

# BASF in South America

Report 2021







**CIRCULAR  
ECONOMY**

**Together for sustainable success**



# Key facts 2021




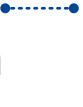
Global

 Our market position is one of the top three in **~80%** of the business areas in which we operate 


About **90,000** customers worldwide and over **70,000** suppliers  About **111,000** employees worldwide 

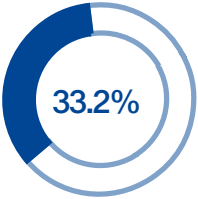

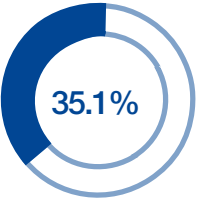

  **€78.6 billion** BASF Group sales  **€24,1** billion in sales of Accelerators products, which make a substantial sustainability contribution in the value chain 







 **€ 2.2 billion** Research and development expenses  **~10,000** employees in Research & Development (R&D) worldwide

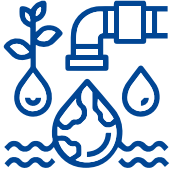




 We use natural resources to manufacture high value-added products and solutions for our customers  **1.3 million** metric tons of renewable raw materials  **1,695 million m<sup>3</sup>** - total water consumption  **78.5%** of water demand covered by reuse




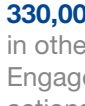



South America

 **€4.4 billion** sales (location of customer)  **5,993** employees

Employed women  **33.2%**  Women in leadership positions  **35.1%** 

 **Mata Viva®:** 750 hectares of restored forests, with 1.3 million trees planted - since 1984  **187,000** metric tons CO<sub>2</sub> removed from the atmosphere  **85%** Recycled waste in South America   

 **27%** increase in water reuse in South America  **1,91** million cubic meters Water used for production (Brazil, millions of cubic meters/year)   

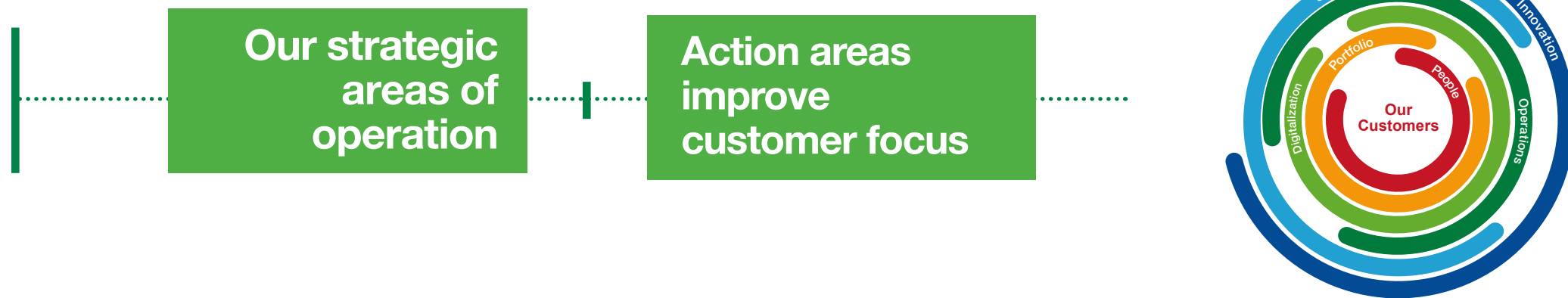
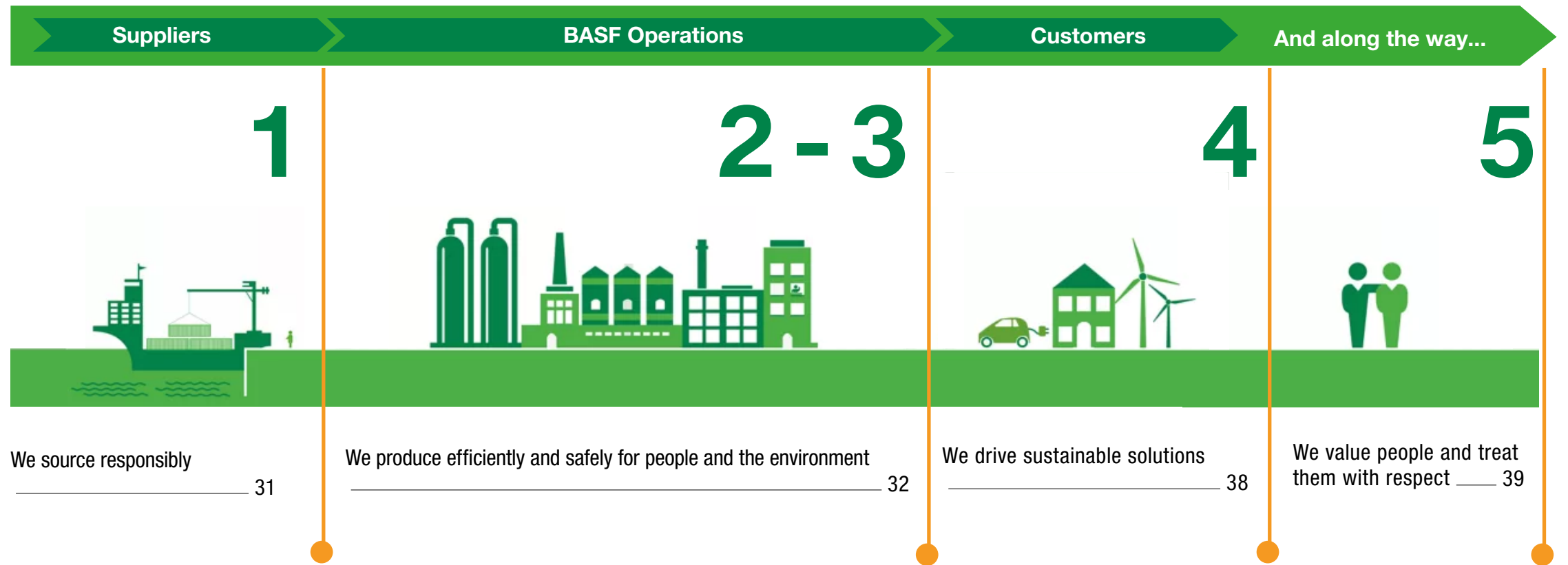
 Social investment (donations, sponsorship, volunteering and own projects) **€ 2.9 million**  **More than 2.5 million** people reached  **2.2 million people** in actions related to COVID  **330,000 people** in other Social Engagement actions   



# Contents

- About the Report ..... 04
- At a Glance ..... 06
- Message from the President ..... 07
- BASF Group ..... 08
- Our Strategy ..... 10
- BASF in the Regions ..... 14
- BASF on the Capital Market ..... 16
- BASF in South America ..... 18
- Overview ..... 19
- How we create chemistry for a sustainable future 20
- Governance and Compliance ..... 21
- Sustainability ..... 22
- Innovation ..... 26
- Digitalization ..... 29
- Espaço ECO Foundation ..... 51

## How we create chemistry for a sustainable future



### About this report

The “BASF in South America” Report is published annually as a document on the performance of our activities in the three pillars of sustainability — economy, environment and society. The reference period for this publication is the fiscal year 2021. This report also provides an overview of the BASF Group, together with its financial performance, prepared in accordance with the requirements of the International Financial Reporting Standards (IFRS) and, where applicable, the German Commercial Code as well as the German Accounting Standards (DRSC). Emissions, waste, energy and water use from consolidated joint operations are included, based proportionally on our participation. The number of employees refer to employees employed by the BASF Group as of December 31, 2021. The scope of this review and the main focus points of our reports are defined based on the topics along the value chain, which we identified in internal strategic discussion processes, ongoing global data analysis and dialog with shareholders.

[For more information on our selection of sustainability topics, see from page 33 onwards and basf.com/materiality](#)

<sup>1</sup> Employees interact in the new Circular Economy space, located at onono (São Paulo, Brazil).  
<sup>2</sup> The people depicted in this report complied with the regulations in place at the time the photos were taken – before or during the coronavirus pandemic.  
<sup>3</sup> BASF is committed to promoting gender equity, which also involves attention to the use of language. Some words have only the masculine form in Portuguese because of its specificity. If they do not explicitly address the male gender, they are referring to all people in general.

# 2021 | BASF Group

## At a glance

### Sales

**€78.6 billion**  
(2020: €59.1 billion)

### EBIT before special items

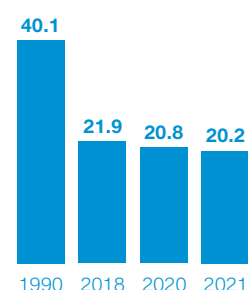
**€7.8 billion**  
(2020: €3.6 billion)

### ROCE

**13.5%**  
(2020: 1.7%)

### Greenhouse gas emissions

(million metric tons of CO<sub>2</sub> equivalents)



### Accelerator sales

**€24.1 billion**  
(2020: €16.7 billion)

### Employees at year-end

**111,047**  
(2020: 110,302)

### Research and development expenses

**€2.2 billion**  
(2020: €2.1 billion)

### Personnel expenses

**€11.1 billion**  
(2020: €10.6 billion)

## Segment data



### Chemicals

Million €

Sales	<b>2021</b>	13,579
	<b>2020</b>	8,071
EBIT before special items	<b>2021</b>	2,974
	<b>2020</b>	445



### Surface Technologies

Million €

Sales	<b>2021</b>	22,659
	<b>2020</b>	16,659
EBIT before special items	<b>2021</b>	800
	<b>2020</b>	484



### Materials

Million €

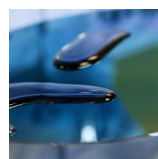
Sales	<b>2021</b>	15,214
	<b>2020</b>	10,736
EBIT before special items	<b>2021</b>	2,418
	<b>2020</b>	835



### Nutrition & Care

Million €

Sales	<b>2021</b>	6,442
	<b>2020</b>	6,019
EBIT before special items	<b>2021</b>	497
	<b>2020</b>	773



### Industrial Solutions

Million €

Sales	<b>2021</b>	8,876
	<b>2020</b>	7,644
EBIT before special items	<b>2021</b>	1,006
	<b>2020</b>	822



### Agricultural Solutions

Million €

Sales	<b>2021</b>	8,162
	<b>2020</b>	7,660
EBIT before special items	<b>2021</b>	715
	<b>2020</b>	970





## Message from BASF President for South America

public authorities, and companies in the search for overcoming challenges – the ones faced by our customers, by society, and also by ourselves. Our performance gives us the assurance that we are on the right track in the implementation of our strategy, which focuses on the customer at the core of everything.

Guided by our purpose to create chemistry for a sustainable future and supported by our values of creativity, openness, responsibility, and entrepreneurship, we continue and strengthen our trajectory of learning and evolution.

We make corporate commitments in our operations and along the value chain. We source responsibly. We produce efficiently and safety for people and the environment. We drive sustainable solutions. We value people and treat them with respect.

In 2021, we took care of our people; we developed our work relationships, adding the benefits of being together in the office with the balance in our private lives; and we continued to promote diversity and inclusion in our relationships. We strengthened partnerships with our customers based on innovation and digitalization. And we maintained our commitments to continue with social projects and investments – and, in this way, we contributed to reducing the negative impacts of the pandemic on society.

We believe that we are now facing the greatest transformation in the chemical industry's history, and BASF's as well. Effective climate protection and limited resources are the key challenges of our time. As the world's largest chemical company, we are leaders and we understand the importance of our role in driving the climate-neutral transformation. We want to show that such transformation and competitiveness are not in contradiction with each other and we want explore renewable energy sources, renewable raw materials and circular economy models to contribute in such efforts.

We are passionate about chemistry, and we move forward because we are connected to our customers, suppliers, partners and society. This report documents our accountability to society and our stakeholders. It is also a way to thank everyone who has been with us for 110 years of operations in South America. Together, we co-create, innovate, and drive sustainable success.

### **Manfredo Rübens**

BASF President for South America

“

*We source responsibly.  
We produce efficiently and safety  
for people and the environment.  
We drive sustainable solutions.  
We value people and treat  
them with respect.*

”

We have managed to make 2021 a successful business year for BASF, worldwide and in South America.

We achieved the best financial outcome in BASF's history in the South American region, with sales of €4.4 billion, even with the challenges extended into the second year of the coronavirus pandemic, affecting people's health and lives on the one hand, and the commercial impacts - such as logistical bottlenecks and instability in the supply of raw materials - on the other.

This outcome was only possible because we used chemistry to expand our positive impact by connecting people, social organizations,

# The BASF Group

**At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. Around 111,000 employees contribute worldwide to the success of our about 90,000 customers in nearly all sectors. Our customer portfolio ranges from major global customers and small and medium-sized enterprises to end consumers.**

## At a glance

**111,047**

Employees around the world

**~240**

Production sites worldwide

- Six segments with 11 operating divisions
- Verbund structure ensures efficient and reliable production
- High-performance organization for greater customer proximity, increased competitiveness and profitable growth
- About 90,000 customers are at the core of our strategy
- More than 70,000 Tier 1 suppliers

## Sites and Verbund

As the world's largest chemical company and industry leader, BASF has companies in 90 countries. We operate around 240 production sites worldwide – including Ludwigshafen, the world's largest integrated chemical complex owned by a single company. It was there, in 1865, that the foundation stone was laid for the Verbund concept, which remains a key strength of BASF today: Intelligently linking and steering our plants in a Verbund structure creates efficient value chains – from basic chemicals to highly refined products such as coatings or crop protection. In the Verbund, we can manage our production in a resource-efficient, CO<sub>2</sub>-optimized and reliable way. For example, by using by-products from one factory as feedstocks elsewhere. This enables us to save raw materials and energy, avoid emissions, reduce logistics costs and exploit synergies.

In addition to Ludwigshafen, Germany, BASF operates Verbund sites in Antwerp, Belgium; Freeport, Texas and Geismar, Louisiana; Kuantan, Malaysia; and Nanjing, China. Another is currently being built in Zhanjiang in the southern Chinese province of Guangdong.

## Organization of the BASF Group

We steer our six segments along our value chains to address the needs of our customers with differentiated solutions and business strategies.

- **Chemicals:** The segment supplies BASF's other segments and third-party customers with basic chemicals and intermediates.
- **Materials:** The segment offers advanced materials and their precursors for the plastics and plastics processing industries.
- **Industrial Solutions:** The segment develops and markets ingredients and additives for industrial applications.
- **Surface Technologies:** The segment offers chemical solutions for surfaces such as battery materials and automotive coatings.
- **Nutrition & Care:** The segment produces ingredients and solutions for consumer applications, for example, nutrition and personal care.
- **Agricultural Solutions:** The segment is an integrated provider of seeds, crop protection and digital technologies and solutions.

We take a differentiated approach to steering our businesses according to market-specific requirements and the competitive environment. We provide a high level of transparency around the results of our segments and show the importance of the Verbund and value chains to our business success. BASF aims to differentiate its businesses from their competitors and establish a high-performance organization to enable BASF to be successful in an increasingly competitive market environment.

The operating divisions, the service units, the regions and the corporate center form the cornerstones of the BASF organization, in line with the corporate strategy. As part of the implementation of our strategy, we streamlined our administration, sharpened the roles of services and regions, and simplified procedures and processes. The organizational realignment created the conditions for greater customer proximity, increased competitiveness and profitable growth.

Our eleven operating divisions bear strategic and operational responsibility and manage the 50 global and regional business units and develop strategies for 75 strategic business units.

The regional and country units represent BASF locally and support the growth of business units with local proximity to customers. For financial reporting purposes, we organize the regional divisions into four regions: Europe, North America, Asia Pacific, and South America, Africa and Middle East.

Our research is currently divided into three global divisions: Process Research & Chemical Engineering, Advanced Materials & Systems Research and Bioscience Research. To strengthen our innovation capabilities, we will reorganize our global research activities in 2022 and align them even more closely with the needs of our customers. To this end, we will integrate downstream research into the divisions and bundle activities with broad relevance in a research unit. This unit will continue to be globally positioned with research centers in Europe, North America and Asia Pacific.

Five service units provide competitive services for the operating divisions and sites: Global Engineering Services, Global Digital

Services, Global Procurement, European Site & Verbund Management, Global Business Services (finance, human resources, environmental protection, health and safety, intellectual property, communications, procurement, supply chain and inhouse consulting services).

Following the bundling of services and resources and the implementation of a wide-ranging digitalization strategy, the number of employees in the Global Business Services unit worldwide will decline by up to 2,000 by the end of 2022 compared with baseline 2019. From 2023 onward, the division expects to achieve annual cost savings of over €200 million.

The Corporate Center supports the Board of Executive Directors in steering the company as a whole. These include central tasks from the following areas: strategy, finance and controlling, compliance and law, tax, environmental protection, health and safety, human resources, communications, investor relations and internal audit.

Our Excellence Program aimed to contribute €2 billion to EBITDA annually until the end of 2021 onward compared with baseline 2018. We met this target in 2021. As planned, this was partly due to the reduction of more than 6,000 positions worldwide until the end of 2021. This decrease resulted from the organizational simplification and from efficiency gains in administration, the service units and the operating divisions.

## Procurement and Sales Markets

BASF supplies products and services to around 90,000 customers<sup>1</sup> from various sectors in almost every country in the world. Our customer portfolio ranges from major global customers and small and medium-sized enterprises to end consumers.

We work with over 70,000 Tier 1 suppliers<sup>2</sup> worldwide. They supply us with important raw materials, chemicals, investment goods and consumables, and perform a range of services. Important raw materials (based on volume) include naphtha, liquid gas, natural gas, benzene and caustic soda.

## BASF sales by industry 2021

Direct customers	
>20%	Chemicals and plastics   Transportation (respectively)
10%–20%	Agriculture   Consumer goods (respectively)
<10%	Construction   Electronics   Energy and resources   Health and nutrition (respectively)

## Business and Competitive Environment

BASF's global presence means that it operates in the context of local, regional and global developments and a wide range of conditions. These include:

- Global economic environment
- Legal and political requirements (e.g. E.U. regulations)
- International trade agreements
- Industry standards
- Environmental agreements (e.g. E.U. Emissions Trading System)
- Social aspects (e.g. U.N. Universal Declaration of Human Rights)

BASF holds one of the top three market positions in around 80% of the business areas in which it is active. Our most important global competitors include Arkema, Bayer, Clariant, Corteva, Covestro, Dow, Dupont, DSM, Evonik, Huntsman, Lanxess, SABIC, Sinopec, Solvay, Sumitomo Chemical, Syngenta, Wanhua and many hundreds of local and regional competitors. We expect competitors from Asia and the Middle East in particular to continue to grow in significance in the years ahead.

## Corporate Legal Structure

As the publicly listed parent company of the BASF Group, BASF SE takes a central position: Directly or indirectly, it holds the shares in the companies belonging to the BASF Group, and is also one of the largest operating companies. The majority of Group companies cover a broad spectrum of our business. In the BASF Group Consolidated Financial Statements, 258 companies including BASF SE are fully consolidated. We consolidate nine joint operations on a proportional basis and account for 27 companies using the equity method.

 For more information on the companies belonging to the BASF Group, see [basf.com/en/corporategovernance](https://basf.com/en/corporategovernance)

<sup>1</sup> The number of customers refers to all external companies (sold-to parties) that had contracts with the BASF Group in the business year concerned under which sales were generated.

<sup>2</sup> BASF considers all direct suppliers of the BASF Group in the business year concerned as Tier 1 suppliers. These are suppliers that provide us with raw materials, investment goods, consumables and services. Suppliers can be natural persons, companies or legal persons under public law.



# Our Strategy

**Chemistry is our passion. As an industry leader, we want to be the most attractive partner for challenges that can be solved with chemistry. That is why our customers are at the center of everything we do. We want to grow profitably and at the same time, create value for society and the environment. We help to change the world for the better with our expertise, our innovative and entrepreneurial spirit, and the power of our Verbund integration.**

The world is changing at a rapid pace – more and more urgently than ever, solutions are needed for a sustainable future. Chemistry plays a key role here. In almost all areas of life, it can help overcome pressing global challenges with innovative products and technologies – from climate change and using resources more sparingly to feeding the world's population. This belief is expressed in our corporate purpose and is what motivates us day in and day out: We create chemistry for a sustainable future.

Our mission and motivation is to grow profitably and make a positive contribution to society and the environment. For example, BASF's solutions contribute to climate protection and help to prevent or recycle waste, produce healthy and affordable food, and enable climate-smart mobility.

At the same time, as an energy and resource-intensive company, we are facing what is probably the biggest transformation in our over 150-year history: The shift toward a carbon-neutral and circular economy and the associated landmarks such as the European Green Deal demand from us new concepts and approaches – for the way we produce, for our raw material base and for our energy supply.

## Our corporate purpose

**We create chemistry for a sustainable future**

We also see these disruptive changes as an opportunity. As the world's largest chemical company, we want to lead the way and actively and responsibly shape the change. That is why we are gradually switching our energy and raw material supplies to renewable sources. We are strengthening our Verbund structure as the basis for resource-efficient, safe and reliable production. We are developing pioneering low-carbon production processes for our products. We are accelerating our innovation processes and deepening cooperation with partners to develop high-performance products that also require fewer resources and have a lower carbon footprint. We are harnessing the many opportunities of digitalization. We are systematically aligning our portfolio with growth areas and future technologies, and are integrating sustainability into our value chains even more strongly. We create a working environment in which our employees can thrive and contribute to BASF's long-term success. This is how we live our corporate purpose.

## Our Strategic Action Areas

Our customers are our number one priority and are at the heart of our strategy. We want to be their most attractive partner for challenges that can be solved with chemistry. BASF supplies products and services to around 90,000 customers from almost all sectors and countries around the world. Our customer portfolio ranges from major global customers and small and medium-sized enterprises to end consumers. Our comprehensive product portfolio means that we are active in many value chains and value creation networks. We use various business strategies, which we adapt to the needs of industries and markets. These range from cost leadership in basic chemicals to tailored system solutions for specific customer applications.

We continue to drive forward our customer focus. We have refined our organizational structure to enable our operating divisions to flexibly address specific market requirements and differentiate themselves from the competition.

We are also improving our customer relationships with a range of measures. For example, since 2019 we have been using the Net Promoter System® worldwide to systematically record and optimize our problem-solving skills, product quality and delivery reliability based on direct customer feedback. We have been using a new



## Net Zero Accelerator

The new Net Zero Accelerator unit started work on January 1, 2022. It bundles the extensive cross-company activities with which we want to achieve our ambitious climate protection targets. The unit will initially have around 80 employees and report directly to the Chairman of the Board of Executive Directors. It will focus on accelerating and implementing projects relating to low-CO<sub>2</sub> production technologies, circular economy and renewable energies – driving forward BASF's transformation to a climate-neutral company. In parallel, our operating divisions will continue to work on divisional-specific carbon reduction projects.

[For more information on climate neutrality, see basf.com](https://www.basf.com)

IT-based customer relationship management system, Salesforce, since 2020. The application helps our sales employees to provide customer support and simplifies their work. Above and beyond this, we have intensified cooperation with our customers to leverage innovation and growth potential together with them. For instance, we established interdisciplinary teams in our business units to even better and more quickly address the needs of our most important customers.

BASF's strategic orientation is founded on a comprehensive analysis of our markets and competitors. We continuously monitor global trends and anticipate the resulting growth opportunities and risks. The following six strategic focus areas enable us to focus on our customers while strengthening our leading position in an increasingly volatile and competitive environment.

## Our six strategic action areas

### Innovation, sustainability, production, digitalization, portfolio and employees

**Innovation** is the bedrock of our success. BASF is a leader in the chemical industry with around 10,000 employees in research and development and R&D spending of around €2.2 billion. We are expanding this position by strengthening our research activities, bringing research and development even closer together, and fostering cooperation.

We pledged our commitment to **sustainability** in 1994 and since then, have systematically aligned our activities with the principles of sustainability. We see sustainability as an integral part of our strategy as well as our targets, steering processes and business models. Our approach covers the entire value chain – from responsible procurement and safety and resource efficiency in production to sustainable solutions for our customers.

Our core business is the **production** and processing of chemicals. Our strength here lies – both now and in the future – in the Verbund and its integrated value chains. The Verbund offers us many technological, market, production-related and digital advantages. That is why we will continue to invest in the creation and optimization of Verbund structures and drive forward the consolidation of production at highly efficient sites.

We want to leverage the diverse growth potential of **digitalization** and seize the associated opportunities to the benefit of our customers. To achieve this, we promote digital skills among our employees, cooperate with partners and make digital technologies and ways of working an integral part of our business.

Investments, acquisitions and divestitures play a key role in strengthening our **portfolio**. We are focusing on innovation-driven growth areas and sustainable technologies. To further strengthen our position in the dynamic growth market of Asia, we are building a new Verbund site in the southern Chinese province of Guangdong.

Our **employees** are key to BASF's success. That is why we believe that it is important to have an inspiring working environment that fosters and develops employees' individual talents and enables them and their teams to perform at their best. We are pursuing three action areas to make our high-performance organization even more so: empowerment, differentiation and simplification.

## Our Values and Global Standards

How we act is critical to the successful implementation of our strategy and how our stakeholders perceive us. This is what our four corporate values represent. They are binding for all employees worldwide. Together with our Code of Conduct and our global standards and guidelines, they provide the framework for responsible conduct.

**Creative:** We make great products and solutions for our customers. This is why we embrace bold ideas and give them space to grow. We act with optimism and inspire one another.

**Open:** We value diversity, in people, opinions and experience. This is why we foster feedback based on honesty, respect and mutual trust. We learn from setbacks.

**Responsible:** We value the health and safety of people above all else. We make sustainability part of every decision. We are committed to strict compliance and environmental standards.

**Entrepreneurial:** We focus on our customers, as individuals and as a company. We seize opportunities and think ahead. We take ownership and embrace personal accountability.

We stipulate binding rules for our employees with standards that apply throughout the Group. We set ourselves ambitious goals with voluntary commitments and regularly monitor our performance in environmental protection, health and safety with our Responsible Care Management System. We mainly approach our adherence to international labor and social standards using three elements: the Compliance Program including our Code of Conduct and compliance hotlines, close dialog with our stakeholders, and the global management process to respect international labor norms. Our business partners are expected to comply with prevailing laws and regulations and to align their actions with internationally recognized principles. We have established appropriate monitoring systems to ensure this.

## Targets and Target Achievement 2021

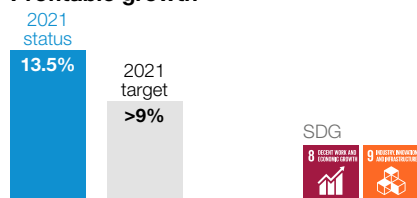
Business success tomorrow means creating value for the environment, society and business. That is why we have set ourselves ambitious targets along our entire value chain. We report transparently on our target achievement so that our stakeholders can track our progress. In order to grow profitably, we want to grow sales volumes faster than global chemical production, further increase our profitability, achieve a return on capital employed (ROCE) considerably above the cost of capital percentage and increase the dividend per share every year based on a strong free cash flow.

We also pursue broad sustainability targets. In this context, we significantly raised our CO<sub>2</sub> reduction target in 2021.<sup>2</sup> We want to strengthen the sustainability focus of our product portfolio and will

update our portfolio steering targets in 2022.<sup>3</sup> We also strive to strengthen the sustainability of our supply chains and use resources responsibly. We want to further improve safety in production. In addition, we aim to promote diversity within the company and create a working environment in which our employees feel that they can thrive and perform at their best.

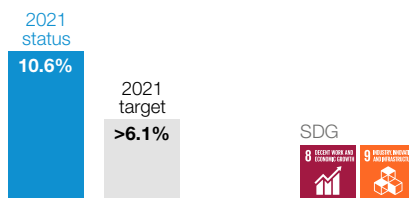
The objective of these targets is to steer our business into a sustainable future, and at the same time, contribute to the implementation of the United Nations' Sustainable Development Goals (SDGs). We are focusing on issues where we as a company can make a significant contribution, such as climate protection, sustainable consumption and production, and fighting hunger.

### Profitable growth

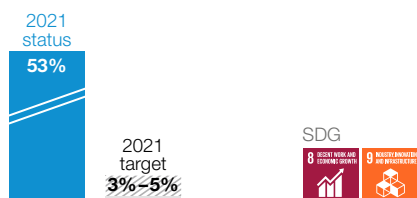


Most important key performance indicator

Achieve a **return on capital employed (ROCE)** considerably above the cost of capital percentage every year



Grow **sales volumes** faster than global chemical production every year

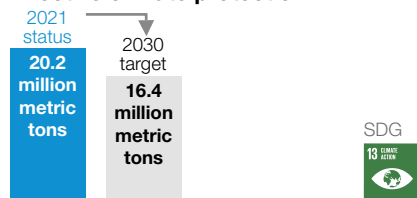


Increase **EBITDA before special items** by 3%–5% per year



Increase the **dividend per share** every year based on a strong free cash flow

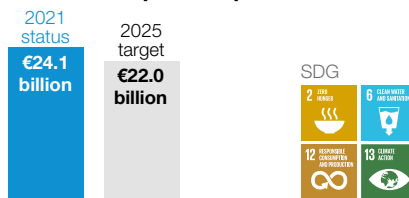
### Effective climate protection



Most important key performance indicator

Reduce our absolute **CO<sub>2</sub> emissions<sup>2</sup>** by 25% by 2030

### Sustainable product portfolio



Most important key performance indicator

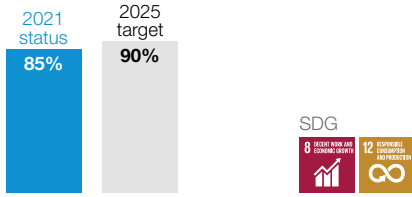
Achieve €22 billion in **Accelerator sales** by 2025<sup>3</sup>

↙ Reduction target

- 1 Dividend proposed by the Board of Executive Directors
- 2 Includes Scope 1 and Scope 2 emissions. In March 2021, we replaced our previous target of CO<sub>2</sub>-neutral growth until 2030 (baseline 2018: 21.9 million metric tons of CO<sub>2</sub>e) with a new, more ambitious climate protection target to reduce absolute CO<sub>2</sub> emissions by 25% compared with 2018.
- 3 We already reached our 2025 sales target for Accelerator products in 2021. Consequently, we will update our product portfolio steering target over the course of 2022.

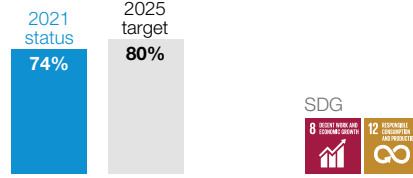


### Responsible procurement



Limited assurance

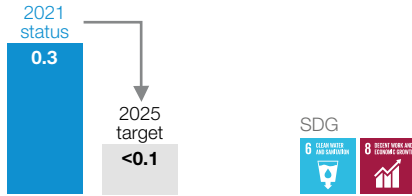
Cover 90% of our relevant spend with **sustainability evaluations** by 2025



Limited assurance

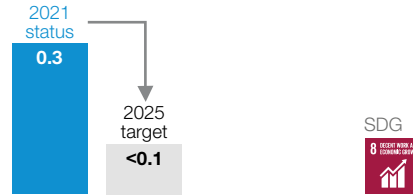
Have 80% of our suppliers improve their **sustainability performance** upon re-evaluation

### Resource efficiency and safe production



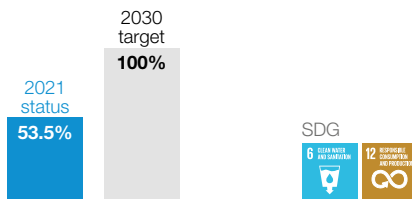
Limited assurance

Reduce worldwide **process safety incidents** per 200,000 working hours to  $\leq 0.1$  by 2025



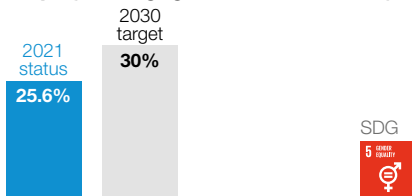
Limited assurance

Reduce the worldwide **lost-time injury rate** per 200,000 working hours to  $\leq 0.1$  by 2025



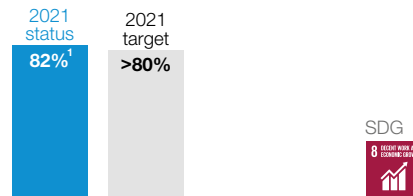
Introduce **sustainable water management** at our production sites in water stress areas and at our Verbund sites by 2030

### Employee engagement and diversity



Limited assurance

Increase the proportion of **women in leadership positions** with disciplinary responsibility to 30% by 2030



Limited assurance

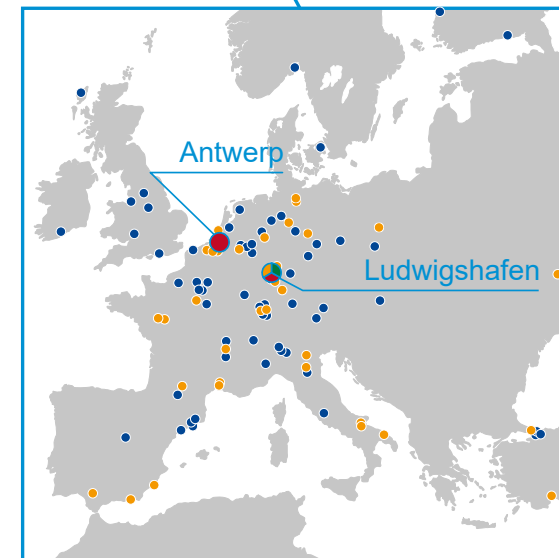
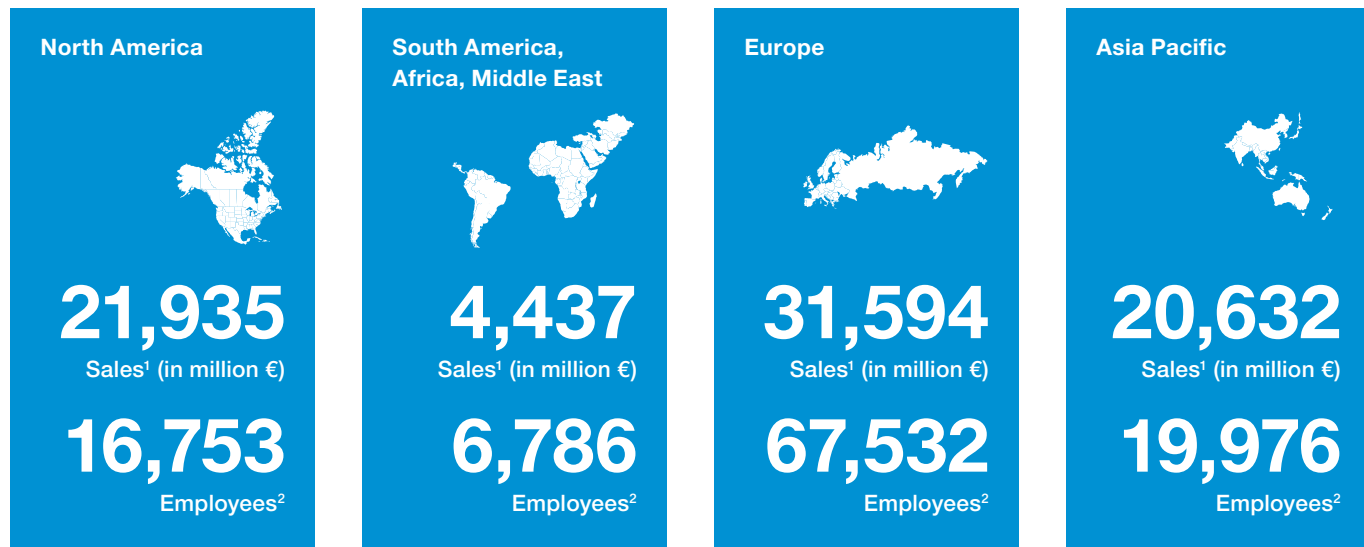
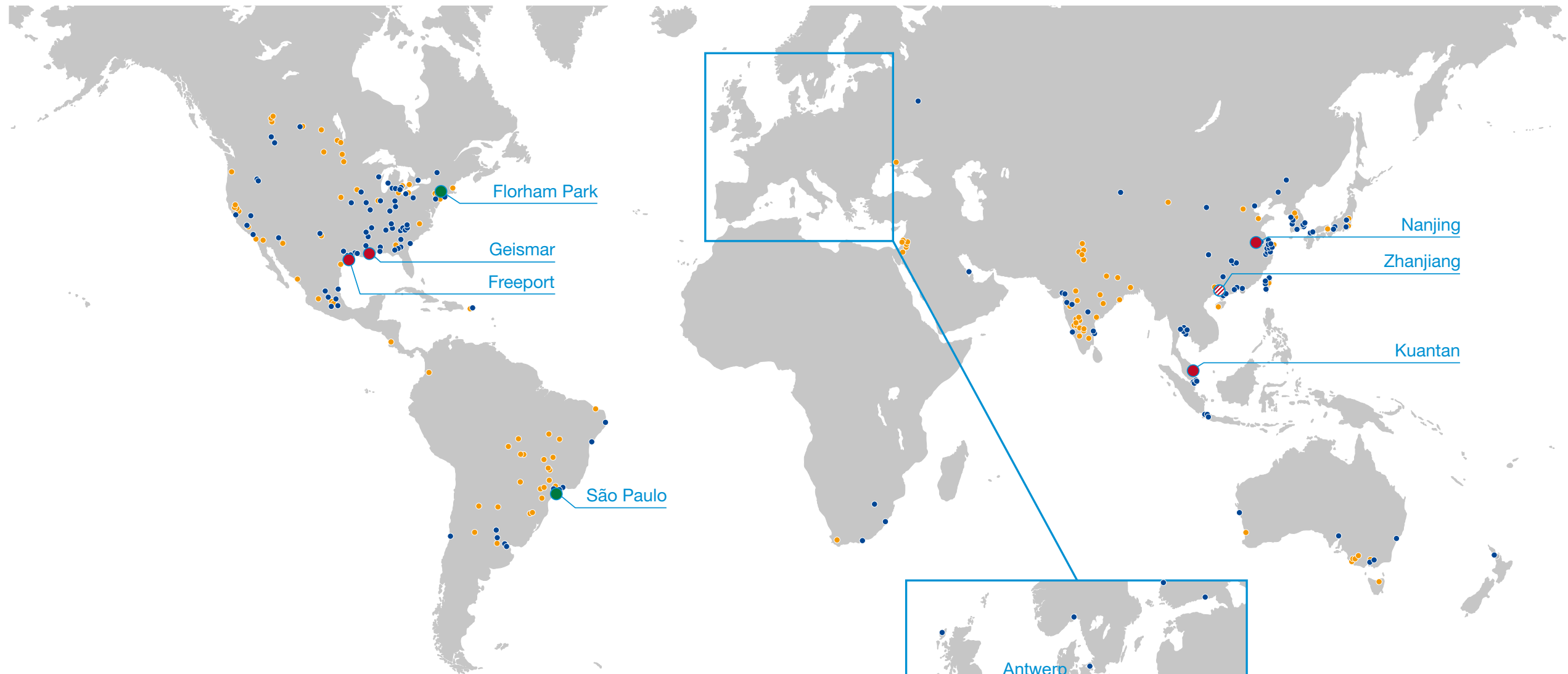
More than 80% of our **employees** feel that at BASF, they can thrive and perform at their best

↓ Reduction target

<sup>1</sup> We regularly calculate the employee engagement level. The most recent survey was conducted in 2020. The next survey is planned for 2022.

# BASF in the Regions

BASF Group sales 2021: €78,598  
 BASF Group employees 2021: 111,047



The map shows the production sites and research and development sites of the BASF Group according to the scope of consolidation for the BASF Report 2021. Sites not shown on the map include office and warehouse locations as well as sites of companies not in the scope of consolidation.

- ▨ Verbund sites / planned Verbund site
- Research and development sites
- Production sites
- Regional centers

<sup>1</sup> In 2021, by location of company  
<sup>2</sup> At year-end 2021

# BASF on the Capital Market

In 2021, the stock markets were characterized by a significant recovery of the global economy. This was due in particular to the approval and increasing availability of effective coronavirus vaccines. BASF stands by its ambitious dividend policy and suggested a dividend of €3.40 per share to the Annual Shareholders' Meeting – an increase of 10 euro cents compared with the previous year. Based on the year-end share price for 2021, BASF shares offer a high dividend yield of around 5.5%.

## At a glance

**€3.40**

Dividend per share

**5.5%**

Dividend yield based on the year-end share price for 2021

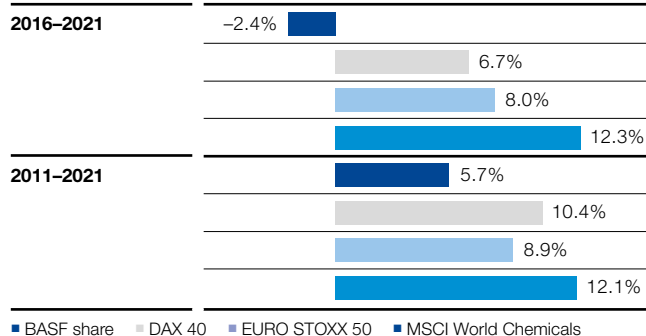
- Share price declined despite very good operating performance
- CDP again awards BASF Leadership status
- BASF maintains "Prime" status in ISS ESG rating

## BASF Share Performance

The BASF share closed the 2021 stock market year at €61.78, a decrease of 4.5% compared with the previous year's closing price.

## Long-term performance of BASF shares compared with indexes

Average annual increase with dividends reinvested



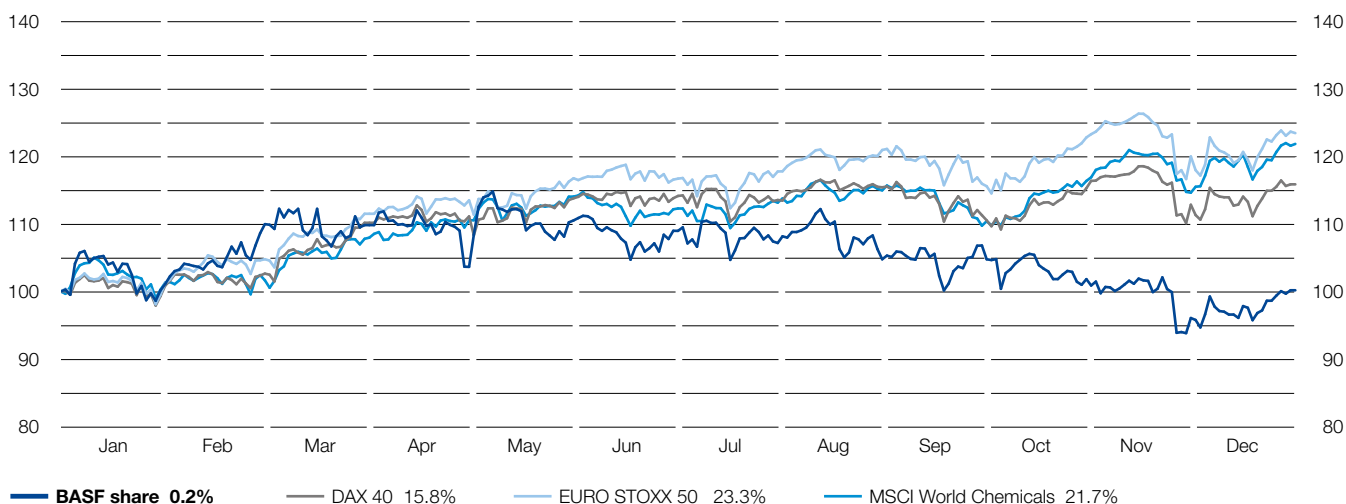
## Weighting of BASF shares in important indexes as of December 31, 2021

DAX 40	4.0%
EURO STOXX 50	1.8%
MSCI World Chemicals	4.6%

BASF's share price reached an annual high of €72.61 in March 2021 before declining over the course of the year despite continued positive business performance. This was due to factors such as the composition of the segments' earnings contributions. Share price development was also negatively impacted by market expectations regarding the future development of margins in the basic chemicals business. Assuming that dividends were reinvested, BASF's share performance rose by 0.2% in 2021. The benchmark indexes of the German and European stock markets – the DAX 40 and the EURO STOXX 50 – rose by 15.8% and 23.3% over the same period, respectively. The global industry index MSCI World Chemicals gained 21.7%.

## Change in value of an investment in BASF shares in 2021

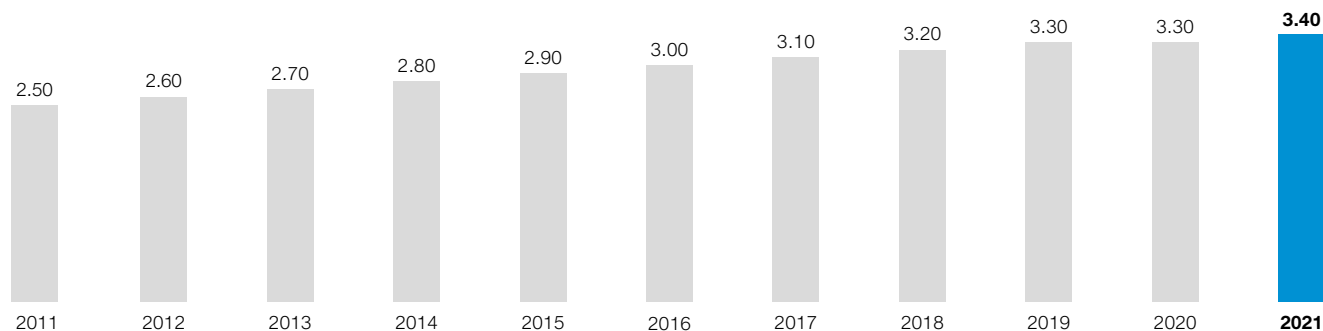
With dividends reinvested; indexed





## Dividend per share

€ per share



The assets of an investor who invested €1,000 in BASF shares at the end of 2011 and reinvested the dividends in additional BASF shares would have increased to €1,733 by the end of 2021. This represents an average annual yield of 5.7%.

## Dividend of €3.40 per Share

The Board of Executive Directors and the Supervisory Board suggested a dividend payment of €3.40 per share to the Annual Shareholders' Meeting. BASF stands by its ambitious dividend policy of increasing the per-share dividend each year and plans to pay out €3.1 billion to the shareholders of BASF SE.

Based on the year-end share price for 2021, BASF shares offer a high dividend yield of around 5.5%. BASF is part of the DivDAX share index, which contains the 15 companies with the highest dividend yield in the DAX 40.

## Broad Base of International Shareholders

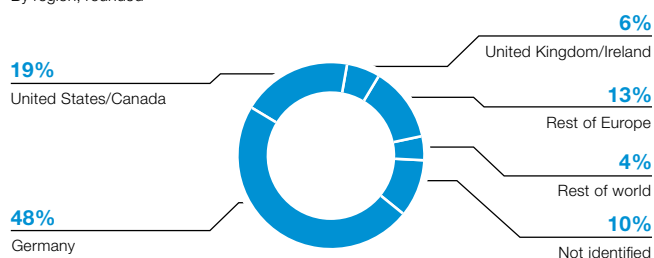
With over 800,000 shareholders, BASF is one of the largest publicly owned companies with a high free float. An analysis of the shareholder structure carried out at the end of 2021 showed that, at around 19% of share capital, the United States and Canada made up the largest regional group of institutional investors. Institutional investors from Germany accounted for around 9%. Institutional investors from the United Kingdom and Ireland hold 6% of BASF shares, while investors from the rest of Europe hold a further 13% of capital. Approximately 39% of the company's share capital is held by private investors, nearly all of whom reside in Germany. BASF is therefore one of the DAX companies with the largest percentage of private shareholders.

## Employees Becoming Shareholders

In many countries, we offer share purchase programs that turn our employees into BASF shareholders. In 2021, for example, around 23,600 employees (2020: around 27,600) purchased BASF shares worth €38.2 million (2020: €61.1 million).

## Shareholder structure

By region, rounded



## BASF – a Sustainable Investment

BASF shares are attractive for investors looking for chemical companies with a convincing ESG performance (environment, society and governance). In the analyses of leading ESG rating agencies, BASF is often recognized as a benchmark within the chemical industry. They specifically highlight our integrated sustainability reporting, business ethics and the development of sustainable products. For example, in the latest assessments by the nonprofit organization CDP, BASF was ranked A+ in all three categories "Climate Change," "Forests" and "Water" and thus once again achieved Leadership status. CDP represents over 590 investors with over \$110 trillion in assets and more than 200 major organizations with \$5.5 trillion in purchasing power. BASF maintained its Prime status in the ISS ESG rating developed by Institutional Shareholder Services and is among the top 7% of the companies assessed. BASF received special recognition for addressing key sustainability issues such as environmental management, energy efficiency and business ethics with a comprehensive set of measures and processes.

## Analysts' recommendations

Around 30 financial analysts regularly publish studies on BASF. The latest analyst recommendations for our shares as well as the average target share price ascribed to BASF by analysts can be found online at [basf.com/analystestimates](https://www.basf.com/analystestimates).

# BASF in South America – Local Report

## Executive Committee

**Luciana Amaro<sup>1</sup>**  
Vice President of  
People Services

**Andrés Jose  
Monroy Trujillo**  
Vice President of  
Country Cluster  
South

**André Oliveira**  
Legal Director,  
Insurances,  
Intellectual  
Property and Chief  
Compliance Officer

**Marcos Allemann**  
Vice President of  
Decorative Paints

**André Wehrmann**  
Senior Vice President  
of Chemicals, Surface  
Technologies, Services  
and Chief Financial  
Officer



**Alberto Jose  
Zuñiga Sanchez**  
Vice President of  
Country Cluster  
Andes

**Manfredo Rübens**  
President

**Antonio Lacerda**  
Senior Vice President  
of Nutrition & Care,  
Industrial Solutions  
and Materials

**Cristiana Brito**  
Director of  
Corporate Affairs  
and Sustainability  
BASF and Espaço  
ECO Foundation

**Sergi Vizoso**  
Senior  
Vice President  
of Agricultural  
Solutions

**Vera Felbermayer**  
Vice President of  
Site Management,  
Operations & Digital  
Support

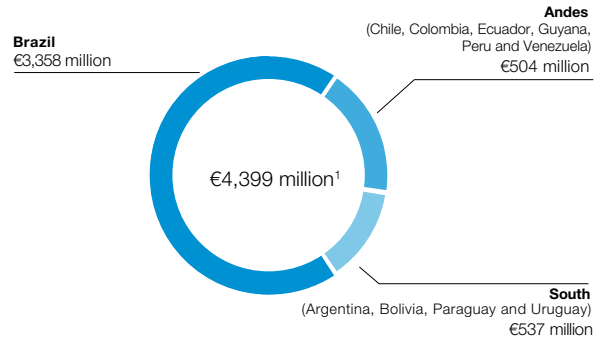
<sup>1</sup> Luciana Amaro was Vice-President of Human Resources/People Services until January 17<sup>th</sup>, 2022 when she left the company. Her successor is Cinthia Gonzalez (effective from April 1<sup>st</sup>, 2022)

# BASF in South America

## Overview

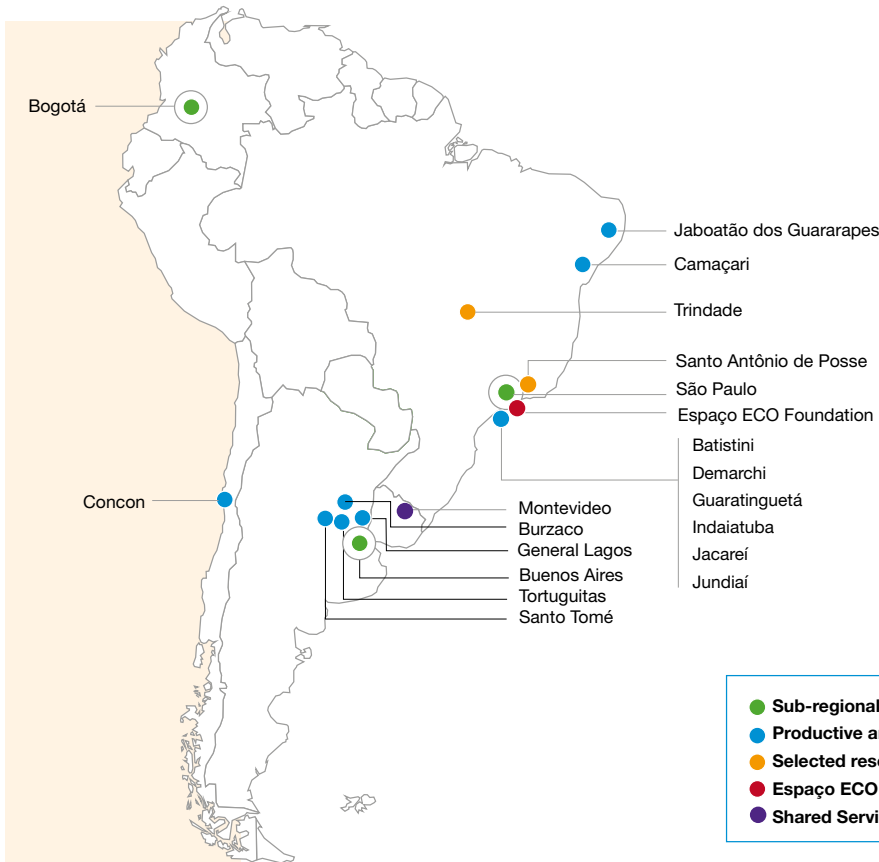
**At BASF, we create chemistry for a sustainable future, while combining economic success with environmental protection and social responsibility. Our purpose guides our portfolio of solutions, which contributes to the preservation of natural resources, enables the production and ensures the quality of the food and helps to improve the quality of life.**

We believe in South America in a long-term operation. We create business opportunities as a strategic partner for our customers, contributing to their sustainable performance and business results. We invest in the development and research of solutions and new technologies in our production sites, and we create value for our customers through our solutions. Sales in South America in 2021 totaled €4,399 million<sup>1</sup>.



BASF has always been a company of transformations. Being in constant evolution is what allows us to complete years of operations and business in different countries. This year we celebrate 110 years of the company in Brazil, 65 years in Peru, 55 years in Ecuador, 60 years of the Suvinil brand, our premium decorative paint brand in Brazil, 70 years of the Demarchi site in São Bernardo do Campo (SP, Brazil), and 10 years of the Jacareí site (SP, Brazil). Dates that highlight our history of dedication and commitment to the economic and social development of the region.

### Production and Selected Sites



**In South America**  
 Head Office São Paulo, Brazil  
 13 productive units and 24 agricultural research and innovation centers and mini-farms in agriculture organized by geographic location:

- Brazil
- Country Cluster Andes: Chile, Colombia, Ecuador, Guyana, Peru and Venezuela
- Country Cluster South: Argentina, Bolivia, Paraguay and Uruguay

- Sub-regional head offices
- Productive and selected units
- Selected research and development sites
- Espaço ECO Foundation, established and maintained by BASF
- Shared Service Center

BASF in South America Sales by location of customer in 2021<sup>1</sup>

# €4,399 million

Employees, as of December 31, 2021

# 5,993

<sup>1</sup> Location of customer, group consolidated, sales to third parties. Results include CCM – Precious Metals





# How we create chemistry for a sustainable future

**Chemistry is an enabler to provide solutions for society's current and future needs.**

Sustainability guides us to act in the present, thinking about the future. Circular economy, emissions reduction, intelligent use of natural

resources, creating value for society, quality of life and economic profitability are some of our objectives transformed into goals and incorporated into our practices, aimed at a sustainable future.

“

We appreciate the support that BASF is providing to Mercedes-Benz to develop improvements in our processes and become more eco-efficient. To ensure environmental preservation, we need urgent changes, and joining forces with such dedicated partners is an excellent tool to maintain our business sustainable.

**Juliana Soares Leite Martins**

Operations & Environmental Management Advisor for Mercedes-Benz Brazil

”

“

Ensuring productive relationships is part of Raízen's culture and every year we honor partners who have consistently shown outstanding performance within each pillar. BASF was a partner that demonstrated support and value generation through close relationship, flexibility, and attention to our needs, beyond the daily routine. I really appreciate this acknowledgement and being able to count on BASF on our journey.

**Henrique Nakamura,**

Raízen's Procurement Director

”

“

Having BASF, Siemens, Voith, and Klabin working together for a greater purpose (circular economy project) shows that we are stronger when we collaborate. Each company can understand more clearly how we handle some of our non-industrial waste, see this chain more completely, and co-create a solution that will be tested on a small scale, enabling full circularity. It is clear that innovation and sustainability can always be together.

**Renata Freesz,**

Innovation Manager at Klabin

”

“

It is appropriate to emphasize the relevance of fostering this working group (structuring a flow of mechanical recycling of plastics for grain storage in agribusiness), as both companies, Braskem and BASF, understand the importance and need to search for the development of sustainable solutions in the chemical and plastics industry.

**Roberto Simões,**

Braskem CEO

”

“

It was a great pleasure to be able to count on BASF's collaboration and partnership with the donation of sodium methylate (catalyst used to improve the production and quality of biodiesel) to continue the research / extension project that we are developing.

**Carla Jovania Gomes Colares,**

Ph.D. Professor in Chemistry at the Federal University of Tocantins

”

Learn more about this project on page 20.

“

*Leitura no Campo* (Reading in the Field) came to our institution as a great gift. Through this project our students and visitors will have the opportunity and access to a book collection, taking all students to the world of imagination, vocabulary expansion and reflection, and assisting in attention-concentration.

**Ana Márcia Pereira Sabino,**

Director of Francisco Thomaz Cintra de Andrade Special Education School Unit – APAE in Vargem Grande do Sul (SP, Brazil)

”

# Governance and Compliance

**Through effective and transparent corporate governance, we have built a trust-based relationship with our employees, customers, investors, financial markets, suppliers, and other stakeholders. This happens because we believe and practice corporate governance aimed at creating value.**

We follow global governance standards. The global Code of Conduct, one of our instruments, guides decisions and sets limits on what we must do to comply with laws and internal policies. It also converts our values into the conduct that we expect from everyone, helping us to take responsibility and operate in an honest, respectful, and safe manner.

In 2021, we strengthened our governance, carried out a structured process of delegation of attributions, and consolidated the role of leadership. We have invested in training our employees and

statutory directors throughout South America. This preserves the responsibility of the company and of each individual employee – also ensuring the processes in the relationship with the customers.

These initiatives emphasize the importance of governance for us and the alignment with our corporate strategy, in which we focus on the customer. With the established structure, formalized and communicated, we are even more agile, focused, and strengthen our attributes of honesty and integrity in our relationships.

Inspired by the United Nations Guiding Principles on Business and Human Rights, BASF lives the responsibility to respect human rights. And this was the main topic defined by the Compliance area to be addressed internally and externally in 2021. Human rights have been given an exclusive topic in our [Code of Conduct](#). By this we want to ensure that each individual has the right to be who they are.

## 1<sup>st</sup> Compliance Week South America

Together with our employees, we foster BASF's compliance culture and program and discuss issues centered on fairness and respect. The event had external guests, a radio program and an online quiz and reached more than 1,800 employees in South America.

## Ethics channel

Through the ethics channel, anyone has the possibility to report their concerns or suggestions by phone, website, email, or app. We want to be a reference for our employees and for society, operating consistently and in line with our discourse. In 2021, we held a campaign to consolidate the ethics channel role and communicated the change in the contact number.

**0800 000 0153**  
**basf@ethicspoint.com**



# Sustainability

## Our Strategy

**We create chemistry for a sustainable future. That is our purpose. To succeed in the long term, we understand that it is necessary to create value for the environment, society, and the economy.**

At BASF, we are passionate about chemistry and our customers. We want to be the world's leading chemical company for our customers, grow profitably and create value for society. Thanks to our experience, our innovative and entrepreneurial spirit, and the power of our integration, we make a decisive contribution to changing the world for the better. That is our goal. This is what motivates us and what we do best. For this, we make corporate commitments in our operations and throughout the value chain.

We are focused on more sustainable processes and aiming to reduce the use of fossil fuels. For decades, we have been working to reduce our emissions worldwide.

We are committed to the challenge of achieving net-zero carbon while supporting our growth. With cooperation and purchase agreements, we work to have enough capacity to supply our production with renewable energies in the future.

Sustainability is firmly anchored in the organization's values, governance and in our business model and corporate strategy. In 2021, we set ambitious new global goals towards climate neutrality:

reduce global greenhouse gas emissions  
**by 25%**  
by 2030 (base year: 2018).

**net zero emissions CO<sub>2</sub>**  
worldwide by 2050.

To achieve these results, we plan to invest approximately €1 billion by 2025 and further €2 to €3 billion by 2030.

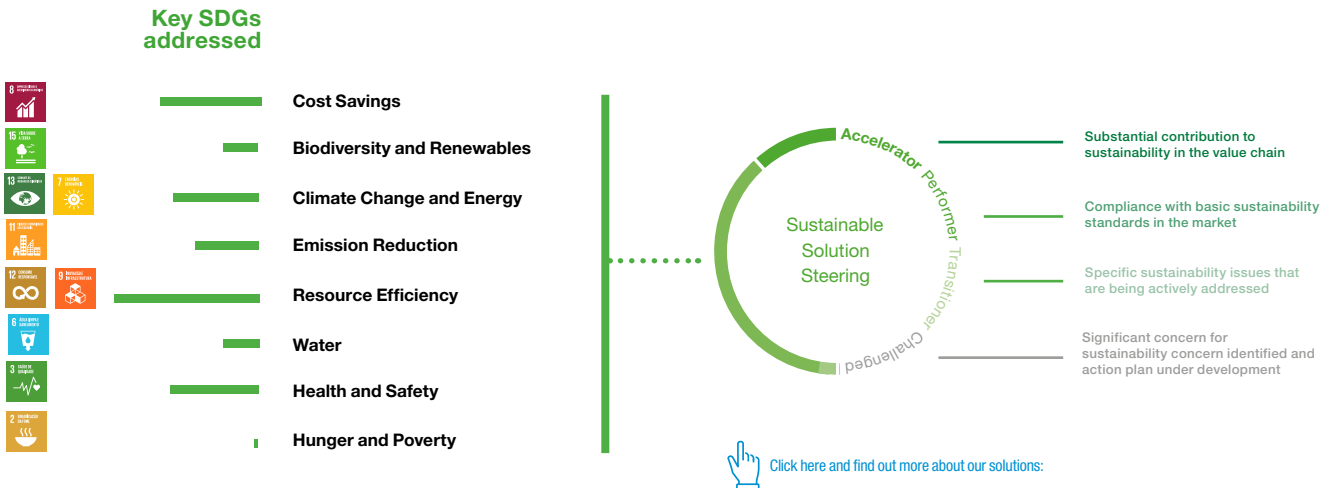
## More on sustainability governance at BASF in South America



# Sustainable solutions

We think about the creation of our products from the perspective of sustainability. For this reason, we have analyzed our entire portfolio and rated it according to its contribution to sustainability (see below). Globally, almost one third of our portfolio is classified as Accelerator,

a category that features a substantial sustainability contribution in the value chain and accounts for €24.1 billion in sales (2021), an increase of 43,9% from 2020.



# Sustainability in the value chain

We are committed to our customers’ environmentally-conscious purchasing decisions. Therefore, we developed a corporate database to calculate the Product Carbon Footprint (PCF) of more than 45,000 products, from “grave-to-gate” (include all product-related greenhouse gas emissions generated until a BASF product leaves the factory gates). Our PCF calculation is based on the Greenhouse Gas emissions of our facilities and on average data for raw materials and energy purchased. The PCFs are calculated following general Life Cycle Assessment (ISO 14044) and Product Carbon Footprints (ISO 14067) standards, as well as the Greenhouse Gas Protocol Product Standard.

The circular economy concept, which proposes the intelligent use of resources, is a practice in our productive process: waste becomes raw materials in new processes or materials can be repaired, reused, upgraded, or returned to new cycles instead of being disposed of. In our evolution process, we integrate the circular economy throughout the entire product life cycle, considering the value chain.

One of the steps we have taken to achieve our goals is establishing a company-wide Circular Economy Program. As part of this

program, BASF teams are currently developing new approaches to the three main action areas in more than 35 initiatives: alternative raw material pathways, innovate material cycles and new business models for the circular economy – which also include digital and service-based concepts. The Silobag project was the first to be approved in South America, in 2020.

[Learn more about Silobag on page 25.](#)

**By 2030, BASF Group wants to achieve**

**€17 billion**

**in sales generated with solutions for circular economy. To this end, we will focus on three areas of activity: circular raw materials, new material cycles and new business models.**



## Energy efficiency

With a multidisciplinary team, we have identified opportunities to reduce our CO<sub>2</sub> emission in South America by more than 30% by 2030, even taking into account the expected production growth.

**Grey to Green** – replacing grey energy (from fossil sources) with green energy (from renewable sources), with certification of the (renewable) power supply agreement.

**Power to Steam** – adapting processes to use clean energy sources: replacing processes and the use of fossil fuels with clean processes, for example, with electrification in various stages of our industrial activities.

**Additional measures** – aim to improve current processes through operational excellence projects, reducing the consumption of raw materials or process times, for example, aiming to ensure the reduction of greenhouse gas emissions.



Site in Concon, Chile

## Our sustainability stories

### Emissions offset in Argentina, Colombia and Ecuador –

We offset emissions in Argentina, while protecting the environment with the contribution to the development of local communities. With the purchase of certified carbon bonds, we offset 100% of the carbon footprint generated during 2020 in production plants and in the vehicle fleet, which represents 5,376 tonCO<sub>2</sub>eq. In addition, 1,330 trees were planted in deforested areas of Argentina (Tucumán and Corrientes).

In 2021, we also offset the carbon footprint of our vehicle fleet in Colombia and Ecuador in 2019 and 2020, totaling 795.82 tonCO<sub>2</sub>eq.



Native tree planting in Argentina

**3tentos Agroindustrial Partnership** – In an unprecedented partnership in the agricultural market, we have developed, together with 3tentos Agroindustrial (group from RS, Brazil), a new operation model with the emission of decarbonization credits (CBIOS) in exchange for supplies.

**EcoPack** – Through this initiative, we collect waste from aluminum packaging donated by customers in Brazil and transform it into materials, such as ecological tiles and walls, for the lining of buildings. With the support of other partners, the expectation is to recycle, annually, about 2,000 tons of used packaging, in addition to creating a business model that makes it possible to generate income for low-income families. Recently, we entered into a partnership with the Mangalô NGO to donate these materials for the construction of the New Mangalô Montessori School, located in São Paulo (SP, Brazil). This prevents waste in the environment and promotes the circular economy, as well as supports this sustainable building.

**Silobags** - Silobags are very common in Brazilian and Argentinean agribusiness. Manufactured from polyethylene, they each weigh about 150 kilograms and can store up to 250 tons of grain. Initially unable to be reused, the bags did not go through an efficient disposal process. Thus, we organized a reverse logistics process of the bags, which counts on the addition of BASF products to enable recycling and transformation into other bags; therefore, ending the cycle of this material.



*We are proud to be leading an innovative operation together with BASF. We are at the forefront of an extremely positive agenda focusing on sustainability in agribusiness and highlighting the value of our entire ecosystem, inputs, grains and industry. This allows us to perform this first purchasing inputs business through CBIOS, originated from the clean energy production.*

**Benhur Vione,**  
Supplies director at 3tentos Agroindustrial.



# Innovation

**In addition to sustainability, innovation is a pillar of BASF's strategy and especially contributes to address the global challenges: resources, environment, and climate; food and nutrition; and quality of life.**

Innovation has made BASF the world's leading chemical company. This has always been the key to our success, as we strongly invest in continuous improvement and solution development. We understand that open innovation plays a fundamental role in connecting the customer and the ecosystem to generate ideas and solutions. Disruptively, we encourage and value contributions that come from outside our premises. Therefore, we maintain strategic partnerships with customers, suppliers, startups, and study and research centers.

## Glasu!

Glasurit becomes **Glasu!** With a new name and visual identity, the BASF brand that offers solutions to make decorative painting more reliable and cost-effective; aims for more identification and approachability to Brazilians. These changes were based on studies and market research, following the trends and changes in consumer behavior.

## Highlight

More than

**€2.2 billion**

research and development expenses

About

**€900 million**

invested globally on research and development activities in Agricultural Solutions in 2021.

Advanced research and innovation centers: 2 units in South America, located in Santo Antonio da Posse (SP) and Trindade (GO).

**Awards in Brazil:** TOP 1 in the Chemical Industry in open innovation in the 100 Open Startups platform ranking (for the second consecutive year) and 4th place in the TOP 100 Open Corps (2020 – 6th place). 2nd place in the chemical, paper, and cellulose in the *Valor Inovação* 150 ranking.

BASF Venture Capital invested, in 2021, \$4 million in an AgVentures fund, which gathers startups from South America in the areas of the agricultural and food sector. In 2022, the fund will boost the Brazilian Empowered Women project and we will start its implementation.



Check out the video by BASF President for South America, Manfredo Rübens, and the Customer Enabling team on the importance of open innovation practice.



## Innovation stories

**shop@BASF** – We ended 2021 with 16 different online sales platforms – such as Personal Care, Shoe Systems, Animal Nutrition, Pharmaceutical Solutions and Agricultural Solutions – providing products and services for more than 2,000 customers in Brazil and five more countries: Argentina, Chile, Colombia, Ecuador, and Peru. In 2021, we had more news, including the PET Care platform.

**Suvinil Fora da Lata (Out of the Can)** – The *Fora da Lata* is the acceleration program for BASF's decorative paint brand – Suvinil – in partnership with Liga Ventures, an accelerator that connects large companies to startups. The program supports – with financial investment, knowledge, mentoring and training – innovative solutions to generate positive transformations in the paint market. In 2021, we supported three initiatives; among them the startup Residuall, which has been developing since 2015, exclusive solutions for waste management, connecting stakeholders in the reverse logistics chain, enabling waste to be traced from its generation to its final destination. We have also supported a reverse logistics campaign, aimed at customers and painting professionals, which promotes the more appropriate disposal of empty or leftover paint containers.

**Startup Center** – The Startup Center of the Center for Scientific and Digital Experiences, onono, has a network composed of more than 10,000 startups selected in partnership with AEVO (innovation management platform).

**Startups Connected** – Through the Startups Connected Program, in partnership with the Brazil-Germany Chamber of Commerce (AHK), we launched the Circular Economy challenge in search of startups that aim to solve problems in the single-use plastics chain.

**Start2Care** – The Start2Care acceleration program offers the opportunity for startups to participate in a program that combines mentoring by market experts with Liga Ventures' methodology and follow-up, fostering new business opportunities. Liga Ventures – our partner – is an open innovation platform, which connects companies and startups in order to enhance interactions and generate new business.

**Cyber Week** – In an unprecedented way, the 5th Cyber Week (2021), an innovative online commercialization journey in the chemical sector, brought together all of BASF's businesses in South America and sold more than €36 million to more than 700 customers, representing an increase of 600% over the previous year's sales.

**9th Braskem 2021 Design Challenge** – In partnership with Braskem, we launched the 9th Braskem Design Challenge in 2021, which aimed to redesign Suvinil's packaging, BASF's decorative paint brand.



*We see the Design Challenge as a tool to bring different people closer to the development of innovative ideas, with socio-environmental and market impact.*

**Yuri Tomina,**  
Marketing and Market Development Manager for Packaging and Consumer Goods at Braskem.





## onono

In 2021, BASF's Center for Scientific and Digital Experiences (onono) consolidated itself as a reference for collaborative innovation initiatives with customers and partners, going beyond the offer of chemical solutions. It was already born digital, therefore, the experiences extend beyond the physical space.

As transformation catalysts, we have opened a feedback channel, understood the issues of customers and partners, and introduced them into an innovative ecosystem to search for solutions. We have learned, exchanged experiences, and grown with clients in this co-creation journey, offering methodologies to jointly identify new opportunities and prototype solutions, always aiming at sustainability.

We are promoting new connections and joining forces, increasingly expanding BASF – which is innovative in its solutions – allowing exchanges with other players and creating together. In 2021, we worked with industry challenges: cosmetics, automotive, paper, logistics and others.

Following our global strategy, we focused on the customer: with an open and collaborative vision, we added value by offering new opportunities to connect customers, BASF's areas, and the open innovation ecosystem.

In times of physical distancing, we used technology to redefine ourselves, innovate, and keep the transforming spirit of onono alive. We have brought our customers closer and strengthened our role in the discussion of current issues, sharing knowledge about sustainable innovations in the industry, as well as prioritizing subjects such as diversity and inclusion. After all, we understand that innovation only occurs through people, connections, and collaborative work, which multiplies possibilities and opportunities.

As an example, we launched in South America the series “Diálogos para o Futuro”, inviting society to a reflection journey between BASF employees and guests on how to build a more balanced future – bearing in mind emotion, innovation and sustainability. The dialogs took place in three online meetings and were attended by more than 1,000 people – employees, company and public sector representatives, among others.

We have created new content channels: onono channel+ on YouTube, the *Deu Química!* (Made Chemistry!) podcast and we launched the Spanish version of our streaming platform and on-demand content, consolidating our work without borders.

In our facility in São Paulo (SP, Brazil), we created a Circular Economy hub, focused on bringing together different players to speed up the transformation to the circular economy through knowledge, prototyping solutions and hybrid experiences: Phygital Circular Economy Experience Hub.

## Transformative connections in practice at onono

- We had 16 open innovation challenges and 23 co-creation workshops.
- We conducted more than 31,000 connections online and offline.
- We launched more than 75 livestreams and webinars, reaching more than 31,000 participants.
- We gathered around 50 students to participate in the Universities Program, with a technology challenge focused on logistics management.
- With the [e]motion program, around 1,600 participants watched 13 webinars (some of them held in partnerships with other companies and organizations). It is a virtual space to share knowledge, bring people together, and use collaboration to find new directions and solutions.
- It is supported by the pillars: innovation, trends, sustainability, and partnerships.



BASF's Center for Scientific and Digital Experiences (onono)

# Digitalization

**Technology is allowing us to get closer to our customer with agility, transparency, and generating value. We have expanded our operations in new markets and transformed data into quality knowledge to contribute to our customers' businesses, and we have encouraged them to join us on a special journey.**

The digitalization of processes at BASF has allowed more simplification and agility. Each of our employees is responsible for implementing our digital transformation, keeping an open mind to new technologies and work approaches and their daily practices. We have a dedicated area that leads and promotes digital transformation.

## Digital platforms for our customers

In 2021, we launched 12 digital platforms. With easy access, we expanded our solutions portfolio, broadened our market, became even closer to our customers and provided a better experience for sharing content and purchasing.

- **Fazenda BASF** (BASF Farm) focusing on farmers and professionals in the agricultural sector, was launched in September 2021 and ended the year with more than 38,000 views and 8,000 subscribers. It is a content hub that brings information about our solutions, market, and trends, in addition to promoting events, meetings, fairs and "field days" – everything online. It aims to contribute to the farmer in making decisions for their business and to enable dialogue and co-creation.

Welcome to *Fazenda BASF* (BASF Farm)



Digitalization boosts the use of technology in the field.

- We have also launched the sustainability platform at [shop.basf.com](http://shop.basf.com), collecting information, video, our solutions, and digital tools to support the value chain in achieving a more sustainable performance. The platform also connects with BASF's businesses, including discussion of demands or requests for commercial information. There is also a link to access the contents of the Espaço ECO Foundation, established and maintained by BASF, which provides consultancy to the market on sustainability. The Foundation makes available the SustenBOT, a calculator that identifies the degree of sustainability of companies quickly, intuitively, easily, and free of charge.

- In 2021, we updated **Suvnil's digital initiatives**, aiming to facilitate the consumer's journey during and after the painting process. We have combined several solutions from our digital ecosystem on the same platform, making it easier and more directed to the consumer, their searches, and their needs to improve their purchasing experience.

New Digital Range, color choice concept, "What color do you want to embrace?" – based on different lighting and visual aspects.

Online store, which works as a marketplace, and helps partner retailers from 19 Brazilian states to increase their sales.

Virtual Painting – an innovative platform that faithfully portrays the application of colors in a variety of environments – was redesigned and received a desktop version.


Another solution proposed by the brand aims to humanize e-commerce, through a virtual live streaming service platform, which promotes assisted sales and product consultation during livestreams sessions, offering interactive tools and quick access to content, product catalogs and check-out.



- We have also launched **Refinity**, a digital platform that provides solutions for automotive repair shops in South America. It offers customers an efficient digital experience in color choices, business and training and support issues.

**Rudy Bot** is a digital tool from Glasurit (BASF's automotive refinish brand), with a WhatsApp automatic reply system, available in Spanish and Portuguese. It works 24 hours a day, seven days a week, to answer questions from professionals such as painters, paint shop salesmen, colorists, and technicians. Users can submit their questions and Rudy provides advice on:


- color codes (by model, vehicle brand and manufacture year)
- product information
- paint defects
- technical sheet

 [Click here to learn more about Rudy Bot](#)

## AgroStart

Through this platform, which celebrated five years in 2021, we co-create agrodigital solutions for the challenges of the present and the future. We have promoted alliances between startups and companies from other industries, in addition to accelerating projects in the sector. Since the launch, more than 600 startups have interacted with AgroStart. In 2021, we co-created with seven startups from different countries in South America.

At AgroStart Garage, Agrostart's intrapreneurship unit, 25 projects were developed.

 5 years of AgroStart

## Digitalization in Operations

The application of artificial intelligence in our business is now a reality: in the planning of factory shutdowns, in the appropriate use of equipment, in risk analysis and prevention. Currently, we have more than 50 global projects in digitalization, which will bring solutions to will bring solutions to our operational sites. In South America, there are more than 10 projects dedicated to artificial intelligence in operations.



Digitization at the BASF plant





## We source responsibly

### We take responsibility along the value chain.

We stand together with our partners in striving to answer important social questions. For this reason, we have extended human rights training to our suppliers, ensuring that what we establish internally is multiplied throughout our value chain. Together with UN Women and the United Nations Global Compact, we gathered suppliers and BASF employees in an event to guide and raise awareness about ethics, legislation, and human rights.

We understand that responsibility in relation to human rights and compliance with legislation is not the responsibility of a single department, but of everyone. We want everyone to absorb these issues and take them into their social interactions. We are aware and want to use our mobilization power to contribute to our social responsibility.

Our measures and criteria for monitoring and observing human rights are integrated into supplier assessment processes and into our monitoring systems for environmental protection, safety, health protection and product management.

Promoting diversity and inclusion is also part of our strategy in the relationship with our customers, suppliers, employees, and other stakeholders. We believe that together with our partners, we enhance more valuable interactions, foster innovation, and find differentiated solutions.

We practice and experience respect for diversity and inclusion inside and outside of BASF. In 2021, we promoted the virtual meeting Diversity Talks: Gender Equity in the Supply Chain, which was attended by more than 280 participants. During the event, we held a conversation with the participation of WeConnect, our customer Grupo Boticário and our supplier Sodexo Brasil.

## Our engagement stories

### **SustenBOT Compras (SustenBOTpurchasing)** –

In partnership with Espaço ECO Foundation, we developed the automated tool *SustenBOT Compras* for managing suppliers, mapping, and recognizing sustainability indicators and ESG criteria in our value chain in Brazil. The project involved each of the elements that make up the chain in Brazil and has been contributing to fostering traceability and transparency of information. The next stage of implementation includes Argentina, Chile, and Colombia.

### **Together for Sustainability (TfS)** – We are one of

the Together for Sustainability (TfS) initiative co-founders, created by chemical industries in 2011 with the aim of assessing and improving sustainability practices in their chains. In 2021, we held 4 audits and 59 assessments on our suppliers in South America, with 74% of the assessed suppliers showing improvements in sustainability indicators.

### **Integrare Business Integration Center** – The

supply area plays a fundamental role in increasing diversity and inclusion in the value chain, promoting equities. Therefore, we are one of the companies associated with the Integrare Business Integration Center. It is a non-profit association of companies, specialized in connecting micro and small companies (MPEs) –belonging to minorities - with large corporations. Currently we have 16 active suppliers, Integrare partners, accounting for BRL 13.9 million in purchases.

 [Assista ao vídeo Integrare](#)

### **WeConnect International** – We are also associated

with **WeConnect International**, an international network that trains and prepares female entrepreneurs to be more competitive and increase their business prospects with large multinationals. In 2021, we totaled BRL 2.7 million in purchases through this network. The project is being implemented throughout South America (Argentina, Brazil, Chile, Colombia, and Peru).





# We produce efficiently and safely for people and the environment

We respond to emergencies by being well prepared at all times and in all locations. Our operations are key to sustainably outperforming the competition in the long term. Therefore, we are connected – the whole of BASF – to operate as efficiently as possible.

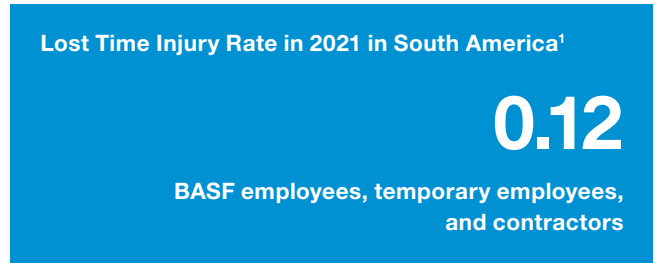
## Health and safety

We value people's health and safety more than anything else. The principle "We never compromise on safety" is firmly supported in our strategy. We guarantee safe working conditions to protect our employees, contractors, and surrounding communities. We prioritize the safety of factories through prevention, work safety, risk control of chemical processes and transport safety. We understand each person as an agent promoting safe behavior in their workplace (and beyond), developing the culture of safety among our own and outsourced employees.

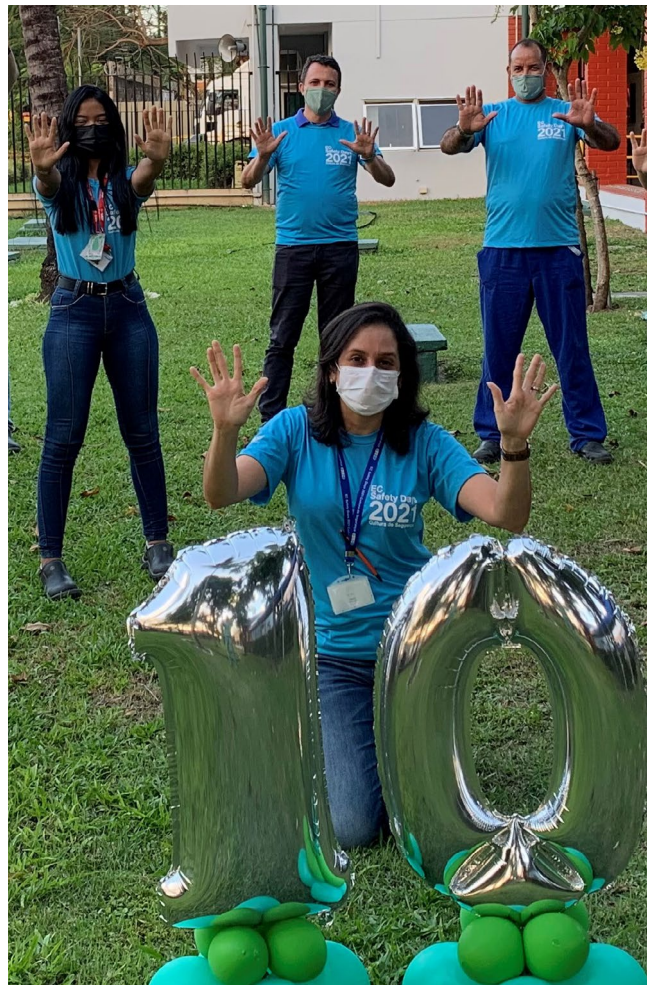


We work continuously to ensure that our solutions are not hazardous to people and the environment when used responsibly and in the correct way. With our commitment to product stewardship as part of the Responsible Care Initiative®, the Global Product Strategy and other initiatives of the International Council of Chemical Associations (ICCA), we are dedicated to continually minimize the safety, health and environmental impacts of our products throughout the value chain – from development to disposal.

In 2021, we achieved reduction in the number of occupational accidents with time-loss in South America. We held at BASF sites in South America the Internal Week for the Prevention of Work Accidents and Environment (SIPATMA), entitled *Vida Segura, Vida Feliz* (Safe Life, Happy Life). During the event, we launched an application to share content, present the activity schedule, and perform learning trails through quizzes. More than 6,000 participation of own and contracted collaborators joined the event online or in-person with BASF and external guests, which addressed safe conduct, zero leakage culture, contractor management, mental health, environmental awareness, emergency plan, among other themes related to sustainability.



<sup>1</sup> The Lost Time Injury rate (LTI rate) is calculated using the sum of lost time accidents and fatalities involving BASF, leasing employees and contractors per 200,000 worked hours. For the 2021 LTI rate, thirteen lost time accidents, no fatality and 20.8 million worked hours were considered. For the 2021 process safety (PSI) rate, there were 24 PSIs.



Employees of the Jaboatão dos Guararapes (PE, Brazil) site celebrate 10 years without accidents

## Environment

We are committed to making a positive contribution to protect the environment – which is why we establish and monitor targets and indicators that ensure the practice of our corporate strategy.

We are committed to the principles of the Responsible Care® program, a voluntary initiative of the chemical industry. It aims for continuous improvement in the areas of environmental protection, health, and safety, which represent the core element of our management.

In 2021, we registered an increase in our indicators (electricity, water, steam, and fuel consumption) due to the 14.1% increase in production in Brazil. The shortage of hydropower – the biggest recorded in 20 years – also contributed to this performance, as it increased the operation of thermoelectric plants in the country.

### We are a global leader in Climate protection, Forest protection and Water management

According to the non-profit organization CDP (formerly known as the “Carbon Disclosure Project”), we are considered one of the world’s leading companies for our water management, forest and climate protection measures. For global acknowledgment with an “A-” rating in all three categories, the organization considered our efforts to protect forests, our environmental management, and our transparent management reporting.

For us, water and waste management is related to circularity. We have aimed to close cycles and use products and resources in the best possible way throughout the value chain, encompassing and generating value for customers and society. Therefore, we adopted several initiatives to improve the management of water resources and solid waste, applying the concepts of circular economy.

## Water Producer Incentive Program

We at BASF, together with the City Government of Guaratinguetá, (SP, Brazil), the Espaço ECO Foundation and other partners, have implemented the Water Producer Incentive Program since 2011. We have encouraged farmers to take care of permanent protection areas in their properties, promoting the preservation of springs and forests and increasing local biodiversity. With this project we want to increase the availability of water in the Hydrographic Basin of Ribeirão de Guaratinguetá (SP, Brazil) – responsible for 95% of the municipality’s public water supply.

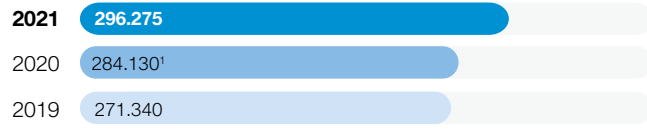
### Ten Year Highlight 2011 - 2021:

- **185 hectares** of existing forest conservation.
- **44 septic** tanks were installed in the rural properties that joined the program.
- **67 farmers** benefited in 2021 with financial contributions.
- Soil conservation: **127 hectares** (with 40 km of terraces built).
- Planting of more than **73,000 native** seedlings.
- **98 hectares** of permanent preservation areas benefited, with the recovery of 54 springs.

## Energy

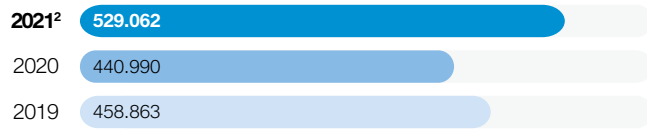
More than 40% of our annual global research and development investments are aimed at products and processes to avoid and reduce greenhouse gas emissions, improve energy, and resource efficiency, and optimize our processes.

### Total electricity consumption (Brazil, MWh)



<sup>1</sup> Including Batistini (SP, Brasil)

### Steam consumption (Brazil, metric tons)<sup>1</sup>



<sup>1</sup> The steam consumed considers the sum of the purchased and internally generated steam and subtracts the exported steam. Including Batistini (SP, Brazil)

<sup>2</sup> The increase in steam consumption was due to the increase in production volumes.

## Emissions and carbon management:

We support the Paris Agreement to limit global warming to less than two degrees Celsius, and the UN Sustainable Development Goal (SDG) number 13 – Action on Global Climate Change.

Our guideline is the Carbon Management Program, implemented globally since 2018.

### Strategic pillars:

- We are increasingly sourcing our energy needs from renewable sources.
- We are relying more and more on energy recovery to produce steam.
- We are working to further improve the energy and process efficiency of our plants.
- We are continuously replacing fossil resources with bio-based raw materials.
- Together with partners, we are pioneering near-carbon-free production processes, especially for emission-intensive basic chemicals.

Our global goals towards climate neutrality:

**By 2050**

Set our net emissions to zero worldwide.

**By 2030**

reduce our greenhouse gas emissions by 25% (reference year 2018)



Camaçari Acrylic Complex (BA, Brazil)



### Emissions of pollutants<sup>1</sup> to the atmosphere per year (Brazil, tons of pollutants per year)



<sup>1</sup> Pollutants: CO, NOx, NMVOC, SOx, Particulate Matter, NH3/other inorganic

### Greenhouse gas (GHG) emissions (Brazil, tons of equivalent CO<sub>2</sub> per year)



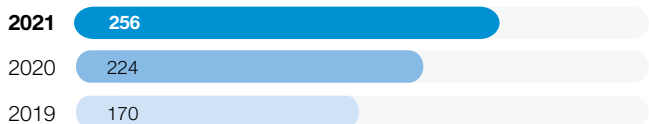
<sup>1</sup> Including Batistini (SP, Brazil)

### Total fuel consumption (Brazil, MWh)



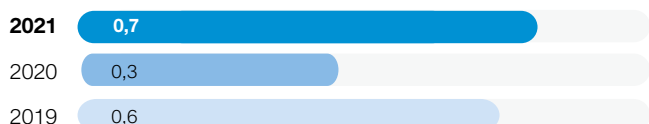
<sup>1</sup> Including Batistini (SP, Brazil)

### Emissions of organic substances to water (Brazil, tons COD<sup>1</sup> per year)



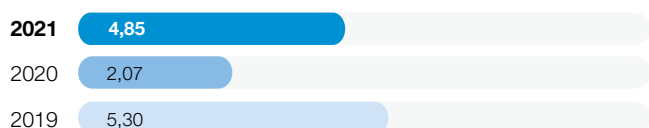
<sup>1</sup> COD = Chemical Oxygen Demand

### Metal Emissions<sup>1</sup> to water (Brazil, tons of metals per year)



<sup>1</sup> Metals = As, Cd, Cr, Cu, Hg, Ni, Pb, Zn

### Phosphorus emissions into the environment (Brazil, tons of phosphorus total per year)



In the environment = internal WWTP after treatment + external WWTP + no treatment

### Nitrogen emissions to water (Brazil, tons of nitrogen per year)



Total Nitrogen = Ammoniacal + Nitrates + Nitrites

### Water

We have set global targets for sustainable resource management in water stress areas by 2030.

### Our goals

Reduce the consumption in cubic meters of water collected by 25% per ton produced in South America by 2025 (base year: 2016).

Between 2002 and 2021, while we increased absolute production volume by 72.4%, we reduced absolute water consumption by 37.2%, thus lowering water consumption per ton of chemicals produced in South America by 63.6%.

### Total Water Supply (Brazil, millions of cubic meters/year)

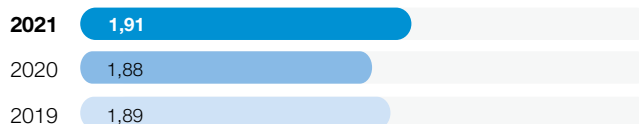


The volume of collected water considers what is taken from surface water sources (rivers), underground sources or public network.

### Water used for cooling (Brazil, millions of cubic meters/year)<sup>1</sup>



### Water used for production (Brazil, millions of cubic meters/year)





## Biodiversity and natural capital

Natural capital management allows us to invest in environmental conservation and forest restoration projects, promoting the valuation of ecosystem services.

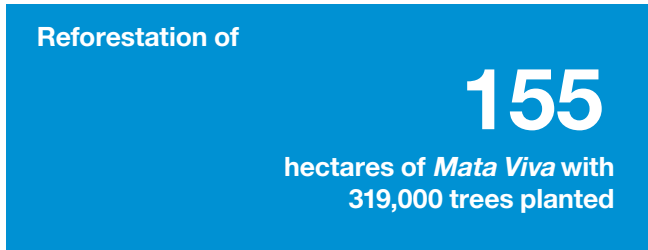
The *Mata Viva*® program reflects our direct contribution to the environment through the management of natural capital. We have developed solutions to protect river and river banks, benefit biodiversity in the Brazilian Atlantic Forest and Cerrado biomes, and contribute to environmental conservation on agricultural properties. Up to 2021, more than 1.3 million trees have been planted and 750 hectares of forests restored.

In our Chemical Complex in Guaratinguetá (SP, Brazil) alone, from 1984 to 2021, we contributed to the reforestation of 155 hectares of native forest with 319,000 trees planted along four kilometers of the Paraíba do Sul river. It is estimated that this investment allowed the removal of 33,500 tons of CO<sub>2</sub> from the atmosphere.



At the Suviril Reserve, at the Paint and Varnish Industrial Complex in São Bernardo do Campo (SP, Brazil), 30 hectares contribute to the preservation of the Atlantic Forest and Brazilian biodiversity. With the support of Espaço ECO Foundation, in 2021, we conducted a study to survey the biodiversity at the site and identified more than 200 species of fauna and flora, and five springs. It is also estimated that the amount of carbon removed from the atmosphere by the forest is 5,160 tons of CO<sub>2</sub> (2011 - 2021).

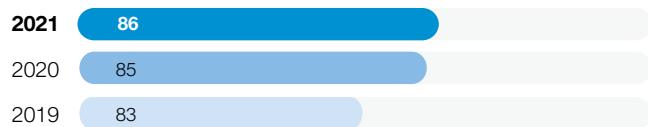
 Reserve Video



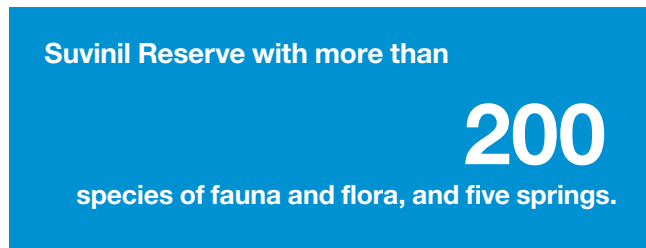
## Circular economy

Our global goal is to double sales with circular economy solutions to €17 billion by 2030.

### Waste recycling rate (Brazil, %)



[Learn more about circular economics on page 12.](#)



## Our environmental stories

**Energy Efficiency Excellence** – We are committed to sustainability, therefore, it is our goal to improve the company's energy efficiency management indicators in South America.

Our actions ensure the increase in energy efficiency and also the reduction of CO<sub>2</sub> emissions, with the Energy Efficiency Excellence Program (Triple E) as a tool for implementation. Triple E is currently present in seven production sites of BASF in South America. In 2017, the initiative enabled BASF to be the first chemical company in Brazil to receive ISO 50001 certification, at the Guaratinguetá Chemical Complex (SP, Brazil), and in the following years continued supporting the certification of the standard for the Demarchi (2019) and Camaçari (2019) units, in Brazil, and Concón (2020), in Chile, where it was also the first large chemical industry in the country to obtain certification. For 2022 and 2023, we are working to obtain certification for the Jacareí and Indaiatuba sites in Brazil, and General Lagos in Argentina, further contributing to raising energy efficiency at BASF South America.

Since its implementation, the Program:

- identified more than 450 improvement opportunities, 180 of which have already been implemented or are in the process of being implemented.
- these initiatives represent savings of BRL 28.2 million per year and a reduction in emissions of 23,700 tons of CO<sub>2</sub> equivalent per year.

**xarvio**® – We have made xarvio® available to the market, BASF's global brand of digital agriculture, which contributes to saving water during crop cycle. In the 21/22 soybean crop, for example, water savings reached 36,000 liters for every thousand hectares – that is, on average, 60% –, as well as reducing the spraying machine use time by 2 hours in the same area.

- 7.5 million hectares registered in Field Manager
- 8,800 users in Brazil and Argentina.

**Field Manager Solution** – Offers, among other management tools – from planting to harvesting – the Digital Weed Mapping, which uses drones to generate infestation maps for localized application of herbicides. With this, the farmer makes rational use of the resources required for weed control, saves time, and contributes to an increasingly sustainable agriculture.

**Demarchi+Eco-efficient** – The *Demarchi+Ecoeficiente* initiative measures and improves the paint production processes at the São Bernardo do Campo (SP, Brazil) plant in consultation with the Espaço ECO Foundation. Since 2010, we have avoided the emission of 3,290 tons of CO<sub>2</sub> into the atmosphere, along with a 55% reduction in the volume of water consumed with the functioning

(bathrooms, kitchen, gardens, drinking fountains, among others) and production of the plant. It also allowed a 16% reduction in energy consumption, contributing to a 21% reduction in greenhouse gases.



**Zero Landfill Program** – We are committed to eliminating, reducing, reusing, and recycling the waste generated in our production processes. To this end, the catalyst plant in Indaiatuba (SP, Brazil), the Paint and Varnish Industrial Complex in São Bernardo do Campo (SP, Brazil) and the plant in Jaboatão dos Guararapes (PE, Brazil) implemented the *Zero Aterro* Program (Zero Landfill Program) – which began in 2015 – preventing 15,000 tons from going to landfills. In addition to this, along with our suppliers, we are able to efficiently recycle debris, compost, or co-process.

The recycling conducted in the São Bernardo do Campo (99.5%), Indaiatuba (99.8%), and Jaboatão dos Guararapes (100%) units deserves a special mention.

*Zero Aterro* in Indaiatuba (SP, Brazil): Achievement of the Zero Waste to Landfill, platinum seal in March 2020, preventing between 99.5% and 100% of the waste produced at the catalyst plant from being disposed of in industrial landfills.



BASF's Paint and Varnish Industrial Complex in São Bernardo do Campo (SP, Brazil).



# We drive sustainable solutions

**We set long-term, voluntary global targets in the areas of economy, environment, safety, employees, and society. Through these targets, BASF's sustainable development is transparent and verifiable.**

Based on our purpose of creating chemistry for a sustainable future, we want to contribute to a world that provides a viable future with a better quality of life for all. Therefore, we work daily to create value for the environment, society, and business with our solutions.

We have reached the end of 2021 with 38 acknowledgments for our work in South America. Granted by customers, press, and different institutions, the recognitions indicate that we are on the right track by focusing on the customer and concentrating our strategy on innovation, sustainability, operations, digitalization, portfolio, and people.

[Learn more about our sustainable portfolio on page 23.](#)



## Our environmental stories

**B-Cycle - Giving Plastics a New Life** – This is a set of BASF solutions for South America, aimed at the market to optimize the mechanical recycling of plastics – whether in the selection, cleaning, or processing, in order to contribute so that the products maintain their quality and characteristics. B-Cycle plays a key role for the value chain to promote circularity, giving plastic a new shelf life.

 [B-Cycle Video](#)

**Partnership with the academy** – Producing biodiesel from oil and residual fat (OGR): together with the Federal University of Tocantins (UFT) we have made this project possible. By presenting new ways to reuse OGR, we combine industry and academy; knowledge and environmental responsibility.

**Collaborative logistics** – We have established a partnership with Avon to share logistics services, aiming to reduce our environmental impact (mainly in fuel consumption), costs, and time optimization. For this, we have considered shipments of superabsorbents on 40 ton road trains, which can generate up to 20 trips/month.

- 109 trips
- CO<sub>2</sub> reduction: 131 tons





# We value people and treat them with respect

The engagement and empowerment of our employees are crucial to our success. We develop networks to establish good relationships with our partners and stakeholders. With our solutions, our responsible business practices, and our social engagement, we want to contribute to a better quality of life for everyone.

## Our people

The year 2021, still with the impacts of the coronavirus pandemic, was a challenging year for companies all over the world, and for us it was no different. Our people made the difference. After all, we have “people” as one of the pillars of our global strategy.

Safely, the administrative employees gradually began to return to the offices, initiating the transition to a new, more inclusive, collaborative, and open work model (learn more on page 42). It is a model that emphasizes experimentation and learning, well-being, and quality of life.

### Demographics data

#### Total number of employees by Group of Countries

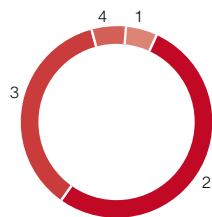
<b>2021</b>	Brazil	4,245		70.9%
Total	South <sup>1</sup>	1,321		22.0%
5,993	Andes <sup>2</sup>	427		7.1%
<b>2020</b>	Brazil	4,215		72.0%
Total	South <sup>1</sup>	1,146		19.6%
5,850	Andes <sup>2</sup>	489		8.4%

<sup>1</sup> Consolidated BASF Group companies in Argentina, Bolivia, Paraguay and Uruguay

<sup>2</sup> Consolidated BASF Group companies in Chile, Colombia, Ecuador, Guyana, Peru and Venezuela

#### Employees by age group – Brazil

1	Up to 25 years old	5.7%
2	Between 26 and 39 years old	51.3%
3	Between 40 and 54 years old	37.6%
4	55 years old or older	5.4%



Number of apprentices - Brazil 16

Women employed in South America

33.2%

Women in leadership positions in South America<sup>1</sup>

35.1%

<sup>1</sup> Includes all consolidated BASF Group companies.



5

### Learning and development

Our mission is to support the development of excellent leaders and employees by providing solutions that foster an engaging work culture and environment.

We encourage a work environment that inspires and connects people, based on inclusive leadership and mutual trust, with respect and dedication to maximum performance. For this reason, we value learning and support our employees with numerous development opportunities that are carried out continuously, with structured processes, training, and guidelines. We have innovated and positioned ourselves ahead of the future challenges of the market and society.

We have used technology to provide our employees with the necessary tools and skills, and we have fostered regular discussions and conversations between leaders and employees about career and performance. Based on these conversations and individual development plans, we encourage training, e-learning, and behavioral and technical webinars.

We have launched the second edition of the *Empreendedorismo na Prática* (Entrepreneurship in practice) Program, in partnership with Fundação Dom Cabral (FDC). The program, open to the public, trains intrapreneurs and encourages the practice of sustainable projects. In 2021, we had almost 300 applicants, approximately 50% of them from BASF and 50% external participants. Within the training, participants can submit projects focused on sustainability to be accelerated by a committee made up of FDC professors and previously trained collaborators. In total, we had 22 reviewed projects and 14 accelerated.

In 2021, we relaunched the global MentforMe platform, focusing on employees in South America. Through this platform, employees have quality content for their development and also have the opportunity to choose their mentor at any BASF unit around the world. By strengthening the disclosure and raising awareness about the tool's importance, we have increased the number of users by 132% and the number of connections (active peers - mentors and mentees) by 100%. Guided by our focus on inclusion (which, for us, extends beyond promoting diversity), we launched specific mentoring programs for black people, women, and people with disabilities.

## Diversity & Inclusion

We want our working conditions to be a driver for innovation, and one way to achieve this is through diversity and inclusion. Therefore, in 2021 we continued our journey to promote a respectful and inclusive work environment, where everyone feels valued for being who they are, the way they are, and thus can establish interactions of greater value, generate innovation and differentiated solutions, and perform at 100% of their potential. We value this attitude in the company and in the interaction between our employees and in the value chain (learn more on page 22).

We have promoted actions to value diversity and inclusion in our ecosystem – in selection processes, talent development and retention programs, and in the supply chain. Through structured governance, we contribute to the effective implementation of diversity initiatives in our company.

### Opportunities for improvement

In order to further understand the perceptions of the teams in relation to our inclusive environment and sharpen the focus of our actions, we conducted a survey to learn about the employees' experience in Diversity & Inclusion and map opportunities to improve our practices. The research was conducted under six key elements: authenticity, sense of belonging, meaningful work, acceptance, fellowship, and fairness. From the results, we conducted focus groups throughout the region to further explore the results and make action plans.

#### Participation of

# 64%

respondents in South America

# 78%

favorability - best scores for sense of belonging (96%) and meaningful work (88%).

## Our Diversity & Inclusion stories

**#BeYouAtBASF** – Launch of the movement #BeYouAtBASF, for everyone to be who they are in the company and express their authenticity.

**Diversity and Inclusion Week** – We have promoted the Diversity and Inclusion Week with seminars addressing embracement, inclusion, and respect in a transversal way, discussing its importance and impacts in the corporate and personal environment. The event keeps the culture of respect for all people, with the promotion of sensitization, awareness, and information activities.

11 virtual events with more than

# 4,000

participants.

**Inclusive communication** – Launch of the Inclusive, Respectful and Embracing [Communication Guide](#), to stimulate a more inclusive language.

**Affinity groups** – Launch of the fifth affinity group, Generations, focused on generational diversity and age inclusion in Brazil (as already implemented in Chile). During the virtual launch, we had 451 participants and 60 people engaged in participating in the group and its activities.

**Generations:** brings generations together, in order to establish a bond of coexistence and exchange of information.

**BYOU:** promotes the respect and inclusion of LGBTI+ people

**Women in BASF (WIB):** focused on gender equity

**Black Inclusion Group (BIG):** focused on racial equity

**Be Different:** promotes the inclusion of people with disabilities

 [Learn more about the other BASF affinity groups by accessing the link.](#)



We promote actions to value diversity and promotion of inclusion in our ecosystem.

**Leadership training** – We have launched the Advanced D&I Program for Leadership, which aims to make the organization's leaders experience and practice equity and inclusion throughout their management journey in their relationship with all employees and other stakeholders. We conduct training with leadership on equity, respect, and inclusion.

**Internship program** – After listening to students in the market (as well as internal affinity groups, among them BIG), we reformulated our internship program. The goal is to maintain our focus on diversity, both in attracting candidates with diverse characteristics and in carrying out affirmative action for minority groups. In addition, we held virtual meetings with BASF veterans and leaders, development tracks, exclusive webinars and mentoring, addressing topics such as digitalization, agile methodologies, and encouragement of volunteer actions.

**SOMA** – *Somos Mais Fortes em Conjunto* (We are Stronger Together) (SOMA) is a new program launched in collaboration between the affinity group BYOU by BASF, along with LinkedIn, Natura and Visa, to promote the social inclusion of transgender and transvestite people through work, culture, health and wellness. During the initiative, we offered more than 54 activities, such as training, consulting, and mentoring. The program benefited 30 transsexual people who live in the *Centro de Acolhida Especial Casa Florescer* (Casa Florescer Welcome Centre), in São Paulo (SP, Brazil).



## Future of work

We envision a modern work culture worldwide in the future, enabling more flexibility about where, when, and how we work, as part of our high-performance culture. In South America, we consider this process to be an ongoing journey that is being co-created with our employees and is based on the experience with new working methods gained over the past years.

This journey will continue to transform our working relationships, so it involves, directly or indirectly, all of our employees.

With this new work model, we seek:

- Inclusive environments that foster collaboration, openness and co-creation
- Leaders who trust and empower their teams
- Employees who take responsibility and act in an entrepreneurial manner
- Experimentation as a key factor in the learning process, including the creation of new working methods
- Mutual commitment to well-being and quality of life management.

Our vision for the future of work aims to leverage high performance, a strong customer orientation, and a distinctive edge for the company in hiring and retaining talents.

In 2022, we are testing and learning new methods in a constantly changing environment. To this end, we encourage an active dialog about what is working and what is not, to find solutions in an open and collaborative way so that we can have the best of both worlds, remote and on-site.

## In practice

- We have offered hybrid model options that support different units and individual needs.
- We have adapted the benefits package and provided for contractual changes.
- We have offered support for employees to ergonomically adapt their home office.
- We are reshaping workspaces to become a mirror and catalyst for our culture: enabling collaboration, co-creation, and innovation.
- We rely on technology to enable productivity and quality interactions.

Besides the changes related to practical aspects concerning the hybrid model, technology, connectivity, and physical spaces, we know that there is much more to be developed along this journey: redefining productivity, working methods, managing quality of life, establishing trusting relationships, ensuring that we have inclusive and bias-free environments, and the emotional health of our people, is what will sustain our success in the Future of Work.

# Social engagement strategy

BASF's social engagement strategy enhances our positive impact by connecting the possibility of solving social challenges to our business strategy. It focuses on scientific education; employability; environmental education; and protection of natural resources and biodiversity. It is based on two pillars:

**Shared value:** it combines the company's contribution to the solution of social challenges with the opportunities generated for the business.

**Corporate citizenship:** contributes to the social development of the surrounding communities.

To achieve our strategy, we act through the sponsorship of social projects, tax incentive, donations, volunteering, community engagement, public-private partnerships, cause-related marketing, social business, alternative business models, and shared value projects.

**Social engagement strategy – Argentina, Brazil, Chile, Colombia, Ecuador, Peru and Uruguay**



## Community Advisory Panel

The Community Advisory Panel, composed of employees and people from different segments of society, maintain a channel of dialogue to discuss matters of common interest related to the environment, health and safety between the company and the surrounding community. They are located in Sao Bernardo do Campo (SP, Brazil) and Guaratingueta (SP, Brazil).

## Our social engagement stories

### Shared Value Projects

**Shared value projects contribute to socio-environmental development and, at the same time, generate profitable business.**

**Allin Kawsay (Peru)** seeks to improve the quality of life (and profitability) of potato growers in the region.

The program is focused on two pillars:

- 1 Increase crop productivity and profitability
- 2 Train farmers in good practices – with information about the growing and harvesting process.

In addition, they receive financial aid and other measures that contribute to boosting their business. In 2021, we conducted 24 qualification courses with the participation of 2,970 farmers.



**PASOS Project (Bolivia)** The project focuses on improving the quality of life of small potato growers in Bolivia by contributing to sustainable production. We, at BASF, in partnership with Interagro and Diseragro, offer personal protection equipment and field training for the correct application of products, use of technology, and crop protection. Together with our experts and farmers, we seek to improve the quality of life for the entire community. During the year 2021, the project was implemented in the city of Cochabamba, where two training sessions were held for more than 140 farmers, with the delivery of 100 personal protection kits.

**Cool Plastic (Chile)**, by The Waves Company (Chilean company organized by the La Boca Beach Surf Club). It seeks to implement circular economy processes in the city of Quintero and the Comuna de Concón, through the transformation of waste into raw material, which will serve as a basis to elaborate new products for later commercialization.

**Algodón Fibras del Corazón (Colômbia)** helps cotton producers to increase their business, modernize their crops, making them more competitive. It also contributes to improving the quality of life of the farmers linked to the program and their families.

- We have disseminated best practices in farming.
- We have organized training processes in safe and efficient crop management.
- With the support of Espaço ECO Foundation, we have carried out a social diagnosis to identify key issues around the needs of the professionals.
- We have promoted the implementation of personal protective equipment use and self-care methods for farmers and farm workers.

Our achievements in 2021:

- Participation of 200 professionals.
- Increased profitability for producers by up to 17%.
- Optimization of 60% of the time for agronomic work, with less exposure of the applicator.
- Increase in the use of Personal Protective Equipment (PPE) by 100%.
- Implementation of 02 voluntary training courses in entrepreneurship.

**Papa Sostenible (Colombia)** contributes with the dissemination of good agricultural practices (focused on farmer safety and environmental protection), developing a solid model of sustainable agriculture that benefits the environment and rural communities in Alto Veladero, Santa Ana, and Quirusilla. With a duration of two years and supported by distributors and local partners, the project impacted more than 250 farmers and their families, with an increase of about 20% in their income.

**Espacio Inclusivo (Chile and Uruguay)** (Inclusive Space) is carried out in partnership with clients and professional training centers in the automotive refinish sector. Through it we have qualified young people in Chile and Uruguay for the profession. In Chile, since 2010, the project has already prepared 586 professionals for the professional market, of which 76 in 2021, including people with disabilities.



Algodón Fibras del Corazón project, Colombia

# Our social engagement stories

## Connect to Transform Open Call

Through the Open Call **BASF Connect to Transform**, we annually select projects of social and environmental impact to be implemented in the cities where we operate, focusing on the areas of scientific education, employability, or environmental education and protection of natural resources and biodiversity. In 2021, in its 5th edition, we selected 12 projects, for implementation in Argentina, Brazil, and Chile.

### Argentina

- Solar Lighting: a project for teaching and lighting
- Inspiring Schools Towards Sustainability

### Brasil

- Worklab
- Empower
- Creative Economy, Audiovisual and Entrepreneurship
- Ribeirão do Soldado: Recovery of Natural Resources and Community History
- Income Generation for Women in Poor Communities
- Rising Together: from Need to Opportunity
- Mobilization & Sustainability – Ecotransformers Program – Stage II

### Chile

- With the Strength of a BASF Woman
- Digitalize your Business with BASF
- Solar Energy for Recycling



Solar Lighting project, Argentina.

## Law Incentive Projects

During 2021, as part of our social engagement strategy, we sponsored 38 projects through tax incentive laws (33 in Brazil, 4 in Chile and 1 in Argentina), totaling investments of approximately BRL 6.5 million. Among the promoted projects, carried out in 2021, we highlight:

**Biblioteca del Sueños** (Library of Dreams) – In Argentina we implemented this project, to encourage reading and value local literature. The Jardín Sueños Bajitos, located in the peripheral neighborhood of Mujica (Buenos Aires, AR), has a new reading space and a collection of 1,200 books. The project has the support of the social organization El Hormiguero, with the realization of CEC Brasil (Center for Culture, Sports and Citizenship) and the sponsorship of BASF, through the Brazilian Law for the Promotion of Culture of the Special Secretariat for Culture of the Federal Government.

The **Acordes da Compaixão Project** (Compassion Chords) – offers free training on social and emotional skills for 900 educators to apply to their students in the classroom. The project, sponsored by BASF throughout Brazil, is an initiative by NGO Gaia+ and Agropodas, along with the City Governments of Juazeiro (BA) and Petrolina (PE). More than 130,000 people were impacted with the initiative.

**Projeto Leitura no Campo** (Reading in the Field) – We sponsored the restoration of physical spaces and collections in eight community libraries in the Brazilian states of Bahia, Goiás, Mato Grosso, Minas Gerais, Rio Grande do Sul, São Paulo, and Tocantins. The *Leitura no Campo* project is carried out by *Rede Educare* and is sponsored by BASF, through the Culture Incentive Law of the Special Secretariat for Culture. In 2021, seven libraries or reading spaces were refurbished and received donation of collections in Brazil.

The library benefits children from 3 to 5 years old, residents of the neighborhood, who attend the institution twice a week for educational and reading incentive activities. With the new collection, the daycare strengthens its goal of forming children readers.



Reading in the Field project, Brazil.





# The relevance of the chemical industry during the coronavirus pandemic

Since the beginning of the pandemic caused by COVID-19 in 2020, we have understood that our purpose to create chemistry together for a sustainable future, would be essential in helping to minimize the effects of the crisis.

We have assembled a crisis team to work with focus and assertiveness; we have prioritized the health, safety, and well-being of our employees; we have supplied essential products to our customers; and we have worked in different partnerships to support society (with product donations, volunteer actions, and support for low-income communities, among others).

Through collaboration with customers, suppliers, employees, government agencies, and society, we were able to move forward and overcome the challenges posed during the second year of the pandemic. Together, we ended the year with a lot of learning, overcoming, and achievements, combining economic success with environmental protection and social responsibility.

## Society

As a chemical industry, we have made an essential contribution to fighting the health and economic crisis by supplying raw materials to fight the pandemic in key segments such as personal care, health and hygiene, food, nutrition, and essential services. We have helped 39 initiatives to support and combat COVID-19 and invested €261 thousand in South America, impacting 2,2 million people in vulnerable situations with the donation of basic food baskets, alcohol hand sanitizer, hygiene and cleaning products.

In Argentina, to fight food waste and create a social alternative to contribute to reducing hunger rates, we have established a partnership with the Balcarce Food Bank. Through the project, we have collected food surpluses and directed them to communities in social vulnerability. We have partnered with companies such as Volkswagen, McCain, and Zarcam, among others. Since the beginning of 2020, we have collected 39 tons of fruits and vegetables, benefiting more than 1,200 people. Environmentally, the recovered food is not disposed of in landfills, minimizing the impact on the environment.

 [Check out more details of the project in this video.](#)

At the beginning of the pandemic, in 2020, there was a shortage of thickener, one of the raw materials needed to produce alcohol hand sanitizer in Brazil. In view of this, we have sought to support manufacturers and obtained a license to start production of Luviset® 360 at the Guaratinguetá (SP, Brazil) Chemical Complex, – a raw material that works as a thickener in the production of alcohol hand sanitizers. In 2021, we donated 13,000 liters of the product, which resulted in 37,000 500ml bottles, distributed to 148,000 people. In addition, 9.6 tons of *Soluprat Hospitalar Roupas Enzimático*

(for Hospital Clothing), produced in partnership with the distributor Royal Mark (responsible for diluting, bottling, and distributing the product), were donated to health clinics and public hospitals for the hygiene of fabrics, such as bed linen and health professionals' uniforms.

The actions in 2021 also included the donation of BRL 800,000 to expand the physical-chemical laboratory of the Institute of Technology and Immunobiology – Bio Manguinhos/FioCruz to increase the production of vaccines, including for COVID-19.

 [Click here and learn more!](#)

**Volunteering** – We have 17 Voluntary Work Committees in our units in Argentina, Brazil, Colombia, Chile, Peru, and Uruguay, that in 2021 mobilized more than 1,000 volunteers in 75 actions, impacting more than 65,000 people in South America.

Together, the volunteers in South America dedicated part of their work in 2021 to minimize the impacts of COVID-19 and promoted the campaign “*Doe Alimentos para quem tem Fome*” (Donate Food to the Hungry), collecting 1,100 food baskets among employees, plus 20,000 food baskets donated to 29 institutions by BASF.



Volunteers impact 65,000 people in South America.



## Employees

After about a year and a half with the teams working remotely, we started to organize the return to the offices. Still on a voluntary basis and hybrid working model, the employees who had been in home office since March 2020 returned following strict safety protocols. The pandemic caused a transformation in our relationship, adopting a new way of working in a hybrid model (learn more on page 42).

We have attempted to make our employees feel welcome, especially in overcoming the challenges of the pandemic by taking care of their physical, mental, and emotional health. Through the *Estar-Bem Movement* (Well-Being Movement) – focused on the pillars: physical, emotional, social, and developmental well-being – we have organized online physical activities (valuing moments of pause in the routine), encouraged virtual conversation and livestreams with specialists to offer support in the main emotional issues faced at this time. Directed towards employees and their families, it offers experiences and services, such as yoga classes, mindfulness, webinars with specialists, wellness café, with invited collaborators to discuss specific topics.

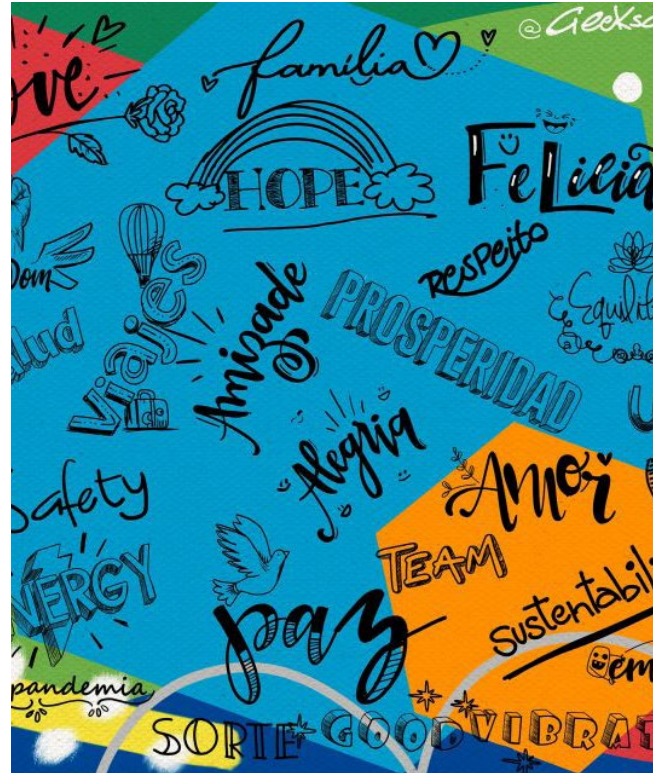


We have launched the “BASF Emotional Health Guide” for South America, with content on emotional health to support the employee (what it is, how to understand if I need help, how I can help, how do I seek help, best practices).

In Brazil, we have received about 500 cases through the “*Sempre-Bem* (Always Fine) Channel”, 86% of which are related to emotional and psychological issues, with 1,500 families assisted.

We have established a partnership for emotional support to employees making specialized therapists available. With this, an improvement of almost 20% was registered in the anxiety and depression levels of the employees assisted.

More than 9,500 check-ins on the corporate Gympass physical activity platform were registered, benefiting more than 1,600 employees and their families.



Employees leave their messages at the year-end meeting.

# Ten-Year-Summary (BASF Group)

Million €

	2012 <sup>a</sup>	2013 <sup>b</sup>	2014	2015	2016	2017	2018	2019	2020	2021
<b>Statement of income</b>										
Sales	72,129	73,973	74,326	70,449	57,550	61,223 <sup>c</sup>	60,220 <sup>d</sup>	59,316	59,149	78,598
Income from operations (EBIT)	6,742	7,160	7,626	6,248	6,275	7,587 <sup>c</sup>	5,974 <sup>d</sup>	4,201	-191	7,677
Income before income taxes	5,977	6,600	7,203	5,548	5,395	6,882 <sup>c</sup>	5,233 <sup>d</sup>	3,302	-1,562	7,448
Income after taxes from continuing operations	-	-	-	-	-	5,592	4,116 <sup>d</sup>	2,546	-1,471	6,018
Income after taxes from discontinued operations	-	-	-	-	-	760	863 <sup>d</sup>	5,945	396	-36
Income after taxes	5,067	5,113	5,492	4,301	4,255	6,352	4,979	8,491	-1,075	5,982
Net income	4,819	4,792	5,155	3,987	4,056	6,078	4,707	8,421	-1,060	5,523
Income from operations before depreciation and amortization (EBITDA)	10,009	10,432	11,043	10,649	10,526	10,765 <sup>c</sup>	8,970 <sup>d</sup>	8,185	6,494	11,355
EBIT before special items	6,647	7,077	7,357	6,739	6,309	7,645 <sup>c</sup>	6,281 <sup>d</sup>	4,643	3,560	7,768
<b>Capital expenditures, depreciation and amortization</b>										
Additions to property, plant and equipment and intangible assets	5,263	7,726	7,285	6,013	7,258	4,364	10,735	4,097	4,869	4,881
of which property, plant and equipment	4,084	6,428	6,369	5,742	4,377	4,028	5,040	3,842	4,075	4,410
Depreciation and amortization of property, plant and equipment and intangible assets	3,267	3,272	3,417	4,401	4,251	4,202	3,750 <sup>d</sup>	4,146	6,685	3,678
of which property, plant and equipment	2,594	2,631	2,770	3,600	3,691	3,586	3,155 <sup>d</sup>	3,408	5,189	3,064
<b>Employees at year-end</b>										
	<b>110,782</b>	<b>112,206</b>	<b>113,292</b>	<b>112,435</b>	<b>113,830</b>	<b>115,490</b>	<b>122,404</b>	<b>117,628</b>	<b>110,302</b>	<b>111,047</b>
<b>Personnel expenses</b>										
	<b>8,963</b>	<b>9,285</b>	<b>9,224</b>	<b>9,982</b>	<b>10,165</b>	<b>10,610</b>	<b>10,659</b>	<b>10,924</b>	<b>10,576</b>	<b>11,097</b>
<b>Research and development expenses</b>										
	<b>1,732</b>	<b>1,849</b>	<b>1,884</b>	<b>1,953</b>	<b>1,863</b>	<b>1,843<sup>c</sup></b>	<b>1,994<sup>d</sup></b>	<b>2,158</b>	<b>2,086</b>	<b>2,216</b>
<b>Key data</b>										
Earnings per share	€ 5.25	5.22	5.61	4.34	4.42	6.62 <sup>c</sup>	5.12	9.17	-1.15	6.01
Adjusted earnings per share	€ 5.64	5.31	5.44	5.00	4.83	6.44 <sup>c</sup>	5.87	4.00	3.21	6.76
Cash flows from operating activities	6,602	8,100	6,958	9,446	7,717	8,785	7,939	7,474	5,413	7,245
EBITDA margin	% 13.9	14.1	14.9	15.1	18.3	17.6 <sup>c</sup>	14.9 <sup>d</sup>	13.8	11.0	14.4
Return on assets	% 11.0	11.5	11.7	8.7	8.2	9.5 <sup>c</sup>	7.1	4.5	-1.2	9.5
Return on equity after tax	% 19.9	19.2	19.7	14.4	13.3	18.9	14.1	21.6	-2.8	15.6
Return on capital employed (ROCE)	% -	-	-	-	-	15.4	12.0 <sup>d</sup>	7.7	1.7	13.5
<b>Appropriation of profits</b>										
Net income of BASF SE <sup>e</sup>	2,880	2,826	5,853	2,158	2,808	3,130	2,982	3,899	3,946	3,928
Dividend	2,388	2,480	2,572	2,664	2,755	2,847	2,939	3,031	3,031	3,123 <sup>f</sup>
Dividend per share	€ 2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30	3.30	3.40
<b>Number of shares at year-end</b>										
	<b>million</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>	<b>918.5</b>

a We have applied International Reporting Standards IFRS 10 and 11 as well as International Accounting Standard 19 (revised) since January 1, 2013. Figures for 2012 have been restated; no restatement was made for 2011 and earlier.

b Figures for 2013 have been adjusted to reflect the dissolution of the natural gas trading business disposal group.

c Figures for 2017 were restated with the presentation of the oil and gas activities as discontinued operations.

d Figures for 2018 were restated with the presentation of the construction chemicals activities as discontinued operations.

e Calculated in accordance with German GAAP

f Based on the number of outstanding shares as of December 31, 2021 (918,478,694)

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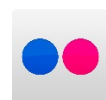
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# Credits

## Corporate Affairs

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### Project Coordination

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You can find the online version of this Report  
on our website: [basf.com.br](http://basf.com.br)

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BASF supports the chemical industry's  
global Responsible Care initiative.



# Activity Report

## 2021

### Espaço ECO Foundation

Espaço ECO Foundation Headquarters  
in São Bernardo do Campo (SP, Brazil)



Established by





# Summary

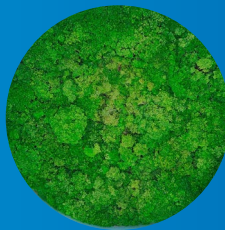
05



## INSTITUTIONAL

Who we are  
Message from Executive Board  
How we add value  
Us, in 2021  
Governance  
Structure

11



## OUR CONTRIBUTIONS TO CUSTOMERS

### Circular economy

Our Role – American multinational personal care company  
More awareness, less plastic – Stellantis  
Spreading knowledge – German-Brazilian Commerce Chamber (AHK)  
Social impact in indicators – BASF  
Together for circular economy – BASF, Henkel, Natura, Solvi, Recicleiros, Wise, Braskem, Bomix and Triciclos

15



### Bioeconomy

Partnership for the future – Brazilian Agricultural Research Corporation (Embrapa)  
Agricultural productivity with sustainability – Brazilian Soybean Strategic Committee (CESB)  
Achieved certification – Bio Óleo  
Environmental performance analysis – Raízen  
Low carbon agriculture partnership – AgroSmart and SustainableCarbon  
Sustainability attributes in the communication strategy – Química Amparo

20



### Natural Capital

A Reserve in our backyard – Suvinil  
Guide to Maturity in Natural Capital – Study of public interest  
Southern Muriqui monkey needs help  
Impact of producers on water availability – BASF and Guaratinguetá City Government (SP)

24



### Value chain

Technology for sustainability in the supply chain – BASF  
Sustainable Finance Guidance – Study of public interest  
Performance management in sustainability in industrial production – BASF

26



## FINANCIAL STATEMENTS





INSTITUTIONAL

# Who we are

**W**e are a Foundation formed by restless people, who challenge themselves to reinvent their own lives in order to evolve and influence the world every day. Since 2005, we have been working to build the one true future we believe in: sustainability. We have taken the path of strategic knowledge, measurement, and innovation to pursue our mission of promoting sustainable development in the business environment and in society.

We connect people and companies for a purpose, aiming at the future. We combine science with information for decision-making by companies based on the ESG strategy. We work with intelligence and innovation to generate and disseminate cutting-edge knowledge, which promotes changes in people, strengthens the business sector, and creates a positive impact on the world.

We are established and maintained by BASF, and we operate independently as a sustainability consultancy to guide and drive the sustainable journey of companies across South America. We understand and respect the journey, challenges and context of each of our clients, which is why we are flexible, providing customized services to add economic, social, and environmental value to companies. We translate sustainability into the language of business, broadening the impact and adding even more people to the ESG agenda.

We work as a Civil Society Organization of Public Interest (OS-CIP). Therefore, we generate positive impacts by reinvesting the financial resources we obtain through commercial projects in relevant causes for society.

## Our commitments

We have obtained the ISO 9001:2008 (Quality Management System) and ISO 14001:2004 (Environmental Management System) certifications, which guarantee the transparency, technical strictness, and commitment of our governance.

We are members of the Global Compact. Our business strategy is based on the Sustainable Development Goals (SDGs) of the United Nations (UN).

Through Annual Activity Reports, we render accounts audited by Ernst & Young and approved by the Fiscal Board and the Public Prosecutor's Office.

**We contribute to the development of our customers' sustainable journey, supporting them with their sustainability strategy through scientific and engagement methodologies.**

**Our experts are driven by restlessness, courage, and creativity, fostering customized and innovative projects.**

**We participate in and promote public debate on issues that impact and transform society.**



## MESSAGE FROM THE EXECUTIVE BOARD

# A world in transformation: environment, relationships and companies

**P**eople and companies have changed. After the COVID-19 pandemic, which began in 2019, the interconnections became evident, further emphasizing the importance of caring for the environment – as a unique and emerging resolution for life. Companies and citizens have strengthened their responsibility for preservation: considering their possibilities and goals. The ESG agenda has become emerging in most companies, which have evolved in their purposes and strategies, setting financial and non-financial goals to their sustainability criteria.

Our mission, which started in 2005, has become even more important and evident. Based on our knowledge of sustainability, we promote discussions with different people in order to add a new dimension of value to the business.

We create and strengthen relationships with our customers, the academic community, the market, and society. We promote discussions and disseminate information in webinars, podcasts, guides and in our social networks. We invest in innovation and digitalization – in our structure and in the tools we make available to customers. Thus, we increase our reach, increase our voice and

strengthen our role as a source of knowledge, an agent of mobilization and awareness. conhecimento, agente de mobilização e conscientização.

Internally, we welcome the new members of the Advisory Board with great pleasure and optimism: they are renowned professionals governance, digitalization, circular economy, and agribusiness. They will certainly make a decisive contribution to the continuity of our strategy.

The United Nations Conference (COP 26), held in Scotland, wrapped up 2021 confirming a trend we had already foreseen and were prepared for. The central topic, climate change, raised immediate reflections around the world, in addition to the development of practical actions to face global warming and accelerate the low carbon economy. Companies have already started to do their part, therefore we see an increasing demand for our scientific methods to evaluate the life cycle and measure the social, environmental, and economic impacts of companies, products, and processes.

In 2021, we challenged ourselves to reinvent our own lives and evolve every day, inspiring and transforming people; innovating and generating business value. The year represented new eras, with new players in sustainability discussions and new public corporate commitments. For us, these are new opportunities for evolution. For companies, it may be the right time to internalize sustainability in their businesses.

In this Activity Report, we aim not only to show what we did, but more importantly, how we did it, understanding the challenge of each sector and each company to support the journey of every one of our customers and partners.

**Enjoy your reading!**



**RODOLFO VIANA**

CEO of the Espaço ECO Foundation



**RAFAEL SELVAGGIO VIÑAS**

Manager of the Espaço ECO Foundation



# How we add value

## SUSTAINABLE JOURNEY

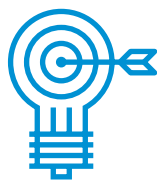
AFEE promotes a sustainable journey along the value chains in an integrated manner, aiming to offer ESG solutions and add a new dimension of value to the business.



## US, IN 2021



Project revenues in 2021:  
**R\$ 1.9 million**



NPS (satisfaction with projects executed):  
**91%**  
of customers  
**2020: 94%**



**36 projects**  
in progress  
**164%**  
of projects executed  
(started and completed in 2021)  
**2020: 116%**



**64 completed projects**  
**2020: 47**  
15 professional experts

### **We operate with an ESG focus**

Part of 2021 was dedicated to improving our knowledge and technical capacity in ESG, bringing substantiation and innovation to our concepts and tools. The in-depth study of the topic and the availability of information for all people through different channels allowed us to strengthen our ecosystem and our communication as avant-garde and relevant source of knowledge, agent of mobilization and awareness.

### **We elaborated an ESG Glossary**

We prepared the [ESG Glossary](#), which democratizes the topic and clarifies around 180 terms, words and expressions used among corporations, such as: GHG Protocol, green taxonomy, displacement of emissions, shared value, among hundreds of others.

### **We conducted a series of webinars**

The series of five webinars “When in doubt between ESG or sustainability, do both”, launched in 2021, was attended by experts from the Foundation and guests from different sectors to promote the exchange of ideas on the themes and

exemplify how this is in practice, impacting society and business in a positive way. The topics covered reflect demands and trends, such as climate change, sustainable finance, circular economy, and corporate governance.

### **We launched podcast platform**

We launched the [Ecoar Podcast](#) series, which addresses topics related to companies sustainability journey. It enables connection and exchange of experiences, promoting co-creation. The initiative aims to articulate and strengthen the debate on the main topics related to sustainability in a format and language that is accessible and understandable to all.

### **We held thematic studies**

To direct our ESG studies, we spoke to BASF representatives in Germany, Argentina, Brazil, Chile, Colombia, Paraguay, and Peru, as well as well-known professionals from companies in different sectors. Therefore, we formed ESG Working Groups specialized in the following themes: carbon credit protocol; biodiversity and natural capital; [sustainable finance](#); social; and governance.



Espaço ECO Foundation Headquarters in São Bernardo do Campo (SP)

# Our Governance

We show the way for companies to achieve the best corporate governance practices. Therefore, we are also an example, being committed to transparency, fairness, accountability, and corporate responsibility.

Our governance structure is made up of an executive board and three boards (Curator, Fiscal and Advisory) that together ensure the transparency, reliability, competence, and agility required for decision-making.

The Executive Board and the Boards (Curator, Fiscal and Advisory) meet periodically to address strategic management issues, ensuring effective and proactive action.

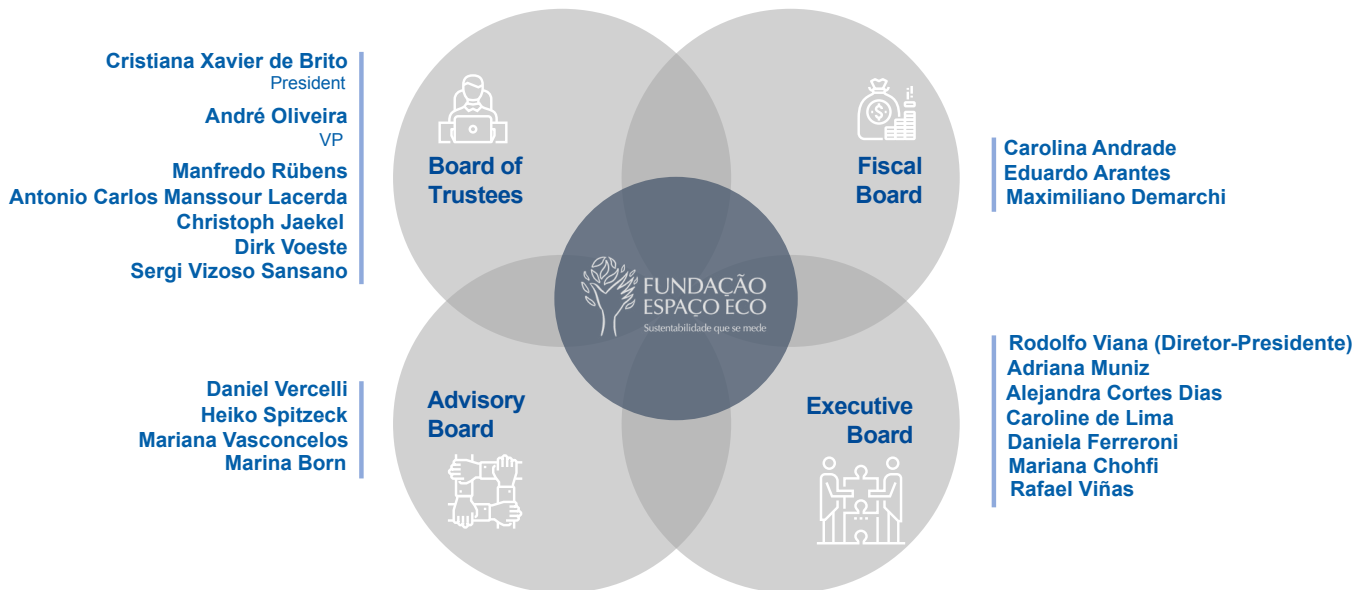
The Foundation's main decision-making body is the Board of Trustees, which ensures compliance with our bylaws, approves the Annual Work Plan, discusses and approves our accounts and

financial statements. It also appoints the other governing bodies. The Board is chaired by Cristiana Xavier de Brito, BASF's Institutional Relations and Sustainability Director for South America, who also leads the company's Sustainability Committee for the region.

The Fiscal Board examines the accounting books and other documents, as well as provides its opinion on the balance sheets and financial and accounting reports, thus supervising the management of the Espaço ECO Foundation. It verifies compliance with legal and statutory duties.

The Executive Board is led by the CEO of the Espaço ECO Foundation, Rodolfo Viana. It operates together with BASF's sustainability board (creator and maintainer of the Foundation), which enables the exchange of experiences and an increasing current and innovative performance. The Executive Board assists the Foundation to operate in accordance with its purpose and social function. In addition, it enables and disseminates the purposes and principles of the Espaço ECO Foundation.

## Current and new members of the Boards



# Learn more about its members: Conselho Consultivo:

The Advisory Board was formed in 2021 and, like the other Boards, has three-year mandates. Formed by external experts who are references in their areas of activity, it advises and provides insights to the other Boards, considering best practices, trends, risks and changes in the scenario.

It also contributes to expanding the Foundation's ecosystem and, when necessary, participates in the solution of technical issues. Together with the Advisory Board, we can expand partnerships in the region - working in consultancy and projects with social interest, -, connecting (in innovative ways) businesses and organizations in their sustainability journeys.



### Mariana Vasconcelos

Agrosmart Founder, a company dedicated to providing farmers with strategic data through artificial intelligence (AI). Its weather models and irrigation recommendations allow farmers to increase the productivity of their crops by saving water.



### Heiko Spitzack

Professor and manager of the Sustainability Center at *Fundação Dom Cabral* - FDC. Experienced in Corporate Counseling and Doctorate in Business Ethics from the University of St. Gallen, as well as a Master in Business Administration (European Studies) from the University of Bamberg.



### Daniel Vercelli

General Manager of Manuia, consultancy with expertise in disruptions, generation of sustainable growth strategies, stakeholder management and implementation of cultural changes.

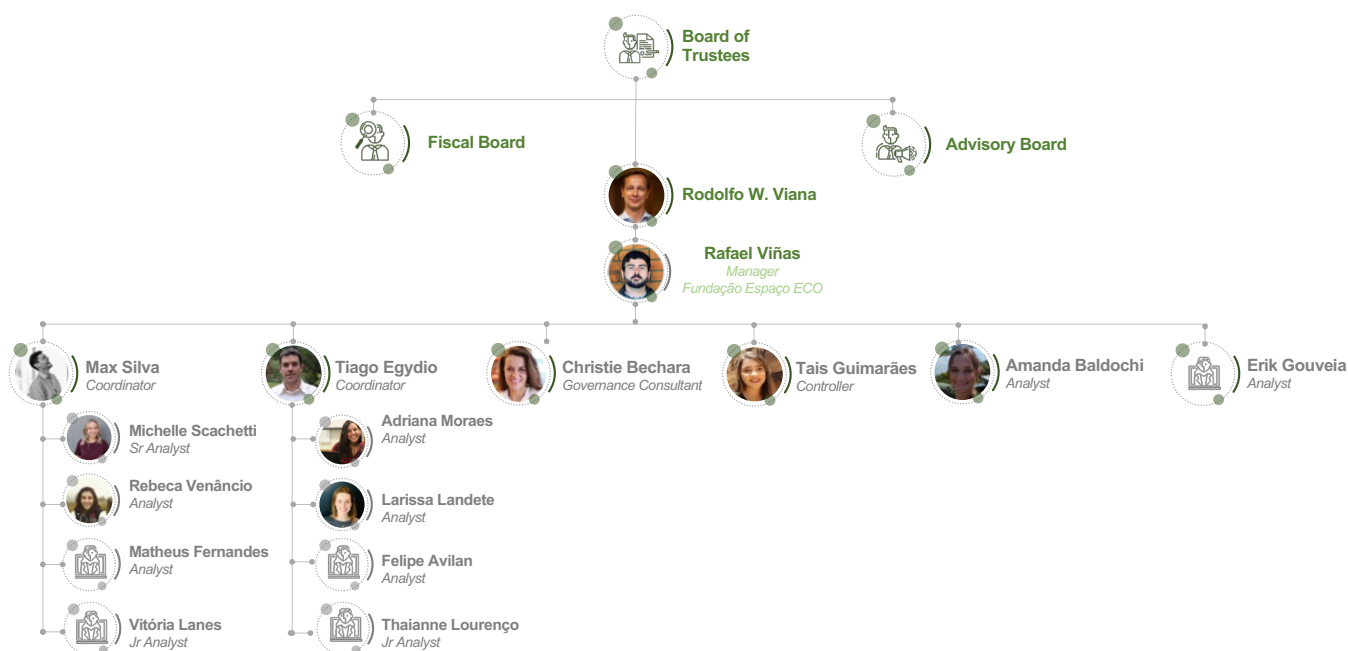


### Marina Born de Engels

Former executive director of Caldenes and former president of RTRS, she is very involved with Sustainability and Biotechnology, as it impacts food production in food producing countries in Mercosur and around the world. Strong supporter of the Circular Economy.

## Structure

Our team of experts translates science into the language of business, bringing sustainability into the daily lives of organizations.



1 This is the representation of the structure of the Espaço ECO Foundation prevailing in 2021. Analysts Michele Scachetti, Felipe Avillan and Matheus Fernandes were succeeded by other professionals throughout the second half of the year.



# Our contributions to customers and society



We support and drive companies sustainability journey. We follow the main concept that involves Life Cycle Analysis (LCA): reflecting what comes before the development of a product or service and its impacts after use. Therefore, we develop commercial and public interest projects focused on four strategic pillars: Circular Economy, Value Chain, Bioeconomy, and Natural Capital, which correlate supply management, natural resources, and new business models.



# Circular economy

**C**ircular economy is a new way of thinking. It goes far beyond the reuse of waste as raw materials: it aims to transform the processes of reduction, reuse, recovery, and recycling of materials and energy. We create the transition dynamics as we develop more circular solutions and change the perspective on waste to understand it as a resource in the form of raw material. This learning is essential for companies to co-create solutions, joining production and consumption systems in order for them to function as a cycle, making processes more inclusive and efficient, and long-lasting solutions.

## Our role

Combining science and measurement, we support sustainability strategies and product innovations

During 2021, we analyzed the environmental impacts for the production of one type of toilet paper. We assessed how we could contribute to innovation (with environmental gains), based on the study of different scenarios in the Paper Life Cycle<sup>(1)</sup> - including the impacts of raw materials, industrial activities, use, and final disposal of the toilet paper.

The results of the study supported the Sustainability and Marketing team of an American multinational personal care company to develop possible product innovation trajectories based on sustainability criteria. In this way, we contributed to support the company in making decisions that strengthen its positive impact on the environment. In addition, we supported them in building the brand sustainability strategy, as well as in communicating the main attributes to their stakeholders.



<sup>1</sup> Life Cycle Analysis = assessment of the environmental performance of a product and/or service aiming at generating subsidies for decision making at different levels. The methodology is based on the ISO 14040:2009 standards series.

# More awareness, less plastic

We optimize processes and assess products towards innovation driven by reducing the impact of plastic on the environment

Companies have emerged the need to innovate to minimize the impact of plastic on the environment. After all, out of the 79 million tons of garbage produced in Brazil in 2020, 16.8% are plastic<sup>2</sup>.

Stellantis approached Espaço ECO Foundation to help them map out opportunities, solutions and strategies to reduce or replace the use of plastics in their production plants. We based the choices on life cycle studies.

- We assessed disposable paper and plastic alternatives, as well as reusable plastic and steel alternatives to replace the disposable cups used in the company's restaurants and pantries, in the production unit of Betim (MG, Brazil). In this way, besides proposing reusable alternatives, we strove to contribute to cost reduction.
- We assessed and proposed different materials for packaging (metal boxes protected by plastic tarpaulins) used in products transported from Betim to Córdoba (Argentina). When they arrived at their destination, the tarpaulins were disposed of, while the metal containers returned empty to Betim. Other material options were then assessed, with different compositions, so that they could be reused and returned along with the metal packaging.

With these studies, we were able to contribute to the diagnosis regarding the use of plastics. The initial results of the project showed that Stellantis reduced plastics disposal and also reduced costs. In addition, it can identify possibilities for improvements in relation to plastic consumption to idealize new projects.



# Aligning knowledge

Based on science, we generate strategic knowledge to communicate and engage diverse audiences regarding the circular economy

We further strengthened our partnership with the Brazil-Germany Chamber of Commerce (AHK) in promoting the circular economy in Brazil, in various industry sectors. Through this project, we developed an online course (with a 40-hour duration) for the supply chain.

The course provided the conceptual foundations (theoretical and practical) of the circular economy concept, and presented the best practices and trends in relation to the topic. In addition, the training aimed to support the participant to:

- Disseminate knowledge in circular economy to identify potential and new business models, technical and practical knowledge (new recycling techniques, how to manage a circular economy value chain). Considering the pandemic, also note health aspects and Covid-19.
- Understand the importance of the supply chain/recovery chain.
- Emphasize the importance of innovation, new technologies and new business models for the development of circular projects.
- Understand project management tools.
- Understand the main impact measurement tools to design or measure results of circular projects.



<sup>2</sup> Source: overview of solid waste in Brazil 2020 (Abrelpe) and Brazilian Institute of Geography and Statistics (IBGE)



# Social impact in indicators

By understanding and measuring the social impact of this project, BASF can gather strategic information to guide and support its sustainable journey and reflect on how it generates value for society

The Connect to Transform BASF Public Notice selects and supports projects developed by organizations with an impact on the communities where the company has manufacturing facilities. Among the projects supported, focused on waste management, are:

- the Cool Plastic project (from The Waves Company, a Chilean company) implements circular economy processes in the city of Quintero and the Comuna de Concón, by transforming waste into raw material and elaborating products for later commercialization.
- the *Reciclador* project (Chile) offers a comprehensive recycling service, including reuse modules manufactured by the company.

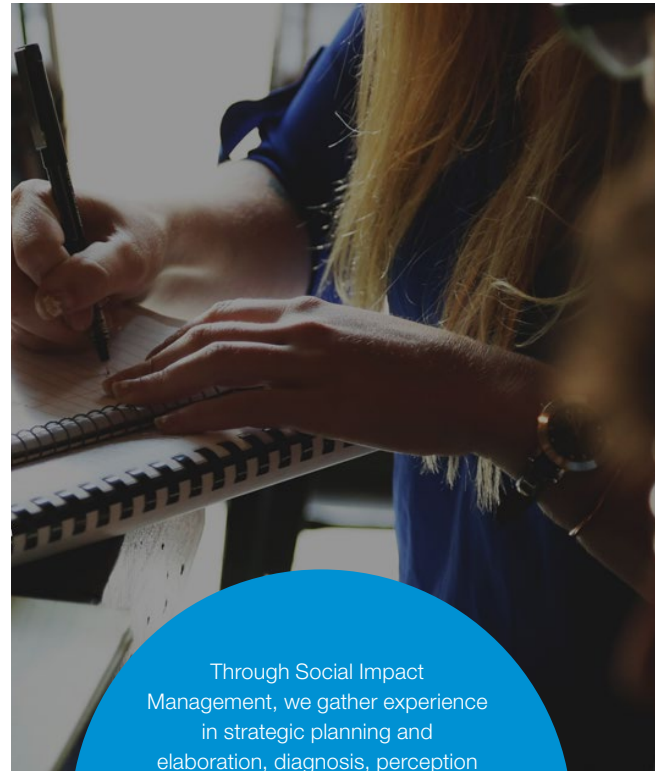
We performed a study to analyze the social impact of the Public Notice, with the aim of understanding its effectiveness and also answering the following questions:

“What would have happened if there was no intervention/investment through the Public Notice?” “What impact has BASF brought to the region?”

Through this measurement, it was possible to understand some benefits directly and essentially related to the investment applied.

We also started the analysis of the social impact of the NGO Ecolmeia project, called *Água Viva*, with environmental conservation actions in the Billings Reservoir (São Paulo, SP) and communities.

We made progress on the subject, conducting training to internalize the evaluative culture and strategic use of the social impact on BASF's business. 25 professionals directly linked to these social programs participated, with a view to expanding these training courses for BASF leaders and strategic areas such as Innovation and the Value Chain.



Through Social Impact Management, we gather experience in strategic planning and elaboration, diagnosis, perception analysis, and impact measurement for an efficient management of social projects through methodologies that are already well known and that show the tangible and intangible value of these initiatives.

## MEASURED RESULTS



**+13**  
workstations  
(in both projects)



**86%**  
report being more  
qualified to  
undertake



**+ 2**  
partnerships  
with international  
markets



**42%**  
report an increase in  
family income (above 20%)  
due to the project



# Blockchain to scale the circular economy

We create an innovative solution that adds a new dimension of value to the business

We supported nine companies - BASF, Henkel, Natura, Solvi, Recicleiros, Wise, Braskem, Bomix and Triciclos - in creating a collaborative network that allows mapping, through a digital platform, which materials were collected and separated to be recycled.

The material we delivered to the group aims to help the stakeholders involved in how to promote best practices and results of reverse logistics programs.

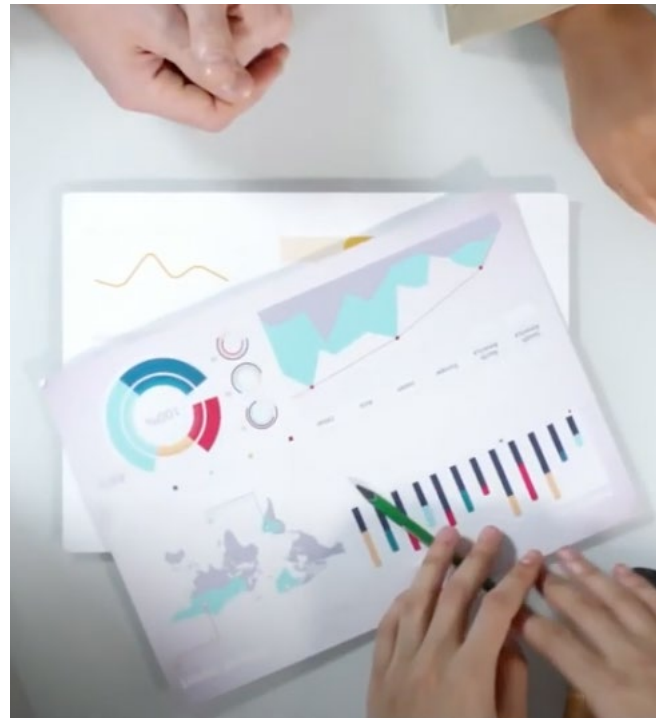
Based on blockchain, [reciChain](#) provides a safe, transparent and reliable environment for sharing information on reverse logistics programs among the members of the recycling chain, allowing the adoption of best practices. For example:

- Investment in additional capacity for recycling materials (e.g. plastic);
- Valid documentation for issuing reverse logistics certificates;
- Origin and quality of post-consumer materials (reducing the amount of waste sent to landfills or dumps).

In this way, the platform called reciChain contributes to encouraging the transition to a circular economy throughout the value chain by increasing the installed capacity for recycling waste, especially plastic. At the same time, it has a positive social impact by formalizing inclusive jobs in cooperatives and other sorting facilities, recyclers, new packaging converters, industry, and product manufacturers.

## Business impacts from the pilots and proofs of concepts delivered:

- Reverse logistics program sorting center digitally transacting more than 5 tons of recyclable materials with more ease and credibility, allowing to understand paths for greater volumes of recyclable material, as well as having reliable information about the quality of its origin.
- Finished product manufacturers involving their business partners in new business models to fulfill their legal obligations in order to add value to their circular economy strategies.



## Did you know?

According to a survey held by the Brazilian Association of Special Waste and Public Cleaning Companies (Abrelpe), in Brazil, about

**40% of waste**

is still sent to dumps and another

**68% of packaging**

is not properly recovered.

# Bioeconomy



**W**ith the implementation of Bioeconomy knowledge, we seek to establish a relationship with the use of natural resources allied to the use of new technologies with the purpose of creating more sustainable products and services.

Through it, it is possible to develop solutions for human health, water, energy and food security, the development of renewable chemicals, the increase in agricultural and energy productivity from the lowest environmental impact.

## Partnership for the future

**We develop criteria and arguments for ranking the health impact of agrochemicals**

For 20 months, we and the Brazilian Agricultural Research Corporation (Embrapa) strengthened our partnership by joining multidisciplinary teams to assess the impact of agrochemicals on human health and the environment, considering the Brazilian scenario. With the analysis, we launched PestLCI Consensus v.1.0, a model that estimates the fractions of agrochemicals that are emitted to air, soil, surface, and groundwater. We used as a baseline specific information from the application scenario, such as application mode, crop and its stage of development, information from the treated area, and the physical-chemical properties of the agrochemicals.

While helping to reduce uncertainties regarding agrochemicals - by developing publicly available arguments - we launched an effective tool for both experts in Life Cycle Analysis and professionals with no experience in the subject. This is because the model allows for the expansion of studies of environmental impacts and provides subsidies for the development of safer technologies for the construction of public policies and programs to rationalize the use of agrochemicals in food production.

The project also contributes to the fulfillment of the United Nations 2030 Agenda and meets the Sustainable Development Goals (SDG 12 - more specifically goal 12.4, which seeks to “achieve the environmentally sound management of chemicals throughout their life cycle in order to minimize their adverse impacts on human health and the environment”).

**Click here to learn more about PestLCI Consensus v.1.0, in an article that we wrote together with Embrapa.**



# Agricultural productivity with sustainability

We develop classification criteria and integrate indicators that encourage best practices among soy producers

Between 2019 and 2021, we conducted an Eco-efficiency Assessment (AEE)<sup>3</sup> study for the Brazilian Soybean Strategic Committee (CESB) to adopt sustainability criteria in a contest promoted by the entity. We assessed producers who participate in the annual “CESB Maximum Productivity Challenge”. In addition to analyzing which farmers produce the most in Brazil – and, at the same time, are the most sustainable (producing better and more sustainably) – we compare individual results with the average production in the region (South, Southeast, Midwest, North and Northeast, based on Agrianual: market indicators referring to the consumption needed to produce a ton of soy in the region).

For the study, we customized our AEE tool, in partnership with professionals from BASF in Germany.

In addition to contributing to the award, the entity also promotes best practices, as a reference for the market.



## Certification obtained

Measurable data contributes to a careful and transparent evaluation for recognizing biofuels in the Brazilian energy matrix

The Foundation advises *Bio Óleo*, a Brazilian biodiesel producer in Mato Grosso, to help it obtain *RenovaBio*, one of the country's most important certifications in biofuel production. In February 2021, *Bio Óleo* received authorization from the *Agência Nacional do Petróleo, Gás Natural e Biocombustíveis* (ANP) to issue CBIOs<sup>4</sup>, the program's decarbonization credits.

We contributed to the achievement of *RenovaBio* by providing technical assistance in all the procedures necessary to enter the program, focusing on filling out the *RenovaCalc* - carbon emission calculator and calculating the Environmental Energy Efficiency Score (NEEA) and the total CBIOs that the plant can emit with the carbon dioxide emissions reduction.

The CBIO calculation is based on the volume of tons that the plant stops emitting in the production of biofuel. For every one ton of CO<sub>2</sub> that the plant stops emitting, it is entitled to 1 CBIO.

The certification obtained is valid for three years. We continue to support the plant by providing consultancy and support to the processes.

<sup>3</sup> Eco-efficiency Analysis verifies the environmental impact in proportion to the cost-effectiveness of a product. It also helps to identify ways to improve environmental impact and costs. The eco-efficiency analysis was most recently validated by NSF International in 2016. It complies with the ISO 14040: 2006 and 14044:2006 standards for environmental life cycle assessment. The life cycle costs and aggregation to an overall eco-efficiency assessment are based on the ISO 14045:2012 standard.

<sup>4</sup> According to the Ministry of Mines and Energy, 1 CBIO is equivalent to 1 ton of avoided emissions, which is equivalent to 7 trees in terms of carbon capture. By 2029, greenhouse gas emissions representing the planting of 5 billion trees will be offset, which is equivalent to all the trees in Denmark, Ireland, Belgium, the Netherlands, and the United Kingdom combined.

# Environmental performance of Sugarcane

Through indicators, we contribute to the analysis of environmental performance in the sugarcane production process, allowing for better communication and more assertive decision-making

We conducted a study for Raízen - an integrated energy company, present in the sectors of sugar and ethanol production, fuel distribution, and power generation - with two priority objectives:

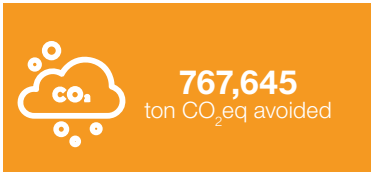
- analyze the environmental performance of the sugarcane production process. Our object of study was the 2019 and 2020 harvests in each industrial production unit (located in eight cities in São Paulo and one in Goiás). We assessed the environmental impacts and, specifically, the carbon footprint (the company's strategic focus, with bold carbon reduction goals).

- compare the environmental performance - of producing one ton of sugarcane - with and without management with products from BASF's portfolio (Muneo, Aprinza, Plateau, Regent Duo, and Opera).



## MANAGEMENT AT RAÍZEN USING BASF PRODUCTS AVOIDED:

**Climate Change**  
(CO<sub>2</sub>eq)



Equivalent to:



**Loss of Fossil Resources**  
(MJ)



Equivalent to:



**Loss of Water Resources**  
(m<sup>2</sup> H<sub>2</sub>O eq)



Equivalent to:





# Partnership for low carbon agriculture

We offer ways to manage carbon in agriculture, from measurement to offsetting emissions and generating carbon credits

From the partnership with the digital platform AgroSmart and SustainableCarbon, we developed a tool to support rural producers in the carbon management of their productive activity. We created, then, a partnership that unites knowledge and innovation.

By proving carbon emission reductions and certifying best practices, we support farmers to position themselves in the market as agents for promoting decarbonization in agriculture. In addition, we enable their properties to be included in the voluntary carbon market, we assess the technical and economic feasibility of agricultural management within the context of the voluntary carbon market, generating a new source of financial resources for professional farmers committed to sustainability.



*We have the knowledge and technology to support farmers and companies to generate carbon credits for Reducing Emissions from Deforestation and Forest Degradation (REDD), Regenerative Agriculture, and other sustainable agricultural practices. In addition, we are also able to support farmers who want to offset emissions by purchasing carbon credits.*

**Marcelo Haddad,**  
Coordinator of Sustainable Carbon



**AgroSmart:**  
technology to support farmers to develop sustainable agricultural practices

**Espaço ECO Foundation:**  
experience in carbon footprint measurement

**SustainableCarbon:**  
meets market requirements for the generation of carbon credits



Low carbon agriculture represents another opportunity for Brazilian producers by associating sustainable production with the generation of environmental services and new business models that can represent a new source of income.

The three institutions together also launched a specific **Podcast** on the topic.

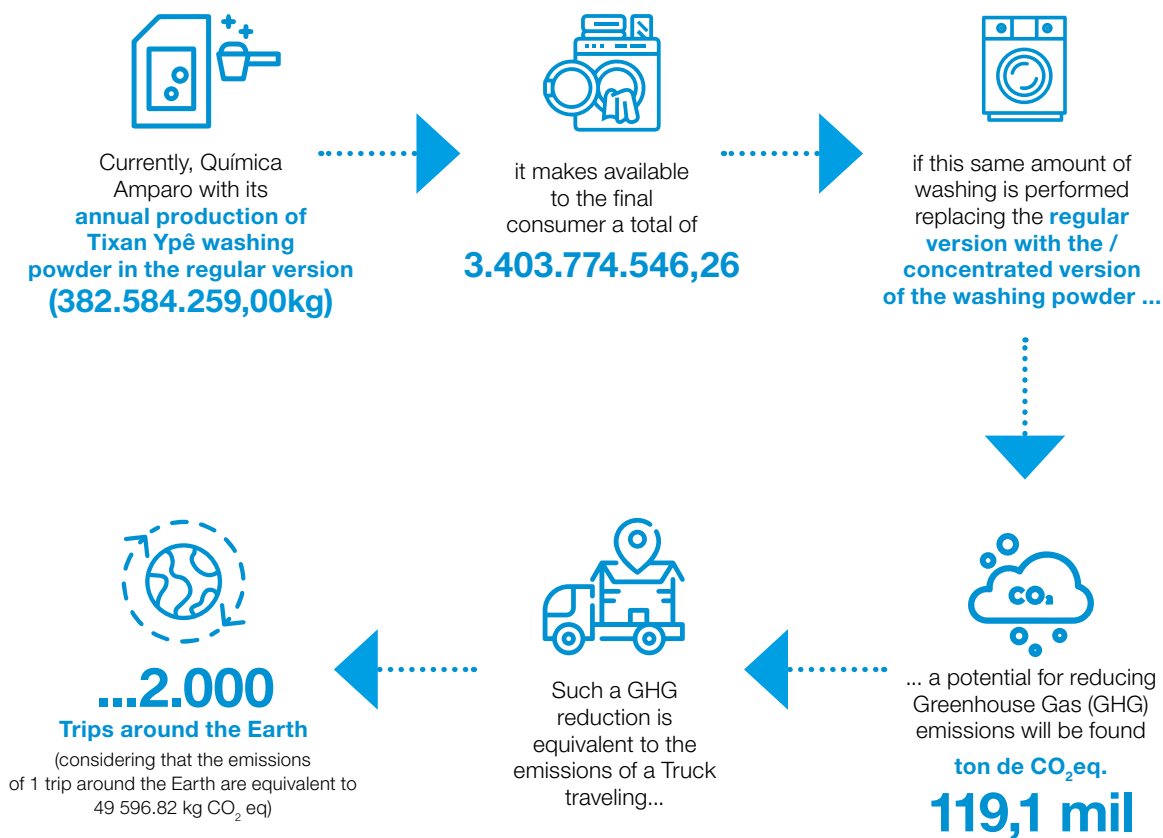
# Sustainability attributes in the communication strategy

With the Environmental Impact Assessment, we translate sustainability into communication with the market, assigning a new criterion of choice and generating value for the product

For three months, we performed the Eco-efficiency Analysis of Tixan Ypê washing powder – in its concentrated and regular versions. We also supported the company in sustaining its attributes for consumer communication, which resulted in a Life Cycle Assessment Completion Letter and a video, released on the company's channels.



## Equivalences Climate Change





# Natural Capital

**T**hrough natural capital projects, we know, understand and value the relationship between business and natural capital, aiming to mitigate the risks of scarcity and structuring initiatives that promote brand value and the restoration of degraded areas, in addition to calculating and offsetting greenhouse gas (GHG) emissions.

## A Reserve in our backyard

Biodiversity mapping adds value by allowing the connection between the Suvinil Reserve and the most recognized ESG indicators in the world market

The biodiversity of the fauna, flora and water resources of the Suvinil Reserve can now be known by everyone. The Reserve is located in BASF's Industrial Complex of Coatings and Varnishes - located in São Bernardo do Campo (SP, Brazil) - and is connected to the Atlantic Forest of Serra do Mar. It is part of the São Paulo Green Belt Biosphere Reserve, internationally recognized by UNESCO.

We, from Espaço ECO Foundation, were in the field during the years 2020 and 2021 to identify, map and record the Reserve in photos and videos. Afterwards, we combined everything into a collection. We assessed how BASF can, from the Reserve, work aligned to 10 ESG indicators of the Corporate Sustainability Index (ISE B3), the Dow Jones Sustainability Index (DJSI), and also to five indicators of the Sustainable Development Goals (SDG) 6, 13 and 15.

In addition to contributing to the preservation of the Atlantic Forest and Brazilian biodiversity, we estimate that the Suvinil Reserve contributes to the reduction of 5,160.31 tons of CO<sub>2</sub>eq from the atmosphere<sup>5</sup>- the equivalent of a 14-ton diesel-powered truck, making 104 trips around the earth.

## Our journey in Suvinil Reserve

### Biodiversity survey

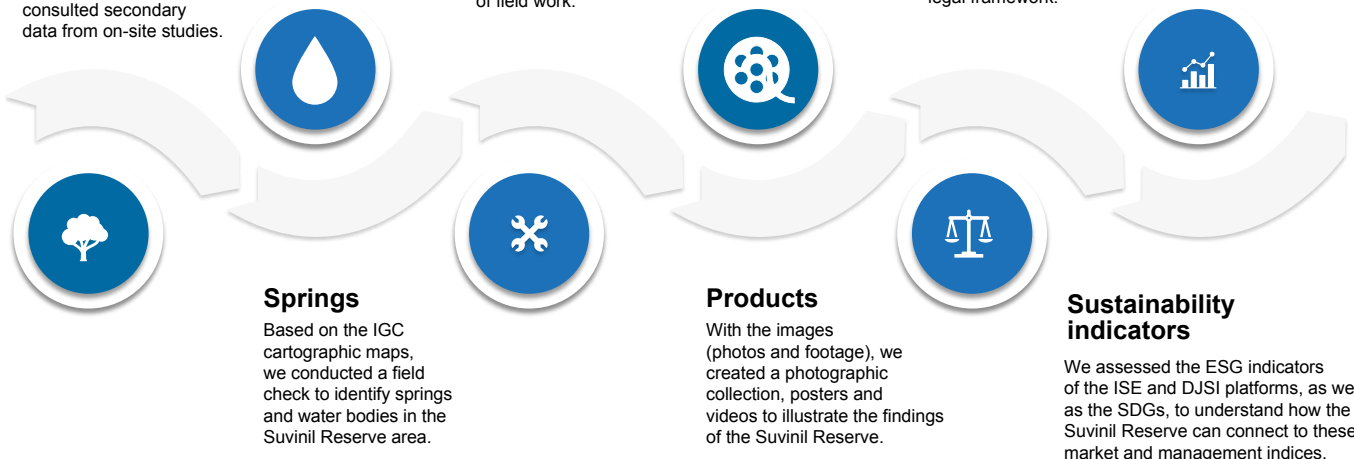
We surveyed the flora and fauna species using the active search and focal point method. We also consulted secondary data from on-site studies.

### Field effort

Throughout 2020, we performed 8 expeditions of 8 hours each, throughout autumn, winter and spring, totaling 64 hours of field work.

### Legal aspects

We assessed the various existing legislation to understand how the Suvinil Reserve area is included in the legal framework.



<sup>5</sup> Considering the Second Brazilian Inventory of Anthropogenic Greenhouse Gas Emissions and Removals (GHG)

## Biodiversity survey study at Suviniil Reserve revealed

- 05** springs, which form small streams - and contribute to the maintenance of the springs that supply the São Paulo metropolitan region.
- 176** plant species, belonging to
- 55** families and 117 botanical genera
- 135** trees
- 41** herbs, vines and ferns
- 85** bird species, belonging to 31 families and 76 genera
- 08** species of mammals,
- 08** Reptiles:  
At least 5 snakes and 3 lizards



### The forest

It has an area of approximately 30 hectares, equivalent to 30 soccer fields. Its vegetation can be divided in two groups:

#### Vegetation in regeneration (50% of the area)

- Natural regeneration of some eucalyptus forests

#### Native vegetation in advanced stage (50% of the area)

- Atlantic forest with a forest structure composed of large trees, biodiverse and with natural regeneration without the presence of grasses

# Guide to Maturity in Natural Capital

Tool provides a reflection on how your company is promoting the management of Natural Capital issues

In 2050, three Planet Earths would be needed to meet the demand for resources for our current lifestyle<sup>6</sup>. Companies are beginning to address this scenario, integrating the governance of natural resource use into their sustainability strategy.

With the conclusion of COP26, countries and the private sector now need to develop effective actions so that the outlined objectives are achieved. Based on the environmental indicators existing in the most relevant ESG indices on the market (such as B3, GRI, Itau Asset, and S&P Dow Jones Index, for example) in their dimensions, we developed a public tool that points out how companies are promoting their management for the following topics: biodiversity and ecosystem services; environmental governance and management; climate changes; circular economy and management of waste and water resources, entitled Guide to Maturity in Natural Capital. With this tool, companies fill out a qualitative questionnaire and receive a diagnosis prepared by categories. In addition, the tool positions the company's performance in five categories, from degenerative to regenerative, considering the organization's practices and engagement in Natural Capital initiatives. With this, we demonstrate the organization's position on the subject, supporting companies to see if their performance is contributing to the construction of regenerative practices (improving existing environmental conditions) or if they still have practices with important challenges for improvement.

The project is registered in the ISBN (International Standard Book Number).



[Guide to Maturity](#)



[How it all began](#)



[Learn more about our backyard](#)

<sup>6</sup> source: World Bank



# Southern Muriqui monkey needs help



With the Emissions Compensation Program, we intend to ensure the life of the largest monkey of the Americas in Brazil

Since 1984, BASF has contributed to the recovery of the riparian forest on the Paraíba do Sul River (located in the Guaratinguetá Chemical Complex, in São Paulo, SP) through the Mata Viva® Program. In 2008, with the project's expansion to partners (rural producers and agricultural cooperatives), Espaço ECO Foundation also added its [emissions offset](#) program to the initiative, calculating the carbon footprint of individuals and companies, and planting native tree seedlings.

Since 2020, the Mata Viva® Program has been offsetting emissions in the Barreiro Rico Forest (Anhembi, SP). It was impacted by three fires in less than six years. This forest is home to the Southern Muriqui, the largest monkey of the Americas, which is critically endangered, according to the International Union for Conservation of Nature (IUCN).

Through partner companies and individuals who donated to the Program, in 2021 we planted 10.000 tree seedlings, contributing to the restoration of an area of 5 hectares at Fazenda São Francisco, where important parts of the of the Barreiro Rico forest is located. In addition, with the resources acquired by the Program in 2021, we were able to connect large forest fragments, which are the home of the Muriquis. In addition to preserving the Southern Muriqui habitat, it is estimated that reforestation will allow the removal of 1,200 tons of carbon from the atmosphere throughout its development cycle.

## Emission Offset Program



### 1. CONTACT

Those interested in offsetting their emissions access the emissions calculator / offset form.

### 2. CARBON CALCULATION

Performing the equivalent CO<sub>2</sub> emissions calculation, called Carbon Footprint, through the data entered by the interested party.

### 3. CALCULATION OF TREES/RESTORED AREA

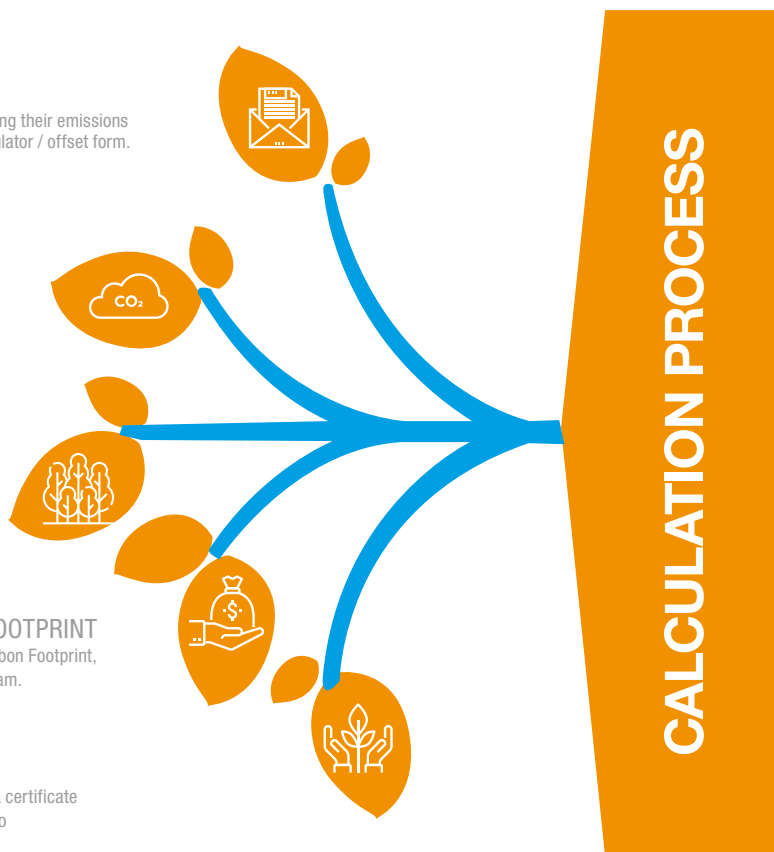
Quantification of trees or area needed to be planted, aiming to offset emissions according to the interested party Carbon Footprint.

### 4. DONATION/COMPENSATION OF THE FOOTPRINT

Total or partial compensation of the interested party's Carbon Footprint, with the option to donate 1 or more seedlings to the program.

### 5. PROGRAM FOLLOW-UP

After the interested party supports the Program, we send a certificate of the contribution performed, follow-up reports, and Imk to visualize the forest restoration site.



# Impact of producers on water availability

We contribute to the strategy and the achievement of sustainability goals of companies

The Water Producer Incentive Program, implemented by the Municipality of Guaratinguetá (SP) and supported by BASF and the Espaço ECO Foundation, in addition to other partners,

encourages rural producers to take care of permanent protection areas existing on their properties. The objective is to increase the availability of water in the Ribeirão de Guaratinguetá Hydrographic Basin through soil conservation practices and management, the recovery of riparian forests and the protection of remnants of native vegetation and springs. In 2021, we performed a study to assess the program's impact so far. We found that, annually, the Program promotes the reduction of 3.4% of superficial water runoff and 18.9% of soil erosion.

Through resources donated by Program Partners, such as BASF and SAEG, the Secretary of Agriculture of Guaratinguetá makes Payments for Environmental Services (PSA) to producers, to invest in the care of water treatment, adopting conservation practices. In 2021, 14 producers participated in the Project.





# Value Chain

**W**e connect, through governance principles, different links of a value chain - towards responsible care and consumption - aligned to the information/perception obtained in our studies.

## Technology for sustainability in the supply chain

We map sustainability indicators and ESG criteria in BASF's value chain, allowing the recognition and valuation of suppliers

We developed an automated tool (SustenBOT) for BASF's purchasing department to perform the manage suppliers: considering risk mapping, managing ESG indicators and recognizing good socio-environmental practices in each of the links that make up the value chain. The tool also contributes to promoting the traceability and transparency of information. In 2021, the questionnaire was sent to 113 suppliers, with 50% of responses obtained and analyzed according to criteria applied by the tool.

In order to develop the tool, we conducted a process of listening to product and service suppliers, addressing Management (with emphasis on governance); Environment – focus on management of greenhouse gas emissions (GHG) and PCF (Product Carbon Footprint); and Social (with emphasis on diversity).

We also performed approximately eight hours of training and qualifications to prepare the Purchasing team for the technical management of the tool (landbot), in addition to meetings to create integrated management mechanisms and generate value for acting with integrity, ensuring that suppliers comply with social and environmental requirements and governance.

### Main advances with the project:

Build and implement a selection of sustainability criteria for assessing categorized suppliers.

- Operate a technological tool that allows the Purchasing department to perform suppliers' "diagnosis"/ assessment (Purchasing SustenBOT).
- Understand and apply assessment mechanics (scores, levels and ranking mechanisms).
- Prepare the Purchasing team to perform any automation adjustments.



# Sustainable Finance

We work as a source of knowledge and innovation, an agent of mobilization and awareness, aligning sustainability with business

What is sustainable finance? What are the rules of the market? What is taxonomy? To clarify these, and many other questions in the sector, we launched the Sustainable Finance e-book.

We understand that the topic is essential to align sustainability with business. Therefore, through a series of in-depth studies, interviews, and research on national and international materials, we analyzed new concepts and scenarios that make sense for new business models.

We met with BASF, Climate Bonds Initiative, Ecoagro, PwC, Rabobank, REABCV, Sitawi and Votorantim Cimentos, as well as other renowned professionals in sustainability and the finance sector and, based on our studies, we published the e-book, which works as a guide and direction for companies.

In addition, we performed the webinar “Viability for Sustainable Finance: commitment, alignment and focus”, with the participation of professionals from Votorantim Cimentos and PwC Brasil. Together with experts, we sought to answer: what risks to take into account in Sustainable Finance or ESG initiatives? Are there concrete elements for communication? What about the ESG agenda in small and medium enterprises? What advances are needed? Thus, we support companies in the development of sustainability strategies, which aim to guarantee transparency and in the identification of which are the topics that society is prioritizing.

 [Click and see ebook](#)



# Sustainability performance management in industrial production

We optimize processes and innovate towards an increasingly eco-efficient management

Aiming at an increasingly eco-efficient management in the production of coatings at BASF's Industrial Complex of Coatings and Varnishes, the company implemented Demarchi+Eco-Efficient, which measures impacts and optimizes processes. The Brazilian plant - by Suvinil and Glasul - was the first in the world to carry out an eco-efficiency process throughout the unit.

The initiative encompasses 11 sustainable practices with relevance to the business, based on studies and analyzes presented by Espaço ECO Foundation®. In addition, it quantifies performance with metrics and indicators monitoring, performed through Life Cycle Analysis of the entire supply chain, from the extraction of around 1,100 raw materials to production.

Located in São Bernardo do Campo (SP), the Industrial Complex has a production capacity of up to 330 million liters of coatings, enamels, varnishes and resins per year.

In 10 years, the Demarchi+Eco-Efficient program has already avoided, through applied improvements, the emission of 3.29 million tons of CO<sub>2</sub> into the atmosphere, the equivalent of 62 trips around the Earth by a truck.

In the period, even with the increase in production, there was a 16% reduction in power consumption, contributing to a 21% reduction in greenhouse gases. In addition, the initiative improved its eco-efficiency by 20%, that is, combining the best environmental and economic performance. Currently, a study by FGV shows that, over these years, the Program has obtained a return on investment: for every R\$ 1 invested by BASF, the project returns R\$ 9 in savings to the company.

## We can mention some of the main positive outcomes:

- Less impact on the environment
- Preservation and creation of value by the company
- Optimization of the use of natural resources
- Identification of risks and opportunities
- Motivation for behavior change

# Financial Statements



## INDEPENDENT AUDITOR'S REPORT ON THE FINANCIAL STATEMENTS

### Opinion

We have audited the financial statements of Espaço ECO Foundation ("Foundation"), which comprise the balance sheet as of December 31st, 2021, and the respective income statements, comprehensive income, changes in equity and cash flows for the year ended on that date, as well as the corresponding explanatory notes, including a summary of the main accounting policies.

In our opinion, the aforementioned financial statements adequately present, in all material respects, the equity and financial position of Espaço ECO Foundation as of December 31st, 2021, the performance of its operations, and their respective cash flows for the year ended on that date, in accordance with the accounting practices adopted in Brazil for small and medium-sized enterprises - Technical Pronouncement CPC PME - "Accounting for Small and Medium-sized Enterprises" and for Non-Profit Entities - Technical Interpretation ITG 2002 - "Non-profit entity".

### Basis for Opinion

Our audit was conducted in accordance with Brazilian and international auditing standards. Our responsibilities, in accordance with those standards, are described in the following section entitled "Auditor's responsibilities for the audit of the financial statements". We are independent towards the Foundation, in accordance with the relevant ethical principles set out in the Code of Ethics for Professional Accountants and in the professional standards issued by the Federal Accounting Council, and we comply with other ethical responsibilities in accordance with these standards. We believe that the audit evidence obtained is sufficient and appropriate to provide a basis for our opinion.

São Paulo, April 25th, 2022

ERNST & YOUNG  
Auditores Independentes S.S.  
CRC-2SP034519/O-6

**Klaas Johnsen**  
Accountant CRC-1SP267150/O-0

## Espaço ECO Foundation

BALANCE SHEETS ON DECEMBER 31, 2021 (IN BRL)

	2021	2020
<b>ASSETS</b>		
<b>CURRENT</b>		
Cash and cash equivalents	750,216	1,299,192
Accounts receivable	209,277	459,289
Advance payments	30,705	24,478
Taxes recoverable	53,068	117,045
<b>Total Current Assets</b>	<b>1,043,266</b>	<b>1,900,005</b>
<b>NON-CURRENT</b>		
Fixed Assets	2,726	3,115
	<b>2,726</b>	<b>3,115</b>
<b>Total Assets</b>	<b>1,045,992</b>	<b>1,903,120</b>
<b>LIABILITY AND EQUITY</b>		
<b>CURRENT</b>		
Accounts payable	212,226	809,061
Tax obligations to be collected	139,249	88,503
Advance payments	5,086	10,484
<b>Total current liabilities</b>	<b>356,561</b>	<b>908,047</b>
<b>OWNERS' EQUITY</b>		
Equity	300,000	300,000
Accumulated Surplus	389,431	695,073
	689,431	995,073
<b>Total liabilities and equity</b>	<b>1,045,992</b>	<b>1,903,120</b>



# ACTIVITY REPORT 2021 - ESPAÇO ECO FOUNDATION

## CREDITS

### **Espaço ECO Foundation**

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