

**Creating the
future is our
business**

**15th HSBC ESG
Conference,
05.02.2020**

Corporate Responsibility
Relations | 2020



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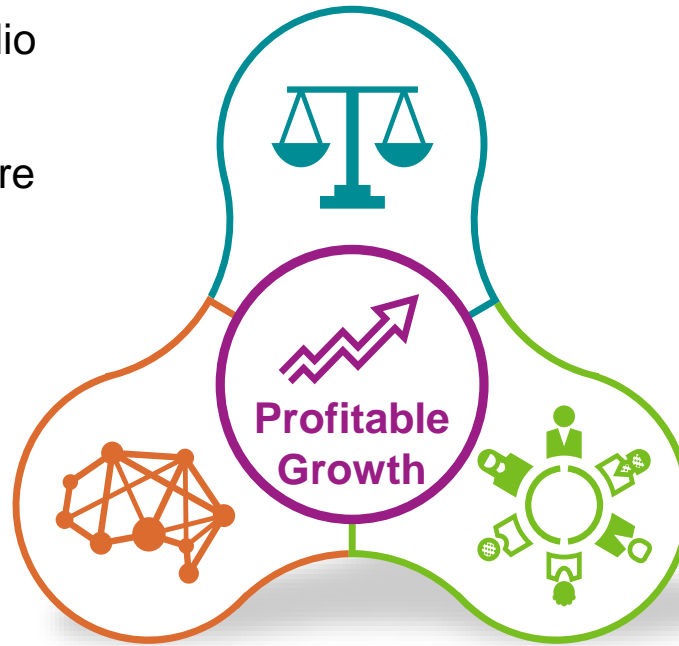
Building a best-in-class specialty chemicals company

▪ Targeting excellence in three strategic areas

- More specialty and balanced portfolio
- Customer-focused innovation
- Open & performance-oriented culture

▪ Portfolio with four growth engines

- Specialty Additives
- Health & Care
- Smart Materials
- Animal Nutrition



▪ Strong track record in strategy execution

- Successful divestment of Methacrylates Verbund; targeted acquisitions APD Specialty Additives, Huber Silica, Dr. Straetmans, PeroxyChem
- Complexity reduction via portfolio streamlining
- €200 m cost savings p.a. until 2021; €50 m in 2018 and in 2019
- Corporate values as guidelines for cultural change

Overall objective: Adj. EBITDA-margin rising from 16 – 18% to 18 – 20%; GDP+ volume growth

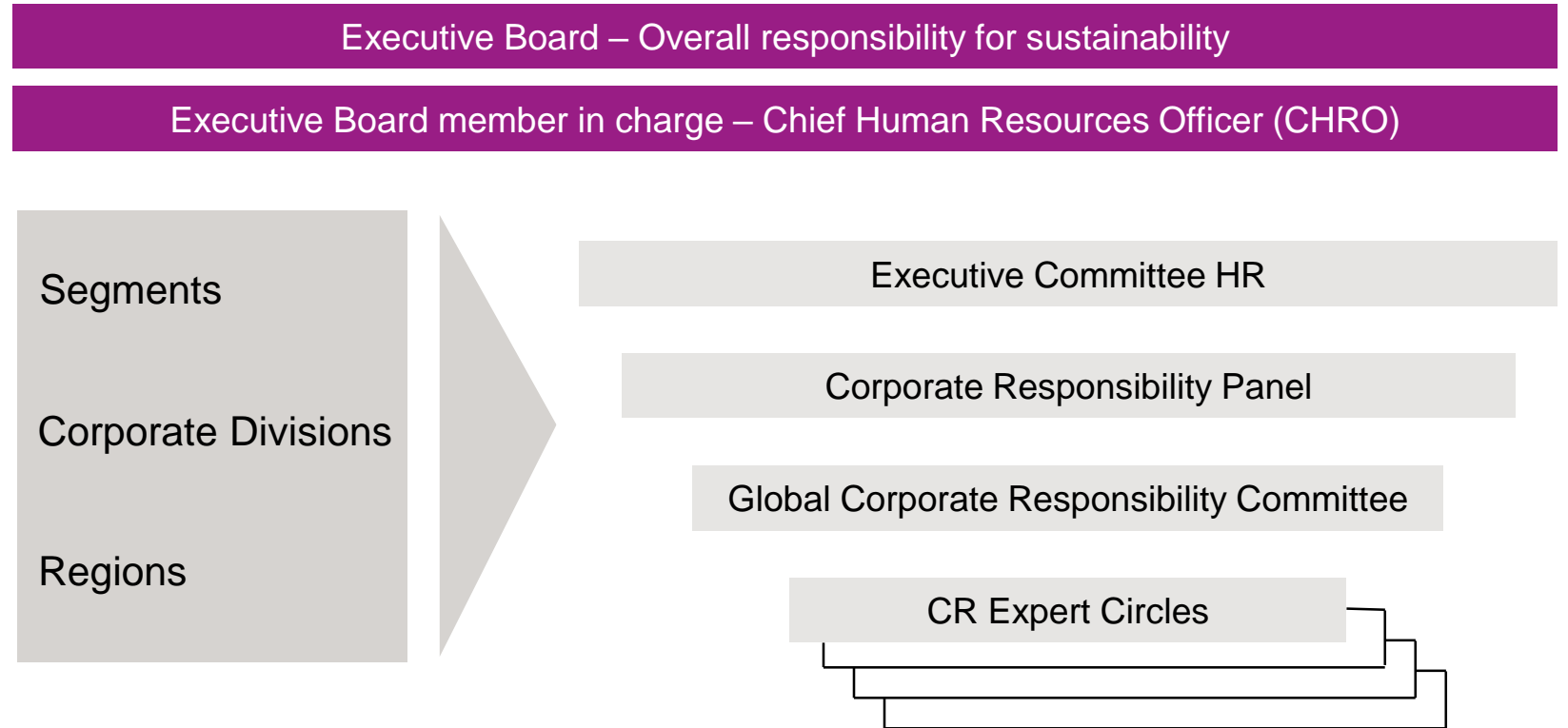
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Our sustainability management



Thomas Wessel
Executive Board Member
responsible for sustainability





Our sustainability strategy¹

1

CO₂



-50%
absolute,
Scope 1 & 2

**2008 -
2025**

2008 - 2018: -30% ✓

CO₂ pricing
as additional
planning
premise for
investments

€ per t CO₂

2

Water



Further
reduction of
specific water
intake



Introduction of
global water
management
system



3

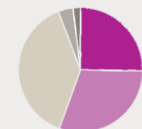
Portfolio



Strategic focus
on growth
engines with
high
sustainability
benefits



Implementation
of sustainability
analysis
according to
new method²⁾



1) adopted February 2019 2) using WBCSD Portfolio Sustainability Assessment method, business activities are weighted at the level of PARCs; PARC = product-application-region combination



Evonik committed to Paris Agreement on Climate Change

SDG 13

One of the four most relevant SDGs for the Evonik Group

13 CLIMATE ACTION



CO₂



-50%

absolute,
Scope 1 & 2

**2008 -
2025**

2008 - 2018: -30% ✓

Carbon Pricing

as additional planning premise for investments since fall 2019

Our assumption:
In ≤10 years, all regions relevant for Evonik will be covered by CO₂-regimes of ≥50 €/t CO₂

R&D for “green” energy



Joint project by Siemens and Evonik on artificial photosynthesis

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

Test facility to start operating at Evonik’s Marl site in early 2020





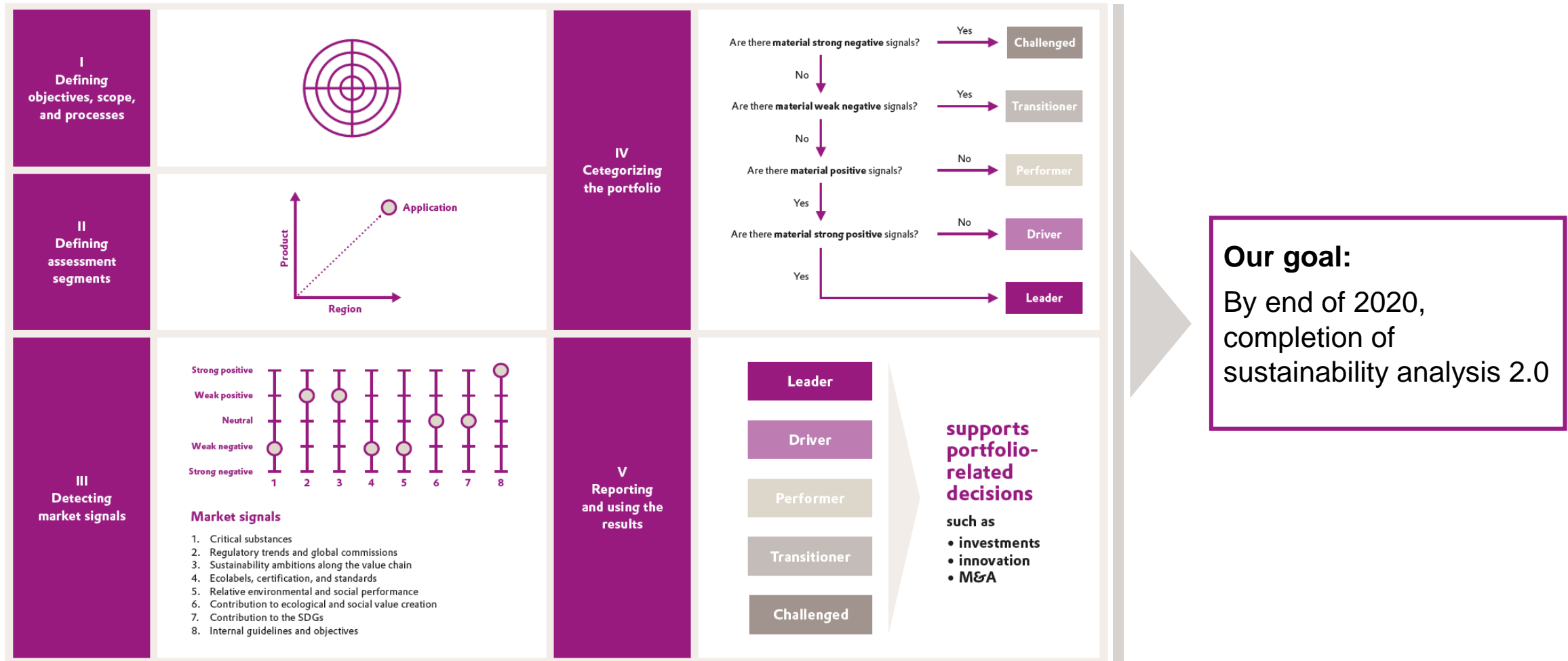
New gas and steam turbine power plant in Marl



- **Modernization** of Evonik's power plant park as key element in achieving our targeted CO₂ 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 **reduced by ~20%**, mainly due to annual **reduction of 1 million metric tons CO₂**
- Plant expected to come **on stream by 2022**



Downstream: Sustainability analysis of our business 2.0





Summary: Our sustainability strategy¹

1 Sustainability is part of Evonik's market proposition

2 Evonik is committed to foresighted resource management

3 Evonik has defined growth engines with a clear focus on sustainability

4 Evonik integrates sustainability into its strategic management processes

5 Evonik sets high standards for continuous improvement of reporting

1) Adopted by the executive board, February 2019



Our sustainability targets 2019 and beyond







Strategy and Growth	Governance and Compliance	Employees	Value chain and Products	Environment	Safety
					
<ul style="list-style-type: none">▪ Anchor sustainability in strategy dialogues▪ Review SDGs of relevance for Evonik (from 2020)	<ul style="list-style-type: none">▪ 20% women at 1st and 2nd management levels below executive board (year-end 2019)	<ul style="list-style-type: none">▪ Analyze results of global employee survey▪ Further support for diversity▪ Occupational Health Performance Index ≥ 5	<ul style="list-style-type: none">▪ Conduct sustainability analysis of our businesses▪ ≥ 20 supplier sustainability audits according to TfS¹▪ > €1 bn additional sales in six innovation growth fields (2025)	<ul style="list-style-type: none">▪ Reduce absolute scope 1 & 2 emissions by 50 percent² (2025)▪ Introduce a global water management system, including site-specific action plans	<ul style="list-style-type: none">▪ Accident frequency rate ≤ 1.30▪ Incident frequency rate ≤ 1.10

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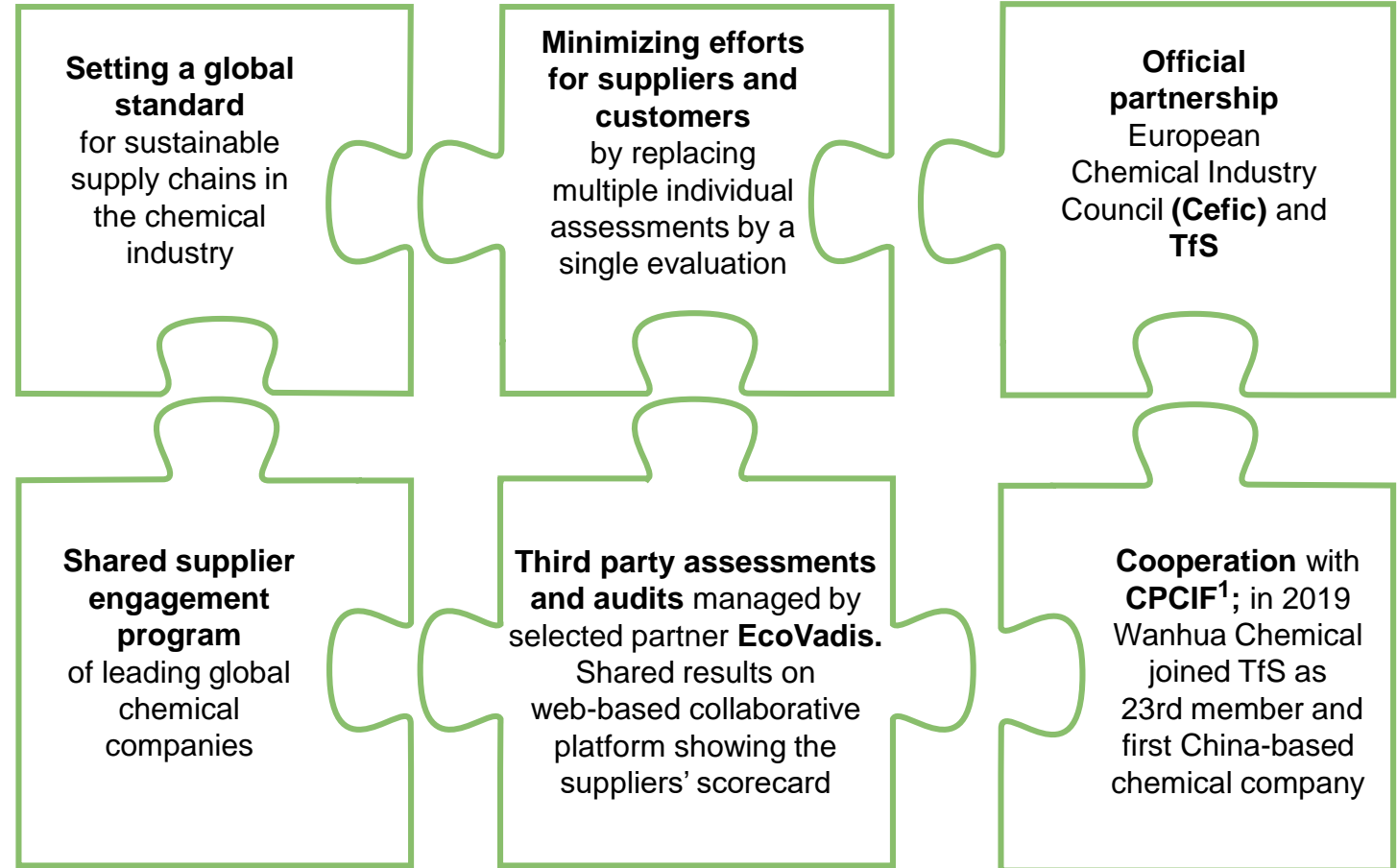
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Upstream: Responsible supply chain management



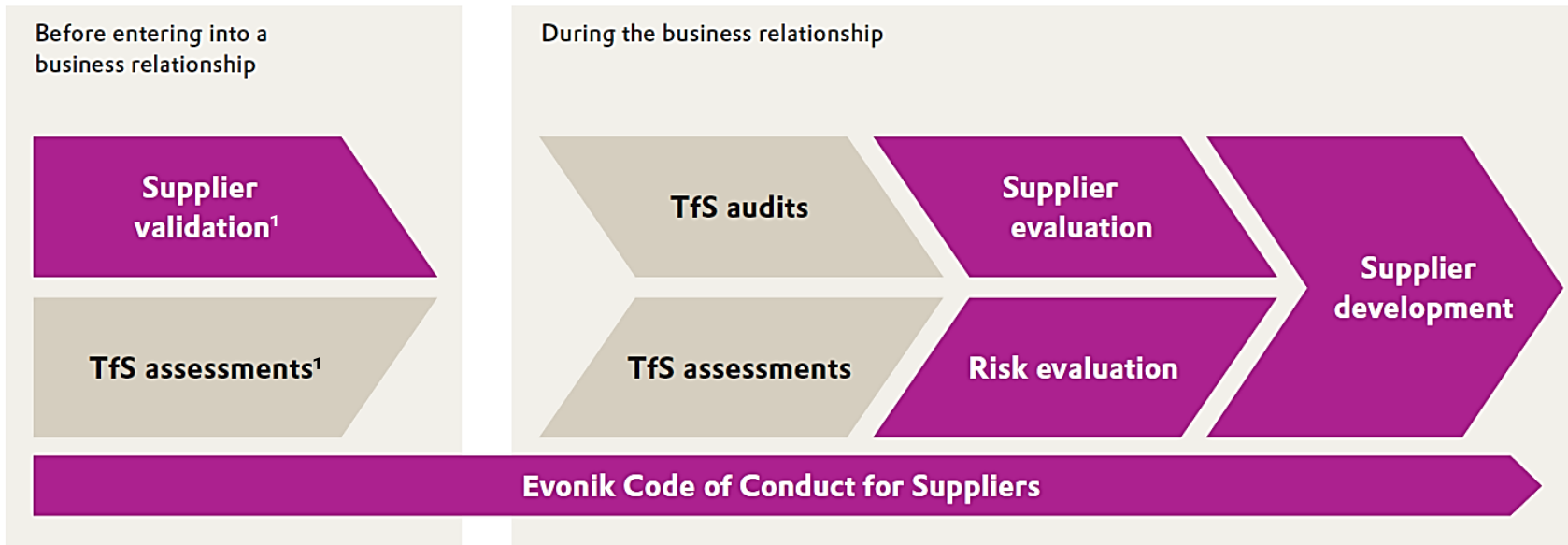
Evonik **founding member** of “Together for Sustainability” (TfS) initiative of chemical industry driving transparency and sustainability along the supply chain



1) CPCIF = Chinese Petroleum and Chemical Industry Federation



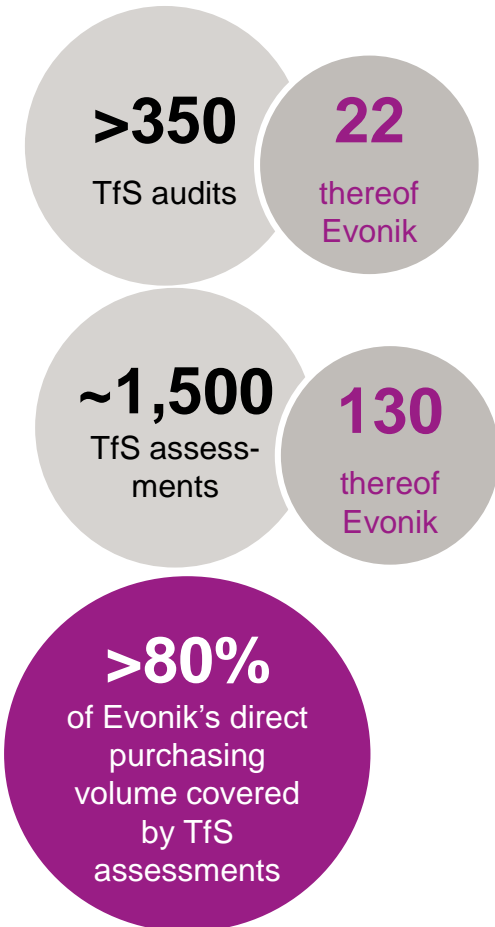
Upstream: Responsible supply chain management



Our targets 2019



- Conduct ≥20 supplier sustainability audits p.a. under the shared audit principle of the “Together for Sustainability” (TfS) initiative
- Continue analysis of suppliers by reviewing ≥ 80 TfS assessments
- Evaluate sustainability performance of 90% of suppliers of critical raw materials by 2020 (year-end 2018: 83%)





Gate to gate: Sustainability evaluation part of our R&D

€459 million

R&D expenses
R&D expenses to sales: 3.1%

★ **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:

~2,800 employees
40 sites

~240
New patent applications filed

~26,000
Patents and pending patents

50%
of sales patent-protected



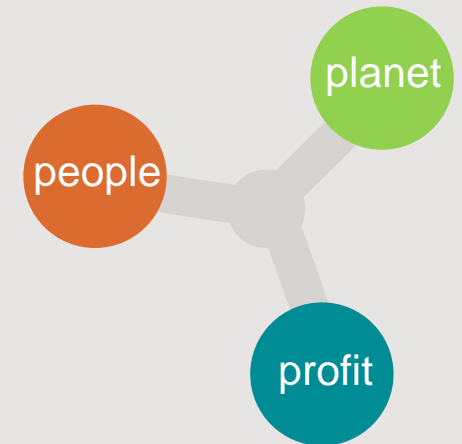
★ Biosurfactants on industrial scale:
Evonik and Unilever teamed up

★ **Tissue Engineering**
project house in
Singapore



Current market growth¹
of ~30% p.a.; market
volume¹ of US \$3 bn
by 2021

12%
of sales with products
and applications
less than 5 years old



Systematic sustainability assessment for strategic R&D projects²



★ Innovation Award: AEROSIL® E2D



Gate to gate: Our innovation targets

R&D expenses to sales

Group level: 3.1%
Growth engines: 4–6%

Sales with new¹ products and applications

🚩 Medium term: 16% of sales
2018: ~12% of sales

Corporate Venturing

~ 30 investments since 2012
2019: **2nd venture capital fund launched** (€150 million), more than doubling amount under management to €250 million

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

Sustainable Nutrition



Advanced Food Ingredients



Healthcare Solutions



Cosmetic Solutions



Membranes



Additive Manufacturing







**Additional contribution to sales
by 2025: > €1 billion; 2018: > €250 million**

1) Developed in past 5 years



Downstream: Sustainability as growth driver¹

Growth engines	Growth trends and drivers	„Sustainable“ products	Market growth in %
Specialty Additives “Small volume, big impact” 	<ul style="list-style-type: none">▪ Rising requirements on additive effects▪ Need for increased product performance and efficiency	<ul style="list-style-type: none">▪ Additives for eco-friendly coatings▪ PU additives for insulation▪ Oil additives for fuel savings	5 – 6
Health & Care Preferred partner in Pharma and Cosmetics 	<ul style="list-style-type: none">▪ Increasing health awareness▪ Bio-based products and eco-safe cosmetics	<ul style="list-style-type: none">▪ Pharma polymers▪ Oleochemicals▪ Advanced biotechnology	5 – 6
Smart Materials Tailored functionalities for sustainable solutions 	<ul style="list-style-type: none">▪ Trend towards resource efficiency in highly-demanding applications▪ Engineered materials to fulfill high performance requirements	<ul style="list-style-type: none">▪ Silica & silanes („green“ tire)▪ HPP² for lightweight applications or 3D-printing▪ Membranes for biogas upgrading	4 – 7
Animal Nutrition Comprehensive portfolio for sustainable food chain 	<ul style="list-style-type: none">▪ Sustainable nutrition▪ Improving food quality and safety	<ul style="list-style-type: none">▪ Amino acids for animal nutrition▪ Probiotics	5 – 7

1) Examples 2) HPP: High Performance Polymers



Products with significant contributions to sustainable development¹

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



¹) Examples

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In 2020, our focus is on...

Sustainability analysis of business 2.0	To be completed by end of 2020
Management processes	Further integration of sustainability into strategic processes
Impact valuation	Database 2018 to be updated
UN Sustainable Development Goals (SDGs)	Ongoing work on SDGs
Transparency/Reporting	Continuous refinement of Sustainability Report (GRI Standards)

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

POWER TO CREATE

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 - **Specific sustainability topics**
 - Evonik products increasing sustainability in their application

We create value for society^{1, 2}



€1 : €3.60³

Every €1 value added by
Evonik creates a total
of €3.60 **added value**
for society



1 : 7.1 jobs³

One Evonik
employee secures an
average of 7.1 **jobs**
in the value chain



€1 : €1.37³

Every €1 value added by
Evonik results
in **public revenues**
of €1.37

1) Impact valuation of our business activities along the value chain for Germany, the rest of Europe, USA, Canada, Mexico, and the Asia-Pacific region in 2016, based on the data currently available.

2) Data outside the scope of the limited assurance review. 3) The total includes Evonik's direct impact. Germany: added value: €1 : €2.50, jobs 1 : 3.7, public revenue €1 : €1.14

UN Sustainable Development Goals (SDGs)



Ratings & Rankings: Evonik well-positioned

- ✓ **Oekom Research** (Prime Standard B-)
- ✓ **Sustainalytics** (among Top 10 of chemicals sector)
- ✓ Together for Sustainability/**EcoVadis** (“Gold Standard”)
- ✓ **Dow Jones Sustainability Index Europe**
- ✓ **FTSE4Good** Europe, FTSE4Good Global
- ✓ **STOXX®** Global ESG Leaders
- ✓ **MSCI** World ESG Leaders Index; Socially Responsible Index MSCI Europe
- ✓ **Vigeo Eiris** Euronext Index (Europe 120, Eurozone 120)
- ✓ **CDP** Climate Change: B



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



Chemie³

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



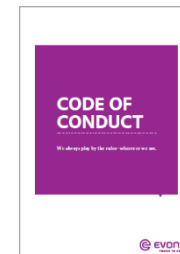
Global Social Policy

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



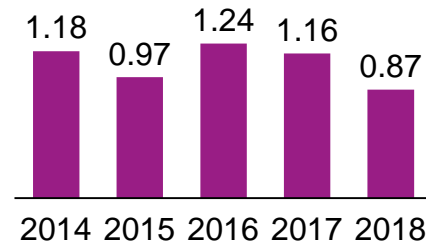
Code of Conduct

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

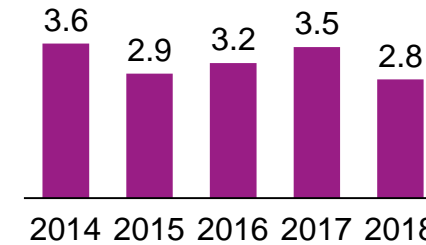
Safety is at the top of our agenda



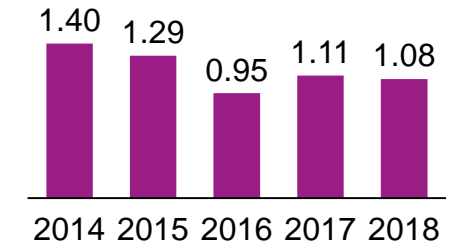
Occupational safety & plant safety



Accident frequency rate¹ for **Evonik employees** considerably improved; target 2018 (≤ 1.30) ✓



Accident frequency rate² for contractors' employees considerably improved



Incident frequency rate³ at very good level target 2018 (≤ 1.10) ✓

Incorporation of safety performance in remuneration systems; culture initiative "Safety at Evonik" firmly established. Implementation of ESTER⁴ covering core ESHQ work processes.

FY 2018 1) Number of work-related accidents involving Evonik employees and employees under the direct supervision of Evonik per 1 million working hours 2) Number of work-related accidents involving non-Evonik employees resulting in absence from work per 1 million working hours 3) Process Safety Performance Indicator according to Cefic, covering incidents involving the release of substances, fire or explosion, even if there is little or no damage. It is calculated from the number of incidents per 1 million working hours of Evonik employees 4) ESTER = Evonik Standard Tool ESHQ and reporting

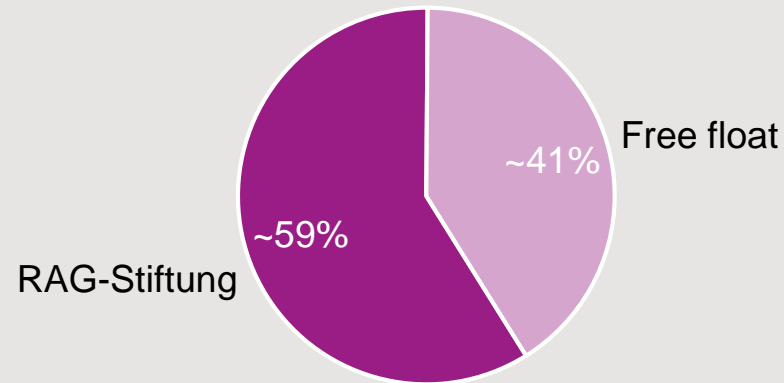
Management compensation: Executive Board

Fixed salary ~1/3	<ul style="list-style-type: none">▪ To be paid in cash for each financial year on a monthly basis	
Bonus ~1/3	<ul style="list-style-type: none">▪ Pay-out calculated on the basis of the achievement of focused KPIs; aligned to mid-term strategic targets:<ol style="list-style-type: none">1. Progression towards EBITDA margin target2. EBITDA growth (yoy)3. Contribution to FCF target4. Accident performance (frequency and severity of accidents)	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ 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

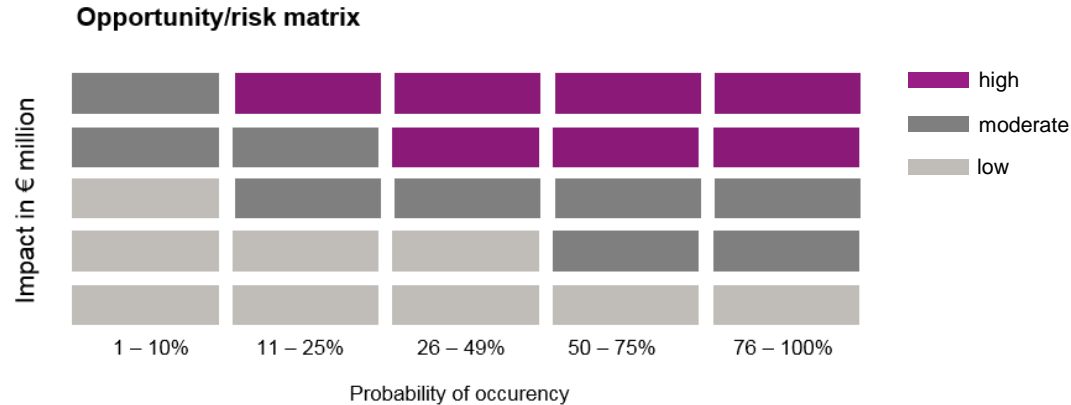
RAG-Stiftung (RAG Foundation)

- 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
- RAG-Stiftung capable to cover annual cash-out requirements with Evonik dividend (~€363 million dividend in 2018)





Opportunity and risk management



Risk categories: planning/market, legal/compliance and processes/organization. In each category, opportunities and risks allocated to **sub-categories**

Within these sub-categories, individual risks allocated to **risk and opportunity classes** (high, moderate, low etc.) based on potential impact/probability of occurrence. Evaluation based on a **net view**, taking into account risk limitation measures

Evaluation of risks based on mid-term planning (3 years); opportunities and risks defined as positive and negative **deviations from plan**

- Opportunity and risk management as central element in the management of Evonik
- Risk management system based on internationally recognized **COSO** Enterprise Management standard
- In 2017, we took steps to integrate **non-financial risks** even more closely into our conventional risk reporting. Our established risk management system now systematically captures and monitors non-quantifiable sustainability risks.
- At the same time, we raised the awareness of risk officers throughout the Group to enable them to identify **sustainability risks**.

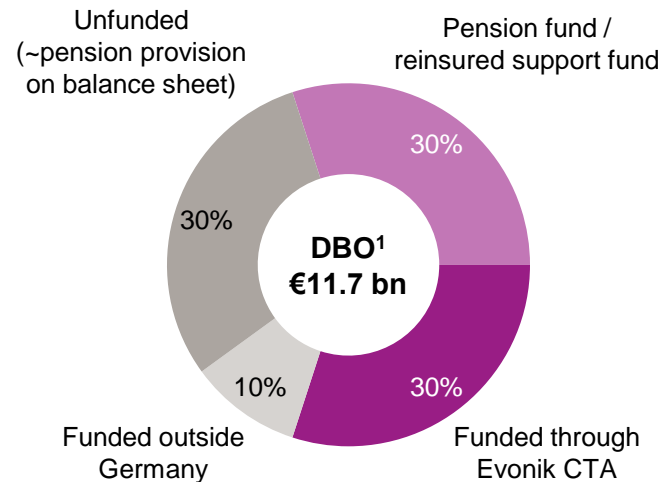
Sustainability embedded in pension asset management

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 ~70%



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.)
- From 2020 on 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


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 EPAA¹, SET Foundation²
- 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 Group, animal protection guidelines and animal protection officers installed



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

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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

Sustainable use of palm oil



TEGO® Betain P 50 C

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



Since 2014 RSPO-certified products offered
such as emulsifiers, consistency enhancers for
creams and lotions.

Today, BL Care Solutions offers >100
ingredients for the cosmetic industry according
to MB supply chain rules.

Evonik member of Roundtable on Sustainable Palm Oil (RSPO)
since 2010

All main Evonik sites¹ processing palm oil **certified** according to
RSPO Standard (MB², SG³)

Share of RSPO certified raw materials amounts to ~25% for the
Evonik Group, 65% for BL Care Solutions

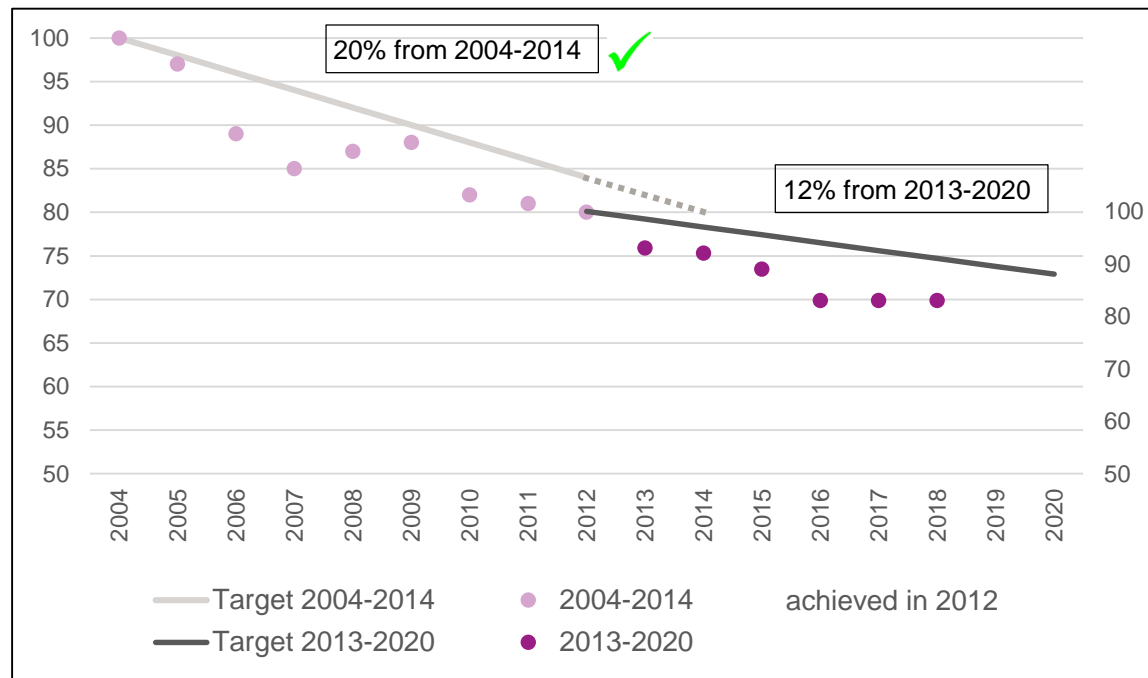
Our goals: We intend to purchase only certified palm-based raw
materials by 2023. Moreover, we will further expand our certified
product portfolio.

1) 20 2) MB = Mass Balance Supply Chain certification 3) SG = Segregated Supply Chain certification

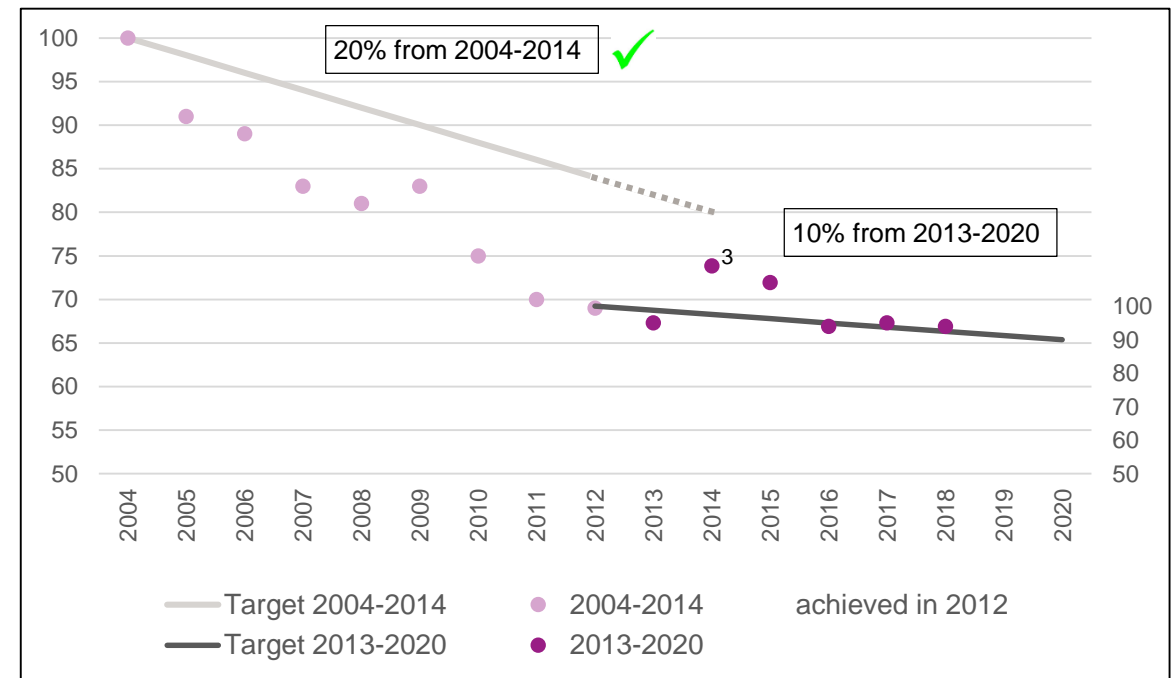


Ambitious environmental targets 2004 – 2020

Specific GHG emissions¹



Specific water intake²



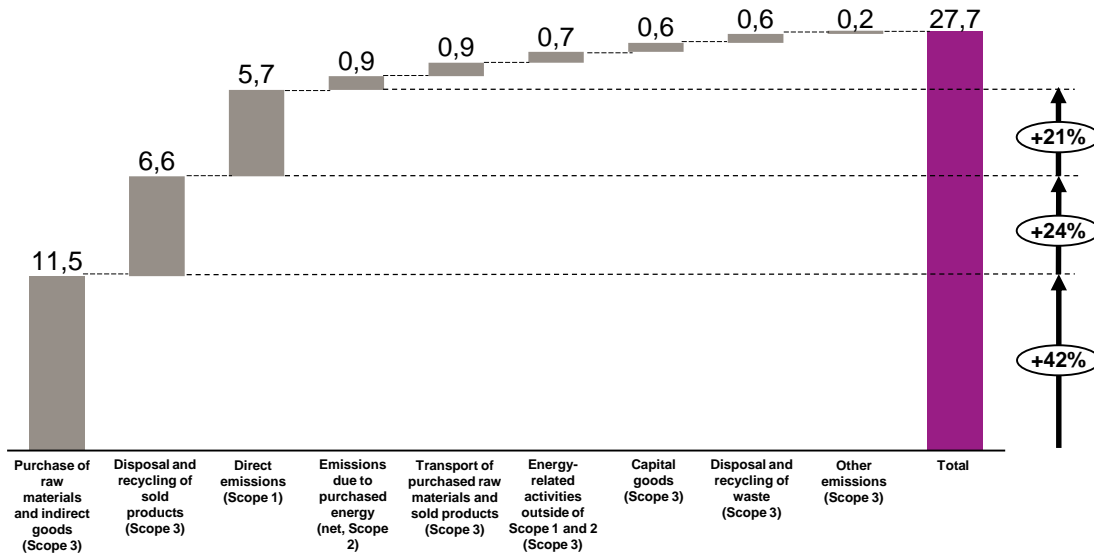
1) Energy- and process-related emissions as defined by the Greenhouse Gas Protocol, scope 2 emissions calculated using market-based method 2) Reporting on specific water intake has been recalculated retrospectively. Based on our regular analytical verification - checks on random samples of reported data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



Managing Evonik's carbon footprint

Carbon footprint

Evonik Carbon Footprint in 2018 (27,6 Mt CO₂e)



Avoided emissions

108 million metric tons CO₂eq¹ avoided emissions

by use of selected Evonik products² compared to conventional alternatives on the market

CO₂eq¹ in million metric t

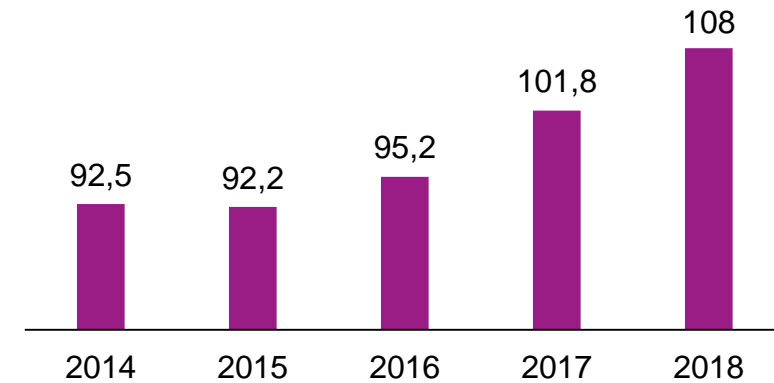


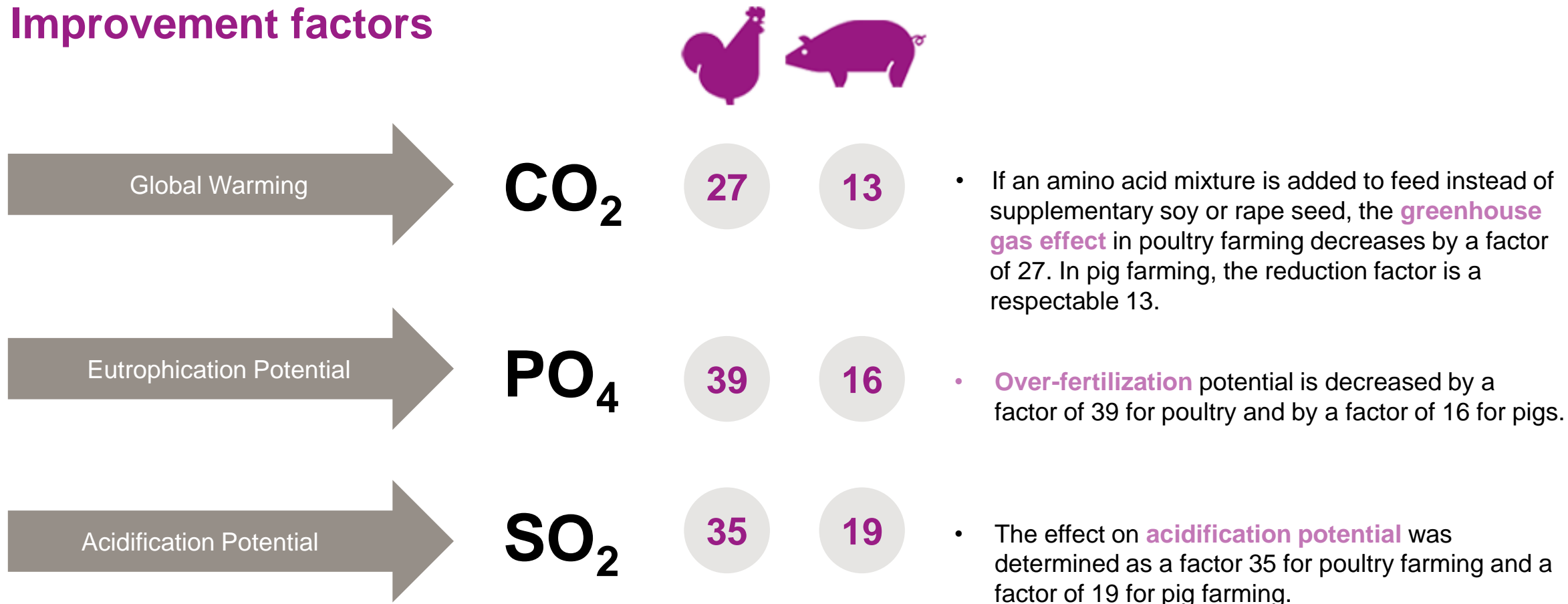
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 - **Evonik products increasing sustainability in their application**

LCA TÜV Rheinland¹ of Evonik's amino acids for animal nutrition



Improvement factors



1) Life cycle assessment by German standardization body TÜV Rheinland, 2015
38 | Public | 2020 | Corporate Responsibility | 15. HSBC ESG Conference, 05.02.2020



Substantially lower resource consumption & emissions

With 1 kg of DL-Methionine, up to 260 kg of soybean meal can be replaced in feed. The use of 100,000 t DL-Methionine¹ means:

– 1,000,000 t



Less consumption of resources (**crude oil equivalents**)

– 790,000 t



Reduced **nitrate emissions** into ground waters

– 800,000 t



Reduced **ammonia emissions** into the air

¹) The calculation is based on LCA Methionine 2003

Innovation example Veramaris

Algae to produce omega-3 fatty acids, skipping over the food chain in the ocean



Specialist in developing industrial biotechnology processes and in operating large scale manufacturing sites for fermentative processes



Specialist for the cultivation of marine organisms including algae



A combination of complementary expertise

- **Start-up of new plant in July 2019**
- **Market-pull** from the feed value chain, consumers and NGOs
- **Committed customers** like Norwegian salmon farmer Lingalaks & German retailer Kaufland
- Initial **sales potential** of ~€150 - 200 m from first plant¹
- **Evonik site in Blair offers flexibility** and opportunity for further investments to expand production



Innovation example Tissue Regeneration

Tissue Engineering Project House following Medical Devices



Biodegradable Bone Screw



Biodegradable Stent

Next
Project
House



- Network with more than 15 universities and institutes
- More than 10 customer projects launched
- More than 10 patents filed
- First product launched

- Evonik's right to play: eg materials (amino acids, growth factors, resorbable polymers)
- CAGR 30%
- Evonik addressable markets: 3B (2021)

Sustainability as a growth driver: efficiency in construction

Silica

Non-combustible high-performance insulation materials are recyclable and allow for slim insulation at new and refurbished buildings.



Binding agents

Durable road markings improve road safety and save **more than 33%** of the CO₂ footprint over the life cycle compared to other technologies.

Silanes

Best practice anti-corrosion systems avoid maintenance costs caused by corrosion over a time period of **more than 35 years.**

Processing aid

Efficient use of ground tire rubber in asphalt, along with reduction of lane grooves, crack formation and noise generation.

Sustainability as a growth driver: wind power

Crosslinkers

Composite materials in rotor blades have gained wide acceptance due to their high carrying capacity and their low weight.

Oil additives

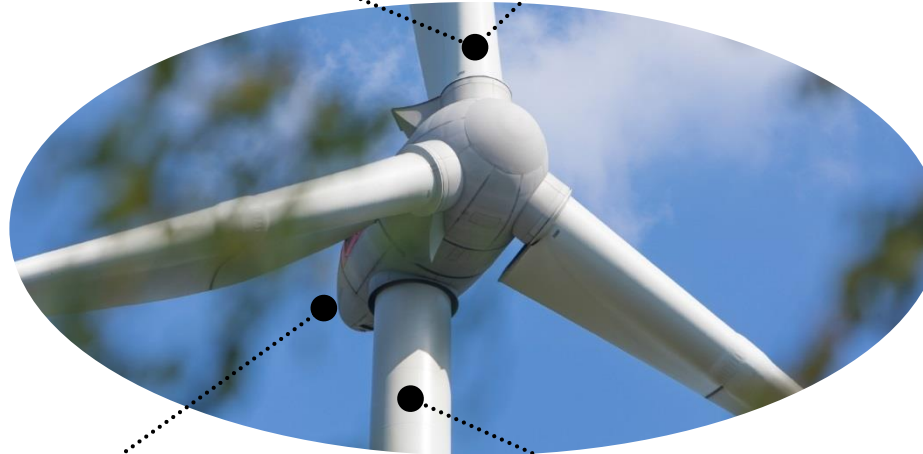
Wind turbine gear oils with high reliability reduce lubricant cost by **20%**.

Silica

High-performance adhesives enable the sustainable construction and stability of glued rotor blades **longer than 75 m**.

Silicone Epoxy Resins

Anti-corrosion coatings are **approx. 50%** thinner, at the same performance.



Sustainability as a growth driver: efficiency in mobility

Polymer powder

Additive Manufacturing (3D printing)

enables new design freedom, light weight components, rapid prototyping and more efficient spare parts logistics.

Silica/Silane system

The **Green Tire** with lower rolling resistance reduces fuel consumption and CO₂ emissions by **up to 8%**, compared to conventional automobile tires. Road safety is improved due to reduced braking distance on wet roads.

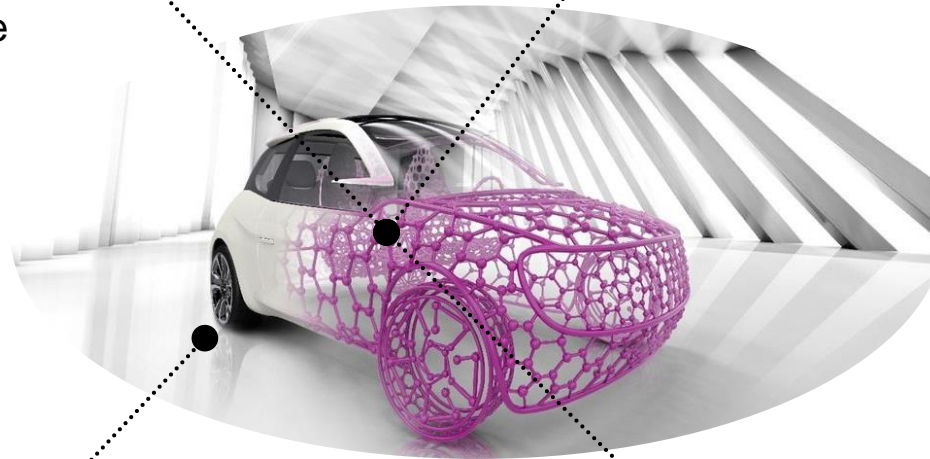
Membranes

Energy carriers methane and hydrogen

from renewable sources emit significantly less CO₂ over the life cycle than petrol and diesel.

Crosslinkers, polymers, resins

Light weight solutions reduce the weight of selected components with the same function by **up to 60%** in comparison to aluminum.

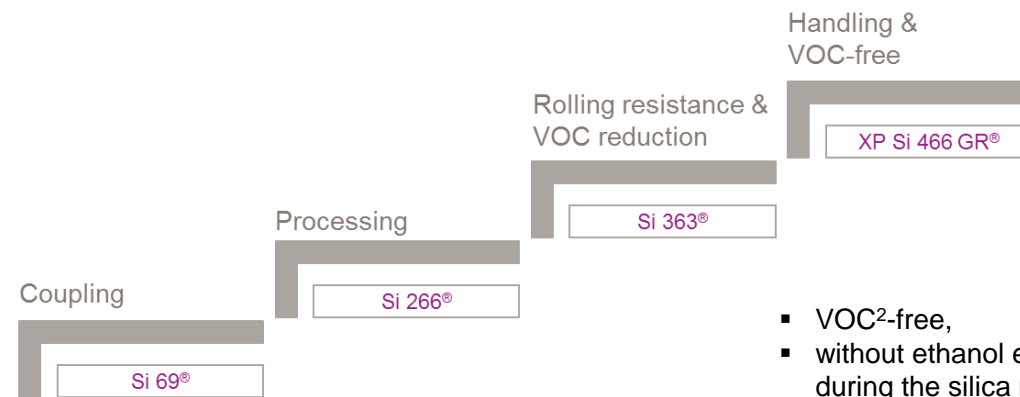
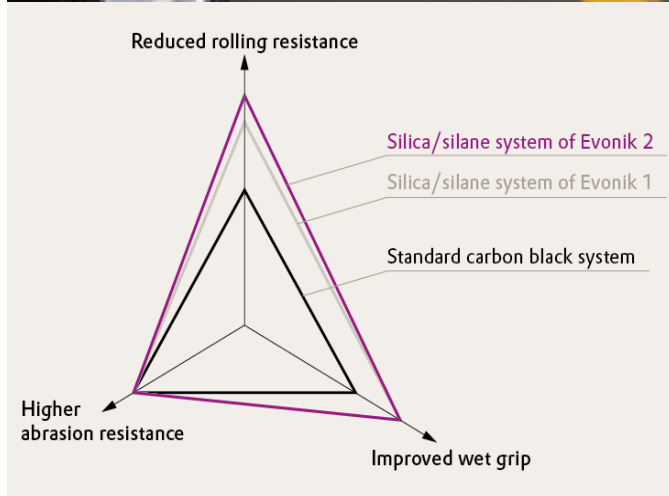




Sustainable mobility: „Green tire“



- Sustainable mobility more and more important to consumers worldwide
- Low resistance tires lead to fuel reduction by up to 8%¹; silica/silane systems as essential components of the rubber mixture of these tires
- Since 2010, market for "green tires" has grown by 30% p.a.; labeling requirements as growth driver
- Evonik is improving “green tires” even further, bringing a new silane on the market in the near future



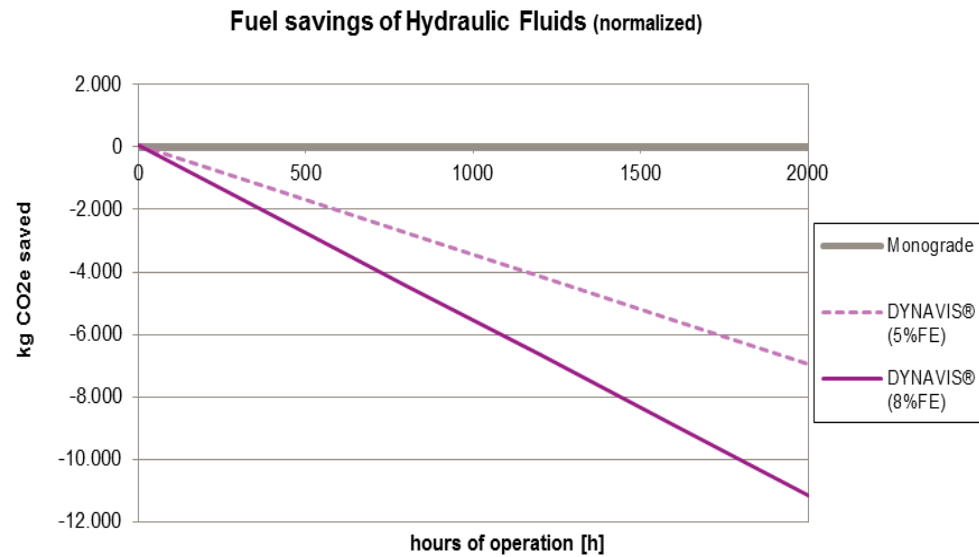
- VOC²-free,
- without ethanol emissions during the silica reaction or from the finished tire

Development of rubber silanes follows market demands



DYNAVIS® additive technology for hydraulic fluids

DYNAVIS® technology: More power, less fuel



- Up to **30%** less fuel consumption for the same amount of work
- Up to **30%** more hydraulic power under full-load conditions

Calculate your savings directly on the DYNAVIS® website





Membranes for efficient separation of gas mixtures

Internal innovation achievement (Creavis)

Polyimide membrane modules for efficient and energy-saving gas separation, tailoring selectivity and permeability exactly to the specific application

Stepwise tapping new growth markets

2011: SEPURAN® Green for upgrading biogas to biomethane; today: >300 biogas upgrading installations operating worldwide, reducing CO₂-emissions by nearly 2 million metric tons p.a.

2015: SEPURAN® Noble for energy efficient helium recovery from source gas

2016: SEPURAN® N₂ for energy efficient nitrogen generation from air

Strategic partnership with Linde

2016: Reference plant for helium upgrading in Mankota (Canada)

2018: Exclusive cooperation agreement on the use of membranes for natural gas processing

Growth

- Already mid-double digit million € business¹ in BL High Performance Polymers (Resource Efficiency Segment)
- Strongly growing with 20% CAGR

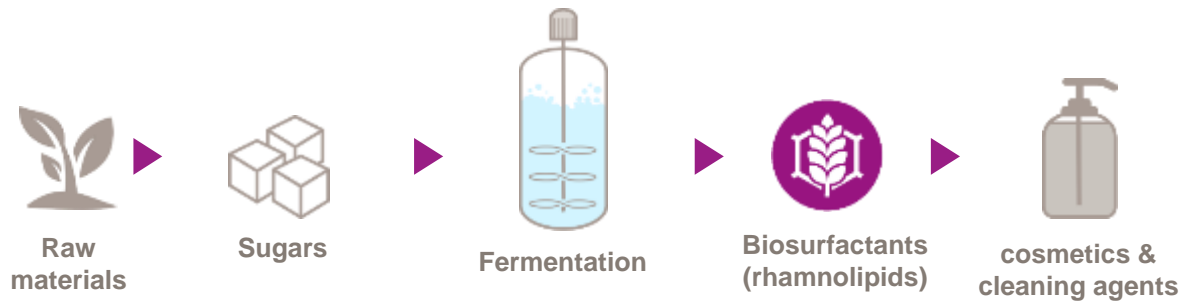


1) Sales 2018

Biosurfactants are the next game changer in Evonik's innovation portfolio

Large-scale production of world's first "green" biosurfactant (rhamnolipids)

A unique process resulting in a unique product



- 100% **renewable natural resource & biodegradable**
 - **Plant based sugars** as only carbon source – no oils used
 - **Unique product properties**, especially cleansing & foaming (comparable products usually made from petrochemicals)
- **First large-scale biosurfactant** for cosmetics and cleaning

Commercialization to capture future growth



- **Unilever** has successfully launched a product in Chile in 2019
- Next step in commercializing **Evonik's leading biotechnology capabilities**: designs of a **global scale production plant**
- Evonik will be the **first company to produce biosurfactants on industrial scale** with focus on attractive markets in personal and home care



RHEANCE® One – completely natural raw material for cosmetics

First ever glycolipids product, launched during in-cosmetics tradeshow in Amsterdam in April 2018.

Glycolipids are made up of sugar and fatty acids, avoiding use of tropical oils. RHEANCE® One is **100 percent based on renewable raw materials** and manufactured using a **fermentation process**.

RHEANCE® is **fully biodegradable** and offers extremely good environmental compatibility.

Glycolipids stand out for generating a dense, creamy foam and having a **pleasant, natural skin feel**.

In skin, hair and oral care products, RHEANCE® One ensures **effective yet gentle cleansing** – and is ideally suited for even the most demanding skin types.



RHEANCE® One: 2019 Ringier Innovation Award for Personal Care in China

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