

# Leading Beyond Chemistry

Stefan Haver,  
Head of Sustainability

October 6, 2021



# Sustainability is the backbone of our purpose



# Our sustainability strategy 2020+

## Core elements



Sustainability is the backbone of Evonik's **purpose**



Evonik integrates sustainability in its **Strategic Management Process**



Evonik intends to increase the **portfolio** share of attractive growth businesses with sustainability benefits

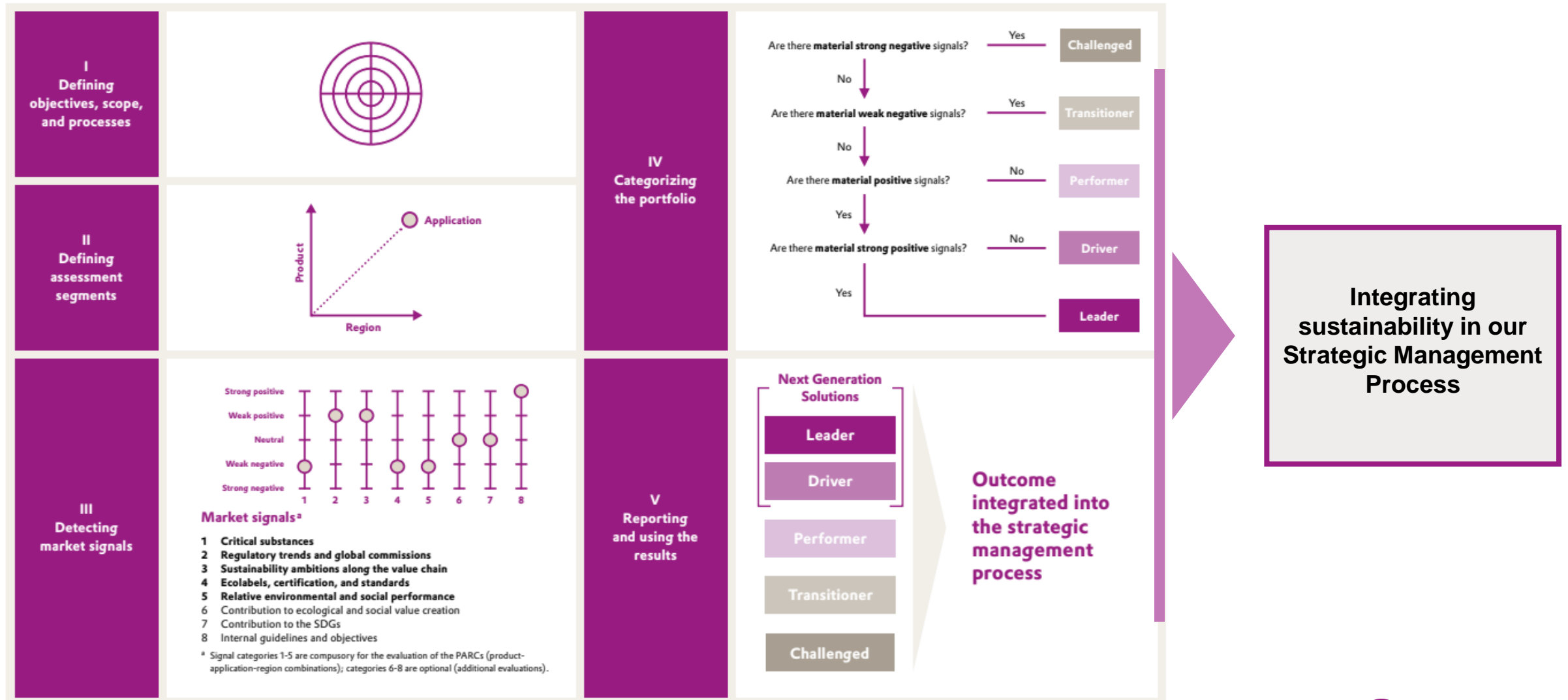


Evonik is committed to foresighted **resource management**



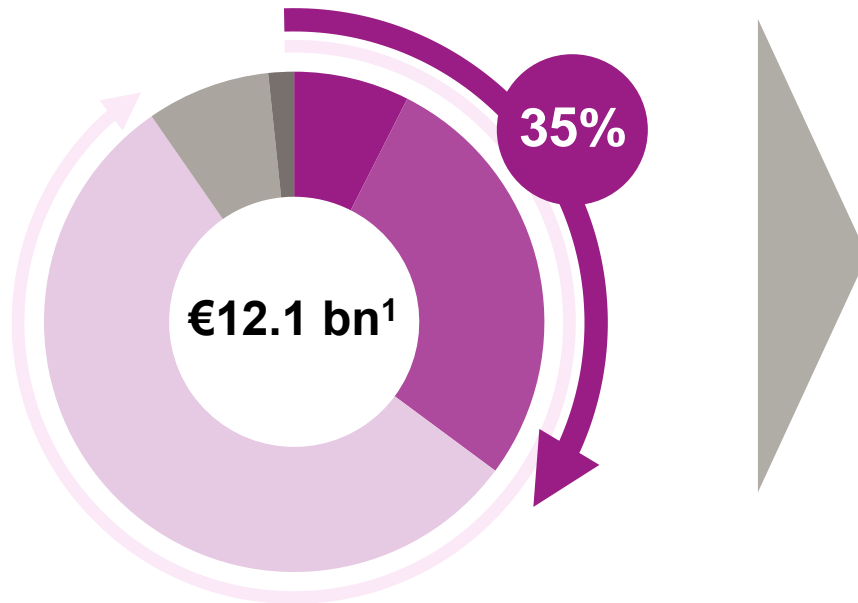
Evonik sets high standards for continuous improvement of its **reporting**

# Sustainability analysis of our business



# Next Generation Solutions

**2020:** Analysis of complete portfolio with 326 PARCs



**35%**

of sales with *Next Generation Solutions*<sup>2</sup>

- addressing globally increasing demand for sustainable solutions
- delivering above-average growth

**Target for FY 2021 ff.**

Increasing share of sales with *Next Generation Solutions*

Challenged   Transitioner   Performer   Driver   Leader

1) 2019 external sales excl. Services, Corporate & Others | 2. "Next Generation Solutions" include "Leader" (A++) and "Driver" (A+) products and solutions



# Next Generation Solutions – growth drivers in our portfolios

## Biosurfactants



*Biosurfactants used in personal and household care applications*

### Evonik's superiority to market

- Evonik only company to produce bio-based surfactants on an **industrial scale**

Growth  
>10%

## Sustainable Food Packaging



*Food stays fresh for longer due to O<sub>2</sub> absorbing packaging*

### Evonik's superiority to market

- Evonik only provider of **additive** to capture oxygen molecules inside of packages to keep them fresh longer and **reduce global food waste**

Growth  
>5%

## Improving Lithium-Ion-Batteries



*High-performance separators for more powerful batteries*

### Evonik's superiority to market

- Evonik's high-quality pure silica and metal oxides **increase safety, lifetime** and **performance of batteries** for EVs

Growth  
>20%

## Superinsulation



*Purely mineral high-performance insulation material*

### Evonik's superiority to market

- **Silica-based** insulation material which is **fully recyclable** and **incombustible** for sustainable housing

Growth  
>20%

# Our sustainability strategy – combatting climate change

CO<sub>2</sub> 🚩

↓  
**-50%**  
absolute  
**scope 1 & 2**  
emissions<sup>1</sup>

**2008 - 2025**

2008 - 2020: -44%

**CO<sub>2</sub> pricing**  
as additional  
planning premise  
for large  
investments

**50 € per t CO<sub>2</sub>**

**-15%**  
Reduction of  
absolute **scope 3**  
**emissions**<sup>2</sup> from  
upstream value  
chain

**2020 - 2025**

R&D for “green” energy 🧪

**Joint project by Siemens Energy and Evonik  
on artificial photosynthesis to close carbon dioxide cycle**

Generation of high-value specialty chemicals  
from carbon dioxide and eco-electricity

Pilot plant commissioned in Marl in fall 2020

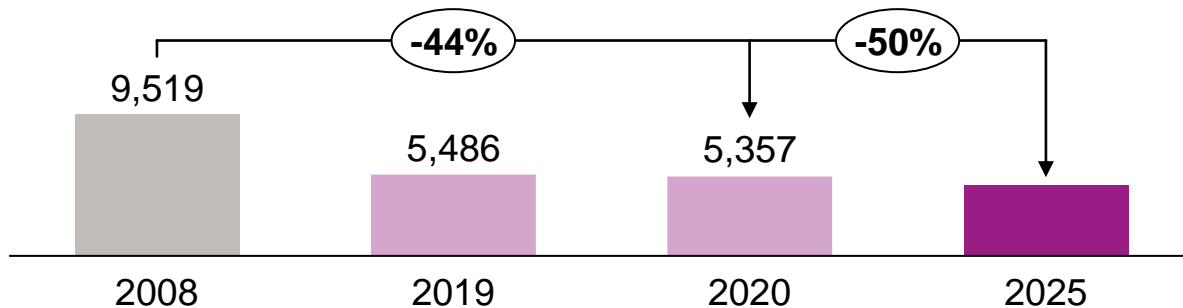


1) Reference base: 2008 2) Reference base: 2020

# New gas and steam turbine power plants in Marl



Scope 1 and Scope 2 emissions<sup>1</sup>



1) In thousand tons CO<sub>2</sub>eq

- **Modernization** of Evonik's power plant park as key element in achieving our targeted CO<sub>2</sub> reduction
- Replacement of last coal-fired power plant at Marl Chemical Park by a **flexible gas and steam turbine power plant**
- Total power output of 180 megawatts with an efficiency exceeding 90%
- Global **scope 1** GHG emissions to be cut **by ~20%**, mainly due to **annual reduction of 1 million metric tons CO<sub>2</sub>**
- Plant expected to come on stream by **2022** at the same time as a **new gas and steam turbine reserve power plant**



# Our sustainability strategy – ambitious environmental targets

## Water

As part of our global water management system **development of site-specific action plans** for sites that are potentially exposed to water stress



## Energy

**Energy target 2020 - 2025:**







**5 + 5 until 25**

Base year 2020

Reduction of  
**absolute**  
energy  
consumption by  
**5%**

Reduction of  
the specific  
energy  
consumption by  
**5%**

# Our Top 10 sustainability targets

		Status 2020
 <b>Strategy and growth</b>	<ul style="list-style-type: none"> <li>At least 35 percent of sales should come from Next Generation Solutions</li> </ul>	35%
 <b>Governance and compliance</b>	<ul style="list-style-type: none"> <li>Percentage of women at the first and second management levels below the executive board: 30 percent at each level by year-end 2024</li> </ul>	26.9% / 26.3%
 <b>Value chain and products</b>	<ul style="list-style-type: none"> <li>100 percent of all raw materials suppliers where annual procurement volume is &gt; €100 thousand to be covered by TfS assessments by year-end 2025</li> <li>Generate more than €1 billion in additional sales<sup>1</sup> in our six innovation growth fields by 2025</li> </ul>	73% €350 m
 <b>The environment</b>	<ul style="list-style-type: none"> <li>Reduce green house gas emissions                             <ul style="list-style-type: none"> <li>absolute scope 1 and scope 2 emissions by 50 percent by 2025 (reference base: 2008)</li> <li>absolute scope 3 emissions from the upstream value chain—principally from the “raw material backpack”—by 15% by 2025 (reference base: 2020)</li> </ul> </li> <li>Reduce both absolute and specific energy consumption by 5 percent by 2025 (reference base 2020)</li> </ul>	–44% -- --
 <b>Employees</b>	<ul style="list-style-type: none"> <li>20 percent intercultural mix<sup>2</sup> in top management by 2023</li> <li>23 percent women in top and senior management by 2023</li> </ul>	12.9% 15.9% / 14.2%
 <b>Safety</b>	<ul style="list-style-type: none"> <li>Safety                             <ul style="list-style-type: none"> <li>Accident frequency rate <math>\leq 0.26^3</math></li> <li>Incident frequency rate <math>\leq 0.40^4</math></li> </ul> </li> <li>Occupational health performance index <math>\geq 5.0</math></li> </ul>	0.80 1.45 5.4

1) With products introduced in or after 2015 2) non-German Employees 3) New reference parameter from 2021 4) Modified calculation basis from 2021

# Evonik well positioned in sector leading ratings and rankings

Evonik



## Recent improvements:

- **ecovadis** from „Gold“ to „Platin“
- **CDP Climate Change** from „B“ to „A –“

# Sustainability even more closely integrated into Evonik's finance strategy

- Evonik successfully issued **first green hybrid bond** in August
- €500 million issuance followed **publication of Green Finance Framework** on 24 August 2021
- Majority of proceeds will be used to finance investments in **Next Generation Solutions**
- Transaction generated strong interest and significant oversubscription
- **High share (~50%) of ESG-investors**
- Very attractive interest rate and cost advantage by green use of proceeds („**Greenium**“)
- Evonik successfully repurchased almost 81% of outstanding €500 million hybrid bond issued 2017 on 6 September 2021, remaining 19% will be repaid on 12 October 2021



Green Finance Framework

August 2021



1.375% p.a.  
coupon

€3.8 m p.a.  
interest savings<sup>1</sup>

0.10% (€500 k) p.a.  
“**Greenium**”

3.0x  
oversubscription

Press release: <https://corporate.evonik.de/en/evonik-successfully-issues-first-green-hybrid-bond-162200.html>

<sup>1</sup> Compared to € 500 million hybrid bond issued in 2017

# Our sustainability governance structure



**Thomas Wessel, CHRO**  
executive board member  
responsible for sustainability

**Executive Board:** overall responsibility for sustainability  
**Chief Human Resources Officer:** responsible executive board member



**Sustainability Circle**  
includes functions and units  
relevant to sustainability



**Sustainability Council**  
ensures close collaboration  
with the operating business

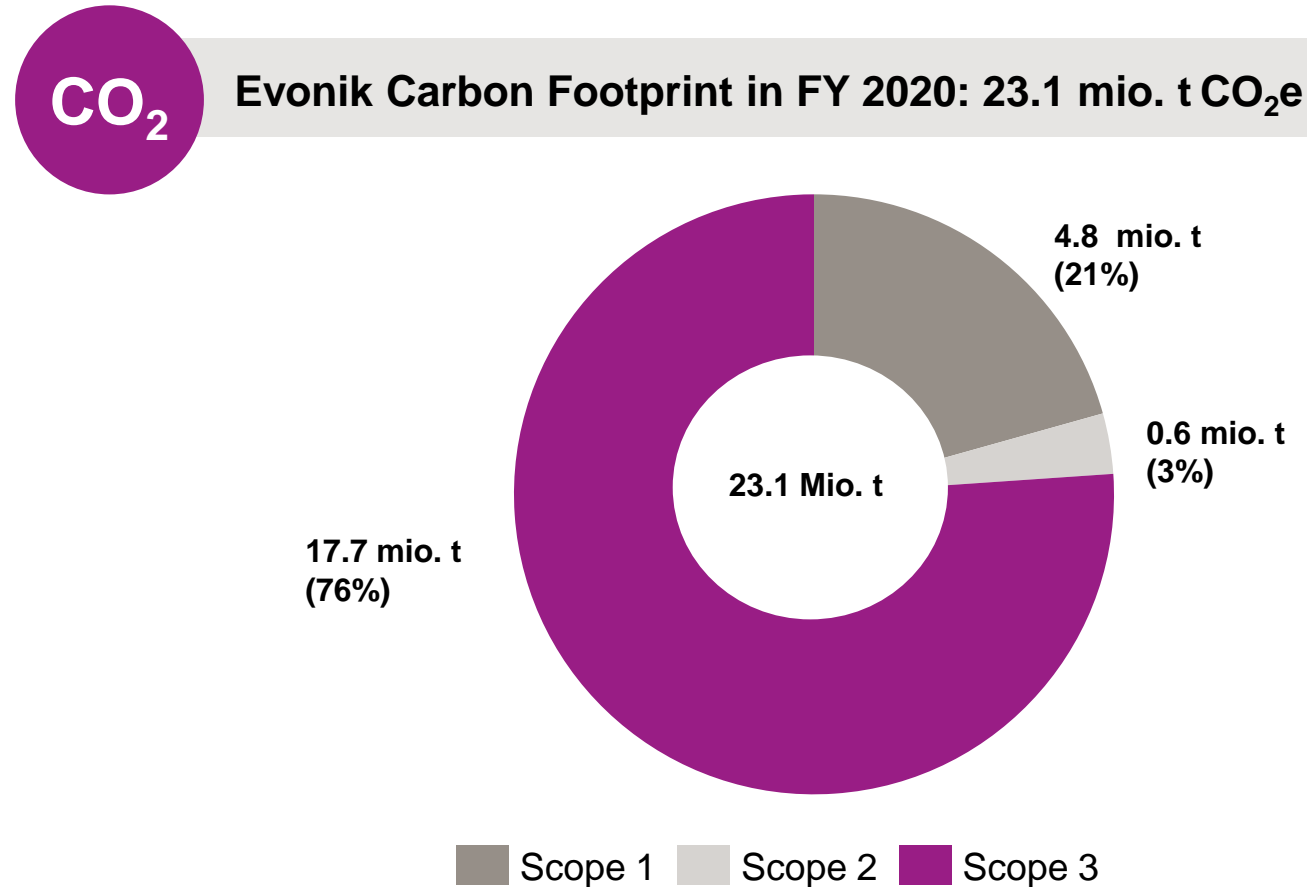




**EVONIK**

**Leading Beyond Chemistry**

# Our sustainability strategy – combatting climate change

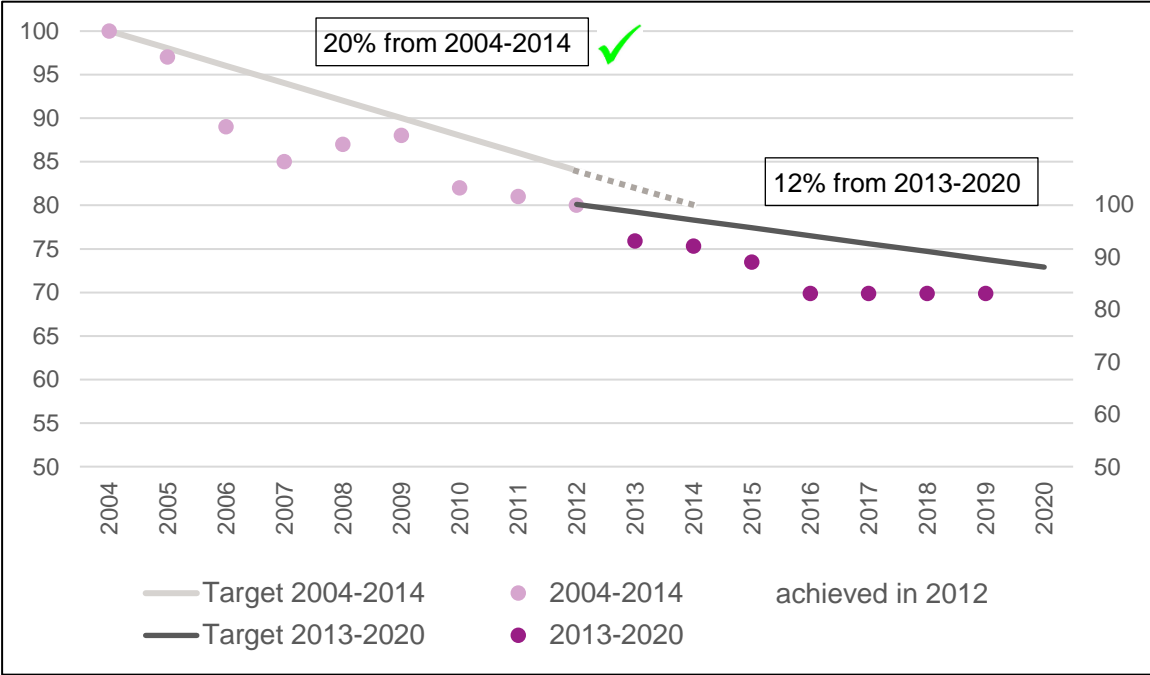


- Strong commitment to **“Paris Agreement on Climate Change”** reflected in implementation and execution on environmental targets
- **“Sustainability Strategy 2020+”** targets reduction of -50% of Scope 1 & Scope 2 emissions<sup>1</sup> by 2025
- Reduction of absolute Scope 3 emissions<sup>2</sup> from the upstream value chain – mainly from the "carbon backpack" – by 15% by 2025
- Global **CO<sub>2</sub> pricing** used as additional parameter for investment decisions

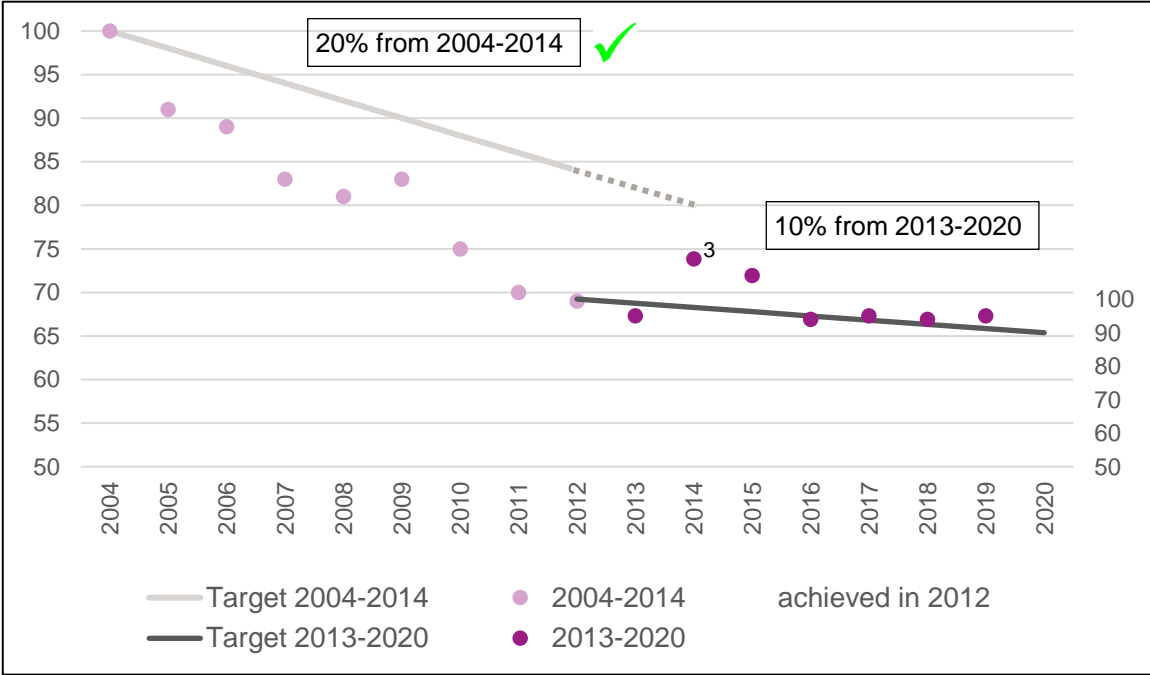
1) Reference base: 2008 2) Reference base: 2020

# Ambitious environmental targets 2004 – 2020

Specific GHG emissions<sup>1</sup>



Specific water intake<sup>2</sup>

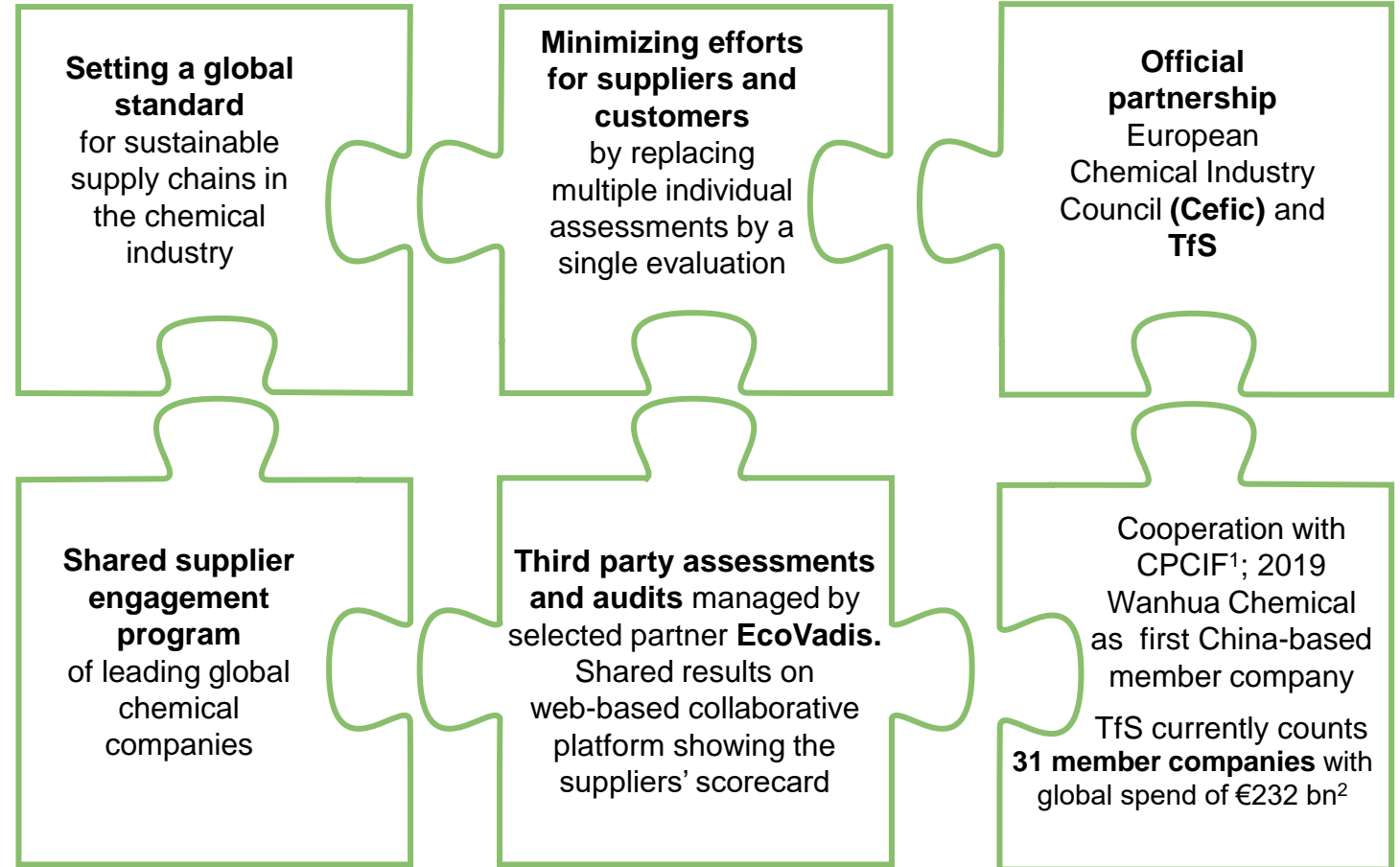


1) Energy- and process-related emissions as defined by the Greenhouse Gas Protocol, scope 2 emissions calculated using market-based method 2) Reporting on specific water intake has been recalculated retrospectively. Based on our regular analytical verification - checks on random samples of reported data and audits - gaps in reporting in one organizational unit were identified and corrected 3) Start-up of hydrogen peroxide facility in Jilin (China).

# Responsible supply chain management

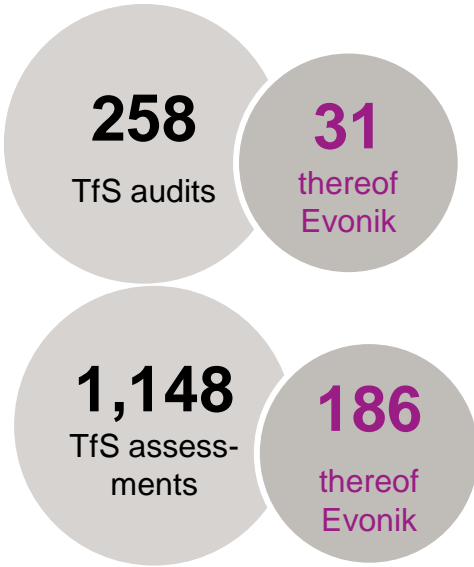
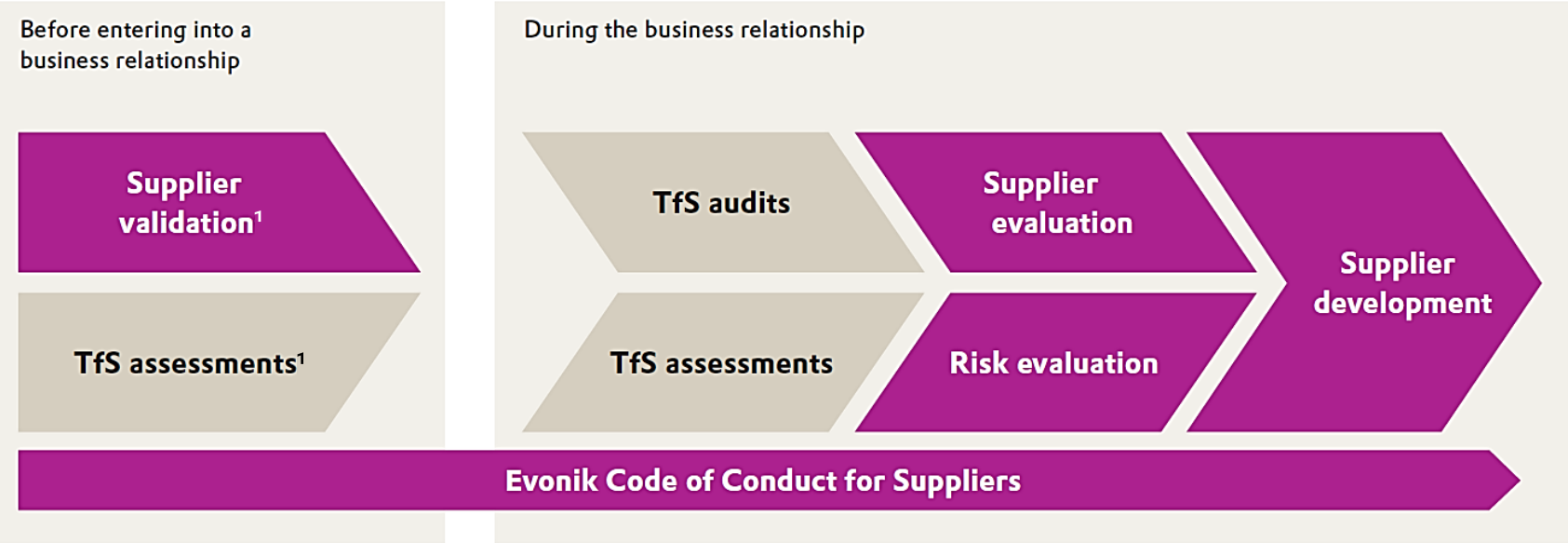


Evonik **founding member** of “Together for Sustainability” (TfS) initiative of chemical industry driving transparency and sustainability along the supply chain.



1) CPCIF = Chinese Petroleum and Chemical Industry Federation 2) estimated figure  
17 | Public | ESG | Leading Beyond Chemistry, October 2021

# Responsible supply chain management



**Our target**

100% of raw materials suppliers with annual procurement volume of >€100k to be covered by TfS assessments by year-end 2025 (2020: 73%)

**~80%** (>50%) of Evonik's direct (indirect) purchasing volume covered by TfS assessments



# Sustainable use of palm oil

- Evonik member of *Roundtable on Sustainable Palm Oil (RSPO)* and cross-industry industry platform *Action for Sustainable Derivatives (ASD)*
- Our annual **demand** for palm-based derivatives is approx. 100 kilo tons, primarily used by Business Lines Care Solutions and Oil Additives
- For Evonik employees, we developed **recommendations for action** for the responsible handling of palm oil, palm kernel oil and their derivatives
- **Target:** By 2023, Evonik aims to ensure only RSPO-certified palm oil and palm kernel oil are used in its products.

## TEGO® Betain P 50 C

The cost-efficient, concentrated Cocamidopropyl Betaine based on RSPO certified palm kernel oil.



### Evonik's Personal Care Business

- ~60% of our cosmetic ingredients are made up of at least 50% renewable feedstocks
- Palm oil raw materials basket contains 65% RSPO-MB palm-based feedstocks
- Production of >40 cosmetic ingredients using CO<sub>2</sub>-optimized processes

# Promotion of sustainable palm oil production in Malaysia

## Evonik and Beiersdorf support WWF project

- Beiersdorf and Evonik committed to a sustainable palm oil economy for many years, being both members of RSPO<sup>1)</sup> and ASD<sup>2)</sup>
- Conservation and sustainable development project launched in Sabah's Tabin landscape in late 2020
- Goal is to certify local palm-oil farmers for sustainable production (RSPO), restore ecological connectivity and protect wildlife habitats
- Tabin's wildlife reserve safeguards many threatened species such as orangutans or Borneo elephants

## Tabin's ecosystem faces enormous challenges



1) RSPO = Roundtable on Sustainable Palm Oil 2) ASD = Action for Sustainable Derivatives

## We create value for society<sup>1, 2</sup>



**€1 : €4.27<sup>3</sup>**

Every €1 value added by  
Evonik creates a total of  
€4.27 **added value** for society



**1 : 7.9 jobs<sup>3</sup>**

One Evonik employee secures  
an average of 7.9 **jobs** in  
the value chain



**€1 : €1.82<sup>3</sup>**

Every €1 value added  
by Evonik results in  
**public revenue** of €1.82

1) Impact valuation of our business in 2019 along the value chain (excluding the methacrylates business) covering Germany, the rest of Europe, USA, Canada, Mexico, Asia-Pacific, Middle-East, Africa, and Central & South America on the basis of currently available data. 2) Data outside the scope of the limited assurance review. 3) The total includes Evonik's direct impact.

# UN Sustainable Development Goals (SDGs) most relevant for Evonik (1)

## Our contributions to the SDGs

## Our methodology to determine the most relevant SDGs for the Evonik Group



Internal stakeholder view

External stakeholder view

Sales

Growth engines

Innovation growth fields

## Most relevant SDGs for the Evonik Group



# UN Sustainable Development Goals (SDGs) most relevant for Evonik (2)

- High safety standards
- Responsible supply chain management
- Responsible management of chemicals and waste
- Products for resource efficiency in highly demanding applications



- Ambitious CO<sub>2</sub> reduction targets
- Silica-silane technology for „green“ tires
- Oil additives to extend lifetime of hydraulic machines and to save fuel
- Membranes for biogas upgrading
- DL methionine for animal nutrition
- High-performance insulation materials

- APIs<sup>1</sup> and intermediates
- Food ingredients and nutritional delivery
- Highly purified amino acids
- Parenteral and drug delivery
- Medical devices



- Global water management system: development of site-specific action plans within Evonik Group regarding water stress
- Oxidation agents, waste water treatment
- Biosurfactants

1) APIs = Active Pharmaceutical Ingredients



# Our sustainability commitments

## External



### UN Global Compact

Aligning companies' operations and strategies with 10 universally accepted principles in the areas of human rights, labor, environment and anti-corruption



### Responsible Care

The global chemical industry's initiative to improve health, environmental performance, enhance security, and to communicate with stakeholders about products and processes



### Chemie<sup>3</sup>

An alliance of VCI, IG BCE and BAVC underpinning sustainability as a guiding principle of the chemical industry in Germany and providing inspiration for the international community

## Internal



### Global Social Policy

Evonik's internal commitment to human rights, core labor standards, international standards and principles of conduct



### ESHQ Values

Protecting people and the environment, treating partners fairly, and focusing on the needs of customers as core beliefs for everyone at Evonik



### Code of Conduct

Containing corporate values and principles, governing conduct of all Evonik employees; externally operated whistleblower system

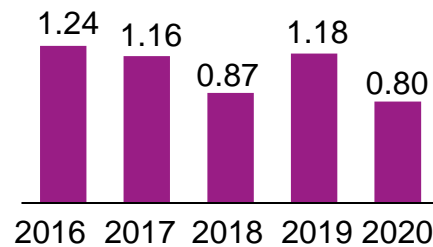
# Sustainability Report: High recognition



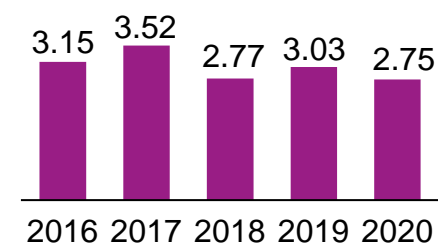
# Safety is at the top of our agenda



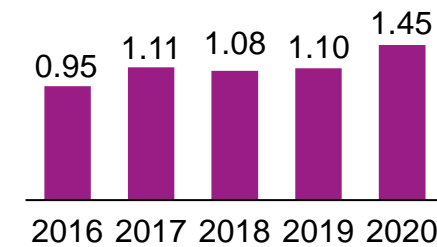
## Occupational safety & plant safety



**Accident frequency rate<sup>1</sup> for Evonik employees** decreased significantly; no fatal accident.  
Target 2020:  $\leq 1.30$



**Accident frequency rate<sup>1</sup> for contractors<sup>4</sup>** below previous year level; no fatal accident.



**Incident frequency rate<sup>2</sup>** increased due to awareness-raising measures and inclusion of newly acquired sites.  
Target 2020:  $\leq 1.10$

Incorporation of safety performance in remuneration systems. Culture initiative "Safety at Evonik" firmly established. Roll-out of new global server-based platform ESTER<sup>3</sup>

1) This indicator contains all work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift per 1 million working hours.

2) Number of incidents per 1 million working hours) 3) ESTER = Evonik Standard Tool ESHQ and Reporting

# Sustainability evaluation part of our RD&I

€433 million

R&D expenses  
R&D expenses to sales ratio: 3.5%

★ **DSM and Evonik** combine expertise in JV Veramaris for omega-3 fatty acids from natural marine algae for animal nutrition in aquaculture



Global R&D network:

~2,600 employees  
37 sites

~215

New patent applications filed

~24,000

Patents and pending patents



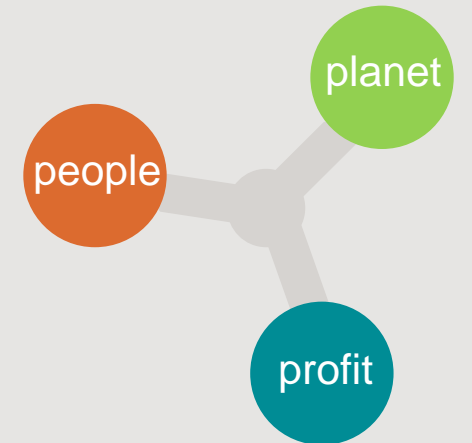
★ Biosurfactants on industrial scale: **Evonik and Unilever** teamed up

★ **Tissue Engineering** project house in Singapore



Current market growth of ~30% p.a.; market volume of US \$3 bn by 2021<sup>1</sup>

★ Evonik wants to make green hydrogen more affordable: Innovative membranes for water electrolysis



Systematic sustainability assessment for strategic RD&I projects<sup>2</sup>



# Our innovation targets

Evonik Innovation Growth Fields: 25% p.a. CAGR

## Sustainable Nutrition



## Advanced Food Ingredients



## Healthcare Solutions



## Cosmetic Solutions



## Membranes



## Additive Manufacturing



**Target: Additional contribution to sales<sup>1</sup> by 2025: > €1 billion**

**FY 2020: ~ €350 million**

1) With products introduced in or after 2015



# Management compensation: Executive Board

Fixed salary  
~1/3

- To be paid in cash for each financial year on a monthly basis

Bonus  
~1/3

- Pay-out calculated on the basis of the achievement of focused KPIs; aligned to mid-term strategic targets:
  1. Progression towards EBITDA margin target
  2. EBITDA growth (yoy)
  3. Contribution to FCF target
  4. Accident performance (frequency and severity of accidents)
- Factor of between 0.8 and 1.2 to take into account the achievement of further individual targets
- Bonus capped at 200% of initial target

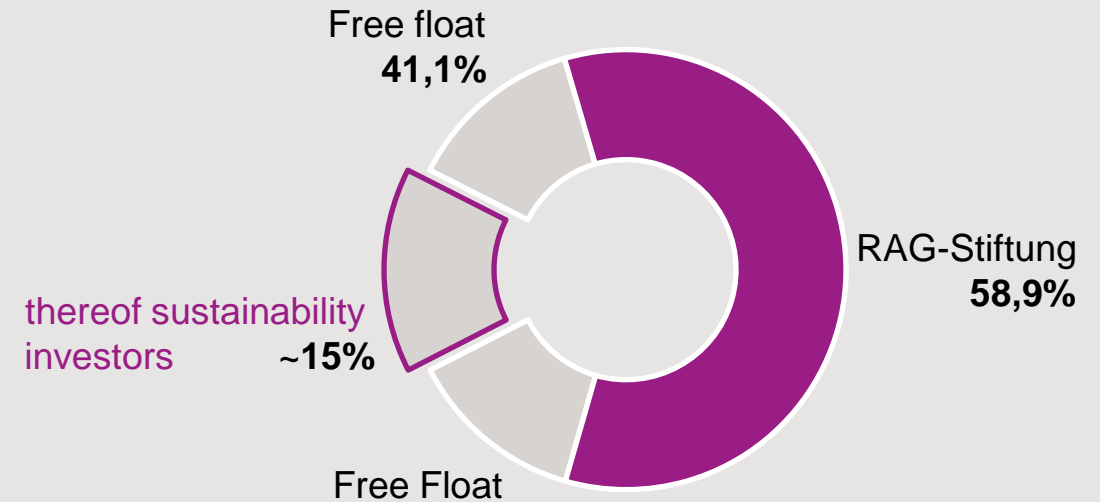
Long-term  
incentive plan  
~1/3

- Granted LTI target amount is calculated in virtual shares (4-year lock-up)
- Value of LTI to mirror the development of Evonik's share price (incl. dividends)
- Amount payable is determined by two performance elements
- Absolute performance: Real price of the Evonik share
- Relative performance against external index benchmark (MSCI Chemicals)
- Bonus capped at 300% of initial amount
- To be paid out in cash after lock-up period

# Shareholder structure

## RAG-Stiftung (RAG Foundation)

- Obligation to finance the perpetual liabilities arising from the cessation of hard-coal mining in Germany
- Evonik as integral and stable portfolio element with attractive and reliable dividend policy
- Clear intention to remain significant shareholder



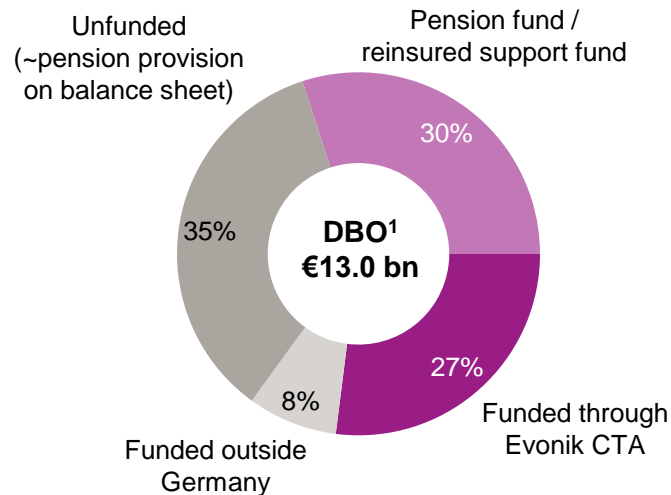
# Sustainability embedded in pension asset management

## Evonik Pensionstreuhand e.V. (CTA)

Sustainability process initially developed for portfolio held directly by Evonik Industries AG and thus directly under Corporate control (Contractual Trust Agreement, **CTA**)

- CTA: **>80%** of total plan assets under management supervised by managers committed to UN Principles for Responsible Investment (UN PRI)
- CTA: **>50%** of liquid assets overlapping with renowned sustainability indices such as FTSE4Good etc.

Funding level at ~65%



## Pensionskasse Degussa VVaG (Pension fund)


As one of the first pension funds in Germany, Pensionskasse Degussa VVaG (**PKD**) with own **ESG strategy** since April 2019

- Main focus on Governance requirements (compliance, audits, risk management, cyber security etc.)
- Since 2020, 50% women in PKD Board of Management
- Investment criteria: managers required to have signed UN PRI; focus on democratic countries, respect for human rights, anti-corruption etc.
- Asset Class Specific: Suitable ESG factors taken into account in investment process


1) DBO = Defined Benefit Obligations | Pension funding overview as of Dec 31, 2019

# Animal welfare

- Wherever possible, usage of published data to minimize animal testing
  - Teaming up with other companies to carry out joint tests
  - Taking read-across, grouping and in-silico/-in-vitro approaches
  - Active involvement in EPAA<sup>1</sup>, SET Foundation<sup>2</sup>
- Toxicological/ecotoxicological data still needed to assess safety of Evonik products
  - Tests on animals in many cases only way of reliably generating these data
  - Under national/international regulations (e.g. REACH) animal testing still required
- Evonik exclusively selects certified contract research organizations with high animal welfare standards
- Within Evonik, **animal protection guidelines** and **animal protection officers** installed  
<https://corporate.evonik.com/en/responsibility/value-chain-products/animal-welfare>



**Animal welfare at Evonik**  
Animal tests and alternatives



**Introduction**

Evonik bears tremendous responsibility for the safety and quality of its products throughout the entire product life cycle ("from cradle to grave") and for protecting people and the environment. The ability to assess product safety requires toxicological and ecotoxicological data, and, in many instances, animal tests remain the only reliable source of these data from a scientific perspective. In addition, the corresponding laws at both a national and international level require manufacturers to perform animal tests. Evonik actively supports the development of alternatives to animal tests in order to continue reducing the number of animal tests performed now and to completely eliminate them in the future. Evonik is guided by the 3R concept\*: Reduce – Refine – Replace

Evonik Industries AG  
Rellinghauser Straße 1-11  
45128 Essen  
[www.evonik.de](http://www.evonik.de)

**Evonik. Power to create.**

1) European Partnership for Alternative Approaches to Animal Testing 2) Foundation for the promotion of alternate and complementary methods to reduce animal experiments

# Product examples with significant contributions to sustainable development

## Insulation & Circular Economy

### **POLYVEST® HT**

for sealing compounds for insulating glass windows (triple glazing)



### **VESTENAMER®**

process additive allows rubber waste to be processed to low-noise asphalt



### **PU-Additives**

for furniture applications and the automotive industry (low VOC)



### **CALOSTAT®**

purely mineral high-performance insulation material; fully recyclable; incombustible



## Mobility

### **Silica-organosilane**

reinforcing system for „green tire“ technology



### **DYNAVIS®**

oil additives for energy-efficient hydraulic fluids



### **ROHACELL®**

light-weight technology for automotive and aircraft industry



### **DRIVON™**

technology for cost-efficient engine oils and transmission fluids



## Renewable Energies

### **Catalyst NM 30**

for cost-efficient biodiesel production



**Crosslinkers, silica, oil additives, silicone epoxy resins** for wind power



### **SEPURAN®**





customized hollow-fibre membranes for efficient biogas purification



**TAICROS® Crosslinkers** for photovoltaic cell encapsulation



# Sustainability as growth driver: product examples

Growth engines	Growth trends and drivers	„Sustainable“ products	Market growth in %
<b>Specialty Additives</b> “Small volume, big impact” 	<ul style="list-style-type: none"> <li>▪ Rising requirements on additive effects</li> <li>▪ Need for increased product performance and efficiency</li> </ul>	<ul style="list-style-type: none"> <li>▪ Additives for eco-friendly coatings</li> <li>▪ PU additives for insulation</li> <li>▪ Oil additives for fuel savings</li> </ul>	5 – 6
<b>Health &amp; Care</b> Preferred partner in Pharma and Cosmetics 	<ul style="list-style-type: none"> <li>▪ Increasing health awareness</li> <li>▪ Bio-based products and eco-safe cosmetics</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pharma polymers</li> <li>▪ Oleochemicals</li> <li>▪ Advanced biotechnology</li> </ul>	5 – 6
<b>Smart Materials</b> Tailored functionalities for sustainable solutions 	<ul style="list-style-type: none"> <li>▪ Trend towards resource efficiency in highly-demanding applications</li> <li>▪ Engineered materials to fulfill high performance requirements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Silica &amp; silanes („green“ tire)</li> <li>▪ HPP<sup>1</sup> for lightweight applications or 3D-printing</li> <li>▪ Membranes for biogas upgrading</li> </ul>	4 – 7
<b>Animal Nutrition</b> Comprehensive portfolio for sustainable food chain 	<ul style="list-style-type: none"> <li>▪ Sustainable nutrition</li> <li>▪ Improving food quality and safety</li> </ul>	<ul style="list-style-type: none"> <li>▪ Amino acids for animal nutrition</li> <li>▪ Probiotics</li> </ul>	5 – 7

1) HPP: High Performance Polymers



## Disclaimer

---

In so far as forecasts or expectations are expressed in this presentation or where our statements concern the future, these forecasts, expectations or statements may involve known or unknown risks and uncertainties. Actual results or developments may vary, depending on changes in the operating environment. Neither Evonik Industries AG nor its group companies assume an obligation to update the forecasts, expectations or statements contained in this release.



**EVONIK**

**Leading Beyond Chemistry**