# Sustainability at Evonik.

## 2024

## NEXTGEN 🔀





## Sustainability fully integrated in corporate strategy Next phase of transformation in all three strategic levers





1. SBTi confirmed target on Scope 1 & 2 emissions

## Setting the frame



AMBITIOUS SUSTAINABILITY TARGETS AND COMMITMENTS



Ambitious commitments on handprint and footprint In line with Science Based Targets



1. Exact target for Scope 3: -11.07 percent



## Handprint: "Next Generation Solutions"

43% of Evonik's portfolio with superior sustainability benefits





### Handprint: "Next Generation Solutions" to grow beyond 50% by 2030 Market-driven transformation



1. Capex for selected projects between 2022 and 2030



### Handprint: Superior sales growth rates of existing "NGS" Portfolio circled around our four "Sustainability Focus Areas"





## Footprint: Our commitments to reaching the Paris Climate Agreement Site-driven transformation



#### €700 million of investments<sup>1</sup> until 2030



1. Capex for selected projects between 2022 and 2030

## Footprint: "Next Generation Technologies"

Site-driven transformation: Example Antwerp as blueprint for other sites







## Footprint: Reduction targets in all our sustainability focus areas Measurable set of KPIs in place



1. Reference year 2021; 2. On all scopes 1, 2, 3; 3. Corresponding to the production volume; 4. RSPO MB: Roundtable on Sustainable Palm Oil Mass Balance



## Ambitious sustainability targets backed by financial commitment

Capex as key element for investments into handprint & footprint



1. Incl. ~€35 m for Performance Materials | 2. ~€350 m p.a. | 3. ~€80 m p.a. on average incl. ~€15 m p.a. for PM, ramping up gradually over the coming years



## Complementing the governance on ESG

## Reflected in organizational set-up and remuneration

#### **Clear responsibilities**

- Executive Board has overall responsibility for sustainability
- Setting strategic framework and executing measures in close cooperation with operating divisions

#### Part of remuneration

- Occupational safety part of remuneration of the executive board since more than a decade
- New ESG goals integrated in remuneration schemes of Executive Board







## Sustainability strategy - Key take-aways

To improve life, today and tomorrow.

Sustainability is an **integral part of our purpose** – four Evonik focus areas as guiding framework for Evonik

**Sustainability is fully integrated** into strategic management processes: portfolio & innovation steering, capital allocation

Handprint: increase NGS<sup>1</sup> sales share to >50% by 2030

Footprint: reduce CO<sub>2</sub> emissions by 25% by 2030<sup>2</sup>

Driving Next Generation Culture & complementing governance

NGS: "Next Generation Solutions"
 Confirmed SBTi target for Scope 1 & 2 ("well below 2 °C"); gross emissions reduction with reference year 2021, target year 2030











## **Sustainability Rankings**

Evonik best-in-class within chemicals sector



1: Rating on a scale of AAA to CCC | 2: Top 1% of companies assessed | 3: Rating on a scale of A+ to D- | 4: out of ~600 companies ranked in the chemical sector | 5: Rating on a scale of A+ to D-



## Green Finance supporting Evonik's sustainability strategy

Green bonds firmly established as financial instrument



1: Formal lifetime 60 years; first redemption right for Evonik in 2026

#### Use of proceeds...

- ...according to Green Finance Framework, mainly allocated to NextGen Solutions and NextGen Technologies capex
- In addition, green RD&I opex for NextGen Solutions and expenses for energy efficiency and renewable energy (e.g. Green PPA)

#### **Green Finance firmly established**

- Sustainability strategy well accepted by reputable ESGinvestors
- Green Finance can be an important differentiating factor, especially in difficult market situations
- Contribution to achieving sustainability targets, e.g. increase sales share of Next Generation Solutions to >50%



		Status 2023	Target
Ch Strategy and suggest	<ul> <li>Sales share to be generated from "Next Generation Solutions" by 2030</li> </ul>	43%	>50%
Strategy and growth	Proportion of sales from challenged products should be permanently <5 percent	~€2%	<5%
	<ul> <li>Generate at least €1 billion in additional sales with circular products and technologies by 2030</li> </ul>		~€1 bn
	<ul> <li>TfS assessments of all raw materials suppliers (with annual procurement volume &gt;€100k) by year-end 2025</li> </ul>	67%	100%
Value chain and products	<ul> <li>RSPO MB certified palm oil and derivatives by 2025</li> </ul>	60%	100%
	<ul> <li>Reduce greenhouse gas emissions</li> </ul>		
The environment	<ul> <li>absolute scope 1 and scope 2 emissions by 2030 (reference: 2021)</li> </ul>	-15%	-25%
	<ul> <li>absolute scope 3 emissions by 2030 (reference: 2021)</li> </ul>	-17%	-11%
	<ul> <li>Reduce specific freshwater intake<sup>2</sup> by 2030 (vs. 2021)</li> </ul>	+12%	-3%
	<ul> <li>Reduce specific production waste by 2030 (vs. 2021)</li> </ul>	+8%	-10%
	<ul> <li>Total saving of energy from implemented efficiency projects until target year 2030 (vs. 2021)</li> </ul>	-390 GWh	-1,200 GWh
	Increase of share of green sourced electricity to 100% by 2030	35%	100%
	<ul> <li>Intercultural mix<sup>3</sup> in top management by 2026</li> </ul>	18,4%	25%
Employees	<ul> <li>Women in top and senior management by 2023</li> </ul>	22.2% / 18.5%	30%
	<ul> <li>Safety</li> </ul>		
<b>Safety</b>	<ul> <li>Accident frequency rate (LTI-R)<sup>4</sup></li> </ul>	0.21	≤0.26
	<ul> <li>Incident frequency rate (PSI-R)<sup>5</sup></li> </ul>	0.43	≤0.40
	<ul> <li>Occupational health performance index</li> </ul>	5.5	≥5.0
Governance and compliance	<ul> <li>20% of Long-Term Incentive linked to Sustainability targets</li> </ul>		V

1. With products introduced in or after 2015 | 2. See table T09 in Sustainability Report | 3. Non-German Employees | 4. New reference parameter from 2021 | 5. Modified calculation basis from 2021



## Agenda Sustainability fully integrated into all three strategic levers

#### Portfolio

- Handprint: "Next Generation Solutions"
- Footprint: CO<sub>2</sub> emission reduction as key KPI

#### Innovation

- Sustainability fully integrated into innovation portfolio steering
- Clear alignment with our four Sustainability Focus Areas

#### Culture

- Safety and health protection are top of our agenda
- Strengthen diversity to lead in a complex world

#### Social & Governance

- Social commitments & responsible supply-chain management
- Sustainability KPIs as integral part of management compensation



## Our Sustainability Focus Areas defining footprint & handprint measures Result of external views and Evonik portfolio and competencies





## Sustainability fully integrated in corporate strategy

PSA and Emission Data Cube: core tools for strategic management process



## Agenda Sustainability fully integrated into all three strategic levers

#### Portfolio

- Handprint: "Next Generation Solutions"
- Footprint: CO<sub>2</sub> emission reduction as key KPI

#### Innovation

- Sustainability fully integrated into innovation portfolio steering
- Clear alignment with our four Sustainability Focus Areas

#### Culture

- Safety and health protection are top of our agenda
- Strengthen diversity to lead in a complex world

#### **Social & Governance**

- Social commitments & responsible supply-chain management
- Sustainability KPIs as integral part of management compensation



## **Portfolio Sustainability Analysis (PSA)**

Categorization of product portfolio, integrated in Strategic Management Process





## Portfolio management: Adding sustainability as integral dimension

Alignment of sustainability clusters and strategic roles in strategy dialogues





#### **Next Generation Solutions**

## Clean-tech market opportunities and impacts in Sustainability Focus Areas

#### **Markets**

Renewable Energy / Transformation	Biogas, Biofuel, Wind, Solar, Hydrogen, Energy Storage/Distribution			
Energy efficiency & Mobility	Advanced Materials, E-mobility, Batteries			
Green Building	Insulation, Advanced Construction Materials			Low VOC, safe materials
Sustainable Water / Sanitation			Wastewater Prevention & Treatment	t
Pollution Prevention / Waste	CCS, CCU	Enable recycling	Pollution prevention & control, Envir	onmental Remediation
Sustainable Consumer Goods		Circular Carbon-Based Ingredients		Low VOC, safe materials
Sustainable Agriculture / Food			Resource-efficient, low pollution, and	d safe nutrition
Pharma & Medical therapies				Drug & vaccine delivery, Cell-culture based therapy

Impacts	Fight Climate Change	Drive Circularity	Safeguard Ecosystems	Ensure Health & Wellbeing
	7 distantia each 7 distantia each 9 success security 9 success security 13 datait 13 datait 14 datait 15 datait 16 datait 17 distantia 18 datait 19 success security 19 success security 19 success security 19 success security 10 datait 10	9 MAGENTY, INVENTION MADE MARKETERISE MADE MADE MARKETERISE MADE MADE MADE MADE MARKETERISE MADE MADE MADE MADE MADE MADE MADE MADE	2 modut 14 ways match 15 withe 15 million	3 AND HELL REVIC 
	Energy Efficiency	Circular Materials	Water & terrestrical	Reduce hazard exposure
	Emission Reduction	Reduce, Recycle, Reuse	Ecosystems Preservation	Replace disputed chemicals
	Climate Adaptation	Repurpose, Repair Remanufacture, Refurbish, Renature	Reduce emission & leaching of disputed and persistent chemicals	More effective therapies



# **Next Generation Solutions across markets and Sustainability Focus Areas** 43 % sales in 2023

Markets		● Below 50 M€   ● 50 –	200 M€ Above 200 M€	
Renewable Energy / Transformation		٠		
Energy efficiency & Mobility			٠	
Green Building			٠	
Sustainable Water / Sanitation				•
Pollution Prevention / Waste			٠	•
Sustainable Consumer Goods				
Sustainable Agriculture / Food				•
Pharma & Medical therapies		۲	۲	
Diverse markets			•	
Impacts	Fight Climate Change	Drive Circularity	Safeguard Ecosystems	Ensure Health & Wellbeing
	7 densitied and 2 dens	9 NOCETIC NOCUMENT AD IN DESERVICES AD IN DESERVICES THE DE	2 100 14 14 14 100 MKDM 15 01/MG	3 600 HATH -M



## Handprint: "Next Generation Solutions" to grow beyond 50% by 2030 Ambitious new sales share target to be achieved through three levers



NGS: "Next Generation Solutions" include "Leader" (A++) and "Driver" (A+) products and solutions

## Superior sales growth rates of existing "Next Generation Solutions" Selected examples addressing our four Sustainability Focus Areas



% values: Target CAGR 2021-2030 defined in Strategy Dialogue



#### Cooling and A/C



- Lightweight through metal / rubber replacement
- Weight reduction supports CO<sub>2</sub> and NO<sub>x</sub> reduction
- Smart battery temperature management

#### Focus "Future mobility"

#### Materials for Li-Ion-Batteries



Nanostructured high-quality metal oxide and silicon particles improve safety, lifetime and energy density

 Metal oxides extend cathode lifetime by ~50%

#### Silica / Silane "green tires"



First Silica/Silane system for naturalrubber-based truck tires

- Fuel savings as high as 8%
- 20% lower rolling resistance (1 class better in tire label) and 5% improved wet grip
- No losses in wear resistance



## Handprint: Drive Circularity

#### TEGOVISIN®



Water-repellents for building materials:

- Strong reduction of water uptake and efflorescence
- Long lasting stability and aesthetics reduce the need for resource and emission intensive maintenance

#### Focus "Durability"

## SITREN®



Additives for integral protection of concrete structure:

- Durability for new and renovated concrete surfaces by protection against environmental influences
- Less emissions and reduced resource use by longer lifetime of constructions

#### WallCraft – Upcoming launch



Self-healing concrete:

- Bacteria-based additive extends the longevity of concrete by stimulating its self-healing properties
- Cracks can grow together again resulting in a durable construction



## Handprint: Drive Circularity





CHEMICAL RECYCLING



- During separation/washing, our additives help to make recycling processes more efficient – resulting in higher quality of recyclates
- During compounding, our additives improve processing leading to competitive costs and quality

- Technologies & additives to enable chemical recycling
- Additives enabling for example
  - use of recycled polyurethanes
  - silicone recycling

>€1 bn

sales potential of Evonik Circular Economy Program by 2030



## Handprint: Safeguard Eco-systems

Econtial	omino	aaida
<b>Essential</b>		



The key to high quality proteins

 Modern, environmentally sound formulation techniques based on nutrient value, on supplementation with crystalline EAAs, and on animal nutrient requirement

#### Focus "Biodiversity"

#### Veramaris



Production of omega-3 fatty acids from microalgae

- Potential to reduce the fish-in-fish-out ratio to zero
- 1 ton EPA DHA replaces 60 Tons wildcaught fish

#### **Peracetic Acid**



Effective alternative to biocides for disinfecting wastewater

 Due to its low oxidant demand in wastewater, lack of harmful disinfection by-products, low ecotoxicity, and efficacy, peracetic acid offers a costeffective alternative to chlorine, UV, and ozone



## Handprint: Ensure Health & Well-Being

Focus "Drug Delivery Systems"				
Drug Delivery Systems	Next generations of LNP-based gene therapies			
	Vaccines	<b>Cancer immunotherapy</b> expected to be the next breakthrough of mRNA therapeutics		
<ul> <li>Global development partner &amp; solutions provider for delivery systems for effective drugs and vaccinations</li> <li>Evonik as pioneer in Lipid nanoparticles (LNP) field for mRNA technology</li> </ul>	Protein therapeutics	mRNA-based therapies can potentially <b>treat hereditary</b> diseases		
	Gene editing	In-vivo modification of genes to prevent diseases expected to be commercial within the next years		



## Actively managing "Transitioners" & phase-out "Challenged" products Either improvement or exit



#### "Challenged" products addressed with exit strategies

- Alternative, new product solutions without any negative signals are offered
- "Challenged" products included in financial riskmanagement

#### "Transitioners" as driver for innovation

- Early identification of negative sustainability signals
- Valuable trigger for innovation and customer engagement in reformulation

Further products will be exposed to negative signals as higher sustainability requirements develop



## Agenda Sustainability fully integrated into all three strategic levers

#### Portfolio

- Handprint: "Next Generation Solutions"
- Footprint: CO<sub>2</sub> emission reduction as key KPI

#### Innovation

- Sustainability fully integrated into innovation portfolio steering
- Clear alignment with our four Sustainability Focus Areas

#### Culture

- Safety and health protection are top of our agenda
- Strengthen diversity to lead in a complex world

#### Social & Governance

- Social commitments & responsible supply-chain management
- Sustainability KPIs as integral part of management compensation



## **Footprint: Evonik Carbon Footprint 2023**

Focus on Scope 1&2, intensifying efforts on Scope 3



1. Scope 3 figures according to fast close estimate



## Our commitments to reaching the Paris Climate Agreement Evonik will be climate neutral by 2050. Committed to SBTi.



<sup>1.</sup> Gross emissions; reference year 2021, target year 2030. \*) Scope 3 figures according to fast close estimate


# Footprint: Clear roadmap to achieve Scope 1 & 2 targets by 2030

Three clusters with economically attractive measures defined



1. Gross emissions in kt CO2e

37 | Sustainability at Evonik



# 1 Exit coal-based energy in Marl



Modernization of Evonik's power plant park with two new power plants

The last coal-fired power plant at Marl Chemical Park was replaced by a **flexible combined cycle gas and steam power plant in April 2024** 

Global scope 1 GHG emissions cut by ~20%, mainly due to annual reduction of up to 1 million metric tons

Additional turbine plant connected to the grid end of 2022, replacing an old reserve gas-fired power plant

Total power output of 270<sup>1</sup> megawatts with an **efficiency exceeding 90%** 

### Exit of coal worldwide mid of this year

Temporary prolongation of runtime of coal-fired power plant in order to increase security of supply, before readopting initial plan to replace coal with gas to end in April

1. 2x blocks in first power plant, 1x block in second plant, each generating 90 MW electricity and 220 tons of steam per hour



# 2 "Next Generation Technologies"

Example Antwerp as blueprint for other sites



1. Gross emissions in kt  $CO_2e$ 



# 2a "Next Generation Technologies": Advanced levers Example



**APC optimizes** complex production processes under consideration of many process parameters and ensures production at the **ideal operating point** 

- Before optimization: High fluctuation
- 1<sup>st</sup> step: Reduce variation up to 50%
- 2<sup>nd</sup> step: Optimize towards process limits, typical benefit 5 % (throughput increase, specific energy/raw material consumption)



# 2b "Next Generation Technologies": Innovative waste heat up-cycling Example





# **2c "Next Generation Technologies": Process redesign** Example



### Sustainable processes via electrochemical pH-shift

- Development of sustainable processes avoiding acids, bases and salt containing waste streams
- pH induced reactions by applying electrochemical process steps – "electrons replace chemicals"
- Technology as enabler to minimize carbon footprint



# **2c "Next Generation Technologies": Process redesign** Example



- In the current process, all side products are incinerated
- A new side product treatment as experimentally demonstrated for a single stream – would lead to GHG emission reduction of up to ~15 % in this process step
- Further CO<sub>2</sub> reduction potential by holistic network optimization



# **2** EAGER program to assess main CO<sub>2</sub> emitting sites

Definition of 2030 implementation plan with reduction measures

### 2021: Starting point

- Detailed analysis of options for Antwerp and Rheinfelden sites
- Definition of most important reduction levers with necessary investments
- Blueprint for other sites



#### 2022-2030

- Identification of potential to reduce GHG, Water and Waste emissions
- Focus on our top 20 sites, accounting e.g. for 80% of GHG emissions
- Implementation plan defined by crossfunctional working group



- First investments into selected projects
- ~€81 m spend in 2023
- e.g. new facility in Singapore for carbon-neutral production of alkoxides



### **IMPLEMENTATION PLAN**





1. EAGER: Evonik Assessment of Greenhouse Gas Emission Reduction

# **2** EAGER to support sound decision making on site investments





1. EAGER: Evonik Assessment of Greenhouse Gas Emission Reduction

# 3 Renewable energy Targeting 100% renewable sourced electricity until 2030

#### Increase of share of green sourced electricity to ~50% in 2026 with recent PPAs



Share of externally sourced green electricity globally



1. CO2 reduction occurs in GHG protocol scope 1 or 3, dependent on selected accounting methodology (incl. or excl. biogenic carbon removals and emissions)



46 | Sustainability at Evonik

# 3 Renewable energy Green Hydrogen for green wind energy

#### Partnering with Siemens to produce green hydrogen

#### Green hydrogen production by Siemens and Evonik in Herne, Germany



- Evonik is investing in a pilot electrolyzer in Herne (Germany) to produce green hydrogen as a starting product for isophorone diamine (IPDA), a key raw material for the rotor blades for wind turbines.
- In the electrolysis process, water is split into green hydrogen and green oxygen with the aid of green electricity.
  - It will be able to meet about 45 percent of the hydrogen required by this site each year
  - 100 percent of its oxygen requirements
  - Reduction of 12,500 metric tons  $CO_2$  a year
  - Local production makes operation of the facilities at the site more reliable
  - Start of production is planned for 2025



### Different levers to deliver outcome that matters to our customers

#### **Incremental Improvement**

- Supplier engagement for raw materials and services investing in energy efficiency and use of renewable energy
- Turn electricity trading green
- Water stewardship and avoiding of production waste in alignment with scope 1&2 emission reduction pathway

#### **Green Opportunities**

- For existing products access renewable raw materials and energy to deliver green(er) products for high market pull applications
- New products based on renewable carbon and green energy without significant harm to other environmental or social sustainability topics

#### **Back-Integration**

- Backwards integration levering efficiency, green energy, carbon capture opportunities
- Reduce storage and transport of toxic chemicals
- Sites & technologies without high-carbon lock-in risk
- Access to raw materials with competitive green future

#### **Asset Transformation**

- Identify lock-in risks (portfolio / technology / site / raw material) and ensure that capital allocation and innovation are steered towards climate-neutrality, circularity and "safe & sustainable by design" chemicals
- Collaborate with, or transfer of business to best owner for an asset-heavy business model

Continuous reduction of product carbon footprints based on certified, marketbased data

Evonik able to serve market segments with high demand for credible green solutions Improve resilience, profitability and competitiveness along the path to climate neutrality Secure financial resources, technology, and raw materials for products, the world will need



Continuously improving the data quality on Scope 3 emissions



Incremental	Green	Back-Integration	Asset
Improvement	Opportunities		Transformation

- Evonik motivates suppliers to provide primary ("real") emission factors for the actual purchased raw material
- Proxies from public databases are only used if the supplier does not provide a real emission factor
- Supplier commitment to deliver primary emission factors mandatory as of 2025
- Strong involvement in TfS development of digital formats to exchange sustainability data across value chains
- Evonik experts support suppliers in calculating Life Cycle Analyses (LCAs) for raw materials purchased by Evonik to be able to provide real emission factors



Continuously increasing the coverage of own products by LCAs





1. LCA = Lifecycle Assessment; 2023 figures available as of April 2024

Taking a selective approach on GHG reductions with green opportunities

### End market pull<sup>1</sup>



#### Green opportunities are e.g.,

Green

Opportunities

Incremental

Improvement

- Rhamnolipids (bio-based feedstocks)

**Back-Integration** 

- Silica (bio-based or recycled feedstocks)
- Eco Products (circular feedstocks instead of virgin fossil ones)



Asset

Transformation

# Leveraging market opportunities resulting from value chain transformations



In various products and markets, Evonik replaces virgin fossil raw materials with circular feedstocks to meet demand for green alternatives

Vestamid Eco Dynacoll Eco Vestoplast Eco Polyvest Eco Trogamid Mycx Eco Vestamin IPD Eco Vestanat IPDI Eco Vestasol IP Eco

Sports and Engineering applications
Adhesives
Adhesives
Polybutadiene in various applications
Optics
Epoxy systems, e.g., in Windmill blades
Epoxy systems, e.g., in Windmill blades
Solvents in various applications





### Actively redesigning value chains to secure access to circular feedstocks







Active portfolio management reducing the emission profile of own assets

Divestment of high emission assets done or in progress



Performance Intermediates



Superabsorber



Carve-out of infrastructure services, incl. power plants in Marl, Wesseling and Antwerp under preparation

Green

Opportunities

**Back-Integration** 

### Site Services in Marl, Antwerp and Wesseling

ncrementa

mprovement





Asset

Transformation

# 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 2025, Evonik aims to ensure only RSPO-certified palm oil and palm kernel oil are used in its products.

### TEGO<sup>®</sup> 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 60% 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

56 | Sustainability at Evonik

### Methodology

- Distinction between water Scarcity Sites and Water Intensive Sites
- Introduction of the Sustainable Baseline Water Stress methodology in addition to AWARE<sup>1</sup>
- Holistic assessment of water risks by using WWF<sup>2</sup> Water Risk Filter
- Assessment according to Physical, Regulatory and Reputational Risks

Understand water as a place dependent and shared resource (Basin risks)	Understand Evonik's impact on local basins (Operational risks)	Assess and prioritize water-related risks	Optimize water governance, improve water efficiency and reduce pollution and footprint	Reduce water demand in water-stress areas to a sustainable level
(Basin risks)	risks)		and footprint	level

#### Example

#### Multi-User Site Shanghai (MUSC)



- Demineralization of purge water from a cooling unit
- Usage in chemical processes
- Replacement of 250.000 m<sup>3</sup> freshwater

# -3%

#### **Reduction of specific freshwater intake by 2030<sup>2</sup>**

Site-specific action plans for water-stress production sites

Water Risk Filter

1. AWARE: available water remaining, 2. corresponding to the production volume, reference year 2021; 2. new tool used to analyze various physical risk aspects such as water stress, flooding, and water quality



#### Only 2% used for production

- Total water intake was 403 m m<sup>3</sup> in 2023, while discharges amounted to 397 million m<sup>3</sup>
  - Difference of 6 m m<sup>3</sup> mainly comprises water used to replace evaporation losses
- ~98% of our total water use (including water consumption) was for cooling purposes in energy generation and production
- Only ~2% used for production purposes



Evonik's water data 2023

\* Figures in the chart are rounded. | <sup>b</sup> Recycling of water from third parties, including use of rainwater. | <sup>c</sup> Water used in chemical processes, including generation of steam and water for sanitary purposes. | <sup>d</sup> Water consumption in accordance with GRI Standard 303-5 (2018). | <sup>e</sup> Freshwater.



### Methodology

Alignment with two of our sustainability focus areas

DRIVE CIRCULARITY				
		12 associate production prepared		



#### Goal for waste management:

 Promote the environmentally sound treatment of waste generated by Evonik

#### Goal for waste reduction:

 Reduction of waste generated at Evonik



- Recycling of solvent from a chemical process
- Usage in other chemical processes
- Adapted by other Evonik site in China

#### Reduction of specific production waste by 2030<sup>1</sup>

Reduce amount of non-hazardous waste sent to landfill

1. corresponding to the production volume, reference year 2021



-10%



### Agenda Sustainability fully integrated into all three strategic levers

### Portfolio

- Handprint: "Next Generation Solutions"
- Footprint: CO<sub>2</sub> emission reduction as key KPI

### Innovation

- Sustainability fully integrated into innovation portfolio steering
- Clear alignment with our four Sustainability Focus Areas

#### Culture

- Safety and health protection are top of our agenda
- Strengthen diversity to lead in a complex world

#### **Social & Governance**

- Social commitments & responsible supply-chain management
- Sustainability KPIs as integral part of management compensation



# Sustainability is fully integrated into innovation portfolio steering







RD&I AT	FIGHT CLIMATE CHANGE	
>€440 m SPEND	>€650 m SALES IN 2023 FROM INNOVATION GROWTH FIELDS	DRIVE CIRCULARITY
~23,000 PATENTS <sup>1</sup>	>2,700 EMPLOYEES	SAFEGUARD ECOSYSTEMS
100% SUSTAINAB	ENSURE HEALTH & SAFETY	



1. Patents and patents pending

62 | Sustainability at Evonik

### Leading in Innovation – Growth fields and sales target On track to achieve target of >€1 bn sales from innovation





# Example for New Growth Area: Hydrogen Economy Tapping into a major opportunity with our DURAION<sup>®</sup> membrane

### Challenge

Currently two major technologies in place for hydrogen electrolysis – both with major downsides:

- State of the art Proton Exchange Membrane (PEM) electrolysis requires rare precious metals and expensive materials
- Established Alkaline Electrolysis (AEL) does not require precious metals, but is not very flexible

Evonik Proposition Evonik's novel Anion Exchange Membrane (AEM) is the most cost-efficient way to ramp-up green hydrogen with key advantages:

- High production rates
- Dynamic operation
- Pressurized H<sub>2</sub> production
- Inexpensive materials & electrodes





1. Study IndWEDe-NOW GmbH, 2018 2 Green Hydrogen for a European Green Deal A 2 x 40 GW Initiative, Hydrogen Europe; Translation with internal assumptions (Creavis)



# **Example for New Growth Area: Circularity**

Novel PU additives enabling chemical recycling of flexible foam





### Agenda Sustainability fully integrated into all three strategic levers

### Portfolio

- Handprint: "Next Generation Solutions"
- Footprint: CO<sub>2</sub> emission reduction as key KPI

### Innovation

- Sustainability fully integrated into innovation portfolio steering
- Clear alignment with our four Sustainability Focus Areas

### Culture

- Safety and health protection are top of our agenda
- Strengthen diversity to lead in a complex world

### Social & Governance

- Social commitments & responsible supply-chain management
- Sustainability KPIs as integral part of management compensation



# **Driving "Next Generation Culture"** Shifting mindset in the entire organization



1. below upper limit of 0.21 (number of accidents per 200,000 working hours)

### Safety first as foundation:

- Accident frequency as part of management compensation
- Low level secured over the last years<sup>1</sup>

### Diversity as basis of our economic success:

- Ambitious targets defined
- Inclusive mindset and behavior foster diversity

### Attractive employer:

- Employee commitment with increase of 5pp in latest employee survey
- Integrating sustainability stronger into HR core processes



### **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



#### Internal

#### **Global Social Policy**

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



#### **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



#### **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



1) This indicator contains all work-related accidents (excluding traffic accidents) resulting in absences of at least one full shift per 200,000 working hours.

2) Number of incidents per 1 million working hours up to 2020, Number of incidents per 200,000 working hours as from 2021 in acc. with Cefic 2016 3) ESTER = Evonik Standard Tool ESHQ and Reporting



# **Diversity goes far beyond quantitative targets**

### We approach diversity with diversity

### • Diversity is key to economic success

- Evonik ranks among top European companies in terms of diversity
- We address diversity strategically, culturally and with an eye toward our business processes
- Top management as prominent role model in embracing diversity, e.g. in Diversity Council

### Specific goals with highest priority (by 2026)

- Gender diversity: e.g. 30% of executive, senior management and on manager level (2023: 22%/19%/30%)
- Intercultural mix: e.g. 25% of executive and 35% of senior management positions (2023: 18%/26%)

### Diversity goes far beyond quantitative targets!

- Diversity is not only a numeric game but a matter of culture
- An inclusive mindset and behavior ultimately determine if we can utilize diversity successfully

**Diversity creates growth** 

- **Diversity creates innovation**
- Diversity brings us closer to our customers
- **Diversity is our future**



### Agenda Sustainability fully integrated into all three strategic levers

### Portfolio

- Handprint: "Next Generation Solutions"
- Footprint: CO<sub>2</sub> emission reduction as key KPI

### Innovation

- Sustainability fully integrated into innovation portfolio steering
- Clear alignment with our four Sustainability Focus Areas

#### Culture

- Safety and health protection are top of our agenda
- Strengthen diversity to lead in a complex world

### Social & Governance

- Social commitments & responsible supply-chain management
- Sustainability KPIs as integral part of management compensation



### Taking a broad view on human rights throughout our value chains

- Evonik commits to respecting human rights in line with the "Guiding" Principles on Business and Human Rights" of the United Nations across its complete value chain.
- Our policy statement on human rights is based on
  - the International Bill of Human Rights,
  - the International Labor Organization's Declaration on Fundamental Principles and Rights at Work
  - the ten principles of the United Nations Global Compact.
- We also respect the OECD Guidelines for Multinational Enterprises.
- Evonik complies with applicable laws and regulations wherever it operates. In countries where local laws and regulations conflict with internationally recognized human rights, we seek ways to honor the above-mentioned international standards while not violating local law.



Before entering into a business relationshi

TfS assessments

Evonik proces



# **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 for the chemical industry



# **Responsible supply chain management**



FY 2023 | 1. Alternatives; 2. with annual procurement volume of >€100k

74 | Sustainability at Evonik

### **Compliance: Watching responsible business practices**





#### House of compliance

- The House of Compliance has been established to define minimum Group-wide standards for the relevant compliance management systems in relation to the topics specified above and to ensure that these standards are implemented
- Decision-making, exchange of experience, and coordination of the joint activities all take place in the Compliance Committee, which is comprised of the heads of the individual departments, who are independently responsible for their subject area, and the head of Corporate Audit

#### **Compliance management system**

 The compliance management system comprises, on the basis of defined values and objectives, the instruments shown in the chart and any measures to be taken accordingly



### **Compliance. Whistleblower hotline.**

- All employees are required to report possible or actual violations of the code of conduct to the responsible department or compliance officer without delay
- In addition to internal reporting channels, electronic whistleblower hotlines operated by independent external providers are available group-wide
- Both employees and external stakeholders such as business partners and their employees, local residents near our sites, and employees' families can report suspected compliance violations
- Reports are possible on all key compliance issues and are automatically forwarded to the department responsible for the relevant compliance topic
- The whistleblower hotline is certified as conforming with European data protection legislation
- Evonik takes up all allegations and investigates them
- To protect whistleblowers, the general principles set out in the policy on internal investigations include security measures such as forbidding putting them at any disadvantage



<sup>a</sup> External Whistleblower System. Guarantees anonymity, if desired by whistleblower.



# **Sustainability integrated into management compensation scheme** 20% of long-term incentive based on strategic ESG KPI's





### **Shareholder structure**

"RAG-Stiftung", long-term shareholder with focus on total shareholder return

### **RAG Stiftung**

- RAG-Stiftung (foundation) manages a portfolio of ~€18 bn assets, one of the biggest foundations in Europe
- Portfolio consists of publicly traded securities, private equity, direct holdings, real estate and bonds of various types
- RAG-Stiftung focuses on investments with high total shareholder return and strong cash/distribution profiles
- Underlying goal is to finance/cover the perpetual obligations arising from hard-coal mining in Germany
- About 75% of total portfolio invested in assets other than Evonik
- RAG-Stiftung with strong interest in Evonik's profitable growth, resulting in significant shareholder returns
- Clear intention to remain significant shareholder

#### **Ownership structure**





1. as of March 2024

# 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)
- Segregated Accounts with minimum ESG guardrails (Art. 8 eligible)
- ESG monitoring



Funding level at 79%

#### 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 to 2023 on, 50% women in PKD-Board of Management (fluctuation in 2024 can change this ratio)
- 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 riskmanagement process
- ESG monitoring



FY 2023 | 1) DBO = Defined Benefit Obligations | Pension funding overview as of Dec 31, 2023

# **Evonik Investor Relations / Sustainability team**



**Tim Lange** Head of Investor Relations

+49 201 177 3150

tim.lange@evonik.com



Cédric Schupp **Director Investor Relations & ESG** 

+49 201 177 3149 cedric.schupp@evonik.com



**Gevitha Selvakumar** Manager Investor Relations & ESG

+49 201 177 3142 gevitha.selvakumar@evonik.com



Dr. Ralf Düssel Head of Sustainability



Sabine Kuznik Head of Sustainability Relations

+49 201 177 4457 sabine.kuznik@evonik.com



Team Assistant

Katharina Gayk

+49 201 177 3146 katharina.gayk@evonik.com



