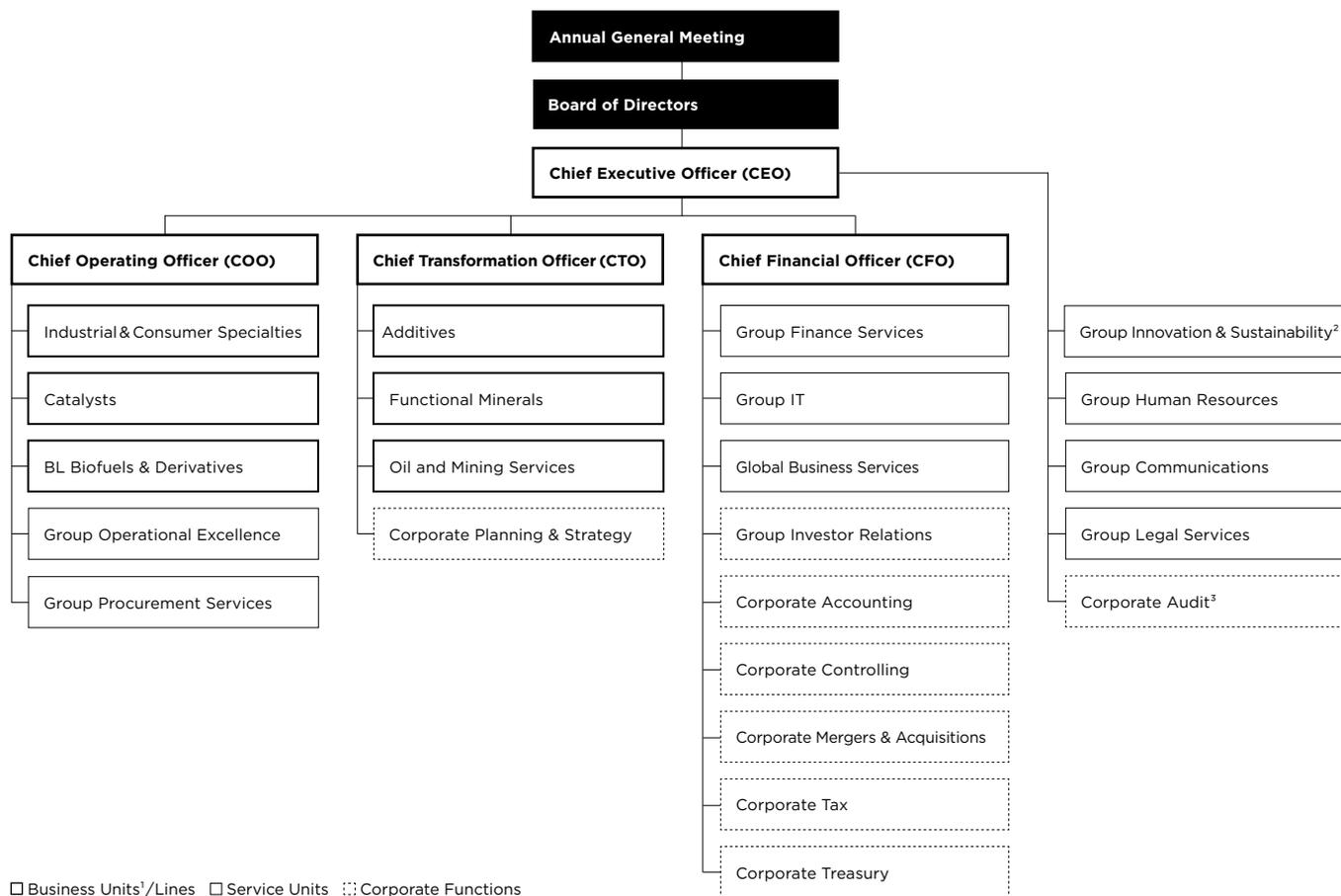
## Core processes for value creation

The processes Idea to Market, Market to Customer, and Customer to Cash are essential to create value for all stakeholders. Turning customer needs into innovative and sustainable solutions, they form the core of Clariant's business model.

### Idea to Market

Clariant believes that continuously investing in innovation is key to future success – even in times of economic uncertainty. Innovative chemistry is one of the four dimensions of the company's new purpose-led strategy. Based on the strategic approach to innovation, as well as on extensive Research & Development resources, Clariant develops high-performing solutions to satisfy unmet customer needs, while adding value with sustainability. To find

007 CLARIANT ORGANIZATIONAL STRUCTURE



<sup>1</sup> In 2019, Clariant decided to dispose of the Business Units Masterbatches and Pigments. The two business units concerned have been reclassified as discontinued operations. In 2020, Clariant successfully completed the sale of its Masterbatches business and launched the divestment process of its Pigments business, which was completed on 3 January 2022.

<sup>2</sup> As of 18 February 2022, the Head of Group Innovation & Sustainability reports directly to the CEO.

<sup>3</sup> The CEO, together with the Chairman of the Audit Committee, is responsible for Corporate Audit.

these solutions, Clariant places a particular emphasis on the understanding of market and customer needs through collaboration and the leveraging of digitalization throughout the innovation process.

### Market developments characterized by sustainability

Sustainability considerations become more and more important for the entire value chain. With end customers attaching increasing importance to product ingredients and sustainability performance, these topics are critical for Clariant's customers as well, particularly in customer-facing market segments, such as the



electrical and electronics, cosmetics, and home care segments. Regulatory requirements like the European Union’s Green Deal or similar developments in other regions also highlight the fact that sustainability includes both operations as well as the transformation of the product portfolio.

Due to its systematic link between sustainability and innovation, Clariant is in an excellent position to benefit from this ongoing shift. The business areas have launched new products in 2021 that combine excellent performance with clear sustainability benefits.

New business opportunities through circularity

Enhancing circularity is one important dimension of adding value through sustainability. Companies in the chemical sector need to find new ways to close material loops by reusing products at the end of their life cycle. This offers new business opportunities for Clariant, as the company has been developing new business models systematically for many years, using redirected waste streams for new applications.

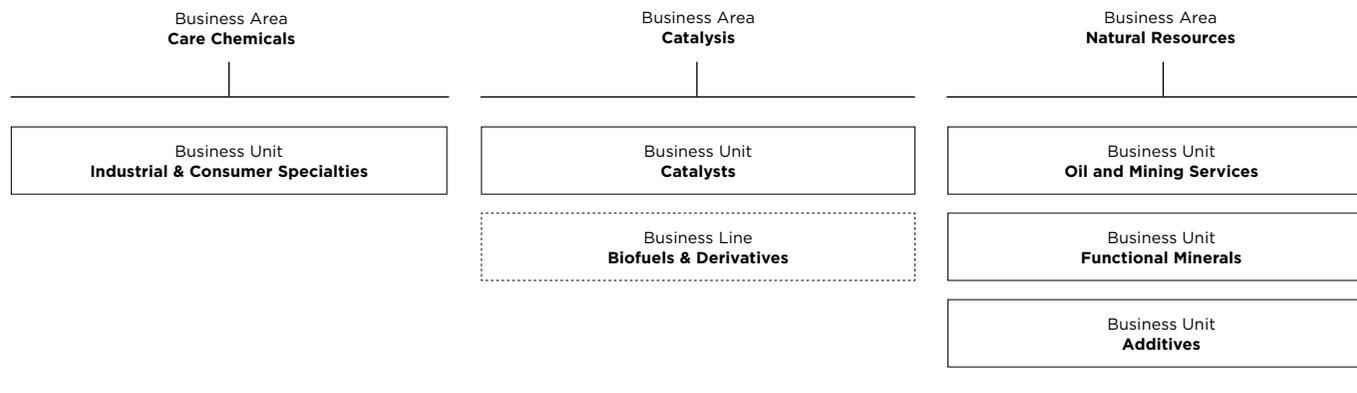
Digitalization: step-changing R&D and innovation processes

With a strong focus on sustainability-driven innovation, digital tools are powerful enablers of Clariant’s innovation strategy. Digitalization of R&D and innovation processes enables significant gains in efficiency, increasing speed and optimizing resource consumption. Data capturing, advanced data analytics, computational science, and the setup of the required IT infrastructure, combined with lab automation and high-throughput experimentation (HTE) capabilities, allow Clariant to shorten its innovation cycles and reduce the time to market. In addition, Clariant uses digital tools to develop new digital business models and explore new ways to collaborate with customers. Digital collaboration solutions have become even more important due to the COVID-19 pandemic.

Five Technology Platforms for Clariant’s research activities

Clariant’s innovation activities are based on a strong network of more than 860 employees. R&D is performed in three flagship Innovation Centers in China, Germany, and India, where several BUs are represented. Dedicated centers with a focus on biotechnology, high-throughput experimentation for catalysts and

008 BUSINESS AREAS

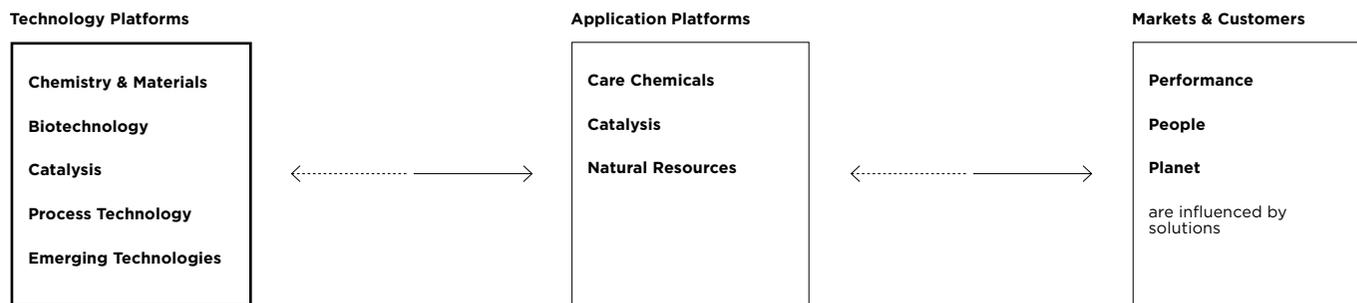


The Business Area Care Chemicals has a clear focus on highly attractive, high-margin, and low-cyclical segments with c. 2/3 of the business being consumer-facing in Consumer Care and Industrial Applications.

The Business Area Catalysis contributes significantly to value creation in our customers’ operations, ensuring that finite raw materials and energy are used efficiently and, in turn, ensuring the quality and yield of processes.

The Business Area Natural Resources adds value through enhanced sustainability benefits and by enabling circularity, supporting recycling solutions, and reducing customers’ dependency on fossil resources, thereby helping them to achieve a lower carbon footprint.

009 CLARIANT INNOVATION CHAIN



→ technology push      ←..... market pull

consumer care innovation complement the global network of Clariant’s R&D Centers based on a contract R&D model. Moreover, Clariant operates 45 Technical Centers across all regions to ensure proximity to customers. The company structures its research activities along five Technology Platforms → FIGURE 009, which collaborate closely with the business units to provide them with crucial technology expertise and innovative solutions:

- **Chemistry & Materials:** This Technology Platform focuses on new chemistries and formulations that meet emerging value propositions of Clariant’s customers, while providing a clear sustainability benefit. Hosted within Business Unit Industrial & Consumer Specialties, this platform serves all business units to leverage synergies.



- **Biotechnology:** This Technology Platform focuses on the valorization of biomass toward biofuels and biobased chemicals by supporting the Business Line Biofuels & Derivatives in further developing the EcoTain®-awarded sunliquid® technology and all relevant business units.
- **Catalysis:** This Technology Platform develops innovative catalysts to increase the resource and energy efficiency of chemical processes and to reduce their environmental footprint. Hosted within Business Unit Catalysts, one specific focus of the Technology Platform lies in using greenhouse gases such as carbon dioxide as feedstock to be converted into valuable chemicals, e.g., methane and methanol.
- **Process Technology:** This Technology Platform focuses on process development and scale-up to commercial scale production by providing a comprehensive chemical engineering toolbox with the aim to provide safer and more sustainable high-performing manufacturing processes. Among others, the Data Science team makes use of advanced data analytics and artificial intelligence to further boost process performance.
- **Emerging Technologies:** This newly implemented Technology Platform focuses on emerging technology trends with high relevance for Clariant's business units and with high transformational impact. Current activities include high-throughput experimentation, digital formulation technologies, as well as cutting-edge analytical methodologies, to widen the solution space and accelerate time to market.

The Sustainability Transformation department is responsible for integrating sustainability in the company's products and processes. The department aligns innovation management practices with Clariant's sustainability programs to enhance its transformation roadmap.

Sustainability Transformation collaborates closely with Global Product Stewardship, a function responsible for monitoring all global regulatory developments, evaluating the impact and risk for Clariant's portfolio, and ensuring compliance of Clariant's products with regulatory requirements. The close interaction between Sustainability Transformation and Global Product Stewardship allows joint action in advocacy and regulatory affairs to tackle the wave of new legislation to be expected from the Green Deal in Europe and other regions likely following. Global Product Stewardship and Sustainability Transformation are involved early on in the innovation process to assure from the beginning that the product developed will be safe and sustainable by design.

By securing Clariant's patents and trademarks, Global Intellectual Property Management leverages the value creation from innovative products for Clariant.

Collaborations for innovation

To drive its innovation strategy, Clariant strongly relies on collaboration across functions and businesses, as well as with external partners. The company's Open Innovation initiative identifies collaboration partners in the private sector as well as at universities and other research institutions to source creative ideas.

Complementing its strong ties to different partner networks, Clariant strives to collaborate closely with partners in the supplier industry to develop solutions that are more sustainable when considering the entire value chain. Thus, the company's innovation team is collaborating closely with Group Procurement Services to create opportunities for joint supplier innovation.

**Market to Customer**

Clariant's success relies on its ability to understand customer needs and market trends along the entire value chain, to develop solutions that address those needs, and to capture the value created. To foster this ability, the company constantly builds and adapts its marketing and sales capabilities, optimizes its pricing, and continues to strengthen its customer relationships, supported by digitalization.

Customer demand for sustainable products increasing continuously

Driven by end consumer interest as well as anticipated policy and regulatory changes, customer demand for sustainable products further accelerated in 2021. Clariant supports the overall vision of such regulation, as it has the potential to foster innovation of sustainable products while preserving the competitiveness of Europe's industry. Clariant continues to promote new solutions that are more sustainable without compromising on performance or on the commitment to fulfilling customer needs. In 2021, Clariant awarded 18 new products the EcoTain® label for an outstanding sustainability profile. The screening, based on 36 sustainability criteria across the products' entire life cycle, is part of the Portfolio Value Program (PVP).

Furthermore, the company intensifies its efforts to demonstrate how its sustainable products can support customers in reaching the sustainability targets they have set regarding their supply chain.

Standing out in the market through specialized solutions

To meet the evolving ecological standards and its customers' quality expectations, the company aims toward ever increasing innovation and specialization, despite the ongoing commoditization, consolidation, and integration in the chemicals market. As a specialty chemical company, Clariant is working to maintain and strengthen its market position by delivering services tailored to customers' demands, both remotely and in person.

Centralized functions to support the technology platforms and business units

Several other units complement the five Technology Platforms.  
→ FIGURE 009

Group Engineering, one of the functions of the newly created transformational Service Unit Group Operational Excellence (GOE), is responsible for managing and executing major and complex investment projects.



Biennial customer satisfaction survey

On a biennial basis, Clariant conducts customer satisfaction surveys to gain insights into how its customers perceive the company's operational, commercial, and innovation performance. The last survey in 2020 revealed improved values of the Customer Satisfaction Index, the Customer Loyalty Index, and in particular the Net Promoter Score (NPS) compared to 2018.

New organizational setup to challenge commercial performance

Customer centricity is important to stay ahead of the competition. That is why Clariant keeps challenging its commercial performance and reinventing its portfolios. After a reorganization in 2021, Clariant now embeds the Commercial Excellence initiative in the renewed Corporate Planning & Strategy (CP&S) group. With deep functional expertise, Commercial Excellence facilitates dialogue with current and prospective customers to improve commercial strategies, customer engagement, as well as sales and marketing operations. It concentrates on three areas that are central to all business units: Sales Force Effectiveness, Pricing Excellence, and Digital@Commercial.

- **Sales Force Effectiveness for improved marketing performance:** Sales Force Effectiveness (SFE) aims to increase sales performance and holistically assesses sales-related areas to identify levers for targeted improvements. In addition to its focus on improving sales force productivity, the team runs in-depth analyses of market gaps and of the performance potential for key market segments. This provides the basis for growth analytics, including lead identification, in cooperation with the business units. When analyzing short- and long-term market trends, Clariant always follows a triangulation approach, considering various sources and looking at a situation from different angles to avoid bias. Clariant continues to adjust and to differentiate customer profile development to ensure that profiles stay relevant. Observing the customer experience reveals both apparent and hidden needs of different roles at different points in time within the decision cycle and allows Clariant to tailor the value proposition accordingly. In 2021, the company made progress segmenting its broad market and product portfolio into logical blocks and

profiles, taking into consideration differences across business lines and business units, as well as proximity to the end consumer.

- **Mutually beneficial pricing through Pricing Excellence:** By determining mutually beneficial price points, Clariant transforms value created for customers into profitable growth for the company. Value calculators that can quantify and visualize the financial benefits of using Clariant's products as compared to the next best competing alternative are helpful to demonstrate a product's value to customers. Clariant's Pricing Excellence identifies intrinsic margin potential and supports the implementation of the pricing, based on data lake-driven analyses. New digital pricing tools integrate both internal and external sources, such as weather influences and commodity stock prices, and accurately execute the value calculations for customers and for Clariant.
- **Advancing customer relationships with Digital@Commercial:** Clariant's commercial activities are driven by digitalization. To help the business units offer tailored products and solutions for the customers, Digital@Commercial seeks to understand each touchpoint along the customer journey, systematically investigating potential digital opportunities for go-to-market approaches. The team initiates new projects together with the business units and supports the implementation in the initial phase. Furthermore, Digital@Commercial plays an important role in maintaining long-term customer relationships. Together with Group IT, the team develops, deploys, and rolls out updates of the Customer Relationship Management (CRM) system across business units. This includes user trainings, commercial analytics, and the development of relevant steering indicators.

**Customer to Cash**

Clariant continuously optimizes its operational chain. The company fosters process efficiency using digitalization, improves CAPEX efficiency with so-called front-end loading, responds to customer demands with agile approaches, and reacts to COVID-19 effectively with flexible short-term changes. Beyond that, Clariant strengthens its overall profitability with continuous cost savings in procurement, with safe, functional operations, and by further integrating sustainability into the value chain.

Connecting commerce and operations with end-to-end supply chains

Clariant continues to build integrated end-to-end supply chains, connecting the commercial with the operational value chain. The company translates customer requirements into demand planning, using an agile mindset as well as digital solutions and technology, including machine learning, demand sensing, and advanced analytics.

An organizational setup to foster operational excellence across business units

In the new organizational setup established in 2021, Operational Excellence forms part of the new transformational Service Unit Group Operational Excellence (GOE). The service unit helps Clariant's business units to deliver best-in-class operations performance, advancing continuous improvement from a Lean Six Sigma approach to a data science-driven, advanced-analytics approach. GOE also aims to reduce CAPEX consumption for every significant CAPEX project across business units.

Digitalization for optimal processes

Digitalization optimizes process efficiency in various ways. Digital lean methods use computer-based optimization to go beyond manual improvements of a classical lean approach. Drawing from increased data availability, this allows digitally steered processes with advanced controls, including in-time raw material delivery, improved plant throughput, system and employee scheduling, and energy use optimization.



Front-end loading for CAPEX efficiency

For CAPEX projects, Clariant established a new governance, introducing a stringent stage-gate process. With front-end loading, project teams can only tackle a new project phase after completing the previous phase, beginning with a clear definition of the business case. This approach leads to more stringent project management and requires systematically identifying and assessing potential innovation needs.

Well-positioned through agile approaches

Benefits for customers are the primary driver for improvements in the operational chain. To satisfy the customers' evolving expectations, Clariant keeps improving its agility. The company has fully adapted agile approaches like the SCRUM methodology, which are established through team trainings and a black belt curriculum. To offer optimal lead times, the company fine-tunes improvements based on feedback from users along the operational chain, including controllers, procurement officers, and production personnel.

Global supply chains under pressure due to COVID-19

COVID-19 keeps challenging Clariant's supply chain management and demand planning. The pandemic influences raw material availability, product delivery, and logistics performance at customer sites. Flexibility and a global sourcing network that mitigates supply shortages allow Clariant to respond to these challenges quickly and effectively.

Coordinated procurement for cost efficiency

In 2021, almost 3 200 vendors delivered raw materials worth CHF 1.9 billion to Clariant's continuing operations. Given these figures, aligned and coordinated procurement activities are vital for overall cost competitiveness and related efficiency. Clariant keeps a structured value chain approach, combined with improved and digitally supported processes. Thus, Group Procurement Services contributed to achieve relevant savings to support all business units. Additional cost efficiency measures, supported by digital enablers, resulted in further cost savings to reach top quartile level among industry peers.

Operational safety: a key priority

A safe operational chain is of utmost importance for Clariant as a responsible employer. It is also necessary to minimize disruptions in production. Thus, Clariant has defined a safety target of zero accidents in its operations. In 2021, the lost-time accident rate (LTAR) remained constant at 0.16 days lost per 200 000 hours of work. Because of the COVID-19 pandemic, Clariant established additional security and safety concepts to guarantee the health and safety of employees at all times.

Sustainable operations for sustainable success

Sustainability is a key priority for Clariant's own operations, but also across its entire value chain. The company continues to increase its renewable energy share, a cost-effective measure with positive environmental impacts. Clariant also keeps rethinking its operations in the pursuit of climate-neutral production. For instance, the design of plant construction aims toward an optimal flow of energy to minimize consumption. Driven by customer demand for sustainable chemistry, Clariant considers carbon footprint and origin when sourcing raw materials. In cooperation with the business units, Clariant continuously seeks solutions for alternative materials.



## A PURPOSE-LED STRATEGY

Clariant aims to move toward top-quartile results in specialty chemicals in terms of growth, profitability, sustainability, and people. Based on its new purpose, »Greater chemistry – between people and planet,« Clariant unveiled a new purpose-led strategy with four dimensions, accompanied by new financial and non-financial targets. The strategy reflects Clariant’s ambition to create value with innovative chemistry and a sustainability focus, putting customers, employees, and the planet at the center of all activities.

### Strategic dimensions

#### A strategy to reflect Clariant’s new purpose

The world is changing quickly. In addition to the ongoing challenges of the COVID-19 pandemic and the related economic issues, such as supply chain disruptions, the effects of climate change are becoming more and more tangible. Thus, climate change and carbon footprint are important priorities for Clariant and the entire industry. Clariant’s innovation power, customer proximity, and its

uniquely talented and experienced people enable the Group to deliver products with an outstanding technical and sustainability performance. Against this background, Clariant unveiled its new purpose, »Greater chemistry – between people and planet.« This purpose leads Clariant’s new strategy. → FIGURE 010

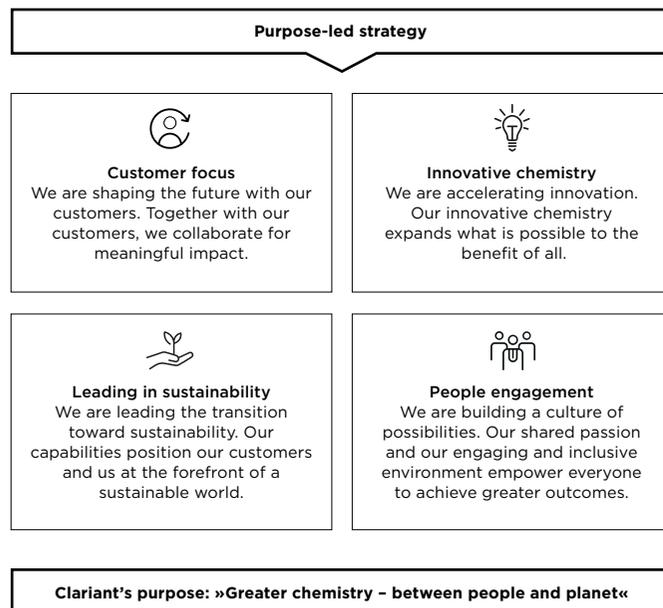
### Four strategic dimensions

The new purpose-led strategy replaces Clariant’s five-pillar strategy. It establishes four strategic dimensions:

- **Customer focus:** Customer centricity is an important differentiator to stay ahead of the competition. With a series of divestments since 2019 and the closing of the Pigment business sale on 3 January 2022, Clariant has become more simplified and focused with a true specialty chemical portfolio. This focus allows even more customer centricity in the three business areas. Clariant continues to become more agile, delivering tailor-made solutions to satisfy customers’ evolving expectations mirroring their enthusiasm. To understand customer needs and develop corresponding solutions, Clariant focuses on building strong customer relationships.
- **Innovative chemistry:** At Clariant, chemistry stands for unique solutions that redefine what conventional wisdom considers to be possible. In line with its focus on ever increasing innovation and specialization, Clariant has an innovation pipeline of high-performance solutions throughout its three business areas. These solutions are strongly linked to customer-driven sustainability requirements. Continuously investing in Research & Development – even in times of economic uncertainty – is crucial for future success and for business growth above market growth.

- **Leading in sustainability:** Customers and stakeholders around the globe are demanding sustainable solutions while moving away from products and investments that have a negative sustainability footprint. Legislation around the globe to address sustainability challenges is further driving the transformation of entire value chains. Clariant is in an excellent position to benefit from this ongoing shift. Innovation and sustainability are systematically linked at Clariant. The company continues to promote new solutions that are more sustainable. In addition, sustainability is a key priority for Clariant’s own operations and the entire value chain in terms of raw materials, the use of renewable energy, and climate-neutral production.
- **People engagement:** Appreciation for people lies at the core of Clariant’s holistic approach to value creation. A culture of dialogue and mutual respect, dedication to sustainable, innovative technologies, and continuous transparency and integrity are key characteristics of Clariant’s stakeholder engagement. The company values customer relationships and ongoing dialogue with suppliers, shareholders, and public policy platforms. → FIGURE 011 Clariant is particularly committed to engaging with employees on all levels. Through the lens of people centricity and by making the well-being of employees a priority, Clariant fosters a culture where people feel valued. By actively promoting diversity, inclusiveness, mutual appreciation, empowerment, and safety at work, Clariant creates an environment where everyone can contribute and develop their talents to their fullest potential. The excellent work and commitment of Clariant’s global team is a key competitive factor.

010 CLARIANT’S NEW PURPOSE-LED STRATEGY



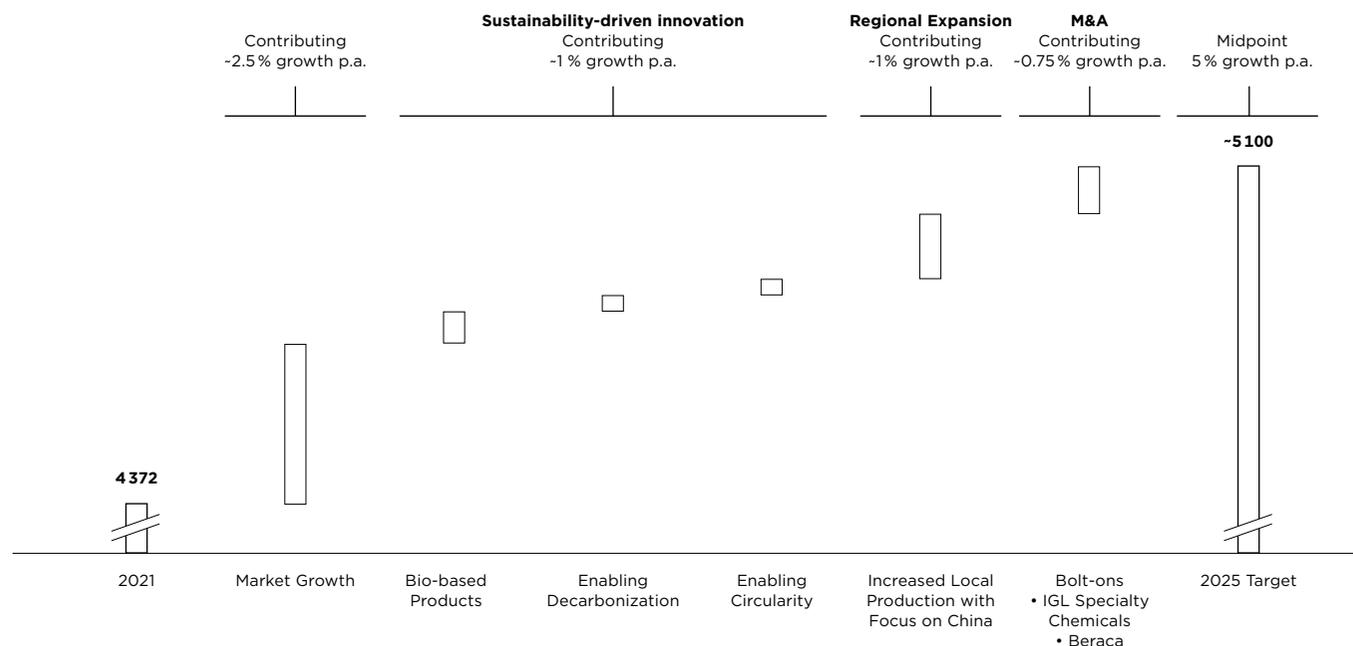


011 EXAMPLES OF STAKEHOLDER ENGAGEMENT

Stakeholder Group	Examples of engagement formats	Key needs and concerns
<p><b>Customers</b></p>	<ul style="list-style-type: none"> <li>– Daily interactions</li> <li>– Marketing and Innovation Excellence Initiatives: Customer interviews, innovation workshops, joint ideation, iGarage</li> <li>– Best practice exchange sessions</li> <li>– Co-branding EcoTain®</li> <li>– Biennial customer satisfaction survey</li> <li>– Trade fairs and international conferences</li> </ul>	<ul style="list-style-type: none"> <li>– On time, in full: quality, reliability of supply, prices</li> <li>– Innovative solutions</li> <li>– Achieving sustainability goals</li> <li>– Circular economy</li> </ul>
<p><b>Employees</b></p>	<ul style="list-style-type: none"> <li>– Personal dialogs</li> <li>– Intranet, Yammer, newsletters, town halls</li> <li>– Biennial company-wide »Pulse Survey« and ad-hoc surveys on selected topics (e.g. Purpose, DE&amp;I, etc.)</li> <li>– Performance management cycle</li> <li>– mySuccess platform</li> <li>– Awards landscape (special recognition, appreciation, badges)</li> <li>– Integrity Line</li> <li>– Global Learning Catalogue</li> <li>– Evaluation of training and development programs</li> <li>– Employee assistance programs (with local adaptations)</li> <li>– Diversity, Equity, and Inclusion communities and focus groups</li> <li>– Interactions on social media and employer review sites</li> </ul>	<ul style="list-style-type: none"> <li>– Wages, salaries, and benefits</li> <li>– Competence building</li> <li>– Leadership skills</li> <li>– Occupational health, safety, and well-being</li> <li>– Integrity</li> <li>– Diversity, Equity, &amp; Inclusion</li> <li>– Digitalization, simplification and harmonization</li> <li>– Remote management capabilities</li> <li>– Work-setup and configuration</li> <li>– Clariant Purpose, culture and values</li> </ul>
<p><b>Shareholders</b></p>	<ul style="list-style-type: none"> <li>– Integrated Report</li> <li>– Annual General Meeting</li> <li>– Quarterly Results - including conference call and webcast</li> <li>– Financial Media Releases</li> <li>– Roadshows</li> <li>– Participation at conferences</li> </ul>	<ul style="list-style-type: none"> <li>– Value creation</li> <li>– Growth and capital returns</li> <li>– Contribution to environmental, social, and governance improvements</li> <li>– Access to up to date public financial information</li> <li>– Insight into Clariant's outlook</li> </ul>
<p><b>Environment</b></p>	<ul style="list-style-type: none"> <li>– Corporate culture that prioritizes environmental stewardship</li> <li>– Innovative and sustainable products and offerings addressing sustainability challenges</li> <li>– Environmental management tools and programs</li> <li>– Low-Carbon Emitting Technologies in the Chemical Industry initiative of the World Economic forum</li> <li>– EcoCircle collaborations fostering transition to a circular plastics economy</li> <li>– Alliance to End Plastic Waste (AEPW)</li> <li>– »Driving change in a changing world« videos on YouTube</li> </ul>	<ul style="list-style-type: none"> <li>– Minimizing impacts on the environment</li> <li>– Safeguarding natural resources</li> <li>– Reducing environmental footprint and handprint of customers</li> </ul>
<p><b>Suppliers</b></p>	<ul style="list-style-type: none"> <li>– Together for Sustainability (TfS) initiative</li> <li>– Supplier performance assessment reviews</li> <li>– Regularly communicating updated standard information package</li> <li>– Yearly procurement events</li> <li>– EcoTain® and other partnerships</li> <li>– Open Innovation initiative</li> </ul>	<ul style="list-style-type: none"> <li>– Prices, payment practices</li> <li>– Lead time</li> <li>– Supplier Code of Ethics</li> <li>– Safety</li> <li>– Circular economy</li> <li>– Digitalization</li> </ul>
<p><b>Policymakers and Civil Society</b></p>	<ul style="list-style-type: none"> <li>– Engagement in trade associations, multistakeholder alliances, sectorial associations, and scientific and research associations</li> <li>– Community dialogues</li> <li>– Dialogue with policymakers and related stakeholders (industry alliances, NGOs, academia) on public policies</li> <li>– Preparation of Position Papers and communication materials</li> <li>– Participation to conferences and events</li> </ul>	<ul style="list-style-type: none"> <li>– Governance and compliance</li> <li>– Sustainable chemistry</li> <li>– Circular economy</li> <li>– Bio economy</li> <li>– Climate change and energy transition</li> </ul>



012 ATTRACTIVE SALES GROWTH TRAJECTORY SUPPORTED BY MULTIPLE LEVERS IN CHF M



### Levers for sales growth

Clariant’s plan to reach an annual midpoint sales growth of 5% on average by 2025 is based on four types of growth levers → FIGURE 012:

- 2.5% market growth of current market segments with actual geographic footprint;
- 1% growth above the market from sustainability-driven innovation, especially from products that are bio-based, that enable decarbonization, or that enable circularity;
- 1% growth from regional expansion through increased local production, with a focus on China; and
- 0.75% growth from M&A activities, in particular the acquisition of Beraca in Brazil and CICS, the joint venture with India Glycols.

Clariant’s high-quality core portfolio operates across diverse, growing end markets. That is why it is more resilient – and less volatile – than Clariant’s pretransformation portfolio. On this basis, Clariant is well set to grow its business in excess of the expected annual market growth of approximately 2.5% and to increase its operating leverage. Differentiated steering and focused allocation of capital and resources will further amplify Clariant’s growth.

### Financial and non-financial targets

New medium-term targets to guide Clariant’s value creation

The four dimensions of the new purpose-led strategy are reflected in Clariant’s new medium-term financial and non-financial targets. They reflect Clariant’s ambition to achieve top-quartile results in specialty chemicals in terms of growth, profitability, sustainability, and people.

By 2025, Clariant is targeting to grow its top line with a 4–6% compound annual growth rate (CAGR) and to increase its EBITDA margin to 19–21%. In addition, Clariant introduces a cash conversion target for the first time: The company is planning to reach a free cash flow (FCF) conversion ratio of around 40% by 2025 – a figure that Clariant defines as cash flow from operations minus capex, divided by EBITDA.

#### FINANCIAL TARGETS BY 2025

	Clariant Group
Sales growth (CAGR) (%)	4–6
EBITDA margin ambition (%)	19–21
FCF conversion expectation (%) <sup>1</sup>	-40

<sup>1</sup> Defined as (cash generated from operating activities – capex)/EBITDA.

Clariant has also set itself science-based climate targets: By 2030, the company plans to reduce its Scope 1 and 2 emissions by 40% and its Scope 3 (cat. 1) emissions by 14%. Finally, Clariant aims to be in the top quartile in employee engagement in its industry.

#### NON-FINANCIAL TARGETS BY 2030

	Clariant Group
Reduction in Scope 1 and 2 emissions (%)	40
Reduction in Scope 3 (cat. 1) emissions (%)	14
Employee Net Promoter Score (eNPS)	Top quartile

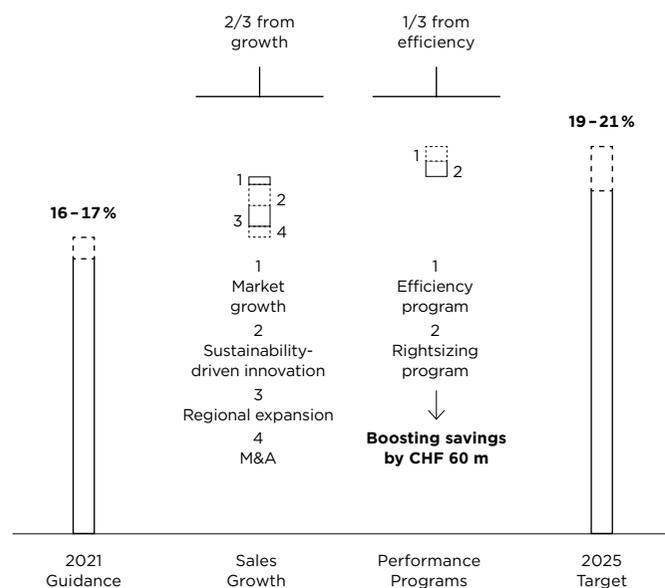
Sustainability-driven innovation raises the average annual growth by approximately 1%. Clariant focuses on bio-based products and solutions that enable decarbonization and circularity, including the EcoTain® product range.

Regional expansion is another important growth driver for Clariant – with China as the main growth region. By allocating approximately 35% of its growth capital expenditure (CAPEX) to China, the company expects its sales share to grow to around 14% by 2025 versus the current 10% contribution. In total, Clariant anticipates regional expansion to contribute around 1% additional average annual sales growth.



Clariant is also well prepared for bolt-on M&A transactions to close product, market, and technology gaps. The recent transactions in Care Chemicals – CICS, the joint venture with India Glycols, and Beraca in Brazil – reflect Clariant’s successful adherence to these criteria. These transactions will positively impact the top line with a combined sales contribution of 0.75% to average annual growth.

013 MEASURES TO DRIVE EBITDA MARGIN<sup>1</sup> RANGE TO 19-21%



<sup>1</sup> Continuing operations

### Improving efficiency for an increased EBITDA margin

In terms of profitability, Clariant’s ambition is to take the EBITDA Group margin corridor to a range of 19 to 21% by 2025. This margin improvement will be leveraged by around two-thirds from sales growth while efficiency improvements will contribute by approximately one-third. → FIGURE 013



## Q&A

**Richard Haldimann**

Chief Technology & Sustainability Officer

### In February 2022, you became the new head of Group Innovation & Sustainability (GIS) at Clariant.

#### How do you plan to accelerate sustainability-driven innovation?

The key is to develop solutions that make our customers successful including helping them to achieve their own sustainability targets. Concretely this means the products need to have both outstanding technical as well as sustainability performance. With the new operating model in place at GIS, we bring all the key corporate units together that support the businesses which bring sustainable innovations into the market. By doing this, we create meaningful impact reflected in the increasing sustainability of our product portfolio as well as in increased profitable growth.

#### What will be the focus areas of Group Innovation & Sustainability going forward?

We will concentrate on three core agendas: First, we want to achieve climate-neutral and sustainable operations here at Clariant. Second, the ongoing sustainability-driven portfolio transformation is vitally important for profitable growth. And third, we want to foster our sustainability-based engagement as a Corporate citizen.

#### Could you describe Clariant’s sustainability journey?

Adding value with sustainability has long been a key element of our business strategy. And the way to create that

value is by eliminating waste and emissions in our operations as well as through constant innovation and R&D. Sustainability challenges provide opportunities for better operations and products. This has resulted in setting new environmental targets and breaking down our SBTi climate targets bonus relevant. By 2030, we want to reduce Scope 1 and 2 emissions by 40% and Scope 3 (cat. 1) emissions by 14%.

#### How do customers profit from these efforts?

Our customers will very directly benefit from our efforts by getting products with a lower carbon footprint and an overall better sustainability profile. Let me give you two illustrative examples: We developed Safebreak® life, the first high-performing brake fluid without hazardous borate esters. This product increases user safety when changing the fluid. In addition, it is fully biodegradable, and has a low carbon footprint. It sets brake fluid producers on the path to more sustainability without compromising on performance. Or take the issue of microplastics connected with polymer-based materials: We provide the industry with a biobased alternative called Licocare® RBW Vita, which is highly performant and biodegradable, thus preventing the formation of microplastics. It can potentially replace polymer alternatives in various applications such as coatings, consumer products, and agriculture.



Clariant is currently executing one of the largest and most comprehensive performance programs in its history. Through the extended rightsizing program, Clariant reduces complexity, drives automation, and leverages shared service centers. The performance program also encompasses reducing and transferring positions and reducing indirect spend. In total, Clariant is targeting cost eliminations of approximately CHF 240 million: Around CHF 100 million are focused on remnant cost elimination; around CHF 30 million affect discontinued operations; and CHF 110 million accrete to the core.

**Improving FCF conversion with capital and cost discipline**

Clariant is strongly committed to capital and cost discipline and expects free cash flow conversion – defined as cash generated from operating activities minus capex, divided by EBITDA – of around 40% toward 2025.

Capital expenditure (CAPEX) in the upcoming year is likely to remain high as Clariant phases existing projects and captures new growth opportunities from higher customer demand. More than half of this CAPEX will be used for growth: Clariant will continue to invest in attractive businesses such as Care Chemicals, Catalysts, and Additives, and in growth regions like China. Clariant will also step up investments in sustainability measures, especially to reduce greenhouse gas emissions. Toward 2025, CAPEX is expected to normalize in the range of CHF 280 million to CHF 320 million per year. Together with Clariant's profitable growth, the reduction in CAPEX will result in a significant improvement in FCF conversion and a continued improvement in ROIC.

**Non-financial targets to reflect emission reductions and employee engagement**

Clariant is a leader in sustainability, so setting ambitious non-financial targets for itself is only a logical next step. The 2030 non-financial targets reflect Clariant's purpose-driven strategy and its commitment to people and planet. Clariant plans to reduce Scope 1 and 2 emissions by 40% and Scope 3 (cat. 1) emissions by 14%. Based on latest climate science, the Science-Based Targets initiative (SBTi) considers these goals to be in line with the necessary steps to meet the targets of the Paris Agreement. In addition, Clariant aims to become a top-quartile company in terms of employee engagement, using this target as a benchmark for measuring its ambition to become the employer of choice in its industry.

**Strategic implications at the business area and regional level**

All three business areas have strong market positions and the ability to deliver growth. Clariant focuses on bringing all core businesses to their full potential. The company will follow a differentiated growth strategy and invest in its most attractive businesses and market segments.

The regrouped regional structure, which is based on the four regions APAC (Asia-Pacific), EMEA (Europe, Middle East, and Africa), LATAM (Latin America), and NORAM (North America), is aligned with Clariant's strategic plans. Clariant plans to further develop its footprint and sales in NORAM and APAC, in particular in China.

**Strategic Management Process**

Clariant's Strategic Management Process (SMP) is conducted by the business units in collaboration with Corporate Planning & Strategy. The SMP ensures that Group-level as well as business unit-level strategy development is an iterative process that addresses the relevant megatrends observed by Clariant. In the 2021 cycle, in addition to refreshing business unit strategies, further strategic topics covered were innovation, sustainability, and global growth drivers, specifically China and differentiated steering of CAPEX.

Despite the current COVID-19 situation, Clariant refreshed its SMP for all business units in 2021 and affirmed its must-win battles. Typically, the full strategic management process is conducted every three years, and must-win battles are reviewed either as the battles are won or as new critical battles are identified.

Implementation of the strategy is now underway with initiatives to maximize total value, together with those supporting growth, innovation, and sustainability.



## CONTRIBUTING TO THE SDGS

Clariant is committed to contributing to the Sustainable Development Goals (SDGs) of the United Nations. These 17 goals outline a clear path to a more sustainable future and offer key business opportunities for the company.

### Sustainable development and market potential

The SDGs provide a global framework for the most urgent societal and environmental necessities. The goals are defined in everyday language and offer a well-defined set of actions for all stakeholders. They are at the heart of the United Nations 2030 Agenda for Sustainable Development.

## 014 CLARIANT'S PRIORITY SUSTAINABLE DEVELOPMENT GOALS



The business community recognizes the SDGs as a powerful way to foster innovation and growth. According to the Business & Sustainable Development Commission's »Better Business, Better World« report, USD 12 trillion of additional market value could be generated by 2030 if the SDGs are achieved.

Clariant can contribute to the SDGs with its innovative and sustainable products and services, strong environmental management, and a commitment to respect and protect human rights across its own operations and the supply chain.

### Evaluating Clariant's impact on the SDGs

Clariant assessed both the positive and negative impacts of its products and services, operations, value chain, collaborations, and corporate citizenship activities, to evaluate the impact of its business activities in relation to the 17 SDGs, including all 169 underlying targets and the corresponding indicators. All business units and several Service Units were involved in performing, reviewing, and validating this analysis.

## 015 EXAMPLES OF CLARIANT'S ACTIVITIES AND PRODUCTS CONTRIBUTING TO THE SDGS



- EcoTain® products
- Portfolio Value Program
- RED SNOW® BEAUTY IN SEASON
- CLARIANT AND CASALE DEVELOP NEW AMMONIA CATALYST FOR SUSTAINABLE CO<sub>2</sub> REDUCTION



- EcoTain® products
- Portfolio Value Program
- EcoCircle initiative
- 2025 environmental targets regarding energy consumption, waste generation, water consumption, and wastewater generation
- Science-Based Targets initiative
- Sunliquid® technology
- high-performing catalysts
- various regional R&D centers
- digitalization investments (operations and stakeholder interaction)
- RED SNOW® BEAUTY IN SEASON
- A NATURAL RHEOLOGY MODIFIER THAT BRINGS REAL CHANGE
- HOW CLARIANT IS LAYING THE GROUND FOR SECOND-GENERATION BIOFUELS AND MUCH MORE
- CLARIANT AND CASALE DEVELOP NEW AMMONIA CATALYST FOR SUSTAINABLE CO<sub>2</sub> REDUCTION



- 2025 environmental targets regarding energy consumption, waste generation, water consumption, and wastewater generation
- Science-Based Target initiative
- Sunliquid® technology
- HOW CLARIANT IS LAYING THE GROUND FOR SECOND-GENERATION BIOFUELS AND MUCH MORE
- CLARIANT AND CASALE DEVELOP NEW AMMONIA CATALYST FOR SUSTAINABLE CO<sub>2</sub> REDUCTION



- 2025 environmental targets regarding energy consumption, waste generation, water consumption, and wastewater generation
- Science-Based Targets initiative
- Sunliquid® technology
- A NATURAL RHEOLOGY MODIFIER THAT BRINGS REAL CHANGE
- HOW CLARIANT IS LAYING THE GROUND FOR SECOND-GENERATION BIOFUELS AND MUCH MORE
- CLARIANT AND CASALE DEVELOP NEW AMMONIA CATALYST FOR SUSTAINABLE CO<sub>2</sub> REDUCTION
- TRANSPORTATION REVOLUTION AIDING THE SWITCH TO SAFER E-MOBILITY



- high-performing catalysts
- sunliquid® second-generation (2G) biofuel technology
- various regional R&D centers
- digitalization investments (operations and stakeholder interaction)
- CLARIANT GENERATES A BUZZ IN CHARLOTTE, NC, WITH THE OPENING OF NEW INNOVATION CENTER
- HOW CLARIANT IS LAYING THE GROUND FOR SECOND-GENERATION BIOFUELS AND MUCH MORE
- TAKE A PEEK INSIDE OUR CONNECTED AND DIGITALIZED POLYPROPYLENE CATALYST PLANT
- TRANSPORTATION REVOLUTION AIDING THE SWITCH TO SAFER E-MOBILITY



- EcoCircle initiative
- Continuous engagement in partnerships with customers, suppliers, universities, and other research institutes as well as peers
- CLARIANT GENERATES A BUZZ IN CHARLOTTE, NC, WITH THE OPENING OF NEW INNOVATION CENTER
- HOW CLARIANT IS LAYING THE GROUND FOR SECOND-GENERATION BIOFUELS AND MUCH MORE
- TAKE A PEEK INSIDE OUR CONNECTED AND DIGITALIZED POLYPROPYLENE CATALYST PLANT
- CLARIANT AND CASALE DEVELOP NEW AMMONIA CATALYST FOR SUSTAINABLE CO<sub>2</sub> REDUCTION

→ READ MORE IN OUR REVIEW ON PERFORMANCE, PEOPLE, AND PLANET



While Clariant contributes in some respect to every SDG, six priority SDGs were identified. Four of these SDGs were paired, as their relevance to Clariant cannot be evaluated independently.

→ FIGURE 014

- SDG 3 »Good Health and Well-being« and SDG 12 »Responsible Consumption and Production«
- SDG 7 »Affordable and Clean Energy« and SDG 13 »Climate Action«
- SDG 9 »Industry, Innovation, and Infrastructure«
- SDG 17 »Partnerships for the Goals «

In addition to this list, certain business units also contribute to SDG 2 »Zero Hunger,« SDG 6 »Clean Water and Sanitation,« and SDG 15 »Life on Land.«.

The above overview provides selected examples of how Clariant contributes to the different SDGs. → FIGURE 015

## MATERIALITY ASSESSMENT

In line with the strategic dimensions, Clariant conducts comprehensive materiality assessments on a regular basis. Validated by external stakeholders, the company identifies the topics that have the greatest impact on the ability to create long-term value and prioritizes with respect to performance, people, and planet.

### New comprehensive materiality assessment in 2021

Clariant evaluates the materiality of economic, environmental, and social topics on an ongoing basis, drawing upon regular stakeholder discussions and market monitoring. In addition, Clariant conducts comprehensive materiality assessments to identify relevant issues and to prioritize initiatives. After the last assessment in 2017, this process was conducted again in the past business year.

### Drawing from recognized sources

The materiality assessment is based on two internationally recognized frameworks: first, the Integrated Reporting <IR> framework issued by the International Integrated Reporting Council (IIRC), which is now part of the Value Reporting Foundation (VRF), and second, the sustainability reporting standards of the Global Reporting Initiative (GRI). An external service provider specialized in materiality assessments facilitated the process.

Based on these frameworks and other sources, including the Sustainability Accounting Standards issued by the Sustainability Accounting Standards Board (SASB), the UN Global Compact, the SDGs, and topics covered by relevant ESG ratings and rankings, Clariant compiled an extensive list of economic, environmental, and social topics as a first step in the process. Topics that Clariant and its peers had identified in the past supplemented this catalog such that the resulting list comprised 240 entries. Consolidating these entries resulted in 28 topics.

### Feedback from two perspectives

As a second step in the process, 42 external stakeholders provided their views on the relevance of each topic, while 13 senior Clariant managers evaluated the importance of the issues for Clariant's value creation.

The external stakeholders were selected based on carefully defined criteria. The group included customers, nongovernmental organization representatives, sustainability experts, scientists, suppliers, and financial stakeholders.



Clariant senior managers evaluated the potential influence of the topics on strategy development and achievement, market positioning and growth opportunities, risk and reputation management, and compliance. Thus, Clariant implicitly accounted for impacts on sustainable development by considering these risks and opportunities.

The worldwide surveys of Management and stakeholders were conducted in English and Mandarin.

As the final step of the process, Clariant's senior management evaluated and validated the results of the assessment in a follow-up workshop.

### Materiality Matrix

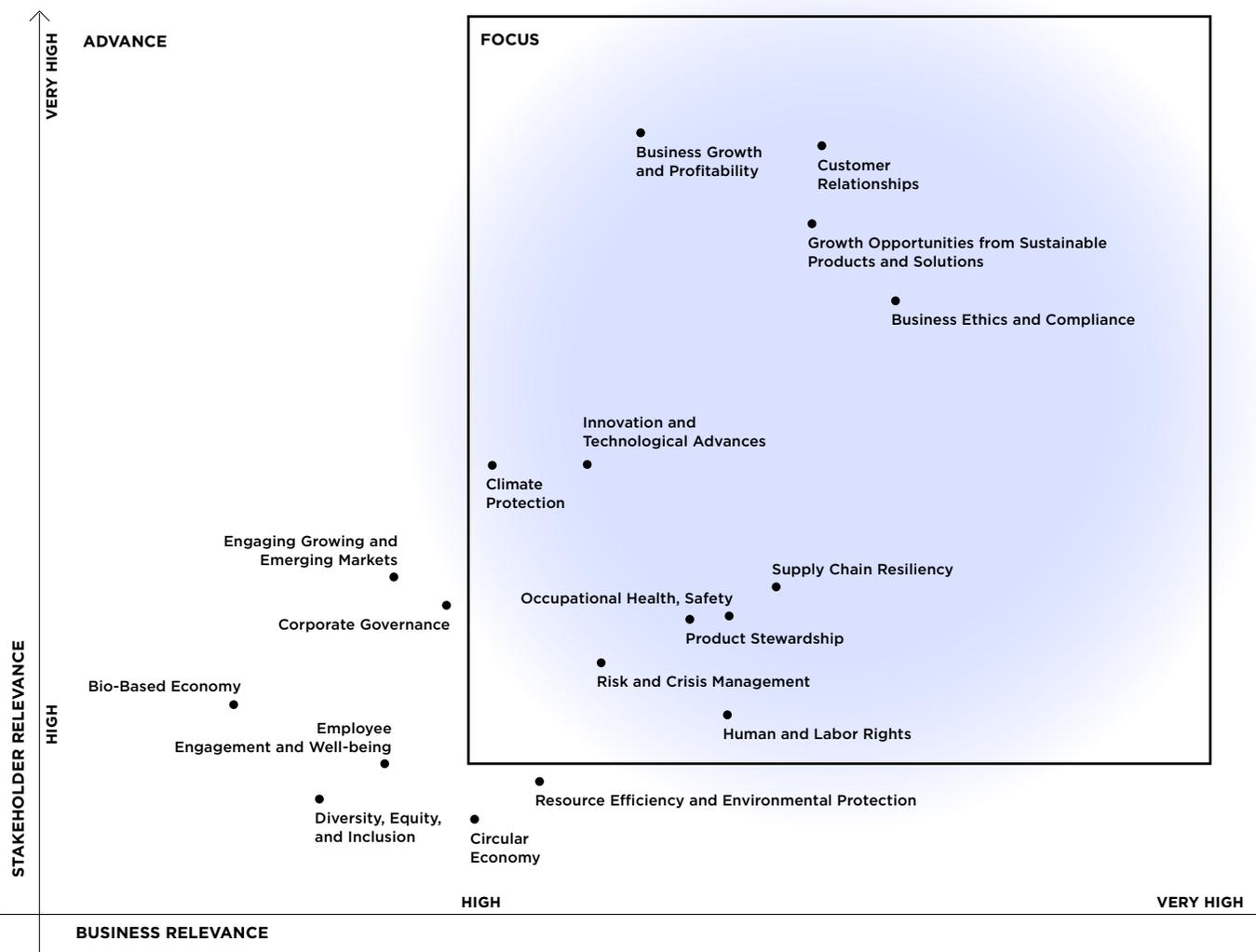
The Clariant Materiality Matrix summarizes the outcomes of the assessment. → FIGURE 016 The horizontal axis depicts the relevance of the topics for Clariant's value creation, whereas the vertical axis shows the relevance of the topics to stakeholders. The topics fall into two categories: Advance and Focus. Focus topics are essential to Clariant's ability to create long-term value; Advance topics offer opportunities that will allow Clariant to better meet expectations.

#### Review on Performance, People, and Planet

This publication depicts Clariant's dedicated management approaches, as well as current developments, activities, and achievements for each material topic.

→ REVIEW ON PERFORMANCE, PEOPLE, AND PLANET

016 CLARIANT MATERIALITY MATRIX





# Value Creation in the 2021 Financial Year

## VALUE CREATION AT THE GROUP LEVEL

Clariant not only concluded its announced divestment program, but also generated markedly higher organic sales growth with a profitability level in 2021 well above 2019 pre-COVID-19 pandemic levels. The Company was able to successfully manage the challenges from unprecedented developments in raw materials, as well as energy and logistics cost. These results positively reflect the attractiveness of the Group's higher-value specialty portfolio and provide tangible proof of the continued effective execution of cost discipline and the efficiency improvement programs.

In the full year 2021, continuing operations sales were CHF 4 372 billion, compared to CHF 3 860 billion in the full year 2020. This corresponds to an increase of 15% in local currency and 13% in Swiss francs. Both pricing and volume growth had a positive impact on the Group of 8% and 7%, respectively.

In the full year 2021, sales rose in almost all geographic regions. The developments in Europe, the Middle East and Africa, Asia-Pacific, including China, and Latin America were particularly robust with sales expansion in the range of 16% to 20%. The sales gap in North America continued to dwindle, and the region ended the year unchanged versus the previous year levels due to the ongoing recovery in Oil and Mining Services.

Care Chemicals sales rose by 22% in local currency in the full year 2021 with a double-digit organic sales increase in both Industrial Applications and Consumer Care. In Catalysis, the top-line was up by 5% in local currency, supported by Syngas, Specialty Catalysts, and emission-control catalyst demand. Oil and Mining Services, Functional Minerals, and particularly Additives all contributed to the 14% local currency sales growth reported in Natural Resources.

The continuing operations EBITDA increased to CHF 708 million as the Group improved profitability on the back of notable sales expansion, operating leverage together with the continued successful pricing measures largely offsetting raw material price increases of approximately 21%, and the execution of the performance improvement programs, which resulted in additional cost savings of CHF 41 million in the full year 2021. Clariant recognized a CHF 33 million net VAT-related credit over the full year 2021, which was offset by exceptional cost, largely related to the performance improvement programs. The EBITDA margin increased to 16.2% from 15.5% in the previous year due to the profitability improvement in Care Chemicals and Natural Resources and the continued cost discipline across the Group.

In 2021, the total Group net result was CHF 373 million versus CHF 825 million in the previous year, CHF 102 million excluding the gain on the Masterbatches disposals. The 2021 net result was positively affected by the strong business performance of the continuing operations and the corresponding margin improvement. In 2020, the gain on the disposal of the Masterbatches business of CHF 723 million and the partial reversal of CHF 50 million of the EU fine provision had an extraordinary positive impact on the result.

Operating cash flow for the total Group was CHF 363 million, just slightly below the previous year level of CHF 369 million, despite a growth-driven cash outflow in net working capital of CHF 221 million, which resulted from the marked sales increase as well as supply chain uncertainties. The restructuring cash payments of CHF 38 million also negatively impacted the cash flow development.

Net debt for the total Group increased to CHF 1 535 billion versus CHF 1 040 billion recorded at the end of 2020. This development is attributable to a growth-driven increase in working capital, higher investments into property, plant, and equipment as well as acquisitions.

The Board of Directors recommends a regular distribution of CHF 0.40 per share to the Annual General Meeting on 24 June 2022, based on the strong performance in 2021. This distribution represents an attractive pay-out ratio of 49% of continuing operations earnings per share (EPS: CHF 0.81) and is proposed to be made through capital reduction by way of par value reduction.

Clariant aims to grow above the market to achieve higher profitability through sustainability and innovation. The Group has concluded its significant portfolio transformation program by divesting Healthcare Packaging in 2019, Masterbatches in 2020, and Pigments in January of 2022. Clariant is now truly a specialty chemical company.

For the full year 2022, Clariant expects strong growth in local currency for the Group driven by a particularly strong first half of 2022. The current high level of uncertainty as a result of the geopolitical conflicts, suspension of business in Russia and the resurgence of COVID-19 in China are expected to impact global economic growth and consumer demand in the second half of the year. Clariant expects the high inflationary environment with regard to raw material, energy and logistic cost as well as supply chain challenges to persist in the second half of 2022. Clariant aims to improve its year-on-year Group EBITDA margin levels via solid volume growth, continued cost discipline, and pricing in an overall increasingly challenging economic environment.



## Q&A

### Stephan Lynen

Chief Financial Officer (CFO)

### **At the recent Capital Markets Day, Clariant announced a new purpose as well as new financial targets. What is the relationship between this purpose and Clariant's financial performance?**

Performance builds on the execution of our purpose-led strategy. Our purpose, »Greater chemistry – between people and planet,« defines our strategy: We focus on our customers, deliver innovative chemistry, expand our leading position in sustainability, and engage our people. The execution of this strategy in combination with our specialty portfolio will enable us to meet our new 2025 financial targets.

### **Can Clariant achieve these targets even under unfavorable economic conditions?**

Our core portfolio has again proven its specialty DNA by the strong performance improvement in 2021. This focused, high-quality portfolio is positioned in attractive, growing end markets. That is why it is more resilient – and less volatile – compared to our pretransformation portfolio. Our investments in sustainability, innovation, and regions like China will further support sales growth. I am convinced that this growth and the savings from the execution of our performance program will assure the successful execution to reach these targets.

### **And how are shareholders going to profit from this course of action?**

At Clariant, we are committed to increasing value for our shareholders. Thanks to our return to revenue growth, the corresponding higher operating margin, lower nonoperating cost, and improving capital return, we were able to achieve a strong improvement in return on invested capital in 2021. The Management team is committed to further increasing this return on invested capital. This is how Clariant can create value and provide superior capital returns in the form of reliable, sustainably growing dividends.



## CARE CHEMICALS

### General information

The Business Area Care Chemicals comprises the Business Unit Industrial & Consumer Specialties (ICS). As a leading provider of specialty chemicals and application solutions for consumer care and industrial markets, Care Chemicals delivers high-performance ingredients and formulation expertise at the best cost-to-performance ratio with an integrated value chain that responds quickly to consumer trends.

Care Chemicals sets a clear focus on highly attractive, high-margin, and low-cyclicality segments. The business area operates in seven different markets: personal care, home care, crop solutions, paints and coatings, aviation, construction chemicals, and industrial lubricants. Offering approx. 2.000 products to around 5.000 customers, it operates in Europe, Middle East, and Africa, Asia-Pacific, North America, and Latin America. Approximately two-thirds of the business is consumer-facing in consumer care and industrial applications.

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## CARE CHEMICALS

### OVERVIEW

The Business Area Care Chemicals comprises Industrial & Consumer Specialties (ICS), which serves customers in the personal care, home care, paints and coatings, and crop solution markets.

### APPLICATIONS

#### Business Unit Industrial & Consumer Specialties

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

### PRIORITY SDGS

- SDG 2 Zero Hunger
- SDG 3 Good Health and Well-being
- SDG 6 Clean Water and Sanitation
- SDG 12 Responsible Consumption and Production
- SDG 15 Life on Land

The business area benefits from several business drivers:

- growing relevance of lifestyle-driven consumers focused on comfort and well-being;
- an increased interest in green and sustainable products that are based on natural ingredients and free of harmful substances;
- the desire of the agricultural industry to better fulfill global nutrition requirements;
- the general trend toward responsible production and consumption, including a demand for solutions that reduce the carbon footprint.

The business area provides formulation solutions with superior performance and a favorable sustainability profile. For example, the home care product Texcare® SRN 170 Terra provides a soil-releasing sustainable polymer for laundry. The green multifaceted all-rounder polymer for laundry protects clothes by preventing soil from penetrating deep into fabric and facilitating the washing process. It features the EcoTain® label.

The business area's skin care products also combine performance with sustainability. Ethience® Protect serves as a case in point. This eco-conscious active ingredient reinforces the skin barrier protection. It was developed in partnership with our current acquisition Beraca (see below).

Synergen® GA serves as an example for the many crop solutions of the business area. Synergen® GA is a sustainable multi-functional adjuvant for aqueous plant protection formulations based on sugar. The product is fully crop-compatible and exhibits zero phytotoxicity. It has a Renewable Carbon Index of 95%, which means that 95% of all carbons in this product come from renewable sources. Synergen® GA also carries the EcoTain® label.

### Market dynamics in 2021

On the supply side, 2021 brought many challenges to industrial companies all over the world. Consequently, these developments also influenced the Business Area Care Chemicals. The year was characterized by intense cost inflation for most raw materials, global logistics challenges, and rising energy costs. In the second half of the year, however, the business area was able to offset these developments through strong pricing and thanks to a continued recovery in global industrial end markets. This was particularly true for industrial lubricants, coatings, and construction chemicals. Consumer market dynamics also accelerated in the second half of 2021.

In addition to these developments, 2021 also saw a growing world market for ethically produced sustainable products. For instance, the personal care and home care industries showed an increased interest in plant-based raw materials and low-carbon-footprint solutions. A growing number of end consumers preferred personal care and home care cleaning products with milder product formulations that also offer powerful foaming and cleansing properties. At the same time, companies in the home care business were in need of more sustainable solutions, for example, detergents that provide full performance at lower temperatures.



### How Business Area Care Chemicals created value in 2021

In the full year 2021, sales in the Business Area Care Chemicals increased by 16% organically, by 22% in local currency, and by 20% in Swiss francs. Both organic Industrial Applications sales as well as Consumer Care sales rose at double-digit rates. The absolute sales levels in Care Chemicals, excluding acquisitions, exceeded full year 2019 pre-pandemic levels. Industrial Applications sales rose strongly as demand recovered in the first half year and continued strengthening towards the end of the year. The Aviation business clearly picked up versus a particularly weak 2020, accompanied by solid expansion in Industrial Lubricants and Coatings as well. Consumer Care sales also increased in a mid-teen range in 2021 attributable to Crop Solutions and Home Care in particular.

The EBITDA margin in the full year 2021 increased to 20.7% from 19.4%. This positive development resulted from strong volume expansion, which boosted operating leverage and pricing measures to address raw material cost headwinds, supply chain constraints, as well as energy and logistics cost increases. With the market trends described above, the business area has taken various steps to further improve its portfolio of innovative and sustainable products.

### New partnerships and products

In July 2021, Clariant established a 51% to 49% joint venture with India Glycols Limited. The new company operates under the name Clariant IGL Specialty Chemicals Private Limited and focuses on renewable ethylene oxide derivatives. These materials are relevant for the rapidly growing consumer care market in India and neighboring countries and will also be marketed worldwide. The partnership strengthens Clariant's core portfolio with renewable solutions for home care and personal care: the VITA range of bio-based and fully segregated nonionic surfactants and ethylene oxide derivatives. These products help to reduce fossil carbon from the value chain and support customers to achieve their sustainability and carbon-saving commitments.

In August 2021, Clariant took another important step to strengthen the business area with sustainably sourced natural ingredients by acquiring the remaining 70% stake in Beraca, a Brazilian personal care specialty company. The deal was closed on 25 October 2021, and Clariant now has full operational ownership. Beraca is located in the Amazon region and has an outstanding expertise in natural and organic certified ingredients such as fats, oils, and botanicals. These resources are collected and extracted from Brazil's biodiversity in an environmentally sustainable production process that also promotes the development of communities. The acquisition is a relevant building block in the strategy of further strengthening individual core business areas through targeted acquisitions.

In partnership with Beraca, Care Chemicals has recently developed the product Ethience® Protect. The eco-conscious active ingredient from the Amazon provides relief for stressed skin. Ethience® Protect rebuilds and strengthens the natural protective shield of the skin and therefore improves its hydration, reduces its sensitivity, and provides it with a healthier look. Ethience® Protect is produced from the waste press cake generated in nut oil production, while the sourcing of the product is both transparent and fully traceable. The product received the BSB Innovation Award (Europe) as an active ingredient in the »Environment« category.

————— FEATURED STORY



**RedSnow®  
Beauty in season**

On South Korea's Jeju Island, January and February are blooming time for a much-revered flower. Clariant harnesses its secret for healthy looking and resilient skin.

[Learn more](#)

————— FEATURED STORY



**A natural rheology modifier that brings real change**

Opening a jar of moisturizer and being greeted by the lumpy texture of half-melted ice cream is not the experience most consumers look for. Yet giving cosmetics perfect consistency can be quite tricky, especially with natural-based thickeners. With Plantasens® Biogum Tara, we present a natural rheology changer that brings real change to this challenge.

[Learn more](#)



Clariant's new partnership with Polygal AG marks another step toward more natural skin care formulations. The cooperation focuses on developing superior natural rheology modifiers for skin care formulations. These can support brands in embracing consumer calls for skin care products with a lower carbon footprint and good biodegradability. Plantasens® Biogum Tara is the first result of this partnership: The rheology modifier with a 100% Renewable Carbon Index is based on Tara Gum and readily biodegradable. At the same time, the product outperforms natural benchmarks, thereby overcoming traditional drawbacks of formulating with natural rheology modifiers.

The business area now offers polyalkylene glycols that can be used for producing electric vehicle fluids and as biodegradable base oils for lubricants. Following new data on biodegradability, a large range of polyalkylene glycols have now achieved EcoTain® approval. This offers customers proven sustainable high-performance alternatives to polyalphaolefins (PAOs). Tests showed that Clariant's synthetic PAG base oils (notably Polyglycol E04 E and Polyglycol E03 A) largely outperformed a PAO benchmark with respect to certain key parameters such as energy efficiency, friction coefficient, heat transfer, and ecotoxicity/sustainability.

### New locations

Combining sustainability needs and increased performance requirements is also the objective of Clariant's new collaborative innovation center. Announced in July 2021 and to be located in the Charlotte area, the center will support North America's paints and coatings industry in meeting the challenges of emerging trends. Customers in the region will benefit from a unique level of R&D and application testing support. The center will add 5000 square feet of laboratories and offices to the existing capabilities at the location.

FEATURED STORY



**Clariant generates a buzz in Charlotte, NC, with the opening of new innovation center**

After being included in LinkedIn's 2021 roundup of top companies in Charlotte, North Carolina, Clariant continues to make its mark with the opening of our new Industrial Applications Innovation Center to support North America's Paints and Coatings industry »Beyond Color« as an expansion of the current facility in Mt. Holly just outside the city.

[Learn more](#)

### Innovation activities

The 2021 financial year also saw notable digitization progress in the business area. This included high-throughput testing and data generation for the development of water dispersing agents, stabilizers and compatibilizers for environmentally friendly and high performing paints and coatings. Further, the customer portal ClariHub providing extensive product & application information has been launched for all segments.

### Certifications and awards

The business area's efforts for sustainable solutions in personal care and cleaning products are appreciated in the market: The American Chemistry Council awarded the GlucoTain® and GlucoPure® product ranges with the 2021 Sustainability Leadership Award in the category Product Safety, Innovation, and Transparency. These sugar-based surfactants for personal care and home care cleaning products perform just as effectively as conventional surfactants while showing a significantly lower emission profile. This is because the feedstocks for the product and the process to manufacture the ingredients result in a lower carbon footprint.

### Ongoing developments

Clariant is a worldwide technology leader in mild surfactants, with a broad offering encompassing several technology platforms (i.e. GlucoTain®, HOSTAPON®, and Medialan™ ranges). Consequently, the Group can offer diverse performance properties to its formulator customers. Mild surfactants are a growing sector in Personal Care, driven by consumers seeking new mildness claims. These surfactants are invaluable in helping formulators respond to the need for mild cleansing hygiene, sensitive skin solutions, the ability to provide solid formats, and more natural ingredients. Clariant has been upgrading its mild surfactants range with additional claim substantiation, technical data, and sustainability features. The upgraded dataset enables Clariant's customers to select the most appropriate mild surfactant according to the requirements of their brands: foaming characteristic, sensory attributes, mildness, cleansing efficiency, renewable carbon content and market ecolabel compatibility. In addition, the carbon footprint for the full range is available to support customers in selecting the most appropriate product to achieve their Scope 3 reduction targets.



# Business Area Care Chemicals

## Performance

INPUT

**2.6 %**

R&D spend of sales

**898.1**

Raw materials procured in CHF m

**> 65**

Active innovation projects

**14**

Production sites

**2 312**

Number of raw materials procured

**1 422**

Raw material suppliers

OUTPUT

**1 699**

Sales in CHF m

**22 %**

Growth in local currencies

**20.7 %**

EBITDA margin

**0.95**

Production volume in m t

## People

INPUT

**38 238**

Training hours

OUTPUT

**2 802**

Staff in FTEs at year-end

## Planet

INPUT

**797.3**

Energy consumption in m kWh

OUTPUT

**56.9**

Waste in thousand t



## CATALYSIS

### General information

The Business Area Catalysis comprises the Business Unit Catalysts and the Business Line Biofuels & Derivatives. It develops, manufactures, and sells a wide range of catalyst products and technologies for the chemical and fuel industries, for emission control, as well as for the biofuel business. Its products contribute significantly to value creation in its customers' operations, making use of finite raw materials and energy efficiently and effectively, ensuring quality and yield of processes.

The business area profits from several business drivers:

- the need to increase energy efficiency and sustainability in chemical production;
- the desire to decarbonize the transport sector;
- the search for sustainable, emission-free mobility solutions;
- growing interest in circular economy solutions through the extensive use of renewable resources;
- increasing legal requirements for renewable energy sources.

The Business Area Catalysis has 17 production sites (including joint ventures), 21 sales offices, and 11 Research & Development and Technical Centers around the world. It serves customers globally, with a special focus on Europe, China, North America, and the Middle East.

### Business Unit Catalysts

There are several hundred products offered in the Business Unit Catalysts portfolio. With these products, customers save energy and reduce emissions. Based on decades of experience in the development and production of custom catalysts, Clariant also helps customers to scale up and commercialize new catalysts.

For example, the emission-control catalyst line EnviCat® removes harmful chemical compounds with an excellent conversion efficiency. Used all over the world, EnviCat® catalysts also help customers meet China's strict new regulations concerning the improvement of air quality.

Another flagship product is MegaMax® 800, a state-of-the-art methanol synthesis catalyst that offers much higher activity than previous solutions – even at very low reactor temperatures and

pressures. Capturing and converting CO<sub>2</sub> emissions is a cornerstone of the technology road map for addressing climate change. Synthesizing methanol from CO<sub>2</sub> is a particularly valuable approach because methanol is a building block for many chemical products such as plastics, paints, cosmetics, and fuels. MegaMax® 800 significantly improves efficiency and increases lifetime productivity in comparison to standard methanol synthesis catalysts.

### Business Line Biofuels & Derivatives

Biotechnology provides unique opportunities for Clariant to meet its customers' demand for more sustainable production chains and for energy supply on a renewable basis. In 2021, the Business Line Biofuels & Derivatives therefore developed additional products and technologies that provide a measurable advantage for our customers to reduce greenhouse gas emissions. The business line's flagship product is the sunliquid® technology, which converts agricultural residues into cellulosic ethanol. The bioethanol produced by the sunliquid® process significantly reduces CO<sub>2</sub> emissions, thereby helping decarbonize the transport sector. The cellulosic ethanol produced by our sunliquid® technology can reduce up to 95% of CO<sub>2</sub> emissions compared to fossil fuel and as much as 120% when carbon sequestration is considered and used as part of the production process.

## CATALYSIS

### OVERVIEW

Business Area Catalysis comprises Business Unit Catalysts and Business Line Biofuels & Derivatives. Products of Business Unit Catalysts are used for chemical production, fuel processing, and emission control. Its »custom catalysts« business helps customers to scale up and commercialize their new catalyst recipes. Business

Line Biofuels & Derivatives complements the offering with sunliquid®, a groundbreaking technology to produce biofuels and biochemical intermediates from agricultural residues.

### APPLICATIONS

#### Business Unit Catalysts

- Ammonia
- Custom catalysts
- Ethylene & derivatives
- Fischer-Tropsch
- Fuel cell
- Fuel upgrading
- Gas processing
- Hydrogen
- Hydrogenation
- Methanol
- Methanol-to-propylene (MTP)
- Off-gas treatment for chemical plants and stationary engines
- Olefins purification

#### Business Line Biofuels & Derivatives

- On-purpose propylene
- Oxidation
- Polypropylene
- Refinery stream purification
- Styrene
- Zeolite powders
- Biocatalysis
- Cellulosic ethanol
- Cellulosic sugars
- Low-carbon advanced biofuels
- Residue-derived biochemical intermediates

### PRIORITY SDGS

- SDG 7 Affordable and Clean Energy
- SDG 9 Industry, Innovation, and Infrastructure
- SDG 12 Responsible Consumption and Production
- SDG 13 Climate Action

## Market dynamics in 2021

In 2021, customers had to face increasing costs in many areas: Natural gas prices in Europe were particularly high, as were coal prices in China and metal prices globally. Rising freight costs also had a negative impact on most businesses. At the same time, supply chains continued to prove unstable in the second year of the COVID-19 pandemic. Furthermore, customers felt rising social and legislative pressure to reduce their CO<sub>2</sub> footprints, which in turn increased their demand for more sustainable solutions. Against this background, the demand for Clariant's syngas and emission-control catalysts recovered in 2021, and even accelerated throughout the year.



Rising oil prices led to a rapid increase in the demand for and production of bioethanol, which can be used as an inexpensive biofuel to reduce transportation costs. In addition, bioethanol helps to comply with political regulations concerning the use of sustainable fuels. Some governments even grant funding for the use of bioethanol in order to support sustainable transportation.

### How the Business Area Catalysis created value in 2021

In the full year 2021, sales in the Business Area Catalysis increased by 5% in local currency and by 3% in Swiss francs. Sales rose in Syngas, Specialty Catalysts, and the emission-control catalyst businesses, which more than offset the slightly weaker development in Petrochemicals, though demand for CATOFIN® catalysts was strong.

In the full year 2021, the EBITDA margin fell to 16.8% from 19.2% in the previous year as a result of the less favorable product mix with a higher contribution from the lower-margin emission-control businesses, logistics constraints, as well as project effects related to the sunliquid® production plant in Romania and the new CATOFIN® production site in China.

Though margins can fluctuate significantly over the quarters of a calendar year, the fundamentals for Catalysis remain positive based on the present demand pattern, the order backlog, portfolio strength, and proven innovation capability.

### New products

In 2021, Clariant developed MegaMax® 800 DCARB, a new catalyst that enables CO<sub>2</sub>-based methanol synthesis to produce »green« methanol. The catalyst outperforms previous generations and benchmarks in carbon efficiency, mechanical stability, and product life span.

In July 2021, Clariant's new AmoMax® 10 Plus ammonia synthesis catalyst started up at the BASF plant in Antwerp, Belgium. This catalyst has higher activity, enabling increased ammonia yield or lower energy costs and CO<sub>2</sub> footprint. BASF selected AmoMax® 10 Plus after good experience with the previous product generation at Freeport, Texas. Compared to standard ammonia synthesis cata-

lysts, AmoMax 10 Plus allows significant energy savings with an expected CO<sub>2</sub> reduction of up to 125 000 tons of CO<sub>2</sub> emissions for a 2 000-mtpd ammonia plant over the course of the typical catalyst lifetime of 15 years.

Clariant also made great progress in the reporting year with respect to sunliquid®, its groundbreaking technology to produce biofuels and biochemical intermediates using microorganisms and enzymes. sunliquid® cellulosic ethanol is ready to use in the framework of the existing transportation infrastructure. Agricultural residues like wheat straw and corn stover from local farmers serve as feedstock. At Hannover Messe 2021, Clariant presented a feasibility study together with Indonesia's state-owned oil and gas company Pertamina. Based on this study, it broadened the feedstock portfolio to fruit and palm biomasses. The sunliquid® process shows a flexibility on a broad range of feedstock. Process conditions & biocatalysts were developed and performance runs executed in Clariant's precommercial plant in Straubing, Germany, for a wide range of lignocellulosic biomass.

Through the sunliquid® licensing strategy, Clariant enables its customers to build their own bioethanol plants. The offering covers all parts of the ethanol production chain. Until 2021, Clariant licensed the technology to five large industry players in Slovakia, Poland, China, and Bulgaria.

### New initiatives

In 2021, Clariant teamed up with Linde Engineering to develop new catalysts for the oxidative dehydrogenation of ethane. This is an innovative, low-emission catalytic technology for the production of ethylene. Clariant's novel catalysts make this technology commercially feasible, reducing CO<sub>2</sub> emissions by up to 100% compared to conventional technologies.

In collaboration with Technip Energies, Clariant launched EARTH, a pioneering technology for steam methane reforming and syngas production that reduces the CO<sub>2</sub> footprint of the process by up to 20%. EARTH technology demonstrated excellent performance in its first commercial application. In 2021, two major contracts for EARTH were concluded.

In November 2021, Clariant also launched a major climate campaign to reduce the climate change impact of emissions caused by nitric acid production. N<sub>2</sub>O is around 300 times more harmful to climate than CO<sub>2</sub>. Clariant's EnviCat® N<sub>2</sub>O-S catalyst can effectively remove up to 95% of this by-product of nitric acid production. In the context of this campaign, the company offers a free first fill of the catalyst to ten nitric acid producers worldwide who do not have N<sub>2</sub>O off-gas treatment in place. With this campaign, Clariant intends to help avoid greenhouse gas emissions equivalent to several million tons of CO<sub>2</sub> every year.

### FEATURED STORY



### How Clariant is laying the ground for second-generation biofuels and much more

The new sunliquid® plant is ready to start production in Romania. It is the nucleus for a new sustainable business ecosystem. What went into building it?

[Learn more](#)



### New locations

Increasing awareness of sustainability fuels global demand for technologies that increase energy efficiency in industrial processes. That is why Clariant extended its production capacities for catalysts in 2021. For example, it commenced operations for its emission-control catalysts EnviCat® at an additional, upgraded production facility in Heufeld, Germany. It features state-of-the-art production equipment exclusively dedicated to emission-control catalysts.

In October 2021, Clariant completed the construction of its first commercial-scale sunliquid® cellulosic ethanol production plant in Podari, Romania. This innovative flagship plant serves as a proof point for the company's ambitious growth strategy. It will process approximately 250 000 tons of straw – provided by more than 300 local farmers – and produce approximately 50 000 tons of cellulosic ethanol annually. This second-generation biofuel will be almost carbon neutral, as coproducts produced by the process will be used for the generation of renewable energy, making the plant almost independent of fossil energy sources. While the cellulosic ethanol can be used as a drop-in solution for fuel blending, it also offers further downstream application opportunities into bio-based chemicals and for sustainable aviation fuel.

In collaboration with Air Liquide, Clariant made another major breakthrough in methanol synthesis performance. It equipped two world-scale methanol plants in Asia with its new MegaZonE™ technology, a novel catalyst layering system, which elongates catalyst lifetime by up to two years and increases methanol production by up to 15%. MegaZonE™ offers significant monetary benefits for customers and has the potential to reduce their CO<sub>2</sub> footprint substantially.

Innovative products such as these are often the result of close cooperation with customers. In order to intensify these efforts, Clariant opened a catalyst contract R&D center in Shanghai, China, in March 2021. It is located at the new »One Clariant Campus,« which is part of Clariant's commitment to local innovation and growth in the dynamic Chinese market. The state-of-the-art catalyst contract R&D center will focus on four fields addressing China's megatrend to drive sustainability and efficiency: more sustainable solutions for the coal value chain, hydrogenation for high-value-adding chemicals, environmental protection, and custom catalysis. To date, only few international companies have built such a comprehensive catalyst research unit in China.

### Certifications and awards

Clariant works toward solutions to further reduce the CO<sub>2</sub> footprint of ammonia synthesis with its AmoMax® line. One example of this is AmoMax®-Casale, jointly developed with Casale. The new catalyst is tailor-made for Casale ammonia synthesis converters and offers a larger active surface area, which allows operation of the ammonia synthesis loop with considerably less pressure. This results in an efficiency factor that is up to 30% higher. Thus, the plant consumes less energy to produce ammonia, and, hence, generates fewer CO<sub>2</sub> emissions.

#### FEATURED STORY



#### Clariant and Casale develop new ammonia catalyst for sustainable CO<sub>2</sub> reduction

Meet AmoMax®-Casale: the sustainable, award-winning new ammonia synthesis catalyst jointly developed by Clariant and Casale. Thanks to significantly higher activity than previous catalysts, AmoMax®-Casale makes ammonia production more efficient and less polluting than ever before.

[Learn more](#)

#### FEATURED STORY



#### Take a peek inside our connected and digitalized polypropylene catalyst plant

Clariant Catalysts and Lummus Technology's joint polypropylene catalyst production plant in Louisville, Kentucky, was officially inaugurated on 17 October 2016. Today, it is Clariant's largest catalyst production site in North America and equipped with state-of-the-art systems that enable fully automated and digitalized operations.

[Learn more](#)

Clariant and Casale won two awards for AmoMax®-Casale: the Swiss Chemical Society's Sandmeyer Award in 2021, and the prestigious Independent Commodity Intelligence Services (ICIS) Innovation Award for »Process with Best Benefit to the Environment and Sustainability« in 2020.

### **Ongoing developments**

In 2021, the Business Area Catalysis ran a number of notable innovation activities that we will be continued in 2022:

Commissioning for Clariant's sunliquid® plant in Podari, Romania, is ongoing. The company has already contracted the entire annual production output to a major global oil and gas corporation under a multiyear agreement. Production is expected to start in H1 2022.

In 2020, Clariant broke ground on a new high-tech production site for CATOFIN® catalysts in Jiaxing, Zhejiang Province, China. Construction of the plant was concluded at the end of 2021 in only 16 months, and the ramp-up is expected to take place in the first half of 2022. Although the first phase will focus on the CATOFIN® propane dehydrogenation catalyst, this facility was constructed with the potential to expand to the production of more catalysts in the future and also includes a research and pilot plant. It will be Clariant's third catalyst production site in China and is an ideal example of how the company continues to support China's petrochemical industry growth as Clariant expands its presence in the region.



# Business Area Catalysis

## Performance

INPUT

**6.0 %**

R&D spend of sales

**290.8**

Raw materials procured in CHF m

**> 90**

Active innovation projects

**17**

Production sites

**1061**

Number of raw materials  
procured

**534**

Raw material suppliers

OUTPUT

**907**

Sales in CHF m

**5 %**

Growth in local currencies

**16.8 %**

EBITDA margin

**0.06**

Production volume in m t

## People

INPUT

**34 641**

Training hours

OUTPUT

**2174**

Staff in FTEs at year-end

## Planet

INPUT

**607.5**

Energy consumption in m kWh

OUTPUT

**31.0**

Waste in thousand t



## NATURAL RESOURCES

### General information

The Business Area Natural Resources offers high-performing products and custom-tailored solutions for the mineral, foundry, oil, and gas extraction businesses, as well as for food, plastic, coating, adhesive, and inks applications. It consists of three business units: Oil and Mining Services, Functional Minerals, and Additives.

The business area profits from several business drivers:

- stricter global chemical regulations and customer expectations that drive sustainability in oil, mining, and purification as well as circularity in plastic, coating, and adhesive;
- lightweight, sustainable fire safety and thermoresistance requirements for digitalization and e-mobility;
- consumer demand for enhanced health and safety;
- growing regulation regarding biofuels, such as Renewable Energy Directive (RED II).

### Oil and Mining Services

The Business Unit Oil and Mining Services is a leader in the development, manufacture, application, and supply of chemicals. It provides products to over 700 customers in the oil, gas, mining, and refinery industries as well as services for many customers in the oil and gas industries. The largest segment of the business unit is Oil Services. The products are applied at different points in the oil extraction process: drilling operations, completions, and production. They help to prevent corrosion of metal components, to maintain flow, and to separate fluids into clean oil and clean water. The mining products of the business unit are used to extract valued minerals in the processing of mineral ores and to deal with the waste materials of this process, the so-called »tailings.« Also, the business unit provides flotation chemicals and emulsifiers for explosives to the global mining industry as well as cold-flow additive applications for middle distillates in refineries, including diesel, home heating oils, and biofuels.

Many of these products are customized according to the specific situation in individual mines or oil fields. Technical experts from the business unit analyze customer applications and the chemistry of solutions. This results in over 5 000 custom-made formulations that are determined cost-efficiently using state-of-the-art statistical data analysis combined with high-throughput experimentation methods.

The business unit's customers are located in all major mineral producing regions around the world. The production facilities of the business unit are located in Brazil, Chile, Australia, and Germany. Its oil business operates in the Americas, Africa, Europe, and Asia.

### Functional Minerals

The Business Unit Functional Minerals operates a fully integrated value chain – from the exploration and mining of bentonites to the processing of finished products to the application of technical know-how at the customer's operations. Its production sites are located across the globe in close proximity to more than 3 300 customers.

Over 1 500 products tailored to customer needs across a diverse range of industries, including edible and waste oil and fat purification, foundries, and cargo and device protection, to name a few, are offered by the business unit. For waste oil and fat purification, the business unit provides the Tonsil® RNF series. With these specialty adsorbents, producers of biofuels and renewable fuels significantly enhance the efficiency and economics of their production process. The Tonsil® RNF products remove impurities in oil and fat, thus prolonging the lifetime and efficiency of high-value catalysts further downstream.

The business unit's sustainably mined bentonite clay products include DESI PAK® desiccants, which achieve exceptional results in protecting goods from moisture, and DESVOCANT™ VOC adsorbents, which help to control and eliminate the accumulation of volatile organic compounds (VOCs) due to the off-gassing of products enclosed in packaging to fully-loaded shipping containers.

## NATURAL RESOURCES

### OVERVIEW

The Business Area Natural Resources comprises Functional Minerals, Oil and Mining Services, and Additives. Functional Minerals operates a fully integrated value chain, from the exploration and mining of bentonites to the processing of finished products to the application of technical know-how at the customer's operations. Oil and Mining Services provides innovative chemistry, technology, and service

solutions for the oil, mining, and refinery industries. Additives serves markets for plastic, coating, ink, and consumer applications ranging across electrical and electronics, packaging, transportation, consumer goods, building and construction, textile, as well as agriculture industries.

### APPLICATIONS

#### Business Unit Functional Minerals

- BTX catalysts
- Cargo and device protection
- Civil engineering
- Clay specialties
- Detergent additives
- Foundry additives
- Kerosene and jet fuel purification
- Oil purification
- Paper additives
- PVC stabilizers
- Wastewater treatment

#### Business Unit Oil and Mining Services

- Chemical delivery and data management systems
- Cold flow improvers
- Explosive emulsifiers
- Fluid separation
- Froth flotation chemistries
- Oilfield integrity management
- Oil flow assurance
- Pour point depressants

#### Business Unit Additives

- Acid scavengers
- Antioxidants
- Antistatic agents
- Halogen-free flame retardants
- Heat stabilizers
- Hot-melt adhesives
- Light stabilizers
- Lubricants
- Processing aids
- Processing stabilizers
- Release agents
- Slip control agents
- Surface modifiers

### PRIORITY SDGS

- SDG 2 Zero Hunger
- SDG 3 Good Health and Well-being
- SDG 7 Affordable and Clean Energy
- SDG 12 Responsible Consumption and Production
- SDG 13 Climate Action



### Additives

The Business Unit Additives is a major supplier of flame retardants, performance additives, and advanced surface solutions for functional effects in plastic, coating, ink, and consumer applications. With production sites in Europe and China, it produces about 300 different products for approximately 1500 customers worldwide.

The products of the business unit are used in many different applications. For example, the halogen-free Exolit® flame retardant comply with fire safety standards for buildings, electrical and electronic equipment, transportation (including e-mobility), and other applications. AddWorks® solutions are ready-to-use packages that prevent oxidation, dissipate electric charge accumulation, and improve heat, light, and weather resistance. Licocene® stands for advanced surface solutions consisting of polymers and waxes. They provide the right balance of adhesion and cohesion while offering high heat resistance. And the bio-based Licocare® RBW Vita range offers high-performing surface solutions for demanding plastic, coating, and agricultural applications. Made from non-food-competing rice bran wax, these products have a Renewable Carbon Index of at least 98% and contribute to a substantial reduction of CO<sub>2</sub> emissions.

### Market dynamics in 2021

In 2021, sustainability was a main global trend in the markets that are relevant to the business area. The year saw stricter global regulations and growing customer expectations concerning CO<sub>2</sub> emissions, waste reduction, circularity, and sustainability.

The ongoing recovery of the global industrial sector, particularly transportation, as well as electrics and electronics and apparel, drove growth in the plastic and coating markets in particular. The mining industry also improved, driven by increased mineral production and high commodity prices. Oil production volumes recovered. However, the oil industry is still hesitant to invest in assets. As the refining industry is also recovering, it explores ways to shift toward bio- and renewable fuels and solutions.

Consumer behavior changed in different ways that are relevant for the business area. This change includes greater concern for health and safety, increased use of vegetable oils, and a shift toward second-generation biofuels and renewable fuels.

The main challenges for the business area consisted of raw material shortages and logistics issues: Supply chain uncertainties due to the COVID-19 pandemic prevailed and caused skyrocketing transport costs.

### How Business Area Natural Resources created value in 2021

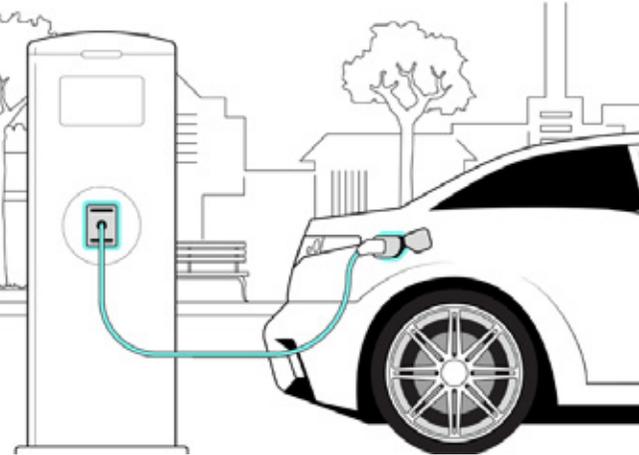
In the full year 2021, sales in the Business Area Natural Resources increased by 14% in local currency and by 12% in Swiss francs. Additives sales rose most significantly among the three Natural Resources business units supported by strong demand in all regions and in all main end markets including e-mobility and electronics in particular. Functional Minerals reported mid-teen double-digit sales expansion with growth in all regions and across all business lines. Oil and Mining Services also reflected sales expansion in the full year 2021, albeit at a lower pace than the other business units.

In the full year 2021, the EBITDA margin increased to 17.0% from 14.3% year-on-year supported by the strong volume expansion and pricing measures, despite continued high raw material prices and exceptional freight cost, together with climbing energy cost.

### New products

In February 2021, Clariant launched DESVOCANT™, a line of adsorbents from naturally occurring, nontoxic, granulated, and dried bentonite. DESVOCANT™ is available in multisized adsorbent sachets, bags, and hanger strips. When added to packaged or boxed items or shipping containers, the adsorbents efficiently reduce the potential exposure of shipment handlers, merchants, and consumers to volatile organic compounds (VOCs).

**FEATURED STORY**



**Transportation revolution aiding the switch to safer e-mobility**

The car of the future is electric. But what makes it firesafe? Clariant's flame retardant specialists have some answers. By aiding the switch to electric mobility, Clariant's additives can help build a more sustainable mobility infrastructure and promote the kind of climate action laid out in the United Nation's Sustainable Development Goals (SDG) 9 and 13.

[Learn more](#)

### New initiatives

In the context of the EU plans to phase out all internal combustion engine vehicles by 2035, the REVOLUTION project brings together organizations from ten countries across the entire automotive value chain. They currently bundle their expertise in a three-year project funded by the Horizon 2020 program. It aims at developing lightweight car parts and at increasing circularity by facilitating the recycling of materials and the use of recycled polymers. Clariant contributes by validating fit-for-purpose additive solutions and by developing new solutions to enable lightweighting and the use of more recycled material content.



In October 2021, the World Business Council for Sustainable Development featured Licocene® as an example of a circular solution in the production of recyclable carpets. Europe alone accounts for 1.6 million tons of carpet waste annually. Licocene® technology helps to produce carpets that are easier to recycle than regular carpets with latex coating and that can be produced with significant energy and water savings.

### New locations

In March 2021, Clariant opened the »Additives Technical Centre« at the »One Clariant Campus« in Shanghai. This center supports China's growth industries with high-end additive solutions that are capable of advancing innovation in their market segments.

Since March 2021, the new Licocene® production facility in Höchst, Germany, has been producing performance polymers and waxes for adhesive, coating, ink, and plastic applications. In addition to this expansion, a new lab facility was established. Thanks to the precise and reliable metallocene technology, the production facility is able to create tailor-made products to enable customer innovation and advance the development of sustainable solutions.

In April 2021, Clariant started production in the new stabilizer additives plant in Cangzhou, China. The facility forms the centerpiece of the partnership with Beijing Tiangang Auxiliary Co. Ltd. This joint venture aims to serve the growing Chinese demand in local growth industries like automotive, textiles, and coatings for high-end stabilizer solutions that meet the requirements of new applications and environmental goals.

In December 2021, Clariant started construction of a new flame retardants production facility in China. By establishing local production capacity, Clariant greatly enhances the speed at which it can provide solutions to its customers in China. Driven by the fast-growing electrical and electronic equipment industries, in particular e-mobility, 5G communications technology, and transportation, there is a rapidly growing demand for Clariant's innovative and sustainable Exolit® OP flame retardants in China and other Asian markets. This new facility will strengthen Clariant's overall production network beyond the existing facilities in Knapsack, Germany.

As an oil and mining lighthouse project, Clariant started a program to develop solutions for the handling of tailings. For instance, flotation is explored as a tool for tailing management, with the collector FLOTINOR™ 5530 improving the recovery of iron in the processing of iron ores. Other applications can help to dewater the tailing to allow dry stacking. To institutionalize the efforts in this area, the business area opened a Competence Center for Tailings Treatment in Brazil in September 2021.

### Certifications and awards

Three additives were awarded the sustainability label EcoTain® in 2021: Licocare® RBW 360 Vita (renewable-based plastic and coating additive), Exolit® OP 1466 (nonhalogenated flame retardant), and Ceridust® 8360 TP (renewable-based printing ink additive).

### Ongoing developments

Clariant is currently extending the existing renewable raw material mass balance certification REDCert<sup>2</sup> with the International Sustainability and Carbon Certification (ISCC PLUS) for Exolit® Terra flame retardants and Licocene® Terra waxes and polymers.

In 2021, Clariant strengthened the ongoing collaboration with the World Foundry Organization (WFO) to support the environmental efforts of metal foundries. The aim is to drive knowledge so that foundries can reduce carbon emissions while meeting the productivity challenges and sustainability expectations of their customers.



# Business Area Natural Resources

## Performance

INPUT

**1.8 %**

R&D spend of sales

**711.2**

Raw materials procured in CHF m

**> 160**

Active innovation projects

**38**

Production sites

**3 505**

Number of raw materials procured

**1 693**

Raw material suppliers

OUTPUT

**1 766**

Sales in CHF m

**14 %**

Growth in local currencies

**17.0 %**

EBITDA margin

**3.32**

Production volume in m t

## People

INPUT

**40 776**

Training hours

OUTPUT

**3 748**

Staff in FTEs at year-end

## Planet

INPUT

**1 308.0**

Energy consumption in m kWh

OUTPUT

**221.9**

Waste in thousand t



## DISCONTINUED OPERATIONS

### Status of transition

Clariant is currently in the process of divesting the Business Unit Pigments as a part of its portfolio optimization. It signed definitive divestment agreements with a consortium comprising Heubach Group and SK Capital Partners in June 2021, and closing was completed on 3 January 2022.

### General information

The Business Unit Pigments offers a wide range of superior-quality organic pigments, pigment preparations, and dyes to provide color in a wide variety of product applications. They are used in automotive and plastic applications; in industrial and architectural coatings; in home, traditional, and digital inks; and in many other applications, such as fabric and personal care products. Sustainability is one of the strategic business unit targets. The business unit is supporting initiatives for the circular economy through enhanced recyclability so that customers can differentiate themselves with market-leading and innovative offerings.

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## DISCONTINUED OPERATIONS

### OVERVIEW

The discontinued Business Unit Pigments serves the packaging, electrical and electronics, consumer goods, textile, transportation, building and construction, and agriculture markets, among others. It delivers to local and regional customers as well as multinationals.

### APPLICATIONS

#### Business Unit Pigments

- Applications for conventional printing, inks, inkjet inks, and electrophotographic toners
- Coloration of plastic applications
- Decorative, industrial, and automotive coatings
- Special applications for home and personal care, aluminium, seed coatings, stationery, viscose, latex, and leather, among others

Customer industries include packaging, electrical and electronics, consumer goods, textile, transportation, building and construction and agriculture. The business unit is comprised of 13 production sites and nine Technical Application Centers all over the world. It supplies more than 2000 products to over 3800 customers in more than 100 countries.

Business Unit Pigments helps customers to make their products more sustainable. For example, the plastics industry profits from the black colorants Solvaperm® Black PCR and Graphtol™ Black CLN. They are free from carbon black, a substance that prevents plastic-sorting scanners from identifying individual plastic types. With Solvaperm® Black PCR and Graphtol™ Black CLN, common packaging plastics are reliably identifiable. These products thus improve the recyclability of plastic products, thereby contributing to a circular economy.

### Market dynamics in 2021

Sustainability is one of the future global economic drivers. 2021 saw a marked increase in the demand for sustainable and recyclable products. Also, there was heightened awareness of the global microplastics issue.

The pigments industry was also influenced by price inflation for pivotal raw materials, energy, and transportation as well as a shortage in the supply chain. In particular, energy quotas in China led to an unprecedented price surge of yellow phosphorus, which is an important raw material for pigment production. In light of these developments, the business unit was forced to increase prices in 2021.

### How Business Unit Pigments created value in 2021

Fostering innovation and sustainability is one important objective for the business unit. Besides that, the business unit has defined environmental key performance indicators (KPIs) to optimize processes, and is committed to

- reducing the specific energy consumption for production;
- minimizing the consumption and discharge of water;
- generating less hazardous waste and CO<sub>2</sub>;
- reducing the emission of volatile organic compounds (VOCs).

In 2021, all KPIs were at their target level. Also, several innovations were proof of the business unit's commitment to sustainability.

### New services

The »Automotive Styling Shades Trendbook« is an important guide for the automotive industry to optimize its product designs. The 2025 edition of this trendbook was published in a new digital format: It now features an online and interactive configurator tool with a collection of 28 new shade trends. This → VIRTUAL SHOWROOM presents shades directly on virtual vehicles and provides highly accurate digitalization of the total appearance, even of metallic effect shades. Supported by webinars and data formats that are compatible with common rendering software, the trendbook enables seamless cooperation even without physical meetings.



### New products

The new product line Licospense™ consists of nontoxic and non-flammable pigment preparations that are free from heavy metals and resin. They can be used for shoe polishes, floor polishes, fertilizers, herbicides, wood stains, varnishes, and other applications. With the Licospense™ product range, customers can replace dyes in oil- and solvent-based applications. At the same time, these ready-to-use blends can save time and cost in the coloration process.

The new Hostatint™ AU range of aqueous pigment dispersions is a major innovation in exterior and interior architectural coatings. Hostatint™ products are low in volatile organic compounds and free of alkylphenol ethoxylates (APEO). They are high-performance products with high opacity, durability, and fade resistance, offering the most expansive color palette possible. Paint and coating manufacturers of all sizes can broaden their color space in an economical way, as the pigment dispersions can be easily calibrated to any tint base or color portfolio.

### New locations

In February, the business unit expanded its state-of-the-art pigments laboratory in Krugersdorp, South Africa. This significant investment supports the growing regional demand for locally produced, sustainable colorants. The laboratory provides color support services to the emerging coatings industry across Africa, Turkey, and the Middle East.

### Certifications and awards

A new certification helps producers of plastic articles to colorize biodegradable polymers: In July 2021, TÜV Austria certified nine organic colorants from the PV Fast™ and Graphtol™ ranges with the label »OK compost INDUSTRIAL.« This label proves suitability for industrial composting and enables customers to use bright colors in their biodegradable products.



# Five-Year Group Overview

## CONTINUING OPERATIONS IN CHF M

	2021	2020 <sup>1</sup>	2019	2018	2017 <sup>3</sup>
Sales	<b>4 372</b>	3 860	4 399	4 404	6 377
Change relative to preceding year					
in Swiss francs (%)	<b>13</b>	-12	0	-	9
in local currencies (%)	<b>15</b>	-5	3	-	9
EBITDA	<b>708</b>	597	461	607	813
EBITDA before exceptional items	<b>760</b>	623	740	739	974
EBITDA margin (%)	<b>16.2</b>	15.5	10.5	13.8	12.7
EBITDA margin before exceptional items (%)	<b>17.4</b>	16.1	16.8	16.8	15.3
Operating income	<b>440</b>	317	165	348	496
Operating income before exceptional items	<b>493</b>	354	444	480	673
Net result	<b>292</b>	130	-34	213	302
Basic earnings per share (in CHF)	<b>0.81</b>	0.32	-0.17	0.59	0.84
Distribution per share (in CHF)	<b>0.40<sup>4</sup></b>	0.70	0.55	0.55	0.50
Operating cash flow	<b>363<sup>2</sup></b>	369 <sup>2</sup>	509 <sup>2</sup>	530 <sup>2</sup>	428
Return on invested capital (ROIC) (%)	<b>9.9</b>	7.4	3.0	7.9	7.5
Return on invested capital (ROIC) before exceptional items (%)	<b>11.1</b>	8.2	9.0	9.0	10.2
Investment in property, plant, and equipment	<b>357<sup>2</sup></b>	288 <sup>2</sup>	273 <sup>2</sup>	237 <sup>2</sup>	248
Research & Development expenditures	<b>155</b>	172	207 <sup>2</sup>	209 <sup>2</sup>	211
Depreciation and amortization	<b>267<sup>2</sup></b>	269 <sup>2</sup>	330 <sup>2</sup>	325 <sup>2</sup>	301
Net working capital	<b>693</b>	500	713	1 145 <sup>2</sup>	1 281
in % of sales	<b>15.9</b>	13.0	16.2	17.3	20.1
Total assets	<b>7 038<sup>2</sup></b>	6 932 <sup>2</sup>	7 979 <sup>2</sup>	7 981 <sup>2</sup>	8 229
Equity (including noncontrolling interests)	<b>2 544<sup>2</sup></b>	2 416 <sup>2</sup>	2 677 <sup>2</sup>	2 970 <sup>2</sup>	2 939
Equity ratio (%)	<b>36.1<sup>2</sup></b>	34.9 <sup>2</sup>	33.6 <sup>2</sup>	37.2 <sup>2</sup>	35.7
Net debt	<b>1 535<sup>2</sup></b>	1 040 <sup>2</sup>	1 372 <sup>2</sup>	1 374 <sup>2</sup>	1 539
Gearing (%)	<b>60<sup>2</sup></b>	43 <sup>2</sup>	51 <sup>2</sup>	46 <sup>2</sup>	52
Employees (in FTEs)	<b>13 374<sup>2</sup></b>	13 235 <sup>2</sup>	17 223 <sup>2</sup>	17 901 <sup>2</sup>	18 135

<sup>1</sup> Restated

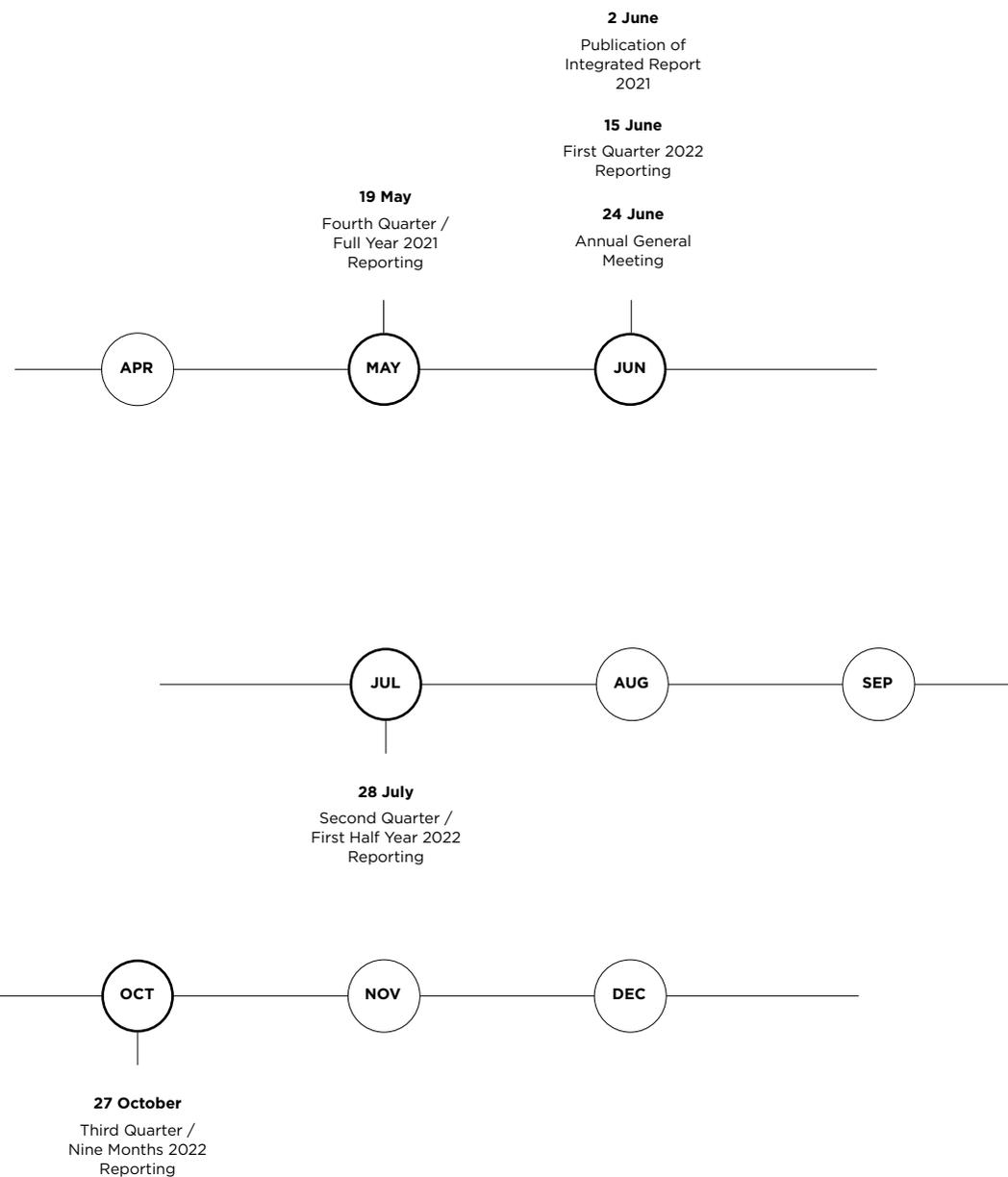
<sup>2</sup> Including discontinued operations

<sup>3</sup> Total Group

<sup>4</sup> Recommended by the Board of Directors, pending approval at the Annual General Meeting 2022



# Financial Calendar 2022





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→ GLOSSARY