

# 2021 ANNUAL REPORT FREUDENBERG GROUP



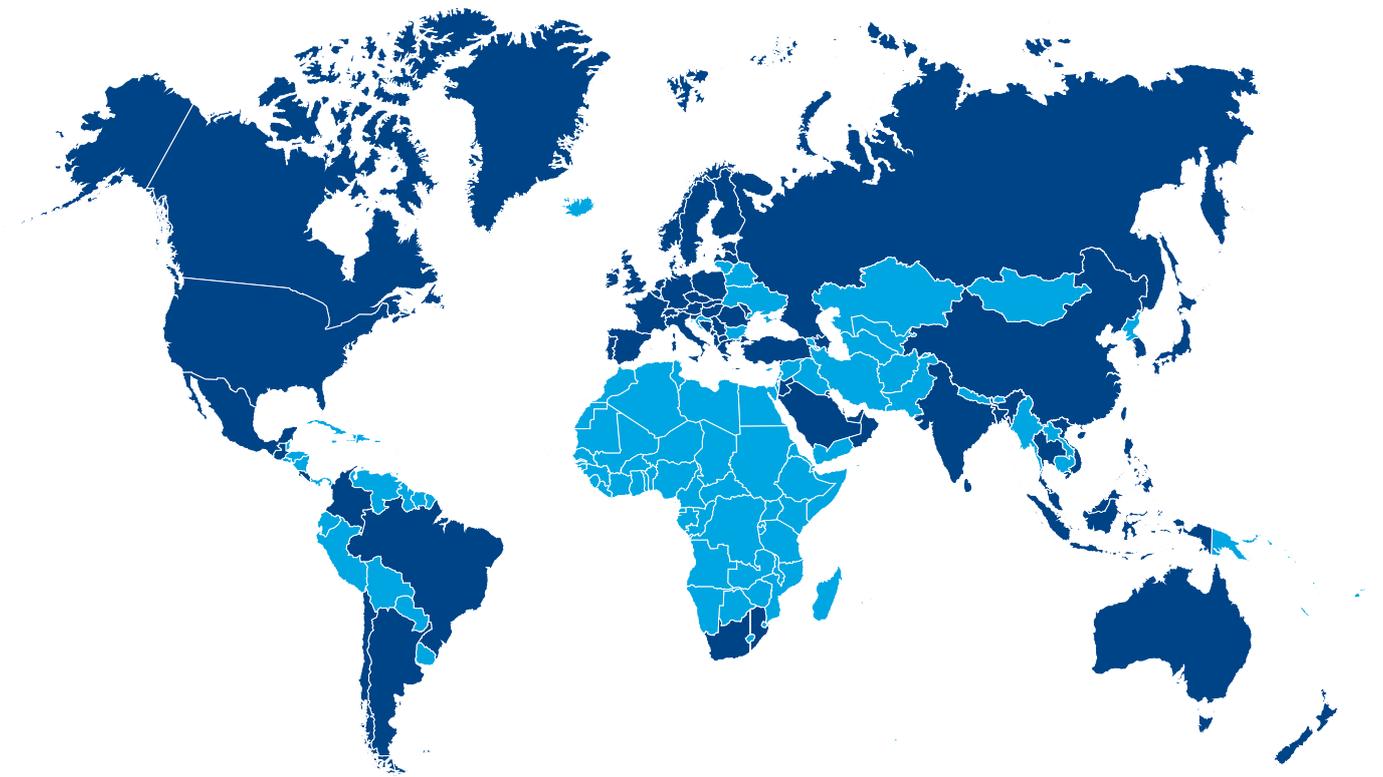
The Freudenberg Group stands for technology and innovation. Together with customers and research partners, Freudenberg employees develop leading-edge technologies, products, solutions and services. The innovative strength of Freudenberg has many facets. Having pioneered innovation throughout its history – from chrome tanning and the development of the Simmerring to sophisticated and high-tech medical devices – the company

is an innovation champion. For Freudenberg, striving together for solutions that support global sustainability is both motivation as well as the concept for success. The Group delivers solutions and answers to tomorrow's questions, today. The company slogan "Innovating Together" embodies the Group's identity. This Annual Report brings you many examples of what makes Freudenberg so unique and different.

# HIGHLIGHTS

[€ million]	2017	2018	2019	2020	2021
<b>Sales</b>					
Germany	1,557	1,641	1,477	1,378	1,584
EU (excluding Germany)	2,434	2,448	2,445	2,133	2,411
Other European countries	441	429	412	605	743
North America	2,502	2,434	2,526	2,259	2,599
South/Central America	326	285	284	194	247
Asia	1,907	2,016	2,115	2,073	2,244
Africa/Australia	179	202	209	199	211
<b>Total sales</b>	<b>9,346</b>	<b>9,455</b>	<b>9,468</b>	<b>8,841</b>	<b>10,039</b>
Consolidated profit	700	602	611	366	587
Cash flow from operating activities	929	828	957	1,139	862
Cash flow from investing activities	-612	-581	-601	-241	-534
Balance sheet total	10,194	10,239	11,355	11,855	12,921
Equity	4,835	5,312	5,820	5,696	6,491
Equity ratio	47 %	52 %	51 %	48 %	50 %
Workforce (as at Dec. 31)	47,653	49,137	48,851	47,777	49,836
Workforce (annual average)	47,657	48,894	49,108	47,909	48,787

# THE DIVERSE WORLD OF FREUDENBERG



**49,836**

Freudenberg had a workforce of 49,836 employees as at December 31, 2021.

**136**

Freudenberg Group employees come from 136 nations.

**60**

Freudenberg operates sites in 60 countries.

# 2021 FREUDENBERG ANNUAL REPORT

## CONTENTS

### COMPANY BOARDS

Supervisory Board	2
Board of Management	3
Executive Council	4
Management of the Business Groups	5

<b>REPORT OF THE SUPERVISORY BOARD</b>	<b>6</b>
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<b>FOREWORD OF THE BOARD OF MANAGEMENT</b>	<b>8</b>
--	----------

<b>TACKLING CLIMATE CHANGE (UN Global Compact Communication on Progress)</b>	<b>12</b>
--	-----------

### COMBINED MANAGEMENT REPORT

#### **Fundamental Information**

Business Model	62
Research and Development	65

#### **Report on Economic Conditions**

Macroeconomic Environment	69
Business Development and Position	72
Earnings Position	74
Financial Position	74

<b>Review of Operations by Business Area</b>	<b>78</b>
--	-----------

<b>Report on Events after the Date of the Statement of Financial Position</b>	<b>105</b>
---	------------

<b>Report on Opportunities and Risks</b>	<b>106</b>
--	------------

<b>Report on Expected Developments</b>	<b>115</b>
--	------------

<b>Freudenberg SE (HGB)</b>	<b>117</b>
-----------------------------	------------

### CONSOLIDATED FINANCIAL STATEMENTS OF FREUDENBERG SE

Consolidated Statement of Financial Position	122
Consolidated Statement of Profit or Loss	124
Consolidated Statement of Comprehensive Income	125
Consolidated Statement of Cash Flows	126
Consolidated Statement of Changes in Equity	127
Notes to the Consolidated Financial Statements	128
Shareholdings	182
Independent Auditor's Report	192

# COMPANY BOARDS

## SUPERVISORY BOARD



1st row from left:  
Wentzler, Schücking, Braun, Cardoso, Freudenberg

2nd row from left:  
Freudenberg-Beetz, Haas-Wittmüß, Kairisto, Pott,  
Schildhauer

3rd row from left:  
Thielen, Towfigh, Zeschky

**Martin Wentzler, Großhesselohe**  
Chairman of the Supervisory Board  
of Freudenberg SE, Attorney

**Dr. Maria Freudenberg-Beetz,  
Weinheim**  
Biologist

**Mathias Thielen, Zürich,  
Switzerland**  
Managing Director of Credit Suisse AG

**Dr. Christoph Schücking,  
Frankfurt am Main**  
Deputy Chairman of the Supervisory  
Board of Freudenberg SE, Attorney and  
Notary Public (until November 30, 2021)

**Martin Haas-Wittmüß, Dreieich**  
Master of Business Administration

**Professor Dr. Emanuel V. Towfigh,  
Bad Soden**  
University Professor,  
EBS University Law School

**Anna Maria Braun, LL. M., Melsungen**  
Chief Executive Officer of B. Braun SE

**Essimari Kairisto, Korschenbroich**  
Member of the Supervisory Board of  
Applus+ Services S.A.,  
Fortum Oyj, TenneT Holding B.V.

**Dr. Jürgen Zeschky, Zug,  
Switzerland**  
CEO and Chairman of the Executive  
Board of HOERBIGER Holding AG

**Carlos M. Cardoso, Incline Village,  
Nevada, USA**  
Principal of CMPC Advisors LLC

**Dr. Richard Pott, Leverkusen**  
Chairman of the Supervisory Board  
of Covestro AG

**Martin Freudenberg, Heidelberg**  
Managing Partner of  
Jumag Dampferzeuger GmbH

**Walter Schildhauer, Stuttgart**  
Managing Partner of  
speedwave GmbH

As at December 31, 2021

## BOARD OF MANAGEMENT



From left: Krauch, Sohi, Loidl and Krieger

**Dr. Mohsen Sohi, Frankfurt am Main**  
Chief Executive Officer

**Dr. Tilman Krauch, Heidelberg**  
Member of the Board, CTO

**Dr. Ralf Krieger, Leimen**  
Member of the Board, CFO

**Ester Maria Loidl, Heidelberg**  
Member of the Board, CHRO

## EXECUTIVE COUNCIL

Members	Business Groups
Claus Möhlenkamp (CEO)	Freudenberg Sealing Technologies
Dr. Andreas Raps (CEO)	EagleBurgmann
Frank Müller (CEO)	Vibracoustic
Dr. Frank Heislitz (CEO)	Freudenberg Performance Materials
Karin Overbeck (CEO)	Freudenberg Home and Cleaning Solutions
Filip Krulis (CEO)	Freudenberg Chemical Specialities
and the Board of Management	
Membership of the above-mentioned six senior executives in the Executive Council takes stronger account of the perspectives of the Business Groups with regard to overarching issues.	

## MANAGEMENT OF THE BUSINESS GROUPS

Management	Business Groups
Claus Möhlenkamp (CEO and Member of the Executive Council), Dr. Theodore Duclos (CTO), Ludger Neuwinger-Heimes (CFO), Dr. Matthias Sckuhr (COO)	Freudenberg Sealing Technologies
Jason Kollatschny (CEO), Bozidar Grcevic (CFO)	Freudenberg Oil & Gas Technologies
Dr. Andreas Raps (CEO and Member of the Executive Council), Dr. Sebastian Weiss (CFO), Dr. Kai Ziegler (CTO)	EagleBurgmann
Frank Müller (CEO and Member of the Executive Council), Marco Altherr (CFO), Dr. Jörg Böcking (CTO), Axel Wersel (COO)	Vibracoustic
Dr. Frank Heislitz (CEO and Member of the Executive Council), Thomas Herr (CFO), John McNabb (CTO)	Freudenberg Performance Materials
Dr. Andreas Kreuter (CEO), Ed Borger (COO), Frank Reuther (CFO)	Freudenberg Filtration Technologies
Satoshi Kawamura (CEO), Yasuhiro Esaki (COO), Yukiyasu Izuta (CFO), Atsushi Shimoda (CTO)	Japan Vilene Company
Karin Overbeck (CEO and Member of the Executive Council), Dr. Arman Barimani (CTO), Kerstin Borrs (CFO)	Freudenberg Home and Cleaning Solutions
Filip Krulis (CEO and Member of the Executive Council), Dr. Jörg Matthias Großmann (CFO)	Freudenberg Chemical Specialities
Dr. Max Gisbert Kley (CEO), Dr. Mark Ostwald (CTO), Kurt Ziminski (CFO)	Freudenberg Medical

# REPORT OF THE SUPERVISORY BOARD



Martin Wentzler (Chairman)

**The COVID-19 pandemic and its effects on most global companies again marked the year 2021. Freudenberg, its employees, and its Partners also felt the impact. Measures for the protection of all employees throughout the Group had to be taken. Corporate management was adapted to the constantly changing situation and varying conditions throughout the world. The Supervisory Board was closely involved in these processes and was kept informed of developments by the Board of Management. There was intensive coordination between the Chief Executive Officer and the Chairman of the Supervisory Board. Furthermore, the Supervisory Board advised the Board of Management on the management of the Group and oversaw and monitored the conduct of business. The Chairman of the Supervisory Board, the Chairman of the Audit Committee, and the Board member responsible for Finance also regularly exchanged information. At the beginning of the year under review, the Supervisory Board approved the strategic planning for the years 2021 to 2023, with a Group-wide focus on sustainability, electromobility, and digitalization.**

The Supervisory Board held eight meetings in 2021. The markets, sales and earnings development, the financial situation and the Group's risk management were analyzed and discussed at all the meetings.

An important topic for the Supervisory Board in the year under review was the Group's approach to

climate neutrality. A comprehensive sustainability project concluded with the development of goals to achieve a 25 percent reduction in CO<sub>2</sub> emissions by 2025 and climate neutrality by 2045.

Furthermore, the Supervisory Board dealt in depth with **acquisitions and their integration** in the Group. In the year under review, Freudenberg Filtration Technologies concluded two acquisitions in the USA. The first involved the Business Group's acquisition of PPA Holdings, Inc., Indianapolis, USA ("Protect Plus Air"). The company is a leading producer of high-quality air filters for residential buildings, mainly sold through retail outlets. In 2020, Protect Plus Air generated US \$118 million in sales with some 940 employees. The second acquisition was the purchase of the business operations of R.P.S. Products, Inc., Hampshire, Illinois, USA. The company also distributes air filters for residential and office buildings through retail outlets and, in 2020, generated sales of approximately US \$41 million with more than 200 employees. Furthermore, Freudenberg Chemical Specialties acquired Deurowood Holding GmbH, Hard, Austria, and the associated shares of DEUROWOOD Produktions GmbH, also in Hard. Deurowood is a globally leading full-range supplier of innovative and safe-to-use chemical additives for paper impregnation and the production of laminates.

A further item on the agenda for the Supervisory Board was project "Balance". The project's aim is to improve local and regional talent development in production and administrative areas with a focus on Asia and North America.

In addition, the Supervisory Board took a decision to appoint Esther Maria Loidl to the Freudenberg SE Board of Management. As Chief Human Resources Officer, she has been responsible for Human Resources and Communication since July 1, 2021. Additionally, she is also responsible for the Freudenberg Regional Corporate Centers.

The **Audit Committee** met five times in the year under review. The first two meetings focused on the annual financial statements and the consolidated financial statements as at December 31, 2020, and the reports concerning these annual financial statements prepared by the auditor. The auditor also presented its evaluation of the standard internal controls applied by Freudenberg. Other issues

addressed by the Audit Committee included the Group's risk management, the work of the Ethics Office, the draft of the EU Commission for a Corporate Social Responsibility Directive and the Freudenberg Group's IT Security. Corporate Audit reported on the status and outcomes of internal audits at each meeting of the Audit Committee.

The **Personnel Committee** met three times in 2021. It consulted on matters such as leadership development, the talent management process, and succession planning in key bodies of the Freudenberg Group.

The **Innovation and Technology Committee** held five meetings. The topics addressed included digital and sustainable solutions in various Business Groups. The committee also addressed the topic of talent management for technology and innovation.

The annual financial statements, the consolidated financial statements compiled pursuant to IFRS, the consolidated management report for Freudenberg SE and the Group as well as the dependent company report 2021 for Freudenberg SE were audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, Germany, and were approved without reservation. The members of the Supervisory Board were provided with the documentation for the annual financial statements and the audit reports in due time. The Supervisory Board approved the consolidated financial statements and the combined management report of Freudenberg SE and the Group as well as the annual financial statements of Freudenberg SE and, following examination, concurred with the auditor's findings. The annual financial statements of Freudenberg SE as at December 31, 2021 are therefore adopted. The report drafted by the Freudenberg SE Board of Management in compliance with Section 312 AktG (German Stock Corporation Act) regarding relations with affiliated companies (dependent company report) was audited by the auditor, who issued the following opinion:

"Pursuant to Section 313 AktG, we have been engaged to audit the report of the Board of Management on relations with affiliated companies for the financial year from January 1 to December 31, 2021, prepared in accordance with the provisions of Section 312 AktG. Based on the results of our audit,

the dependent company report does not give rise to any reservations. In accordance with Section 313 (3) 1st sentence AktG., we have therefore issued the following opinion:

Based on our audit and assessment which were carried out in accordance with professional standards, we confirm that:

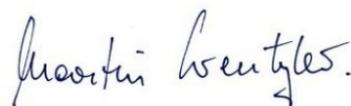
1. The factual statements made in the report are correct,
2. The payments made by the company in connection with legal transactions detailed in the report were not unreasonably high,
3. There are no circumstances in favor of a significantly different assessment than that made by the Board of Management in regard to the measures listed in the report."

The Supervisory Board examined and approved the report on relations with affiliated companies and signed off on the auditor's report. The Supervisory Board's examination of the report on relations with affiliated companies did not result in any objections to the concluding statement by the Board of Management in the dependent company report.

Dr. Richard Pott was reelected to the Supervisory Board of Freudenberg SE for a further term of four years. Anna Maria Braun and Carlos M. Cardoso were elected to the Supervisory Board as new members, also for terms of four years.

The Supervisory Board thanks the Business Group managing bodies and the Board of Management for their prudent actions and successful management of the business. Special thanks go to all Freudenberg employees for their outstanding efforts during another exceptionally challenging year.

Weinheim, March 18, 2022  
For the Supervisory Board



Martin Wentzler  
Chairman

# BOARD OF MANAGEMENT FOREWORD

The Freudenberg Group, like many other global companies, is still feeling the impact and constraints of the COVID-19 pandemic. Along with a number of health challenges posed by the pandemic, we have had to deal with significant raw material shortages, inflation, logistical challenges, extraordinary volatility in demand, and skilled labor shortages.

Despite the difficulties, 2021 was a very respectable year for us. Our roughly 50,000 employees all contributed to the outcome – a heartfelt thank you goes out to everyone. We also launched our new 2021 to 2023 strategic period, focusing on the key topics of sustainability, electromobility and digitalization. In the year under review, thanks to our entrepreneurial success, we continued to invest heavily in future technologies, machinery, and production facilities to secure Freudenberg's future.



Dr. Mohsen Sohi (CEO)

## Diversity as a sign of strength at Freudenberg

Freudenberg has so far overcome the current difficulties comparatively well. In several respects, **this is due to the diversity of the company**: For one, the Freudenberg Group offers a **wide range of products in diverse industries**, combined with a broad **regional presence**. Still, we intend and can improve on our geographical diversity. Our long-term goal is to have an equal presence in Europe, America, and Asia – in production as well as in administration. The aim is to evenly distribute knowhow and expert knowledge across all regions.

For another, the **diversity of our employees** is also a source of Freudenberg's strength. People from over 130 nations work together at Freudenberg. In 2015, we launched our **"Diversity & Inclusion"** initiative. Since then, we have attracted more **women to leadership positions** – and our goal is to improve the

ratio. In the **USA**, we are working to attract even more minority group members to Freudenberg. Speaking of the USA: With its labor market close to full employment in the year under review, it was hard to attract enough skilled workers to our US facilities.

## Strategic topic: "The future of work"

Our corporate culture should make it possible for all employees to contribute their individual strengths. We aim to combine Freudenberg's diverse skills and harness them for the success of the company. Still, we must always bear in mind that Freudenberg is a technology group. Development and production activities are at the heart of our company. Two-thirds of our employees are indispensable assets in our workshops, laboratories, and warehouses. This has been the case during the pandemic as well. We are especially grateful to them and hold them in our highest esteem.

At Freudenberg, we intend to separate pandemic-related needs and fundamental decisions. So once the pandemic is over, a Group-wide project team will be addressing a strategic topic: "The future of work." This is one of the many issues that Esther Maria Loidl, our Board of Management colleague, will be dealing with. A strong addition to the team, she joined our Board of Management in July 2021.

<b>10,039</b>	<b>877</b>	<b>49,836</b>
Sales (€ million)	Operating profit (€ million)	Freudenberg employees

### Business performance figures

Overall, **sales** of €10,038.7 million were significantly above the previous year's figure of €8,840.8 million. This figure incorporates negative exchange rate effects totaling minus €94.9 million. This was mainly due to the exchange rate trend for the US dollar, the Turkish lira, and the Japanese yen. In the year under review, acquisitions contributed €193.3 million to sales. This was offset by divestment effects totaling some €25.4 million. This includes sales from acquisitions or disinvestments until first incorporated into the Freudenberg Group for twelve calendar months or are no longer incorporated. All four Freudenberg Group business areas contributed to sales growth. The Business Groups benefited from the recovery of the global economy and their emergence from the previous year's recession. But growth flattened over the course of the year.

In addition to sales, **operating result** is a key indicator of our financial performance. Our business generated a profit of €877.3 million. This is well above the previous year's level of €669.9 million and is equivalent to a **return on sales** of 8.7 percent. Increased sales volume was the main growth driver. However, a significant increase in raw material prices had a negative impact.

In 2021, even as we achieved considerable savings, we invested in future growth. **Investments in research and development** amounted to €500.2 million (previous year: €446.3 million). This represents 5.0 percent of sales (previous year: 5.0 percent). Furthermore, in the year under review, we invested in new sites such as the Freudenberg Filtration Technologies site in Shunde, China.

Freudenberg measures the effectiveness of research and development activities in the share of new products (those younger than 4 years) as a percentage

of total sales. This now stands at 32.4 percent (previous year: 34.1 percent).

**Consolidated profit** totaled €587.1 million (previous year: €366.1 million).

Our **equity ratio** as of the reporting date was 50.2 percent (previous year: 48.0 percent).

**Liquid funds** at year end totaled €2,186.8 million (previous year: €2,021.4 million).

The **ratings agency** Moody's Deutschland GmbH, Frankfurt am Main, Germany, gave Freudenberg SE, Weinheim, Germany, an "A3" rating with a stable outlook, as in the previous year. This is equivalent to an excellent single-A rating.

### Strategy

In January 2021, the Supervisory Board adopted the Freudenberg Group's new strategic planning. The focus here is on more than 40 strategic business units that have developed their own very detailed strategies tailored to the relevant customer, market, and technology environment. Strategic planning is based on the Freudenberg Group's vision: Freudenberg strives to be one of the most innovative and diversified globally active technology groups.

In the current period up to 2023, sustainability, electromobility and digitalization will remain key issues for the entire Freudenberg Group, alongside customer centricity.

**Sustainability** at Freudenberg focuses on energy and material efficiency to reduce CO<sub>2</sub> emissions. Examples of successful sustainability projects can be found on pages 32 to 37 in the chapter entitled "Responsibility for Society." Revised graphically and in its content, it also serves as a UN Global Compact Progress Report.

Starting on page 12, we show the measures that Freudenberg has taken to implement the Global Compact principles in the past year. They make a contribution to achievement of the UN Sustainable Development Goals.

Climate change is a major challenge of our time. Building on our sustainability strategy, we investigated the opportunities and costs for Freudenberg to achieve climate neutrality as part of our “Sustainability drives Climate Action” project. Our goals: We aim to reduce our CO<sub>2</sub> emissions by 25 percent by 2025 and achieve climate neutrality by 2045.

The topic of **mobility** is closely linked to sustainability. The sector is facing a fundamental transformation towards electromobility. At Freudenberg, this applies in particular to the Sealing Technologies and Vibracoustic Business Groups. At Sealing Technologies alone, we have invested more than €200 million in e-mobility since 2018 – whether in the expansion of battery technology, hydrogen technology or the development of high-tech components for electric vehicles.

When it comes to **digitalization**, our activities are moving in two directions. First, we are focusing on improving the efficiency of our internal processes. Second, we aim to offer digital services that provide added value to our customers. Such services may also be additional digital functions that are built into our products – so-called smart products.

In addition to the strategic planning cycles, Freudenberg once again used its “Janus” project to embark on a journey during the year under review to the world of 2050. An interdisciplinary team analyzed the potential impact of the COVID-19 pandemic, rising protectionism, nationalism (e.g. Brexit) and trade conflicts on the Freudenberg Group’s growth areas and business opportunities.

## Portfolio development

Freudenberg aims to achieve above-market growth. On the one hand, we achieve this with product and process investments and, on the other, through acquisitions of companies that have extensive technical expertise. In the future, we aim to focus on acquisitions outside of Europe. The long-term goal is an equal distribution of sales of one-third each in Europe, Asia, and America.

The Filtration Technologies Business Group achieved this goal in the year under review. Two acquisitions in the USA made contributions to its success: First of all, PPA Holdings, Inc., Indianapolis, USA (“Protect Plus Air”) was acquired. The company is a leading producer of high-quality air filters for residential buildings that are mainly sold through retail outlets. In 2020, Protect Plus Air had some 940 employees and generated sales of US \$118 million. The second acquisition was the purchase of the business of R.P.S. Products, Inc., Hampshire, Illinois, USA. The company also sells air filters for residential and office buildings through retail outlets. In 2020, the company employed more than 200 people and generated sales of roughly US \$41 million.

In addition, Freudenberg Chemical Specialities acquired Deurowood Holding GmbH, Hard, Austria and the associated shares of DEUROWOOD Produktions GmbH, also in Hard. Deurowood is a leading global full-range supplier of innovative and safe-to-use chemical additives for paper impregnation and the production of laminates.

We are also extremely satisfied with the progress we have made in merging Freudenberg Performance Materials with the nonwoven companies Low & Bonar Limited, Edinburgh, UK, and the Filc Group, Škofja Loka, Slovenia, despite COVID-19-related constraints.

## Safety of Freudenberg Employees

Since the outbreak of the pandemic in March 2020, two topics have had highest priority for the entire Freudenberg management team: safeguarding the company and the health of our employees. In the past few months, the number of new corona infections reached an all-time high in many countries. Early on, to help prevent the spread of COVID-19, we took a variety of country- and site-specific health and safety measures. Our conduct and hygiene protocols are strict and are still effective today. Many of our employees also took the opportunity to receive their vaccination at the company. In so doing, they protect themselves, their families, friends, and their co-workers.

The safety of our employees is also of utmost priority beyond corona. We are delighted that occupational safety at Freudenberg continues to be first-class for a manufacturer. The LDIFR value (accidents with at least one day of work lost per million hours worked) was 1.3 in the year under review (previous year: 1.5).

## Corporate Citizenship

Freudenberg provides support where help is needed. The Group demonstrated this several times in the year under review. Since the outbreak of the COVID-19 pandemic, we have donated significantly more than €2 million to those in need worldwide and we made donations to about 130 organizations in 28 countries for food and protective facemasks.

Furthermore, we endowed our global e<sup>2</sup> (education and environment) initiative with a further €4 million. Since the launch of the initiative in 2015, a total of €18 million has been made available to support charitable projects in the areas of education and environmental protection.

In addition, in the current 2022 financial year, Freudenberg also donated €3 million as immediate humanitarian aid for those affected by the war in Ukraine. Furthermore, our employees and Partners are actively engaged in providing further financial and non-financial support.

## Outlook

We expect the macro-economic and geopolitical environments to remain uncertain. Challenges such as raw material shortages, inflation, logistical issues, extraordinary volatility in demand, and skilled labor shortages are likely to arise, in part accentuated by the COVID-19 pandemic and war in the Ukraine. To overcome such difficulties, we will remain agile at each of our facilities around the world and continue to respond quickly and flexibly to continuously changing demands. We will also place a special emphasis on customer centricity. The approach is applicable to every industry and region. At the same time, we intend to continue investing in long-term projects. The transformations in mobility, digitalization and sustainable solutions will remain key strategic topics for us.

## Thanks to employees and customers

The entire Freudenberg Group delivered an impressive performance in 2021. Leadership and crisis teams acted quickly, decisively and with prudence. Whether in production or in administration, our employees demonstrated commitment, flexibility, and creativity in dealing with the new challenges. For this, we thank you.

We also express appreciation to our customers and business partners for their confidence in the company and for the excellent cooperation in such extraordinary times. We assure you of our ongoing support.

Weinheim, March 18, 2022  
For the Board of Management



Dr. Mohsen Sohi  
CEO

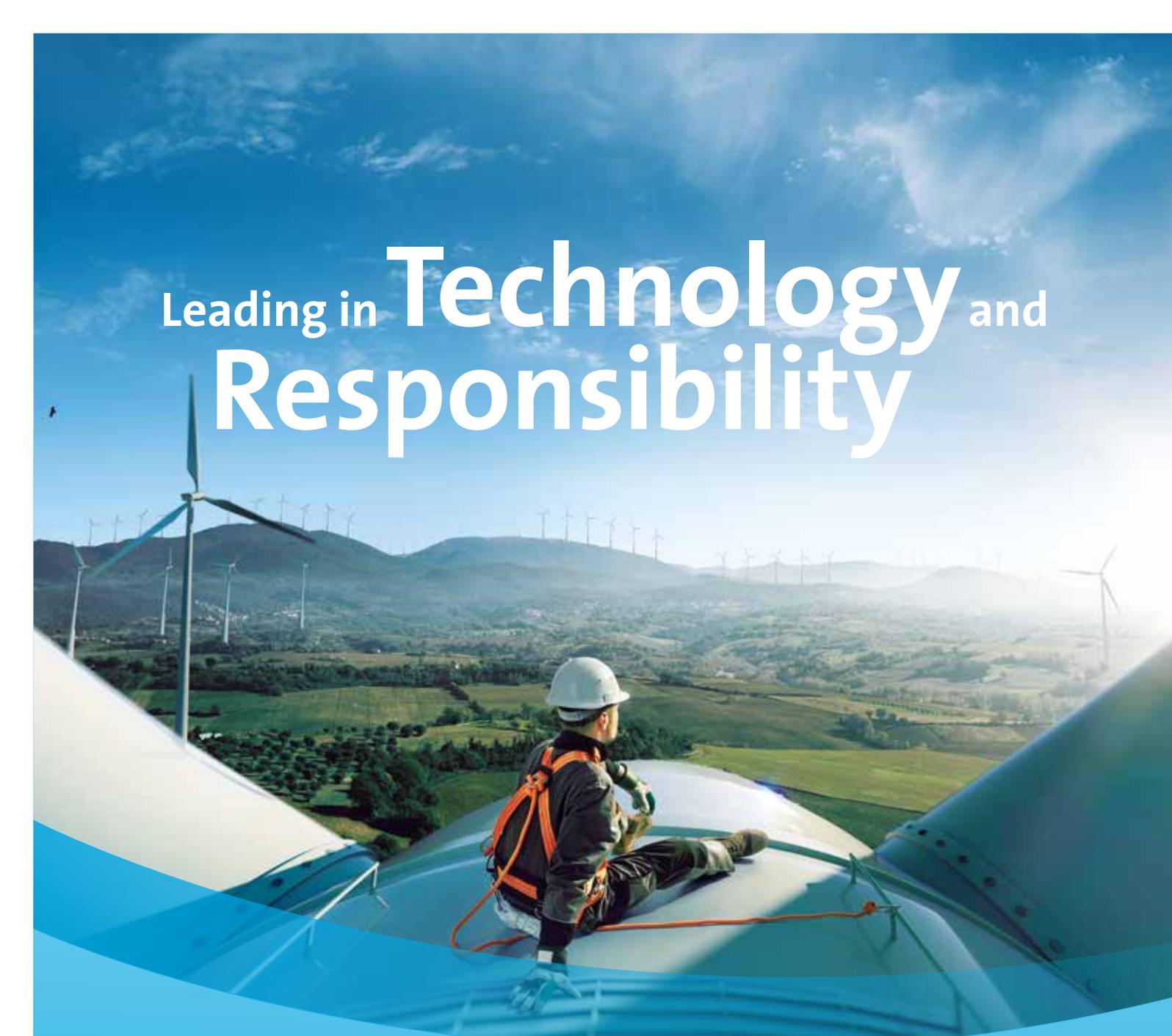
# Tackling climate change

This is how Freudenberg applies the United Nations Global Compact and the Sustainable Development Goals.

Technology and Responsibility	14
Sustainability	22
Human Rights and Labor	38
Health, Safety and Environmental Protection	46
Corporate Citizenship	52
Compliance	56



**The 2021 UN Global Compact Progress Report  
from Freudenberg**



# Leading in **Technology** and **Responsibility**

At Freudenberg, success is financial success and fulfilling the company's responsibility for society and the environment. The two goals are inseparably linked and are firmly anchored in the company's Guiding Principles. Values are important, which is why Freudenberg is supporting the United Nations Global Compact initiative that is committed to a more just and sustainable economy.

In 2021, Freudenberg stood out as an agile and flexible global technology company, with a scientifically based standard of progress. Our employees are experts in leading technological products, services and solutions that are used in thousands of applications and about 40 market segments. Our seals, vibration-control components, technical textiles,

filters, cleaning technologies, specialty chemicals and medical-technology products make a valuable contribution to the success of our customers around the world. The company has always been family-owned, and the values of founder Carl Johann Freudenberg have kept the company grounded. We have been true to them since 1849.

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**Creative technical solutions with excellent quality. That's what Freudenberg stands for. Our success is rooted in our technological expertise and capacity to innovate, guided by the mission to create a sustainable future.**

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# Standing up for Sustainability

Freudenberg stands for excellent technologies and innovation. But that is not enough for us: In a networked and globalized world, we want to set benchmarks in other fields as well – primarily in climate protection and in our company culture. Any company recruiting skilled workers throughout the world, as Freudenberg is doing, needs multifaceted offerings and robust interactions so that it can respond to the central questions of equal treatment of young and old, different genders and people from different backgrounds, on the local and cultural levels. Our company culture should allow all Freudenberg employees to contribute their strengths. We want to bring these different capabilities together and apply them constructively to our success. The idea is to

deal responsibly with raw materials and resources as well as our own energy transition, which is making climate-neutral manufacturing possible. In accomplishing this mission, Freudenberg can highlight its excellence and future viability in a measurable way and draw comparisons. Success in our work is in part determined by how sustainable we are.

**The Guiding Principles of the Freudenberg Group are devoted to value for customers, leadership, responsibility, innovation, people, and a long-term orientation. Two of the Guiding Principles are especially relevant to “Responsibility for Society.”**



## RESPONSIBILITY

Our company and its family shareholders together are committed to protecting the environment and being responsible corporate citizens in all countries and communities in which we do business. We take all possible care to ensure the safety of the workplace and of our products. As a family company, we strive for the highest standards of personal behavior. Fairness and integrity guide our conduct amongst ourselves, towards our business partners and the general public.

## PEOPLE

As a family company, we are devoted to our employees' well-being and personal development. We reject all forms of discrimination and harassment and show understanding and respect in our dealings with each other. We promote a multi-cultural environment where employees work together in worldwide teams to enrich our culture and capability. We believe in the value of enduring relationships with customers, suppliers and industrial partners.

**Freudenberg is a values-based technology company that feels a responsibility to its customers and society.**

Responsibility for society encompasses five areas at Freudenberg:

**Sustainability; Health & Safety and Environmental Protection; Corporate Citizenship; Compliance; and Human Rights & Labor.**

All these themes are anchored in the Freudenberg Values and Principles and in the Code of Conduct.

Freudenberg employees are aware of their responsibility. It motivates international teams to deal with the environment and society sustainably at all times. Employees on these teams work closely with one another across borders and lay the foundation for successful, respectful collaboration.



- Freudenberg Values and Principles
- Areas that are relevant to the "Responsibility" theme
- Processes and initiatives along the value creation chain (relating to the UN Global Contract)
- Initiatives that go beyond the value creation chain

# Commitment to Social Responsibility

**Sustainable  
Development Goals:  
Freudenberg focuses on  
eight of the 17 goals.**



Responsible and pro-active conduct has a long tradition at Freudenberg. It is part and parcel of the values that the company has lived and breathed over its 172-year history. With the signing of the United Nations Global Compact, we affirmed our support for its ten basic principles on human rights, labor standards, anti-corruption, and environmental protection, to which the United Nations agreed in 1987. And we are committed to the 17 Sustainable Development Goals that were proclaimed as a global framework in 2016, shortly after the Paris climate conference. Since 2019, Freudenberg has prioritized eight of the 17 goals to which it can make an important contribution.



One example of a sustainable solution is employing used and recycled plastic. Recycled polypropylene pellets are transformed into red components for the Vileda brand of the Freudenberg Home and Cleaning Solutions Business Group. Here the focus is on objectives 12 and 13 on the list of Sustainable Development Goals.



From a global perspective, sustainability has many facets. For an industrial company like Freudenberg that operates globally, the following eight Sustainable Development Goals out of a total of 17 are at the center of its business activities. For each of them, we have defined the contribution we are striving to make in our daily work.



### GOOD HEALTH AND WELL-BEING

Health services are naturally a benefit to our employees. Along with the prevention of common diseases, healthy nutrition and the mental health of our employees are especially important to us. Our activities include vaccine campaigns, the provision of masks, and reductions in the use of critical substances.



### QUALITY EDUCATION

Demographic changes in Europe will make shortages of skilled employees likely in the future. Other continents have overwhelmingly young populations. In either situation, we rely on robust training courses. We promote lifelong learning for our employees with many training and continuing education courses.



### AFFORDABLE AND CLEAN ENERGY

We plan to secure access to reliable, modern and affordable energy for all our locations. Around the world, completely different conditions prevail for procuring clean energy. Where possible, we are concluding long-term contracts that guarantee a supply of clean energy.



### DECENT WORK AND ECONOMIC GROWTH

We have a social obligation to all of our employees. But this also involves the laws, practices, needs and the possibilities available in their countries. Discrimination and the marginalization of vulnerable persons have no place in the company.



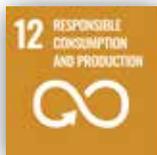
### INDUSTRY, INNOVATION AND INFRASTRUCTURE

The value of a robust infrastructure to an industrial company is obvious. We practice sustainable industrialization with ongoing investments in existing and new plants. Our products are used in large industrial projects.



### REDUCED INEQUALITIES

Diversity is anchored in the Group's Values and Principles. With a range of initiatives, Freudenberg supports a work environment where everyone is valued, respected and heard. Special attention is paid to a balanced gender distribution in which women can strive for targeted career development leading to top leadership positions.



### RESPONSIBLE CONSUMPTION AND PRODUCTION

In our business, we limit our use of resources so that they remain available for future generations. The use of recyclates and recyclable raw materials has priority, as does the elimination of plastic packaging. In our companies, employees are trained to internalize sustainable work methods and assess them based on key performance indicators.



### CLIMATE ACTION

The industrial sector accounts for a high proportion of greenhouse gas emissions. Freudenberg is reducing its CO<sub>2</sub> emissions relative to sales by 25 percent by 2025. By 2045 at the latest, we would like to be climate-neutral in terms of Scope 1 and 2, and we are adopting crucial measures to do this: first, maximizing energy efficiency and reducing our energy consumption; second, electrifying our energy supply; third, using green electricity, and fourth, offsetting the CO<sub>2</sub> emissions that are still unavoidable.



# Commitment pays off!

The winners of the “We all take care” Award

*We <sup>all</sup> take care!*

Since its launch in 2002, the global initiative “We all take care” has honored employees who are especially committed to making work safer, healthier and more environmentally friendly, or who have made a commitment to society. A total of 14 projects from the entire Freudenberg world made it to the finals. There were 205 submissions, and many of them revolved around climate protection and sustainability.

**1st** place

First place:

- “Climate protection through solvent substitution,”  
Freudenberg Chemical Specialities
- “Less dust in nonwoven production,” Freudenberg  
Home and Cleaning Solutions
- “Electric energy management system,”  
Freudenberg Medical

Three teams shared first place. All three projects show the seriousness with which Freudenberg is increasing energy efficiency, CO<sub>2</sub> reduction and material efficiency. They are more proof that the door is wide open to innovations affecting sustainability and climate protection. The project team from Freudenberg Chemical Specialities in Munich achieved positive climate effects with an environmentally friendlier solvent. A Freudenberg Home and Cleaning Solutions team has developed a sustainable nonwoven mix posing no harmful health effects. The team and the project impressed the jury, as did the Freudenberg Medical team from Ireland with its reduction in energy consumption using simple methods.

## 2nd place

### Second place: “Talk, listen & care,” Freudenberg Oil & Gas Technologies

The COVID-19 pandemic has placed new demands on employees. Loneliness and the feeling of being overwhelmed by professional and personal challenges intensified when employees turned to remote work. With its “Talk, listen & care” program, the team from Freudenberg Oil & Gas Technologies in Port Talbot, United Kingdom, succeeded in enlisting volunteers to help their colleagues with anxieties and psychological problems. With outstanding execution, the project tapped into the potential for using personal contact. It also took mental health seriously as an important basic need.

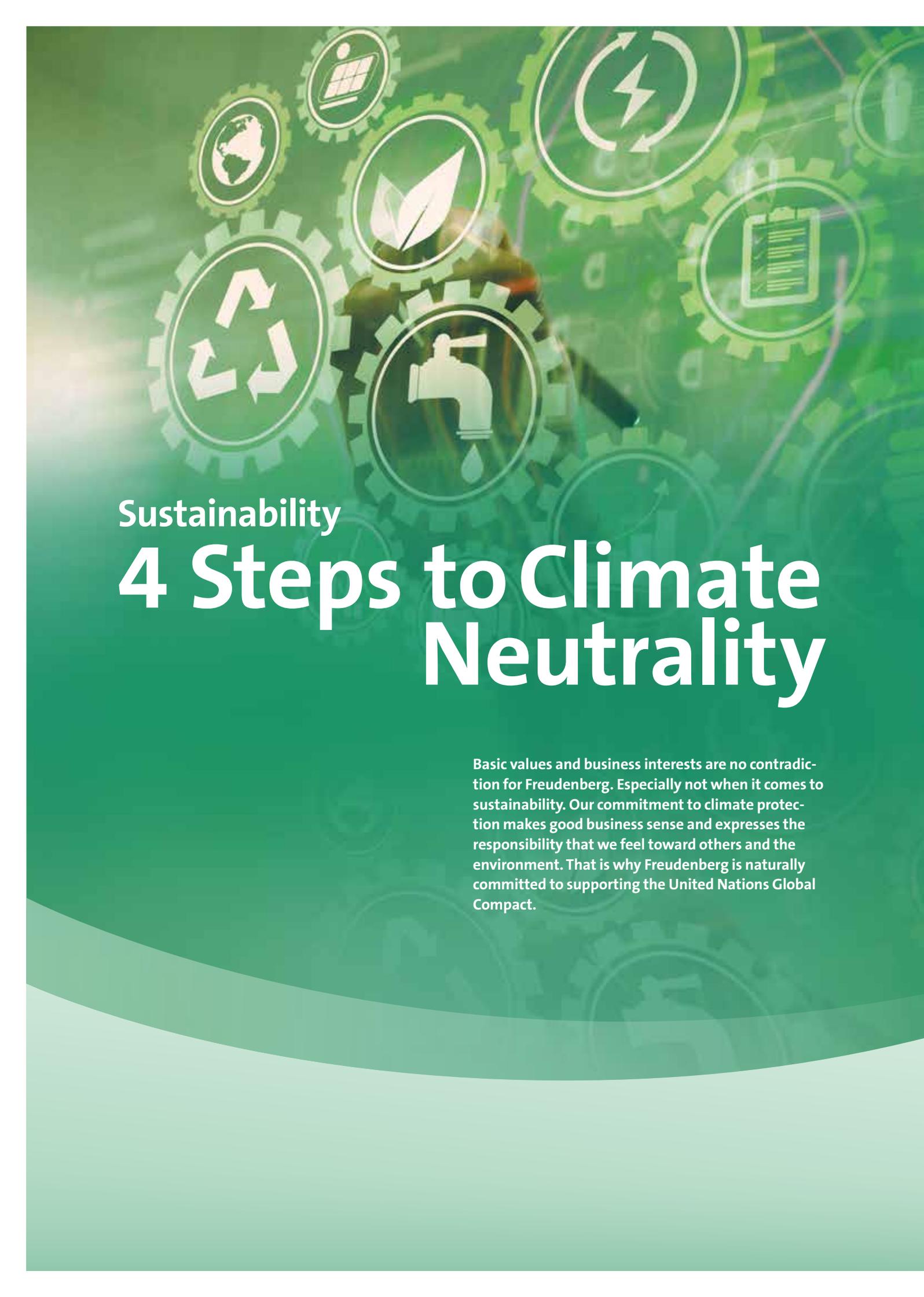
## 3rd place

### Third place: “Safety Detectives in Bursa,” Vibracoustic

Just 15 seconds of thought is enough to sharpen awareness of a task and to avoid work-related accidents that have severe consequences. The Vibracoustic project team has taken ownership of this insight and has developed a playful approach to sensitize employees to this simple but effective rule. As part of the project, 28 participants slipped into the role of safety detective to uncover potential hazards on the shop floor. They stuck one puzzle piece on the board for each hazardous activity. At the end, this produced the slogan “Think for 15 seconds before you start working” as the solution. It was a humorous yet memorable way to sharpen the awareness of safety.



Safer, healthier, environmentally friendlier. That's what the “We all take care” Award stands for.



Sustainability

# 4 Steps to Climate Neutrality

Basic values and business interests are no contradiction for Freudenberg. Especially not when it comes to sustainability. Our commitment to climate protection makes good business sense and expresses the responsibility that we feel toward others and the environment. That is why Freudenberg is naturally committed to supporting the United Nations Global Compact.

The term sustainability has become a buzzword in politics, society and business. By definition, it deals with social, ecological and economic matters and is synonymous with fair, climate-neutral, committed and responsible conduct. Everyone is talking about sustainability, but that does not make it any easier to understand the term. But one thing has become clear: Sustainability is not easy to achieve. It is crucial to set goals, but the path to achieving them is at least as important.

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**Human-caused climate change is happening. It has to be stopped if we are going to meet our responsibilities to future generations.**

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When it produces ingredients for sweets, Freudenberg Chemical Specialities pays attention to sustainable criteria.



Freudenberg's position on this is clear. We would like to help keep our planet livable far into the future. This position is consistent with the UN's 1987 Brundtland definition of sustainability. It means producing as little waste and carbon dioxide as possible while minimizing the use of water, energy and materials. Our commitment to climate protection is necessary in a business sense as well. The more sustainably we operate, the more attractive we are to major automakers. They incorporate us as a supplier into their own sustainability programs. As we look ahead, this is even more clear: If we want to sell our products tomorrow, they will have to be sustainable. That will take innovation. The current situation represents a huge opportunity for Freudenberg as a technology company. That means there is no contradiction between responsible conduct toward others and the environment on one hand, and our business interests on the other.

**Freudenberg wants to be a climate-neutral company by 2045. The seriousness of purpose that the company has shown is closely related to its basic values and its long-standing sense of responsibility. It is also uncovering the business opportunities that a consistent course toward sustainability offers.**

Freudenberg have been analyzed. The company has turned to a multistep strategy: reductions in energy use, electrification, as well as the purchasing and self-generation of green electricity, and offsets for CO<sub>2</sub> emissions. They are in part being implemented simultaneously.

**Freudenberg takes climate protection seriously.**

Freudenberg has set a course for climate-neutral manufacturing. The first milestone is to reduce relative CO<sub>2</sub> emissions, measured per million euros of revenue, by 25 percent, over the period from 2020 to 2025. Freudenberg intends to be a climate-neutral company by 2045. The company is laying the foundation for this ambitious goal with a wide-ranging project called “Sustainability drives Climate Action.” Since 2019, the opportunities and challenges that man-made climate change poses for

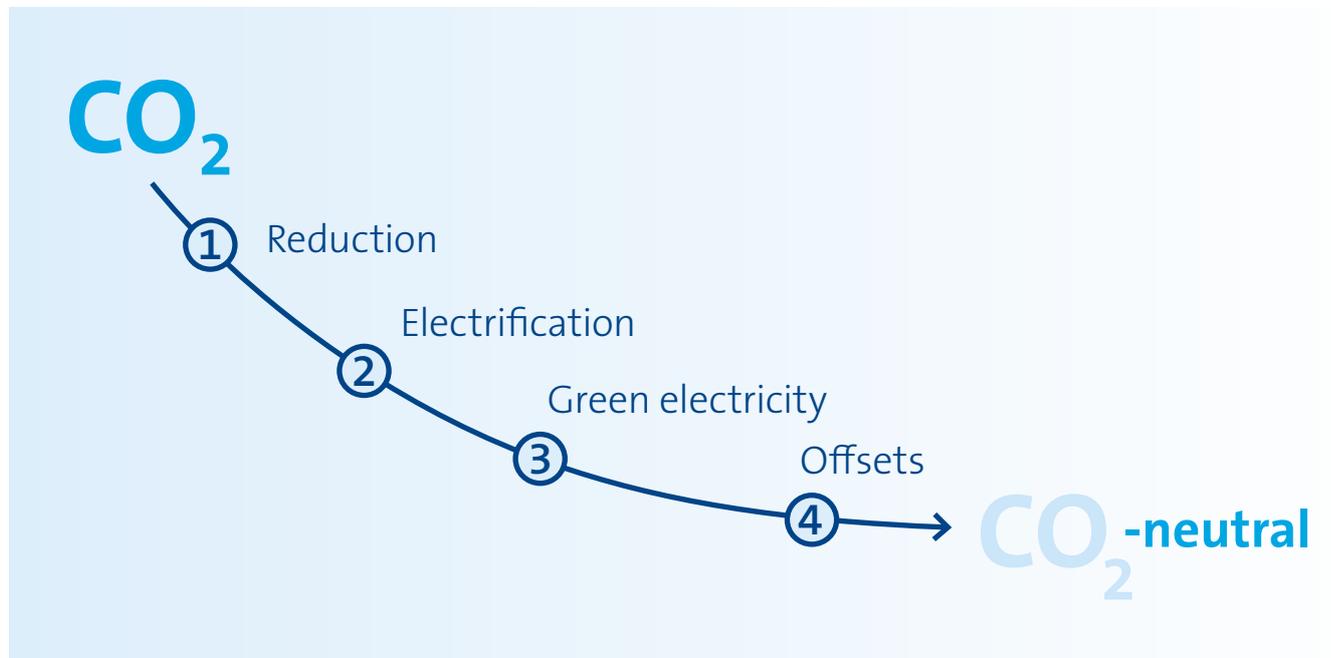
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**Pursuing climate neutrality is a long-distance race. Freudenberg has no intention of relying on a last-minute sprint. Our philosophy is, the faster we progress, the better.**

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## 4 Steps to CO<sub>2</sub> Neutrality



Relative CO<sub>2</sub> emissions  
due to be reduced  
by 25 percent by **2025**

Many factors will determine when specific Business Groups will be manufacturing climate-neutrally. Their starting situations vary greatly, based on how much energy they require for their production processes, for example. The technological obstacles that need to be overcome in research and development are just as varied. Customers also play an important role.

Some pioneers are already placing demanding requirements on the Business Groups. That's why we say that each Freudenberg Group company has to find its own way and set its own pace. What's important is to be able to measure and document our progress verifiably so that each Business Group can contribute to our common goal of being climate-neutral by 2045.

Freudenberg wants to be a  
climate-neutral  
company by **2045**

## Decreasing Energy Consumption at Every Site

The “Bee – Be energy efficient” initiative is laying the foundation for uniform and comparable energy standards within the Freudenberg Group. It is an important component of the “Sustainability drives Climate Action” project and has been uncovering energy-saving potential at Freudenberg locations since 2019. It especially considers the issues of energy consumption, process technology and the energy efficiency of existing buildings and new construction. So far, about 25 sites worldwide have partic-

ipated in the program. The results show potential reductions in energy use averaging 25 percent. As part of the program’s next stage, energy-efficiency experts have developed a flexible consulting approach for the sites. It ranges from measures that can be quickly carried out, to decision-making aids for long-term investments in production facilities. The services are rounded out by the Bee Academy, a comprehensive online training program covering the fundamentals of energy management and energy efficiency.

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## Freudenberg has been a reliable partner to energy suppliers and was able to conclude long-term supply contracts for green electricity in 2021.

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During 2021, the focus was mainly on pillars two and three of the four-step strategy: electrifying the energy supply and sourcing this electricity completely from renewable energy sources, such as wind, solar and hydropower.

Freudenberg is considered to be an especially reliable partner, which enabled it to conclude long-term supply contracts for green electricity with energy suppliers in 2021. In these so-called “power purchase agreements,” the price of electricity is fixed over a ten-year period. They are a cornerstone of Freudenberg’s effort to achieve its climate goals, and they make a major contribution to renewable energy’s steady growth. To highlight its progress on sustainability and improvements at its sites worldwide, Freudenberg incorporates many inputs into the calculation of its key performance indicators. In the current strategic period for 2021 through 2023, the company is introducing an electronic sustainability reporting system for all the Business Groups.

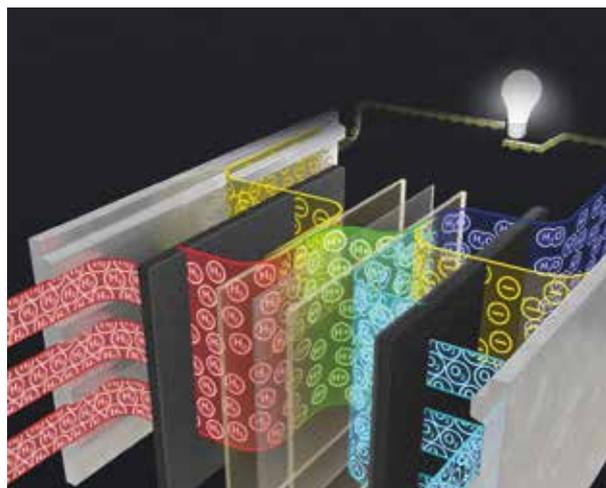
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**342.6** At more than  
gigawatt hours,  
the share of green electricity came  
to about 21 percent of the total.

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## The Demand for Sustainable Products Is a Huge Opportunity

Even today, the focus of the company's research and development departments is on viable, sustainable innovations. Products for batteries and fuel cells offer technical solutions to help us chart a course toward the new mobility, on land, on the water and in the air, with cars, trucks, buses, ships and aircraft. To date, as a pioneer in closed cycle management, we have been making progress with the recycling of PET bottles. Each year, we take five billion plastic bottles that would otherwise have ended up in landfills and process them into raw materials. In many respects, our own sustainable practices are an admission ticket to the markets of the future. The EU's policy decisions and regulations, starting with emissions limits for vehicles, all the way to the Green Deal and its taxonomy, are heading in this direction. Freudenberg is bolstering these efforts in serious pursuit of its own climate goals.



Functional principle of a fuel cell: Hydrogen splits into protons and electrons.



PET granulate made from recycled source material is used in the Vileda and O-Cedar brands from Freudenberg Home and Cleaning Solutions.

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Climate change is one of the greatest challenges of our time. Freudenberg wants to reduce its relative CO<sub>2</sub> emissions by 25 percent by 2025.

We are turning to self-generated energy or are purchasing it to meet our goals. The categories of emissions are defined as Scope 1 and Scope 2, which are internationally recognized terms under the Greenhouse Gas Protocol.

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# Group-wide Key Performance Indicators on Sustainability

Freudenberg is striving to achieve ambitious climate goals. Figures from 2021 show a very positive trend. The company is progressing more quickly than planned on reductions of CO<sub>2</sub> emissions.

The three most important areas of activity for all the Business Groups are **energy efficiency, CO<sub>2</sub> emissions and waste**. The company has introduced eight key performance indicators Group-wide that create transparency for improvements in these areas and help to drive sustainability at Freudenberg. The metrics for 2021 are shown on **page 29**.

## Energy use

**955**

(direct, in GWh)

**1,646**

(indirect, in GWh)

**21%**

(Renewable energy as a proportion of total energy consumption)

**2,601**

(total in GWh)

The metrics show energy consumption from self-generated and purchased energy in 2021.

**0.26**

(Energy efficiency in kWh/euro sales)

## CO<sub>2</sub> emissions

These metrics express the Freudenberg Group's global CO<sub>2</sub> emissions from self-generated and purchased energy.

**828**

(total in 1,000 tons)

**82.5**

(in tons/million euros sales)

For Germany, the calculation of emissions has been market-based since 2021.

The metrics from 2020 serve as the basis for the Freudenberg Group's calculations and its goal of reducing the relative amount of its CO<sub>2</sub> emissions per million euros of sales by 25 percent by 2025. The target is 65 tons of CO<sub>2</sub> per million of euros of sales by 2025. If all the green electricity that Freudenberg obtained via certificates and direct purchases from energy suppliers in 2021 is included, the reduction comes to nearly **10 percent, which significantly exceeds expectations.**

## Waste

**13.3**

(in tons/million euros sales)

**Sustainability has two dimensions for the Freudenberg Group.** First of all, the way the company shapes its processes and uses its systems to reduce the resource consumption (**footprint**). Second, Freudenberg offers many products and solutions that allow customers to manufacture more efficiently and sustainably or to make their products more resource-efficient (**handprint**).

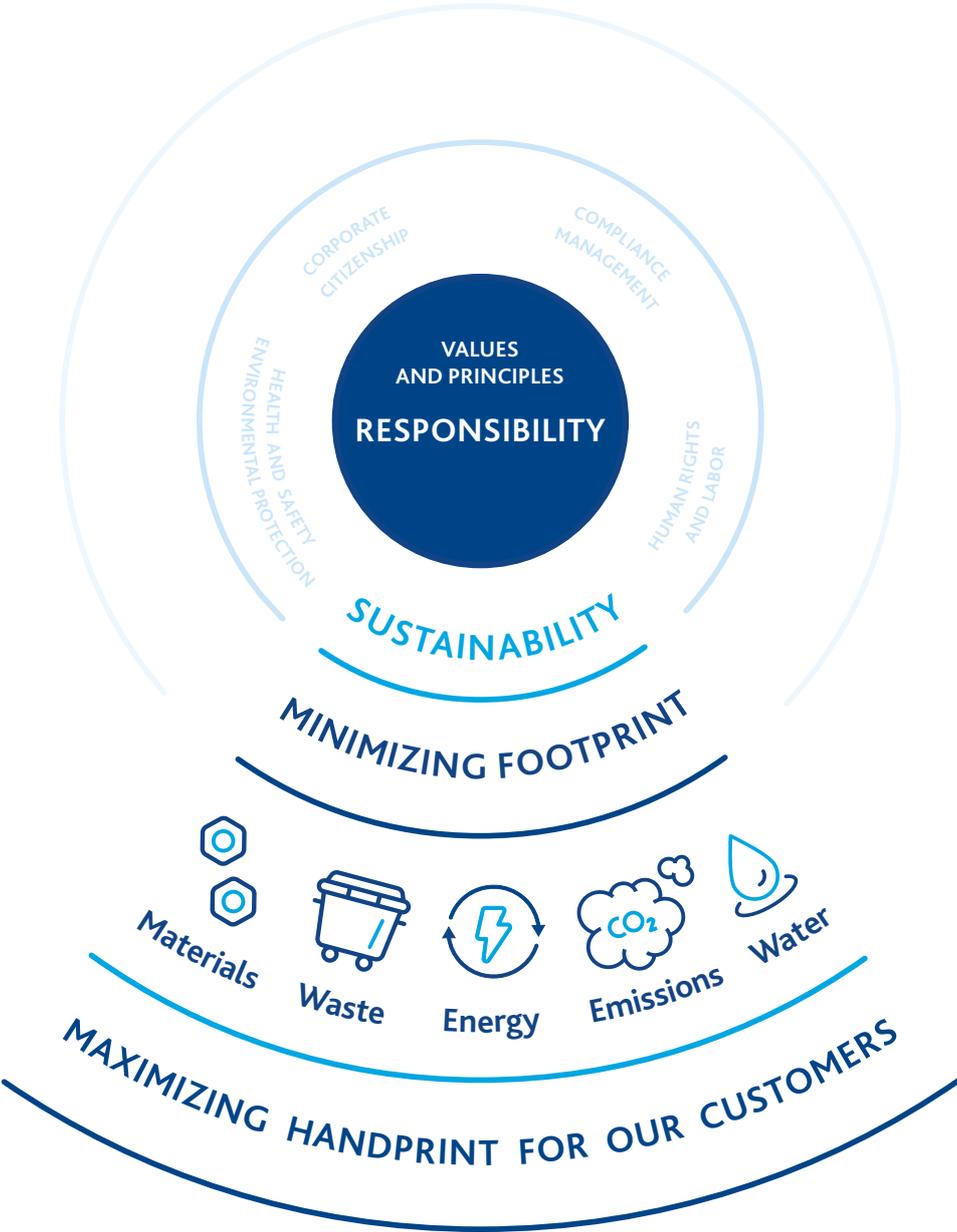


**By reducing its footprint and expanding customers' handprints, Freudenberg is contributing to greater sustainability worldwide.**

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Handprints and footprints are always a matter of resource and energy efficiency, and that invariably means technology. Examples of successful sustainability projects can be found on **pages 32 to 37**.

The five subject areas – **materials, waste, energy, emissions and water** – have the greatest relevance for the Freudenberg Group as a whole, since all the themes do not hold the same importance to particular Business Groups. For example, water is hardly used in some of them. But in others, it plays a major role, especially when production facilities are located in arid regions such as India. The picture is not uniform when it comes to materials either. Some can be recycled, but others such as elastomers (rubber, caoutchouc) cannot.



 <b>Materials</b>	 <b>Waste</b>	 <b>Energy</b>	 <b>Emissions</b>	 <b>Water</b>
Materials efficiency Recycled, renewable and substitute materials End of Life (EOL) Product handling	Waste handling	Energy efficiency Renewable energy	Air pollution/ emissions	Water pollution Water use

# Examples of successful sustainability projects

## Short paths for sustainable raw materials

Freudenberg Sealing Technologies produces more than a billion sealing rings annually at its Oberwihl plant in Germany, with a steadily improving climate balance sheet. In 2019, the plant was designated as a model site for the Group-wide initiative “Be energy efficient.” The conversion of the Oberwihl heating system stands out among the numerous measures that the plant has taken to improve its energy efficiency. The system is being converted to use woodchips; a renewable material abundantly available in

the Black Forest. It is also a waste product that the wood industry wants to market. The installation of a second wood-burning boiler, including an automatic filling system, has made good progress. It is scheduled to begin operation in 2023. The installation of a cogeneration unit is being examined as well; it would cut the use of fossil-based heating oil by more than 95 percent. The wood heating system in Oberwihl is publicly funded, which accelerates amortization. The bottom line: Investments in climate protection pay off when relatively long time frames are taken into account. Additional assistance comes from the unbiased views of independent energy experts who are very knowledgeable about funding mechanisms in different regions.



Heating industrial buildings with woodchips as fuel: A good idea when the raw material is available as a waste product of the local wood industry.





Tramm-Göthen in Mecklenburg-West Pomerania: The largest solar park in Germany so far, it provides energy exclusively to Freudenberg and Volkswagen.

### Green Electricity from PPAs: A Look at Costs and Climate

Green electricity, that is, electricity from renewable sources such as wind, solar and waterpower, has a double payoff: On one hand, for the climate: Gases harmful to the climate are not released when it is generated, in contrast to electricity from coal-fired power plants. For another, it can pay off financially – when it is obtained through power purchase agreements, or PPAs, and the price of electricity is set in advance over the regular contractual period. Freudenberg already covers five percent of its global energy needs with green electricity from PPAs, and the percentage is rising. Martin Skrobisch, who heads the “Purchase Green Energy” project, puts the cost savings at 40 million euros. “Purchase Green Energy” is part of the overarching “Sustainability drives Climate Action” project. Still, the demand for green electricity greatly exceeds the supply, Skrobisch says,

especially in Europe and America and increasingly in other parts of the world. Fast action is needed when an interesting project presents itself. The latest example is the PPA covering the supply of solar electricity from Tramm-Göthen, where Germany’s largest photovoltaic park to date was built during the year under review. On an area equivalent to 347 football fields, 420,000 solar modules generate about 172 megawatts of electricity annually. The financing of this megaproject was facilitated by a purchase contract for all of its green electricity over a period of ten years. The agreement was concluded by Freudenberg and automaker Volkswagen on one hand and the electricity provider RWE on the other. PPAs are crucial to the decarbonization of industry and the expansion of renewable energy – not to mention the attainment of Freudenberg’s climate goals.





640 solar panels: View of the roof of Freudenberg Oil & Gas Technologies in Nisku, Canada

### Solar on the Roof – Emissions Down

Leaving the roof of a new production building empty and unutilized in Nisku, Canada? That was out of the question for Freudenberg Oil & Gas Technologies. Instead, about 640 solar panels found their way onto the roof. With the help of high-performance photovoltaic systems, the site has been able to cover about 12 percent of its energy use on its own since early 2021. This is reducing CO<sub>2</sub> emissions by 157 tons per

year, which corresponds to the energy consumption of 23 single-family homes. This has made Freudenberg Oil & Gas Technologies in Nisku one of the first production facilities in the province of Alberta to directly integrate solar into its daily operations. In all, the roof surfaces of the new buildings are expected to reduce the site's annual electricity and natural gas consumption by about 30 percent.



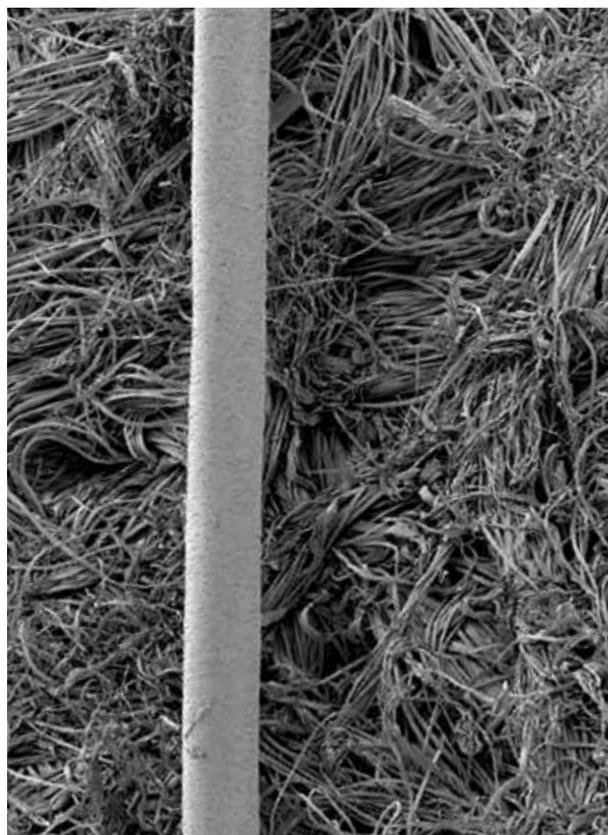
## Sustainable Technology with 1,000 Possibilities

The Freudenberg Group's Evolon is a sustainable textile fabric with a unique production process and more than 20 applications, with more on the way. Evolon is made at the Colmar site in France, home to about 60 employees of the Freudenberg Performance Materials Business Group. The product is sold in Europe, Asia, North and South America, and South Africa, among other countries worldwide. Its special characteristic: Not just the technology, but the product itself is becoming more and more sustainable. It consists of endless threads – so-called microfilaments – made of polyester and polyamide that are separated, intermingled and re-constituted under high-pressure water jets. This produces a textile with a dense, compact fiber structure without the use of a binding agent or solvent. Since 2003, Freudenberg has been using its own processing system, which re-uses water multiple times and cuts down on its overall consumption during manufacturing.

The development of Evolon with recycle from used PET bottles is another milestone on the road to greater sustainability. In the early 1990s, the Freudenberg Group was one of the first companies in Europe to recycle used PET bottles. Today, Freudenberg recycles about 7 million PET bottles into polyester nonwovens, making it one of the world's largest recyclers in the field. By recycling PET bottles, Freudenberg is using waste as a raw material, reducing the amount of incineration and alleviating the pressure on landfills. At the same time, the substitution of recycled polyester for primary materials has led to the conservation of natural resources.

One square meter of the textile contains about 6,000 kilometers of microfilament, which is produced in just a few minutes – much faster than the time frame for conventional textiles. With Evolon

New Generation from Freudenberg Performance Materials, the textile fabric is even more durable. This has led to new applications, such as its use in bed linens and packaging, along with applications in the automotive and electronics industries. Evolon's technology and the Freudenberg facility in Colmar have been awarded several certificates recognizing their environmentally friendly processes. The validation in part came from the OEKO-TEX Institute and the MADE-IN-GREEN label, which certify sustainable processes, safe working conditions and the absence of harmful substances.



No hair in the soup: The recycled polyester fibers from PET bottles are one hundred times thinner than a human hair.



HANDprint

FOOTprint

## The Prospect for Zero-emissions from Gas Pipelines

In 2021, at the UN Climate Conference in Glasgow, the United Kingdom, 100 nations agreed to reduce emissions of the greenhouse gas methane by 30 percent by 2030. The United States and the European Union were especially important parties to the agreement. The new mechanical seal “CobaDGS” from the Freudenberg Business Group EagleBurgmann shows how the 30-percent goal can be achieved. The seal eliminates the emission of methane gas from pipeline compressors used in the transportation of natural gas. According to one calculation, if Freudenberg were to exclusively provide CobaDGS for pipeline compressors instead of conventional seals, the switch would eliminate a volume of methane that is as damaging to the climate as about 10 million tons of CO<sub>2</sub>. We are

achieving these annual reductions gradually, and we will first reach the target fully in 2040.

During stoppages, the seals used in methane compressors are also susceptible to harmful contamination, which is why operators generally release the enclosed natural gas into the environment. The auxiliary compressor “RoTech Booster” from EagleBurgmann protects seals from contamination during stoppages, making it unnecessary to continue draining off the greenhouse gas. A full 650 units are in use worldwide, eliminating the equivalent of about 2 million tons of CO<sub>2</sub> annually. By 2040, the amount of savings per year could reduce the greenhouse effect by the equivalent of about 10 million tons of CO<sub>2</sub>.



HANDprint

FOOTprint

## Less Energy, More Climate Protection

Determining the potential for energy efficiency and reducing facilities’ CO<sub>2</sub> emissions – these are the objectives that “Be energy efficient,” or Bee, is pursuing. During the year under review, Bee’s energy-efficiency experts have developed a flexible approach to consultation to meet the individual needs of each facility: The Bee Basic Analysis of four to six locations collectively identifies early potential for reductions and measures that can be executed quickly, with little investment. For the Bee Advanced Analysis, a team of Bee specialists travels to one site and examines its production processes and supporting systems. This results in facility-specific proposals such as the use of variable speed compressors, an efficient compressed air-drying system or systematic shutdown manage-

ment. With Bee Assist, energy-efficiency experts guide the facilities as they expand production and optimize their energy supplies and provide quick help with decision-making. The Bee Academy – a comprehensive online training program on the fundamentals of energy management and energy efficiency – rounds out the offerings. The approach is catching on: About 25 facilities have already completed the basic or advanced program. The potential for energy savings averages 25 percent. Extrapolated to the Freudenberg Group’s total energy consumption, this represents enormous potential for CO<sub>2</sub> reduction and cost savings – a win-win for both the climate and the balance sheet.



HANDprint

FOOTprint

## Everything Points to Green

According to the latest study from its National Academies of Sciences, Engineering and Medicine (NASEM), the United States generates more plastic waste than any other country. At the same time, its major consumer goods companies are increasingly promising to promote sustainability. Freudenberg Home Cleaning Solutions is the first and only company in its market segment to sign the Ellen MacArthur Foundation's Global Commitment Plastic Pact, which focuses on the reduction of plastic packaging. The company has three clear goals to achieve by 2025: raise the recycling capacity for plastic packag-

ing to 100 percent, use at least 25 percent recycled material in its plastic packaging, and reduce the proportion of new plastic in packaging by more than 20 percent. Even today, durable products account for more than 90 percent of the Freudenberg Home and Cleaning Solutions portfolio. In turn, it offers customers sustainable products that stay out of the waste stream for some time. To avoid plastic waste, the company is steadily cutting back on packaging and is turning to cardboard and recyclable mono-materials as films.



Freudenberg Home and Clearing Solutions uses PET granulate from recycled materials.



A photograph of three diverse business professionals in a modern office hallway. They are all wearing light blue face masks. The woman on the left is wearing a light blue button-down shirt and tan trousers. The man in the middle is wearing a light blue button-down shirt and light-colored trousers. The woman on the right is wearing a white button-down shirt and orange trousers. They appear to be in a collaborative conversation. The background shows a white wall and a ceiling with recessed lighting. A blue curved graphic element is at the bottom of the page.

Human Rights  
and Labor

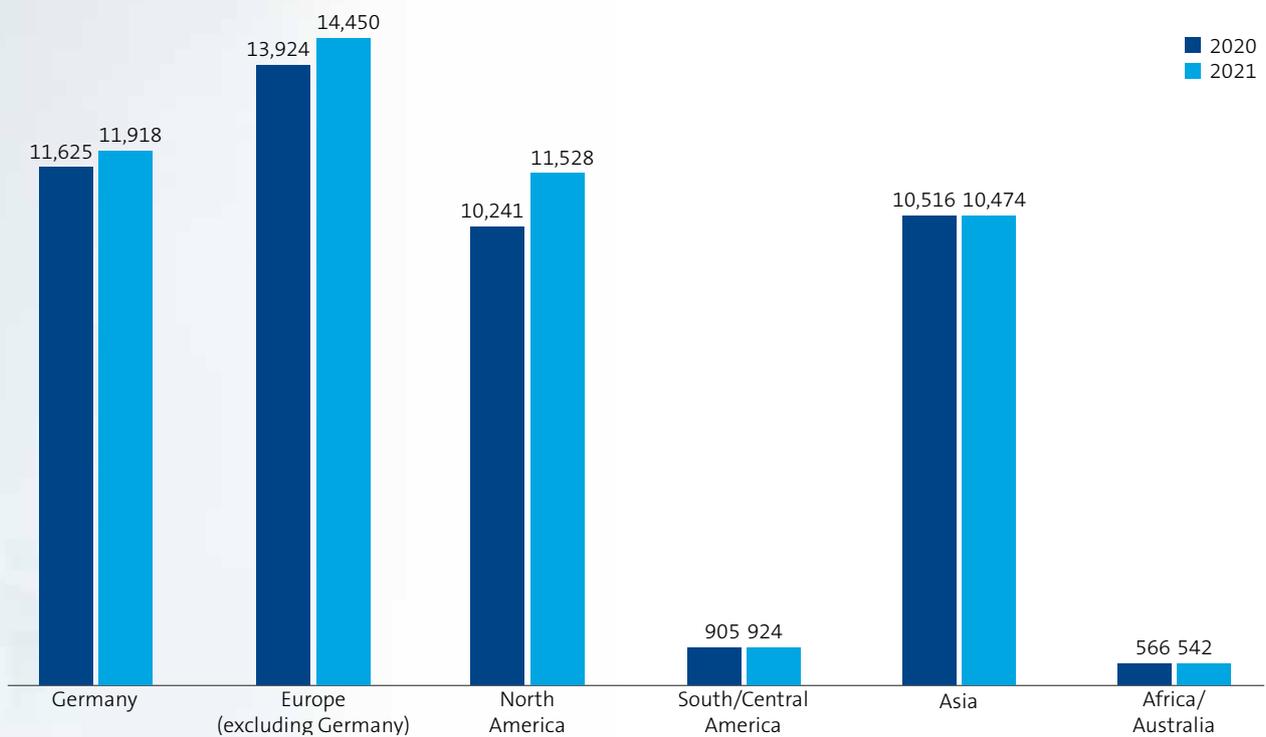
# Strength through Diversity

Diverse teams drive innovation at Freudenberg. The best solutions and innovations occur when employees contribute their varied experience, knowledge and skills to a collaboration. Employees provide new ideas, generate imaginative solutions and create innovative products. Freudenberg employees all have a common foundation: entrepreneurship in their mindset and actions. This spirit unites them around the world.

# 49,836

staff were employed by Freudenberg as of December 31, 2021 (previous year: 47,777 employees).

## Freudenberg Group employees by region



In Germany, the employee headcount was 11,918 (previous year: 11,625), in Europe (excluding Germany) the number was 14,450 (previous year: 13,924), in North America 11,528 (previous year: 10,241), in Asia 10,474 (previous year: 10,516) and in Africa/Australia 542 (previous year: 566), in South America/Central America 924 (previous year: 905).

## **Attractive Employer**

### **Strengthening the Employer Brand**

In the year under review, internal and external communication of the 2017 employer promise continued. The goal was to reach specific target groups and ensure that Freudenberg appealed to the right talent in sufficient numbers in the future. The activities led to both a steep rise in the number of followers on social networks – especially on LinkedIn, WeChat and Facebook – and in the number of visitors to the redesigned Freudenberg career website.

### **Examples of Awards**

In 2021, the Freudenberg Group once again won various awards for successful human resource work. Examples include: For the tenth time in a row, a Freudenberg company, Chem-Trend of Michigan, USA, was named one of the 150 Top Employers in the Region. In the rating published by the Detroit Free Press newspaper, Freudenberg-NOK Sealing Technologies in Detroit, USA, was named “Top Work Place 2021” for the fourth time in succession.

### **Attractiveness**

Freudenberg provides numerous benefits that are being continuously expanded to attract new and retain existing employees. The benefits tend to vary from region to region and site to site, but are usually more generous than the minimum legal requirements in the relevant country.

As part of the Talent Management program (see Talent Management) Freudenberg supports numerous continuing education programs at all hierarchical levels (see Personnel Development). Freudenberg also considers the maintenance of a good work-

life balance as important in helping to ensure and improve employee health and well-being, especially during the period of the COVID-19 pandemic. As part of an occupational health management program, the Group provides the best possible medical support and sponsors numerous sport and fitness programs.

### **Talent Management**

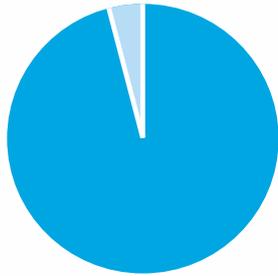
The goal of the talent management process is holistic and focuses on professional personnel development as well as the successful identification and advancement of potential future executives. In the process, employees receive balanced and calibrated feedback from their superiors. They also discuss their next development steps with them. As part of talent management, succession candidates are systematically identified for expert and leadership functions, to ensure the long-term stability of the leadership team. In 2021, the development of talent across Business Groups was established to a greater degree. Regional and functional talent conferences in particular are leading to a shared recognition of the key positions and high-potential employees in the organization. Another result is the joint responsibility for nurturing talent and making the best possible staffing decisions.

In September 2021, the recruiting process was rolled out in Freudenberg’s global employee information system. All open positions at Freudenberg have been posted using the system and thus are visible. Freudenberg is making it possible for its employees to actively become involved in their ongoing development and take it into their own hands. Supervisors support their staffs in this process.



# Employment Ratios

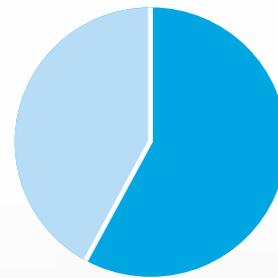
(As of December 31, 2021)



**2,053** | **46,344**  
Part-time | Full-time

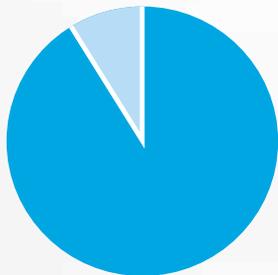
There are country-specific assumptions and regulations for part-time work.

The employee counts on this page come from the Group's internal HR system. They deviate from the employee statistics based on IFRS since employees from some companies are considered differently. Newly acquired companies are an example of this.



**20,300** | **28,097**  
Direct | Indirect

Direct employees are directly involved in the production of products and the provision of services.



**4,232** | **44,165**  
Fixed term | Open-ended



## Recruiting

All open positions at Freudenberg are posted on the new recruiting platform for external candidates as well, and every effort is made to create a positive candidate experience. The introduction of the electronic recruiting platform in 2021 was also the impetus for reworking the career sites on the Freudenberg website.

One of the greatest challenges during the year under review was filling open positions in direct as well as indirect areas. In all, Freudenberg was able to recruit 6,833 employees. The focus of the recruiting activities was on **Europe and North America**, and in manufacturing.

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## Diversity and Inclusion

Diversity is anchored in the Group's Values and Principles and is clearly positioned in the brand. Freudenberg is convinced that teams with people of various ages and genders and with diverse cultural backgrounds are more successful. In 2021, people from 136 nations worked together. An international working group is devising specific measures to further strengthen activities as part of an inclusive working environment, while serving as a sounding board and multiplier. The goal of various initiatives is to create a working environment in which every person feels appreciated, respected and heard.

A balanced gender distribution is particularly worth pursuing, with a focus on the hiring process, early identification of female talent as well as the targeted career promotion of women into top executive positions. The trend here continues to be positive. The share of female expert staff and executives remained stable at 32 percent, and the share of females in middle management was roughly 22 percent.

In 2021, racial diversity in the United States was another focus, and a number of measures were identified. One was for Freudenberg to support various institutions and programs that are especially devoted to the support of minorities. Many other measures were approved as well. For example, by year's end 2021, a "Learning Path for Diversity and Inclusion," with various training modules was made available to employees.

Freudenberg does not exclusively think of diversity in terms of gender, age or religion. It plans to pay more attention to geographic diversity. Many of the country's experts and managers are located in Germany. In the medium term, the Group would like to work on developing strong local and regional leadership, both in manufacturing and administration. The goal is to balance knowhow and expert knowledge across all regions. Accordingly, Project Balance was launched in 2021. Its goal is to create the framework for strengthening local talent and succession planning for senior management positions in Asia and North America.



## New Hires

**6,833**

(employees were hired in total)

**1,587**  
(in North America)

**1,261**  
(in Asia)

**1,819**  
(in Europe excluding Germany)

**866**  
(in South/Central America)

**1,250**  
(in Germany)

**50**  
(in Africa/Australia)



## Diversity

**Freudenberg regards diversity as more than gender, age, and religion. In the future, it will put more emphasis on geographic diversity.**

**136**

(Freudenberg employees come from 136 countries)

**60**

(There are Freudenberg facilities in 60 countries)

**32%**

(Female professionals and managers)



## Personnel Development

In 2021, development programs were adapted to the new conditions with the help of virtual learning. This made it possible for Freudenberg to maintain training and continuing education. As a result, knowledge relating to strategic issues, such as digitalization, customer orientation and e-mobility, could continue to be taught.

Once again in 2021, more than 500 employees from all regions participated in Group-wide manager development programs. A special focus was on the newly designed manager program for the manufacturing field.

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**The Freudenberg Training Center is also engaged socially. Since 2016, a technical internship has been offered as part of the donor-funded project, “Training for Refugees.”**

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## Training at Freudenberg

In 2021, 91 people (previous year: 120) began training programs at Freudenberg companies in Germany. A total of 366 persons in Germany and 482 worldwide were in a training program as of December 31, 2021. In 2021, 69 new trainees began their training at Freudenberg in Weinheim, 34 from Freudenberg and 35 from outside companies. The quality of the training at Freudenberg is highly regarded by other companies. This is shown by the fact that well-respected companies in the region have repeatedly sent their young talent to be trained at Freudenberg in Weinheim. The training ranges from two-year technical programs to commercial courses and even

work-study at a university. The Freudenberg Training Center is also engaged socially. Since 2016, as part of the donation-funded project “Training for Refugees,” a technical internship has been offered, raising the prospect of training at Freudenberg. So far, a total of 53 refugees have accepted the offer, and 30 of them were able to begin their training at Freudenberg. Out of that number, 12 graduated and were able to find jobs, six at Freudenberg and six at outside companies. Eight refugees were added from the preparatory internship in 2020/2021, and Freudenberg enabled them to take part in vocational training to become machine and facility operators.



## Manager Development

A newly designed program for managers in the manufacturing field.

**500**

(Participants in programs from all regions)



## Training

**482**

(Trainees at Freudenberg worldwide as of December 31, 2021)

**366**

(Trainees at Freudenberg in Germany as of December 31, 2021)



# Health, Safety and Environmental Protection For the Good of Humanity and the Environment

Freudenberg's HSE (Health, Safety and Environment) Guideline includes the HSE principles and defines the Freudenberg Group's Values and Principles for HSE. The overarching goals are avoiding accidents, preventive health programs and continuously reducing the negative impact of its business on the environment.



Freudenberg is committed to the well-being of its employees and their personal development. Job safety and health protections are promoted and practiced on all hierarchical levels. Protective measures related to work, health and the environment are integral components of all processes.

This approach has enabled the Freudenberg Group to reduce and maintain the number of accidents at a low level relative to industry benchmarks. Existing measures are strengthened and enhanced with innovative approaches to continuous improvement. Success in occupational safety serves as a benchmark for other areas in which Freudenberg also aims to continuously improve. This includes health protection, in addition to reducing negative environmental effects.

Health-related assistance and information were especially in demand during 2021. The Freudenberg Safe Work COVID-19 Guideline provides facilities with practical assistance on dealing with the pandemic.

The Group-wide Freudenberg Portal has highlighted practical examples from various Freudenberg sites on topics such as cleaning and disinfection as well

as employee training, along with information on vaccination campaigns. At the same time, services involving health promotion and prevention were carried out on employees' behalf. Especially in demand were programs on dealing with insecurity, anxieties or new forms of work, such as mobile work or remote leadership, among other topics.

The safety of our employees in the workplace has top priority. An HSE week is held each year. All Freudenberg Group sites are called on to implement HSE initiatives that go beyond daily routines. Aside from various training programs to protect employees' health, the focus in 2021 was on measures to promote sustainability, such as reducing energy use and eliminating scrap, and on ways to work ergonomically, even in remote settings.

Internal and external audit processes and standard HSE assessments at all Business Group sites monitor the implementation of internal standards and programs to improve occupational safety, health and environmental protection, as well as fire prevention. The findings from such audits are systematically evaluated and remediation measures implemented within the respective Business Groups and across the Group.

## Management Systems

The roll-out of management systems for occupational health and safety (OHSAS 18001 and conversion to ISO 45001) and environmental protection (ISO 14001) continued in the year under review.

Many facilities are introducing energy management systems in accordance with DIN EN ISO 50001 or EN 16246 to reduce energy consumption and thus the impact of their industrial activities on the environment. The Business Groups Freudenberg Sealing Technologies, Freudenberg Performance Materials, Freudenberg Filtration Technologies, Eagle Burgmann and Vibracoustic have established management systems for this purpose at many of their German production sites. Other production sites run by EagleBurgmann in Austria, Freudenberg Home and Cleaning Solutions in Sweden, and Freudenberg Performance Materials in France have followed their example.

## Investments

The proportion of direct investment in environmental protection, occupational health and safety as part of the overall investment in tangible assets, intangible assets and investment properties was 10.1 percent (previous year: 6.1 percent). Since 2021, there has been an additional category of sustainability-related investments. Here the main focus has been on the reduction of energy consumption and carbon dioxide emissions. In 2021, the proportion of investments devoted to sustainability was 1.6 percent.

## Environmental Protection

Freudenberg feels obligated to protect the environment and takes responsibility to ensure that its actions are as environmentally friendly as possible.

The goal is to continually reduce the company's negative impact along the entire value chain, by using resources more efficiently, reducing emissions, saving energy, water and other materials while optimizing transportation processes.

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# Equivalent CO<sub>2</sub> Reductions

(from one Klüber Lubrication project)

**30,000**

(tons of CO<sub>2</sub> annually)

**medium-term reduction from  
the use of an alternative  
cleaning agent.**

**60,000**

(tons of CO<sub>2</sub> annually)

**planned avoidance of emissions  
due to material substitutions  
at the customer.**

A project at Klüber Lubrication, a Freudenberg company, is one example of the Group's activities in this area. A multidisciplinary team was able to identify an alternative cleaning agent after comprehensive tests in labs and in manufacturing processes. It is less damaging to the climate than other options by a factor of 170 and even cleans more efficiently. In the medium-term, emissions will be reduced by the equivalent of up to 30,000 tons of CO<sub>2</sub> per year. And customers will be avoiding additional emissions equivalent to about 60,000 tons of CO<sub>2</sub> per year as soon as the solvent is replaced as a raw material starting in 2022.

### Events

In 2021, there were 46 environmental and crisis-management events in the Freudenberg Group (previous year: 38 events).

After severe flooding in Europe and the United States, operations were interrupted at the Freudenberg Sealing Technologies in Remagen, Germany as

well as the Freudenberg Performance Materials site in Asheville, USA.

A number of small fires broke out at the sites of Vibracoustic in Morganfield and Carmi, USA, and Freudenberg Performance Materials in Kaiserslautern, Germany, Freudenberg Sealing Technologies in Luzerne, Italy, and Kufstein, Austria, and Freudenberg Filtration Technologies in Kaiserslautern, Germany. In Taiwan, a large fire broke out in an external warehouse owned by a third party where Freudenberg Performance Materials nonwovens were stored, leading to a total loss of the stored goods.

Other environmental events were the contamination of the rainwater drainage in the Weinheim Industrial Park in Germany, and the release of exhaust air containing solvent at the site of Freudenberg Performance Materials in Hückelhoven, Germany.

In addition, there were other environmental incidents and events requiring emergency management, such as false alarms, water damage and medical emergencies.



Occupational and health protections have top priority at Freudenberg.

## Resource Consumption

In 2021, Freudenberg used 2.6 million megawatt hours of energy (previous year: 2.3 million megawatt hours). The energy consumption was largely spread among the following sources:

- externally procured energy (electricity, steam and district heating that was produced outside the Freudenberg sites; 1.64 million megawatt hours)
- gas (0.93 million megawatt hours)
- heating oil (0.03 million megawatt hours)

The cost of 2.6 million megawatt hours of energy was about 266 million euros in all. The proportion of energy costs came to 2.7 percent of total revenue (previous year: 1.8 percent).

## Contaminated Sites

Provisions for contaminated sites were about 20 percent higher than those for the previous year. The amount was at the same level as 2019.

The renovation of the former Freudenberg Sealing Technologies site in Pinerolo, Italy, continued, as did ongoing groundwater monitoring programs at Klüber Lubrication in São Paulo, Brazil and Freudenberg Sealing Technologies in Montrond, France, among other locations.

Official monitoring requirements were implemented at the Weinheim site and at Freudenberg Sealing Technologies in Bristol, USA, and at Chem-Trend in Howell, USA.

## Preventive Healthcare

The ongoing COVID-19 pandemic restricted daily life during the year under review and had an impact on the way we work. The focus was on issues such as hygienic measures, information about infections, inoculations against the coronavirus, and remote work.

There was increased communication about the support that Freudenberg has been offering to its employees over the course of the COVID-19 pandemic. More health-related structures and services were created to support and inform employees – whether in offices, in manufacturing areas or off-site working remotely.

The emphasis was on nutrition to prevent illness and improve health. The topic was originally scheduled for 2020, and services and themes were often adapted with an eye to the pandemic. One example: Good nutrition was cited as a way to strengthen the immune system. The influence of the pandemic on psychological health was made clear. In response, cooperation with psychologists was expanded, a number of services were established, and this crucial area was selected for initiatives in 2022.

The presentation of the Freudenberg-wide “We all take care” Award was again carried out as a hybrid event. The meetings of jurors as well as the award ceremony took place remotely. A great many projects dealt with the pandemic and measures to keep employees healthy.

Freudenberg Home and Cleaning Solutions in Parets del Vallés, Spain submitted the winning project, which was in the “occupational health management” category. The approach behind the project, “Iberica Team spreads worldwide its... Healthy Lifestyle!” was devoted to holistic health. An especially positive aspect: The activities crossed national borders, enthusiastically supporting the “Innovating Together” slogan.

## Occupational Safety

Freudenberg's internal reporting uses the LDIFR (Lost Day Incident Frequency Rate) benchmark. The figure serves as a non-financial key performance indicator for the Freudenberg Group. All workplace incidents with at least one day of work lost per one million hours worked are measured. The LDIFR value was 1.3 in the year under review (previous year: 1.5).

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# LDIFR

(Lost Day Incident Frequency Rate)

# 1.3

(work accidents with at least one lost day, based on a million hours worked)

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The total number of incidents resulting in more than one day's absence in the year under review was 132 (previous year: 148). There were three serious accidents in 2021, the same number as in the previous year.

In occupational safety, the focus is on measures to raise employee awareness of safe practices while designing safe work systems. Successful "We all take care" projects are evidence of this.

If you spend just 15 seconds thinking about the activity you are about to begin, you will avoid on-the-job accidents. That's the message from a Vibracoustic team in Bursa, Turkey. To sensitize employees to this simple yet effective approach, the team organized a safety-related scavenger hunt during which participants had to identify 28 hazardous situations in the production area. Using the 15 second rule, the facility's safety-awareness was heightened.

The Freudenberg Performance Materials site in Nantong, China, restructured its production processes, increasing efficiency while eliminating safety hazards. A redesign of the system made it possible to optimize individual work steps, in some cases involving manual interventions, and reduce their number. An online error recognition system was also implemented. It not only sped up the inspection process – it reduced the amount of work needed for quality inspections. The team not only eliminated safety risks – it boosted efficiency by 20 percent.

The internal Safety Boost initiative continued in 2021. It continually intensified and focused job safety activities. Unsafe situations, work accidents, environmental incidents posing high risks were investigated and reported Freudenberg-wide.

The focus on safety culture resulted in various programs in the Business Groups, such as ViBeS (Vibracoustic Be Safe!). As part of the project, an app was first developed and distributed to communicate information on HSE activities. During the corona pandemic, it also provided employees with news relating to the virus. This made it possible to link various kinds of information, training and contact persons to a central location. This facilitated communication and promoted acceptance.

In 2021, the Safety Boost initiative 2021 zeroed in on maintenance, training, and discussion of pro-active safety metrics.



Corporate Citizenship

# On a small and large scale

At Freudenberg, Corporate Citizenship goes beyond the value creation chain. The Group wants its facilities to be recognized as a good neighbor in the surrounding areas, so it supports a wide array of social projects – from small initiatives locally to complex international programs. All the campaigns are tailored to local requirements, and Freudenberg employees often participate in their free time.



For the sake of Indian children: They appreciate clean water from an "Aqua Tower" donated by Freudenberg.

### Global Program for Education and Environmental Protection

Since the founding of the company, Freudenberg has been actively involved in the community. With the launch of the e<sup>2</sup> (education and environment) initiative, Corporate Citizenship has expanded worldwide since 2015. The initiative's goal is to provide people with access to education and employment, and support environmental protection. The initiative complements existing individual initiatives that meet an established list of criteria. In 2021, Freudenberg decided to provide e<sup>2</sup> with another 4 million euros. That increases its support to a total of 18 million euros.

### Clean Water for a Better Life

The "Aqua Tower" project in India shows that e<sup>2</sup> projects can create inspiration across borders. One year after two of these filtration systems were constructed on the subcontinent, Freudenberg employees, working with Planet Water, their partner in the project, have installed additional Aqua Towers in the Mexican towns of Cerro Prieto and San Vicente de Ferrer. Aqua Towers transform contaminated water from rivers, streams and springs into drinking water. Two other Aqua Towers are planned for Mexico. Another project is ready for launch in Thailand.

### Aid in the Coronavirus Pandemic

In 2021, in keeping with a long Freudenberg tradition, the Group provided help where it was urgently needed. Since the pandemic's outbreak, Freudenberg has allocated significantly more than 2 million euros to the needy worldwide from its e<sup>2</sup> budget and donated to about 130 organizations in 28 countries, to provide food and protective masks.

### **Donations for the Victims of a Flooding Disaster in western Germany**

In July 2021, heavy rainfall caused historic emergencies in many communities in western Germany. The Ahr Valley, the home of many employees at Freudenberg's Remagen facility, was especially hard-hit. The massive amount of water destroyed the houses of more than 30 employees. Although the plant

itself was unscathed, production was shut down for days due to a power outage. The plight of the victims triggered a readiness to help from the entire Freudenberg world: Employees, and the company's Partners donated a total of about 345,000 euros. Many employees donated the equivalent value of their overtime. Freudenberg Home and Cleaning Solutions organized truckloads full of cleaning supplies.

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## Donations

# 345,000

(euros)

**in donations from employees and the Partners for the victims of disastrous flooding.**



**The following examples show the Freudenberg Group's long-term orientation on local aid projects:**

**Training Center in India**

Since 2009, Freudenberg has offered young people in a non-profit training center in Nagapattinam, India in the province of Tamil Nadu, south of Chennai, the opportunity to qualify as electricians, welders, plumbers, motor mechanics, and machinists in dual training programs. So far, more than 700 young people have had a successful start to their careers. Most have found a job in the large, well-known organizations in and around Chennai. The Nagapattinam region is poor, populated mainly by farmers and fishers, and suffered immensely from the 2004 tsunami.

**School Projects in China**

In 2021, for the eleventh time in a row, a Freudenberg summer camp was held at the primary school in Sichuan. More than 70 employees and volunteers created an unforgettable summer for 150 children. The curriculum included astronomy, geography, history, marine biology, art and philosophy. Even before the e<sup>2</sup> initiative, the partnership began with a project especially close to the hearts of Freudenberg employees: the rebuilding of the school after an earthquake in the region in 2008.

In 2021, a second school project was added, this time in the village of Guyong in Guangxi, about 1,500 kilometers southeast of Sichuan. In mid-October, the employees of Freudenberg Apollo Filtration Technologies joined school and government officials in dedicating the Apollo Hope primary school. The financial support from Freudenberg Apollo Filtration Technol-

ogies funded the construction of a new auditorium, library and restroom facility and the installation of a new drinking water system, all of which significantly improved the school's learning environment.

**"Service Day" in North America**

Every September, more than 60 Freudenberg facilities in North America take part in a range of activities to benefit society. As part of "Service Day," a total of 50 employees gathered at a tree nursery in Detroit, Michigan, USA and teamed up with long-time e<sup>2</sup> partner, "The Greening of Detroit," to plant tree seedlings in Detroit parks and neighborhoods. Freudenberg employees in the USA also lent their support to a second e<sup>2</sup> theme: education. In Howell, Michigan, USA, they spurred the interest of children and teenagers in STEM (science, technology, engineering, and mathematics) careers.

**Freudenberg Foundation**

Since 1984, the Freudenberg Foundation has been helping to bring about real, long-term change by promoting inclusion, education and democracy. As a non-profit company, the Foundation is a Partner of Freudenberg & Co. KG. The main focus of its activities is the social, linguistic, educational and professional integration of children and youths.

A person in a blue shirt is working on a laptop. The image is overlaid with a blue tint and digital graphics, including a grid of lines and a checklist icon. The text 'Compliance' is written in white, sans-serif font.

Compliance

# Abiding by laws and regulations

As early as 1887, when his sons joined the company, founder Carl Johann Freudenberg drafted his first principles of business conduct. The document forms the basis for the Freudenberg Group's 10 Business Principles with which the Partners and employees identify. One principle stipulates that success must come from performance. Another states that Freudenberg shall not engage in illegal or unethical business practices.

## Business Principles and Guiding Principles

Supplemental Guiding Principles were derived from the Freudenberg Group's Business Principles and define the values shaping conduct toward employees, business partners, stakeholders and third parties.



## Compliance Structure

Freudenberg consists of Business Groups that operate entrepreneurially and largely independently. Along with the Holding level, they accordingly hold responsibility for adherence to laws and regulations. Both the Board of Management of Freudenberg SE and the top management of the individual Business Groups are clearly committed to this.

At the Holding level, the focus is on the compliance issues that are the most important to the Business Groups and internationally, and that might specifically pose a threat to Freudenberg's reputation.

Anti-corruption and cartel legislation risks have been classified as potentially dangerous due to the company's global presence and the diversity of Freudenberg Group's products and markets.

Freudenberg's goal is to continuously improve its compliance organization, documentation, and processes. A function at the Holding level coordinates Freudenberg-wide compliance measures. It strengthens and expands collaboration between departments on the Group level and the Business Group compliance managers. Among other benefits, this promotes the implementation of Freudenberg compliance standards, the sharing of best practices, and the further development of compliance programs.

An updated training program on various compliance issues was developed in 2021 and is available online. E-learning courses are available for many individual topics and offer the opportunity to selectively sensitize employees from particular workplaces and areas of responsibility to specific sets of issues.

## **Code of Conduct**

The Code of Conduct is derived from the company's Business Principles and Guiding Principles, especially those related to "Responsibility." It covers standards of behavior that apply uniformly worldwide. It is designed to ensure that respect for the law and responsible behavior remain the cornerstone of the company's business conduct.

The Code of Conduct is available to all employees in 26 languages. It has been communicated and explained to all employees worldwide. The Business Groups have been using all the available communication channels in a range of different forms. This integrated, ongoing communication, which is mandatory for new employees, and the binding nature of the Code of Conduct (for example, as an attachment to employment contracts), underscore the unambiguous obligation to adhere to these standards of behavior. The e-learning tool on the Freudenberg Code of Conduct is an appropriate way for all employees to become familiar with its content. The tool also makes it possible to monitor participation and success, and it invites feedback from employees.

Freudenberg wants to strengthen and further develop the role of the Code of Conduct as a cornerstone of the company culture and expand help and support for employees and their supervisors. In these efforts, Freudenberg especially relies on regular information-sharing with the compliance managers of the Business Groups and on active cooperation with Ethics Offices and their staffs.

## **Ethics Offices**

Ethics Offices are an important element of the Compliance Management System at Freudenberg. They serve as a starting point for employees who for different reasons cannot turn to their supervisors, human resources managers or employee representatives, or choose not to. The opportunity to report compliance violations proactively or to expose looming violations through a channel guaranteed to be confidential should help maintain a culture of trust and safeguard Freudenberg's internal Values and Principles even more effectively.

In 2021, the Corporate Ethics Office presented a statutory report about its work, especially focusing on trends in the cases that were handled.



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**Training is regularly held on compliance-related subjects. Employees are selectively sensitized to specific sets of compliance issues.**

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#### **Risk Management and Corporate Audit**

Fraud prevention and anti-corruption measures, along with reviews of their effectiveness, have continued to be components of risk management

and the mission of Corporate Audit, a Group-level function. Aside from the main objective of reviewing the effectiveness of internal monitoring systems, the focus has been on uncovering potential property damage and instances of criminal corruption as well as monitoring the effectiveness of the measures taken, and their improvement when necessary.

## UN Global Compact Index

The UN Global Compact (UNGC) is the world's largest and most important initiative promoting responsible corporate management. Since its signing in 2014, Freudenberg has voluntarily agreed to make sure its business is values-based and sustainable. The following Global Compact Index provides

an overview of the 10 principles in the Global Compact and references the pages of the Annual Report where readers can find information about the progress we have made in implementing these principles.

UNGC PRINCIPLE	Content	Reference
<b>Human Rights</b>		<b>17, 18, 42, 53-55, 58</b>
Principle 1	Protection and compliance with international human rights	42, 53-55, 58
Principle 2	No violations of human rights	42, 53-55, 58
<b>Labor standards</b>		<b>17-19, 21, 38-45</b>
Principle 3	Uphold the freedom of association and the right to collective bargaining	17, 18, 42, 46-48, 50-51, 58
Principle 4	Elimination of all forms of forced labor	17, 58
Principle 5	Abolition of child labor	17, 58
Principle 6	Elimination of discrimination	17, 42, 48
<b>Environmental Protection</b>		<b>14, 18-20, 22-37, 48, 50, 52-55</b>
Principle 7	Environmental protection through care principle	22-37, 48, 50, 52-55
Principle 8	Support for environmental awareness	18-21, 20, 22-37, 48, 52-55
Principle 9	Development of environmentally friendly technologies	14, 20, 22-37, 48, 52-55
<b>Anti-corruption</b>		<b>56-59</b>
Principle 10	Anti-corruption measures	56-59



The 2021 UN Global Compact Progress Report  
from Freudenberg can be found online at:  
<https://www.freudenberg.com/progressreport>

# COMBINED MANAGEMENT REPORT

## FUNDAMENTAL INFORMATION

### BUSINESS MODEL

#### Organizational structure

The Freudenberg Group (Freudenberg) is a global technology group whose goal is to strengthen its customers and society long-term through forward-looking innovations.

At year-end 2021, the number of companies in Freudenberg totaled 474 located in 57 countries, 444 of these companies were included in the

consolidation. 421 companies, including 162 sales companies and 171 production companies, were fully consolidated. The remaining companies were holding or management companies.

Together with partners, customers and the world of science, the ten Business Groups aspire to develop cutting-edge products, excellent solutions and services for some 40 market segments and for thousands of applications: Seals, vibration control components, technical textiles, filters, cleaning technologies and products, specialty chemicals, and medical products.

STRATEGIC MANAGEMENT PARENT COMPANY FREUDENBERG & CO. KOMMANDITGESELLSCHAFT			
BUSINESS OPERATIONS PARENT COMPANY FREUDENBERG SE			
Seals and Vibration Control Technology Business Area	Technical Textiles and Filtration Business Area	Cleaning Technologies and Products Business Area	Specialties Business Area
<b>Business Groups</b>	<b>Business Groups</b>	<b>Business Group</b>	<b>Business Groups</b>
Freudenberg Sealing Technologies	Freudenberg Performance Materials	Freudenberg Home and Cleaning Solutions	Freudenberg Chemical Specialities
Freudenberg Oil & Gas Technologies	Freudenberg Filtration Technologies		Freudenberg Medical
EagleBurgmann	Japan Vilene Company		
Vibracoustic			

As at December 31, 2021. For further details on Freudenberg companies, please refer to the chapter entitled "Review of Operations by Business Area".

Freudenberg builds on lasting and reliable relationships with customers and partners. The partnership with NOK Corporation, Tokyo, Japan, for example, already spans more than 60 years. Numerous activities in the Americas, Asia (China and India) and Europe have been jointly established during the decades-long partnership.

Freudenberg and NOK Corporation jointly hold shares in several companies. Particularly worthy of mention are Freudenberg-NOK General Partnership, Plymouth, USA, which is fully consolidated in the consolidated financial statements, as well as NOK-Freudenberg Singapore Co. Pte. Ltd., Singapore, which is disclosed at-equity as a 50:50 joint venture in the consolidated financial statements.

Further details can be found under “Investments in joint ventures” and “Investments in associated companies” in the Notes to the Consolidated Financial Statements.

Across the globe, the Freudenberg Group’s products and services make a valuable contribution to the success of its customers – rarely visible, but always indispensable, in the spirit of the positioning that reads “**Freudenberg is a values-based technology group that best serves its customers and society**”.

It is Freudenberg’s goal to offer **customers** in the passenger car and commercial vehicle industry, mechanical and plant engineering, textile and apparel, construction, mining and heavy industry, energy, chemical, oil and gas industry, medical technology, civil aviation and rail vehicles sectors, and end users excellent technological and innovative products as well as services.

Innovation strength, strong customer orientation and close collaboration as well as diversity and team spirit are the cornerstones of the Group. Commitment to excellence, reliability and pro-active, responsible action have belonged to the company’s core values ever since it was founded in 1849.

Freudenberg introduced the “Strategic Guide” **leadership concept** in 2013. Under this concept, the Board of Management concentrates on developing the Freudenberg Group strategy, approves major investments, draws up strategic guidelines, and defines strategic planning. Operational business is in the hands of independent companies whose management conducts business under their own responsibility. These individual companies in turn belong to Business Groups.

Freudenberg has two **parent companies**: Freudenberg & Co. Kommanditgesellschaft (Freudenberg & Co. KG), Weinheim, Germany, is the strategic parent company, Freudenberg SE, Weinheim, Germany, is the parent company with responsibility for managing business operations. The corporate bodies of Freudenberg & Co. KG are the Management Board, the Board of Partners and the General Meeting. The corporate bodies of Freudenberg SE are the Board of Management, the Supervisory Board and the Shareholders Meeting. The composition of the Management Board of Freudenberg & Co. KG and the Board of Management of Freudenberg SE is identical. This also applies to the Board of Partners of Freudenberg & Co. KG and the Supervisory Board of Freudenberg SE.

Freudenberg is a **family company** and is currently owned by some 350 heirs to the founding father Carl Johann Freudenberg.

## Organizational changes

### Acquisitions and disinvestments and discontinued operations

**Freudenberg Filtration Technologies** strengthened its business in the USA through two acquisitions in the year under review: Under the first transaction, the Business Group acquired PPA Holdings, Inc., Indianapolis, USA, (“Protect Plus Air”) in September 2021. The company is a leading producer of high-quality air filters for residential buildings. They are mainly sold through retailers. Protect Plus Air has some 940 employees and generated US \$118 million in revenue in 2020. Under the second transaction, Freudenberg Filtration Technologies acquired the business operations of R.P.S. Products, Inc., Hampshire, Illinois, USA, in December 2021. The company also sells air filters for residential and office buildings through retailers. In 2020, the company had more than 200 employees and generated about US \$41 million in revenue.

Furthermore, the **SurTec** division (part of the Freudenberg Chemical Specialities Business Group), acquired the chemicals business of Italteco Srl. of Modena, Italy, in March 2021. Italteco specializes in research and development and the distribution of chemical specialities for the surface treatment of aluminum alloys and steel.

**Freudenberg Chemical Specialities** acquired Deurowood Holding GmbH, Hard, Austria, and the associated shares of DEUROWOOD Produktions GmbH, Hard, Austria, in April 2021. Deurowood is a leading full-range supplier of innovative and safe-to-use chemical additives for paper impregnation and laminate production.

## Business processes

In the year under review, Freudenberg conducted operational excellence activities in all areas with a view to making processes, services and products better, more efficient and safer.

One example of these activities is the Group-wide “PEOPLE+” HR project, which saw the implementation of another milestone in the year under review: Since September 2021, the recruiting process throughout the Group has been incorporated in the Workday HR IT system. The standardized process makes recruitment leaner and more efficient. Workday was rolled out across the Group in May 2020 under the first phase of the project. With the HR IT system, the Group has created greater transparency and enhanced efficiency through uniform HR processes. Thanks to Workday, HR processes and HR master data as well as data relating to talent management and compensation across the entire Freudenberg organization can be accessed from a single source for the first time.

At Freudenberg, digitalization must either offer added value to the customer or significantly improve internal efficiency. COVID-19 has accelerated the Group’s digitalization efforts. This applies above all to cooperation and communication measures. The DIALOG senior management conference, a triennial event, took the form of a purely virtual event for the first time in the year under review, with some 400 participants. Freudenberg has also progressed with the digitalization of production processes.

Moreover, all Business Groups continued to work on responding to customer needs even more effectively and on optimizing business processes. Further details and information can be found in the chapter entitled “Review of Operations by Business Area”.

## RESEARCH AND DEVELOPMENT

Together with customers and research partners, Freudenberg employees develop leading-edge technologies, products, solutions and services. For Freudenberg, striving together for solutions that support global sustainability is both motivation and the concept for success.

In the 2021 financial year, Freudenberg conducted research and development activities in the amount of €500.2 million (previous year: €446.3 million). This represents 5.0 percent of sales (previous year: 5.0 percent). Research and development activities also include development expenses for customer-specific development projects disclosed under cost of sales in the consolidated statement of profit or loss.

The Business Groups account for the largest share of funds for research and development activities. They cooperate closely with their customers on technology, product and service developments in their market segments. As a leading technology group and innovative partner, Freudenberg constantly strives to meet the most demanding requirements in terms of product, process and service quality.

The objective of all innovation activities is to constantly expand and refresh the portfolio of products and services. Freudenberg measures the effectiveness of research and development activities as the share of new products (products less than four years old) in total sales. This share is 32.4 percent (previous year: 34.1 percent).

### **Strategic innovation management throughout the Group**

The constant further development of products and services along with new solutions is fundamental to the success of a company. Freudenberg therefore attaches the utmost importance to holistic innovation management throughout the Group. All activities are defined and strategically pursued at Business Group level.

Freudenberg Technology Innovation drives forward medium- and long-term innovation activities together with the Business Groups. The corporate function has expertise in materials, processes, surface technology methods, tribology and electrochemistry. It also coordinates the **Freudenberg technology platforms** that function as an overarching format for collaboration. The purpose of these platforms, now totaling nine in number, is to create internal networks of experts who work together on key technologies, thus developing products, services and processes as

the basis for long-term innovations. The technology platforms recommend and implement cross-cutting strategic initiatives. Topics addressed by the technology platforms active in the year under review included digitalization, friction/wear, and high-performance materials.

Freudenberg Technology Innovation defined four core topics as overarching fields of competence for the current strategic period: Process & Data Sciences, Virtualization of Material Development, New Mobility & Energy Transition, and Sustainable Materials and Processes.

### **Digitalization is a focus of innovation activities**

Digitalization is playing an ever more prominent role in innovation issues. For that reason, all Freudenberg Technology Innovation units are systematically focusing on digitized processes and workstreams. This is the case, for example, in the Labs and Services unit that performs important services in the analysis and characterization of materials and successively digitized its portfolio during the year under review.

In addition, Freudenberg Innovation Technology further expanded its core competences in the field of data usage analysis with the new Data Sciences unit. This unit's Digital Technologies, Digital Systems, Digital Modeling and Data Analytics sections are tasked with understanding complex interactions by means of data. This work is intended to culminate in the development of new data-based Freudenberg products in a digital environment, thus optimizing existing development and production processes.

The main focus of these efforts is to devise innovative solutions for the efficient and automated availability of data and, by extension, knowledge – of defined quality. The available information can thus be put to use in algorithms – as a data product with economic value added. This leverages the potential to revolutionize standard processes such as material or product development, for example with regard to the automated design of products and processes or by AI-assisted (artificial intelligence) materials development.

In 2021, Freudenberg Innovation Technology also launched the Digitalization Hub@Weinheim – a network of experts and specialists from Freudenberg, universities and startups. Freudenberg has added important digitalization know-how to its network with the participation of Campus Heilbronn of the Technical University Munich, and the Industrial Science Group from Darmstadt.

### **Innovation opportunities from the energy transition**

In the year under review, Freudenberg Technology Innovation generated and evaluated scenarios for the development of future value chains in the fields of the hydrogen economy, fuel cells and batteries. Concrete development activities for materials and processes to manufacture both components and products that can be commercialized by the Business Groups thus draw on these key technologies. Particular attention is paid to building strategic competence and to developing new methods for development departments, test laboratories and technology centers.

### **Sustainability starts with development**

One goal of the Freudenberg Group's strategic innovation activities is the continuous improvement of process technologies in order to enhance materials and energy efficiency. Efforts are increasingly centering on the use of raw materials from recycling sources and the associated adaptation of processes and products. Closing internal material cycles to avoid waste and returning materials to the cycle post-customer use are challenging issues; Freudenberg Technology Innovation addresses these issues using case studies and formulates a conceptual response. Tasks also include the proactive search for viable alternative raw materials that are more environmentally compatible than existing and established solutions as well as new concepts for production technologies that are hard to electrify.

## Selected innovations

### Recycling and sustainability

Freudenberg's expertise in materials and energy efficiency enables innovations that make a positive contribution to climate protection. The circular economy is becoming an increasingly important factor in this context. Today, numerous products are already manufactured from recyclates. Furthermore, many Freudenberg materials can be recycled at the end of their useful life.

In the year under review, **Freudenberg Home and Cleaning Solutions** launched a Vileda brand microfiber cloth made from 100 percent upcycled PET material for sustainability in household cleaning.

**Freudenberg Performance Materials** proved that vehicle components can also make a contribution to the circular economy. Since 2021, underbody shields for passenger cars – textile shields that provide protection against water, dirt and chemicals – are made of 100% recycled fibers. The shields can also be fully recycled at the end of their useful lives.

### Mobility

Whether on the road or on the rail, in the water or in the air: Freudenberg technology helps engines and other parts work reliably. The company supports improvements in all mobility fields with its innovations.

In the year under review, **Japan Vilene Company** developed a battery separator for innovative nickel metal hydride batteries. The new separator weighs less than conventional products and has higher porosity. The new battery has a bipolar structure and excellent performance characteristics, and improves vehicle acceleration capabilities and fuel efficiency.

As a benchmark, the advanced **SurTec 650** technology (**SurTec** is part of Freudenberg Chemical Specialities) supports lightweight vehicle design with modern corrosion protection solutions for automotive components such as batteries, control devices and sensors.

**Freudenberg Sealing Technologies** is active in the field of autonomous driving and, among other things, is addressing the issue of waveguide antennas for automotive radars. In addition, the Business Group is one of the participants in a consortium of developers from industry and research to develop a high-end reference radar sensor.

### Digitalization

In the field of digitalization, Freudenberg focuses both on solutions that bring customers added value and those that raise the Group's internal efficiency. Digital solutions are used in a wide variety of applications, for example in the development, implementation and use of products and services, as well as in monitoring and data analysis. In addition, digital processes make communication with customers easier.

For the first time, **Vibracoustic** was commissioned with the complete integration of an air spring system for a large-series vehicle; this involved the development and coordination of the application software, the actual air springs and the control devices plus other system components such as air tank, valves and sensors.

**EagleBurgmann** launched the EB Smart Seal Sensor that monitors the temperature, pressure and vibrations of supply system seals. The data is transmitted wirelessly to an online condition monitoring cloud.

**Freudenberg Medical** manufactures a cable-free silicone monitoring belt, the Bambi Belt, for its customer Bambi Medical, Eindhoven, Netherlands, to monitor vital signs such as heart muscle activity and respiration activity of premature babies. The belt makes it easier to remove premature babies from an incubator.

ChemGuide, a digital tool from **Freudenberg Filtration Technologies**, supports the design and realization of gas phase filtration systems. These systems provide important services with regard to corrosion protection and the elimination of harmful gases in sensitive electronic components.

## Energy

Hydrogen is an essential building block for the energy transition. Freudenberg technologies are relevant at all stages of the hydrogen value chain, from production and transport through to storage and final use. The company has also been closely involved in the field of fuel cell technology for many years and is systematically addressing the new challenges in the hydrogen industry.

High-integrity TechLok and SPO flange connectors from **Freudenberg Oil & Gas Technologies** simplify the installation of pipeline connections for hydrogen transport. The classic flange or compact clamp connectors only require four bolts for assembly and use proprietary pressure-energized metal sealings to ensure high resilience to cyclical pressure and operating temperatures ranging from extremely high to cryogenic. The dynamic ball joints featuring proprietary BlueSky technology perform an important function in solar power plants. They are designed for temperatures of up to 370 degrees Celsius and pressures of up to 300 PSI and maintain joint integrity when solar panels move to maximize exposure to the sun's rays while preventing the release of fugitive emissions from heat transfer media.

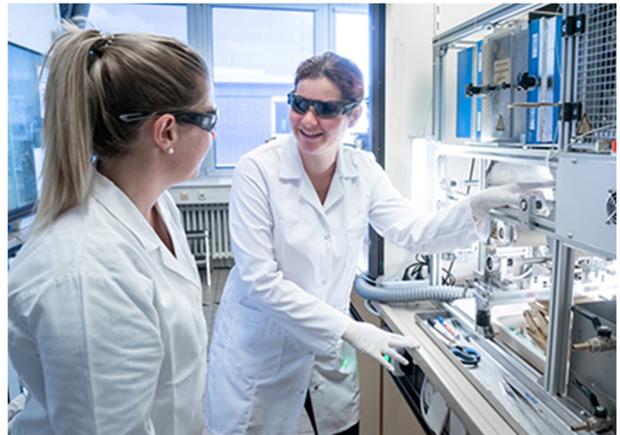
By providing special seals for electrolyzers, **Freudenberg Sealing Technologies** is contributing to sustainable hydrogen production based on solar and wind power. The seals are designed for automated production, enabling a rapid build-up of high manufacturing capacities as required for the "Green Deal".

## Awards

Freudenberg recognizes outstanding achievements in innovation by regularly presenting two external science prizes, the Karl Freudenberg Prize and the "Freudenberg Award – Mobility".

The 2021 Karl Freudenberg Prize was awarded to Dr. Jing Yan, a member of a research team at the Interdisciplinary Centre for Neurosciences at Heidelberg University. Representing the research team, the neurobiologist was recognized for the discovery on the molecular basis of nerve cell death in neurodegenerative diseases such as stroke or dementia.

The "Freudenberg Award – Mobility" was shared by three award winners in the year under review. Dr. Jairo Inga Charaja, Dr. Martin Eisele and Dr. Stefan Scheubner were recognized for their dissertations at Karlsruhe Institute of Technology. In 2021, the name of the award was changed from the Carl Freudenberg Prize to the "Freudenberg Award – Mobility" to highlight the relationship to the Freudenberg Group and more clearly reinforce the focus of the award on mobility systems.



Two Freudenberg Technology Innovation employees working with a coating unit that uses UV polymerization. They are wearing special UV protective glasses.

## REPORT ON ECONOMIC CONDITIONS

### MACROECONOMIC ENVIRONMENT

In 2021, the global economy began to recover from the severe recession of the previous year triggered by the pandemic. Momentum was, however, less pronounced than had been expected. While demand for goods and services picked up sharply as case numbers fell and vaccination programs made inroads, significant supply bottlenecks disrupted the manufacture and delivery of many products. The resulting shortages led to price increases, some of them quite steep. Towards the end of the year, the Omicron variant of the COVID-19 virus led to new bans on contacts that once again impacted economic activity.

The USA was the only major advanced industrial country to regain the pre-crisis GDP level. Key drivers for this were fiscal and monetary stimuli such as the American Rescue Plan approved in March 2021 and the strong domestic economy.

Economic development in the eurozone was more frequently affected by government lockdowns. The problems in global supply chains were especially noticeable in the highly export-oriented German economy. The situation was similar in Japan, which did not even benefit to any appreciable extent from hosting the postponed Olympic Games.

Momentum in key Asian emerging economies was above-average. After the slight dip in its economy of the previous year, China recorded the highest economic growth since 2011. In Taiwan, the pace continued to increase thanks to rising global demand for electronic products. The Indian economy that is comparatively independent of international trade made a rapid recovery, with economic output returning to the pre-crisis level. The situation in Russia and Brazil was similar.

EUROPE		
Region	GDP growth 2020	GDP growth 2021
Eurozone	-7.3 %	5.1 %
Germany	-5.0 %	2.7 %
France	-9.2 %	6.7 %
Greece	-8.9 %	8.3 %
Ireland	-0.3 %	14.2 %
Italy	-9.0 %	6.3 %
Portugal	-8.4 %	4.3 %
Spain	-11.4 %	4.7 %
United Kingdom	-10.7 %	7.0 %

Sources: Consensus Inc., national statistical offices  
GDP growth: February 2022

WORLD REGIONS		
Region	GDP growth 2020	GDP growth 2021
Argentina	-10.5 %	9.3 %
Brazil	-4.6 %	4.7 %
China	2.1 %	7.9 %
India	-8.0 %	9.2 %
Japan	-5.3 %	1.7 %
Mexico	-9.0 %	5.5 %
Russia	-3.6 %	4.5 %
Taiwan	2.3 %	6.0 %
USA	-3.5 %	5.6 %

Sources: Consensus Inc., national statistical offices  
GDP growth: February 2022

## Sector-specific environment

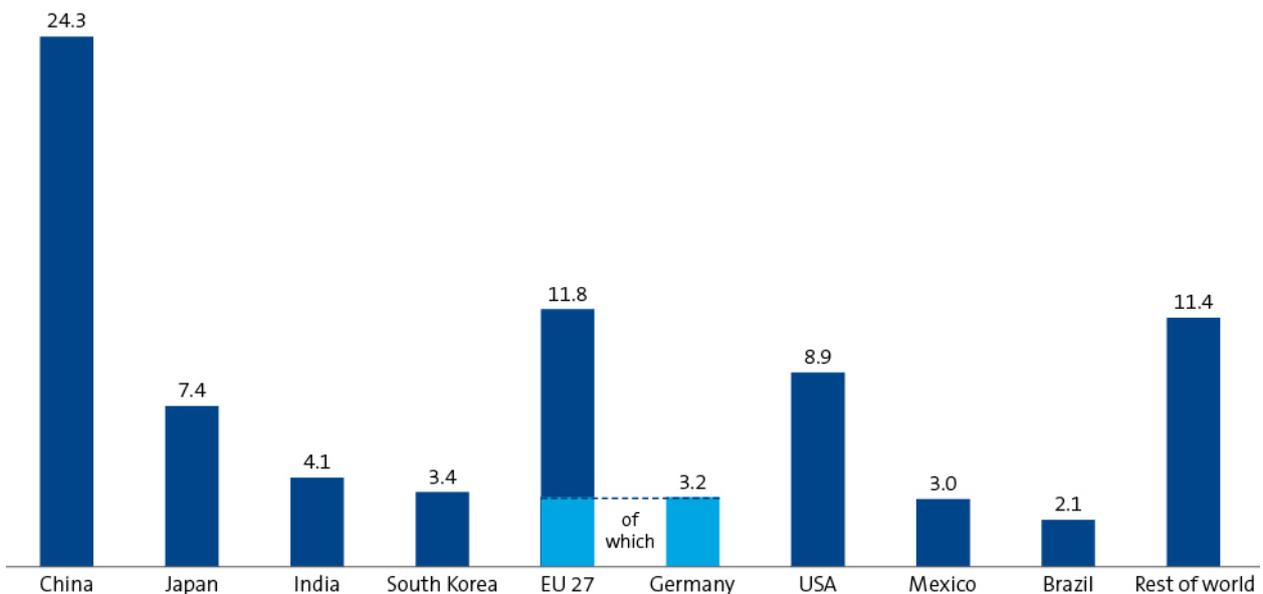
Developments in the Freudenberg Group’s main sales markets were very mixed. Not all markets recovered from the serious crisis of the previous year.

As 2021 progressed, supply bottlenecks in the **automotive industry** became increasingly pronounced, with global production of light vehicles only reaching 76.4 million units. This represents a year-on-year increase of only 3 percent. In North America, production stagnated (0 percent), production figures for Japan (-4 percent) and the EU27 (-6 percent) were even lower than the weak numbers of the previous year. At 4 percent, the growth rate in China was noticeably better than the global average. Momentum was significantly stronger in India (26 percent) and Brazil (9 percent) – in both cases following massive decreases in the previous year (Source: IHS Markit).

The share of all-electric vehicles in global production increased to 6 percent, the share of hybrid vehicles rose to 7 percent (Source: LMC), with this growth in part attributable to state incentives.

Despite the supply bottlenecks and the growing shortage of skilled labor in the global **mechanical engineering** sector, production increased by a robust 13 percent thanks to significant catch-up effects. The rise in the eurozone was 12 percent, with Italy (15 percent) and France (12 percent) recording significantly higher growth rates than Germany (7 percent). Growth in Japan was even higher (23 percent), with growth in the United Kingdom running at 17 percent. In China (12 percent) and the USA (10 percent), growth was also in the double-digit range (Source: VDMA, national statistical offices).

LIGHT VEHICLE DOMESTIC PRODUCTION  
2021 production in million units (76.4 million units worldwide)



Source: IHS, February 2022

Generally speaking, catch-up effects in the **textile and apparel industry** are only moderate. The sector nevertheless picked up again, in some areas quite significantly, after the severe crisis. The world market leader China grew production, already at a high level, by a further 2 percent. In the USA, the increase was 6 percent, and in the EU27 as high as 8 percent (Source: national statistical offices).

With a few exceptions, the construction industry returned to robust growth in 2021. There were noticeable increases in Japan (11 percent), China (4 percent) and the USA (8 percent). Within the EU27, the rates were highest in Italy (22 percent) and France (10 percent). In Germany, there was a downturn in construction activity. The annual average decrease was just short of 2 percent (Source: national statistical offices).

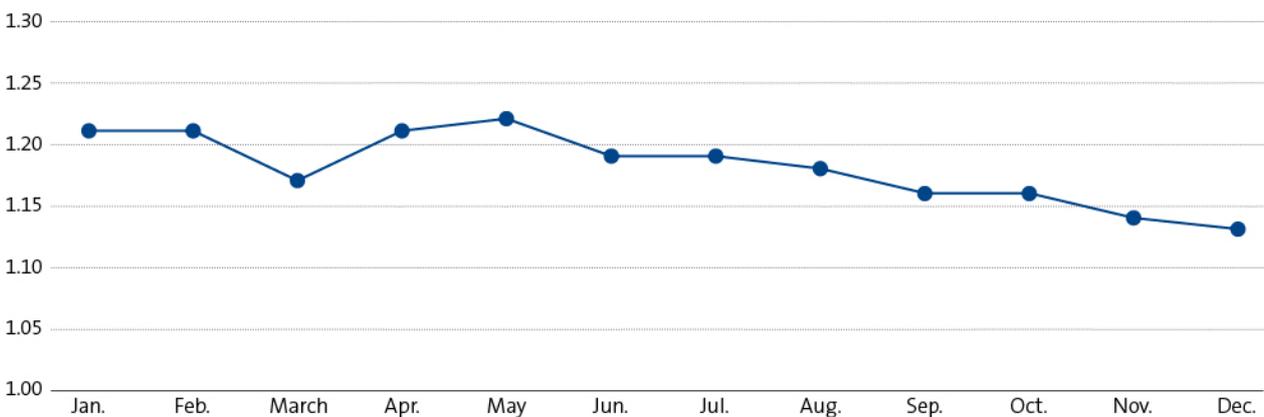
Global demand for **medical technology** components recovered very quickly from the recession of the previous year and already returned to the pre-crisis level during the course of 2021. Production in Germany grew over 4 percent, in the EU27 growth was even as high as 12 percent. The increase was 7 percent in the USA, 15 percent in Japan and 24 percent in China (Source: national statistical offices).

**Private consumption** recovered strongly worldwide in 2021 as government lockdowns ended, with rates similar to those for GDP (Source: national statistical offices). This contributed to pushing up inflation. However, the very sharp increases in energy prices were the main factor behind inflation rates in many countries that were well above the targets envisaged by central banks (Source: Federal Statistical Office / Eurostat). In Germany the annual average inflation rate ran at 3.1 percent (Source: Federal Statistical Office).

Demand for oil rose sharply as the economic recovery progressed. Along with geopolitical uncertainty in key producing countries – above all Kazakhstan and Ukraine – combined with the stricter OPEC position, this led to an appreciable rise in the **oil price** during the course of 2021. The average annual price was US \$67.69 per barrel (WTI), 69.4 percent higher than the previous year (Source: Handelsblatt).

The euro exchange rate showed a slightly negative trend during the course of the year, but the annual average exchange rate of approx. US \$1.18 per euro was nevertheless 3 percent higher than the level of the previous year (Source: Deutsche Bundesbank / European Central Bank).

EURO EXCHANGE RATE DEVELOPMENT IN 2021  
US dollar per euro



Source: European Central Bank; month-end rates

## BUSINESS DEVELOPMENT AND POSITION

For Freudenberg, sales, operating result and return on sales are the key financial performance indicators. The key performance indicator of operating result describes the result before income tax without special effects (for example, significant restructuring expenses), the profit or loss on disposals of assets, impairment of goodwill, or results of major associated companies. The return on sales is calculated from the two key performance indicators of sales and operating result.

In its internal reporting, Freudenberg uses the LDIFR (Lost Day Incident Frequency Rate) as a non-financial key performance indicator. It measures all accidents at work involving at least one day's absence per million working hours. The indicator also includes data for temporary employees and agency staff.

The forecasts made at the beginning of the year with respect to the financial and non-financial key performance indicators are regularly reviewed and updated in the course of the year. The financial and non-financial key performance indicators presented are made available to the Board of Management on a monthly basis. This allows trends and changes to be identified in good time so that measures can be taken to counteract any detrimental developments.

The key financial performance indicators are used for assessing business success, the position and development of the Group, and focus on sustainable growth and a continuous increase in enterprise value as indicators for steering future, values-driven success.

Our performance indicators developed as follows:

FORECAST/ACTUAL COMPARISON FREUDENBERG				
	ACTUAL 2020	Forecast for 2021	Change	ACTUAL 2021
Sales [€ million]	8,840.8	slightly above prior-year level	+13.5 %	10,038.7
Operating result [€ million]	669.9	slightly higher	+31.0 %	877.3
Return on sales [percent]	7.6	marginally increased	+1.1 % points	8.7
LDIFR [LDI per million working hours]	1.5	at prior-year level	-0.2	1.3

At €10,038.7 million, sales were appreciably higher than the prior-year level of €8,840.8 million and as a result the forecast development was exceeded. The increase is mainly attributable to the stronger than expected recovery in demand in the automotive industry and the processing industry during the first half of 2021 following the economic effects of the COVID-19 pandemic in 2020.

At €877.3 million, the operating result was well above the prior-year level of €669.9 million that was affected by the COVID-19 pandemic and higher than the forecast development. This corresponds to a return on sales of 8.7 percent. The rise is attributable to the higher earnings contributions associated with higher sales volumes that were in part affected by significantly higher material costs. In addition, startup

costs for expanding the battery and fuel cell business continue to be incurred.

Once more, one focus at all levels of the company in the 2021 financial year lay on occupational safety. Measures in this area in 2021 again concentrated on rules for correct conduct and preventive measures to protect against the coronavirus. The internal Safety Boost initiative also continued in 2021. Under this initiative, occupational safety activities are continually intensified and focused. Unsafe situations, accidents at work, environmental incidents and fires with potentially high risks are analyzed and reported throughout the Freudenberg Group. The LDIFR in the 2021 financial year was 1.3 (previous year: 1.5), slightly above the forecast development. The improvement is further progress in the integration of newly-acquired companies.

**Sales**

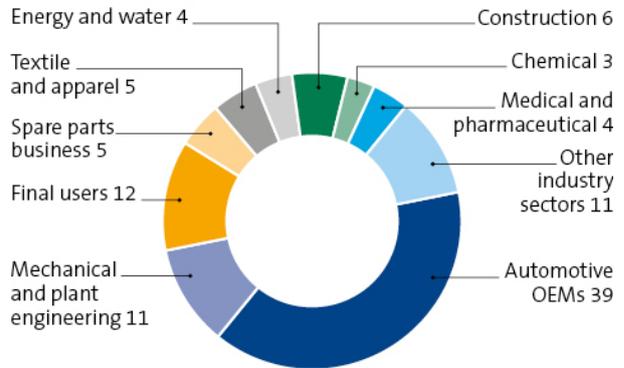
Freudenberg aims for profitable growth achieved both through its own efforts (organic) and through acquisitions (external). Key success factors are in particular the innovative product range, customer-oriented, flexible solutions to problems in the different sectors of industry, and structured expansion into attractive markets and strategic business areas.

In the 2021 financial year, Freudenberg reported sales of €10,038.7 million (previous year: €8,840.8 million). Exchange rate effects totaling €-94.9 million had a negative effect on sales. These effects were primarily attributable to developments in the exchange rates of the US dollar, the Turkish lira and the Japanese yen. Acquisitions in the year under review accounted for sales of some €193.3 million. Disinvestment effects amounted to some €25.4 million. This includes sales of acquired or disinvested companies for the period until they are included or not included, as the case may be, in the consolidation of the Freudenberg Group for a full 12 calendar months.

**Sectors and regions**

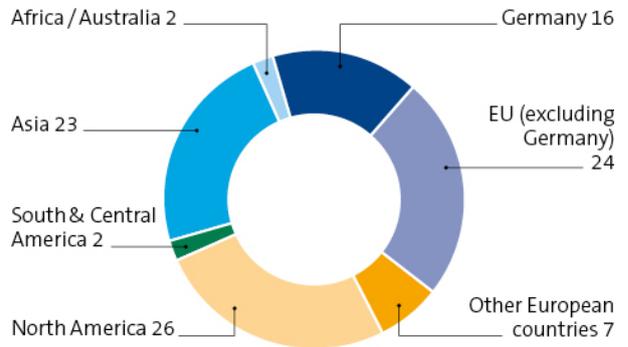
Sales distribution by sectors remained generally stable in the 2021 financial year. The only exception was the share of sales to automotive OEMs in total sales, which decreased slightly to 39 percent (previous year: 40 percent). In contrast, the share of sales to the textile and apparel sector in total sales increased from 4 percent to 5 percent. There was no change in the share in total sales compared with the previous year for the remaining sectors.

SALES BY SECTOR [in %]



The North America region accounted for 26 percent of total sales (previous year: 26 percent). Freudenberg generated a share of 24 percent (previous year: 24 percent) of total sales in the European Union excluding Germany. Asia accounted for 23 percent (previous year: 23 percent) of total sales.

SALES BY REGION [in %]



## Earnings position

[€ million]	2020	2021
Sales	8,840.8	10,038.7
Cost of sales	-6,093.3	-6,904.7
<b>Gross profit</b>	<b>2,747.5</b>	<b>3,134.0</b>
Selling expenses	-1,271.5	-1,369.2
Administrative expenses	-603.0	-637.2
Research and development expenses	-387.8	-428.4
Other income and expenses	24.9	38.5
Income from participation in joint ventures	20.1	26.0
<b>Profit from operations</b>	<b>530.2</b>	<b>763.7</b>
Financial result	-19.5	14.5
<b>Profit before income taxes</b>	<b>510.7</b>	<b>778.2</b>
Income taxes	-144.6	-191.1
<b>Consolidated profit</b>	<b>366.1</b>	<b>587.1</b>

At €10,038.7 million, sales in 2021 were above the level of the previous year. The cost of sales ratio decreased slightly by 0.1 percentage points while gross profit increased by 0.1 percentage points. The selling expenses ratio fell to 13.6 percent, while the administrative expenses ratio decreased to 6.3 percent.

Compared with the previous year, there was an increase in research and development expenses, although the research and development expense to sales ratio fell slightly to 4.3 percent. The increase in research and development expenses reflects the continued growth in activities in the battery cell and fuel cell business.

Compared with the previous year, the financial result rose by €34.0 million, chiefly as a result of the rise in the share of income from associated companies, in the amount of €52.3 million. This development was offset by the fall in income from investments.

The consolidated profit was €221.0 million higher than the figure for the previous year.

## Financial position

### Financing management

Freudenberg SE and the central financing company Externa Handels- und Beteiligungsgesellschaft mit beschränkter Haftung, Weinheim, Germany, steer all the financing activities of Freudenberg, thus ensuring that Freudenberg has sufficient liquid funds. As a general principle, companies obtain the financing they require via cash pool agreements or internal loans – for legal, fiscal and other reasons, financing in some countries also takes the form of bank loans guaranteed by Freudenberg SE.

Freudenberg does not expose itself to financial risks through speculation with derivative financial instruments but uses such instruments only for hedging, and therefore reducing, risks in connection with underlying transactions and items. Future transactions are only hedged if there is a high probability of occurrence. In order to ensure the identification and management of all financing risks, the Freudenberg Group pursues a holistic approach to financial risk management. The existing financial risks are identified and limited in an institutionalized control loop.

Exchange rate risks on currency markets remain high. In addition, there continues to be volatility on the credit and capital markets. This also impacts the financing conditions for industrial companies. In the opinion of the Board of Management, Freudenberg is in a good position to tackle these challenges thanks to its conservative finance policy. Liquidity measures include high reserves of liquid funds and committed credit lines with core banks. Liquid funds are always invested on the basis of internal directives. These call for the risk-based, limit-oriented diversification of financial investments between issuers with an investment grade rating and for investment only for short terms.

A key element in external borrowing is a long-term shareholder loan where the interest payable is oriented towards market interest rates for the same terms plus a premium.

As at December 31, 2021, Freudenberg had undrawn committed credit lines amounting to some €1,100 million. The interest payable on the certificates of indebtedness (“Schuldscheindarlehen”) included in the liabilities to banks is based on variable and fixed components. Further details on interest rate structure can be found in the section on interest rate risks in the Notes to the Consolidated Financial Statements.

As in the previous year, the rating agency Moody’s Deutschland GmbH, Frankfurt am Main, Germany, rated Freudenberg SE, Weinheim, at “A3”, with a stable outlook in the year under review. The Group therefore continues to hold a single-A rating.

This gives Freudenberg very good creditworthiness at investment grade level.

STATEMENT OF FINANCIAL POSITION STRUCTURE				
	Dec. 31, 2020	Dec. 31, 2021	Change	
	[€ million]	[€ million]	[percent]	[€ million]
<b>Asset structure</b>				
Non-current assets	6,962.6	7,401.3	6.3%	438.7
Current assets	4,892.2	5,519.8	12.8%	627.6
<b>Assets</b>	<b>11,854.8</b>	<b>12,921.1</b>	<b>9.0%</b>	<b>1,066.3</b>
<b>Capital structure</b>				
Equity	5,696.1	6,490.5	13.9%	794.4
Non-current liabilities	2,945.1	3,039.5	3.2%	94.4
Current liabilities	3,213.6	3,391.1	5.5%	177.5
<b>Equity and liabilities</b>	<b>11,854.8</b>	<b>12,921.1</b>	<b>9.0%</b>	<b>1,066.3</b>

### Capital structure

In the 2021 financial year, the statement of financial position total rose by €1,066.3 million. The **equity ratio** increased from 48.0 percent to 50.2 percent. **Equity** increased by €794.4 million. This increase is chiefly due to the positive consolidated result and positive exchange rate effects. Actuarial gains on the re-measurement of defined-benefit pension plans also contributed to the increase in equity. These effects were partially offset by dividend payments to the parent company Freudenberg & Co. KG and holders of non-controlling interests.

**Non-current liabilities** amounted to €3,039.5 million (previous year: €2,945.1 million). This rise was mainly due to the increase in the shareholder’s loan amounting to €150 million and a resulting increase in long-term financial debt. This development was partially offset by a reduction in provisions for pensions and similar obligations from €879.7 million in the previous year to a total of €808.8 million. The

reason for this development was the use of a higher interest rate for calculations, resulting in actuarial gains.

The €177.5 million rise in **current liabilities** to €3,391.1 million was chiefly the result of increases in trade payables and other short-term provisions. These developments were partially offset by a reduction in the short-term portion of the shareholder’s loans to €402.0 million (previous year: €537.0 million) as this amount was reclassified to non-current liabilities as a result of a change in the contract term.

Adjusted for exchange rate effects and changes in the consolidated group, non-current liabilities rose by 1.7 percent while current liabilities fell by 5.9 percent. As regards the currency structure, reference is made to the currency risk section of the Notes to the Consolidated Financial Statements.

## Investments

Adjusted for acquisitions, investments in intangible assets, tangible assets and investment properties amounted to €304.8 million (previous year: €287.1 million).

The Freudenberg Group invested worldwide. Freudenberg Filtration Technologies commissioned a new manufacturing facility of its Consumer division at Shunde, Foshan City, China. Freudenberg Performance Materials invested in a new needle punch line at the Slovenian production location Škofja Loka. Vibracoustic invested in the modification of its facilities in Dey, Romania and Sroda Slaska, Poland.

Investments in Germany totaled €88.0 million (previous year: €85.8 million). Freudenberg Sealing Technologies commissioned the first sections of the Fuel Cell Innovation Center in Munich, Germany. Freudenberg Performance Materials significantly expanded its manufacturing capacity for gas diffusion layers (a key component of fuel cells) and invested in the expansion of its facility in Weinheim, Germany. Freudenberg Performance Materials also commissioned a new meltblown line producing base material for FFP1, FFP2 and FFP3 face masks at the facility in Kaiserslautern, Germany. Vibracoustic expanded its air spring manufacturing capacities in Hamburg, Germany.

Investments planned for 2022 are likely to be financed from cash flow from operating activities and to have no major effect on net assets.

## Liquidity

**Cash flow from operating activities** in the 2021 financial year amounted to €861.8 million, corresponding to a decrease of €277.0 million compared with the previous year. This fall was chiefly due to a significant rise in working capital, lower income from investments and a decrease in the interest result.

As a result of higher cash outflows for acquisitions and disinvestments, the negative **cash flow from investing activities**, increased from €-241.1 million in the previous year to €-533.5 million.

**Cash flow from financing activities** in the 2021 financial year was €-197.5 million (previous year: €64.3 million). Cash inflows were largely characterized by the increase in the accounts of Freudenberg & Co. KG Partners. The cash outflows mainly concerned payments to the shareholder and holders of non-controlling interests as well as the repayment of financial debts.

On the basis of the assessment of the Board of Management, the Group can meet all of its payment obligations without any restrictions.

### Assets

The total assets of Freudenberg increased by €1,066.3 million to €12,921.1 million (previous year: €11,854.8 million).

**Non-current assets** rose from €6,962.6 million to €7,401.3 million. This development was due to the increase in almost all items included in non-current assets in the statement of financial position. Special mention should be made of the rise in intangible assets compared with 2020 and the higher carrying amount of investments in associated companies. Adjusted for exchange rate effects and changes in the consolidated group, non-current assets increased by €11.8 million.

**Current assets** rose by €627.6 million to €5,519.8 million. This rise was due chiefly to increases of €343.6 million in **inventories** and €137.9 million in current receivables. Adjusted for exchange rate effects and changes in the consolidated group, there was a total increase of €460.2 million in current assets.

### Overall assessment

The 2021 financial year was characterized by a difficult economic and geopolitical environment chiefly affected by the impact of the COVID-19 pandemic. Both the sales and the operating result of the Freudenberg Group were above the level of the previous year. The Business Groups benefited from COVID catch-up effects, which led to significantly higher sales. On the other hand, considerably higher material prices had a negative impact on the operating result.

As in previous years, Freudenberg continued to invest in the future viability of the Group in 2021. In addition to customer orientation, key topics were the transformation in mobility, digitalization and sustainability. Special mention should be made of investments in the battery and fuel cell business. Freudenberg aims for profitable growth which may come both from its own resources and from acquisitions. In a volatile environment and especially in times of crisis, it is beneficial to be a broadly diversified company. We continue to aim for a balanced portfolio of cyclical and non-cyclical business with equal sales contributions from North and South America, Europe and Asia. Against this backdrop, we further strengthened various Business Groups through acquisitions in the year under review. The liquidity situation of Freudenberg remains solid.

Furthermore, occupational safety continued to be one of the main focuses of the Group in the 2021 financial year. Key topics in 2021 were the implementation of appropriate rules of conduct and the development of preventive measures for protection against COVID-19. In the year under review, the non-financial performance indicator LDIFR was 1.3 (previous year: 1.5).

Against the backdrop of our solid net assets and financial position and our high-earnings business, our overall assessment of the economic position of the Group is positive.

## REVIEW OF OPERATIONS BY BUSINESS AREA

The Freudenberg Group's ten Business Groups are divided into four Business Areas: "Sealing and Vibration Control Technology", "Technical Textiles and Filtration", "Cleaning Technologies and Products", and "Specialties". They focus on long-term, sustainable and profitable growth.

Together with its partners, customers and the world of science, the Freudenberg Group aspires to develop cutting-edge products, excellent solutions and services for some 40 market segments and thousands of applications in the spirit of the positioning that reads "Freudenberg is a values-based technology group that best serves its customers and society".

### SEALS AND VIBRATION CONTROL TECHNOLOGY BUSINESS AREA

**In the year under review, the Seals and Vibration Control Technology Business Area comprised the following Business Groups:**

- Freudenberg Sealing Technologies
- Freudenberg Oil & Gas Technologies
- EagleBurgmann
- Vibracoustic

Sales in this Business Area amounted to €5,135.4 million (previous year: €4,550.4 million). The headcount at the close of the financial year was 29,111 (previous year: 28,436).

## FREUDENBERG SEALING TECHNOLOGIES



	2020	2021
Sales [€ million]	1,894.1	2,199.9
Workforce	12,831	13,492

### Business development

- 16 percent year-on-year increase in sales
- Automotive business hardest hit by the semiconductor crisis and raw material shortages in the second half-year

With year-on-year sales growth of 16 percent, the 2021 financial year was a very good one overall for Freudenberg Sealing Technologies. From February, sales exceeded expectations, in some cases quite significantly, for a period of six months. In the second half of the year, automotive business was hardest hit by the critical situation in global raw material supplies, in particular elastomers, and the accompanying price increases, with sales continuing to slide until the end of the year.

Developments in all regions were significantly better than was the case in the previous year. However, with growth of some 25 percent, business activities in the general industry sector were noticeably better than those in the automotive sector. The global semiconductor shortage had an enormous impact on

Freudenberg Sealing Technologies' customers in the automotive industry. The severe impact and production downtimes in this sector also meant that the Business Group was obliged to cut back production at some sites.

Exchange rate effects that had a negative impact on business were offset by price adjustments in all sectors.

### Key events

- Development project with ZF Friedrichshafen and Flixbus on alternative drives for long-distance buses
- Numerous product innovations for electrifying vehicle drives presented

The Remagen site and many of its employees were severely affected by the devastating floods in the west of Germany in early July 2021. Production came to a standstill for nine days as the power supply was interrupted due to the severe weather conditions. A wave of support from the Freudenberg Group

worldwide got underway not long after the disaster: Cash and in-kind donations began arriving within a very short space of time. Many Business Group employees helped flood victims by donating the equivalent of the overtime they had worked. Thanks to emergency power generators organized by Freudenberg Service, the plant was soon up and running again, and subsequently operated at full capacity with 18 shifts per week for several weeks, thus preventing any interruptions in deliveries to customers.

In terms of business development, attention in 2021 centered on the organizational and operational evolution of the fuel cell and battery business: The Battery and Fuel Cell Systems Division debuted with its new external presence independent of Freudenberg Sealing Technologies on September 1, 2021. These changes are designed to intensify the focus and the international dimension of the dynamically growing business in both battery and fuel cell technology even more effectively.

The Business Group reached further key operational milestones in its fuel cell strategy in 2021. The company started a strategic partnership with Lürssen Werft, the market leader in the yacht sector, to develop fuel cell systems for mega yachts. In the case of the first system under development, it will allow a ship to spend more than 15 days at anchor or cruise for more than 1,000 miles with zero emissions. Freudenberg's ambition is to make a significant contribution to sustainability in the maritime sector. The cooperation with Lürssen proves that the maritime fuel cell technology is generally transferable to all maritime sub-segments. Furthermore, Freudenberg Sealing Technologies started the development project HyFleet together with ZF Friedrichshafen and FlixBus. The partners aim to jointly develop a high-performance fuel cell system for future long-distance bus platforms by 2024 to completely replace conventional diesel drives. They will also be examining the hybridization of electric powertrains with fuel cells and batteries.

Electromobility – in particular the electrification of drive systems – was a further focus of business development in the year under review. Freudenberg Sealing Technologies introduced a new generation of electrically conductive seals under the name of “eCONevo” at the virtual 2021 Vienna Motor

Symposium, the leading event of its kind for the European automotive industry. In addition to preventing bearing damage caused by electrically-induced corrosion, the seals also increase electromagnetic compatibility. With these products, the company is making an important contribution to high-performance electric drives. In 2021, the Business Group furthermore presented a new generation of DIAvent valves, which ensure that reaction gases can escape from damaged lithium-ion batteries significantly faster than before. Even with an overpressure of 300 millibars inside the housing, “DIAvent Highflow” already enables a flow rate of 92 liters per second. At the same time, the valve maintains the continuous pressure compensation required for normal battery operation.

A further product innovation is new thermoplastic compounds for electric drives that provide these alternative powertrains with greater thermal conductivity and better electrically insulating properties. These new thermally conductive, electrically-insulating (TCEI) grades are important in the production of bobbins for e-motors. Bobbins molded from the new materials can be thinner, leaving more room for copper wiring which generates higher power densities in the motors. These products made their debut at The Battery Show in Novi, Michigan, USA, in September 2021.

Freudenberg Sealing Technologies also successfully launched product innovations in other sectors; these include the “LeaCo” optical sensor that enables the early detection of leaks in industrial plants. The “LeaCo” monitoring system is easy to install and offers a particularly good solution for retrofitting existing production facilities and test stands.

By providing seals for systems that use electrolysis to produce hydrogen, Freudenberg Sealing Technologies is contributing to sustainable hydrogen production based on solar and wind power. The seals are designed for automated production, enabling a rapid build-up of high manufacturing capacities as required for the “Green Deal”. One of the solutions pursued by Freudenberg Sealing Technologies is based on molding the sealing material directly onto the functional part. The company is already using a similar process to produce gas diffusion layers in fuel cells. Alternatively, the seal can be applied to or

inserted into a specialized carrier, which in turn is easy to transport and install.

In October 2021, the Freudenberg company Merinvest OÜ, Mullutu, Estonia, was recognized as “Employer of the Year 2021”, one of the highest local awards for employers. The facility has a workforce of some 260 employees and has been producing membranes and O-rings for many years. In November, Freudenberg-NOK Sealing Technologies in Plymouth, USA, was honored with the Top Workplace Award 2021 from Detroit Free Press for the fourth time in succession. The award is based on an anonymous survey conducted among the workforce rating employee satisfaction with their company. In the same month, the State of Berlin recognized Freudenberg Sealing Technologies with the “Inclusion Prize” in the mid-sized companies category for its commitment to inclusive employment.

### Location changes

The new central warehouse for Europe in Bischofsheim opened in January 2021. It replaces the old facility in Lorsch. Around 50,000 items are permanently accessible on 12,500 square meters. It is one of Freudenberg Sealing Technologies’ main logistics centers and supplies customers worldwide. The warehouse is partially automated; for example, employees use the “pick-by-vision” method: Smart glasses display the required information, such as the storage area, item and withdrawal quantity, directly in their field-of-vision, freeing up the warehouse workers’ hands for their primary tasks. Another example is the driverless transport systems that navigate through the aisles thanks to laser, sensor and camera technologies.

Groundbreaking for a new facility in Changchun, China, to be operated as a joint venture with NOK took place in May 2021. As early as April 2022, the new 32,500 square meter site is to start producing up to 150 million seals per year. The present facility in Changchun with its workforce of 550 that has been in operation since 1992 currently produces 120 million seals per year (as at 2020) and supplies almost all leading automobile manufacturers in China.

During the course of the year, the first sections of the new Fuel Cell Innovation Center II in Munich were commissioned. The new center has over 6,000 square meters of space to house test capacities for fuel cell systems including the necessary fuel infrastructure for the process development of large-scale industrialization at system level. Over 200 new jobs are to be created by the end of 2022.

### Profile:

*Freudenberg Sealing Technologies is a long-standing technology expert and global market leader for demanding and novel applications in sealing technology and electromobility. With its materials and technology expertise, the company is a proven supplier for demanding products and applications, as well as a development and service partner to customers in the automotive industry and in general industries. The Corteco brand is a specialist for the independent automotive spare parts market.*

*Moreover, Freudenberg’s activities in the field of fuel cell systems for commercial vehicles gathered pace in 2021. With the XALT Energy brand, the company produced large-scale lithium-ion battery cells, modules and systems for use in heavy-duty vehicles, such as city and transit buses, ships and other industrial applications in the year under review.*

## FREUDENBERG OIL & GAS TECHNOLOGIES



	2020	2021
Sales [€ million]	67.9	70.2
Workforce	402	376

### Business development

- Global rig count roughly unchanged year-on-year, slight increase in rig activity in the USA
- Sales up four percent compared with 2020, mainly due to increases in the second half of the year

Oil and gas market activity began to recover towards the end of the second quarter of 2021 as a result of economies re-opening, the reduction in global raw material inventories and the re-initiation of delayed oil and gas projects.

The global average rig count was roughly unchanged year-on-year, while the USA saw an increase of approximately nine percent in rig activity. Although raw material prices for oil and natural gas were above the pre-crisis level, market activity within “Drilling and Completions” was still well below the pre-crisis level.

Overall, Freudenberg Oil & Gas Technologies finished the year with sales up some three percent compared with 2020, with second half sales increasing by 29 percent compared with the first half of 2021.

Major projects for the Business Group included the Chevron Anchor Project in the Gulf of Mexico, where one of the Business Group’s proprietary 20,000 psi rated special sealing products was utilized. Other examples are the Shell Colibri Project located offshore Trinidad and Tobago, which utilizes Freudenberg Oil & Gas Technologies’ TechLok connectors on the floating storage and production operating vessel, along with the Chevron Jantz Project located offshore Australia that utilizes a special sealing product for subsea compression gas technology located on the sea floor.

### Key events

- Focus on products for wind, solar and geothermal applications continued
- New product developments account for some seven percent of total sales.

The Business Group's strategy to diversify business by also serving the adjacent and alternative energy markets was successfully continued in the year under review. Freudenberg Oil & Gas Technologies provided BlueSky Dynamic Ball Joints for concentrated solar applications, produced WellProtek Ultra annular seals for geothermal well drilling, and developed special seals for a mid-stream refining application. The company also worked on a patent application for a new static flange technology for use in the offshore wind energy market.

The Business Group continued to focus on new product development and commercialization in 2021, resulting in new product order intake of some seven percent of total sales. Significant new products commercialized in 2021 include a variety of pressure control products which added to the overall product portfolio. These include split casing head seals made from the proprietary Gazguard elastomer, and the Flex Union Dynamic Ball Joint for use in land-based misalignment pipe connection applications.

With regard to Freudenberg Oil & Gas Technologies' restructuring efforts, the Business Group worked on rationalizing two of its existing legal entities in Norway down to one. The new unit will operate under the name of Freudenberg Oil & Gas Technologies AS.

### Profile:

*Freudenberg Oil & Gas Technologies is a global provider of critical sealing and connector solutions, niche products and services to the global energy market – including the oil and gas, renewable energies and alternative energies market segments. The products are used in the drilling, extraction and processing of oil and gas, enabling power generation from tidal and solar sources.*

*Freudenberg Oil & Gas Technologies develops and delivers products, technologies and services for a wide range of customers including oil and gas producing companies, original equipment manufacturers (OEMs), and engineering and service companies that in turn provide technologies, equipment and services for onshore and offshore oil and gas production and power generation systems throughout the world. The Business Group has its own materials and product testing lab in Houston, Texas, USA, and operates production and service centers in Canada, Malaysia, Norway, Singapore, United Kingdom, United Arab Emirates and the USA.*



	2020	2021
Sales [€ million]	789.4	823.2
Workforce	5,627	5,645

**Business development**

- For first time, EagleBurgmann becomes global first fit market leader based on sales.
- Very good growth in the pharmaceutical industry and in agitators, mixers and kneaders
- Major international projects secured in Mexico and Iraq

For the first time in the company’s history, EagleBurgmann sales in original equipment manufacturer business outperformed all competitors in what is known as the first fit market. As a result, the Business Group laid the foundation for robust development in the aftermarket business with spare parts over the coming years.

Overall, business in all regional markets of the globally active Business Group exceeded the level of the previous year. Business development with customers in the pharmaceutical industry was particularly pleasing. In terms of applications, there was growth

above all in products for agitators, mixers and kneaders. There were also positive developments for EagleBurgmann in important international projects. Two major orders for products for use in refineries in Mexico and Iraq were secured. In the field of alternative energies, intensive activities were undertaken to ensure a well-filled project pipeline.

Higher prices on raw materials markets and supply chain disruptions had a slightly negative impact on business development.

The ongoing global COVID-19 pandemic no longer had a direct effect on the Business Group’s incoming orders. However, restricted access to external industrial plant remained an obstacle to customer contacts, and maintenance and servicing jobs could not be processed as planned. All EagleBurgmann production sites and service centers were open during the year under review. The supply of products and services to customers was guaranteed at all times – with a few minor exceptions due to supply chain bottlenecks.

### Key events

- **CobaDGS mechanical seal prevents emissions of climate-critical methane.**
- **EagleBurgmann continued its goal-oriented work on the digital transformation.**
- **Modular product lines suited to a wide range of applications worldwide perceptibly shorten delivery times.**

In 2021, more than 100 nations all over the globe pledged to cut emissions of methane, a greenhouse gas, by 30 percent by 2030. EagleBurgmann has two commercialized products that can contribute significantly to achieving this target. The first is the new CobasDGS mechanical seal that can completely eliminate methane emissions from pipeline compressors used to transport natural gas. The second is the RoTech booster that keeps gas seals reliably clean during standby conditions and prevents venting the compressor, thus releasing methane to the environment. 650 RoTech boosters were in operation in the year under review, with annual savings of some two million tonnes of CO<sub>2</sub> equivalent.

A further key strategy project in the year under review was the digital transformation of the Business Group. The relaunch of the online shop professionalized the digital sales channels, bringing improvements in many respects. This was appreciated by customers, as evidenced by a noticeable increase in EagleBurgmann's digital business.

The "Smart Seal Sensor" product line celebrated further milestones on its way to commercialization. Going forward, smart products fitted with sensors will enable EagleBurgmann customers to digitally monitor the operating parameters of mechanical seals, visualize their performance and process data on web-based platforms.

Furthermore, EagleBurgmann has set itself the task of reducing the complexity of its projects and controlling them intelligently. Going forward, there is to be a stronger focus on anticipating customer needs and serving them efficiently using a toolkit system. Milestones in the EagleBurgmann Complexity Program during the year under review therefore

included upgraded product variants manufactured using global modular processes. This aims to save costs, increase flexibility and counteract bottlenecks in raw materials and manufacturing capacity thanks to shorter delivery times. The Business Group also responded to the sustained increases in material costs by setting up a global purchasing network.

### Location changes

A major project for the future was launched at EagleBurgmann's largest manufacturing location in Eurasburg, Germany. Over the next six years, production of mechanical seals and other products is to be modernized, automated and digitized. In a first step, manufacturing workstreams were restructured and the internal flow of goods optimized.

In a global context, work on realigning the network of service centers to market needs continued. This network forms the basis for optimal customer proximity and swift response times on the part of the Business Group.

### Profile:

*EagleBurgmann is one of the leading international manufacturers of industrial sealing technology. The Business Group develops, manufactures and markets a broad range of high-quality products for pumps, compressors, agitators and special equipment. These sealing solutions are used when safety and reliability are most important, for example, in the (petro-)chemical industry and refineries, the pharmaceutical as well as the food processing industry, power plant technology or water applications. A dense sales and service network ensures the best possible customer proximity and is optimally complemented by digital offerings.*

## VIBRACOUSTIC



	2020	2021
Sales [€ million]	1,799.0	2,042.1
Workforce	9,576	9,598

### Business development

- Noticeable slowdown during the course of the year due to the semiconductor crisis in the automotive industry and fragile global supply chains.
- A strong portfolio, a solid order backlog and future-capable products for electromobility secured a good market position.
- Transformation to electric drives gained momentum.

In the first quarter of 2021, the automotive industry initially made a very good recovery from the consequences of the COVID-19 pandemic. However, this was followed by another slowdown, with a noticeable weakening of global light vehicle production from the second quarter. While production in China and America remained stable, volumes in Europe dropped below the level of 2020, with automotive production in Germany well below the previous year. At some 76 million units, global production closed on the low level of 2020. This was

chiefly attributable to the persistently fragile global supply chains that led to raw material bottlenecks in all regions and higher material and logistics costs, and to the semiconductor crisis.

In this very challenging market environment that put pressure on Vibracoustic's sales, the company was nevertheless in a good position to continue to assert its market leadership in the year under review. A strong product portfolio, a solid order backlog and the high relevance of products for hybrid and battery-electric vehicles contributed to achieving this good position. In addition, important measures were initiated to further adapt to current and future market and customer demands.

In 2021, the transition towards electric vehicles gained momentum in the automotive industry. Manufacturers began systematically aligning their portfolios to electric vehicles, either adapting existing vehicle platforms to electromobility or introducing new ones. Vibracoustic already launched several solutions for electric platforms currently in operation at European premium carmakers and secured its future growth through NVH solutions for further new

electric platforms. Moreover, the company launched its first electronic control unit for a premium SUV model and added software solutions to its product portfolio.

The Business Group continued to focus on growing business with Japanese and Korean car manufacturers in order to address previously unleveraged potential with these customers. This initiative has been very successful, and business targets for key accounts were exceeded.

Vibracoustic made preparations for production ramp-ups for customer projects through global investments in 2021. The company concentrated primarily on Germany, Eastern Europe, the USA, Mexico and China. To meet increasing demand for air springs, Vibracoustic took the decision to expand production capacities for air springs for light vehicles in Hamburg, Germany, and to establish production capacities in Sroda Slaska, Poland. In this context, some production capacities for rubber metal parts were transferred to other European locations, primarily Dej, Romania. Capacity expansion investments were therefore made at all three locations.

#### Key events

- **Axle test bench in Weinheim, Germany, expanded to test powered electric axles**
- **Innovative decoupling system for eCompressors launched**

Based on Freudenberg's "Be Energy Efficient (BEE)" initiative to identify potential for greater energy efficiency, the Business Group launched the "VEE – Vibracoustic Energy Efficiency" initiative to enforce energy efficient production methods in order to reduce energy consumption and thus prevent CO<sub>2</sub> emissions and save energy costs.

Vibracoustic is a leading expert in NVH components. NVH is the acronym for noise, vibration and harshness and these components are used to optimize audible noise and perceptible vibrations in vehicles to enhance driving comfort. The company expanded the capabilities of its unique axle test bench in Weinheim, Germany, to include the testing

of powered electric axles in future. This allows the quicker, more precise and more reliable development of NVH components for electric vehicles. This updated axle test rig provides Vibracoustic with unique capabilities on the market.

The Business Group launched an innovative decoupling system for eCompressors fitted to battery-electric and plug-in hybrid vehicles. The new solution optimizes battery thermal management and balances excessive noise and vibration. It therefore solves many challenges from highly-loaded eCompressors which are no longer belt-driven but electrically powered.

Effective April 1, 2021, the Business Group established Vibracoustic Aftermarket GmbH, Darmstadt, Germany, a dedicated organization to grow sales in the attractive aftermarket business.

#### Location changes

Following the decision in 2020 to close the US plant in Ligonier, Indiana, closure was completed at the end of June 2021. The remaining business was transferred to Vibracoustic locations in Mexico, USA and China.

#### Profile:

*Vibracoustic is a global leading NVH (noise, vibration, harshness) expert for the automotive industry and provides tailored solutions that offer more comfort, while contributing to efficiency, safety and the operating life of vehicles. Thanks to its know-how throughout the entire product life cycle and in all vehicle systems, and its broad product portfolio, Vibracoustic provides solutions to current and future NVH challenges in all vehicle segments. With a global network of production and engineering sites, the Business Group supplies almost all light and commercial vehicle manufacturers as well as their direct suppliers with components that significantly improve driving comfort.*

## TECHNICAL TEXTILES AND FILTRATION BUSINESS AREA

In the year under review, the Technical Textiles and Filtration Business Area comprised the following Business Groups:

- Freudenberg Performance Materials
- Freudenberg Filtration Technologies
- Japan Vilene Company

In total, the Business Area generated sales of €2,413.4 million (previous year: €2,090.5 million) in the year under review. At year-end 2021, the headcount was 11,227, compared with 10,357 at the close of the previous year.

## FREUDENBERG PERFORMANCE MATERIALS



	2020	2021
Sales [€ million]	1,019.1	1,320.4
Workforce	4,998	4,927

### Business development

- Sales recovered in all key market segments.
- One third of sales generated by the acquisitions Low & Bonar and Filc.
- The global market remained volatile. Raw material shortages and supply bottlenecks made an impact.

- Milestone in EU funding for gas diffusion layers was reached.

Sales by the Business Group rose 29.6 percent in 2021. Following the outbreak of the COVID-19 pandemic and the downturn on global markets, the business climate for Freudenberg Performance Materials improved significantly year-on-year. Full-year sales by Low & Bonar PLC, London, United Kingdom (now Low & Bonar Limited, Edinburgh, United Kingdom) acquired in May 2020 were included in the Business

Group's sales for the first time and, together with sales by the Slovenian Filc group also acquired in the previous year, accounted for approximately one third of sales by Freudenberg Performance Materials.

Overall, the Business Group's global market remained extremely volatile in the year under review. The Asia-Pacific region made a noticeably swifter recovery than North America in the first half of the year, although this recovery was significantly undermined by further disruptions due to COVID-19, while recovery on the North American market stabilized. Price adjustments offset the sharp rises in raw material prices, although these increases still had a negative impact, as did intermittent stalling in global supply chains which disrupted production.

Sales recovered in all of Freudenberg Performance Materials' key market segments. Growth in the apparel segment was exceptionally high, but sales were nevertheless still well below the level prior to the COVID-19 pandemic. The segment reported significant growth in new innovative products for padding used in outdoor clothing. Overall, the apparel business recovered somewhat faster than expected in the second half of the year, particularly in Europe and the Asia-Pacific region.

The Business Group performed very successfully in the construction segment during the year under review and benefited from the clearly positive market development. The Macon location in the USA was instrumental in this success because the site made significant progress compared with previous years. Business with geotextiles from the ENKA Solutions brand reported strong sales in Europe; business on the US market was weaker.

Healthcare also developed very strongly in the year under review. All products outperformed sales targets for 2021 and sales were also up on the previous year. Components for advanced wound care were particularly successful. There was further growth in the market for water condensation protection products in Europe and North America on the back of the previous year's very good performance.

Business with gas diffusion layers was also very satisfactory, and benefited from pronounced growth in electromobility. A milestone was reached in the application process for funding under the EU's

hydrogen project IPCEI Hydrogen (Important Project of Common European Interest on Hydrogen), where the Business Group is targeting the technological advancement and expansion of gas diffusion layer business. The company invested in significantly expanding gas diffusion layer manufacturing capacities. Gas diffusion layers are a key component of fuel cells. Research and investment in this drive technology has a global dimension, giving the technology strategic importance.

The "Container" and "Boat & Pool" segments accounted for the highest growth rates in the coated technical textiles business, leading the field in this business that recovered well. A regional breakdown shows strong growth in Western Europe and China, while business in the USA was sluggish, in part as a result of the shortage of transport containers.

Resource constraints impacted business development at Freudenberg Performance Materials in many respects. A volatile automotive market felt the negative effects of chip shortages and a lack of other raw materials in the second half of the year. As a result, there was reduced demand for products in this segment. This was most evident in the Asia-Pacific market, and also in Europe towards the end of the year. Power shortages in China affected business directly and indirectly. The result was power outages for customers, with some deliveries being supplied from Europe rather than from local factories in China. The COVID-19 pandemic further exacerbated the growing challenge of hiring suitably qualified skilled workers for production operations in Germany and the USA. Sales of medical masks fell sharply compared with the previous year. Business with Evolon masks also declined.

## Key events

- **Freudenberg Performance Materials decided to invest in new production lines in Slovenia and China.**
- **The Kaiserslautern, Germany, site commissioned a meltblown line for the production of base material for FFP1, FFP2 and FFP3 face masks.**
- **The company realigned its apparel business in Weinheim, Germany, and at the Italian location in Sant’Omero.**
- **Freudenberg Performance Materials was honored with renowned awards for delivery reliability and product sustainability.**

In the second half of 2021, Freudenberg Performance Materials introduced a joint organizational structure with Low & Bonar Limited and the Filc group, the two companies acquired the previous year, to intensify customer centricity. The Business Group thus successfully concluded the integration of both companies in the year under review. Furthermore, Freudenberg Performance Materials took the decision in March 2021 to invest in a new needle punch line at the Slovenian production location in Škofja Loka, in response to continued high demand. With the investment, Freudenberg Performance Materials is aiming to reinforce the strong market position of the Filc group and safeguard growth in the construction industry. Production under the investment project approved in 2021 is scheduled to commence in July 2022.

The company also approved a further investment to build a new line for EnkaMat products at the location in Changzhou, China. This investment was the next step in the globalization strategy for EnkaMat products that are seeing strong market growth in the erosion protection/landfill, green roofs and acoustic segments in the Asia-Pacific region. Production on the new line is expected to commence in the first quarter of 2023.

In the first quarter of the year under review, a new meltblown line for the production of base material for FFP1, FP2 and FFP3 face masks was commissioned at the facility in Kaiserslautern, Germany. Freudenberg Performance Materials cooperated with the Freudenberg Filtration Technologies Business Group in the commissioning process.

In light of the massive changes in the apparel market, it is planned to concentrate the production of base material for interlinings at the Weinheim location. Finishing and coating of the materials is to be bundled at the Italian location in Sant’Omero in future. Relocation of the necessary plant from Weinheim to Sant’Omero was announced in January 2021. The measure is to be realized by the end of 2022.

Freudenberg Performance Materials was again honored with several awards in the year under review: OEKO-TEX Institute awarded the STeP (Sustainable Leather & Textile Production) certificate to the facility in Colmar, France, affirming environmentally friendly production processes, a high level of health and safety and socially responsible working conditions at the French site. With the STeP certificate and the Standard 100 certification awarded several years ago, Evolon also meets all the requirements for the “MADE IN GREEN by OEKO-TEX” label that proves a product has been tested for harmful substances and manufactured using sustainable processes under socially responsible working conditions. The certificate also confirms the complete traceability of all materials and a transparent supply chain, and thus offers consumers the highest level of safety.

The Architectural Membrane Association (AMA) recognized the TF 400 Green façade membrane from the Mehler Technologies brand with the AMA Award in the “Product” category for the cladding’s outstanding sustainability. The mesh fabric is made of 100% upcycled PET bottles. Freudenberg Far Eastern Spunweb Comp. Ltd., Taoyuan, Taiwan, was honored with the Supplier Excellence Award 2021 from Interface Thailand. The customer recognized the outstanding quality of the supplier’s products.

Toyota Boshoku Europe recognized the Filc group as one of its best suppliers by presenting the TBEU Award in Bronze in the “Delivery Service” category. The jury praised the high flexibility and commitment of Filc during the COVID-19 pandemic, commenting that the company’s high delivery reliability helped to maintain Toyota Boshoku Europe’s business.

Freudenberg Performance Materials India received the COVID HR Warrior Award from the HR Forum Sharp. The award commends the company for its optimal measures to contain the spread of COVID-19 at the workplace from April to October 2020 in the Chennai region. This was the period when the number of cases reached its peak. Sharp is a forum for over 400 HR experts from renowned companies in Chennai.

**Profile:**

*Freudenberg Performance Materials is a leading global supplier of innovative technical textiles for a wide range of markets and applications, including automotive, construction, apparel, energy, filter media, healthcare, building interiors, shoe and leather goods, as well as special applications. The Business Group operates 33 production locations in 14 countries worldwide.*

## FREUDENBERG FILTRATION TECHNOLOGIES



	2020	2021
Sales [€ million]	519.4	578.3
Workforce	2,853	3,894

### Business development

- Business development in many areas was determined by COVID-19.
- Year-on-year growth in the “Consumer” division
- “Automotive” expanded in Asia and Europe as well as in buses and agricultural vehicles business.

The COVID-19 pandemic that began in March 2020 continued to impact business development at Freudenberg Filtration Technologies in 2021. This was particularly evident in the very volatile order situation throughout the year. Other factors were disrupted supply chains and sharp increases in materials and logistics costs that were offset by price adjustments. The Business Group benefited from a noticeable change in awareness of air quality and air hygiene. Demand for high-quality solutions for indoor air filtration rose significantly as consumers and customers responded to the need for general protection against COVID-19. This trend had a particularly positive impact on the “Consumer”

division established in 2019, which reported significant year-on-year growth. The division registered high demand for products that do not merely separate harmful particles, but also offer additional protection such as antiviral or gas-adsorbing air filtration. In the field of water filtration, an innovative system for water treatment using reverse osmosis and ultrafiltration was developed. In addition to the generally promising expansion of Consumer business in a challenging market environment, the new manufacturing facility in Shunde, China, was commissioned and the post-merger integration project with Freudenberg Apollo Filtration Technologies successfully concluded.

Sales of cabin air filters for passenger vehicles were up on the level of the previous year, particularly in Europe and Asia. Apart from demand for OEM products, there was a strong increase in original replacement parts business in the aftermarket for used cars. The “Automotive” division also entered new sales markets. micronAir cabin air filters that reduce concentrations of anorganic and biological particles and aerosols were developed for applications in buses. Activities also focused on expanding business

with filter solutions for agricultural vehicles and on air filters and humidifiers for fuel cells. Furthermore, the division successfully completed the TISAX audit (Trusted Information Security Assessment Exchange). TISAX is an internationally established standard in the automotive industry based on the security requirements of the “VDA Information Security Assessment” governing the exchange of information among companies.

Sales in the “Industrial” division developed well in almost all regions and almost all strategic market segments. The exception was Australia, where business with filters for mining vehicles used in open pit and underground mines saw a sharp downturn in sales. Manufacturing capacities for mouth-nose masks produced since the beginning of the coronavirus pandemic in March 2020 was adjusted to meet significantly lower demand. Business in flat material for filter media used to produce masks was also well below expectations. New digital solutions that simplify product selection and give customers greater safety in air filtration system operation were presented. The cloud-based “Viledon Defect Library”, for example, documents paint defects that occur in companies’ paint shops, and supports users with a swift and reliable defect analysis. The “Viledon ChemGuide” makes planning filter systems for corrosion protection and the removal of contaminant gases easier and faster, thereby contributing to greater efficiency in design and operation.

#### Key events

- **Due to the COVID-19 pandemic US consumers have become more aware of air hygiene.**
- **The Business Group acquired two North American producers of air filters for residential buildings and offices that generated sales of around US\$159 million with over 1,100 employees in 2020.**
- **The “Consumer” division opened its manufacturing facility in Shunde, China, with 1,200 employees and state-of-the-art environmental and automation standards.**

Freudenberg Filtration Technologies further expanded its business strategically in North America with two

acquisitions and invested in a new business field, filter solutions for residential and office buildings. Most residential units in the USA are equipped with air-conditioning or ventilation systems. They rely on air filters that improve performance and increase the operating life of technical equipment, and above all protect people from airborne particles. This market has been on the rise for several years. Due to the COVID-19 pandemic, American consumers have become more aware of air hygiene, which has led to increased demand, especially for filters in the higher performance categories.

The Business Group acquired PPA Holdings, Inc., Indianapolis, USA (“Protect Plus Air”) in September. The company is a producer of air filters for residential and office buildings, mainly sold through retailers. A further transaction in the USA was concluded in December with the acquisition of R.P.S. Products, Inc., Hampshire, USA. The company will be integrated into the existing company Freudenberg Filtration Technologies, L.P., Hopkinsville, USA, and will continue operating under that name. With its own brands BestAir and BestAir Pro, R.P.S. Products is mainly active in the same market as Protect Plus Air. Together, the two companies generated sales of around US\$159 million with over 1,100 employees in 2020.

The sales of both acquisitions are grouped together in the new “Residential & Commercial” division. The Business Group is now organized into four divisions: Automotive, Consumer, Industrial, Residential & Commercial. With this structure and its extensive expertise in filters and application technologies, Freudenberg Filtration Technologies sees itself well positioned in the very competitive filtration market.

In addition to acquisitions, the Business Group invested in capacity expansion, research and development, and occupational safety. The Kaiserslautern facility, for example, commissioned a new high-speed pleating machine for automotive filters. Work on a new line for pocket filters commenced in Weinheim, where warehouse and logistics processes were also optimized. Freudenberg Filtration Technologies invested in production expansion in the USA as well as in China, where new test facilities were also installed.

## Location changes

Freudenberg Filtration Technologies commissioned a new manufacturing facility for more than 1,200 employees in the Consumer division at Shunde, Foshan City, China. With a floor area of 65,000 square meters, the site is the Business Group's largest manufacturing facility worldwide. Located in Shunde Science and Technology Industrial Park and almost 60 percent larger than the previous one, the site is home to production, logistics, warehousing, administration and a research, development and test center covering an area of 4,500 square meters. State-of-the-art automation and environmental technologies have been installed at the new facility.

## Profile:

*Freudenberg Filtration Technologies is a development, production and application specialist for air and liquid filtration. The Business Group's solutions help make customers' industrial processes more efficient, conserve resources, protect people and the environment, helping improve quality of life. As a globally renowned partner for reliable, energy efficient filtration designs, Freudenberg Filtration Technologies is dedicated to competency in the automotive & transport, energy & resources, hygiene, comfort & health, production & building technology industries and to technologically sophisticated special applications. System solutions such as the development, installation and the operation of complete filtration solutions as well as wide-ranging services for air and water quality management complement the innovative product portfolio.*

## JAPAN VILENE COMPANY



	2020	2021
Sales [€ million]	552.0	514.7
Workforce	2,506	2,406

### Business development

- Slight decrease in sales on the home market Japan and in Asia
- Recovery in the automotive industry boosted sales in North America and Europe.

Japan Vilene Company faced mixed regional developments in a challenging year. While sales in North America and Europe were up on the previous year, the Business Group reported a downturn in sales in its home market Japan and in Asia. Overall, too, sales by Japan Vilene Company in the 2021 financial year were slightly lower than the previous year.

In Japan, the drop in sales is attributable to lower demand for medical technology and medical protective clothing. The record demand of the previous year for isolation gowns, industrial respirators, mask filters or transdermal backing materials could not be matched in the second year of the COVID-19 pandemic. In contrast, electrical and industrial products, particularly HEV separators and industrial battery separators, made good progress.

Developments in air filters, car headliners and floor mats for passenger cars and light commercial vehicles were also positive.

In the other regions of the world the Business Group also benefited from the recovery – at times quite significant – on automotive markets. The company reported an increase in product sales in North America. The situation was similar in Korea, where demand from car manufacturer Hyundai ran at a high level, particularly in the first half of the year. Automotive business also benefited from the generally positive situation in the automotive industry in other parts of Asia, too, especially Thailand and China.

### Key events

- E-commerce for the sale of car floor mats
- Innovation for home use face masks

Hanns Glass GmbH & Co. KG, Meuselwitz, Germany, a Japan Vilene Company enterprise, entered the world of e-commerce for the sale of car floor mats in March 2020. Under the brand name of “Mat10”, the company sells car floor mats for every model of car direct to end customers and guarantees delivery within three days. The company has not only begun digitalization of distribution, but also of the production and administration process, suitable for a minimum production lot of one item. In 2021, approximately 10,000 sets of “Mat 10” car floor mats were delivered in Germany.

The Business Group developed a meltblown and hydro-entangled triboelectric filter for face masks that simultaneously ensures easy breathing and high filtration efficiency. The filter is suitable for home use face masks and is used in the “Fitty Breath-tech” product from the company Tamagawa Eizai Co., Ltd. for retail sale in Japan. The Business Group supplies other materials for home use face masks to HISAMITSU Pharmaceutical Co., Ltd. They are used for the surface and ear loops of these face masks. Customers appreciate the thin, stretchable and soft properties of the material, giving it a smooth touch and fit feeling during wear.

Digitalization is a key topic at Japan Vilene Company. Since September 2021, a “Digitalization Implementation Task Team” has been working on a digital strategy for the three categories of “Task Office”, “Team Core” and “Team New Idea”. By the end of 2023, the team has set itself the goal of analyzing the digital capabilities of the Business Group, selecting priority issues and presenting suggestions and ideas to the management about how to cultivate and promote digital literacy.

As part of its Operational Excellence activities, Japan Vilene Company has installed a certification system. This system ensures that all sites define uniform processes and standards for their workflows. The employees responsible for certification are called “Green Belt Holders”. A training program to educate employees on how to drive local Operational Excellence initiatives and promote the mindset change in the Business Group was launched in 2021.

Companies belonging to Japan Vilene Company were again recognized for outstanding achievements in 2021. Among other awards, Nissan honored Japan VIAM Co., Ltd., Moriyama, Japan, as the best supplier of car floor mats for the sixth year in succession. Moreover, in September 2021 Japan’s Minister of Health, Labor and Welfare presented the Japan Vilene Company’s Shiga factory with a certificate of gratitude for its active participation in blood donation activities. The Shiga factory has participated in blood donation initiatives for many years, providing valuable support to patients needing a blood transfusion.

**Profile:**

*Since it was established in 1960, Japan Vilene Company has maintained its position as the leading domestic manufacturer of nonwoven materials under the motto of “Engineering Fabric Innovation”, utilizing its long-standing raw material expertise and considerable know-how in the fields of production processes and technologies as well as nonwoven converting. The Business Group’s “Automotive”, “Medical”, “Electrical” and “Industrial” divisions offer a broad portfolio of products for a wide range of applications.*

**CLEANING TECHNOLOGIES AND PRODUCTS BUSINESS AREA**

The Cleaning Technologies and Products Business Area comprises the Freudenberg Home and Cleaning Solutions Business Group whose

Vileda, Vileda Professional, O-Cedar, Oates, Gimi, Gala, Wettex and Marigold brands are active in the mechanical cleaning and laundry care segments for final users and professional cleaning companies.

**FREUDENBERG HOME AND CLEANING SOLUTIONS**



	2020	2021
Sales [€ million]	1,085.8	1,140.2
Workforce	3,215	3,279

**Business development**

- Positive sales development despite less dynamic growth in the second half of the year
- Continued high level of consumer hygiene needs boosts sales volumes.
- Vileda Professional sales outperform 2019 pre-pandemic level thanks to high growth in cleanroom and healthcare business.

In a positive consumer climate, high demand from final users and persistently high costs of transport and raw materials were the determining factors in business development at Freudenberg Home and Cleaning Solutions.

As in the previous year, the company posted good gains in market share, bringing positive sales developments despite less dynamic growth in the second half of the year.

A breakdown by regions confirms the general impression. In the region of Europe, Middle East and Africa, or EMEA, sales increased on the back of high demand for cleaning equipment. Growth was attributable in particular to floor cleaning products that include many electronic devices. Sales of cloths, sponges and laundry care products also developed well. However, compared with the sharp increase seen in 2020, the first year of the pandemic, demand for gloves, scourers and face masks showed a downward trajectory.

The trends on markets in North and South America were similar. As was the case in Europe, high demand for floor cleaning products drove growth for Freudenberg Home and Cleaning Solutions. In this region, the EasyWring & Clean RinseClean innovation from the US O-Cedar brand in particular brought new momentum to the US market for the Business Group. This floor cleaning system has a special two-chamber bucket featuring separate clean and dirty water tanks for hygienic and efficient cleaning.

In Asia, business picked up compared with the previous year when lockdowns and contact restrictions during the COVID-19 pandemic put pressure on sales. The company reported better than planned growth in the region.

Sales in the Business Group's Professional division were stronger than in the 2019 pre-pandemic year. There was exceptionally good growth in the cleanroom and healthcare business in the USA, Russia and China. Demand in the food service, hotel and catering customer segments also picked up well, compensating for subdued business development in the first half of the year.

## Key events

- **The spray mop category in the floor cleaning segment gained important market share.**
- **Recyclable microfiber cloths made of upcycled plastic from Vileda und Vileda Professional**
- **Prestigious awards, including the Red Dot Design Award 2021 and the "Symbol of Sustainability" in Hungary**
- **Production in Mombello, Italy, shut down and transferred to the Monselice site.**

Once again, innovations drove business for Freudenberg Home and Cleaning Solutions in 2021: For consumers in the USA, the EasyWring & Clean RinseClean floor cleaning system from O-Cedar generated new momentum. Furthermore, the company gained almost 9 percentage points in market share in the strategically important spray mop category. In the second half of 2021, the product line even grew almost 10 percentage points year-on-year. The Vileda and Vileda Professional brands launched microfiber cloths made from recycled plastic to meet growing demand for environmentally-friendly products made from upcycled materials. The new Steam Plus steam mop, along with the VR303 vacuum cleaning robot that debuted in Germany, brought fresh impetus to business in electronic cleaning equipment. In the laundry care segment, the innovative Infinity Flex clothes airer that has extendable drying space, flexible design and space-saving storage was launched. In addition, a new range of lightweight and durable shopping trolleys from the Gimi brand leveraged further market potential on the European market.

Prestigious awards for Freudenberg Home and Cleaning Solutions underscored product excellence: The "1-2 Spray Max" mop received the "Voted Product of the Year Award", a coveted award for innovations in consumer products in Greece. The Sun-Lift clothes airer was recognized with the "Red Dot Design Award 2021", one of the most respected prizes for product design in Germany, for its inimitable design and high functionality. The Hungarian initiative "Love it Clean" honored the Business Group's commitment to sustainability with its "Symbol of Sustainability 2021" award.

There were operational changes in Italy. Freudenberg Home and Cleaning Solutions merged the factories in Mombello and in Monselice at the end of the year. Despite significant investment, production in Mombello failed to generate the necessary profitable growth. Manufacture of ironing boards was relocated to the site in Monselice. All other activities were terminated effective December 31, 2021. The process to sell the Mombello facility to a local producer is ongoing. In addition, Freudenberg Home and Cleaning Solutions adapted the business model for consumer business in Slovenia. A Slovenian distributor took over local business effective August 1, 2021. Going forward, FHP Export GmbH, Weinheim, Germany, will be responsible for marketing, logistics and customer service.

**Profile:**

*Freudenberg Home and Cleaning Solutions is a leading international company for branded cleaning products and systems as well as laundry care products. The products are sold inter alia under the brand names Vileda, Vileda Professional, O-Cedar, Gimi, Oates, Gala, Wettex and Marigold. Detailed market expertise, innovations, effective new products and a strong customer focus all help the company succeed. International market and customer research, innovation centers and production facilities in all regions of the world, as well as a dedicated sales network in more than 35 countries, also help the company thrive.*

## SPECIALTIES BUSINESS AREA

In the year under review, the Specialties Business Area chiefly comprised the following Business Groups:

- Freudenberg Chemical Specialities
- Freudenberg Medical

Overall, the companies in this Business Area generated sales totaling €1,593.1 million (previous year: €1,346.2 million). At year-end 2021, the headcount was 6,219 compared with 5,769 at year-end 2020.

## FREUDENBERG CHEMICAL SPECIALITIES



	2020	2021
Sales [€ million]	1,055.8	1,257.3
Workforce	3,724	3,817

### Business development

- Strong growth in the first nine months
- Inflation pushed up raw material prices with effect on customers' purchasing power.
- Production difficulties in individual sectors of industry offset by developments in other market segments

The Freudenberg Chemical Specialties Business Group is made up of the companies Klüber Lubrication, SurTec, Chem-Trend, Capol and OKS. Business of all five companies developed better than expected given the negative economic conditions of the continuing COVID-19 pandemic. Sales by all divisions in the first nine months of the year grew significantly compared with the volume of the previous year. The strong pace of growth slackened towards the end of the year. Nevertheless, the Business Group outperformed its business targets for the year as a whole. This was in

part attributable to coverage of major market segments and a presence on important regional markets.

Various economic effects prevented stronger growth. In many markets, significantly higher inflation pushed up raw material prices and had a negative impact on customers' purchasing power. The companies in the Business Group increased prices to offset higher raw material and energy prices. Developments in exchange rates to the euro, the Business Group's reporting currency, which were in some cases negative, also had an adverse impact.

Shortages of raw materials, particularly special materials, forced the divisions' purchasing organizations to pursue alternative procurement channels. These efforts were largely successful; nevertheless, it was not possible to entirely avoid negative effects on productivity. The critical raw material supply situation also had unfavorable customer-side effects. For example, the bottlenecks in integrated circuit deliveries experienced by automotive suppliers led to marked production downturns at car manufacturers. At the same time, developments in many market segments, such as oil & gas, bearings, textiles, thermoplastic materials, composites and the food industry, were satisfactory. Growth in all regions in 2021 compared with the previous year was at a good level. Even India, where a government-imposed shutdown affected much of the economy for part of 2020, recovered rapidly in 2021.

Klüber Lubrication reported above-average growth in some market segments in 2021. Traxit International GmbH, Schwelm, Germany, the lubrication specialist for the wire industry acquired in January 2020, also asserted its position.

The SurTec and Chem-Trend divisions depend on healthy automotive sector activity. Falling demand from customers in the automotive industry was offset by strong growth in other segments.

Chem-Trend reported good growth in market segments outside the automotive industry during the course of the year, contributing to an appreciable increase in sales. SurTec defended its good market position in market segments such as construction and electronics, and decorative and functional surface technology and reported year-on-year growth.

Capol already had a very good year of business with products for the confectionery industry in 2020 and was able to repeat this performance in 2021. OKS also grew, partly as a result of recovery in the contract production business for Freudenberg Group companies, and partly due to growing demand from specialized distributors for operation and maintenance products boosted by general growth in industrial production.

### Key events

- **Acquisitions in speciality chemicals for SurTec and Chem-Trend**
- **New chemical products for the automotive and aerospace industries as well as special products for the manufacture of paper, laminates and wood composites**
- **New sites in Hard, Austria, and Modena, Italy**

The surface treatment specialist SurTec acquired the chemicals business of Italtelco S.r.l. of Modena, Italy, established in 1974. Italtelco specializes in research and development for and the distribution of chemical specialities for the surface treatment of aluminum alloys and steel. The product range includes chemical products for the architectural, automotive and aerospace industries as well as for decorative, mechanical and other industrial components. SurTec and Italtelco have already worked together in the field of metal pre-treatment in Italy for many years. The company was successfully integrated in the SurTec group. With the acquisition, SurTec will distribute the products for the aluminum industry that are very well established worldwide.

In April 2021, FCS-Munich GmbH, Weinheim, acquired Deurowood Holding GmbH, and the associated shares of Deurowood Produktions GmbH, Hard, Austria, from PINOVA Capital and the management. Deurowood develops, manufactures and sells catalysts, functional additives, pigmented dispersions and other special products for the impregnation of paper and the production of laminates and wood composites. The company is a leading full-range supplier of innovative and safe-to-use chemical additives and is to be integrated in the Chem-Trend group in the medium term.

Dedicated project groups in the five Business Group divisions deliver significant input to enhance sustainability, both in terms of internal added value and at customer level, thus achieving major progress in strategic portfolio and innovation management.

### **Location changes**

In the year under review, new sites in Hard, Austria – in connection with the acquisition of Deurowood – and Modena, Italy – in connection with the acquisition of the chemicals business of Italtelco – were added to the Business Group.

### **Profile:**

*The Freudenberg Chemical Specialties Business Group comprises the operationally autonomous divisions of Klüber Lubrication, Chem-Trend, SurTec, OKS, and Capol. Klüber Lubrication is one of the world's leading manufacturers of specialty lubricants. Chem-Trend is the world's leading supplier of release agents used to manufacture composite, rubber, plastic, metal and polyurethane molded parts. SurTec is a leading supplier of chemical specialties for surface treatment and electroplating. OKS specializes in performance lubricants and in repair and maintenance products. Capol is a world-leading provider of surface treatment products for the confectionery industry and pigments and natural flavors for the food industry.*

## FREUDENBERG MEDICAL



	2020	2021
Sales [€ million]	188.3	232.1
Workforce	1,662	2,037

### Business development

- Overall, the global medical device market grew at a single-digit rate in 2021.
- In the challenging market environment in the healthcare sector Freudenberg Medical experienced strong sales growth across all regions.
- Demand for existing products at pre-crisis levels

As in the previous year, the medical device market in 2021 was again significantly influenced by the COVID-19 pandemic: Throughout the year, waves of the infectious disease impacted the ability of healthcare facilities to provide services as planned. Furthermore, patients were still very concerned about catching the virus when hospitalized or attending healthcare facilities. This weighed on the use of medical device products. Moreover, the postponement of procedures in the previous year triggered an increase in demand for healthcare services in 2021 that took medical practices and hospitals to the limits of their available capacity, or even beyond. The lack of

qualified personnel exacerbated the bottlenecks in many sectors of the healthcare system.

Overall, the global medical device market grew at a single-digit rate in 2021. As part of the critical infrastructure, the health sector was ensured priority access to scarce materials, raw materials and services; this contributed to avoiding shutdowns and severe production disruptions.

In the challenging market environment in the healthcare sector, the Freudenberg Medical Business Group nevertheless experienced strong sales growth across all regions in the year under review. Two effects drove this positive development: The first was the return to pre-crisis levels for existing products and the second was the high number of product launches and ramp-ups. The “Minimal Invasive Solutions” segment in particular benefited from the fact that significantly fewer procedures in this segment were postponed in 2021, while at the same time there was strong customer interest in new products. Freudenberg Medical also continued to contribute to the fight against the pandemic by supplying advanced

components for diagnostic systems and consumables for mRNA vaccine manufacturing operations.

### Key events

- **Site in Galway, Ireland, expanded to house additional production of laser-cut hypotubes and specialty needles**
- **Investment in digital manufacturing processes and automation for fully-automated injection molding and assembly lines**
- **New catheter technology advances the standard of care for atrial fibrillation.**

Freudenberg Medical used Business Group growth to successfully conclude a high number of investment projects. In June 2021, the Freudenberg Medical company Cambus Teoranta headquartered in Spiddal, Ireland, announced the intent to expand the manufacturing operation at the Merit Medical System facility in Galway, Ireland, acquired in 2020 by some 2,000 square meters. The investment serves to house manufacturing equipment for laser-cut hypotubes and specialty needles. Hypotubes are small-diameter metal tubes used in catheter production. In December 2021, Freudenberg Medical opened a modern new cleanroom for manufacturing to ISO Class 7 in Costa Rica. The company is thus adding to its expertise in thermoplastic extrusion and expanding its capabilities for manufacturing high-precision multi-layer tubing with ultra-thin walls for the rapidly growing catheter manufacturing market.

In 2021, Freudenberg Medical continued with the successful implementation of its strategy to offer innovative products and process platforms for medical device applications. Further key investments were made in digital and automated manufacturing and, as a result, series production commenced on several fully-automated injection molding and assembly lines. Industry 4.0 catheter manufacturing thus achieved uniform quality levels, a superior service and competitive costs. Automated inline inspection is an important element of zero-defects manufacturing processes. Other major innovations targeted advancements in the design and manufacturing of single-use-endoscopes, the extrusion of challenging

polymer materials or the coating of balloon catheters with novel drug substances.

The Freudenberg Medical company VistaMed Ltd. in Carrick-on-Shannon, Ireland, together with the partners OneProjects and Tyndall National Institute received a €5.1 million grant for a project to provide the first catheter to deliver a 3D, intraprocedural analysis. The catheter technology is to advance the standard of care for atrial fibrillation, one of the most common causes of cardiac arrhythmias worldwide. In October 2021, Freudenberg Medical's InHealth operation launched the first hands-free HME (heat moisture exchange) solution for laryngectomy patients. The filter element increases the quality of life for patients who have had their larynx removed by allowing them to speak without manually closing a valve.

In November 2021, the silicone operation in Beverly, Massachusetts, USA, passed the ISO 14001 (Environmental Management System) audit. This concludes a multi-year effort to certify all Freudenberg Medical sites to this standard and ensure a global, state-of-the-art approach to sustainability management. Freudenberg Medical's comprehensive sustainability initiatives aim to reduce the use of fossil fuels, significantly decrease the amount of waste, and limit the overall impact on the environment.

### Profile:

*Freudenberg Medical is the global partner for the design, development and manufacture of innovative medical products. The company's portfolio comprises catheter solutions for minimally-invasive procedures and components made from complex medical materials. The company is a leader in the field of high-precision silicone and thermoplastic components and tubing as well as coatings and metal hypotubes.*

## REPORT ON EVENTS AFTER THE DATE OF THE STATEMENT OF FINANCIAL POSITION

Major events after the date of the statement of financial position which are not included either in the statement of profit or loss or the statement of financial position are explained in the Notes to the Consolidated Financial Statements under the section “Major events after the date of the statement of financial position”.

## REPORT ON OPPORTUNITIES AND RISKS

Freudenberg is exposed to numerous opportunities and risks inseparably associated with business activities. Monitoring technological, political and social changes in particular is part of proactive entrepreneurship. This often generates opportunities to be harnessed in order to secure and specifically improve the company's competitiveness.

Opportunities are addressed in the context of the annual planning process and pursued and reported throughout the year. Long-term opportunities for profitable growth are, inter alia, identified as part of the strategy process. Freudenberg operates a Group-wide risk management system to identify risks in a timely fashion and respond to them appropriately. Newly-acquired companies can temporarily increase the Group's risk profile as described below until the integration process has been completed. The following presentation is in line with the assessment of the Board of Management.

### Opportunities

#### Global presence

Due to its global presence, Freudenberg has for many years been able to offer products and services at uniform worldwide standards. As a result, Freudenberg can keep pace with the international strategies of its customers, for example in production or research and development. Traditionally, Freudenberg has also leveraged this expertise for many customers from Europe or North America in emerging economies. Some progress is being made to successfully support the international strategy of customers from emerging economies entering the market in Western Europe. If this trend were to intensify in the future, Freudenberg could generate additional benefit from its global network.

#### Investments in strategic growth areas and regions

A central element of strategic planning is the continuous evolution of existing business through product and process innovations with a view to achieving profitable, significantly faster-than-market growth in existing business areas. This is also accomplished by expanding the portfolio through selective, targeted acquisitions in order to close identified technology gaps and gain access to new markets. The successful growth strategy in the defined areas therefore continues. Examples in 2021 include the acquisition of PPA Holdings, Inc., Indianapolis, USA. Options to acquire new areas of business that complement Freudenberg are also examined. In the medium term, Freudenberg's goal is a strategically balanced portfolio of cyclical and non-cyclical businesses with sales distributed evenly among the regions of North and South America, Europe and Asia.

### Forward-looking product development

Social trends, ecological imperatives and the regulatory environment are constantly changing. Changes in consumer behavior and growing expectations of products and services, for example with regard to the sustainability of products and their manufacture or to compliance with human rights throughout the supply chain, are key drivers in the search for innovative solutions and new raw materials. Significant market potential and opportunities for the future lie in the systematic focus on such changes and the Group's ensuing innovation activities at as early a stage as possible. Freudenberg's sustainability criteria for product development are material consumption, reducing waste and saving energy along with cutting emissions and water consumption. The Group-wide "Sustainability drives Climate Action" program coordinates the special focus on saving energy and reducing CO<sub>2</sub> as well as the Group's positioning on climate protection and climate change.

### Mobility

The term "new mobility" as used by Freudenberg describes solutions offered to customers spanning the entire spectrum of drive technologies, such as optimized internal combustion engines, hybrid solutions, battery electric vehicles and fuel cell systems. Gas diffusion layers from Freudenberg are a performance-defining component in fuel cells. New sealing solutions for internal combustion engines that reduce CO<sub>2</sub> emissions, special seals for use in fuel cells, and components for the electromagnetic shielding of high-voltage parts in electric powertrains open up further fields of application, some of them entirely new. Air spring systems that optimize passive cooling of batteries installed in the floor pan are used in electric vehicles and hybrid models. Freudenberg's filter systems feature in all types of vehicle, including those powered by batteries or fuel cells.

Applications for trucks, buses and ships are developed in collaboration with partners. These include the development of a high-performance fuel cell system for long-haul buses, possibly combined with a battery to form a hybrid powertrain. Work is also underway in various cooperation projects to develop fuel cell systems for seagoing vessels such as cruise ships.

Freudenberg's strength as a partner lies in its broad-based line-up, together with its industrialization know-how and its technology and materials competence, for example, its battery and fuel cell expertise.

Freudenberg regards itself as well prepared for the changes in drive technologies in a range of applications, given that other components and systems offset reductions in demand for products such as seals. Going forward, Freudenberg will remain a competent provider of solutions for high-tech innovations for all types of drivetrains.

### Digitalization

At Freudenberg, digitalization centers on gaining a better understanding of customers' wishes, reducing cycle times, updating products and making them more innovative, and commercializing products faster. All efforts pursue at least one of two objectives: To enhance customer benefit or to leverage internal efficiencies.

New applications and products cover a broad spectrum, from intelligent filter systems that are activated exactly when the air must be purified through to the smart, precise measurement of lubricating oils to meet real requirements efficiently during maintenance work, for example on cable cars. Examples of new digital applications include the use of sensor technology to continuously monitor the condition of a seal, where efficiency was improved further through the use of artificial intelligence. In individual cases, Freudenberg works at interdisciplinary level to develop custom-tailored concepts and products to improve operational efficiency and stability. Robotics process automation optimizes internal business processes. The practical execution of upcoming projects is supported by a "Digitalization Hub" that structures and implements digitalization projects. Parallel to this, a key focus lies in knowledge transfer and networking.

## Harnessing synergies for strategic issues

Throughout the world regions, Freudenberg's know-how and innovation strength are used in some 40 market segments and for thousands of applications. The company engages in numerous activities specifically targeted at pooling this knowledge, because the potential thus generated makes a key contribution to securing the future. Synergies are harnessed to drive key strategic issues such as digitalization, sustainability and materials efficiency across the Business Groups. Joint projects and programs are always implemented under expert guidance and have already produced the first results.

The "Future Technologies" unit at Freudenberg Technology Innovation bundles strategic know-how and works on numerous technology-oriented initiatives. These include a project with a very long-term perspective to determine future business opportunities for the Freudenberg Group. Based on several development scenarios, employees and external experts analyze growth fields for business opportunities thus identified and target specific strategic product developments. This unit also engages in technology foresight to determine trends and new technologies, and advises the Business Groups on their application, as well as searching for relevant universities, research institutions and funding, where applicable. The unit monitors the development of the Freudenberg Group's technology platforms, and bundles key cross-sectional topics with the aim of developing new technologies.

## Talent management

A talent management process covering the majority of employees worldwide has been in place at Freudenberg for several years. The process establishes a uniform procedure for talent management throughout the entire Group. It includes harmonized assessment systems and is based on standardized skills profiles and definitions of potential. This enhances the comparability of assessments and facilitates personnel development. The process enables Freudenberg to take personnel decisions on the basis of sound and reliable information.

## Risk management system

The Group's risk management system is a decentralized system oriented to the organizational structure. It covers all fully-consolidated Freudenberg companies, and includes all Group measures addressing the main risks. This process in particular ensures the structured identification, assessment, control and monitoring of main risks. The process also includes appropriate risk communication and the continuous improvement of the risk management system.

The primary objective of the risk management system is the early identification of risks that might jeopardize the continued existence of the company and the initiation of appropriate countermeasures. The intention is not to avoid all potential risks, but rather to create the leeway for taking a deliberate decision to enter into a risk backed by a comprehensive knowledge of the main factors involved.

The risk management strategy is derived from the general strategy of the Group. The risk management system is continually developed, refined and audited.

Controlling, internal auditing, the compliance organization, the Code of Conduct, the internal control system, various quality assurance systems as well as several corporate functions make a significant contribution to the success of the Group's risk management.

## Risks

Risks are defined as all future developments, events or actions that could have a negative impact on the targets and strategies of the Group.

The following deals with risks classified as significant for Freudenberg ranked in descending order by their importance according to the potential level of damage. These quantifiable and non-quantifiable risks can have very differing impacts. They may occur individually and independent of one another, or simultaneously. In all cases they have the potential to impact the net assets, financial position or results of operations of the Group directly or indirectly in the short or long term. Quantitative data are not disclosed because qualitative factors affecting operating

activities such as failure to meet corporate targets or damage to the company's reputation are included in impact classification.

### Legal risks and compliance

Freudenberg is a globally active manufacturer of functionally relevant technical components and system parts for the automotive industry and many other sectors of industry. The Group manufactures mechanical cleaning equipment and filter products for end users and is becoming increasingly active in the manufacture and sale of medical materials and components. Freudenberg also develops and produces specialty lubricants, release agents and a broad range of specialty chemicals for very diverse applications. Wide-ranging services in the various business segments round off the Freudenberg portfolio. Consequently, Freudenberg is exposed to several legal risks. These include in particular risks in the fields of competition and antitrust law, product liability risks, data protection, contractual warranty risks, tax and excise duty law, M&A transactions, asset misappropriation fraud, anti-corruption regulations, money laundering, infringements of intellectual property rights (patents and brand law), export controls, chemicals regulation as well as risks in the fields of occupational health and safety and environmental protection. These risks can affect Freudenberg to various degrees and can lead not only to fines or other penalties or compensation, for example, but can also impact the reputation and image of the Group as a whole. In extreme cases, legal risks could have a substantial effect on Freudenberg.

Freudenberg has many measures in place to respond to these legal risks. These include comprehensive quality assurance mechanisms tailored to the requirements of the respective business models and value chains, clearly-defined product specifications, instructions, regular training for employees, documentation, and preventive contractual solutions containing provisions limiting liability and taking account of the parties' spheres of influence. These measures are flanked by customary insurance cover which is thoroughly analyzed and, where necessary, adapted to changed conditions on an annual basis.

The Group conducts its global business in many different jurisdictions under different legal and regulatory frameworks that are undergoing change and becoming steadily more complex. The scale and scope of the laws and regulations that must be observed are subject to constant changes that are sometimes difficult to predict, and call for the monitoring of legislative trends, interdisciplinary and cross-border communication as well as a swift response and proactive approach.

By tradition, compliance with laws and regulations as well as internal guidelines and Freudenberg's own Guiding Principles and Business Principles has very high priority at Freudenberg. Employees are made aware of and trained in the relevant legal risks for their respective Business Group and the regions of relevance for Freudenberg; they are expected to observe and comply with these requirements.

Freudenberg uses classic methods (documents translated into all the main relevant languages and attendance seminars) to communicate compliance issues through training, dialog and discussions. Digital communication media such as web-based training, e-learning tools, interactive video conferences, and similar, are also being increasingly used to reach as many employees as possible.

Despite all carefully applied control and prevention mechanisms in our compliance structure and compliance measures, there is a residual risk that is unavoidable given the size and complexity of our global organization. Furthermore, the possibility that Freudenberg or Freudenberg employees unconsciously infringe(s) third-party rights cannot be ruled out; this could trigger negative judicial consequences or damage the image or reputation of Freudenberg.

### Macroeconomic and sectoral risks

Freudenberg delivers solutions to many customer segments and sectors and is active in many regions and countries. The broad diversification of the Group reduces dependence on individual customers, customer groupings, suppliers, raw materials, technologies, regions and countries. Freudenberg is actively involved in the rapid development of alternative automotive drivetrain technologies through intensified research and development

activities in various product groups, and tests the findings in several cooperation projects with industrial partners. Notwithstanding, Freudenberg is dependent on the general economic situation, particularly with regard to the general demand for its products and services, and also exposed to the effects of geopolitical risks. International trade disputes, especially in Asia, with disruptive effects on regional and global supply chains, are monitored particularly closely. In spite of sustained efforts to diversify further, a slump in demand in a specific region or sector or a persistent international trade dispute can lead to a substantial decline in sales and earnings for Freudenberg, as is the case for most other companies, and thus pose a significant risk for Freudenberg. More specifically, the dynamic developments in the war between Russia and Ukraine are being closely monitored. Significant disruption in global supply chains with direct and indirect consequences for the Group can be expected as a result of the military escalation and the embargo measures imposed. This will be reflected by the restricted availability of products, in particular raw materials and bought-in parts, that are unavoidable or cannot be offset by short-term operational or strategic measures. The broad-based diversification of the Group with respect to geographic regions and business sectors will help to keep the total impact on Freudenberg within manageable limits despite possible isolated problem areas.

Freudenberg has taken measures to limit the negative consequences of demand-side risks. In particular, the company has appropriate capacity flexibility and practices active working capital management. Freudenberg regularly monitors several success indicators and can thus respond promptly to negative developments. In the context of a long-term response to demand-side risks, Freudenberg makes targeted investments in research and development, in individual regions and customer relations, as well as in selected strategic growth areas.

### **Information security risks**

Modern business processes are to a significant extent based on information captured, processed, exchanged and stored digitally. Potential risks caused by faults in these processes could impact both internal business processes and communication with customers and

suppliers, and could, for example, lead to the interruption of operations at Freudenberg or at a third party. Demands on the reliability and security of IT systems are intensifying as a result of technological progress and the trend towards greater process networking.

The aim of the guideline on information security issued by the Board of Management is to preserve the confidentiality, availability and integrity of information. Freudenberg deals with the relevant information security risks by operating information security management systems oriented to the ISO/IEC 27001:2013 international standard. The Business Groups and corporate functions conduct regular risk assessments and implement appropriate measures. For example, measures such as geographically separate, redundant data centers are implemented to deal with technical risks.

At Freudenberg, as elsewhere, the relevance of cyber risks is steadily growing. Freudenberg counters new, increasingly professional attack techniques, such as supply chain attacks, through the risk-based continued development of protection and response mechanisms. In this context, the IT security level of IT service providers is regularly reviewed and aligned with Freudenberg's requirements.

Various forms of internal training and communication measures encourage heightened awareness on the part of employees with regard to the correct handling of information and information processing systems and processes. Despite all technical, organizational and awareness measures, significant system failures and damage to Freudenberg as the result of a cyberattack cannot be ruled out.

### **Interruption of operations and long-term disruptions**

The classic risk of unplanned interruptions of operations has several possible causes. The main ones are interruptions in production, the current pronounced uncertainty regarding the availability of chips and specific raw materials, delays in upstream stages of the supply chain or in the Group's own supply chain levels, restricted availability of IT infrastructure, damage from natural hazards, or any combination of these causes. Possible consequences

are loss of sales revenue and earnings, contract infringements, contractual penalties and claims for damages as well as reputational damage.

Recent years have seen an increase in nature events probably associated with climate change. Freudenberg real estate is also affected by regional floods, fires and hurricanes. Precautionary measures and actual damage can result in an impact on sales revenue and earnings. Where possible, insurance cover has been arranged for actual damage and any resulting interruption of operations.

Freudenberg has taken numerous precautions to maintain and safeguard IT systems (back-up solutions, emergency data centers) as well as to meet contractual delivery obligations (dual/multi-sourcing, lead centers with interchangeable infrastructures, cross-plant tools, crisis training at relevant production locations) and to ensure delivery reliability and contract compliance, and has also taken out insurance cover for insurable individual risks. These concepts and their evolution have also proved their worth in light of the unique challenges posed by the ongoing pandemic situation. Despite all the measures that have already been taken or will be taken in the event of an emergency, there is a residual risk of a temporary interruption in operations with a possible impact on the sales revenue and earnings of the Group.

### **Financial risks**

As an internationally active company with major shareholdings in other countries, Freudenberg is exposed to financial risks which under certain circumstances could significantly impact the net assets, financial position or results of operations of the Group. Such risks include financial risks from the Group's M&A activities arising from the potential impairment of goodwill and investments or of unrecognized obligations. Freudenberg employs various measures to manage these risks. The Group has several expert groups specifically tasked with the identification, analysis and control of Freudenberg's financial risk profile. This also includes the regular review of financial risk management methodology and steering.

Various measures to safeguard liquidity are in place which allow Freudenberg to react swiftly to

unexpected liquidity-related risks. Such risks are hedged by solid banking and Partners' financing as well as high liquid reserves. Freudenberg has a high equity ratio, a stable level of Partners' reserves, and comprehensive credit lines.

In addition, Freudenberg is exposed to exchange rate and interest rate risks. Managing these risks is implemented by internal guidelines and processes and monitored by a treasury management system. In line with a central framework of regulations, exchange rate risks are determined locally on a cause-specific basis and steered under a consultation process. Interest rate risks arise from possible changes in the market rate and can lead to changes in the market value of fixed interest investments.

Funds for subsidiaries are made available in the form of loans or cash pool agreements. Freudenberg companies channel surplus liquidity to the central finance department.

Binding internal guidelines for Freudenberg companies clearly specify that derivative financial instruments may not be used for speculative purposes, but only for hedging risks in connection with underlying transactions and associated financing operations.

The Group's conservative finance strategy was one of several factors that led the rating agency Moody's Deutschland GmbH, Frankfurt am Main, Germany, to confirm its Freudenberg SE "A3" rating with a long-term "stable" outlook in July 2021. This gives Freudenberg very good creditworthiness at investment grade level.

### **Risks from technological progress and third-party innovations**

As a highly diversified technology group, Freudenberg is active in numerous product and market segments, some of which differ considerably. Moreover, Freudenberg conducts its entrepreneurial activities on the basis of different business models. Consequently, Freudenberg operates in a constantly changing environment and is exposed to technological progress and a wide range of innovations. In specific terms, this means that Freudenberg comes up against new products, technologies or organizational structures.

Freudenberg addresses the implications of these customary risks in its regularly updated corporate strategy and limits these risks by various measures, in particular in-house research and development and innovation. The most important pillar and key driver of innovation at Freudenberg is to be found in the Business Groups, whose research and development activities are closely geared to their customers. In addition, the Freudenberg Group acquires companies or business units to add to the Group's technology and product portfolio and to enhance competitiveness through innovation.

With the Freudenberg Technology Innovation corporate function, Freudenberg has created an organizational unit that pools the Group's technical knowledge – in particular on cross-sectional technologies. At 5.0 percent, Freudenberg invested a substantial share of sales in research and development in the 2021 financial year. The share of sales attributable to new products totaled 32.4 percent.

### **Contractual risks**

Freudenberg enters into contracts with third parties on a daily basis and makes continuous adjustments to its portfolio through acquisitions and disinvestments of companies and business units. During the course of these activities, obligations are assumed or commitments undertaken that may change as time goes by, must be complied with over a longer period of time, or may prove impossible to meet as a consequence of unforeseen events. These activities could in retrospect prove disadvantageous and, above all, could negatively impact the earnings situation of the Group. Freudenberg has several measures in place to deal with these significant risks, such as comprehensive upfront analyses and checks with regard to acquisitions supported by consultations with internal and external experts and consultants and, where appropriate, plausibility checks on the outcomes of the consultation process. This is complemented by interdisciplinary and supra-regional risk management resources established at both Business Group and holding company level, as well as the continuous improvement and further development of systematic contract management and contract monitoring in line with business

demands. These measures significantly reduce the risk.

### **Occupational safety, health protection and environmental risks**

Freudenberg has production sites in some 60 countries, some of which operate under very different conditions. There are operational risks with regard to production processes in particular in terms of workflows, production equipment and the processing of hazardous materials. Freudenberg trains employees to comply with safety regulations and in the use of protective equipment, and fulfills all relevant safety requirements and guidelines.

Freudenberg locations are constantly exposed to natural hazards as a result of the presence in various regions and climate zones. In spite of the usual preventive measures, natural hazards such as earthquakes, floods, forest fires, mudslides or extreme snowfall can occasionally negatively impact the business operations of the units concerned. Natural hazards are taken into consideration as part of the site selection process and for acquisition projects.

Freudenberg has been monitoring the risk of a global pandemic for several years (SARS, avian influenza virus H5N1, zika virus) and initiated or prepared basic protective measures such as pandemic plans or holding stocks of mouth-nose protective masks. In spite of the precautions taken, with the international outbreak of the SARS-CoV-2 coronavirus it was not possible to avoid an impact, for example on employees, working conditions, supply chains and falling demand. Temporary plant closures and loss of sales in some areas contrasted with sales growth in other areas of the Group, highlighting the benefits of the Group's strong international and sectoral diversification.

The precautions and measures to fight the pandemic have been developed further on the basis of the experience gathered to date. Despite the hygiene measures in place at sites, Freudenberg employees can nevertheless be affected at work or in a private context. Depending on the course of events, in particular with regard to a further sharp global outbreak of this or another virus or lengthy quarantine measures, effects leading directly or

indirectly to loss of sales revenue or earnings cannot be excluded. We expect the COVID-19 virus to also impact the working environment and business activities through 2022 at least.

Group-wide standards in the fields of occupational safety, health, environment and fire protection define and implement the minimum requirements and guidelines for the Business Groups. Internal and external audit processes monitor the implementation of programs to constantly minimize risks in these fields at the Business Groups. The audit findings are systematically evaluated and measures implemented throughout the Group. Sites regularly conduct emergency and evacuation exercises. Despite all of these preventive measures, significant occupational health and safety and environmental risks cannot be entirely ruled out.

In the case of hazardous substances, efforts are, for example, made to identify substitutes for substances with proven, unacceptable risks before a statutory provision comes into effect with a view to minimizing potential and customary risks arising in connection with such hazardous substances. This also forestalls undesirable effects through a possible ban on a given substance. In addition, many product developments are subject to a stage gate process which among other things ensures that new products have a better environmental performance than their predecessors and that undesirable substances are not used in the development of new products.

Since it was launched in 2002, the worldwide “We all take care” initiative motivates Freudenberg employees to make their work and their workplaces safer, healthier and more environmentally friendly as well as taking responsibility for society. The initiative is supported by the Group's top management, employee representatives and senior executives in the Business Groups, and the best projects are honored each year.

### **Internal control and risk management system (referred to the Group financial reporting process)**

The Group internal control and risk management system for the financial reporting process at Freudenberg is tasked with ensuring the functionality, compliance and effectiveness of financial reporting in

the Group. The internal control system includes measures designed to ensure the complete, accurate and timely transmission and presentation of information of relevance for the preparation of the consolidated financial statements and the consolidated management report of the Group.

The consolidated financial statements and the consolidated management report of the Group are prepared centrally. The minimum requirements regarding reporting content submitted by the companies are defined and controlled centrally, and the time frame and process requirements are monitored. The regularly updated IFRS accounting guidelines form the basis for the IFRS reporting packages of the parent company and of all domestic and foreign subsidiaries included in the consolidation. There are binding instructions for Freudenberg's internal coordination and other preparatory work for the financial statements.

Freudenberg uses a standard software tool for the Group financial reporting process. This tool is used throughout the company worldwide and clearly defines user rights observing the principle of the separation of functions. The system covers both reporting by Freudenberg companies and the data for the consolidated financial statements. Additional controls are implemented in the consolidation process.

The consolidation process is also supported by a software tool for the automatic reconciliation of balances throughout the Group. The individual companies have a local internal control system which is the responsibility of the respective Business Group and which must comply with uniform minimum requirements applicable throughout the Group.

The Corporate Controlling & Accounting function organizes seminars for employees involved in this process in the event of important changes in financial reporting procedures and IT applications, thereby guaranteeing a consistently high standard of reporting. Actuarial reports and evaluations are compiled by specialist service providers.

There is a clear demarcation of tasks between the corporate function and the companies. The segregation of functions and the dual control principle are systematically applied. It is standard procedure for

the Freudenberg auditor and the auditors of the consolidated companies to review the functionality and compliance of the relevant reporting process. Suggestions for improvements are regularly discussed and optimized. In addition, the functionality and compliance of processes of relevance to financial reporting are reviewed regularly under an internal auditing process. The complete package of processes, systems and controls adequately ensures that the Group's reporting process is in accordance with IFRS and other regulations and laws of relevance to financial reporting and is reliable.

### **Overall assessment of the opportunities and risks**

Freudenberg has an in-depth understanding of the short- and long-term opportunities necessary for the further development of existing business areas and the development of new activities to secure the future of the Group, and actively pursues these opportunities.

In our opinion, based on the probability of occurrence and potential impact of the risks described above, they do not individually or cumulatively present a risk to the continued existence of Freudenberg.

## REPORT ON EXPECTED DEVELOPMENTS

The assumptions made in the report on expected developments are based on the operative planning of the Freudenberg Group for 2022 and the strategic planning for the period 2021 to 2023 adopted by the Board of Management and the Supervisory Board. This planning is premised on our underlying expectations regarding macroeconomic conditions and developments in the markets of relevance to the Group. The assessments of future business development take their orientation from the targets set by our Business Groups as well as the opportunities and risks arising from expected market conditions and the competitive situation in the planning period. Set against this backdrop, we adjust our expectations for business development on a case-by-case basis in line with the latest forecasts.

We expect the generally challenging macroeconomic environment to continue in the 2022 financial year. Measured against a markedly weaker global economy in 2020, due above all to the spread of COVID-19, the global economic recovery of 2021 is expected to continue in 2022. Most regions will have returned to the pre-crisis level by the end of 2022<sup>1</sup>. Nevertheless, economic and geopolitical uncertainty for 2022 remains high. The development of the COVID-19 pandemic remains a key source of uncertainty, above all with regard to possible new virus variants and their impact on the global economy and on the Freudenberg Group's markets, in particular the automotive industry. A further source is developments in the war between Russia and Ukraine. Moreover, uncertainty is exacerbated by the challenges presented by potential persistent supply chain bottlenecks and raw material shortages, inflationary trends on procurement markets, trade barriers, the shortage of skilled workers and changes in the mobility sector. Against this backdrop, we expect modest business development in the markets relevant to the Group.

With regard to our regional core markets, we expect economic growth in Germany to increase from 2.7 percent in 2021 to 3.7 percent in 2022. In the eurozone, which remains the Group's largest sales region, we forecast growth of 4.0 percent in 2022. This trend will be bolstered by pent-up demand in private consumption. Given the high order backlogs, the industrial sector is expected to continue its recovery. The NextGenerationEU (NGEU) recovery plan and a continued expansive fiscal and monetary policy will also generate financial growth momentum. However, persistent supply bottlenecks will prevent a stronger growth dynamic.

We expect economic growth of 3.9 percent in the USA in 2022. The main growth drivers will be private consumption and investment. Following even stronger growth of 5.6 percent in 2021, fiscal growth momentum will lose some of its dynamism in 2022. The base rate of interest is nevertheless expected to rise in 2022.

In Japan, growth is expected to be 3.1 percent, bolstered by a new economic stimulus package from the Japanese government and continued expansive fiscal and monetary policy.

Economic developments in the emerging economies will present a mixed picture. China remains one of the most important growth regions for Freudenberg. Following strong growth of 7.9 percent in 2021, we anticipate growth of 5.0 percent in 2022, bolstered by improved consumer confidence and continued high global demand. We forecast economic growth of 7.9 percent for India in 2022. In light of the present events, we expect growth in Russia to be in negative territory at -8.0 percent.

Against the backdrop of stable global economic growth expected for 2022, developments in the sectors served by Freudenberg will be mixed. The automotive sector is a particularly important industry for Freudenberg. Based on 2.5 percent growth in the automotive industry in 2021, we expect production to

<sup>1</sup> Sources: In this chapter, all figures related to economic developments are based on data from Consensus Economics, the European Commission, the International Monetary Fund, the World Bank, the OECD, and the marketing research and consulting company Schlegel und Partner.

increase worldwide by 8.5 percent in 2022. We anticipate growth in all regions, 17.5 percent in Europe, 16.6 percent in North America, 7.3 percent in Japan, and 0.8 percent in China. A return to the 2019 pre-crisis level is not expected before 2023.

In the mechanical and plant engineering industry, Freudenberg's second most important sector, we anticipate further worldwide growth of 5.0 percent in 2022 on the back of strong 13.0 percent growth in 2021.

Private consumption is also expected to see positive development. We expect growth of 4.8 percent in the industrial nations, with even higher rates in the emerging economies, for example 8.1 percent in China and 8.5 percent in India.

In the oil and gas industry we anticipate growth rates of between 2.0 and 10.0 percent in the industry's regions in 2022.

We expect economic and geopolitical uncertainty to continue. To manage this, we will stay agile at each of our locations throughout the world and continue to respond swiftly and flexibly to changing requirements. Customer centricity is a main focus of all our efforts. This principle applies to all sectors and regions. We will therefore continue to invest in long-term projects. The mobility transformation, digitalization and sustainable solutions will remain our key strategic themes. We will adopt a selective and focused approach to developing our portfolio further and strengthening it through acquisitions relating to promising technologies. Our efforts in this context are guided by the findings of the foresight project named "Odyssey" that examined what the world might look like in 2050 and what business opportunities this might bring for Freudenberg. The project was launched in 2015, and a follow-up project called "Janus" started in 2020 to address the impact of the most recent political and economic changes on the framework set out in "Odyssey". Additionally, the interdisciplinary "Janus" team was tasked in the 2021 financial year with analyzing the impact of the COVID-19 pandemic, growing protectionism, nationalism and trade conflicts on the future. Our long-term goal is a balanced portfolio of cyclical and non-cyclical businesses with equal sales contributions from North and South America, Europe and Asia.

In 2022, we will again continue to drive forward with our projects in the fields of sustainability, non-financial key performance indicators and social engagement. As a responsible, innovative technology group, Freudenberg will once again implement numerous measures in environmental protection, occupational health and safety. As in the previous year, special attention will again be devoted to occupational safety. We expect to see the Lost Day Incident Frequency Rate (LDIFR) in the 2022 financial year on the level of the previous year.

Given the opportunities and risks described in the previous chapter, or in the event that the expectations and assumptions described above do not materialize, the actual development of Freudenberg may show a positive or negative deviation from this report on expected developments.

Anticipated sales developments in our Business Groups reflect the regional and sectoral developments described above. We expect Group sales in the 2022 financial year to be slightly higher than the level of the previous year. Set against the backdrop of a persistently challenging macroeconomic environment, we anticipate a slightly higher operating result. On the basis of these forecasts, we expect a return on sales for 2022 at the level of the previous year.

Weinheim, March 18, 2022

The Board of Management

## FREUDENBERG SE (HGB)

Freudenberg SE is a wholly-owned subsidiary of Freudenberg & Co. KG, Weinheim, Germany, and the parent company with responsibility for the operations of the Freudenberg Group.

The net assets, financial position and results of operations of Freudenberg SE are characterized by its holding function. The company holds interests in affiliated companies and it is the profit from these investments that dominates the earnings situation of Freudenberg SE.

The annual financial statements of Freudenberg SE are set up in accordance with the Handelsgesetzbuch (HGB – German Commercial Code) and the Aktiengesetz (AktG – German Stock Corporation Act).

### EARNINGS SITUATION

[€ million]	2020	2021
Sales	29.8	36.8
Investment result	270.0	544.0
Other operating income	8.6	8.3
Material expenses	-17.9	-25.9
Personnel expenses	-0.2	-7.7
Other operating expenses	-93.9	-90.1
Financial result	-28.1	-26.1
<b>Profit before taxes</b>	<b>168.3</b>	<b>439.3</b>
Income taxes	-1.5	-40.5
<b>Profit for the year</b>	<b>166.8</b>	<b>398.8</b>

The **sales** of Freudenberg SE largely result from the charging of services and from royalties for the Freudenberg global brand amounting to €9.9 million (previous year: €11.2 million).

The **investment result** increased from €270.0 million to €544.0 million. The positive development in the results of individual affiliates had a corresponding impact on the overall result. This was partially offset by the fall in dividend payments from €44.0 million to €33.4 million.

**Other operating income** fell slightly from €8.6 million to €8.3 million.

**Material expenses** rose from €17.9 million to €25.9 million and represent services purchased.

At €7.7 million, **personnel expenses** were considerably higher than the level for 2020 (previous year: €0.2 million). The previous year had been characterized by the positive effect of the reversal of provisions for pensions in the amount of €9.2 million, which almost entirely compensated for salaries and wages. In 2021, salaries and wages, at €10.0 million, were slightly above the figure of €9.3 million for the previous year. The compensating effect of the reversal of provisions for pensions, which amounted to €2.4 million, was significantly less pronounced than in the previous year.

The **other operating expenses** fell from €93.9 million to €90.1 million. This fall was chiefly due to lower exchange rate losses.

The **financial result** increased by €2.0 million (previous year: €3.1 million). This increase was chiefly the result of higher interest income from affiliated companies.

**Income taxes** rose by €39.0 million from €1.5 million to €40.5 million. This was mainly due to the higher taxable income of Freudenberg SE and affiliates forming part of its group for tax purposes and to taxes for prior periods in the amount of €7.6 million.

At €398.8 million (previous year: €166.8 million), the **profit for the year** of Freudenberg SE was above the level of the previous year.

## ASSETS, LIABILITIES AND FINANCIAL POSITION

[€ million]	Dec. 31, 2020	Dec. 31, 2021
Intangible assets	9.5	7.9
Tangible assets	1.6	1.6
Financial assets	2,796.2	2,762.1
Receivables and other assets	2,689.0	3,041.2
Cash at bank and in hand	98.8	169.1
<b>Total assets</b>	<b>5,595.1</b>	<b>5,981.9</b>
Equity	3,538.6	3,836.0
Provisions	136.4	163.8
Liabilities	1,920.1	1,982.1
<b>Total equity and liabilities</b>	<b>5,595.1</b>	<b>5,981.9</b>

The assets of Freudenberg SE as the holding company chiefly consist of shares and participations in companies and amounts receivable from these companies.

As at the statement of financial position date, financial assets had fallen by €34.1 million to €2,762.1 million (previous year: €2,796.2 million).

Receivables and other assets mainly include amounts receivable from affiliates. As at the date of the statement of financial position, these had risen by €352.2 million to €3,041.2 million (previous year: €2,689.0 million). This is mainly the result of higher cash pool receivables from Externa Handels- und Beteiligungsgesellschaft mit beschränkter Haftung with headquarters in Weinheim, Germany.

Equity increased to €3,836.0 million (previous year: €3,538.6 million). The net retained profit from the previous year rose by €297.3 million from €2,793.4 million to €3,090.7 million. The profit for the year rose from €166.8 million to €398.8 million. The net retained profit for the year was reduced by dividends paid in the amount of €101.5 million (previous year: €92.5 million).

Provisions rose by €27.4 million from €136.4 million to €163.8 million and chiefly include provisions for pensions.

Liabilities increased by €62.0 million from €1,920.1 million to €1,982.1 million, mainly as a result of higher liabilities to affiliated companies and other liabilities.

## SUMMARY STATEMENT

Against the backdrop of our sound situation with respect to net assets and financial position and the high earnings of our affiliates, we assess the general economic situation of Freudenberg SE as positive. This statement is not affected by the events reported in the chapter "Report on Events After the Date of the Statement of Financial Position".

## REPORT ON EXPECTED DEVELOPMENTS

As the parent company of the Freudenberg Group responsible for business operations but without its own business operations, Freudenberg SE mainly receives income from its affiliates. As a general principle, expectations concerning business developments within the Freudenberg Group therefore also have an impact on the earnings of Freudenberg SE. For this reason, the assumptions and statements made in the report on expected developments for Freudenberg are equally relevant to Freudenberg SE.

## NET RETAINED PROFIT AND DIVIDEND

In December 2021, the Shareholders Meeting resolved, as proposed by the Supervisory Board and the Board of Management, to pay a dividend of €101.5 million (previous year: €92.5 million) to the sole shareholder Freudenberg & Co. KG in 2021 from the net retained profit as at December 31, 2020, which amounted to €2,793.4 million.

The Board of Management proposes that the retained profit for the 2021 financial year, amounting to €3,090.7 million should be carried forward to new account.

## **SUMMARY CONCLUDING STATEMENT OF DEPENDENT COMPANY REPORT OF FREUDENBERG SE**

“We hereby declare in accordance with Sec. 312, Para 3, AktG (German Stock Corporation Act) that, on the basis of the circumstances of which we were aware at the time when transactions with affiliated companies were implemented or acts or forbearances were taken, our company received consideration comparable with that obtainable from a non-affiliated company and did not suffer any disadvantage as a result of such acts or forbearances.”



# CONSOLIDATED FINANCIAL STATEMENTS OF FREUDENBERG SE

## CONTENTS

Consolidated Statement of Financial Position	122
Consolidated Statement of Profit or Loss	124
Consolidated Statement of Comprehensive Income	125
Consolidated Statement of Cash Flows	126
Consolidated Statement of Changes in Equity	127
Notes to the Consolidated Financial Statements	128
Shareholdings	182

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

## ASSETS

[€ million]	Note	Dec. 31,2020	Dec. 31,2021
<b>ASSETS</b>			
Intangible assets	(1)	2,665.8	2,846.3
Tangible assets	(2)	2,719.4	2,769.5
Investment properties	(3)	16.7	13.9
Investments in joint ventures	(4)	192.8	233.7
Investments in associated companies	(5)	889.1	962.9
Other financial assets		117.4	137.3
Financial assets		1,199.3	1,333.9
Other non-current assets	(7)	75.4	105.4
Deferred taxes	(26)	286.0	332.3
<b>Non-current assets</b>		<b>6,962.6</b>	<b>7,401.3</b>
Inventories	(6)	1,179.8	1,523.4
Trade receivables		1,402.9	1,527.3
Other current assets		195.3	208.8
Current receivables	(7)	1,598.2	1,736.1
Current tax assets		92.8	73.5
Securities and cash at bank and in hand	(8)	2,021.4	2,186.8
<b>Current assets</b>		<b>4,892.2</b>	<b>5,519.8</b>
		<b>11,854.8</b>	<b>12,921.1</b>

## EQUITY AND LIABILITIES

[€ million]	Note	Dec. 31,2020	Dec. 31,2021
<b>EQUITY AND LIABILITIES</b>			
Subscribed capital		450.0	450.0
Capital reserves		50.2	50.2
Retained earnings		4,839.4	5,618.3
<b>Equity without non-controlling interests</b>		<b>5,339.6</b>	<b>6,118.5</b>
Non-controlling interests		356.5	372.0
<b>Equity</b>	<b>(10)</b>	<b>5,696.1</b>	<b>6,490.5</b>
Provisions for pensions and similar obligations	(11)	879.7	808.8
Other long-term provisions	(12)	91.0	121.6
Long-term provisions		970.7	930.4
Financial debt		1,474.2	1,593.4
Other non-current liabilities		170.4	185.0
Liabilities	(13)	1,644.6	1,778.4
Deferred taxes	(26)	329.8	330.7
<b>Non-current liabilities</b>		<b>2,945.1</b>	<b>3,039.5</b>
Other current provisions	(12)	734.1	801.7
Current tax liabilities		115.3	149.2
Financial debt		1,182.2	1,077.3
Trade payables		878.7	1,025.7
Other current liabilities		303.3	337.2
Liabilities	(13)	2,364.2	2,440.2
<b>Current liabilities</b>		<b>3,213.6</b>	<b>3,391.1</b>
		<b>11,854.8</b>	<b>12,921.1</b>

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS

[€ million]	Note	2020	2021
Sales	(14)	8,840.8	10,038.7
Cost of sales	(15)	-6,093.3	-6,904.7
<b>Gross profit</b>		<b>2,747.5</b>	<b>3,134.0</b>
Selling expenses	(16)	-1,271.5	-1,369.2
Administrative expenses	(17)	-603.0	-637.2
Research and development expenses	(18)	-387.8	-428.4
Other income	(19)	93.8	116.2
Other expenses	(20)	-68.9	-77.7
Income from investments in joint ventures	(4),(21)	20.1	26.0
<b>Profit from operations</b>		<b>530.2</b>	<b>763.7</b>
Income from investments in associated companies	(5),(22)	-11.2	41.1
Other investment result	(23)	29.6	14.4
Other interest and similar income	(24)	20.0	16.6
Interest and similar expenses	(25)	-57.9	-57.6
<b>Financial result</b>		<b>-19.5</b>	<b>14.5</b>
<b>Profit before income taxes</b>		<b>510.7</b>	<b>778.2</b>
Income taxes	(26)	-144.6	-191.1
<b>Consolidated profit</b>		<b>366.1</b>	<b>587.1</b>
Of which: attributable to Freudenberg		336.2	558.1
Of which: attributable to non-controlling interests	(27)	29.9	29.0

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

[€ million]	Note	2020	2021
<b>Consolidated profit</b>		<b>366.1</b>	<b>587.1</b>
<b>Other comprehensive income:</b>			
Remeasurement of defined benefit plans	(11)	-34.7	85.8
Changes in value of securities		-5.3	-0.3
Income tax relating to items that will not be reclassified to profit or loss	(10)	9.9	-23.8
Share in other comprehensive income of joint ventures	(4)	0.0	0.1
Share in other comprehensive income of associated companies	(5)	8.2	42.3
<b>Items that will not be reclassified to profit or loss</b>		<b>-21.9</b>	<b>104.1</b>
Exchange rate differences	(10)	-315.7	213.4
Changes in value of derivative financial instruments	(10)	0.2	-0.2
Miscellaneous comprehensive income		3.4	-1.0
Income tax relating to items that will be reclassified subsequently to profit or loss when specific conditions are met	(10)	7.7	-7.5
Share in other comprehensive income of joint ventures	(4)	-0.1	-1.1
Share in other comprehensive income of associated companies	(5)	-11.3	31.9
<b>Items that will be reclassified subsequently to profit or loss when specific conditions are met</b>		<b>-315.8</b>	<b>235.5</b>
<b>Other comprehensive income for the year</b>		<b>-337.7</b>	<b>339.6</b>
<b>Total comprehensive income for the year</b>		<b>28.4</b>	<b>926.7</b>
Of which: attributable to Freudenberg		29.8	881.1
Of which: attributable to non-controlling interests		-1.4	45.6

# CONSOLIDATED STATEMENT OF CASH FLOWS

[€ million]	Note	2020	2021
Profit before taxes		510.7	778.2
Depreciation, amortization and impairment losses on intangible assets, tangible assets, investment properties and financial assets less write-ups		513.2	510.2
Income from investments and interest income		0.9	-39.1
Income taxes paid		-189.2	-205.2
Profit or loss on disposal of intangible assets, tangible assets, investment properties and financial assets		1.3	-10.6
Dividends received		41.9	32.2
Other expenditure and income not affecting payments		15.7	35.6
Changes in inventories, trade receivables and other assets		127.7	-426.2
Changes in trade payables and other liabilities		46.1	128.1
Changes in provisions		105.5	98.7
Interest paid		-53.4	-51.9
Interest received		18.4	11.8
<b>Cash flow from operating activities</b>	<b>(28)</b>	<b>1,138.8</b>	<b>861.8</b>
Cash inflow from disposals of intangible assets, tangible assets and investment properties		24.0	44.0
Cash outflow from acquisitions of intangible assets, tangible assets and investment properties		-287.1	-304.8
Cash inflow from disposals of financial assets		15.3	7.5
Cash outflow from acquisitions of financial assets		-2.5	-20.6
Cash inflow in connection with the disposal of consolidated companies or other business units less cash disposed of		0.7	18.5
Cash outflow in connection with the acquisition of consolidated companies or other business units less cash acquired		8.5	-278.1
<b>Cash flow from investing activities</b>		<b>-241.1</b>	<b>-533.5</b>
Dividend payments to shareholders/non-controlling interests	(29)	-135.2	-138.7
Payments from transactions with non-controlling interests		0.0	4.0
Cash inflow from the take-up of financial debts		672.1	412.6
Cash outflow from the repayment of financial debts		-481.9	-470.9
Cash inflow from disposals of loans and securities held as non-current assets		13.3	2.7
Cash outflow from acquisitions of loans and securities held as non-current assets		-4.0	-7.2
<b>Cash flow from financing activities</b>		<b>64.3</b>	<b>-197.5</b>
<b>Changes in cash and cash equivalents with effect on payments</b>	<b>(31)</b>	<b>962.0</b>	<b>130.8</b>
Changes in cash and cash equivalents from changes in consolidated group		-2.1	0.0
Changes in cash and cash equivalents from exchange rate differences		-57.7	34.6
<b>Cash and cash equivalents at beginning of year</b>		<b>1,119.2</b>	<b>2,021.4</b>
<b>Cash and cash equivalents at end of year</b>		<b>2,021.4</b>	<b>2,186.8</b>

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

[€ million]	Subscribed capital	Capital reserves	Currency translation	Remeasurement of defined benefit obligations	Fair value measurement of securities	Financial investments accounted for using the equity method
<b>Status Jan. 1, 2020</b>	<b>450.0</b>	<b>50.2</b>	<b>-16.5</b>	<b>-425.6</b>	<b>18.3</b>	<b>80.6</b>
Changes in consolidated group						
Consolidated profit						
Appropriation of profit						
Other comprehensive income			-279.8	-30.7	-4.8	-4.7
<b>Status Dec. 31, 2020</b>	<b>450.0</b>	<b>50.2</b>	<b>-296.3</b>	<b>-456.3</b>	<b>13.5</b>	<b>75.9</b>
<b>Status Jan. 1, 2021</b>	<b>450.0</b>	<b>50.2</b>	<b>-296.3</b>	<b>-456.3</b>	<b>13.5</b>	<b>75.9</b>
Changes in consolidated group						
Consolidated profit						
Appropriation of profit						
Other comprehensive income			189.2	81.2	-1.3	70.2
<b>Status Dec. 31, 2021</b>	<b>450.0</b>	<b>50.2</b>	<b>-107.1</b>	<b>-375.1</b>	<b>12.2</b>	<b>146.1</b>

[€ million]	Tax effects recognized in equity	Other retained earnings	Total retained earnings	Equity without non-controlling interests	Non-controlling interests	Equity
<b>Status Jan. 1, 2020</b>	<b>108.9</b>	<b>5,136.4</b>	<b>4,902.1</b>	<b>5,402.3</b>	<b>417.2</b>	<b>5,819.5</b>
Changes in consolidated group					-15.9	-15.9
Consolidated profit		336.2	336.2	336.2	29.9	366.1
Appropriation of profit		-92.5	-92.5	-92.5	-43.4	-135.9
Other comprehensive income	20.2	-6.6	-306.4	-306.4	-31.3	-337.7
<b>Status Dec. 31, 2020</b>	<b>129.1</b>	<b>5,373.5</b>	<b>4,839.4</b>	<b>5,339.6</b>	<b>356.5</b>	<b>5,696.1</b>
<b>Status Jan. 1, 2021</b>	<b>129.1</b>	<b>5,373.5</b>	<b>4,839.4</b>	<b>5,339.6</b>	<b>356.5</b>	<b>5,696.1</b>
Changes in consolidated group		-0.7	-0.7	-0.7	7.1	6.4
Consolidated profit		558.1	558.1	558.1	29.0	587.1
Appropriation of profit		-101.5	-101.5	-101.5	-37.2	-138.7
Other comprehensive income	-30.6	14.3	323.0	323.0	16.6	339.6
<b>Status Dec. 31, 2021</b>	<b>98.5</b>	<b>5,843.7</b>	<b>5,618.3</b>	<b>6,118.5</b>	<b>372.0</b>	<b>6,490.5</b>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## General

Freudenberg is an international industrial group mainly active as a supplier to the automotive, mechanical engineering, oil and gas, and construction industries as well as the textile and apparel industries. The portfolio also includes medical technology and consumer goods.

The consolidated financial statements of Freudenberg SE, Weinheim, Germany (registered with Mannheim Local Court, HRB 714579), for 2021 have been drawn up in accordance with the International Financial Reporting Standards (IFRS) as they are to be applied in the European Union (EU) as of the date of the statement of financial position (December 31, 2021). Freudenberg SE, Weinheim, Germany, is included in the consolidated financial statements of Freudenberg & Co. Kommanditgesellschaft, Weinheim, Germany, which are published in the "Bundesanzeiger" (Federal Gazette).

Freudenberg SE has availed itself of the right as laid down in Sec. 315e (3) HGB ("Handelsgesetzbuch", German Commercial Code) to set up its consolidated financial statements in accordance with IFRS.

The Group currency is the euro. All amounts are indicated in million euros unless otherwise stated.

## Accounting standards applied for the first time in the reporting year

In the 2021 financial year, the application of the following amended and new standards was binding for the first time:

Standards/Amendments	Designation	Impact
Various standards	Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 – <i>Interest Rate Benchmark Reform: Phase 2</i>	No material impact

### Accounting standards published but not yet applied

The following standards, interpretations and amendments published by the International Accounting Standards Board (IASB) and the IFRS Interpretations Committee are not yet binding. The application of these standards, interpretations and amendments is subject to endorsement by the EU which, in some cases, is still pending.

Standards/Interpretations/Amendments		Application binding from <sup>1</sup>	Endorsed by EU	Probable Impact
IAS 1	Amendments to IAS 1 – <i>Classification of Liabilities as Current or Non-current</i>	January 1, 2023	No	No material impact
IAS 8	Amendments to IAS 8 – <i>Definition of Accounting Estimates</i>	January 1, 2023	No	No material impact
IAS 12	Amendments to IAS 12 – <i>Deferred Tax related to Assets and Liabilities arising from a Single Transaction</i>	January 1, 2023	No	No material impact
IFRS 17	Amendments to IFRS 17 – <i>Initial Application</i>	January 1, 2023	No	No material impact
IAS 16	Amendments to IAS 16 – <i>Property, Plant and Equipment: Proceeds before Intended Use</i>	January 1, 2022	Yes	No material impact
IAS 37	Amendments to IAS 37 – <i>Onerous Contracts: Cost of Fulfilling a Contract</i>	January 1, 2022	Yes	No material impact
IFRS 3	Amendments to IFRS 3 – <i>Reference to the Conceptual Framework</i>	January 1, 2022	Yes	No material impact
IFRS 16	Amendments to IFRS 16 – <i>Covid-19-Related Rent Concessions beyond 30 June 2021</i>	April 1, 2021	Yes	No material impact
IFRS 17	<i>Insurance Contracts</i>	January 1, 2023	Yes	No material impact
Various Standards	Amendments to IAS 1 und IFRS Practice Statement 2 – <i>Disclosure of Accounting Policies</i>	January 1, 2023	No	No material impact
Various Standards	<i>Annual Improvements to IFRS Standards 2018–2020</i>	January 1, 2022	Yes	No material impact

<sup>1</sup> From this date or for reporting periods beginning after this date.

## Consolidated group

Apart from Freudenberg SE, 61 German (previous year: 64) and 359 foreign (previous year: 365) **affiliated companies**, with respect to which Freudenberg SE has the power to direct the relevant activities of the company, the right to variable returns from the company and the ability to affect such variable returns, are fully consolidated.

Freudenberg operates a joint venture in the field of mechanical seals within the EagleBurgmann Business Group together with the partner Eagle Industry Co., Ltd., Tokyo, Japan. Freudenberg holds a 25-percent stake in EagleBurgmann Japan Co., Ltd., Tokyo, Japan. The partner also holds a 25-percent indirect stake in EagleBurgmann Germany GmbH & Co. KG, Wolfratshausen, Germany. According to the joint venture agreement between the partners, Freudenberg exercises control over affiliated companies of the EagleBurgmann Group in which Freudenberg holds less than half of the voting rights of the other company; such affiliated companies are therefore fully consolidated.

In the consolidated financial statements, 1 German (previous year: 1) and 12 foreign (previous year: 13) **joint ventures** are included. These legally independent companies are managed jointly with the partner company in each case. Both parties hold rights to the net assets of the companies. The joint ventures are consolidated by the equity method.

In addition, 9 foreign (previous year: 10) **associated companies** are included in the consolidated financial statements. Freudenberg does not control these companies but only exercises a significant influence. These companies are consolidated by the equity method.

All affiliated companies, joint ventures and associated companies are listed under "Shareholdings".

In the year under review, 14 companies were included in the consolidated financial statements as fully consolidated affiliated companies for the first time. 23 companies which had previously been fully consolidated were no longer included as fully consolidated affiliated companies due to sale, liquidation or merger. The timing of the initial consolidation is determined on the basis of the date when Freudenberg SE gained control. In the event of loss of control, deconsolidation is effected.

## Acquisitions and disposals

With effect from September 21, 2021, the Freudenberg Filtration Technologies Business Group acquired 100 percent of the shares in PPA Holdings, Inc., Indianapolis, USA (“PPA Holdings”). PPA Holdings is a leading producer of high-quality air filters for residential buildings. They are mainly sold through retailers. In 2020, PPA Holdings generated sales of US\$118million with some 940 employees. The company is fully consolidated as part of the Freudenberg Group.

With effect from December 1, 2021, the Freudenberg Filtration Technologies Business Group acquired R.P.S. Products, Inc., Hampshire, USA (“RPS Products”) within the framework of an asset deal. RPS Products is a filter manufacturer that also sells filters for residential and office buildings through retailers. With the acquisition of RPS Products, the company is being integrated into the existing company Freudenberg Filtration Technologies LP, Hopkinsville, USA, and will continue operating under that name.

The two companies will be integrated in the Freudenberg Filtration Technologies Business Group. The consideration for the acquisitions was €227.8 million and was transferred in full with an effect on payments.

The goodwill in the amount of €130.8 million resulting from the purchase price allocations chiefly represents synergy potential resulting from complementary competences in the production and sale of filtration products. The goodwill will be allocated in full to the Freudenberg Filtration Products Business Group. Of this goodwill, an amount of €83.7 million is not deductible for tax purposes. With these acquisitions, Freudenberg can offer its customers a broader product range in the North American market. These transactions add filtration solutions for the ventilation of residential buildings to the portfolio and strengthen the existing global filtration portfolio for mobility and industrial applications. As at the date of the statement of financial position, the purchase price allocations were still provisional as detailed analyses of the assets and liabilities acquired had not yet been finally completed.

Since the acquisition dates, the two companies acquired have contributed €29.1 million to the sales of

the Freudenberg Group. The effect on consolidated profit was not material.

If the acquisitions had already taken place at January 1, 2021, sales would have been €103.7 million higher. The effects on consolidated profit would not have been material.

With effect from April 23, 2021, FCS-Munich GmbH (part of the Freudenberg Chemical Specialities Business Group), Weinheim, acquired all of the shares in Deurowood Holding GmbH, Hard, Austria, and the associated shares of DEUROWOOD Produktions GmbH, Hard, Austria (“Deurowood”). Deurowood is a globally leading full-range supplier in the area of innovative and safe-to-use chemical additives for paper impregnation and the production of laminates. The company develops, manufactures and sells catalysts, functional additives, pigment dispersions and other special products for the impregnation of paper, production of laminates and wood composites. The company is fully consolidated as part of the Freudenberg Group. From the Group point of view, this acquisition was not material.

The consideration transferred for all acquisitions which were not material from the Group point of view ran into the mid-double-digit range in millions of euros. In 2021, assets totaling about €83.2 million were acquired as a result of all the other acquisitions classed as not material. The resulting goodwill, amounting to about €50.6 million, concerns synergies chiefly in the area of research and development. In the financial year under review, the companies concerned contributed about €26.0 million to consolidated sales. If the acquisitions had already taken place at January 1, 2021, the sales of the Freudenberg Group would have been €2.1 million higher.

The transaction costs arising in connection with the company acquisitions were, in each case, not significant and were recognized with effect on net income. As at the acquisition date, there was no significant difference in each case between the gross contractual amounts receivable and the fair value of the acquired receivables.

The fair values of the main asset and liability items of the companies acquired as at the acquisition dates were determined mainly on the basis of level 3 input factors. The cumulative values were as follows:

[€ million]	Acquisitions of the Freudenberg Filtration Technologies Business Group	Further acquisitions
Intangible assets	174.6	66.3
Tangible assets	19.6	8.9
Other non-current assets	13.7	0.0
Inventories	20.3	2.2
Trade receivables	24.7	3.8
Other current assets	2.7	0.3
Cash and cash equivalents	2.1	1.7
<b>Assets</b>	<b>257.7</b>	<b>83.2</b>
Non-current liabilities	12.8	8.4
Current liabilities	20.8	23.7
<b>Liabilities</b>	<b>33.6</b>	<b>32.1</b>
<b>Net assets</b>	<b>224.1</b>	<b>51.1</b>

Intangible assets identified in connection with purchase price allocations mainly concern customer lists/relations, technologies and brands. The fair values of the customer lists identified were measured by the residual value method on the basis of business planning with a useful life of seven to 15 years. As regards technologies and brands, the relief-from-royalty approach with a useful life of five to 10 years was applied.

The purchase price allocation for the acquisition of Low & Bonar Limited, Edinburgh, United Kingdom, was reviewed in the 2021 financial year. The review did not result in any adjustment requirements.

**Consolidation methods**

The consolidated financial statements are based on the annual accounts of Freudenberg SE and the consolidated companies according to IFRS. All the annual accounts concerned were drawn up as at December 31, 2021. In accordance with IFRS 10, the accounts of the individual companies to be included in the consolidated financial statements were drawn up applying uniform accounting and measurement methods.

The acquisition costs of the individual consolidated companies are set off against the pro-rata share in the fair value of the equity of the companies concerned as of the date of acquisition according to the purchase method. Identifiable acquired assets and liabilities are also included in the consolidated statement of financial position at their fair values as of the acquisition date. Any remaining differences are shown as goodwill.

Inter-company profits and losses, sales, expenses and income and all receivables and payables between consolidated companies are eliminated. Deferred taxes are set up on consolidation transactions affecting net income.

Joint ventures and associated companies are consolidated by the equity method on the basis of financial statements drawn up in accordance with IFRS.

The differences arising from the acquisition of shareholdings in joint ventures and associated companies form part of the book value of the shareholding in the company concerned. Amortization is not recognized on goodwill in subsequent periods. An impairment test is carried out on the book value of the shareholding in the joint venture or associated company as a whole if there are indications that the carrying amount could be impaired.

**Accounting and measurement principles**

Acquired intangible assets are capitalized at acquisition cost and amortized on a systematic basis.

Systematic amortization is based on the following useful lives:

Software	3 to 8 years
Patents	depending on patent term
Licenses	depending on contract term

Intangible assets with finite useful lives acquired in a business combination are amortized on a systematic basis over useful lives of up to 25 years.

An impairment test is carried out on goodwill at least once per year. For the impairment test, the goodwill acquired is allocated to the groups of cash-generating units expected to benefit from the business combination. In line with internal management reporting, the groups of cash-generating units are represented by the Business Groups. An impairment loss is recognized if the carrying amount of the group of cash-generating units is higher than its recoverable amount. The recoverable amount is the higher of the fair value less costs to sell and the value in use of the group of cash-generating units.

For the determination of the recoverable amount, the value in use of the group of cash-generating units concerned is determined by the discounted cash flow method on the basis of a detailed planning period of five years. The discount rates used for the determination of the value in use are based on the weighted average cost of capital (hereafter WACC) determined separately for each group of cash-generating units.

Impairments of capitalized goodwill are shown under other expenses in the consolidated statement of profit or loss. Reversals of impairments are not recognized with respect to goodwill for which impairments have been recognized.

Impairment losses going beyond goodwill are recognized for individual assets of cash-generating units if the fair value less costs of disposal of such units or the value in use of such units has fallen below their carrying amount.

Provided that such assets meet the requirements of IAS 38, internally generated intangible assets are carried as assets at production cost and are amortized on a systematic basis over their useful lives, if their useful lives are finite.

If the useful life of intangible assets is not considered to be finite, no amortization is effected. An impairment test is carried out on such assets annually. An intangible asset may be regarded as having an indefinite useful life when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash flows for the Group.

Expenditure in connection with development projects is capitalized as intangible assets if, in addition to meeting the criteria of IAS 38, a Group threshold is exceeded. Otherwise, development expenditure is shown as expenses. Capitalized development expenditure is amortized on a straight-line basis over the underlying useful life of the product concerned. Amortization of capitalized development expenditure is normally recognized in research and development expenses.

Tangible assets are capitalized at acquisition or production cost. In the case of assets produced by Group companies, production cost also includes directly attributable cost as well as pro-rata overheads and depreciation.

Borrowing costs are capitalized as part of acquisition or production cost in the case of qualifying assets.

Expenditure for repairs and maintenance is generally shown as expenses. Such expenditure is only capitalized if future economic benefits in connection with such expenditure are probable and the

acquisition or production cost can be reliably measured.

Taxable grants and tax-free investment subsidies, normally paid by public bodies, are set off against acquisition or production cost or recognized in the statement of financial position as deferred income.

Movable non-current assets and industrial buildings are depreciated over their useful lives, normally on a straight-line basis.

Systematic depreciation is determined on the basis of the following useful lives:

Buildings	max. 50 years
Machinery and equipment	5 to 20 years
Other fixtures, fittings and office equipment	3 to 20 years

An impairment test on tangible and intangible assets assigned to cash-generating units is always carried out if circumstances or changed conditions indicate that the carrying amount of such cash-generating units may not be recovered. The composition of the cash-generating units is determined at the divisional or regional level as a function of the business model and differs between Business Groups. If the impairment of an asset reflected by a write-down in the past is reduced or eliminated, the impairment loss is reversed. The amortized acquisition or production cost represents the upper limit of measurement in such cases.

Under IFRS 16, right-of-use assets and corresponding payment obligations are recognized for all leased assets. The right-of-use asset represents the lessee's right to use a leased asset (the underlying asset) for an agreed term in return for a charge. In accordance with the relief options allowed by IFRS 16, Freudenberg recognizes lease payments associated with underlying assets of low value as expenses on a straight-line basis in the statement of profit or loss. Assets of low value are identified on the basis of classes of assets. Leased assets in the classes of machinery and equipment, IT equipment and other fixtures, fittings and office equipment are classed as of low value. In the case of leased assets in the other classes of assets land and buildings, passenger cars,

fork lift trucks and IT infrastructure, right-of-use assets and corresponding lease liabilities are recognized even if the term of the lease is short (less than 12 months). In the case of contracts which include a lease component and another non-lease component, such as a service installment, Freudenberg recognizes such non-lease components as part of the lease in accordance with the practical expedient allowed by IFRS 16. Right-of-use assets are depreciated on a straight-line basis over the shorter of the useful life of the asset and the term of the lease. In the event that the exercise of a purchase option is assessed as reasonably certain, the right-of-use asset is depreciated over the useful life of the underlying asset irrespective of the term of the lease.

Land and buildings held to earn rentals from third parties are dealt with as investment properties. Such properties are measured at acquisition cost. Investment properties are depreciated over their useful lives. This approach normally corresponds to straight-line depreciation. Systematic depreciation is calculated on the basis of a maximum useful life of 50 years. The fair value is determined by the discounted cash flow method.

Participations are shown at fair value. In some cases, amortized cost represents the best estimate of fair value.

Investments in joint ventures and associated companies are shown at acquisition cost on first-time consolidation and subsequently adjusted for changes in the share of the shareholder in the net assets of the company concerned. In the event that the losses of a joint venture or associated company attributable to Freudenberg exceed the value of the share in that company, no further impairment losses are recognized. If there is objective evidence of impairment or value recovery in the case of such participations, assumptions concerning future business developments must be made with a view to determining the recoverable amount.

Long-term loans are discounted if the amount of such discount is significant.

Inventories are shown at acquisition or production cost or at net realizable value, where this is lower. Inventories of raw materials and consumables and merchandise are measured by the weighted average

cost method. Production cost includes directly attributable costs as well as production and material overheads and depreciation.

On first recognition, receivables and other financial assets are measured at fair value. Fair value normally corresponds to the consideration to be received for goods or services transferred to the customer. Subsequent measurements of such assets are effected at amortized cost using the effective interest method. Long-term receivables are only discounted if the amount of such discount is significant. A loss allowance is recognized on the basis of the expected loss model. Further information on the expected loss model is given in note (13).

Contract assets, which are mainly the result of realization of revenue over time for customer-specific products and development contracts, are recognized at amortized cost. For determining impairment losses on contract assets, the simplified procedure for determining the expected credit losses is applied.

The other financial assets are classified and measured on the basis of the business model within which the financial assets are held and on the basis of contractual cash flows at the time of acquisition. There are differences between the treatment of equity and debt instruments. Investments in equity instruments which are held as long-term strategic participations, and which are not expected to be sold within the short- to medium-term future are measured in equity without effect on net income. Debt instruments with cash flows not consisting solely of interest payments and principal repayments, investments for which another measurement would result in an accounting mismatch and shares in partnerships are measured at fair value through profit or loss. An impairment test is carried out for debt instruments measured at amortized cost or at fair value through other comprehensive income.

Cash at bank or in hand is shown at its nominal value. Cash held in foreign currencies is converted using the exchange rate as of the statement of financial position date. The expected credit loss model is applied. Derivative financial instruments that do not meet the requirements for hedge accounting are measured at fair value through profit or loss.

Non-current assets and groups of assets held for sale are shown separately in the statement of financial position if they are available for immediate sale in their present condition and the sale of such assets is highly probable within the next 12 months. Such assets are shown at the lower of fair value less costs to sell and book value. Systematic depreciation is not recognized on such assets from the date of reclassification. Liabilities included in a disposal group are shown separately under liabilities.

The requirement for the reversal of the impairment of assets has been complied with both for non-current and for current assets. Unless individual standards call for a different measurement, the amortized acquisition or production costs represent the upper limit of measurement in such cases.

Provisions for pensions and similar obligations are determined by the projected unit credit method using actuarial principles. Service cost and the net interest on the net defined benefit liability are recognized under personnel expenses with an impact on net income. Gains and losses from remeasurements of the net defined benefit liability are disclosed under other comprehensive income. Assets held to provide benefits for employees are measured at fair value.

Deferred taxes are calculated on temporary differences between the book values of assets and liabilities in the consolidated statement of financial position and their tax bases, taking into account the applicable national income tax rates valid on the date of realization and already in force on the statement of financial position date. In addition, deferred tax assets are recognized for tax losses carried forward if sufficient taxable income will be available in the future. Deferred tax assets and liabilities are only set off against each other in cases where the income taxes concerned are levied by the same tax authority and concern the same period. In the case of deferred tax assets which are not impaired following the offsetting, it is assumed that future taxable income will be sufficient to allow the realization of the deferred tax assets formed.

Other provisions allow for all recognizable risks and uncertain obligations towards third parties which will probably result in an outflow of resources which can be reliably estimated. Such provisions are recognized at their most probable settlement value and

discounted if the amount of such discount is significant. Reimbursement rights in this connection are shown separately under other assets. In its contracts with customers, Freudenberg provides for warranty services for general repair obligations but does not provide for any extended warranties. In accordance with IFRS 15, the existing warranties are mainly classified as assurance-type warranties and are recognized in accordance with IAS 37 – *Provisions, Contingent Liabilities and Contingent Assets*.

Liabilities are disclosed and measured in accordance with IFRS 9 except where another more specific standard is applicable. Financial liabilities are normally measured at fair value less transaction costs. Subsequent measurements of financial liabilities are normally effected in accordance with IFRS 9 at amortized cost using the effective interest method.

Contract liabilities relate to considerations received from customers in advance of performance under a contract. Contract liabilities are recognized as sales as soon as the promised goods or services have been transferred to the customer.

Lease liabilities include fixed payments defined in the lease (less any lease incentives to be provided by the lessor), variable lease payments that depend on an index or a rate and amounts expected to be payable by the lessee under residual value guarantees. In addition, payments on the basis of purchase or extension options must be taken into consideration if the lessee is reasonably certain to exercise that option. In the case of termination options, penalties for terminating the lease are only to be included if the lease term reflects the lessee exercising an option to terminate the lease. Lease payments must be discounted using the interest rate implicit in the lease if that rate can be readily determined. If that rate cannot be readily determined, the lessee's incremental borrowing rate must be used. This is normally the case with Freudenberg. The specific incremental borrowing rate for a lease is determined on the basis of an interest matrix. This matrix is based on interbank rates and takes into consideration the term and currency of the lease as well as a risk premium.

Put options granted to the holders of non-controlling interests for the sale of their shares are recognized as forward purchases. The item recorded in equity for these shares is de-recognized and a liability measured

at fair value, which corresponds to the net present value of the price at the time of exercise, is recognized. As at each statement of financial position date, the liability is remeasured. The remeasurement depends on exchange rate changes, adjustments to corporate planning assumptions and the discount rate. Any resulting changes in book value are recognized with an effect on net income.

Sales are measured at the fair value of the consideration received or to be received. Sales are recognized when control of the promised good or service is transferred to the customer. Control of an asset refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset.

The delivery of goods normally represents a performance obligation that is satisfied at a specific point in time. In determining the timing of satisfaction, the transfer of control of the asset is taken as the main criterion. Normally, this is the time when the goods are physically delivered to the customer.

Sales from the delivery of customer-specific products are recognized over time, provided Freudenberg has an enforceable right to payment from the customer in an amount that at least compensates Freudenberg for the performance completed to date plus a reasonable profit margin. The amount of revenue is based on the progress towards complete satisfaction of a performance obligation and measured on the basis of the units produced.

Sales from the performance of services are recognized in the accounting period in which the services are performed. Revenue is recognized in the amount which Freudenberg has a right to invoice, as this amount of consideration corresponds directly to the value to the customer of Freudenberg's performance completed to date. Customers are normally invoiced monthly.

Sales in connection with customer-specific development projects are realized over time. In the case of fixed-price contracts, the amount of sales is measured based on the cost incurred to date related to the total expected cost to be incurred in connection with the full satisfaction of the performance obligation. In the case of customer-specific

development projects for which Freudenberg has a right to consideration from a customer in an amount that corresponds directly to the value to the customer of Freudenberg's performance completed to date, sales are recognized as a practical expedient in the amount of the consideration which Freudenberg has a right to invoice.

Invoices are normally issued following the physical delivery of goods to the customer or the performance of the service promised in the contract. Payments by customers under fixed-price contracts are based on a contractually agreed payment plan. There are normally no contracts with customers under which the time between the transfer of a promised good or service and payment in connection with such transfer exceeds one year.

In the event that the service performed by Freudenberg exceeds the payments received or to be received by Freudenberg, a contract asset is recognized. As soon as the right to receive the consideration from the customer becomes unconditional, the contract asset is reclassified to trade receivables. If the payments received from the customer exceed the service performed by Freudenberg, a corresponding contract liability is recognized.

The performance obligations entered into by Freudenberg under contracts with customers normally have an expected original duration of one year or less. In the case of longer terms, Freudenberg is normally entitled to consideration corresponding directly to the performance of services completed to date. Accordingly, the performance obligations contracted but not yet (fully) fulfilled on the reporting date are not disclosed.

The consolidated statement of cash flows is broken down into cash flows from operating, investing and financing activities. Effects arising from changes in the consolidated group and the effects of exchange rate differences have been eliminated from the consolidated statement of cash flows. The influence of these effects on cash and cash equivalents is indicated separately. In the consolidated statement of cash flows, interest paid and interest received are allocated to cash flow from operating activities.

## **The exercise of judgment and estimates in the application of accounting and measurement methods**

In some cases, it is necessary to apply accounting methods based on estimates or the exercise of discretion in connection with the establishment of the consolidated financial statements. Normally, these methods include complex, subjective assessments and the use of uncertain assumptions which may be subject to change. It is therefore conceivable that actual amounts in the future and future events may deviate from the forecasts made as estimates for the same reporting period could have been made differently for equally understandable reasons. Such accounting methods based on estimates and the exercise of discretion may therefore have a material impact on the net assets, financial position and results of operations in the consolidated financial statements and may also change over the course of time. The estimates used for the establishment of the consolidated financial statements and the underlying assumptions are regularly reviewed and any changes are taken into consideration as soon as better information is available.

The composition of a cash-generating unit and the determination of the recoverable amount for the performance of impairment tests is connected with assessments made by management concerning future developments and experience gained in the past. The cash flows predicted on the basis of these assessments may be affected by factors including volatility of capital markets, exchange rate fluctuations and expected economic development. The WACCs used for discounting take into account the market risk and the capital structure of companies comparable to the applicable group of cash-generating units. Changes in these factors may have significant impact on the existence or amount of a value impairment. Further details are given in note (1).

The actuarial assessments for the determination of provisions for pensions and similar obligations are based on major assumptions and estimates with respect to the discount rates used and expected future adjustments to salaries and pensions as well as life expectancy. All the parameters used are regularly reviewed as of the statement of financial position date. Any changes in the parameters used may lead to changes in statement of financial position values. Further details are given in note (11).

The determination of the settlement amount of provisions for restructuring, environmental risks, guarantees and litigation is normally connected with estimates and uncertainty. For the measurement of such values, the assessments of local independent experts are used in some cases. In the future, deviations between actual events and the assumptions made may necessitate adjustments to the Group's provisions. More detailed information on provisions is given in note (12).

The measurement of leases is based in part on estimates and assessments concerning the term of the lease. Extension and termination options must be taken into consideration in the determination of the term if it is reasonably certain that the lessee will exercise an extension option or not exercise a termination option. In assessing whether the lessee is reasonably certain to exercise an option to extend the lease or not to exercise an option to terminate the lease, all relevant facts and circumstances that create an economic incentive for the lessee to exercise or not exercise the option concerned must be taken into consideration. Such aspects may include penalties, fixtures installed on the leased asset by the lessee and the opportunity cost of exercising or not exercising the option concerned. Information on leased assets is given in note (2).

The measurement of certain derivative financial instruments without an active market such as put or call options and earn-out clauses is based on probability predictions and the best possible estimates of the expected settlement amount, taking into consideration recognized mathematical finance methods. The same applies to the determination of expected credit losses recognized as loss allowances in connection with financial instruments measured at amortized cost. Further information on financial instruments is given in note (13).

When determining whether sufficient taxable income will be available in the future for assessing the value of deferred tax assets and the usability of losses carried forward, various estimates, including the development of tax planning strategies, must be made. Deviations between the actual results and the estimates made may have an effect on the assets, liabilities and earnings situation. Further details are given in note (26).

The determination of the amount and timing of revenue from contracts with customers is affected by a number of estimations. Sales are recognized in the amount of the consideration to which Freudenberg expects to be entitled. Especially in the case of the delivery of goods the amount of consideration may vary as a result of variable consideration. The amount of variable consideration is based on estimates and is determined upon the inception of the contract and reassessed at the end of each reporting period. The variable consideration is estimated either by using the expected value method or by using the most likely amount method. This depends on which method Freudenberg expects to better predict the amount of consideration to which it will be entitled. Sales are only recognized to the extent that it is highly probable that a significant reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Amounts which have been received (or are to be received) and which will probably have to be refunded are recognized as refund liabilities and disclosed under other liabilities.

For the recognition of sales from customer-specific development projects, estimates need to be made concerning the degree of completion or the total cost of the contract. A change in these estimates may lead to an increase or reduction in sales in the reporting period.

Fair value is determined on the basis of input factors in 3 defined categories. Determination is based on estimates and assumptions associated with uncertainty. The following fair value measurement hierarchy is applied:

Level 1: Use of quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2: Determination of fair value using measurement procedures based on observed input factors for similar assets or liabilities in active markets or for identical assets or liabilities in markets that are not active.

Level 3: Measurement of assets and liabilities using measurement methods based on unobservable inputs as adequate observable market data are not available for the measurement of fair value.

## Currency translations

The financial statements of almost all companies included in the consolidated financial statements which are not located in the eurozone are drawn up in the national currencies concerned. This is normally the currency of the primary economic environment in which the companies concerned operate (concept of functional currency).

In the accounts of individual companies, foreign-currency receivables and liabilities are translated at the exchange rates as of the date of the statement of financial position.

Goodwill created as a result of acquisitions on or after March 31, 2004, is carried as an asset of the economically independent foreign companies concerned in their respective functional currencies.

In the consolidated financial statements, the financial statements of all companies not located in the eurozone are translated in accordance with the following principles:

- Statement of financial position items are translated at the exchange rate as of the date of the statement of financial position.
- Statement of profit or loss items are translated at average annual exchange rates.
- Differences arising from the use of different exchange rates are recognized in equity without an effect on net income.
- The same principles are used in the case of investments in joint ventures and associated companies consolidated by the equity method.

The annual financial statements of companies located in hyperinflationary countries are translated in accordance with IAS 29. Gains or losses as a result of the adjustment of the carrying amounts of non-monetary items to reflect inflation are recognized in other income or other expenses. From the point of view of the Group, current inflation adjustments on the basis of historic acquisition and production costs had no material impact on the net assets, financial position or results of operations of the Group as at December 31, 2021.

The exchange rates of currencies used for currency conversion which are material to the annual financial statements developed as follows:

Country	Currency	Closing rate		Average rate		
		1 euro =	Dec. 31,2020	Dec. 31,2021	2020	2021
Brazil	BRL		6.3735	6.3101	5.9988	6.3786
China	CNY		8.0225	7.1947	7.8975	7.6069
United Kingdom	GBP		0.8990	0.8403	0.8894	0.8584
India	INR		89.6605	84.2292	84.9444	87.3135
Japan	JPY		126.4900	130.3800	121.8840	130.3200
Mexico	MXN		24.4160	23.1438	24.7300	24.0516
Turkey	TRY		9.1131	15.2335	8.1579	10.8104
USA	USD		1.2271	1.1326	1.1470	1.1816

Differences arising from the use of different exchange rates compared with the previous year are shown in the statement of changes in intangible

and tangible assets with respect to non-current assets and in the consolidated statement of comprehensive income with respect to equity.

## NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

### (1) Intangible assets

Changes in intangible assets from January 1 to December 31, 2020:

[€ million]	Internally generated software	Concessions, licenses and others <sup>1</sup>	Goodwill	Payments made on account	Intangible assets in course of construction	Total
<b>ACQUISITION/PRODUCTION COST</b>						
<b>Status Jan. 1, 2020</b>	<b>4.6</b>	<b>1,953.5</b>	<b>1,843.6</b>	<b>2.2</b>	<b>4.2</b>	<b>3,808.1</b>
Changes in consolidated group	0.0	56.0	81.9	0.1	0.0	138.0
Exchange rate differences	-0.4	-42.5	-38.7	0.0	-0.1	-81.7
Additions	0.0	7.8	0.0	0.8	2.1	10.7
Disposals	-0.1	-11.5	0.0	0.0	0.0	-11.6
Reclassifications <sup>2</sup>	0.0	5.0	0.0	-1.3	-2.7	1.0
<b>Status Dec. 31, 2020</b>	<b>4.1</b>	<b>1,968.3</b>	<b>1,886.8</b>	<b>1.8</b>	<b>3.5</b>	<b>3,864.5</b>
<b>AMORTIZATION</b>						
<b>Status Jan. 1, 2020</b>	<b>3.6</b>	<b>891.4</b>	<b>225.8</b>	<b>0.0</b>	<b>0.0</b>	<b>1,120.8</b>
Changes in consolidated group	0.0	6.0	0.0	0.0	0.0	6.0
Exchange rate differences	-0.3	-29.2	-13.0	0.0	0.0	-42.5
Additions - systematic	0.2	110.4	0.0	0.0	0.0	110.6
Impairment losses	0.0	14.8	0.0	0.0	0.0	14.8
Disposals	-0.1	-10.9	0.0	0.0	0.0	-11.0
<b>Status Dec. 31, 2020</b>	<b>3.4</b>	<b>982.5</b>	<b>212.8</b>	<b>0.0</b>	<b>0.0</b>	<b>1,198.7</b>
<b>Book value Dec. 31, 2020</b>	<b>0.7</b>	<b>985.8</b>	<b>1,674.0</b>	<b>1.8</b>	<b>3.5</b>	<b>2,665.8</b>

<sup>1</sup>Intangible assets identified in connection with purchase price allocations mainly concern customer lists/relations, technologies and know-how.

<sup>2</sup>The reclassifications also include transfers to other items in the statement of financial position.

Changes in intangible assets from January 1 to December 31, 2021:

[€ million]	Internally generated software	Concessions, licenses and others <sup>1</sup>	Goodwill	Payments made on account	Intangible assets in course of construction	Total
<b>ACQUISITION/PRODUCTION COST</b>						
<b>Status Jan. 1, 2021</b>	<b>4.1</b>	<b>1,968.3</b>	<b>1,886.8</b>	<b>1.8</b>	<b>3.5</b>	<b>3,864.5</b>
Changes in consolidated group	0.0	58.4	180.9	0.0	0.0	239.3
Exchange rate differences	0.4	34.9	47.7	0.0	-0.1	82.9
Additions	0.1	6.3	0.0	1.1	3.5	11.0
Disposals	0.0	-7.6	-1.2	0.0	0.0	-8.8
Reclassifications <sup>2</sup>	-0.1	2.6	0.0	-0.3	-1.2	1.0
<b>Status Dec. 31, 2021</b>	<b>4.5</b>	<b>2,062.9</b>	<b>2,114.2</b>	<b>2.6</b>	<b>5.7</b>	<b>4,189.9</b>
<b>AMORTIZATION</b>						
<b>Status Jan. 1, 2021</b>	<b>3.4</b>	<b>982.5</b>	<b>212.8</b>	<b>0.0</b>	<b>0.0</b>	<b>1,198.7</b>
Changes in consolidated group	0.0	-1.0	0.0	0.0	0.0	-1.0
Exchange rate differences	0.3	23.8	8.6	0.0	0.0	32.7
Additions – systematic	0.1	108.8	0.0	0.0	0.0	108.9
Impairment losses	0.0	12.8	0.0	0.0	0.0	12.8
Disposals	0.0	-7.4	-1.1	0.0	0.0	-8.5
<b>Status Dec. 31, 2021</b>	<b>3.8</b>	<b>1,119.5</b>	<b>220.3</b>	<b>0.0</b>	<b>0.0</b>	<b>1,343.6</b>
<b>Book value Dec. 31, 2021</b>	<b>0.7</b>	<b>943.4</b>	<b>1,893.9</b>	<b>2.6</b>	<b>5.7</b>	<b>2,846.3</b>

<sup>1</sup> Intangible assets identified in connection with purchase price allocations mainly concern customer lists/relations, technologies and know-how.

<sup>2</sup> The reclassifications also include transfers to other items in the statement of financial position.

The impairment losses with respect to concessions, licenses and others recognized in the year under review chiefly concern technologies. They are the result of a revised assessment of the future usefulness of these assets.

Goodwill was subjected to an impairment test in the 2021 financial year. Apart from the expected developments in sales and profit as well as net investments of the Business Groups concerned, the basic assumptions used for determining the value in use of the groups of cash-generating units included a growth rate ranging from 0.5 to 2.0 percent (previous year: 0.75 to 2.0 percent) and pre-tax WACCs ranging from 6.3 percent to 10.0 percent (previous year: ranging from 4.4 percent to 8.9 percent). On this basis,

it was not necessary to recognize any impairment of goodwill.

The three significant goodwill items are assigned to the groups of cash-generating units Vibracoustic, Freudenberg Filtration Technologies and Freudenberg Sealing Technologies. The WACCs used for the impairment test were 7.3 percent (previous year: 8.9 percent) for Vibracoustic, 8.1 percent for Freudenberg Filtration Technologies and 10.0 percent (previous year: 7.2 percent) for Freudenberg Sealing Technologies.

The assumed sustainable growth rate for all three groups of cash-generating units was 2.0 percent (previous year: 2.0 percent). The book values of these goodwill items are shown in the following table:

[€ million]	Goodwill	
	Dec. 31,2020	Dec. 31,2021
Vibracoustic	835.9	835.9
Freudenberg Filtration Technologies	110.6	256.0
Freudenberg Sealing Technologies	210.8	218.7

The sales of Vibracoustic recovered in the 2021 financial year. Compared with 2021, an increase in global light vehicle production is expected in 2022, but this will still be below the figure for the pre-Covid year of 2019. The operational planning for Vibracoustic assumes growth in sales in 2022.

Freudenberg Filtration Technologies benefited from changed awareness of air quality and hygiene in 2021. For 2022, the Business Group also expects higher demand for high-quality filtration solutions. The commissioning of the new filter plant, the Consumer division's largest in the world, in Shunde, China, will also contribute to growth in sales. Furthermore, the two new US acquisitions R.P.S. Products and PPA Holdings will be grouped together in the new division "Residential & Commercial" resulting in the optimum use of synergy effects and competences in the production and sale of filter products.

After Freudenberg Sealing Technologies had completed the 2021 financial year almost at the pre-crisis level, the Business Group expects further moderate growth and higher demand in the sealing product sector. Growth is expected to be moderate because delivery problems and material bottlenecks affecting customers and suppliers will also impact on everyday business in 2022. The imponderables resulting from the Covid-19 pandemic will also have an effect. In overall terms, volume growth of about +3.5 percent is expected, assuming that there will be no further severe restrictions or lockdowns as a result of the pandemic. In 2022, significant financial resources will be provided for development and investments in the innovative battery and fuel cell business.

In the case of a variation in the WACC of up to +1.0 percentage points or a variation in the sustainable growth rate of up to -1.0 percentage points, it would have been necessary to recognize further impairments of all remaining goodwill for the group of cash-generating units of Japan Vilene Company in the amount of €20.6 million. There would have been no need for impairment with respect to other goodwill items.

## (2) Tangible assets

Changes in tangible assets from January 1 to December 31, 2020:

[€ million]	Land and buildings	Machinery and equipment	Other fixtures, fittings and office equipment	Payments made on account	Construction in progress	Total
<b>ACQUISITION/PRODUCTION COST</b>						
<b>Status Jan. 1, 2020</b>	<b>2,034.5</b>	<b>3,733.7</b>	<b>912.6</b>	<b>30.8</b>	<b>189.5</b>	<b>6,901.1</b>
Changes in consolidated group	85.0	232.4	33.6	2.8	10.6	364.4
Exchange rate differences	-76.0	-143.9	-26.1	-1.2	-6.3	-253.5
Additions	86.2	73.9	65.1	31.9	129.7	386.8
Disposals	-45.5	-81.9	-39.3	-0.3	-2.1	-169.1
Reclassifications <sup>1</sup>	39.0	139.3	17.4	-29.2	-168.3	-1.8
<b>Status Dec. 31, 2020</b>	<b>2,123.2</b>	<b>3,953.5</b>	<b>963.3</b>	<b>34.8</b>	<b>153.1</b>	<b>7,227.9</b>
<b>DEPRECIATION</b>						
<b>Status Jan. 1, 2020</b>	<b>821.7</b>	<b>2,677.2</b>	<b>658.6</b>	<b>0.0</b>	<b>0.3</b>	<b>4,157.8</b>
Changes in consolidated group	32.1	167.8	30.8	0.0	2.3	233.0
Exchange rate differences	-25.7	-96.6	-17.6	0.0	0.0	-139.9
Addition – systematic	111.9	185.4	84.9	0.0	0.0	382.2
Addition - impairment	0.7	2.6	0.3	0.1	0.2	3.9
Disposals	-23.3	-70.8	-33.8	0.0	-0.3	-128.2
Reclassifications <sup>1</sup>	0.0	0.0	-0.3	0.0	0.0	-0.3
<b>Status Dec. 31, 2020</b>	<b>917.4</b>	<b>2,865.6</b>	<b>722.9</b>	<b>0.1</b>	<b>2.5</b>	<b>4,508.5</b>
<b>Book value Dec. 31, 2020</b>	<b>1,205.8</b>	<b>1,087.9</b>	<b>240.4</b>	<b>34.7</b>	<b>150.6</b>	<b>2,719.4</b>

<sup>1</sup> The transfers also include reclassifications to other items of the statement of financial position.

Changes in tangible assets from January 1 to December 31, 2021:

[€ million]	Land and buildings	Machinery and equipment	Other fixtures, fittings and office equipment	Payments made on account	Construction in progress	Total
<b>ACQUISITION/PRODUCTION COST</b>						
<b>Status Jan. 1, 2021</b>	<b>2,123.2</b>	<b>3,953.5</b>	<b>963.3</b>	<b>34.8</b>	<b>153.1</b>	<b>7,227.9</b>
Changes in consolidated group	22.3	10.3	2.3	0.0	0.7	35.6
Exchange rate differences	64.0	107.8	13.9	1.1	6.2	193.0
Additions	60.1	62.5	66.2	34.3	151.3	374.4
Disposals	-53.8	-90.3	-66.3	-3.7	-4.7	-218.8
Reclassifications <sup>1</sup>	56.4	103.8	19.7	-29.8	-153.1	-3.0
<b>Status Dec. 31, 2021</b>	<b>2,272.2</b>	<b>4,147.6</b>	<b>999.1</b>	<b>36.7</b>	<b>153.5</b>	<b>7,609.1</b>
<b>DEPRECIATION</b>						
<b>Status Jan. 1, 2021</b>	<b>917.4</b>	<b>2,865.6</b>	<b>722.9</b>	<b>0.1</b>	<b>2.5</b>	<b>4,508.5</b>
Changes in consolidated group	1.1	5.0	1.0	0.0	0.0	7.1
Exchange rate differences	23.7	69.3	10.5	0.0	0.2	103.7
Addition – systematic	113.7	181.4	83.8	0.0	0.0	378.9
Addition - impairment	2.9	3.2	0.5	0.0	3.6	10.2
Write-ups	-0.7	-0.9	-0.1	-0.1	0.0	-1.8
Disposals	-26.9	-76.8	-60.9	0.0	-0.1	-164.7
Reclassifications <sup>1</sup>	-2.0	-0.1	-0.2	0.0	0.0	-2.3
<b>Status Dec. 31, 2021</b>	<b>1,029.2</b>	<b>3,046.7</b>	<b>757.5</b>	<b>0.0</b>	<b>6.2</b>	<b>4,839.6</b>
<b>Book value Dec. 31, 2021</b>	<b>1,243.0</b>	<b>1,100.9</b>	<b>241.6</b>	<b>36.7</b>	<b>147.3</b>	<b>2,769.5</b>

<sup>1</sup> The transfers also include reclassifications to other items of the statement of financial position.

In the year under review, Freudenberg received government grants in the amount of €3.3 million (previous year: €8.4 million). These mainly concerned investment promotion.

**Additional disclosures on leased assets – right-of-use assets**

As a result of the application of IFRS 16, Freudenberg recognizes right-of-use assets in respect of leased assets. The following amounts are recognized in the statement of changes in tangible assets under the category “Land and buildings” (land and buildings) or “Other fixtures, fittings and office equipment” (passenger cars, forklift trucks and IT infrastructure):

[€ million]	Land and buildings	Passenger cars	Forklift trucks	IT infrastructure	Total
Acquisition/Production cost	389.4	68.9	26.0	8.9	493.2
Of which: additions	76.3	22.9	8.7	3.0	110.9
Depreciation	105.2	32.2	10.2	3.8	151.4
<b>Book Value Dec. 31, 2020</b>	<b>284.2</b>	<b>36.7</b>	<b>15.8</b>	<b>5.1</b>	<b>341.8</b>

[€ million]	Land and buildings	Passenger cars	Forklift trucks	IT infrastructure	Total
Acquisition/Production cost	438.1	74.5	30.1	9.2	551.9
Of which: additions	51.2	20.8	7.1	1.4	80.5
Depreciation	159.2	40.6	14.0	4.8	218.6
<b>Book Value Dec. 31, 2021</b>	<b>278.9</b>	<b>33.9</b>	<b>16.1</b>	<b>4.4</b>	<b>333.3</b>

In the 2021 financial year, the interest expense for leased assets amounted to €6.9 million (previous year: €7.7 million). In addition, expenses for leased assets of low value and short-term leases were recognized in the statement of profit or loss in the amount of €19.2 million (previous year: €17.4 million). The total cash outflow for leasing in 2021 was €118.6 million (previous year: €116.0 million).

### (3) Investment properties

Details of land and buildings held by Freudenberg as investment properties are shown in the table below:

[€ million]	2020	2021
Rent income	5.3	5.3

There were no significant direct operating expenses in the year under review or in the previous year.

There are no restrictions on the saleability of investment properties. There are no contractual obligations to purchase, build or develop investment properties. Furthermore, Freudenberg is not under any contractual obligations to repair or maintain such investment properties going beyond its statutory obligations.

Changes in investment properties from January 1 to December 31:

[€ million]	2020	2021
<b>ACQUISITION/PRODUCTION COST</b>		
<b>Status Jan. 1</b>	<b>56.3</b>	<b>56.6</b>
Exchange rate differences	-0.1	0.1
Additions	0.4	0.1
Disposals	0.0	-1.6
<b>Status Dec. 31</b>	<b>56.6</b>	<b>55.2</b>
<b>DEPRECIATION</b>		
<b>Status Jan. 1</b>	<b>38.2</b>	<b>39.9</b>
Additions - systematic	1.7	1.7
Disposals	0.0	-0.3
<b>Status Dec. 31</b>	<b>39.9</b>	<b>41.3</b>
<b>Book value Dec. 31</b>	<b>16.7</b>	<b>13.9</b>

The fair value of investment properties was €43.4 million (previous year: €48.0 million) and was calculated on the basis of discounted cash flows (level 3 inputs).

#### (4) Investments in joint ventures

The joint venture agreement with NOK Corporation, Tokyo, Japan, is of major importance for Freudenberg.

NOK-Freudenberg Singapore Pte. Ltd., Singapore, is a 50:50 joint venture between the Japanese NOK Corporation and Freudenberg SE with the objective of

serving the high-growth Chinese and Indian markets with locally-produced and imported sealing products.

The summarized financial information of this joint venture company is set out below:

[€ million]	NOK-Freudenberg Singapore Pte. Ltd.	
	Dec. 31,2020	Dec. 31,2021
Current assets	272.0	326.5
Of which: cash and cash equivalents	84.3	111.3
Non-current assets	246.4	279.5
Current liabilities	138.6	146.3
Of which: current financial liabilities	22.1	14.3
Non-current liabilities	21.5	14.8
<b>Equity without non-controlling interests</b>	<b>358.3</b>	<b>444.9</b>
Freudenberg share	50.0 %	50.0 %
Pro-rata share in equity	179.2	222.4
<b>At-equity measurement</b>	<b>179.2</b>	<b>222.4</b>

	2020	2021
<b>Sales</b>	<b>449.3</b>	<b>522.3</b>
Profit or loss from continuing operations	39.3	50.8
Other comprehensive income	-10.3	29.1
<b>Total comprehensive income</b>	<b>29.0</b>	<b>79.9</b>
Of which: depreciation and amortization	-26.0	-26.7
Of which: interest income	1.2	0.8
Of which: interest expenses	-2.8	-1.4
Of which: income tax expense or income	-15.1	-19.7

As in the previous year, Freudenberg did not receive any dividend from NOK-Freudenberg Singapore Pte. Ltd.

The total carrying amount of interests in all individual joint ventures which are not material was €11.3 million (previous year: €13.6 million).

The pro-rata share of the profit or loss from continuing operations of all individual joint ventures classed as not material was €0.6 million (previous year: €0.4 million) and the pro-rata share in other comprehensive income was €0.3 million (previous year: €-0.6 million).

## (5) Investments in associated companies

For Freudenberg, its most important investment in associated companies is its participation in the Japanese company NOK Corporation with its registered office in Tokyo, Japan. NOK Corporation applies Japanese GAAP. Adjustment to the financial reporting requirements of Freudenberg was effected on the basis of the information published by NOK Corporation.

The NOK Group manufactures and supplies sealing products, flexible printed circuits, roll products for office equipment and further products such as specialty lubricants.

This major associated company gave the following figures in its consolidated interim financial statements as at December 31:

[€ million]	NOK Corporation	
	Dec. 31, 2020	Dec. 31, 2021
Current assets	3,007.1	2,965.9
Non-current assets	3,389.5	3,403.4
Current liabilities	1,713.6	1,511.1
Non-current liabilities	957.8	802.6
Treasury shares	-1.8	-1.8
Non-controlling interests	337.1	377.5
<b>Equity without treasury shares and non-controlling interests</b>	<b>3,389.9</b>	<b>3,679.9</b>
Freudenberg share	25.1%	25.1 %
Pro-rata share in equity	850.9	923.7
Goodwill	7.1	7.1
<b>At-equity measurement</b>	<b>858.0</b>	<b>930.8</b>

	2020	2021
<b>Sales</b>	<b>4,764.2</b>	<b>5,118.3</b>
Profit or loss from continuing operations	-53.4	179.4
Other comprehensive income	-18.1	316.0
<b>Total comprehensive income</b>	<b>-71.5</b>	<b>495.4</b>

The rise in the other comprehensive income of NOK Corporation is chiefly due to the positive developments in the exchange rate and securities as well as actuarial gains.

Freudenberg received dividends in the amount of €12.6 million (previous year: €8.8 million) from NOK Corporation.

As at December 31, 2021, the market value of the shareholding in NOK Corporation was €417.3 million (¥54,408.8 million) (previous year: €381.0 million; ¥48,194.4 million).

The total carrying amount of interests in all associated companies classed as not material was €32.1 million (previous year: €31.1 million).

The pro-rata share in the profit or loss from continuing operations of all individual associated companies classed as not material was €4.6 million (previous year: €5.8 million) and the pro-rata share in the other comprehensive income of these companies was €1.1 million (previous year: €-1.4 million). The pro-rata share in the total comprehensive income was therefore €5.7 million (previous year €4.4 million).

## (6) Inventories

Inventories break down as follows:

[€ million]	Dec. 31,2020	Dec. 31,2021
Raw materials and consumables	375.3	507.9
Work in progress	168.2	193.1
Finished goods and merchandise	571.8	736.8
Customer-specific tools in construction	61.6	80.2
Payments made on account	2.9	5.4
	<b>1,179.8</b>	<b>1,523.4</b>

Inventories rose by €343.6 million compared with the previous year. After eliminating the effects of changes in the consolidated group and exchange rate effects, inventories increased by about 25 percent.

Write-downs of inventories totaling €34.6 million (previous year: €49.3 million) were recognized as expenses in the reporting year.

Write-ups totaling €25.7 million (previous year: €15.7 million) were recognized as the reason for the impairment losses concerned no longer existed in accordance with the requirement to reverse write-downs.

The inventories shown are not subject to any significant restrictions on title or disposal.

## (7) Receivables

[€ million]	Dec. 31,2020	Dec. 31,2021
<b>Trade receivables</b>	<b>1,402.9</b>	<b>1,527.3</b>
Of which: residual term up to 1 year	1,402.9	1,527.3
Of which: residual term more than 1 year	0.0	0.0
<b>Other assets</b>	<b>270.7</b>	<b>314.2</b>
Of which: residual term up to 1 year	195.3	208.8
Of which: residual term more than 1 year	75.4	105.4

After adjustment for effects resulting from changes in the consolidated group and exchange rate effects, trade receivables rose by about 4 percent.

Contract assets have not been disclosed as a separate item but under other assets in the statement of financial position, because the amount concerned was not material. As at December 31, 2021, contract assets amounted to €9.0 million (previous year: €8.1 million). Changes in contract assets are mainly the result of the satisfaction of performance obligations laid down in contracts with customers. Contract assets are normally a result of contracts meeting the requirements for the realization of sales over time.

The other assets include pension plan assets in excess of the corresponding pension obligations amounting to €25.6 million (previous year €7.4 million).

The other assets also include other tax receivables in the amount of €86.4 million (previous year: €73.6 million) and liability insurance claims totaling €4.6 million (previous year €5.0 million).

The claims for reimbursement in connection with recognized provisions, which are included in other assets, are shown in the other provisions under note (12).

**(8) Securities and cash at bank and in hand**

<b>[€ million]</b>	<b>Dec. 31,2020</b>	<b>Dec. 31,2021</b>
Securities	97.0	180.6
Checks and cash in hand	9.9	1.5
Cash at banks	1,914.5	2,004.7
	<b>2,021.4</b>	<b>2,186.8</b>

Higher liquidity is documented by an increase in cash at bank and securities (especially commercial paper).

**(9) Assets and groups of assets held for sale**

As at December 31, 2021 (as in the previous year), no assets or liabilities were classified as held for sale.

## (10) Equity

The subscribed capital in the amount of €450.0 million (previous year: €450.0 million) consists of 450 million no-par-value registered shares. The sole shareholder of Freudenberg SE is Freudenberg & Co. Kommanditgesellschaft, Weinheim (hereafter: Freudenberg & Co. KG).

The reserves break down as follows:

[€ million]	Dec. 31,2020	Dec. 31,2021
Capital reserves	50.2	50.2
Retained earnings	4,839.4	5,618.3
	<b>4,889.6</b>	<b>5,668.5</b>

The capital reserves consist of contributions in kind made by the shareholder.

The retained earnings include net income earned by the Group in the past and not distributed as well as reserves of companies included in the consolidated financial statements including expenses and income recorded without effect on net income.

The profit distributed in the reporting year amounted to €101.5 million (previous year: €92.5 million). This corresponded to a profit per share of €0.23 (previous year: €0.21).

The Board of Management proposes that the 2021 net retained profit in the amount of €3,090.7 million (previous year: €2,793.4 million) should be carried forward to new account.

In the reporting year, income (+) and expenses (-) which had previously been recorded without an effect on net income with respect to the following components of other comprehensive income were reclassified to the statement of profit or loss:

[€ million]	Dec. 31,2020	Dec. 31,2021
Exchange rate differences	-3.5	-0.5
	<b>-3.5</b>	<b>-0.5</b>

In the 2021 financial year, tax effects (income (+) / expenses (-)) recorded without effect on net income are attributable to the various items of other comprehensive income as follows:

[€ million]	Dec. 31,2020	Dec. 31,2021
Remeasurement of defined benefit plans	10.0	-24.5
Securities and other items	7.6	-6.8
	<b>17.6</b>	<b>-31.3</b>

## Non-controlling interests

The change in non-controlling interests in the equity of consolidated affiliated companies from €356.5 million to €372.0 million is mainly the result of the allocation of profit for the year. Exchange rate differences also led to an increase. Non-controlling interests were reduced by dividends paid.

In the case of the following affiliated company, the consolidated financial statements include significant non-controlling interests in the amount of 25 percent of the shares:

[€ million]		
Freudenberg-NOK General Partnership, Plymouth, USA	Dec. 31,2020	Dec. 31,2021
Profit (+)/loss (-) attributable to non-controlling interests	8.3	14.0
Total amount of non-controlling interests	107.1	135.5

This affiliated company is included in the consolidated financial statements with the following values:

[€ million]		
Freudenberg-NOK General Partnership	Dec. 31,2020	Dec. 31,2021
Current assets	272.2	381.7
Non-current assets	255.0	293.8
Current liabilities	83.0	115.1
Non-current liabilities	28.8	32.2

	2020	2021
Sales	539.7	629.0
Profit (+)/loss (-)	33.3	56.2
Total comprehensive income	-10.0	95.5

Freudenberg-NOK General Partnership paid dividends in the amount of €3.9 million (previous year: €14.6 million) to the holder of the non-controlling interests.

Other non-controlling interests especially concern the EagleBurgmann Business Group, where they arise especially as a result of the contractual agreements with the partner Eagle Industry Co. Ltd., Tokyo, Japan.

**(11) Provisions for pensions and similar obligations**

The Freudenberg pension scheme consists of both defined contribution and defined benefit pension plans. Defined benefit plans include both fixed salary and final salary plans. The provisions for pensions and similar obligations include obligations arising from current pensions and future pension entitlements.

The pension plans at the Freudenberg Group mainly concern German, Japanese and British companies. The pension obligations of the German companies are commitments financed by provisions. These obligations are subject to the rules of the pension plan concerned and the applicable statutory provisions. The plans include benefit commitments dependent on service periods and on salaries and provide for disability benefits and benefits for surviving dependents as well as for retirement benefits.

The pension plans of British companies are managed by third party pension funds. The representatives of the pension funds are legally obliged to act in the interest of all participants in the plan. In cooperation with investment advisers, they are responsible for the development and regular review of investment strategies for the plan assets. Commitments based on age and years of service include both retirement benefits and certain forms of survivor benefits. Most of these plans are frozen and future entitlements can no longer be earned by plan participants. The pension obligations of these companies are mainly financed by plan assets, funded chiefly by employers' contributions.

The pension plans in Japan consist of benefit commitments based on age and years of service. These pension plans are managed by a third-party pension fund. The pension obligations of the Japanese companies are mainly financed by plan assets, funded solely by employers' contributions.

Apart from pension obligations, this item also includes obligations similar to pensions, such as amounts paid to employees upon the termination of their employment which do not constitute termination benefits. These benefits vary in accordance with the legal, tax and economic conditions in the countries concerned.

All defined benefit schemes of the Freudenberg Group are subject to typical actuarial risks, especially investment and interest risks.

Current service cost and net interest on the net defined benefit liability are disclosed in the statement of profit or loss under personnel expenses in the relevant functional areas.

In the case of the defined contribution plans, there are no additional obligations apart from the payment of contributions. Contributions paid are expensed under personnel expenses and amounted to €76.1 million in 2021 (previous year: €82.5 million).

The defined benefit obligations were calculated on actuarial principles by the projected unit credit method. The calculation was based on the following discount rates as major actuarial assumptions:

	Dec. 31, 2020	Dec. 31, 2021
Germany	0.70 %	1.10 %
Japan	0.50 %	0.55 %
United Kingdom	1.35 %	1.93 %

In the case of the other foreign companies, the discount rates ranged from 0.1 to 2.6 percent (previous year 0.2 to 2.3 percent).

The Heubeck 2018 G actuarial tables were used in the case of the German companies. A uniform trend in salaries and pensions of 1.75 percent was defined for the relevant pension plans. As a result of the pension plan regulations, the assumed trend in salaries and pensions only has an effect on the value of pension obligations in exceptional cases.

Net obligations are shown in the following items of the statement of financial position:

[€ million]	Dec. 31,2020	Dec. 31,2021
Provisions for pensions and similar obligations	879.7	808.8
Other assets	7.4	25.6
	<b>872.3</b>	<b>783.2</b>

Net obligations are calculated as follows:

[€ million]	Dec. 31,2020	Dec. 31,2021
Present value of funded obligations	515.0	514.5
Fair value of plan assets	-485.2	-515.7
<b>Surplus (-)/deficit (+)</b>	<b>29.8</b>	<b>-1.2</b>
Present value of unfunded obligations	842.5	784.4
	<b>872.3</b>	<b>783.2</b>

Defined benefit obligations developed as follows:

[€ million]	Germany	Japan	United Kingdom	Miscellaneous	2020
<b>Present value of defined benefit obligations, Jan. 1, 2020</b>	<b>742.2</b>	<b>137.6</b>	<b>108.2</b>	<b>106.0</b>	<b>1,094.0</b>
Current service cost	18.2	4.1	0.0	4.7	27.0
Interest cost	7.8	0.5	3.7	1.6	13.6
Gains (-) and losses (+) from remeasurement of defined benefit obligations	32.4	-3.4	17.5	2.8	49.3
Gains (-) and losses (+) on settlements	0.0	0.0	0.0	0.0	0.0
Past service cost	0.0	0.0	0.6	0.3	0.9
Contributions by plan participants	0.0	0.0	0.0	0.5	0.5
Liabilities extinguished on settlements	0.0	0.0	0.0	-0.1	-0.1
Benefits paid	-27.6	-4.8	-9.5	-6.5	-48.4
Changes in consolidated group	12.6	0.0	215.7	6.4	234.7
Other changes	-0.2	0.0	0.0	-0.6	-0.8
Exchange rate differences	0.0	-5.0	-5.9	-2.3	-13.2
<b>Present value of defined benefit obligations, Dec. 31, 2020</b>	<b>785.4</b>	<b>129.0</b>	<b>330.3</b>	<b>112.8</b>	<b>1,357.5</b>

[€ million]	Germany	Japan	United Kingdom	Miscellaneous	2021
<b>Present value of defined benefit obligations, Jan. 1, 2021</b>	<b>785.4</b>	<b>129.0</b>	<b>330.3</b>	<b>112.8</b>	<b>1,357.5</b>
Current service cost	16.6	3.8	0.0	5.2	25.6
Interest cost	6.4	0.6	4.3	1.5	12.8
Gains (-) and losses (+) from remeasurement of defined benefit obligations	-59.8	-1.0	-13.5	-3.0	-77.3
Gains (-) and losses (+) on settlements	0.0	0.0	0.0	-0.1	-0.1
Past service cost	0.0	0.0	0.0	0.0	0.0
Contributions by plan participants	0.0	0.0	0.0	0.4	0.4
Liabilities extinguished on settlements	0.0	0.0	0.0	-0.2	-0.2
Benefits paid	-20.3	-4.9	-12.3	-6.0	-43.5
Changes in consolidated group	0.0	0.0	0.0	-2.2	-2.2
Other changes	0.5	0.0	0.0	2.9	3.4
Exchange rate differences	0.0	-3.8	23.1	3.2	22.5
<b>Present value of defined benefit obligations, Dec. 31, 2021</b>	<b>728.8</b>	<b>123.7</b>	<b>331.9</b>	<b>114.5</b>	<b>1,298.9</b>

The plan assets of funded pension plans developed as follows

[€ million]	Japan	United Kingdom	Miscellaneous	2020
<b>Fair value of plan assets, Jan. 1, 2020</b>	<b>116.2</b>	<b>107.1</b>	<b>32.9</b>	<b>256.2</b>
Interest income	0.5	3.8	0.2	4.5
Gains (-) and losses (+) from remeasurement of plan assets	-0.1	13.4	1.3	14.6
Contributions by employer	6.3	5.7	2.2	14.2
Contributions by plan participants	0.0	0.0	0.4	0.4
Liabilities extinguished on settlements	0.0	0.0	0.0	0.0
Benefits paid	-4.6	-9.5	-3.0	-17.1
General plan administration costs	0.0	-0.2	0.0	-0.2
Changes in consolidated group	0.0	218.9	4.0	222.9
Other changes	0.0	0.0	0.0	0.0
Exchange rate differences	-4.2	-5.7	-0.4	-10.3
<b>Fair value of plan assets, Dec. 31, 2020</b>	<b>114.1</b>	<b>333.5</b>	<b>37.6</b>	<b>485.2</b>

[€ million]	Japan	United Kingdom	Miscellaneous	2021
<b>Fair value of plan assets, Jan. 1, 2021</b>	<b>114.1</b>	<b>333.5</b>	<b>37.6</b>	<b>485.2</b>
Interest income	0.5	4.4	0.4	5.3
Gains (-) and losses (+) from remeasurement of plan assets	8.7	-1.3	1.1	8.5
Contributions by employer	6.1	4.3	2.2	12.6
Contributions by plan participants	0.0	0.0	0.4	0.4
Liabilities extinguished on settlements	0.0	0.0	-0.1	-0.1
Benefits paid	-4.7	-12.3	-2.1	-19.1
General plan administration costs	0.0	-0.1	-0.2	-0.3
Changes in consolidated group	0.0	0.0	0.0	0.0
Other changes	0.0	0.0	1.4	1.4
Exchange rate differences	-3.4	23.3	1.9	21.8
<b>Fair value of plan assets, Dec. 31, 2021</b>	<b>121.3</b>	<b>351.8</b>	<b>42.6</b>	<b>515.7</b>

The fair value of plan assets with quoted prices in active markets was as follows:

[€ million]	Dec. 31,2020	Dec. 31,2021
Equity instruments	119.1	86.5
Interest-bearing securities	108.1	293.3
Other assets	95.9	106.5
	<b>323.1</b>	<b>486.3</b>

The fair value of plan assets without quoted prices in active markets was as follows:

[€ million]	Dec. 31,2020	Dec. 31,2021
Equity instruments	1.2	0.0
Interest-bearing securities	1.3	1.8
Other assets	159.6	27.6
	<b>162.1</b>	<b>29.4</b>

In the following year, contributions in the amount of €14.9 million (previous year: €11.4 million) will probably be made to plan assets. The weighted average duration of defined benefit obligations as at the end of the reporting year was 16.6 years (previous year: 17.1 years).

As at the end of the financial year, expected discounted pension payments as a function of the due date were as follows.

[€ million]	Dec. 31,2021
2022	33.1
2023-2026	139.4
2027-2031	213.2

In the reporting year, gains and losses from the remeasurement of the defined benefit obligations and plan assets recognized in retained earnings developed as follows:

[€ million]	2020	2021
<b>Gains (+) and losses (-) from remeasurement, Jan. 1</b>	<b>-413.7</b>	<b>-444.5</b>
Gains (+) and losses (-) from remeasurement of defined benefit obligations	-49.3	77.3
Of which: as a result of changed financial assumptions	-64.8	75.3
Of which: as a result of changed demographic assumptions	2.3	-1.9
Of which: as a result of experience-based adjustments	13.2	3.9
Gains (+) and losses (-) from remeasurement of plan assets	14.6	8.5
Reclassifications/other changes	0.8	0.1
Exchange rate differences	3.1	-4.4
<b>Gains (+) and losses (-) from remeasurement, Dec. 31</b>	<b>-444.5</b>	<b>-363.0</b>

The possible changes in the defined benefit obligation as a result of changes in the discount rate, a major actuarial assumption, were calculated on the basis of the projected unit credit method. If the discount rate as at the statement of financial position date had been 0.50 percentage points lower, the present value of defined benefit obligations as at the statement of financial position date would have been €120.5 million (previous year: €87.9 million) higher. If the discount rate as at the statement of financial position date had been 0.50 percentage points higher, the present value of defined benefit obligations as at the statement of financial position date would have been €82.8 million (previous year €123.3 million) lower.

## (12) Other provisions

[€ million]	Personnel obligations	Warranties and guarantees	Restructuring	Miscellaneous	Total
<b>Status Jan. 1, 2021</b>	<b>380.1</b>	<b>108.7</b>	<b>72.4</b>	<b>263.9</b>	<b>825.1</b>
Increases	359.5	39.0	10.6	180.7	589.8
Unwinding of discount and effect of change in discount rate	-0.2	0.0	0.0	-2.1	-2.3
Amounts used	-260.3	-29.7	-31.7	-101.5	-423.2
Reversal	-26.1	-15.1	-2.5	-43.5	-87.2
Exchange rate differences	8.3	1.3	0.7	5.3	15.6
Changes in consolidated group	1.1	0.0	0.0	0.3	1.4
Other changes	5.7	0.6	0.5	-2.7	4.1
<b>Status Dec. 31, 2021</b>	<b>468.1</b>	<b>104.8</b>	<b>50.0</b>	<b>300.4</b>	<b>923.3</b>
Of which: long-term	72.7	4.7	4.0	40.2	121.6
Of which: short-term	395.4	100.1	46.0	260.2	801.7
Reimbursement claims connected with provisions and shown in the statement of financial position under other assets	0.6	0.1	0.0	1.2	1.9

The provisions for personnel obligations mainly include provisions for other short-term employee benefits such as bonuses and commissions, provisions for vacation not taken, provisions for termination benefits and other long-term employee benefits such as long-term remuneration components as well as provisions for partial early-retirement.

The provisions for guarantees and warranties concern products supplied and services rendered. Provisions for restructuring are recognized if a detailed, formal restructuring plan has been prepared and communicated to the parties concerned. The provisions cover expenditure directly connected with the measures adopted.

The miscellaneous provisions include the following items:

[€ million]	Dec. 31, 2020	Dec. 31, 2021
Onerous contracts	30.8	42.5
Commissions	11.8	34.5
Legal action	27.2	30.3
Other	194.1	193.1
<b>Total</b>	<b>263.9</b>	<b>300.4</b>

**(13) Liabilities**

[€ million]	Residual term		Dec. 31,2020	Residual term		Dec. 31,2021
	Short-term	Long-term		Short-term	Long-term	
Liabilities to banks (= financial debt)	191.1	595.5	786.6	189.3	582.6	771.9
Cash Pool Liabilities	129.0	0.0	129.0	125.6	0.0	125.6
Other financial debt	33.9	130.9	164.8	53.2	113.5	166.7
Lease liabilities	85.8	261.8	347.6	88.7	255.0	343.7
Shareholder's loans	537.0	150.0	687.0	402.0	300.0	702.0
Accounts of Freudenberg & Co. KG Partners	205.4	336.0	541.4	218.5	342.3	560.8
<b>Financial debt</b>	<b>1,182.2</b>	<b>1,474.2</b>	<b>2,656.4</b>	<b>1,077.3</b>	<b>1,593.4</b>	<b>2,670.7</b>
<b>Trade payables</b>	<b>878.7</b>	<b>0.0</b>	<b>878.7</b>	<b>1,025.7</b>	<b>0.0</b>	<b>1,025.7</b>
Contract liabilities	43.5	0.0	43.5	64.6	0.0	64.6
Miscellaneous liabilities	259.8	170.4	430.2	272.6	185.0	457.6
<b>Other liabilities</b>	<b>303.3</b>	<b>170.4</b>	<b>473.7</b>	<b>337.2</b>	<b>185.0</b>	<b>522.2</b>
	<b>2,364.2</b>	<b>1,644.6</b>	<b>4,008.8</b>	<b>2,440.2</b>	<b>1,778.4</b>	<b>4,218.6</b>

The average interest rate on long-term liabilities to banks is 1.03 percent (previous year: 1.17 percent). The other financial debt includes loans by third parties with an interest rate between 0.50 and 5.00 percent on the long-term portion.

The interest payable on the certificates of indebtedness included in the liabilities to banks is based on variable and fixed components. Cash flows for variable and fixed interest and repayment of principal will probably be as follows from 2022 to 2027:

[€ million]	Book value	Cash flows		
	Dec. 31,2021	2022	2023	2021 - 2027
Certificates of indebtedness	557.0	53.2	115.7	414.1

The cash pool liabilities are towards the parent company and its affiliates not included in the consolidated group of Freudenberg SE and are of a short-term nature.

Lease liabilities have been recognized since 2019 as a result of the application of IFRS 16. As at December 31, 2021, possible future cash outflows in the amount of €38.5 million (previous year: €27.2 million) were not included in lease liabilities because a lease had been concluded but not yet incepted as at the date of the statement of financial position or because it was not assessed as reasonably certain that an extension option would be exercised.

The cash flows for the leasing liabilities shown in the statement of financial position break down as follows:

[€ million]	Dec. 31,2021
2022	94.7
2023-2026	175.9
2027 ff.	94.3

The loans granted by the shareholder were extended during the reporting year. Interest is payable on these loans at rates between 0.75 and 3.35 percent (previous year: between 1.00 and 3.35 percent). The long-term portion of these loans consists of two tranches of the same amount, one with a term of just under five years and one with a term of more than five years.

The interest rates applicable to deposits in accounts of Freudenberg & Co. KG Partners as at the date of the statement of financial position vary between 0.50 and

3.00 percent depending on the individual agreements (previous year: between 0.50 and 3.00 percent). The long-term portion of these accounts has a term of between one year and five years.

Miscellaneous liabilities include liabilities for outstanding wages and salaries, holiday pay and special bonuses and liabilities for other taxes, as well as liabilities in connection with social security and other refund liabilities.

### Contingent liabilities and other financial obligations

[€ million]	Dec. 31,2020	Dec. 31,2021
<b>CONTINGENT LIABILITIES</b>		
Guarantees	12.3	14.9
Warranty agreements	4.4	1.4
Miscellaneous	2.8	3.9
	<b>19.5</b>	<b>20.2</b>
<b>OTHER FINANCIAL COMMITMENTS</b>		
Purchase commitments in connection with the delivery of goods and services	182.9	195.5
Purchase commitments in connection with tangible assets	57.9	72.6
Purchase commitments in connection with intangible assets	0.5	0.4
Miscellaneous	4.8	9.6
	<b>246.1</b>	<b>278.1</b>

In addition, the following contingent liabilities and other financial commitments concern joint ventures:

[€ million]	Dec. 31,2020	Dec. 31,2021
<b>CONTINGENT LIABILITIES</b>		
Warranty agreements	13.4	14.2
	<b>13.4</b>	<b>14.2</b>
<b>OTHER FINANCIAL COMMITMENTS</b>		
Purchase commitments in connection with the delivery of goods and services	0.0	0.3
Purchase commitments in connection with tangible assets	0.1	0.0
Miscellaneous	0.2	0.0
	<b>0.3</b>	<b>0.3</b>

## NOTES TO THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

### (14) Sales

[€ million]	2020	2021
Sales from sales of goods	8,656.4	9,807.0
Sales from research and development / research and development licenses	82.6	106.9
Sales from services	9.4	9.6
Sales from production-related licenses	0.1	1.3
Other sales	92.3	113.9
	<b>8,840.8</b>	<b>10,038.7</b>

Other sales include, inter alia, sales from the sale of customer-specific tools, sales from rental and lease contracts and sales from support and supplementary operations. At Freudenberg, long-term performance obligations arise under rental and lease agreements. Further details are given in note (3).

The breakdown of sales by sectors is given below:

[€ million]	2020	2021
Automotive OEMs	3,482.9	3,897.0
Final users	1,088.7	1,182.9
Mechanical and plant engineering	939.7	1,095.0
Construction	500.7	628.4
Spare parts business	467.1	545.6
Textile and apparel	389.2	463.0
Medicine and pharmaceuticals	372.1	411.1
Energy and water	367.3	410.0
Chemical	244.0	254.8
Other industry sectors	989.1	1,150.9
	<b>8,840.8</b>	<b>10,038.7</b>

In the 2021 financial year, sales in the amount of €27.4 million (previous year: €12.2 million) were recorded which had been recognized as contract liabilities at the beginning of the financial year.

### (15) Cost of sales

Cost of sales, amounting to €6,904.7 million (previous year: €6,093.3 million), indicates the cost of goods and services sold. Apart from individual directly attributable costs, such as personnel expenses and material expenses, overheads including depreciation/amortization as well as development expenses for customer-specific development projects are also shown under cost of sales.

### (16) Selling expenses

Selling expenses, amounting to €1,369.2 million (previous year: €1,271.5 million), include all expenses incurred in the sales area, for example personnel, advertising, carriage and packaging expenses.

### (17) Administrative expenses

In 2021, administrative expenses amounted to €637.2 million (previous year: €603.0 million). Administrative expenses include all expenses which cannot be allocated to production, sales or research and development and concern, inter alia, personnel expenses and miscellaneous administrative expenses.

### (18) Research and development expenses

Apart from personnel and material expenses, research and development expenses chiefly include the cost of licenses and patents occurring in the course of development projects.

## (19) Other income

[€ million]	Dec. 31,2020	Dec. 31,2021
Income from recharges	13.3	21.2
Income from disposals of long term assets	11.8	21.0
Income from other secondary business	1.2	1.6
Currency and exchange gains <sup>1</sup>	0.0	4.7
Miscellaneous income	67.5	67.7
	<b>93.8</b>	<b>116.2</b>

<sup>1</sup> After offsetting of exchange rate losses.

The increase in other income is chiefly due to higher income from disposals of non-current assets and higher income from recharges. In the reporting year, the Freudenberg Filtration Technologies Business Group recorded sales from the disposal of a building. In the previous year, the Freudenberg Performance Materials Business Group recorded sales from the disposal of its South American business with nonwovens for the hygiene industry. In addition to these elements, the other income includes a large number of individual items with low amounts such as fees, insurance reimbursements, subsidies and grants.

## (20) Other expenses

[€ million]	Dec. 31,2020	Dec. 31,2021
Losses resulting from disposals of non-current assets	13.1	10.4
Exchange rate loss <sup>1</sup>	7.6	0.0
Miscellaneous expenses	48.2	67.3
	<b>68.9</b>	<b>77.7</b>

<sup>1</sup> After offsetting of exchange rate gains.

The increase in other expenses was chiefly a result of the higher miscellaneous expenses compared with the previous year. The rise in miscellaneous expenses was chiefly due to the measurement of option rights.

## (21) Income from investments in joint ventures

The income from investments in joint ventures amounted to €26.0 million (previous year: €20.1 million).

## (22) Income from investments in associated companies

The increase in income from investments in associated companies from €-11.2 million to €41.1 million is a result of the higher pro rata profit of the associated company NOK Corporation, Tokyo, Japan.

## (23) Other investment result

The fall in other investment result from €29.6 million to €14.4 million was chiefly the result of lower income from investments.

**(24) Other interest and similar income**

Other interest and similar income amounted to €16.6 million (previous year: €20.0 million).

**(25) Interest and similar expenses**

In 2021, interest expenses amounted to €57.6 million (previous year: €57.9 million). This item chiefly includes interest on shareholder's loans in the amount of €12.4 million (previous year: €13.0 million) and interest payable to the Partners of Freudenberg & Co. KG in the amount of €10.5 million (previous year: €12.5 million).

## (26) Income taxes

This item shows German corporation tax (plus solidarity surcharge) and municipal trade taxes as well as similar taxes on income payable in other countries.

The figure also includes deferred taxes on temporary differences between the tax balance sheets and commercial balance sheets of individual group companies, on adjustments to consistent measurement within the Freudenberg Group and on the consolidation procedure.

Deferred taxes are calculated at the tax rates applicable in the respective countries.

Income taxes break down as follows (expense (-) / income (+)):

[€ million]	2020	2021
Current taxes related to the reporting period	-200.0	-251.3
Current taxes related to prior periods	6.4	-6.5
Deferred taxes	49.0	66.7
	<b>-144.6</b>	<b>-191.1</b>

The deferred tax income related to changes in tax rates was €0.1 million (previous year: deferred tax expense of €0.3 million). Deferred tax income includes income in the amount of €68.0 million (previous year: €43.3 million) resulting from the development or elimination of temporary differences. In the reporting year, impairment losses with respect to deferred tax assets on temporary differences were recognized in the amount of €13.2 million (previous year: €18.6 million).

In the reporting year, deferred taxes related to transactions recognized directly in equity resulted in a decrease in equity of €-31.3 million (previous year: increase in equity of €17.6 million).

As of December 31, 2021, tax losses carried forward amounted to €888.8 million (previous year: €760.6 million). Deferred tax assets were recognized in respect of tax losses carried forward totaling €85.4 million (previous year: €57.5 million). Deferred tax assets were not recognized in respect of tax losses carried forward with a total amount of €803.4 million (previous year: €703.1 million) as it is not expected that these losses will be usable. Of the tax losses carried forward, €23.6 million (previous year: €22.2 million) will be forfeited in the period up to 2031 if they are not used.

In the reporting year, tax losses carried forward totaling €24.3 million (previous year: €11.2 million) for which no deferred tax assets had been recognized were used.

Deferred taxes concern temporary differences and tax losses carried forward in the following amounts:

[€ million]	Deferred tax assets Dec. 31,2020	Deferred tax liabilities Dec. 31,2020	Deferred tax assets Dec. 31,2021	Deferred tax liabilities Dec. 31,2021
Intangible assets	21.8	270.8	30.1	252.9
Tangible assets	13.0	183.5	18.5	190.3
Financial assets	0.4	1.9	0.8	1.4
Inventories	51.3	1.9	64.0	1.5
Receivables	12.3	12.9	17.4	16.5
Other assets	3.4	2.6	2.9	2.3
Provisions for pensions and similar obligations	158.2	0.3	138.4	1.9
Other provisions	84.7	2.2	92.6	2.5
Liabilities	96.8	14.7	117.9	24.1
Other liabilities	0.7	5.6	0.8	4.9
Tax losses carried forward	10.0	0.0	16.5	0.0
	<b>452.6</b>	<b>496.4</b>	<b>499.9</b>	<b>498.3</b>
Offsetting	-166.6	-166.6	-167.6	-167.6
<b>Recognized in statement of financial position</b>	<b>286.0</b>	<b>329.8</b>	<b>332.3</b>	<b>330.7</b>

No deferred tax items were set up on temporary differences arising from shareholdings totaling €43.5 million (previous year: €41.5 million) as short-term dividend payments are not expected.

No deferred tax liabilities were recognized in respect of differences in the retained earnings of affiliated companies amounting to €2,816.0 million (previous year: €2,611.1 million) as it is intended to use these funds for maintaining the substance and expanding the business of the companies concerned.

## Reconciliation of expected income tax with actual income tax expense

Freudenberg SE and its German subsidiaries are subject to corporation tax (plus solidarity surcharge) and the municipal trade tax. Income realized in other countries is taxed at the rates applicable in the respective countries. The tax rate of 30.0 percent (previous year: 30.0 percent) used for calculating the expected tax expense is based on the structure of Freudenberg relevant for taxation. It is calculated as the weighted average of the tax rates for the regions in which Freudenberg realized its main income. Non-taxable income includes, inter alia, the profit after tax of participations consolidated by the equity method, dividends received from non-consolidated companies and income from the re-measurement of financial assets measured at fair value through profit or loss. In the year under review, the other tax effects chiefly included a positive effect from the reversal of impairment losses recognized in prior periods with respect to deferred tax assets as the reasons for the impairment losses no longer applied.

[€ million]	2020	2021
Profit before income taxes	510.7	778.2
<b>Expected income tax expense (-)/ income (+)</b>	<b>-153.2</b>	<b>-233.5</b>
Different tax rates:		
In Germany	0.0	-0.1
In other countries	37.6	50.9
Tax portion of:		
Non-taxable income	29.5	43.3
Non-deductible expenses	-52.0	-42.5
Current taxes related to prior periods	8.9	-9.5
Tax portion of new tax losses carried forward for which no deferred tax assets were recognized	-22.1	-22.0
Tax portion of tax losses carried forward and used for which no deferred tax assets were recognized	1.1	3.4
Other taxation effects	5.6	18.9
<b>Actual income tax expense</b>	<b>-144.6</b>	<b>-191.1</b>
Effective tax rate (percent)	28.3	24.6

## (27) Profit or loss attributable to non-controlling interests

[€ million]	2020	2021
Profit	53.4	59.0
Loss	-23.5	-30.0
	<b>29.9</b>	<b>29.0</b>

## NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

### (28) Cash flow from operating activities

The cash flow from operating activities takes into account dividends received from joint ventures totaling €0.4 million (previous year: €0.3 million) and dividends received from associated companies totaling €16.8 million (previous year: €14.0 million).

### (29) Payments to shareholders/non-controlling interests

Payments to shareholders and non-controlling interests include dividends paid to the shareholder, to the Partners of Freudenberg & Co. KG and to holders of non-controlling interests in Group companies

### (30) Reconciliation of financial debt

The table below shows the reconciliation of financial debt:

[€ million]	2020	With effect on payments	Without effect on payments				2021
			Addition	Acquisitions / Disposals	Exchange rate effects	Others	
Liabilities to banks	786.6	-23.8	0.0	7.4	1.7	0.0	771.9
Liabilities from cash pool	129.0	-3.6	0.0	0.0	0.0	0.2	125.6
Leasing liabilities	347.6	-91.2	60.7	18.0	9.5	-0.9	343.7
Other financial debt	164.8	26.1	0.0	12.2	-38.0	1.6	166.7
Shareholder's loans	687.0	15.0	0.0	0.0	0.0	0.0	702.0
Accounts of Freudenberg & Co. KG Partners	541.4	19.2	0.0	0.0	0.0	0.2	560.8
<b>Financial debt</b>	<b>2,656.4</b>	<b>-58.3</b>	<b>60.7</b>	<b>37.6</b>	<b>-26.8</b>	<b>1.1</b>	<b>2,670.7</b>

Cash inflows from interest received and cash outflows from interest paid are included in cash flow from operating activities and are shown separately in the consolidated statement of cash flows.

**(31) Changes in cash and cash equivalents with effect on payments**

Freudenberg recognizes checks, cash in hand, cash at bank and short-term securities with an original term of up to three months as cash and cash equivalents. Cash and cash equivalents include funds with an amount of €1.0 million (previous year: €1.9 million) subject to restrictions on use.

The funds subject to restrictions on use by Freudenberg largely concern cash and cash equivalents held by affiliates which can only be used by Freudenberg with restrictions as a result of exchange controls.

## FURTHER NOTES

### Material expenses

[€ million]	2020	2021
Raw materials, consumables and merchandise purchased	3,562.6	4,201.3
Services purchased	234.4	315.2
	<b>3,797.0</b>	<b>4,516.5</b>

### Workforce and personnel expenses

In the year under review, an average of 48,787 (previous year: 47,909) persons were employed in the following functions:

2021	Germany	Other countries	Total
Production	6,485	25,836	32,321
Sales	2,076	6,387	8,463
Research and development	1,840	1,824	3,664
Administration	1,373	2,966	4,339
	<b>11,774</b>	<b>37,013</b>	<b>48,787</b>

[€ million]	2020	2021
Wages and salaries	2,089.3	2,255.2
Social security contributions and costs of pensions and assistance	503.1	545.8
<b>Personnel expenses</b>	<b>2,592.4</b>	<b>2,801.0</b>

### Research and development

In the year under review, research and development activities amounting to €500.2 million (previous year: €446.3 million) were performed. The research and development activities also include development expenses for customer-specific development projects included in the cost of sales in the consolidated statement of profit or loss. Sales from research and development and research and development licenses amounted to €106.9 million (previous year: €82.6 million). In the reporting year, government grants for research and development projects totaling €8.6 million (previous year €8.7 million) were received.

## Financial instruments

The term “financial instrument” is used to refer to any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise. A distinction is made between primary and derivative financial instruments. Primary financial instruments in the case of the purchase or sale of assets are recognized at the settlement date, i.e. the delivery of the asset concerned. Derivative financial instruments are recognized as of the trade date. In the event of loss of control over the contractually agreed rights to a financial asset, the asset concerned is derecognized. Financial liabilities are derecognized on the statement of financial position when the commitment is discharged or cancelled, or expires.

According to IFRS 9, financial assets are divided into the following categories:

- Measured at amortized cost

This category includes debt instruments with cash flows consisting solely of principal and interest payments. They are held by Freudenberg in a business model whose objective is achieved by collecting the contractual cash flows.

- Measured at fair value through other comprehensive income

This category includes both debt and equity instruments. Debt instruments are to be included in this category if the cash flows associated with these instruments consist solely of principal and interest payments and the business model has the objective of both collecting contractual cash flows and selling financial assets.

Amounts recognized in other comprehensive income for those debt instruments are reclassified to the statement of profit or loss upon the later disposal of such instruments. Equity instruments not held for trading may be assigned to this category. The amounts recognized in other comprehensive income for those equity instruments are not reclassified to the statement of profit or loss in the event of the later disposal of such instruments.

- Measured at fair value through profit or loss

This category includes both debt and equity instruments. Debt instruments are to be assigned to this category in the event that the cash flows associated with such instruments do not consist solely of principal and interest payments or if the business model is based mainly on short-term trading intentions. Equity instruments must also be assigned to this category if there are trading intentions. If there are no trading intentions, there is an option to classify equity instruments as measured at fair value through profit or loss. In addition, both debt and equity instruments are classified in this category if such classification prevents an accounting mismatch between assets and liabilities. The same applies to partnership shares. Those shares are not considered to be equity instruments and also do not meet the condition that the cash flows associated with them consist solely of principal and interest payments. Derivative financial instruments that do not meet the requirements for hedge accounting are also measured at fair value through profit or loss.

In accordance with IFRS 9, financial liabilities are, as a general principle, measured at amortized cost. In such cases, the liabilities concerned are initially recognized at fair value less transaction costs. In accordance with IFRS 9, subsequent measurements are effected at amortized cost using the effective interest method. Only liabilities held for trading purposes are measured at fair value through profit or loss.

Financial instruments are assigned to categories on the basis of the relevant items in the statement of financial position. The allocation to the categories unambiguously defines the accounting and measurement of the financial assets and liabilities.

[€ million]	At amortized cost	At fair value through other comprehensive income	At fair value through profit or loss	Book value Dec. 31, 2020
<b>ASSETS</b>				
Other financial assets	3.2	45.8	68.4	117.4
Trade receivables	1,402.9			1,402.9
Other assets	116.3		34.0	150.3
Securities and cash at bank and in hand	2,021.4			2,021.4
	<b>3,543.8</b>	<b>45.8</b>	<b>102.4</b>	<b>3,692.0</b>

<b>LIABILITIES</b>				
Financial debts <sup>1</sup>	2,656.4			2,656.4
Trade payables	878.7			878.7
Other liabilities	277.1		2.4	279.5
	<b>3,812.2</b>		<b>2.4</b>	<b>3,814.6</b>

[€ million]	At amortized cost	At fair value through other comprehensive income	At fair value through profit or loss	Book value Dec. 31, 2021
<b>ASSETS</b>				
Other financial assets	8.5	42.2	86.6	137.3
Trade receivables	1,527.3			1,527.3
Other assets	111.0		35.6	146.6
Securities and cash at bank and in hand	2,186.8			2,186.8
	<b>3,833.6</b>	<b>42.2</b>	<b>122.2</b>	<b>3,998.0</b>

<b>LIABILITIES</b>				
Financial debts <sup>1</sup>	2,670.7			2,670.7
Trade payables	1,025.7			1,025.7
Other liabilities	305.0		1.2	306.2
	<b>4,001.4</b>		<b>1.2</b>	<b>4,002.6</b>

<sup>1</sup> Financial debts include lease liabilities, even though not included in the scope of IFRS 9.

Certain other assets and other liabilities are shown on the statement of financial position but are not included in the table concerning financial instruments because they can not be categorized as financial instruments in accordance with IFRS 9 or are subject to the special recognition and measurement principles applicable to hedge accounting (see information on hedging transactions). The other current and non-current assets shown in the statement of financial position, amounting to €167.6 million (previous year: €120.4 million), mainly concern reimbursement claims with respect to other taxes, advance payments made and plan assets in excess of the corresponding pension obligations. Further details are given in note (7). The other current and non-current liabilities shown in the statement of financial position in the amount of €216.0 million (previous year: €194.2 million) chiefly concern liabilities with respect to other taxes, contract liabilities and liabilities in connection with social security. Further details are given in note (13).

Loans, receivables and debts are measured at amortized cost. The cash flows arising from these financial assets consist solely of principal and interest payments. These loans, receivables and debts are held by Freudenberg within a business model whose objective is achieved by collecting the contractual cash flows. The fair values of financial assets and financial liabilities measured at amortized cost are approximately equal to the carrying amounts of such assets and liabilities.

The other financial assets measured at fair value through other comprehensive income as at the statement of financial position date consist solely of equity instruments not held for trading purposes. The greater part of these financial instruments, in the amount of €38.7 million (previous year: €41.8 million) were measured on the basis of active markets for identical assets (level 1 input factors). For the remaining equity instruments, in the amount of €3.5 million (previous year: €4.0 million), the amortized cost represents the best estimate of the fair value. The amounts recognized in other comprehensive income for equity instruments are not reclassified to the statement of profit or loss upon the later disposal of such instruments. In the reporting year, the total amount of other financial assets recognized in other comprehensive income was €0.1 million (previous year €-5.2 million). This amount recognized in other

comprehensive income in the year under review includes effects resulting from disposals of financial instruments in this category in the amount of €0.8 million.

The other financial instruments measured at fair value through profit or loss are debt instruments with an amount of €3.2 million (previous year: €2.9 million) with cash flows not consisting solely of principal and interest payments. In addition, these financial instruments include investments that do not meet the requirements for measurement at fair value through other comprehensive income and with cash flows not consisting solely of principal and interest payments in the amount of €11.5 million (previous year: €8.8 million). The other financial assets also include shares in partnerships with an amount of €71.9 million (previous year: €56.7 million). These shares and the other financial assets measured at fair value through profit or loss are measured on the basis of active markets for identical assets (level 1 inputs). In the reporting year, the total effect of the re-measurement of such financial instruments on the statement of profit or loss was insignificant. The other assets in this category solely include derivative financial instruments. These chiefly concern option rights for the acquisition of shares in companies with a value of €34.7 million (previous year: €33.3 million). The fair value of these assets is measured on the basis of developed, unobservable input factors (level 3 input factors). The other assets and other liabilities include derivative financial instruments used for hedging currency risks that do not meet the requirements for hedge accounting. Such derivatives are measured at fair value through profit or loss (see information on hedging transactions). The other liabilities also include put options granted to holders of non-controlling interests for the sale of their shares in the amount of €166.8 million (previous year €145.2 million), which are recognized as forward purchases.

Freudenberg does not hold any financial assets or liabilities for short-term trading purposes.

### Risks in connection with financial instruments

Freudenberg is exposed to risks resulting from changes in exchange rates and interest rates and, as a general principle, uses conventional derivative instruments such as interest rate swaps, caps and currency futures to hedge risks in connection with business operations and financing to a limited extent (see information on hedging transactions).

The risks arising in connection with financial instruments are chiefly as follows:

#### Interest rate risk:

In the case of fixed-interest loans or investments, there is a risk that changes in the market interest rate will affect the market value of the item concerned (market value risk contingent on interest rates). In contrast, variable interest loans and investments are not subject to this risk as the interest rate is adjusted to reflect changes in the market situation with a very short delay. However, there is a risk with respect to future interest payments as a result of short-term fluctuations in market interest rates (cash flow risk contingent on interest rates). Risks associated with interest rate changes mainly affect long-term items. If market interest rates had been 0.5 percentage points higher or lower, on average, as of December 31, 2021, this would have had only an insignificant impact on net income.

#### Currency risk:

The primary financial instruments are chiefly held in the functional currency. Exchange rate differences caused by the conversion of financial statements into the Group currency are not taken into consideration. If the value of the euro against major currencies held at the date of the statement of financial position (USD, GBP and JPY) had been 10 percent higher as at December 31, 2021, the profit before income taxes would have been €14.3 million (previous year: €35.1 million) lower. If the value of the euro against major currencies held (USD, GBP and JPY) had been 10 percent lower as at December 31, 2021, the profit before income taxes would have been €17.5 million (previous year: €42.8 million) higher.

#### Liquidity risk:

Risks connected with cash flow fluctuations are identified by the cash flow planning system already existing. As a result of the good rating (“A3”) of Freudenberg SE and the credit lines granted by banks on a binding basis, Freudenberg can access ample sources of funds at all times.

#### Credit risk:

A credit risk is the risk that Freudenberg will incur a financial loss as a result of the other party to a financial instrument failing to discharge its obligation. Credit risks may be of a variety of types. For example they may be a result of the investment of liquid funds or the granting of payment deadlines in connection with the supply of goods and services. As a general principle, credit risks arise in connection with all agreements which need to be fulfilled by the counterparty in the future.

In accordance with IFRS 9, expected credit losses are the key factor in calculating loss allowances using the expected loss model. Impairment losses are recognized in accordance with IFRS 9 for all financial assets measured at amortized cost, for debt instruments measured at fair value without effect on net income, and for contract assets. IFRS 9 provides for a three-stage procedure. Loss allowances are measured either on the basis of the 12-month expected credit loss (stage 1) or on the basis of the lifetime expected credit loss if there has been a significant increase in credit risk since initial recognition (stage 2) or a credit impairment has been identified (stage 3).

Securities and cash at bank and in hand are debt instruments that are measured at amortized cost. Such assets held by Freudenberg mainly have a low credit risk and are due in the short-term. Such assets must therefore be assigned to stage 1 of the impairment model. The loss allowance for these assets as at the date of the statement of financial position was €1.0 million (previous year: €1.6 million).

For trade receivables, the simplified approach in accordance with IFRS 9 is adopted. In this approach, the loss allowance is always calculated on the basis of the lifetime expected credit losses. In order to

determine the expected credit losses, trade receivables are assigned to groups with similar credit risks. In the case of appropriate individual circumstances and risk indications, individual impairment losses are recognized. Information related to the past and to the future is taken into consideration in the measurement of impairment losses.

In order to determine the expected credit losses for a group of receivables, Freudenberg applies two factors. The first factor takes the country risk into account and the second factor accounts for the customer-specific default risk.

The centrally defined country risk factor covers factors such as transfer or convertibility risks, moratoriums, and capital or currency regulations which would prevent a company from converting its local currency into a foreign currency and/or transferring foreign currency to creditors in other countries. This specifically includes circumstances such as war, confiscation, revolution, insurrections, flooding and earthquakes. In addition the model considers forward looking information regarding the financial and economic situation. The financial information includes medium-term financial solvency indicators such as overall foreign debt and total payments in connection with external debts. These figures are typically connected with indicators such as the gross domestic product and/or foreign exchange revenues. Economic information includes long-term structural indicators that measure the growth potential such as income levels, savings rates or economic growth rates achieved as well as export diversification, dependence on subsidies or the size of economies.

The customer-specific risk is based on shared credit risk characteristics of receivable groups. It takes into consideration specific business models, customer experience, differences in local payment cultures and market knowledge. If there is a major difference between different due date ranges, impairment loss rates are calculated separately for the different due date ranges.

To a large extent, trade receivables are covered by credit insurance. Credit insurance is taken into account in the calculation of the impairment losses. Otherwise, the carrying amount represents the maximum credit risk.

Trade receivables are de-recognized if, on the basis of an appropriate estimate, it is not to be expected that the receivable may be realized in full or in part. In this context, the information concerned must indicate that a debtor has financial problems and that there is no realistic prospect of the receipt of payments, for example if a debtor has been placed under liquidation or is subject to insolvency proceedings. As at the statement of financial position date, derecognized receivables in the amount of €2.4 million (previous year: €3.8 million) were still subject to enforcement activity.

In the year under review and the comparison period, loss allowances for financial assets other than those mentioned above were not material. This is also a result of the risk management system implemented by Freudenberg, which aims, inter alia, to minimize the credit risk. Freudenberg only concludes derivative financial instruments with national and international banks of investment grade rating. Credit risks are largely limited by distributing between several banks and a policy of applying caps to individual banks.

The risk profile of trade receivables is summarized in the table below:

[€ million]	Gross carrying amount Dec. 31, 2020	Weighted average loss rate <sup>1</sup>	Loss allowance
Current (not past due)	1,235.5	0%	4.5
1 – 60 days past due	144.4	3%	5.0
61 – 180 days past due	26.9	22%	6.0
181 – 360 days past due	12.8	30%	3.8
More than 360 days past due	13.7	81%	11.1

<sup>1</sup> The weighted average loss rate was rounded to full percentage values.

[€ million]	Gross carrying amount Dec. 31, 2021	Weighted average loss rate <sup>1</sup>	Loss allowance
Current (not past due)	1,327.9	0%	5.0
1 – 60 days past due	172.1	3%	4.4
61 – 180 days past due	32.5	21%	6.7
181 – 360 days past due	10.4	24%	2.5
More than 360 days past due	12.9	77%	9.9

<sup>1</sup> The weighted average loss rate was rounded to full percentage values.

The loss allowance for trade receivables developed as follows:

[€ million]	2020	2021
<b>Loss allowance Jan. 1</b>	<b>31.8</b>	<b>30.4</b>
Changes in consolidated group	0.5	0.1
Exchange rate differences	-1.9	0.5
Additions (expenses for loss allowance)	18.2	10.0
Amounts used	-10.5	-3.0
Reversals (write-ups)	-7.7	-9.5
<b>Loss allowance Dec. 31</b>	<b>30.4</b>	<b>28.5</b>

As at the statement of financial position date, the loss allowance for other assets amounted to €0.9 million (previous year: €0.5 million). No significant impairment losses to contract assets were recognized in the year under review.

## Hedging transactions

Freudenberg SE is responsible for all financing activities and also operates the cash management system for the entire group of companies. Group companies obtain the financing they require via cash pools or internal loans or, in some countries, in the form of bank loans guaranteed by Freudenberg SE.

The limits of action, responsibilities and control procedures in connection with derivative financial instruments are laid down in a binding form in internal directives for Group companies. Compliance with these directives and the proper handling and measurement of transactions are regularly verified, observing the principle of separation of functions. Furthermore, risk management for financial instruments is integrated in the Freudenberg Group risk management system. Freudenberg does not expose itself to additional financial risks through speculation with derivative financial instruments but uses such instruments only for hedging purposes and therefore reducing risks in connection with transactions (see information on risks in connection with financial instruments). Future transactions are only hedged if there is a high probability of occurrence. As a general principle Freudenberg uses derivative financial instruments for hedging interest rates and foreign exchange risks. Open risk items are primarily hedged via transactions within the Group. External hedging transactions are only concluded after consultation with the responsible corporate function.

The interest rate risk represents the risk that the fair value or future cash flows of financial instruments may fluctuate as a result of changes in market interest rates. As in the previous year, there were no derivatives entered into for the purpose of interest rate hedging as at December 31, 2021.

Freudenberg is active internationally and is subject to exchange rate risks resulting from transactions in foreign currencies. Currency risks arise from future business transactions and recognized assets and liabilities concluded in a currency which is not the functional currency of the relevant Group company. The objective of hedging transactions is to reduce the volatility resulting from foreign currencies. For this purpose, currency futures and currency swaps are concluded.

Derivative financial instruments for hedging recognized assets or liabilities (fair value hedges) are shown in the statement of financial position at fair value. Changes in the fair value are recorded in the statement of profit or loss.

Financial instruments for hedging future cash flows (cash flow hedges) are also included in the statement of financial position at fair value, but changes in the fair value of such instruments are recognized without effect on net income under retained earnings, taking into consideration the applicable income taxes and recognized in the statement of profit or loss when future cash flows are realized. Ineffective portions of hedge transactions are always recognized in the statement of profit or loss. The effectiveness of hedging transactions is determined regularly by prospective assessment upon the inception of the transaction. For hedging currency risks, the main hedging transactions concluded are based on contract terms that are congruent with the underlying transaction. Ineffectiveness may arise if parameters such as the timing of a planned transaction change compared with the original estimate.

Derivative financial instruments are used solely for hedging purposes. However, if the derivatives do not meet the requirements for hedge accounting, they must be assessed as “held for trading” for accounting purposes. Such instruments are measured at fair value through profit or loss.

As at December 31, 2021, the Group held the following currency futures:

[€ million]	Dec. 31, 2020	Dec. 31, 2021
<b>DERIVATIVE FINANCIAL INSTRUMENTS - CASH FLOW HEDGES</b>		
Other assets - book value (assets)	0.1	0.2
Notional amount	3.7	4.9
Maturity date	1/2021-11/2021	1/2022-11/2022
Hedge ratio	1:1	1:1
Change in exchange rate of outstanding hedging instruments	0.1	0.2

<b>DERIVATIVE FINANCIAL INSTRUMENTS HELD FOR TRADING</b>		
Other assets - book value (assets)	0.7	0.9
Other liabilities - book value (liabilities)	2.3	1.3
Notional amount	198.3	162.3
Maturity date	1/2021-12/2021	1/2022-12/2022

As at the date of the statement of financial position, Freudenberg held no fair value hedges (previous year: book value included in other liabilities in the amount of €0.2 million, with a notional amount of €2.1 million).

In the reporting year, value changes in the case of currency futures (cash flow hedges) are recognized in equity in the amount of €-0.2 million (previous year: €0.2 million).

The fair values of currency futures were determined on the basis of the quoted currency future prices for similar financial instruments (level 2 inputs). As a result of the very high effectiveness of the hedges, the fluctuations in the values of cash flows from the hedged underlying transactions correspond to the fluctuations in the value of the hedges.

Derivatives to hedge currency risks in connection with the US dollar represent a large part of the notional amount.

[€ million]	Dec. 31, 2020	Dec. 31, 2021
Notional amount currency pair USD/EUR	60.8	78.4
Weighted average hedged rate for the year USD/EUR	1.23	1.13

## Related party disclosure

Relations with related parties concern the parent company Freudenberg & Co. KG, joint ventures, associated companies and other related parties.

Other related parties include other participations of the parent company and companies that are not included in the consolidated financial statements for reasons of materiality. Transactions with these parties in the course of the company's ordinary business are effected at normal market conditions and were as follows:

[€ million]	Sales 2020	Receivables			Payables <sup>1</sup>		
		Residual term up to 1 year	Residual term more than 1 year	Dec. 31,2020	Residual term up to 1 year	Residual term more than 1 year	Dec. 31,2020
Parent company	3.0	3.7	0.0	3.7	626.5	150.0	776.5
Joint ventures	44.5	31.8	0.0	31.8	4.5	7.5	12.0
Associated companies	14.4	5.5	0.0	5.5	9.0	0.0	9.0
Other related parties	3.5	2.0	0.0	2.0	60.1	0.0	60.1
	<b>65.4</b>	<b>43.0</b>	<b>0.0</b>	<b>43.0</b>	<b>700.1</b>	<b>157.5</b>	<b>857.6</b>

[€ million]	Sales 2021	Receivables			Payables <sup>1</sup>		
		Residual term up to 1 year	Residual term more than 1 year	Dec. 31,2021	Residual term up to 1 year	Residual term more than 1 year	Dec. 31,2021
Parent company	3.0	10.2	0.0	10.2	499.9	300.0	799.9
Joint ventures	55.1	25.2	0.0	25.2	5.9	5.8	11.7
Associated companies	17.8	4.3	0.0	4.3	8.6	0.0	8.6
Other related parties	3.5	1.1	0.0	1.1	48.6	0.0	48.6
	<b>79.4</b>	<b>40.8</b>	<b>0.0</b>	<b>40.8</b>	<b>563.0</b>	<b>305.8</b>	<b>868.8</b>

<sup>1</sup> Details of liabilities to the parent company are presented in the information on liabilities in note (13).

Related parties also include the members of the Board of Management and the Supervisory Board. The members of these bodies are listed under “Company Boards”.

The total remuneration of members of the Board of Management, including expenditure for short-term payments for members of the Board of Management amounted to €9.2 million (previous year: €8.4 million).

A current service cost of €2.0 million (previous year: €4.1 million) was incurred with respect to company pensions for Board of Management members.

An amount of €31.5 million (previous year: €41.2 million) was assigned to provisions for pension obligations to former members of the Board of Management.

Under a service agreement, Freudenberg SE paid an amount of €1.2 million (previous year: €0.9 million) to its parent company for the performance of key management functions.

#### Fees of the Auditor

The auditor, PriceWaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, Germany, performed the following services in the 2021 financial year:

[€ million]	2021
Auditing services	2.0
Tax services	0.8
Other assurance services	0.1
Other services	0.5
	<b>3.4</b>

#### Major events after the date of the statement of financial position

During the preparation of this annual report, the conflict between Russia and Ukraine intensified at the beginning of 2022, leading to military escalation. This development is already having direct and indirect negative consequences. For example, global supply chains are being disrupted and the costs of energy supplies and logistics have risen. In view of the dynamically evolving situation, it is not possible to finally quantify the possible impact of this conflict on the net assets, financial position and earnings situation at the present time. We assume that the broad-based diversification of the Group with respect to geographic regions and business sectors will help to keep the total impact on Freudenberg within manageable limits despite possible isolated problem areas.

Apart from this issue, there were no events of major significance for the net assets, financial position and results of operation of the group of companies up to March 18, 2022, the date when these consolidated financial statements were approved for publication by the Supervisory Board.

Weinheim, March 18, 2022

Freudenberg SE

The Board of Management

# SHAREHOLDINGS

AS AT DECEMBER 31, 2021

Company	Location	Country/Region	Share of capital [%]
Freudenberg SE	Weinheim	Germany	-

## I. AFFILIATED COMPANIES

### Germany

Blaesus Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs KG	Mainz	Germany	88.12
Burgmann International GmbH¹	Wolfratshausen	Germany	100.00
Capol GmbH¹	Elmshorn	Germany	100.00
Carl Freudenberg KG	Weinheim	Germany	100.00
Chem-Trend (Deutschland) GmbH¹	Maisach	Germany	100.00
Corteco GmbH¹	Weinheim	Germany	100.00
CT Beteiligungs-GmbH¹	Munich	Germany	100.00
EagleBurgmann Atlantic GmbH	Wolfratshausen	Germany	75.00
EagleBurgmann Espey GmbH	Moers	Germany	75.00
EagleBurgmann Germany GmbH & Co. KG¹	Wolfratshausen	Germany	75.00
EagleBurgmann Germany Verwaltungs-GmbH	Wolfratshausen	Germany	75.00
EagleBurgmann Middle-East GmbH	Wolfratshausen	Germany	60.00
Externa Handels- und Beteiligungsgesellschaft mit beschränkter Haftung¹	Weinheim	Germany	100.00
FCS-Munich GmbH¹	Weinheim	Germany	100.00
FFT Beteiligungs-GmbH¹	Weinheim	Germany	100.00
FHP Export GmbH¹	Weinheim	Germany	100.00
Freudenberg Chemical Specialities SE & Co. KG¹	Munich	Germany	100.00
Freudenberg DS Tooling Center GmbH & Co. KG¹	Weinheim	Germany	100.00
Freudenberg Filtration Technologies SE & Co. KG¹	Weinheim	Germany	100.00
Freudenberg FST GmbH¹	Weinheim	Germany	100.00
Freudenberg Fuel Cell e-Power Systems GmbH¹	Munich	Germany	100.00
Freudenberg Haushaltsprodukte Augsburg GmbH¹	Augsburg	Germany	100.00
Freudenberg Home and Cleaning Solutions GmbH¹	Weinheim	Germany	100.00
Freudenberg Industrial Services GmbH¹	Hamburg	Germany	100.00
Freudenberg Medical Europe GmbH¹	Kaiserslautern	Germany	100.00
Freudenberg Oil & Gas GmbH¹	Weinheim	Germany	100.00
Freudenberg Performance Materials Apparel SE & Co. KG¹	Weinheim	Germany	100.00
Freudenberg Performance Materials Holding SE & Co. KG¹	Weinheim	Germany	100.00
Freudenberg Performance Materials Logistics SE & Co. KG¹	Weinheim	Germany	100.00
Freudenberg Performance Materials SE & Co. KG¹	Weinheim	Germany	100.00
Freudenberg Performance Materials Service GmbH¹	Weinheim	Germany	100.00
Freudenberg Process Seals GmbH & Co. KG¹	Weinheim	Germany	100.00
Freudenberg Real Estate GmbH¹	Weinheim	Germany	100.00
Freudenberg Sealing Technologies GmbH¹	Hamburg	Germany	100.00
Freudenberg Technology Innovation SE & Co. KG¹	Weinheim	Germany	100.00
Freudenberg Verwaltungs- und Beteiligungs-GmbH¹	Weinheim	Germany	100.00
Freudenberg Wohnbauhilfe GmbH	Weinheim	Germany	100.00
Hanns Glass GmbH & Co. KG¹	Meuselwitz	Germany	75.00
Hanns Glass Immobilienverwaltung GmbH & Co. KG¹	Paderborn	Germany	75.00

## Consolidated Financial Statement – Shareholdings

Company	Location	Country/Region	Share of capital [%]
Hemoteq AG¹	Würselen	Germany	93.74
Integral Accumulator GmbH¹	Weinheim	Germany	100.00
Japan Vilene Europe GmbH	Meuselwitz	Germany	75.00
JUBA Jutta Baumgartner GmbH	Meuselwitz	Germany	75.00
Kaul GmbH	Elmshorn	Germany	100.00
Klüber Lubrication Deutschland SE & Co. KG¹	Munich	Germany	100.00
Klüber Lubrication GmbH¹	Weinheim	Germany	100.00
Klüber Lubrication München SE & Co. KG¹	Munich	Germany	100.00
Lederer GmbH¹	Öhringen	Germany	100.00
Low & Bonar Production GmbH¹	Erlenbach am Main	Germany	100.00
Mehler Texnologies GmbH¹	Hückelhoven	Germany	100.00
Mehler Texnologies Logistics GmbH¹	Fulda	Germany	100.00
OKS Spezialschmierstoffe GmbH¹	Maisach	Germany	100.00
PTFE Compounds Germany GmbH¹	Bördeland	Germany	100.00
SurTec Deutschland GmbH¹	Zwingenberg	Germany	100.00
SurTec International GmbH¹	Bensheim	Germany	100.00
Traxit International GmbH	Schwelm	Germany	100.00
Vibracoustic Aftermarket GmbH¹	Darmstadt	Germany	100.00
Vibracoustic Asia Holding GmbH	Weinheim	Germany	100.00
Vibracoustic CV Air Springs GmbH	Hamburg	Germany	65.07
Vibracoustic Europe GmbH¹	Darmstadt	Germany	100.00
Vibracoustic SE¹	Darmstadt	Germany	100.00
Vibracoustic SE & Co. KG¹	Weinheim	Germany	100.00
Vileda Gesellschaft mit beschränkter Haftung¹	Weinheim	Germany	100.00
<b>Other countries</b>			
Freudenberg S.A. Telas sin Tejer	Buenos Aires	Argentina	100.00
Klüber Lubrication Argentina S.A.	Buenos Aires	Argentina	100.00
Chem-Trend Australia Pty Ltd	Thomastown	Australia	100.00
EagleBurgmann Australasia Pty. Ltd.	Ingleburn	Australia	25.00
Freudenberg Filtration Technologies (Aust) Pty. Ltd.	Braeside	Australia	100.00
Freudenberg Home and Cleaning Solutions Pty. Ltd.	Broadmeadows	Australia	100.00
Freudenberg Sealing Technologies Pty. Ltd.	Brendale	Australia	100.00
Klüber Lubrication Australia Pty. Ltd.	Thomastown	Australia	100.00
EagleBurgmann Belgium BV	Sint-Job-in-'t-Goor	Belgium	75.03
FHP Vileda SComm.	Verviers	Belgium	100.00
Klüber Lubrication Belgium Netherlands S.A.	Dottignies	Belgium	100.00
Klüber Lubrication Benelux S.A./N.V.	Dottignies	Belgium	100.00
Chem-Trend Industria e Comercio de Produtos Quimicos Ltda.	Valinhos	Brazil	100.00
EagleBurgmann do Brasil Vedacoes Ltda.	Campinas	Brazil	75.00
Freudenberg Nao-Tecidos Ltda.	Jacareí	Brazil	100.00
Freudenberg-NOK-Componentes Brasil Ltda.	São Paulo	Brazil	75.00
Klüber Lubrication Lubrificantes Especiais Ltda.	Barueri	Brazil	100.00
SurTec do Brasil Ltda.	Valinhos	Brazil	100.00
Vibracoustic South America Ltda.	Taubaté	Brazil	100.00
Hänsel Textil Bulgaria ood (in liquidation)	Rousse	Bulgaria	100.00
Freudenberg Productos del Hogar Ltda.	Santiago de Chile	Chile	100.00
Klüber Lubrication Chile Ltda.	Santiago de Chile	Chile	100.00
Bonar High Performance Materials (Changzhou) Co. Ltd.	Changzhou	China	100.00

Company	Location	Country/Region	Share of capital [%]
Changchun Integral Accumulator Co., Ltd.	Changchun	China	100.00
Chem-Trend (Shanghai) Trading Co. Ltd.	Shanghai	China	100.00
Chem-Trend Chemicals (Shanghai) Co., Ltd.	Shanghai	China	100.00
Dichtomatik (China) Co., Ltd.	Shanghai	China	100.00
EagleBurgmann Dalian Co. Ltd.	Dalian	China	40.00
EagleBurgmann Shanghai Co., Ltd.	Shanghai	China	40.00
EagleBurgmann Technology (Shanghai) Co., Ltd.	Shanghai	China	50.00
Freudenberg & Vilene Interlinings (Nantong) Co. Ltd.	Nantong	China	87.50
Freudenberg & Vilene International Trading (Shanghai) Co., Ltd.	Shanghai	China	87.50
Freudenberg & Vilene Nonwovens (Suzhou) Co. Ltd.	Suzhou	China	87.50
Freudenberg Apollo Filtration Technologies Co., Ltd.	Foshan	China	75.00
Freudenberg Home and Cleaning Solutions (Ningbo) Co., Ltd.	Ningbo	China	100.00
Freudenberg Home and Cleaning Solutions (Shanghai) Co., Ltd.	Shanghai	China	100.00
Freudenberg Management (Shanghai) Co. Ltd.	Shanghai	China	100.00
Freudenberg Medical Plastic & Metal Manufacturing (Shenzhen) Co., Ltd.	Shenzhen	China	100.00
Freudenberg Politec Ltd.	Shanghai	China	100.00
Freudenberg Real Estate (Yantai) Co. Ltd.	Yantai	China	100.00
Freudenberg Spunweb (Shanghai) Trading Co., Ltd.	Shanghai	China	67.69
Freudenberg Vilene Filter (Chengdu) Co. Ltd.	Chengdu	China	87.50
Klüber Lubrication (Shanghai) Co., Ltd.	Shanghai	China	100.00
Klüber Lubrication Industries (Shanghai) Co., Ltd.	Shanghai	China	100.00
Low & Bonar (Shanghai) Trading Co. Ltd.	Shanghai	China	100.00
SurTec Metal Surface Treatment Technology Co. Ltd.	Hangzhou	China	100.00
Tianjin VIAM Automotive Products Co., Ltd.	Tianjin	China	75.00
Traxit (Huzhou) Lubrication Co. Ltd.	Huzhou	China	100.00
Traxit (Tianjin) Chemical Co. Ltd.	Tianjin	China	100.00
Trelleborg Automotive Design (Shanghai) Co. Ltd.	Shanghai	China	100.00
Vibracoustic (Chongqing) Co. Ltd.	Chongqing	China	100.00
Vibracoustic (Shanghai) Sales & Trading Co., Ltd.	Shanghai	China	100.00
Vibracoustic (Wuxi) Vibration Isolators Co., Ltd.	Wuxi	China	100.00
Vibracoustic (Yantai) Co., Ltd.	Yantai	China	100.00
Vibracoustic CV Air Springs (Yantai) Co., Ltd.	Yantai	China	65.07
Freudenberg Medical srl.	San José	Costa Rica	100.00
Chem-Trend A/S	Søborg	Denmark	100.00
EagleBurgmann KE A/S	Ringkøbing	Denmark	75.00
Klüber Lubrication Nordic A/S	Skovlunde	Denmark	100.00
SurTec Scandinavia ApS	Copenhagen	Denmark	100.00
Freudenberg Sealing Technologies OÜ	Mullutu	Estonia	100.00
Freudenberg Filtration Technologies Finland Oy	Tampere	Finland	100.00
Freudenberg Home and Cleaning Solutions Oy	Espoo	Finland	100.00
Chem-Trend France S.A.S.U.	Entzheim	France	100.00
Corteco SAS	Nantiat	France	100.00
EagleBurgmann France S.A.S.	Sartrouville	France	75.00
FHP Vileda S.A.S.	Asnières Sur Seine	France	100.00
Freudenberg Filtration Technologies SAS	Villebon-sur-Yvette	France	100.00
Freudenberg Immobilier SAS	Chamborêt	France	100.00
Freudenberg Joints Plats SAS	Chamborêt	France	100.00
Freudenberg Performance Materials S.A.S.	Colmar	France	100.00

## Consolidated Financial Statement – Shareholdings

Company	Location	Country/Region	Share of capital [%]
Freudenberg Sealing Technologies SAS	Langres	France	100.00
Klüber Lubrication France S.A.S.	Valence	France	100.00
Low & Bonar Paris SARL	Paris	France	100.00
Mehler Texnologies France SARL	Francheville	France	100.00
SurTec France S.A.S.	Toulouse	France	100.00
Vibracoustic France SAS	Carquefou	France	100.00
Vibracoustic Nantes SAS	Carquefou	France	100.00
FHP Hellas S.A.	Kifissia, Athens	Greece	100.00
Aquabio Ltd.	Worcester	United Kingdom	100.00
Bonar International Holdings Limited	Edinburgh	United Kingdom	100.00
Bonar Rotaform Limited	Leicester	United Kingdom	100.00
Bonar Silver Limited	Leicester	United Kingdom	100.00
Capol (U.K.) Limited	Huddersfield	United Kingdom	100.00
Chem-Trend (UK) Ltd.	Huddersfield	United Kingdom	100.00
EagleBurgmann Industries UK LP	Warwick	United Kingdom	75.00
EagleBurgmann Industries UK Ltd.	Warwick	United Kingdom	75.00
Filtamark Ltd.	Crewe	United Kingdom	100.00
Freudenberg Filtration Technologies UK Limited	Crewe	United Kingdom	100.00
Freudenberg Household Products LP	Rochdale	United Kingdom	100.00
Freudenberg Limited	Littleborough	United Kingdom	100.00
Freudenberg Oil & Gas Technologies Ltd.	Port Talbot	United Kingdom	100.00
Freudenberg Performance Materials LP	Littleborough	United Kingdom	100.00
Freudenberg Sealing Technologies Limited	Leicester	United Kingdom	100.00
Freudenberg Vileda Ltd.	Rochdale	United Kingdom	100.00
KE-Burgmann UK Ltd.	Congleton	United Kingdom	75.00
Klüber Lubrication Great Britain Ltd.	Huddersfield	United Kingdom	100.00
LCM Construction Products Ltd.	Leicester	United Kingdom	100.00
Low & Bonar Euro Holdings Limited	Leicester	United Kingdom	100.00
Low & Bonar Limited	Edinburgh	United Kingdom	100.00
Low & Bonar Pension Trustees Limited	Edinburgh	United Kingdom	100.00
Mehler Texnologies Ltd.	Leicester	United Kingdom	100.00
Techlok Limited	Port Talbot	United Kingdom	100.00
Freudenberg Textile Technologies, S.A.	Guatemala City	Guatemala	100.00
APEC (Asia) Limited	Hong Kong	Hong Kong	100.00
Freudenberg & Vilene Int. Ltd.	Hong Kong	Hong Kong	87.50
Freudenberg Household Products Ltd.	Hong Kong	Hong Kong	100.00
Freudenberg Trading (Hongkong) Ltd.	Hong Kong	Hong Kong	100.00
Japan Vilene (Hong Kong) Ltd.	Hong Kong	Hong Kong	75.00
Jump (Asia) Distributors Ltd	Hong Kong	Hong Kong	100.00
Klüber Lubrication China Ltd.	Hong Kong	Hong Kong	100.00
Vibracoustic Hong Kong Holdings Ltd.	Hong Kong	Hong Kong	100.00
Chem-Trend Chemicals Co. Pvt. Ltd.	Bangalore	India	100.00
Dichtomatik India Seals Private Limited	Kancheepuram	India	100.00
EagleBurgmann India Pvt. Ltd.	Pune	India	50.00
EagleBurgmann KE Pvt. Ltd.	Chennai	India	75.00
Freudenberg Filtration Technologies India Private Limited	Pune	India	100.00
Freudenberg Gala Household Product Pvt. Ltd.	Mumbai	India	60.00
Freudenberg Performance Materials India Pvt. Ltd.	Chennai	India	100.00

Company	Location	Country/Region	Share of capital [%]
Freudenberg Regional Corporate Center India Pvt. Ltd.	Bangalore	India	100.00
Gimi India Pvt. Ltd.	Bangalore	India	100.00
Klüber Lubrication India Pvt. Ltd.	Bangalore	India	89.99
Low & Bonar India Private Limited	New Delhi	India	100.00
SurTec Chemicals India Pvt. Ltd.	Bangalore	India	100.00
Traxit Engineers Private Limited	Mumbai	India	70.00
Vibracoustic India Pvt. Ltd.	Mohali	India	100.00
Vibracoustic Noida Pvt. Ltd.	Mohali	India	100.00
PT EagleBurgmann Indonesia	Cikarang Selatan	Indonesia	24.98
PT Klüber Lubrication Indonesia	Jakarta	Indonesia	100.00
Cambus Teoranta	Spiddal	Ireland	90.00
VistaMed Ltd.	Carrick-on-Shannon	Ireland	90.00
Chem-Trend Italy S.a.s. di Externa Holding S.r.l.	Milan	Italy	100.00
Corteco S.r.l. (a socio unico)	Pinerolo	Italy	100.00
EagleBurgmann Italia S.r.l.	Vimercate	Italy	75.00
Externa Holding S.r.l.	Milan	Italy	100.00
Externa Italia S.r.l.	Pinerolo	Italy	100.00
FHP di R. Freudenberg S.A.S.	Milan	Italy	100.00
Freudenberg Italia S.a.s. di Freudenberg S.r.l.	Milan	Italy	100.00
Freudenberg Performance Materials Apparel S.a.s. di Externa Holding S.r.l.	Milan	Italy	100.00
Freudenberg S.r.l.	Milan	Italy	100.00
Freudenberg Sealing Technologies S.a.s. di Externa Italia S.r.l.u.	Pinerolo	Italy	100.00
Freudenberg Tecnologie di Filtrazione S.a.s. di Externa Holding S.r.l.	Milan	Italy	100.00
Hänsel Textil Italia S.a.s. di Externa Holding S.r.l.	Rho	Italy	100.00
Klüber Lubrication Italia S.a.s. di Externa Holding S.r.l.	Milan	Italy	100.00
Mehler Texnologies S.r.l.	Settimo Milanese	Italy	100.00
Politex S.a.s. di Freudenberg Politex s.r.l.	Milan	Italy	100.00
SurTec Italia SAS di Externa Holding Srl	Milan	Italy	100.00
Chem-Trend Japan K.K.	Kobe	Japan	100.00
EagleBurgmann Japan Co., Ltd.	Tokyo	Japan	25.00
Freudenberg Spunweb Japan Company, Ltd.	Osaka	Japan	67.69
Japan VIAM Co., Ltd.	Moriyama	Japan	75.00
Japan Vilene Company Ltd.	Tokyo	Japan	75.00
Oshitari Laboratory, Inc.	Sayama	Japan	75.00
Oyama Chemical Co., Ltd.	Oyama	Japan	75.00
Pacific Giken Co., Ltd.	Yasu	Japan	75.00
SurTec MMC Japan KK	Tokyo	Japan	56.00
Vibracoustic Japan KK	Yokohama	Japan	100.00
Vilene Create Co., Ltd.	Tokyo	Japan	75.00
VIS Co., Ltd.	Koga	Japan	75.00
Freudenberg Vileda Jordan Ltd.	Amman	Jordan	51.00
Capol Inc.	Saint-Hubert	Canada	100.00
EagleBurgmann Canada Inc.	Milton	Canada	75.00
Freudenberg Filtration Technologies Inc.	London	Canada	100.00
Freudenberg Household Products Inc.	Laval	Canada	100.00
Freudenberg Oil & Gas Canada Inc.	Nisku	Canada	100.00
Freudenberg-NOK Inc.	Tillsonburg	Canada	75.00
EagleBurgmann Colombia, S.A.S.	Bogotá	Colombia	75.00

## Consolidated Financial Statement – Shareholdings

Company	Location	Country/Region	Share of capital [%]
Low & Bonar Latvia s.i.a.	Riga	Latvia	100.00
Bonar International Sarl	Luxembourg	Luxembourg	100.00
EagleBurgmann (Malaysia) SDN. BHD.	Shah Alam	Malaysia	25.00
Freudenberg Household Products (Malaysia) Sdn Bhd	Petaling Jaya	Malaysia	100.00
Freudenberg Oil & Gas Technologies Sdn. Bhd.	Kuala Lumpur	Malaysia	100.00
Freudenberg-NOK St Malaysia Sdn. Bhd.	Petaling Jaya	Malaysia	75.00
Klüber Lubrication (Malaysia) Sdn. Bhd.	Shah Alam	Malaysia	100.00
United Lubricants Industries (S.E.A) Sdn. Bhd.	Cheras	Malaysia	100.00
Chem-Trend Comercial, S.A. de C.V.	Querétaro	Mexico	100.00
Dichtomatik de Mexico S.A. de C.V.	Querétaro	Mexico	75.00
EagleBurgmann Mexico S.A. de C.V.	Querétaro	Mexico	75.00
Freudenberg Filtration Technologies, S.A. de C.V.	Silao	Mexico	100.00
Freudenberg Productos del Hogar, S.A. de C.V.	Buenavista	Mexico	100.00
Freudenberg-NOK Sealing Technologies de Mexico, S.A. de C.V.	Cuautla	Mexico	75.00
Klüber Lubricacion Mexicana S.A. de C.V.	Querétaro	Mexico	100.00
VIAM Manufacturing Mexico S.A. de C.V.	Aguascalientes	Mexico	75.00
Vibracoustic de México, S.A. de C.V.	Lerma	Mexico	100.00
Vibracoustic Toluca, S.A. de C.V.	Toluca	Mexico	100.00
Vitechmex Nonwovens S.A. de C.V.	Aguascalientes	Mexico	75.00
EagleBurgmann Netherlands B.V.	Veenendaal	Netherlands	75.00
Freudenberg Household Products B.V.	Arnhem	Netherlands	100.00
Freudenberg Industrial Services B.V.	Zwolle	Netherlands	100.00
Low & Bonar B.V.	Arnhem	Netherlands	100.00
Low & Bonar Technical Textiles Holdings B.V.	Arnhem	Netherlands	100.00
SurTec Benelux B.V.	Reuver	Netherlands	100.00
EagleBurgmann Norway AS	Gardermoen	Norway	75.00
Freudenberg Home and Cleaning Solutions AS	Gardermoen	Norway	100.00
Freudenberg Oil & Gas Technologies AS	Sandnes	Norway	100.00
Deurowood Holding GmbH	Hard	Austria	100.00
DEUROWOOD Produktions GmbH	Hard	Austria	100.00
EagleBurgmann Austria GmbH	Judenburg	Austria	75.00
Freudenberg Austria GmbH	Kufstein	Austria	100.00
Freudenberg Sealing Technologies Austria GmbH & Co. KG	Kufstein	Austria	100.00
Klüber Lubrication Austria Ges.m.b.H.	Salzburg	Austria	100.00
SurTec Produkte und Systeme für die Oberflächenbehandlung GesmbH	Salzburg	Austria	100.00
EagleBurgmann Philippines, Inc.	Dasmarias, Cavite	Philippines	25.00
Chem-Trend Polska Sp. z o.o.	Kobylnica	Poland	100.00
Chem-Trend Polska sp. z o.o. spółka komandytowa	Kobylnica	Poland	100.00
EagleBurgmann Poland sp. z o.o.	Warsaw	Poland	75.00
FHP Vileda Sp. z o.o.	Warsaw	Poland	100.00
FIM Polska Sp. z o.o.	Środa Śląska	Poland	100.00
Freudenberg Sealing Technologies Sp. z o.o.	Śnieciska	Poland	100.00
Freudenberg Vilene Sp. z o.o.	Lodz	Poland	100.00
Klüber Lubrication Polska Sp. z o.o.	Kobylnica	Poland	100.00
Mehler Texnologies Sp. z.o.o.	Sosnowiec	Poland	100.00
SurTec Polska Sp. z o.o.	Kobylnica	Poland	100.00
Vibracoustic Polska Sp. z o.o.	Środa Śląska	Poland	100.00
ST Ibérica Sociedade Unipessoal, LDA	Albergaria-a-Velha	Portugal	100.00

Company	Location	Country/Region	Share of capital [%]
Chem-Trend Romania s.r.l.	Sibiu	Romania	100.00
Freudenberg Management Imobiliar SRL	Braşov	Romania	100.00
Freudenberg Performance Materials Apparel srl	Bukarest	Romania	100.00
Freudenberg Performance Materials SRL	Braşov	Romania	100.00
Klueber Lubrication Romania s.r.l.	Sibiu	Romania	100.00
Mehler Texnologies Romania S.R.L.	Stefanestii de Jos	Romania	100.00
SurTec Romania s.r.l.	Sibiu	Romania	100.00
Vibracoustic Romania SRL	Dej	Romania	100.00
EagleBurgmann OOO	Moscow	Russian Federation	75.00
Freudenberg Filtration Technologies OOO	Nizhniy Novgorod	Russian Federation	100.00
Freudenberg Household Products Eastern Europe OOO	St. Petersburg	Russian Federation	70.00
Freudenberg Politex OOO	Zavolzhye	Russian Federation	100.00
Freudenberg Vileda Eastern Europe OOO	Moscow	Russian Federation	100.00
Klüber Lubrication OOO	Moscow	Russian Federation	100.00
Mehler Texnologies OOO	Moscow	Russian Federation	100.00
OOO Freudenberg Sealing Technologies	Moscow	Russian Federation	100.00
OOO SurTec	Moscow	Russian Federation	100.00
AlMOzn National Co. For Home Appliances Limited	Jeddah	Saudi Arabia	75.00
EagleBurgmann Saudi Arabia Ltd.	Al-Khobar	Saudi Arabia	51.00
EagleBurgmann Sweden AB	Norrköping	Sweden	75.00
Freudenberg Home and Cleaning Solutions AB	Norrköping	Sweden	100.00
Freudenberg Sealing Technologies AB	Stockholm	Sweden	100.00
Vibracoustic China Holding AB	Forsheda	Sweden	100.00
Vibracoustic Forsheda AB	Forsheda	Sweden	100.00
Vibracoustic Sweden Holding AB	Forsheda	Sweden	100.00
Vibracoustic Wuxi Holding AB	Forsheda	Sweden	100.00
EagleBurgmann (Switzerland) AG	Höri	Switzerland	75.00
Freudenberg Sealing Technologies AG	Zurich	Switzerland	100.00
Klüber Lubrication AG (Schweiz)	Zurich	Switzerland	100.00
SurTec Cacak d.o.o.	Čačak	Serbia	100.00
Chem-Trend Singapore Pte. Ltd.	Singapore	Singapore	100.00
EagleBurgmann KE Pte. Ltd.	Singapore	Singapore	75.00
EagleBurgmann Singapore Pte. Ltd.	Singapore	Singapore	25.00
EBI Asia Pacific Pte. Ltd.	Singapore	Singapore	25.00
EBI Asia Pte. Ltd.	Singapore	Singapore	50.00
Freudenberg Oil & Gas Pte. Ltd.	Singapore	Singapore	100.00
Klüber Lubrication South East Asia Pte. Ltd.	Singapore	Singapore	100.00
Freudenberg Filtration Technologies Slovensko, s.r.o.	Potvorice	Slovakia	100.00
Freudenberg Immobilienmanagement Slovakia, s.r.o	Potvorice	Slovakia	100.00
Klüber Lubrication Slovensko s.r.o.	Vráble	Slovakia	100.00
Low & Bonar Slovakia a.s.	Ivanka pri Nitre	Slovakia	100.00
SurTec SK s.r.o.	Vráble	Slovakia	100.00
FILC tovarna filca d.o.o.	Škofja Loka	Slovenia	100.00
Freudenberg Gospodinjski Proizvodi d.o.o.	Limbuš	Slovenia	100.00
NELINTA podjetništvo in poslovno svetovanje d.o.o.	Mengeš	Slovenia	100.00
SurTec Adria d.o.o.	Ljubljana	Slovenia	100.00
EagleBurgmann Ibérica S.A.	Villaviciosa de Odón	Spain	75.00
Freudenberg Espana S.A.	Parets del Vallès	Spain	100.00

## Consolidated Financial Statement – Shareholdings

Company	Location	Country/Region	Share of capital [%]
Freudenberg Espana S.A., Telas sin Tejer, S.en C.	Parets del Vallès	Spain	100.00
Freudenberg Home and Cleaning Solutions Iberica, S.L.U.	Parets del Vallès	Spain	100.00
Freudenberg Sealing Technologies, S.L.U.	Parets del Vallès	Spain	100.00
Klüber Lubrication GmbH Ibérica S.en C.	Parets del Vallès	Spain	100.00
Vibracoustic Cascante S.A.U.	Cascante	Spain	100.00
Vibracoustic Spain Holding S.L.U.	Martorell	Spain	100.00
Vibracoustic Spain S.A.U.	Martorell	Spain	100.00
Freudenberg Apparel Lanka (Pvt) Ltd.	Colombo	Sri Lanka	87.50
EagleBurgmann Seals South Africa (Pty) Ltd.	Modderfontein/ Johannesburg	South Africa	55.50
Freudenberg Filtration Technologies (Pty) Ltd.	Cape Town	South Africa	100.00
Freudenberg Nonwovens (Pty.) Ltd.	Cape Town	South Africa	100.00
Klüber Lubrication (Pty.) Ltd.	Alrode Alberton	South Africa	100.00
SurTec South Africa Pty. Ltd.	Alrode Alberton	South Africa	100.00
Vibracoustic-Ikhwezi (Pty) Ltd.	East London	South Africa	70.00
Chem-Trend Korea Ltd.	Anseong-si	South Korea	100.00
EagleBurgmann Korea Co., Ltd.	Osan	South Korea	25.00
Freudenberg Home and Cleaning Solutions Korea Ltd.	Seoul	South Korea	100.00
Freudenberg Vilene Filtration Technologies Korea Co., Ltd.	Pyeongtaek-si	South Korea	87.50
Korea Vilene Co., Ltd.	Pyeongtaek-si	South Korea	87.50
EagleBurgmann Taiwan Co., Ltd.	Kaohsiung	Taiwan	25.00
Freudenberg & Vilene Nonwovens (Taiwan) Co. Ltd.	Taoyuan	Taiwan	87.50
Freudenberg Far Eastern Spunweb Comp. Ltd.	Taoyuan	Taiwan	67.69
Chem-Trend Trading (Thailand) Co. Ltd.	Bangkok	Thailand	100.00
EagleBurgmann (Thailand) Co., Ltd.	Rayong	Thailand	25.00
Freudenberg & Vilene Filter (Thailand) Co. Ltd.	Chonburi	Thailand	87.50
Jump Distributors (Thailand) Co Ltd	Nonthaburi	Thailand	100.00
Klüber Lubrication (Thailand) Co., Ltd.	Bangkok	Thailand	100.00
VIAM Manufacturing (Thailand) Co., Ltd.	Prachin Buri	Thailand	75.00
Vibracoustic (Thailand) Ltd.	Sriracha	Thailand	100.00
Accu-Tech s.r.o.	Chrastava	Czech Republic	100.00
Chem-Trend CZ s.r.o.	Prague	Czech Republic	100.00
EagleBurgmann Czech s.r.o.	Prague	Czech Republic	75.00
Freudenberg Home and Cleaning Solutions s.r.o.	Prague	Czech Republic	100.00
Freudenberg Sealing Technologies s.r.o.	Opatovice nad Labem	Czech Republic	100.00
Hanns Glass CZ s.r.o.	Cheb	Czech Republic	75.00
Klüber Lubrication CZ, s.r.o.	Prague	Czech Republic	100.00
Mehler Texnologies s.r.o.	Lomnice nad Popelkou	Czech Republic	100.00
SurTec CR s.r.o.	Prague	Czech Republic	100.00
TPE správní s.r.o.	Melnik	Czech Republic	100.00
Vibracoustic CZ s.r.o.	Melnik	Czech Republic	100.00
Beltan Vibracoustic Titresim Elemanlari Sanayi ve Ticaret A.S.	Bursa	Turkey	100.00
Eagle Burgmann Endüstriyel Sızdırmazlık Sanayi ve Ticaret Limited Şirketi	Istanbul	Turkey	75.00
Freudenberg Household Products Evici Kullanım Araçları Sanayi ve Ticaret A.S.	Istanbul	Turkey	100.00
Freudenberg Sealing Technologies Sanayi ve Ticaret A.S.	Bursa	Turkey	100.00
Freudenberg Vilene Tela Sanayi ve Ticaret A.S.	Istanbul	Turkey	100.00

Company	Location	Country/Region	Share of capital [%]
Klüber Lubrication Yağlama Ürünleri Sanayi ve Ticaret A.S.	Istanbul	Turkey	100.00
Mehler Technologies Teknik Tekstil Ticaret Limited Sirketi	Istanbul	Turkey	100.00
Vibracoustic Çerkezköy Oto Parçaları Dış Ticaret A.S.	Çerkezköy	Turkey	100.00
Vibracoustic Çerkezköy Otomotiv Sanayi ve Ticaret A.S.	Çerkezköy	Turkey	100.00
Vibracoustic CV Air Springs Otomotiv Sanayi ve Ticaret A.S.	Gemlik	Turkey	65.07
Vibracoustic CVAS Turkey Trading Otomotiv A.S.	Bursa	Turkey	65.07
EagleBurgmann Hungaria Kft.	Budapest	Hungary	75.00
Freudenberg Háztartási Cikkek Kereskedelmi BT	Budapest	Hungary	100.00
Freudenberg Sealing Technologies Kft.	Kecskemét	Hungary	100.00
Klüber Lubrication Hungaria Kft.	Budapest	Hungary	100.00
Vibracoustic CV Air Springs Magyarország Kft.	Nyíregyháza	Hungary	65.07
Capol LLC	Deerfield	USA	100.00
Chem-Trend Limited Partnership	Howell	USA	100.00
CTM Enterprises, Inc.	Las Vegas	USA	100.00
EagleBurgmann Industries Inc.	Houston	USA	75.00
EagleBurgmann Industries LP	Houston	USA	75.00
Filc USA LLC	Durham	USA	100.00
Filters Now, LLC	Wilmington	USA	100.00
Freudenberg Battery Power Systems, LLC	Wilmington	USA	50.10
Freudenberg Filtration Technologies LP	Hopkinsville	USA	100.00
Freudenberg Fuel Cell e-Power Systems Inc.	Wilmington	USA	100.00
Freudenberg Household Products Inc.	Aurora	USA	100.00
Freudenberg Household Products LP	Aurora	USA	100.00
Freudenberg Medical, LLC	Beverly	USA	100.00
Freudenberg North America Limited Partnership	Plymouth	USA	100.00
Freudenberg Oil & Gas, LLC	Houston	USA	100.00
Freudenberg Performance Materials LP	Durham	USA	100.00
Freudenberg Real Estate LP	Plymouth	USA	100.00
Freudenberg Texbond L.P.	Macon	USA	100.00
Freudenberg-NOK General Partnership	Plymouth	USA	75.00
Freudenberg-NOK Holdings, Inc.	Wilmington	USA	75.00
Intpacor Inc.	Plymouth	USA	100.00
Klüber Lubrication NA LP	Londonderry	USA	100.00
Low & Bonar Inc.	Wilmington	USA	100.00
Mehler Technologies Inc.	Virginia Beach	USA	100.00
Pellon Corporation	Plymouth	USA	100.00
PPA Holdings, Inc.	Indianapolis	USA	100.00
PPA Industries, Inc.	Indianapolis	USA	100.00
Protect Plus Holdings Corp.	Indianapolis	USA	100.00
SurTec, Inc.	Brunswick	USA	100.00
Tobul Accumulator Incorporated	Houston	USA	100.00
Traxit North America, LLC	Lyon	USA	100.00
Upper Bristol Ramp, LLC	Wilmington	USA	75.00
VIAM Holding, Inc.	Manchester	USA	75.00
VIAM Manufacturing, Inc.	Manchester	USA	75.00
Vibracoustic CV Air Springs USA, Inc.	Wilmington	USA	65.07
Vibracoustic North America Holdings, Inc.	Plymouth	USA	100.00
Vibracoustic North America LP	Plymouth	USA	100.00

## Consolidated Financial Statement – Shareholdings

Company	Location	Country/Region	Share of capital [%]
Vibracoustic USA, Inc.	South Haven	USA	100.00
VICAM Inc.	Manchester	USA	75.00
VITECH Manufacturing L.P.	Hopkinsville	USA	75.00
VITECH Manufacturing, Inc.	Hopkinsville	USA	75.00
Walflor Industries Inc.	Wilmington	USA	100.00
XALT Energy, LLC	Midland	USA	50.10
XALT Energy MI, LLC	Midland	USA	50.10
EagleBurgmann Gulf Mechanical LLC	Abu Dhabi	UAE	29.40
EagleBurgmann Middle East FZE	Dubai	UAE	60.00
Freudenberg Oil and Gas FZE	Dubai	UAE	100.00
Mehler Texnologies Middle East Trading L.L.C.	Dubai	UAE	100.00
Chem-Trend Vietnam Company Limited	Ho Chi Minh City	Vietnam	100.00
EagleBurgmann Vietnam Company Limited	Ho Chi Minh City	Vietnam	25.00
Freudenberg & Vilene International Vietnam Co. Ltd.	Ho Chi Minh City	Vietnam	87.50
SurTec Viet Nam Co., Ltd.	Ho Chi Minh City	Vietnam	100.00

### II. INVESTMENTS IN JOINT VENTURES (CONSOLIDATED BY EQUITY METHOD)

Germany			
CPW GmbH	Wuppertal	Germany	50.00
Other countries			
Corfina s.r.l.	Pinerolo	Italy	50.00
NOK-Freudenberg Singapore Pte. Ltd. <sup>2</sup>	Singapore	Singapore	50.00
TTKKE Holdings, LLC	Dover	USA	30.00

### III. INVESTMENTS IN ASSOCIATED COMPANIES (CONSOLIDATED BY EQUITY METHOD)

Germany			
Other countries			
Yihua Bonar Yarns & Fabric Co. Ltd.	Yangzhou	China	60.00
Hikotomi Industrial Co., Ltd.	Hikone	Japan	24.98
NOK Corporation	Tokyo	Japan	25.10
NOK Klüber Co., Ltd.	Tokyo	Japan	49.00
Shinwa Products Co., Ltd.	Tsuzuranuki	Japan	34.09
Klüber Lubrication Korea Ltd.	Seoul	South Korea	48.00
Dawson Manufacturing Company	Benton Harbor	USA	45.00
SurTec Middle East (L.L.C.)	Sharjah	UAE	35.00
EagleBurgmann Venezuela, C.A.	Caracas	Venezuela	41.25

<sup>1</sup> Application of Sec. 264 (3), HGB (Handelsgesetzbuch, "German Commercial Code") and Sec. 264b, HGB

<sup>2</sup> Consolidated financial statements including  
 Changchun NOK-Freudenberg Oilseal Co., Ltd., Changchun, China  
 Corteco China Co. Ltd., Shanghai, China  
 Freudenberg-NOK Pvt. Ltd., New Delhi, India  
 NOK-Freudenberg Group Sales (China) Co., Ltd., Shanghai, China  
 NOK-Freudenberg Group Trading (China) Co., Ltd., Shanghai, China  
 NOK-Freudenberg Hong Kong Ltd., Hong Kong, Hong Kong  
 PT NOK Freudenberg Sealing Technologies, Kota Batam, Indonesia  
 Taicang NOK-Freudenberg Sealing Products Co., Ltd., Taicang, China  
 Wuxi NOK-Freudenberg Oilseal Co., Ltd., Wuxi, China

# INDEPENDENT AUDITOR'S REPORT

To Freudenberg SE, Weinheim

## Audit Opinions

We have audited the consolidated financial statements of Freudenberg SE, Weinheim, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2021, and the consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of cash flows and consolidated statement of changes in equity for the financial year from 1 January to 31 December 2021, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Freudenberg SE, which is combined with the Company's management report, for the financial year from 1 January to 31 December 2021.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2021, and of its financial performance for the financial year from 1 January to 31 December 2021, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

## Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

## Other Information

The executive directors are responsible for the other information.

The other information comprises the annual report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report and our auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information mentioned above and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report disclosures audited in terms of content or with our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

### **Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report**

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

### **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Frankfurt am Main, 18 March 2022

PricewaterhouseCoopers GmbH

Wirtschaftsprüfungsgesellschaft

Dr. Peter Bartels

Michael Conrad

Wirtschaftsprüfer

Wirtschaftsprüfer

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## PHOTOS:

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anjali04 – stock.adobe.com (p. 28)  
Blue Planet Studio – stock.adobe.com (p. 24)  
dusanpetkovic1 – stock.adobe.com (p. 38)  
everythingpossible – stock.adobe.com (p. 22)  
fizkes – stock.adobe.com (p. 16, 57)  
Andre Forner//people for brands (p. 41, 43, 45, 49)  
Freudenberg Group (p. 18, 27 top)  
Freudenberg Performance Materials (p. 35, 37)  
elmar gubisch – stock.adobe.com (p. 32)  
Inferno Solar (p. 34)  
Martin Joppen (p. 2, 3, 6, 8)  
Michaela Kuhn / Licht Form Arte (p. 23)  
littlewolf1989 – stock.adobe.com (p. 20)  
Marco Moog Photography (p. 2: 1st row, 3rd from left)  
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Ngampol – stock.adobe.com (p. 59)  
Edward L. Ochal, TIF Photographic LLC (p. 79)

Sebastian Ospina (p. 82)  
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Andrey Popov – stock.adobe.com (p. 46, 47)  
Portra/E+ via Getty Images (p. 15)  
PRASANNAPIX – stock.adobe.com (p. 19)  
Private (p. 2: 1st row, 4th from left)  
Raja (p. 53)  
Danielle Rodgers (p. 103)  
Chikako Sakon (p. 95)  
Gerald Schilling (p. 21, 84)  
Marco Schilling (p. 68)  
Christian Schwier – stock.adobe.com (p. 54)  
Ertugrul Selvi (p. 86)  
sidorovstock – stock.adobe.com (p. 14)  
Song\_about\_summer – stock.adobe.com (p. 56)  
Stanley Tang (p. 92)  
Johannes Vogt (p. 27 bottom, 88, 97)  
Volkswagen (p. 33)

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To improve the readability of this Annual Report, the language forms male, female, diverse (m/f/d) are not used simultaneously. All references to persons apply equally to all genders.

Registered trademarks are omitted in the Annual Report, also to improve readability.

Please note that all photos were either taken before the coronavirus pandemic or, if taken during the pandemic, all persons complied with the valid hygiene guidelines.

