



sustaining life for generations

**Sustainability at Merck KGaA, Darmstadt,
Germany**

Investor Relations, Merck KGaA, Darmstadt,
Germany, June 2022
ODDO BHF Sustainability Forum



Disclaimer



Publication of Merck KGaA, Darmstadt, Germany. In the United States and Canada the group of companies affiliated with Merck KGaA, Darmstadt, Germany operates under individual business names (EMD Serono, Millipore Sigma, EMD Performance Materials). To reflect such fact and to avoid any misconceptions of the reader of the publication certain logos, terms and business descriptions of the publication have been substituted or additional descriptions have been added. This version of the publication, therefore, slightly deviates from the otherwise identical version of the publication provided outside the United States and Canada.

Cautionary Note Regarding Forward-Looking Statements and financial indicators

This communication may include "forward-looking statements." Statements that include words such as "anticipate," "expect," "should," "would," "intend," "plan," "project," "seek," "believe," "will," and other words of similar meaning in connection with future events or future operating or financial performance are often used to identify forward-looking statements. All statements in this communication, other than those relating to historical information or current conditions, are forward-looking statements. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements in the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond control of Merck KGaA, Darmstadt, Germany, which could cause actual results to differ materially from such statements.

Risks and uncertainties include, but are not limited to: the risks of more restrictive regulatory requirements regarding drug pricing, reimbursement and approval; the risk of stricter regulations for the manufacture, testing and marketing of products; the risk of destabilization of political systems and the establishment of trade barriers; the risk of a changing marketing environment for multiple sclerosis products in the European Union; the risk of greater competitive pressure due to biosimilars; the risks of research and development; the risks of discontinuing development projects and regulatory approval of developed medicines; the risk of a temporary ban on products/production facilities or of non-registration of products due to non-compliance with quality standards; the risk of an import ban on products to the United States due to an FDA warning letter; the risks of dependency on suppliers; risks due to product-related crime and espionage; risks in relation to the use of financial instruments; liquidity risks; counterparty risks; market risks; risks of impairment on balance sheet items; risks from pension obligations; risks from product-related and patent law disputes; risks from antitrust law proceedings; risks in human resources; risks from e-crime and cyber attacks; risks due to failure of business-critical information technology applications or to failure of data center capacity; environmental and safety risks; unanticipated contract or regulatory issues; a potential downgrade in the rating of the indebtedness of Merck KGaA, Darmstadt, Germany; downward pressure on the common stock price of Merck KGaA, Darmstadt, Germany and its impact on goodwill impairment evaluations as well as the impact of future regulatory or legislative actions.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included elsewhere, including the Report on Risks and Opportunities Section of the most recent annual report and quarterly report of Merck KGaA, Darmstadt, Germany. Any forward-looking statements made in this communication are qualified in their entirety by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us or our business or operations. Except to the extent required by applicable law, we undertake no obligation to update publicly or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

This presentation contains certain financial indicators such as EBITDA pre adjustments, net financial debt and earnings per share pre adjustments, which are not defined by International Financial Reporting Standards (IFRS). These financial indicators should not be taken into account in order to assess the performance of Merck KGaA, Darmstadt, Germany in isolation or used as an alternative to the financial indicators presented in the consolidated financial statements and determined in accordance with IFRS. The figures presented in this statement have been rounded. This may lead to individual values not adding up to the totals presented.



“Together with our global team of nearly 60,000 employees, Group will continue raising the bar”



„The three core sustainability goals of Company reflect our accountability to make an impact: First, we will achieve climate-neutral operations by 2040. Second, we will integrate sustainability into all value chains by 2030. And third, we will achieve human progress for more than one billion people through sustainable science and technology in 2030.

We are on track to meet these goals.

Furthermore, we will continue to support the United Nations Global Compact. Its principles of human rights, labor standards, environmental protection, and anti-corruption are part of our social license to operate.”

Belén Garijo, Chair of the Executive Board and CEO



strategy & AMibition

Sustainability strategy
Sustainability goals
Focus areas



Scientific exploration and responsible entrepreneurship: Caring, pioneering and outperforming

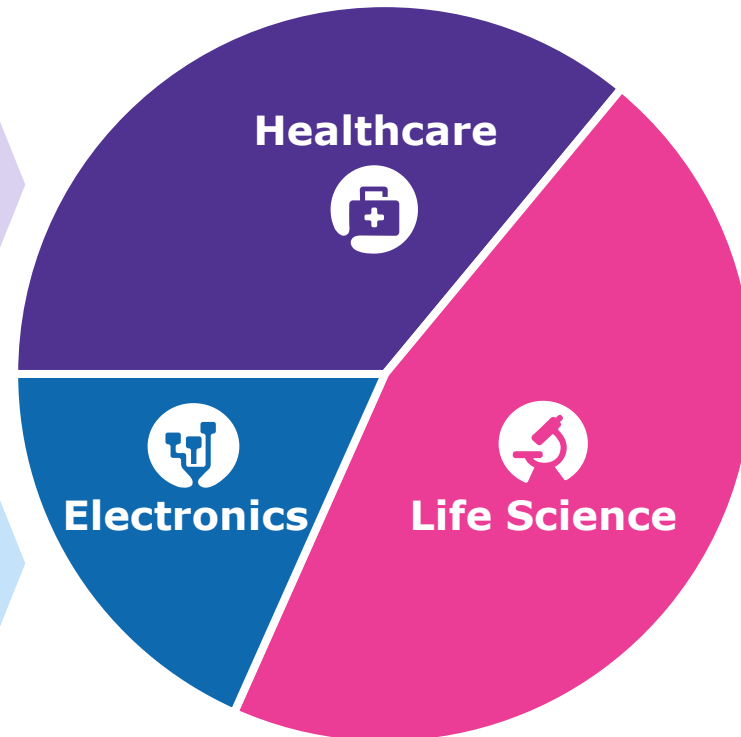
MERCK

Healthcare

- In line with our motto "As One for Patients", we help create, improve and prolong lives.

Electronics

- We are the company behind the companies advancing digital living.



Sales Split 2021

Our ambition is to become the global 21st century **science & technology pioneer** by

- mobilizing for efficient growth
- leveraging innovation in the "Big 3"¹
- driving culture & leadership
- focusing on sustainability

Life Science

- We solve the toughest problems in life science by collaborating with the global scientific community.



Sustainability ambition

Accelerating positive impact on environment and society



Boundaries of human progress today will become reality tomorrow: Our sustainability goals

Positive impact through our products

- Ensure global access to medicines
- Enable cutting edge technologies
- Support greener production

Goal
01

Dedicated to human progress

*In 2030, we will advance human progress for
>1 bn people through sustainable science & technology*

- Sustainable innovations and technology for our customers
- Impact of our technologies and products on health and well-being



Stabilize production and minimize risks

- Actively manage ESG risks
- Training on policies & standards
- Manage sustainability in supply chain

Goal
02

Creating sustainable value chains

*By 2030, we will integrate sustainability into
all our value chains*

- Sustainability culture & values
- Sustainable and transparent supply chain
- Securing our social license to operate in all regions



Minimize negative impact through our operations

- Achieve climate neutrality
- Manage water efficiency
- Reduce waste

Goal
03

Reducing our ecological footprint

*By 2040, we will achieve **climate neutrality**
and **reduce our resource consumption***

- Climate change & emissions
- Water & resource intensity



Group sustainability strategy: Deep dive into strategic focus areas

Sustainability innovation and technology for our customers

- Sustainability as integral part of **product design**
- Enable **customers** to reduce sustainability footprint
- SBV as a tool to assess net sustainability **impact**

Health and wellbeing impact of our technologies and products

- Health (Healthcare, Life Science) & wellbeing (Life Science, Electronics)-related impact of:
 - Company's **products**
 - Company's **activities**

Climate change and emissions

- **Greenhouse gas emissions** Scope 1, 2, 3
- **Renewable energy**
- **Energy efficiency** in operations



Sustainability culture & values

- **Diversity & inclusion** activities
- Sustainability **mindset**: Communication, trainings, incentive schemes
- **Employee engagement**

Sustainable and transparent supply chain

- Supply chain management activities:
 - Sustainability **assessments**
 - Supplier **data management**

Secured social license to operate across regions

- **Safe & ethical** research, **ethical & compliant** business conduct
- **Plant & process** safety, **patient & product** safety
- **Stakeholder** engagement & communication

Water and resource intensity

- **Waste & water** management and **recycling**
- **Circular** activities

Enabling a sustainable future for an increasing number of people: Where we can make the biggest difference



Good health and well-being

With our products, we create a positive impact on the health and quality of life of people around the world.



Decent work and economic growth

We see it as our responsibility to respect human rights both within our company and along our supply chain. That is why we are dedicated to upholding appropriate and fair labor and social standards.



Industry, innovation and infrastructure

We use our expertise in science and technology to make our products, processes and infrastructure sustainable.

Responsible consumption and production

We use resources efficiently and reduce waste and emissions. We pay attention to this throughout the entire life cycle of our products.

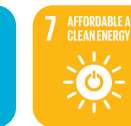


Partnerships for the goals

We need strong partners in order to drive sustainable development within our company and beyond and to better meet societal challenges. We therefore collaborate with a wide array of organizations, companies, federations, and networks.



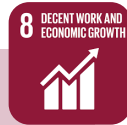
Additional contribution to:



Accelerated science & tech leadership driving growth and sustainability

Economic growth

can drive progress, create decent jobs and improve living standards



19.7 bn Net sales¹

6.1 bn EBITDA pre¹



59,000 Employees¹

36% Women in Leadership¹



142 Nationalities

66 Countries

Good health & wellbeing

at all ages and regions is essential to build prosperous societies



~165 Mio patients treated with our HC products¹



1.5 bn tablets donated against Schistosomiasis since 2007¹



2.4 bn R&D investment in HC, LS and EL¹



50+ Covid-19 vaccine projects supported

Responsible consumption & production

decoupling economic growth from environmental degradation



-50% scope 1+2 emission until 2030, **climate neutrality 2040**



-10% water consumption in water-scarce areas until 2025

2021: All environmental targets on track



-5% waste score until 2025



80% purchased electricity from renewable sources until 2030





Impact on people

Goals
Targets
Initiatives



Goal 1: Dedicated to Human Progress

Sustainable innovations and technology for our customers

We believe that we can harness science and technology to help tackle many global challenges.



Impact of our technologies and products on health and well-being

At least half of the world's population still does not have adequate access to health. We strive to increase quality of life, healthy living and well-being.

Indicators:



- People treated with our Healthcare products¹

2020: **182.5** million people

Outlook 2022:

- People benefitting from our sustainable technology
- Percentage of newly published patent families with positive sustainability impact

Initiatives:



Novel Modalities:
mRNA

Access to Medicine

Expand clinical trial
excellence

Design for
Sustainability

Green Chemistry
awareness
campaigns

Portfolio
Sustainability
Assessments

Fighting malaria &
schistosomiasis



Access to Medicine: Established and Emerging Markets

Fair pricing of medicines

- **Pricing schemes** to serve low-income patients
- Affordable **second brands** and branded generics
- Patient Access Programs incl. **financial assistance and donations**
- Participate in **government tenders** for public hospitals serving low-income patients
- **Education and prevention** programs for patients and health systems
- **Collaboration** with payers like health insurances
- Various product- and **market specific reimbursement** and contracting models

Anti-microbial resistance (AMR)

- Conducting **collaborative, global efforts** with academia and governments to create conditions which enable sustainable innovation and investment
- Original **member of the AMR Industry Alliance**, one of the largest private sector coalitions working to fight the global AMR crisis
- Part of the group of more than 20 biopharmaceutical companies that launched the **AMR Action Fund** in 2020, a ground-breaking partnership that aims to **bring 2-4 new antibiotics to patients by 2030**
- The Fund will provide **more than US\$1 billion** to support clinical research of innovative new antibiotics that are addressing the most resistant bacteria and life-threatening infections

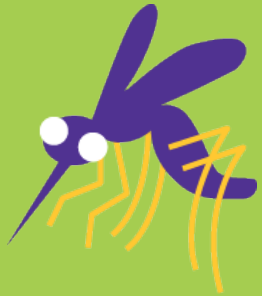
access to
medicine
index

**Rank 8 in 2021:
Strong in R&D and IP**

- 5th in R&D: Good Performance through the value of our innovative pipeline to which all our three business sectors contributed.
- Leader in IP: We share our proprietary library – e.g. for strategic collaborations to fight Covid-19 or for drug discovery to advance research in infectious diseases and publicly pledge not to enforce patents.
- Our multiple mechanisms ensure supply of medicines globally. We successfully donate in response to required needs and we perform high with our initiatives to strengthen capacity and systems in low- and middle-income countries.



Preventing and treating infectious diseases: Our fight against schistosomiasis and malaria



Fighting the most dangerous animal in the world: the mosquito

- We help to deliver sustainable health solutions against **malaria**, causing 200m cases and >400,000 deaths per year
- **R&D activities** for new **anti-malarial treatments**, incl. clinical development on an innovative drug (M5717) for prevention and treatment of the disease
- We help preventing the spread of malaria by demonstrating the efficacy of our **insect repellent IR3535®** - can be used for all age groups, excellent toxicological and eco-toxicological profile
- Supported by **education campaigns** on mosquito protection



Prevention meets medication:
Our goal is the elimination of schistosomiasis

- Almost 240 million infections and 200,000 deaths every year from the long-term effects of **schistosomiasis**
- Integrated strategy focusses on **treatment, sanitation and hygiene** (WASH), health education, R&D, as well as advocacy and partnerships
- **Donated over 1.5 billion tablets** to WHO, treating 600,000 school-aged children
- Development of a new **pediatric formulation** of praziquantel (Phase III), innovative drugs, sensitive diagnostics and new technologies for safe water access and for transmission control



Life Science: Enabling our customers to reduce environmental impact



➤ Program to foster sustainable product development

Design for Sustainability (DfS)

- With the DfS program, **we aim to reduce environmental impacts** of devices and instruments
- Also in the use phase and helping our customers make more informed decisions and surpass their own sustainability goals
- **Enables product developers** to analyze the impact of the product on the following areas: materials, energy and emissions, water, circular economy, suppliers and manufacturing, packaging, usability, and innovation (scoring system)

➤ Products and enabling tools for sustainable science and pharma

DOZN™ 2.0

- **Evaluates the relative “greenness”** of chemicals and chemical processes against the 12 Principles of Green Chemistry
- **Web-based quantitative tool** that allows users to increase their sustainability and to minimize adverse effects on human health
- **Enables us and our customers** to assess green alternatives: More than 1.100 alternatives to conventional products available

>1,400
greener alternative products → ~30% increase in 2021

Examples

Stericup®E & Steritop®E

Our new filtration systems thread directly onto any media bottle, significantly reducing the use of plastic by **up to 48%** and packaging by **up to 69%**, and reducing biohazardous waste.

ZooMAb™

A new class of recombinant antibodies produced with **minimal animal involvement, free of biocides and preservatives** and storable at room temperature – **saving energy and waste.**

Cyrene™

Our solvent Cyrene™ is derived from **renewable waste cellulose** and therefore safer and more environmentally sound than conventional petroleum-based solvents. First-in Class USDA Certified Biorenewable Solvent Portfolio worldwide! **225 kt** of toxic DMF could be replaced by Cyrene every year.



Electronics: Safety and sustainability for our customers

➤ Going green in the semiconductor production

Green solvents

- Need for various wet chemicals in semiconductor and microchip manufacturing
- Previous chemicals for removing the photoresist were harsh, inefficient, and required large amounts to work
- New solvents use green ingredients that are less harmful to human beings, and require much less for their use: TMAH- and DMSO-free
- Dissolve the photoresist entirely rather than lifting it off the chip means the process is both quicker and more effective

Avoid solvents

- CHEMGUARD CG600: Model for high flow rate delivery of tetrakis(dimethylamido)titanium (TDMAT)
- This product complements our existing TDMAT technology with remote bulk chemical delivery to meet the ever-increasing flow rate and availability requirements of our customers with modern technology nodes
- Eliminates the need to use solvents
- The first container changes were successfully completed - much faster than expected: Time required for container changes has been significantly reduced



Avoid waste through laser marking

- Packaging is considered the main cause of waste, but plays an important role for manufacturers and retailers
- Laser marking by laser sensitive pigments provides a permanent and durable mark within the polymer without introducing additional materials into the recycling process
- Laser marking eliminates the need for non-sustainable and solvent-based inks, as well as paper and plastic labeling materials
- More so, laser marked product containers are more readily recyclable in standard materials recovery facilities



Innovations for more
sustainability



Community engagement

Our community engagement activities 2021:



Our employees were engaged in around **26%** of the projects.

1,100 employees volunteered **5,300** hours
 Our employees receive up to two days of paid leave per year to take part in volunteer activities.

➤ Supporting the communities in which our sites are located

- In designing our projects, we are guided by
 - Group Policy on Contributions to Society
 - Access to Health Charter
 - WHO guidelines for medicine donations
 - Corporate Volunteering Guideline
- In 2021, we supported 255 projects in 99 countries in the fields of "Health", "Education & culture", "Environment" and "Disaster relief"
- Volunteering initiatives as well as monetary (50%) and product donations (48%): € 43 million in 2021





Impact on Nature

Goals
Targets
Initiatives



Goal 3: Reducing our ecological footprint

Doing our part to help mitigate climate change

Climate protection and energy efficiency will pay off in the long run – for the environment and our business.



Striving to use our resources as efficiently as possible

We aim to conserve and recycle water and reduce waste.

Indicators:



- GHG emissions scope 1+2¹:
-50% by 2030
2021: **1,843 kt** (2,028 kt)
- GHG emissions Scope 3
- Purchased electricity from renewable resources
- Waste Score
Outlook 2022:
- Water Intensity Score
- Wastewater quality

Initiatives:



Renewable energy,
VPPA

Use technical
solutions to reduce
scope 1 emissions

Recycling
programs

SMASH packaging
program





Waste Water
assessment of
relevant plants

Guideline for
Capex process

Supplier
Decarbonization

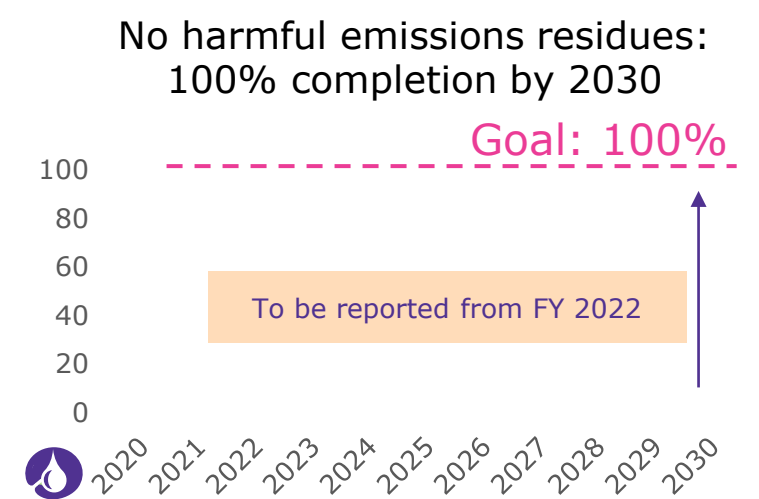
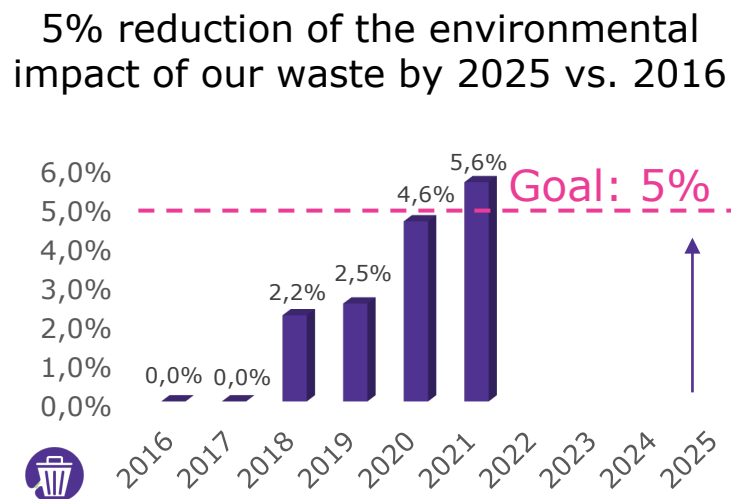
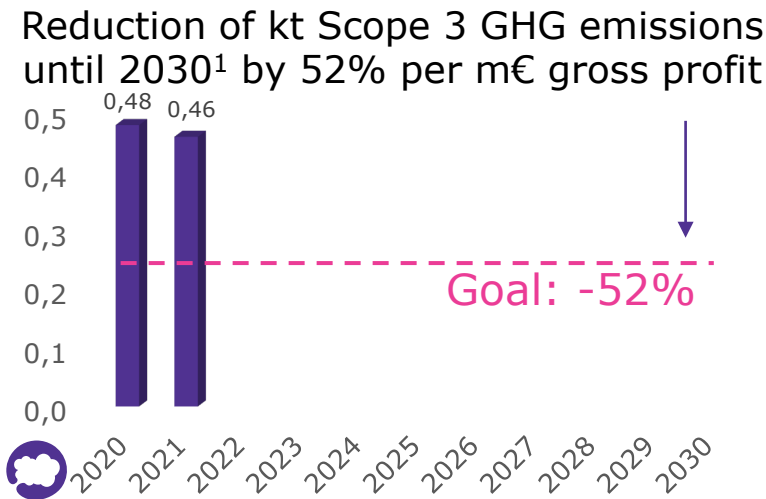
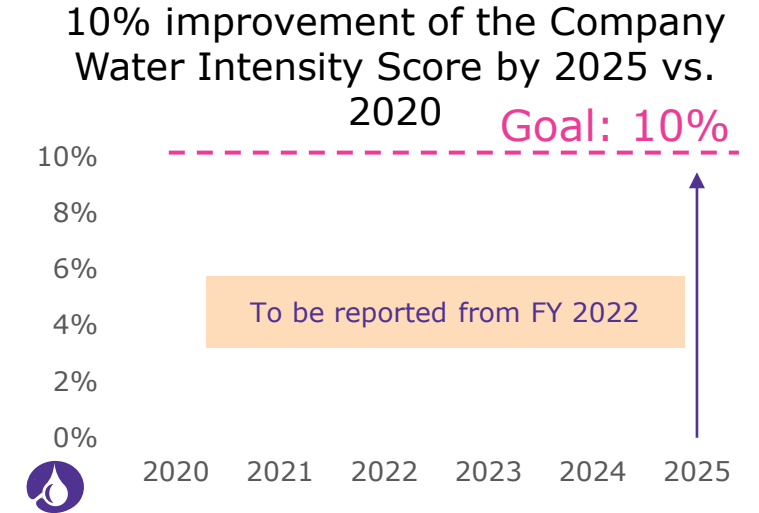
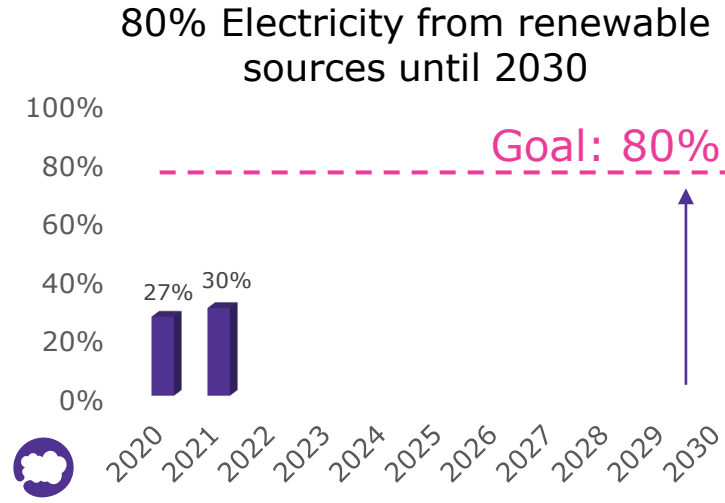
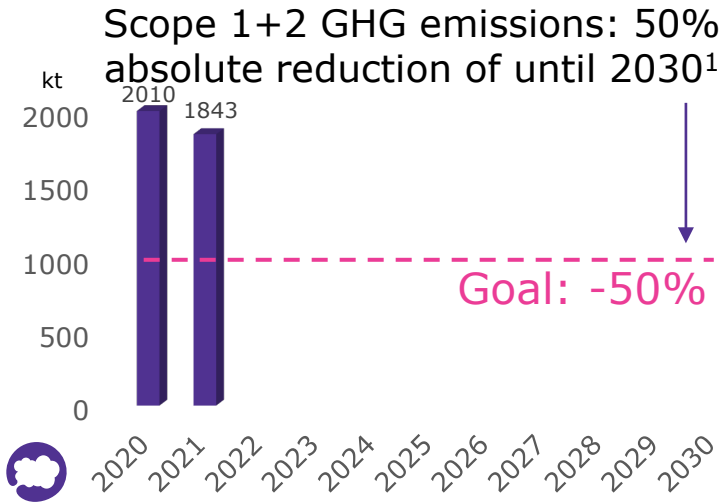


Reduce our environmental footprint: Emissions, Water and Waste

Goal 3	 Climate neutrality by 2040	 Enhance water efficiency & purity	 Reduce waste impact
Target	<ul style="list-style-type: none"> Lower scope 1+2 GHG³ emissions by -50%⁴ Source 80% of purchased electricity from renewable sources until 2030 Intensity reduction of Scope 3 per € gross profit by 52% until 2030⁴ 	<ul style="list-style-type: none"> Enhancing water efficiency: improve Group water intensity score by -10% by 2025⁴ Harmful emission residues should be lowered below a scientifically defined threshold by 2030 	<ul style="list-style-type: none"> Based on the Company Waste Score, we have set ourselves the goal of reducing the environmental impact of our waste by -5% by 2025 compared to 2016
Status	<ul style="list-style-type: none"> ➤ Scope 1+2: 1,843 kt¹ (2,028 kt²) ➤ Renewable energy: 30%¹ (27%²) ➤ Scope 3: 5,716 kt¹ (5,030 kt²); emissions/profit ratio: 0.46¹ (0.47²) ➤ Scope 1-3 targets approved as Science Based Targets  	<ul style="list-style-type: none"> ➤ 2025 target achievement will be reported from fiscal year 2022 onwards ➤ 2020 target of -10% water use in stressed areas has been overachieved: -27% 	<ul style="list-style-type: none"> ➤ Reduction of waste impact (Company Waste Score): -5,6%¹ (-4,6²)



Environmental targets



Science Based Targets initiative Group labeled as “1.5°C company” by SBTi



SBTi certification of
Scope 1-3 targets

Work on **SBTi roadmap** towards
climate targets 2030

Aiming for
climate neutrality by 2040

Scope 1+2

Absolute reduction of
Scope 1+2 GHG¹ emissions by
50% until 2030 (vs. 2020)

Scope 3

Intensity reduction of kg Scope 3
GHG¹ emissions per € gross profit
by 52% until 2030 (vs. 2020)



Renewable energy

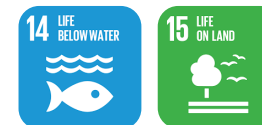
Source 80% of purchased
electricity from renewable
sources by 2030

Science Based Target initiative (SBTi):

- Science-based targets provide a clearly defined pathway for companies to reduce GHG¹ emissions, helping prevent the worst impacts of climate change and future-proof business growth
- Targets are considered ‘science-based’ if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement, pursuing efforts to limit global warming to 1.5°C



Turn the impact on biodiversity from negative to positive



Biodiversity		Group's impact today	Group's targets and actions supporting the general principles of the <i>Convention on Biological Diversity</i>	Group's long-term ambition
Indirect	Influence on conservation of ecosystems			
	Stable climate Clean Water Clean Soil Clean Air		<ul style="list-style-type: none"> Reduce emissions to support 1.5°C warming limit Aim for climate neutrality 2040 Counteract water scarcity and zero harmful emissions Avoid waste, reduce landfill, foster recycling ➤ Innovate: Green and safe chemistry initiatives 	
	Availability of habitats		<ul style="list-style-type: none"> Reduce landfill (Company waste score) Manage ecosystems on production sites ➤ Innovate: e.g. Cultured meat 	
Direct	Preservation of species		<ul style="list-style-type: none"> Adhere to Nagoya Protocol Conduct species conservation assessment ➤ Innovate: e.g. Northern White Rhino 	



Circular Economy: Using smart ideas to save resources



Key Principles:

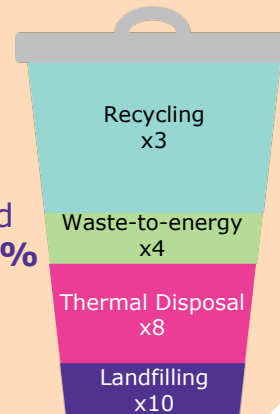
- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems



Group contribution areas:

- Smart product design
- Responsible sourcing and consumption
- Life-cycle management
- Packaging and recycling

Group Waste Score:
Reduced by **-5.6%** since 2016



SMASH Packaging

We are aiming to **lower our Waste Score**, our key waste management indicator, **by 5% by 2025** (2016 baseline) focusing on priorities

Single-use product recycling

- **Prevention**
- **Recycling**
- **Waste to energy**

Decarbonization of supply chain (SBTi)



Solvent recycling program

Reusable packaging

Despite our strong economic growth in 2021 we were able to keep our **recycling rate¹** stable at **69%**

Zero landfilling activities

DELTA



Reduce the impact on the environmental footprint of our products by improved packaging

SMASH packaging: We are working to find new ways of making our Life Science products and packaging more environmentally sustainable, while still getting them to our customers in a safe and timely manner.

12
∞

Shrink – reduce amount of packaging

- Eliminate the use of packaging that is excessive in size or weight, helping to reduce our use of natural resources, lower our energy use and decrease our transport emissions.

Save – maximize recycling


- Maximize recycling of our packaging materials by eliminating the use of packaging materials that are not recyclable and by providing our customers with recycling guidance for all our packaging materials.

Switch – improve plastic sustainability

- Improve the sustainability and recyclability of our plastic packaging, also by using healthier, more sustainable materials and more recycled content.

Secure – achieve zero deforestation

- Ensure that the wood- and fiber-based packaging materials used in our packaging do not contribute to deforestation.



Our 2022 targets:

- 90% of existing packaging aligned with our zero deforestation standards
- 20% reduction of air space in distribution boxes
- 20% reduction of Expanded Polystyrene (EPS)
- 100% of unrecyclable fiber-based packaging is replaced





GOVERNANCE

Targets & numbers
Reporting
Risk Management
Supply Chain
Policies
Ratings



Goal 2: Creating sustainable value chains

Amplifying sustainability in our company culture

Education and planning to increase employee engagement and diversity & inclusion activities.



Sustainable and transparent supply chain

Our supplier management focuses on high-quality, delivery reliability, and competitive prices in addition to global compliance with fundamental environmental and social standards.

Indicators:



- Suppliers covered by valid sustainability assessment¹
21% (number) / **65%** (volume)
- Other:
- Women in leadership
- Sustainability trainings
- EHS incident rate
- Violations of Social & Labor Policy
- Lost time injury rate

Initiatives:



Cascade new DE&I aspirations into the organization

Supplier Sustainability Assessments

Sustainability trainings for employees

Establish product carbon footprint data base

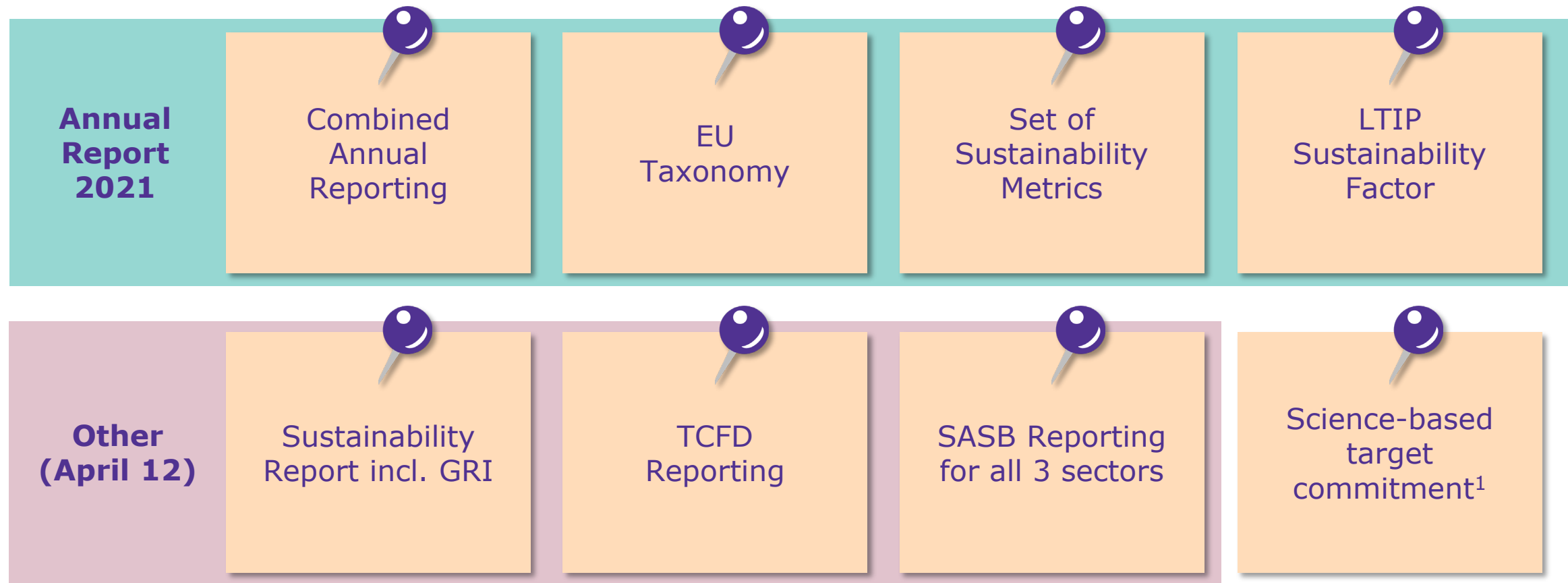
Decarbonization of supply chain

Prepare for German Supply Chain Due Diligence Act

Sustainability partnerships with customers



Improved transparency on sustainability following major standards



Clear Metrics to drive execution and progress towards 2030 ambition

Goal	Metric	2021 (2020)	Target
1	Percentage of newly published patent families with positive sustainability impact	from 2022	n.a.
	People treated with our Healthcare products*	165 mio (183 mio)	1 bn people ambition ¹ : HC
2	Percentage of women in leadership positions	36% (35%)	Gender parity by 2030 ²
	Percentage of employees trained on sustainability	from 2022	n.a.
	Percentage of relevant suppliers covered by valid sustainability assessment*	21% ^{3a} /65% ^{3b} (n.a.)	visible increase until 2024 ³
	Environment, Health and Safety (EHS) Incident Rate	3.9 (3.4) ⁴	As low as possible
	Violations of Global Social and Labor Standards Policy	41 (29) ⁵	n.a.
	Lost Time Injury Rate (LTIR)	1.2 (1.3)	<1.0 by 2025 ⁶
3	Greenhouse gas emissions Scope 1+2*	1,843 kt (2,028 kt)	-50% by 2030 ⁷
	Scope 3 intensity: kg Greenhouse gas emissions per € gross profit	0.46 (0.48)	-52% intensity by 2030 ⁸
	Percentage of purchased electricity from renewable resources	30% (27%)	80% by 2030
	Company Waste Score (WS)	-5.6 (-4.6)	-5% by 2025 ⁹
	Company Water Intensity Score (WIS)	from 2022	-10% by 2025 ¹⁰
	Wastewater quality: no harmful emission residues	from 2022	100% completion by 2030 ¹¹

*LTIP relevant

¹92 mio HC + 91 mio Prazi in 2020

²considers room for non-binary people

³by a)number, b)purchase volume

⁴incidents + severity vs. man-hours

⁵confirmed violations

⁶accidents with min. 1 day of missed work per 1 mio. man-hours

⁷vs. 2020 2,028 kt CO₂e

⁸vs. 2020 0.48 intensity ratio (kg scope 3 emissions per € gross profit)

⁹vs. 2016 WS 443

¹⁰vs. 2020 (updated) WIS considering local availability of water and no. of man-hours

¹¹below scientifically defined threshold



Diverse human capital: Thinking, talking, and leading differently

Focus areas	Indicator	Status 2021 (2020)	Aspirations
Gender	Percentage of women in leadership globally	36% (35%)	Gender parity ¹ until 2030
Culture & Ethnicity	Percentage of underrepresented ethnic colleagues in US leadership	21% (20%)	Increase to 30% until 2030
	Percentage of nationals from Asia, Latin America, Middle East & Africa in leadership	16% (16%)	Increase to 30% until 2030
Inclusion	Inclusive Leadership Programs and participation of leaders across all business	37%	Participation of all leaders by 2026

¹The gender concept considers room for non-binary people



The **uniqueness** of our people brings our **curiosity** to life. It contributes to our success in **science & technology**.



Sustainable Business Value (SBV): Measuring impact of action



assess dimensions along entire value chain*



First use cases across B2C & B2B calculated, e.g.

Liquid Crystal Windows

Maintain the **benefits of natural light** while providing indoor privacy on demand as well as shading.

Schistosomiasis Elimination Program

Provide up to 250 million praziquantel tablets annually for **treatment of schistosomiasis** in 47 African countries.

Solvents for Pharmaceuticals

Enabling the **next generation of drugs** by serving applications in the pharmaceutical industry across R&D, production, and quality control.



Governance

Policies & Principles

Our corporate responsibility is reflected in our reporting: We provide our [reports](#) as well as general guidelines, regulations, policies and ISO certificates for you to download

General conducts, policies, statements

- [Comapny Human Rights Charter](#)
- [The Group Code of Conduct](#)
- [Social and Labor Standards Policy](#)
- [Modern Slavery Statement](#)
- [Code of Digital Ethics](#)
- [Transparency in Healthcare according to EFPIA Codes](#)
- [Use, Care and Welfare of Laboratory Animals](#)
- [Use and Handling of Nanomaterials](#)
- [Stipulations to promote the percentage of management positions held by women](#)
- [EHS Policy](#)
- [Disaster Relief Policy](#)

Iso certificates

- Certificate DIN EN ISO 9001:2015
- Certificate IQ-Net ISO 9001:2015
- Certificate DIN EN ISO 14001:2015
- Certificate IQ-Net ISO 14001:2015
- ISO 18001 certificate (DQS GmbH)
- ISO 18001 certificate (IQ-Net and DQS GmbH)
- ISO 50001 Certificate
- Registrar Confirmation Letter ISO 9001, 14001 and 45001 Versum Materials (English)
- Registrar Confirmation Letter ISO 9001, 14001 and 45001 Merck KGaA, Darmstadt, Germany (English)

Other principles and documents

- [Company Responsible Sourcing Principles](#)
- [CDP 2019 Water 2019 Information Request](#)
- [CDP 2019 Climate Change 2019 Information Request](#)
- [Stem Cells Principle](#)
- [Mica Supply Chain](#)
- [Genome Editing Principle](#)
- [Fertility Principle](#)
- [Investigator Sponsored Study Principle](#)
- [Group Tax Strategy for the UK](#)

Charter on access to health in developing countries

- [Our Approach](#)
- [Pharmaceutical Products and Donations](#)
- [Fake Medicines](#)
- [R&D for infectious diseases](#)
- [Pharmaceutical Product Pricing](#)
- [Intellectual Property](#)
- [Healthcare Position Statements](#)

<https://www.emdgroup.com/en/company/press-positions.html>



External stakeholders assess our engagement



As of 2021, Griup received an MSCI **ESG* Rating of AAA.**

*Environment, Social, Governance



Sustainalytics rates Group with 21.3 and medium ESG risk exposure. This ranks us **#9 from 451** in our pharma subindustry.



Since 2008, Company is part of **FTSE4Good Index**, measuring the performance of companies with strong ESG practices, ranking percentile rank 95 (top 5%).



In the ISS corporate ESG ranking Group achieved **prime status** and B-ranking, putting us in the 1st decile.



Since 2019, the Group share is again **included in STOXX Global ESG Leaders Index**, a sustainability index based on key environmental, social and governance criteria.



Group has been **reconfirmed** as a constituent of the **Ethibel Sustainability Index (ESI)** Excellence Europe since May 2020, based on VigeoEiris.



Group received gold status in 2022, stating Company is among the **top 3% of companies.** **EcoVadis** annually examines ~75,000 suppliers from 160 countries.



CDP Climate: In 2021, we scored "B" (2020: B). **CDP Water:** In 2021, we received a "A-" (2020: B).



In the 2021 **Access to Medicine Index** Group ranked **eighth place.** We were recognized for our performance in R&D, where we ranked fifth.



CONSTANTIN FEST



Head of Investor Relations
+49 6151 72-5271
constantin.fest@emdgroup.com

SVENJA DJAVAHERI



Assistant Investor Relations
+49 6151 72-3744
svenja.djavaheri@emdgroup.com

PETRA HOLTZ



Assistant Investor Relations
+49 6151 72-3321
petra.holtz@emdgroup.com

GUNNAR ROMER



Institutional Investors /
Analysts
+49 6151 72-2584
gunnar.romer@emdgroup.com

FLORIAN SCHRAEDER



Institutional Investors /
Analysts
+49 6151 72-42005
florian.schraeder@emdgroup.com

EVA STERZEL



ESG / Institutional & Retail Investors /
AGM
+49 6151 72-5355
eva.sterzel@emdgroup.com



EMAIL: investor.relations@emdgroup.com

WEB: <http://www.emdgroup.com/investors>

PHONE: +49 6151 72-3321





DEEP DIVE

Examples & initiatives
Governance details



Governance

How ESG is embedded in our governance



Governance

Group's ownership structure

Shareholders of Merck KGaA, Darmstadt, Germany

- Shareholders hold ~30% of Merck KGaA, Darmstadt, Germany total capital
- Share capital is divided into 129,242,252 bearer shares and one name share without nominal value
- Listed at German Stock Exchange's Prime Standard, member of the DAX 30
- Only bearer shares entitled to vote at Group's Annual General Meeting: **one share, one vote**

Supervisory Board

Its Chairman leads AGM, representing interests of Group's shareholders:

- Approving financial statements of Group
- Working together with Executive Board, receiving reporting on progress regarding business and financial development at Company, Containing 16 members: **8 employee representatives, 8 independent representatives** (2 family representatives and 6 elected shareholder representatives)
- 2 committees: **Nomination and Audit Committee**

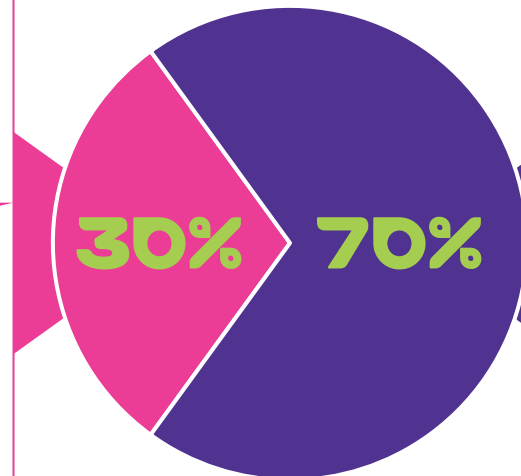
Nomination Committee
Defines criteria and makes proposals for new candidates

Audit Committee
Control systems, external auditing, financial statements

Finance Committee
financial statements, external auditing

Personnel Committee
Executive board members, contracts, compensation

R&D Committee
research activities of all sectors: HC, LS, EL



E. Merck KG, Darmstadt, Germany: Partners' Meeting & Family Board

- E. Merck KG, Darmstadt, Germany (99.9% The Family) holds ~70% of Merck KGaA, Darmstadt, Germany total capital
- These 70% of the total capital are **not entitled to vote** at Group's AGM
- A Family Board represents the entrepreneurial interests of The Family (elected by partners' meeting)

Board of Partners

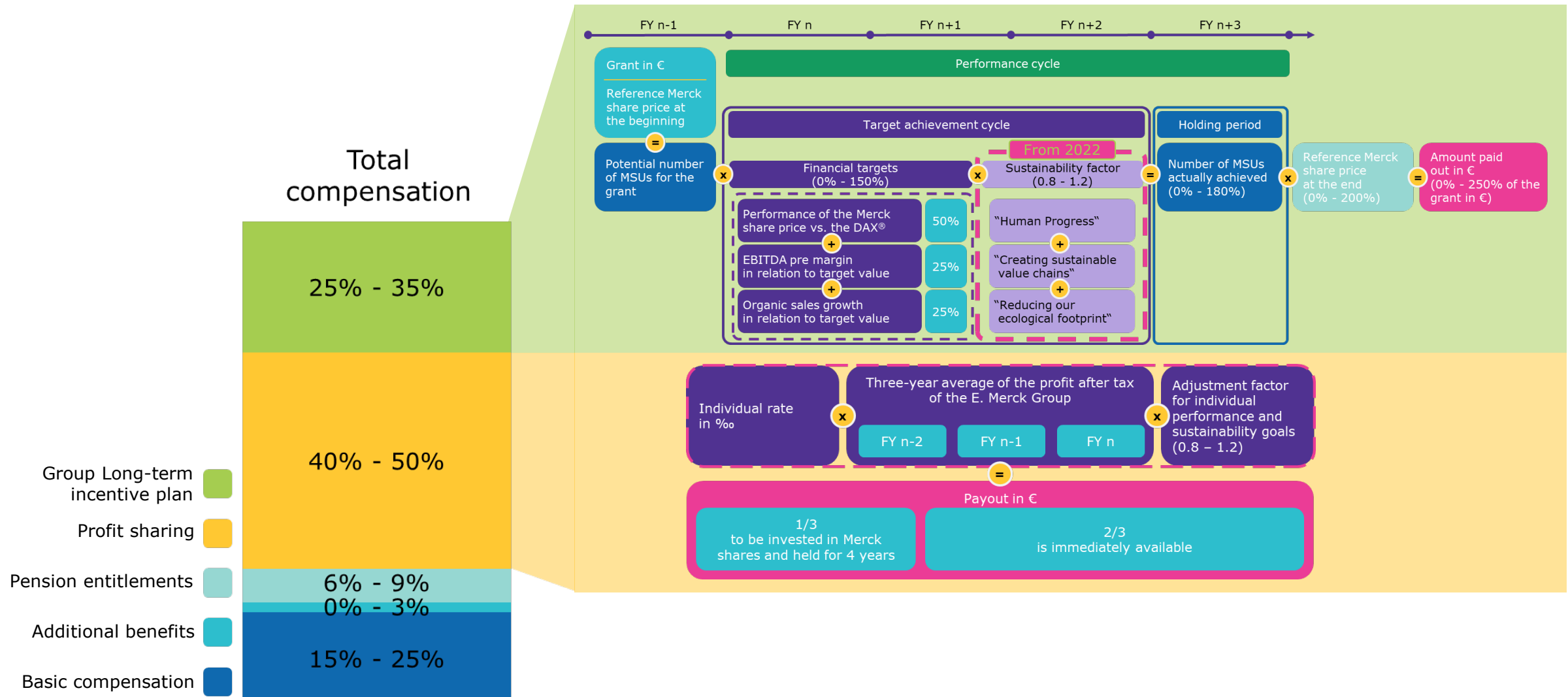
Elected by Family Board, and takes over some duties of a usual Supervisory Board:

- Appointment, dismissal and supervision of Executive Board members of Merck KGaA, Darmstadt, Germany
- Approves extraordinary business transactions and annual financial statements of E. Merck KG, Darmstadt, Germany
- Contains **5 members of the Family Board and 4 external members** of the business community
- 3 committees: **Finance, Personnel and R&D Committee**



Governance

Executive compensation from 2021/2022



Executive Board long-term incentive linked to sustainability

- Starting from fiscal year 2022, our sustainability strategy will be even more firmly embedded in the compensation system for the members of the Executive Board
- The sustainability factor encompasses three performance criteria according to the sustainability strategy and measures the performance indicators over a three-year target achievement cycle
- The sustainability factor depends on the degree of target achievement and may increase or decrease the outcome of the financial performance indicators of the LTIP (Performance Company Share vs. DAX, EBITDA pre margin, organic sales growth) in the range of 0.8x and 1.2x

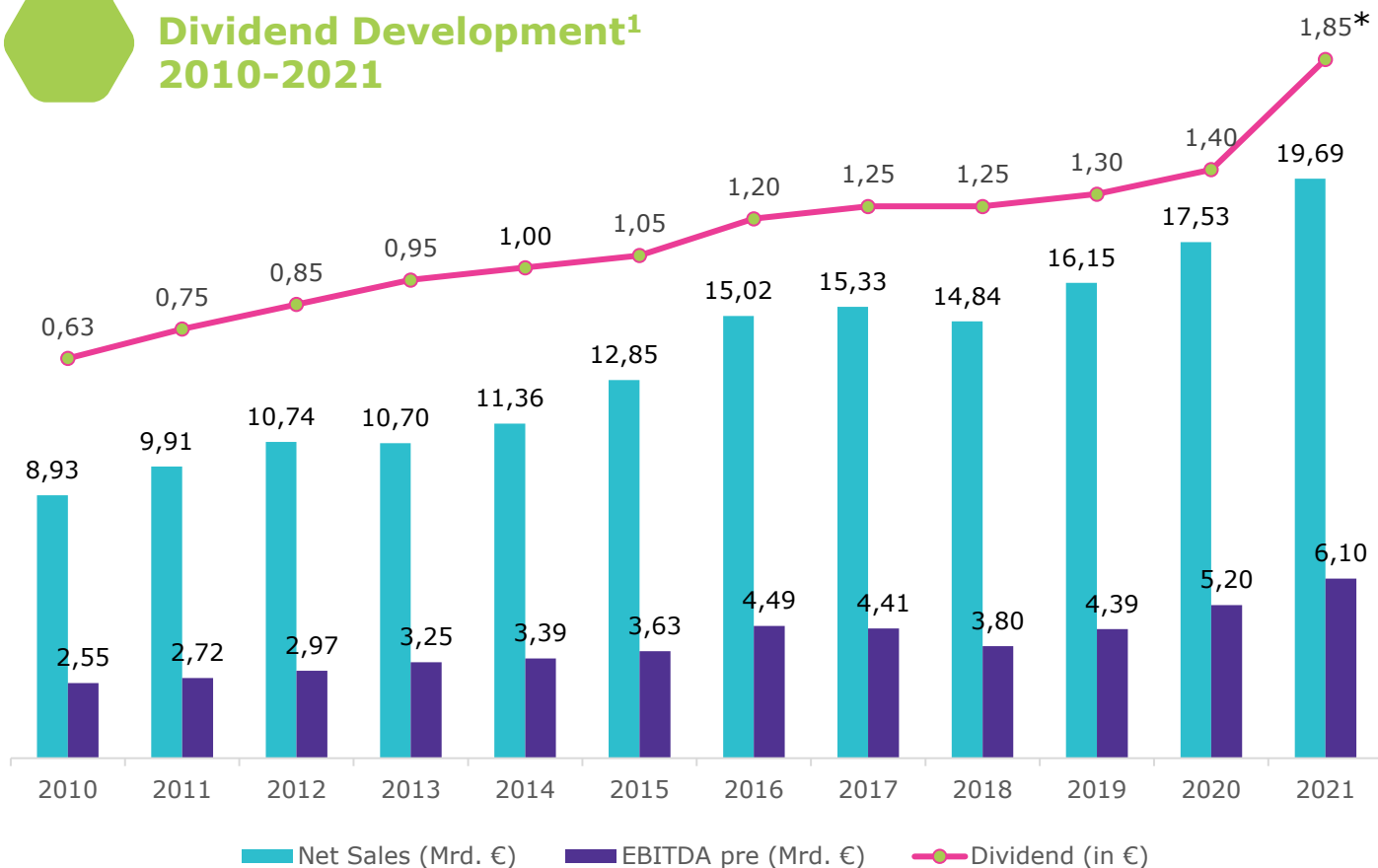
Parameters for the sustainability factor for the 2022 tranche of the LTIP¹:

Performance Criteria	%	Performance Indicators
Dedicated to human progress	20%	People treated with our Healthcare products
Creating sustainable value chains	40%	Percentage of relevant suppliers (in terms of number and purchase volume) that are covered by a valid sustainability assessment
Reducing our ecological footprint	40%	Scope 1 + 2 greenhouse-gas emissions



Sustainable dividend growth

Dividend Development¹ 2010-2021



Dividend policy²

- Group aims to continuously develop dividends in line with business performance and earnings progression
- The current dividend constitutes the minimum level for next year's dividend
- Group aims at a target corridor of 20-25% of EPS pre

¹ Including share split 2:1 from June 30, 2014

² Assuming a stable economic environment

*2021 dividend subject to approval by the Annual General Meeting until April 22, 2022



Generating positive impact by usage of our innovations

Further hope to save the Northern White Rhino

October 4th
WORLD ANIMAL DAY



- Northern White Rhino suffered for decades on illegal hunting of their horns leaving only two female Northern White Rhinos left
- Collaboration with conservationists and research groups of the BioRescue project, part of a multi-national partnership
- Funded by the German Federal Ministry of Education and Research (BMBF), supported by Leibniz Institute for Zoo & Wildlife Research, and local partners in Kenya
- With the donation of Geri®, we are giving access to world-leading fertility technologies as well as providing ongoing counsel and scientific expertise
- Fertilized eggs developed into viable embryos with the help of Geri® (innovative benchtop incubator with integrated continuous embryo monitoring capabilities)
- Next step of the project: prepare the surrogate mother for the embryo transfer

