FOCUS ON SDGs

Sustainable Development Goals





FOCUS ON SDGs

Reporting on the targets for the SDGs of relevance for Evoniks

Evonik supports the United Nations' 17 Sustainable Development Goals (SDGs). Using our own methodology¹ (see chapter "Strategy and growth") we have identified the four SDGs that are especially relevant for Evonik.

An SDG is relevant for us if there is a significant positive or negative influence on or by Evonik. Our products and solutions help to achieve the relevant SDGs. We are always aware that our business activities can have critical impacts in some cases. The most relevant SDGs for Evonik are:



Read more on the following pages.

Targets for the SDGs of relevance for Evonik

| | | Reference in sustainability report 2020 |
|-------|--|---|
| SDG | 3—Ensure healthy lives and promote well-being for all at all ages | |
| 3.9: | By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination | Strategy and growth p. 11, 17 Value chain and products p. 38 The environment p. 63, 66, 71 |
| SDG | 6—Ensure availability and sustainable management of water and sanitation for all | |
| 6.3: | By 2030, improve water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse globally | The environment p. 63, 71 |
| 6.4: | By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity | The environment p. 63, 71 |
| 6.6: | By 2030, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes | The environment p. 63, 76 |
| SDG | 12—Ensure sustainable consumption and production patterns | |
| 12.2: | By 2030, achieve the sustainable management and efficient use of natural resources | Strategy and growth p. 11, 17 Value chain and products p. 38, 45, 49 The environment p. 63, 66, 71, 74 |
| 12.4: | By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water, and soil in order to minimize their adverse impacts on human health and the environment | Strategy and growth p. 11, 17 Value chain and products p. 38, 51 The environment p. 63, 66, 71, 74 |
| 12.5: | By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse | Value chain and products value chain and products value p. 38, 47 The environment value p. 63, 74 |
| 12.6: | Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle | Strategy and growth p. 11, 17 Governance and compliance p. 25, 26 Value chain and products p. 38, 49 |
| SDG | 13—Take urgent action to combat climate change and its impacts | |
| 13.1: | Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries | Governance and compliance p. 25, 30 |
| 13.2: | Integrate climate change measures into national policies, strategies, and planning | Strategy and growth p. 11, 12 The environment p. 63, 66 |
| 13.3: | Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning | Strategy and growth p. 11, 12 The environment p. 63, 66 |

SDG 3: GOOD HEALTH AND WELL-BEING



Ensuring healthy lives and promoting the well-being of all are important for the stability of society. While the industrialized countries face an aging population, the main challenge in less developed countries is ensuring good healthcare for the general population, because health is

an important step out of poverty. Children and young people can only go to school, get an education, and shape their lives if they are healthy.

High standards of occupational health protection

We have always considered fostering the health and well-being of our employees to be part of our corporate responsibility. We have extensive health protection and promotion measures in order to maintain the employability and well-being of our employees.

As an overriding indicator, we have established an occupational health performance index to measure our progress and initiate continuous improvements. We also record accident frequency and severity as parameters to manage safety at work.

The pandemic confronted Evonik with special challenges in 2020. You can find more detailed information in our Sustainability Report 2020 on page 55 ff. or in our Corona Special.¹

GOVERNANCE

Our activities are based on an extensive ESHQ management system, and a central audit system is used to check that it is applied. Issues relating to occupational safety and health protection are agreed with the employee representatives. Occupational safety committees at our sites regularly discuss aspects of occupational safety and health protection. Groupwide targets based on key performance indicators are used to check the implementation of the requirements and identify the need for further action. The frequency² and severity of accidents affect the variable remuneration of executive board members.

MATERIAL TOPICS

 Waste management • Plant safety • Occupational safety • Health protection and promotion • Climate change
 Product stewardship • Strategy and growth • Water management

OUR TARGETS

- Occupational health performance index ≥ 5.0 for 2021 and beyond; status in 2020: 5.4
- Accident frequency³ ≤ 0.26 for 2021 and beyond; status 2020: 0.8 (upper limit until 2020: 1.30)
- Incident frequency⁴ ≤ 0.4 for 2021 and beyond; status 2020:1.45 (upper limit until 2020: 1.10)
- Establish a risk estimate for > 99 percent of substances placed on the market in quantities of > 1 metric ton p.a. by the end of 2020 (reference base 2018); status in 2020: > 99 percent



HOW OUR PRODUCTS AND APPLICATIONS CONTRIBUTE



Production of pharmaceutical active ingredients at Evonik's site in Hanau (Germany).

Evonik is an innovation and development partner for companies around the world that produce pharmaceuticals, dietary supplements, and medical products. We offer convincing, innovative, and custom-tailored products, technologies, and services. We have carefully extended our **healthcare business** in recent years and added new technology platforms. One example is our expertise in drug delivery technologies for novel mRNA vaccines.

As a development partner for gene-based therapies, we supported projects for COVID-19 vaccines from development through to the production of clinical samples. Responsible handling of chemicals is a vital precondition for our business activities. That includes timely identification and evaluation of the potential health and environmental risks in our portfolio. We therefore examine the entire value chain of each of our products—from procurement of the raw materials to delivery to our industrial customers.

¹ \Box www.evonik.com/sustainability-report, \Box www.evonik.com/corona-special

² Sustainability Report 2020 🖵 p.30.

³ New reference parameter from 2021 in line with common international practice, see 🖵 p.93.

⁴ Modified calculation basis from 2021, see 🖵 p. 93.

SDG 6: Clean water and sanitation

SDG 6: CLEAN WATER AND SANITATION



Billions of people still lack access to clean water and sanitation, even though this is a basic human right. Climate change is making the situation far worse.

As part of our sustainability strategy, we are committed to using water responsibly.

Evonik mainly uses water for cooling, for process purposes in production facilities, to generate steam in power plants, and for sanitary purposes. We save water wherever possible. To reduce the use of freshwater, we use integrated systems with graduated water qualities. In addition, we re-use water multiple times in cooling water circuits.

Water stress analysis is an important element in our worldwide water management. Taking into account projections for the climate and socio-economic developments, we have identified sites that are particularly likely to be affected by water stress in the next 20 years. At five of these sites—in China, India, the USA, and South Korea—we conducted detailed interviews on water usage and possible options for reducing water consumption.

Our global water management includes examining other aspects such as infrastructure and transportation options¹. We also use risk analysis to investigate the possible impact of natural catastrophes such as storms, hail, floods, hurricanes, tornadoes, and heavy rainfall.

GOVERNANCE

Our activities are based on an extensive ESHQ management system, and a central audit system is used to check that it is applied.

ATERIAL TOPICS

Biodiversity
 Water management

OUR TARGET

 Develop site-specific action plans for sites that are potentially exposed to water stress as part of a global water management system¹

SDG TARGETS 6.3, 6.4, 6.6

Our biodiversity analysis looks at emissions into water. Here, we use a geoinformation system. Our site in Mobile (Alabama, USA) is close to the Fowl River. The US Environmental Protection Agency (EPA) is currently altering the status of the watershed area around this river to a water conservation area. Evonik is a member of the Fowl River Forever steering committee that is working on a management plan to protect and improve the water quality.

HOW OUR PRODUCTS AND APPLICATIONS CONTRIBUTE

Hydrogen peroxide is an environmentally compatible, resource-efficient chemical that is mainly used for environmental applications, in food processing, and in the electronics industry. Other key applications are wastewater treatment and disinfection.

In livestock farming, sustainable modern feed formulations help protect groundwater from over-nitrification. Adding essential amino acids such as **DL-methionine** allows feed to be adapted better to the nutritional requirements of livestock, especially hens and pigs. As a result, the animals need less liquid. That reduces water consumption in agriculture and the excretion of nitrates.

The molecular structure of surfactants gives detergents, shower gels, shampoos, and conditioners their cleaning properties. Surfactants are the most important ingredients in these products, alongside water, and play a role in hygiene and cleanliness. Evonik has developed **biosurfactants** with particularly high environmental compatibility and skin tolerability, without any loss of cleaning power. They are produced from bacteria and yeasts. The ability to produce biodegradable rhamnolipids on an industrial scale sets Evonik apart from its competitors.



A scientist analyzing the foam structure of surfactants.

SDG 12: Responsible consumption & production

SDG 12: RESPONSIBLE CONSUMPTION & PRODUCTION



A fundamental change in consumption patterns and production methods is essential in the light of climate change and scarce resources. That means finding new ways to make consumption more sustainable and production more energy- and resourceefficient.

Evonik's direct influence on sustainability requirements mainly comprises its own production and business processes and the products it markets. We have integrated technology platforms that enable us to link efficient processes, careful use of resources, and innovative capability. These integrated structures also support our efforts to achieve a further reduction in production waste. Moreover, for many years we have had established processes and management systems for early identification and evaluation of any health and environmental risks related to our portfolio.

Our impact valuation looks intensively at the impact of our production and business processes. This is supplemented by analyzing our portfolio on the basis of sustainability criteria.¹ The sustainability analysis of our business 2.0 includes life cycle assessments. In this way, we map ecological strengths and weaknesses over the entire product life cycle and identify opportunities and risks for a product or business.

As a specialty chemicals company, Evonik is positioned at the center of the value chain. Our technological expertise helps our customers achieve their goals, for example, with regard to the circular economy. In fall 2020, we launched a circular plastics program, which brings together all Evonik activities in this field. The aim is to step up collaboration with customers and stakeholders in the plastics processing industry and extend our networks along the value chain.

GOVERNANCE

Evonik is committed to observing internationally recognized standards and its own more far-reaching guidelines and principles of conduct. We examine the entire value chain of each of our products—from procurement of the raw materials through R&D to delivery to our industrial customers. An internal expert circle is working to extend the circular economy.

MATERIAL TOPICS

• Waste management • Efficient use of scarce resources/ circular economy • Sustainable products and solutions for our customers • Product stewardship • Strategy and growth • Responsible corporate governance and human rights • Responsibility within the supply chain

OUR TARGETS

• At least 35 percent of sales should come from Next Generation Solutions from 2021

- 100 percent of all raw materials suppliers where annual procurement volume is >€100 thousand to be covered by TfS assessments by year-end 2025; status in 2020: 73 percent
- Establish a risk estimate for > 99 percent of substances placed on the market in quantities of > 1 metric ton p.a. by the end of 2020 (reference base 2018); status in 2020:
 > 99 percent

^{SDG TARGETS} 12.2, 12.4, 12.5, 12.6

HOW OUR PRODUCTS AND APPLICATIONS CONTRIBUTE

Evonik's products and solutions help save resources. One example is a process for fermentative production of the omega-3 fatty acids EPA² and DHA² from natural algae to feed salmon in aquaculture. This means that fish oil obtained from wild fish is no longer necessary. This process is the result of a research cooperation between Evonik and Royal DSM, which led to the present joint venture Veramaris® www.veramaris. com/home.html.



Packaging VESTENAMER® in Marl (Germany).

A process additive for the re-use of rubber from scrap car tires saves raw materials such as crude oil and natural rubber by adding a proportion of recycled tire granulate. That is also an example of material circularity. Our binders for paints and coatings improve durability by providing protection from corrosion, abrasion, and scratches. Additives to optimize packaging materials mean that food stays fresh for longer. Moreover, we market **products and solutions** to remove printing ink from paper so the valuable pulp can be recycled.

Evonik is committed to transparency in its supply chains. We are a founding member of **Together for Sustainability** (TfS). The aim of this sector initiative is the joint development and implementation of a global assessment and audit program for responsible procurement of goods and services. Our requirements are set out in our code of conduct. We expect our suppliers to share our principles and act correctly in all respects.

¹ You can find more detailed information in our Sustainability Report 2020 www.evonik.com/sustainability-report

² EPA = eicosapentaenoic acid; DHA = docosahexaenoic acid.

SDG 13: CLIMATE ACTION



Climate change is one of the top five risks to global economic stability and social cohesion, according to the World Economic Forum's Global Risks Report 2020. Rising average temperatures, rising sea levels, and the increase in severe weather events such as heavy rainfall, drought, and

extreme heat are signs that are visible to everyone. In December 2015, the nations that signed the Paris Agreement on Climate Change pledged to tackle climate change and its consequences.

Evonik has been working for years to meet specific targets for reducing CO_2 emissions and thus the negative climate and environmental impacts of its business activities. We have also introduced carbon pricing for major investments so we can take account of the changing global regulatory framework.

Modernizing our power plants is a key element in achieving our climate targets. Evonik is currently building a new, highly efficient gas and steam turbine power plant at Marl Chemical Park in Germany. The use of coal for energy generation at this site will end in 2022. Another new gas and steam turbine power plant will come into service at the same time to replace the present gas-fired reserve plant.

We are working with our suppliers in order to reduce our scope 3 emissions. A team of experts is identifying the potential to avoid emissions in the upstream value chain, especially the "raw material backpack" of the starting products we source.

GOVERNANCE

Climate change is a matter of the utmost importance for the entire executive board. Responsibility for our groupwide sustainability and climate strategy, monitoring, and reporting is assigned to the member of the executive board responsible for human resources and sustainability. We use our risk management system to identify and evaluate climate-related opportunities and risks, which we monitor and manage with the aid of appropriate measures.

MATERIAL TOPICS

• Climate change • Strategy and growth • Responsible corporate governance and human rights

OUR TARGETS

- Reduce absolute scope 1 and scope 2 emissions by 50 percent by 2025 (reference base: 2008); status in 2020: -44 percent
- Reduce absolute scope 3 emissions from the upstream value chain—principally from the "raw material backpack" by 15 percent by 2025 (reference base: 2020)

SDG TARGETS 13.1, 13.2, 13.3



Quality assurance in the application technology lab in Shanghai (China).

HOW OUR PRODUCTS AND APPLICATIONS CONTRIBUTE

Evonik markets a variety of products and solutions that help avoid greenhouse gas emissions. Adding DL-methionine to livestock feed greatly reduces emissions of greenhouse gases and excretion of ammonia and nitrate. Other examples are silica-silane technology for tires with optimized rolling resistance, membranes for the treatment of biogas, and innovative building insulation made from silicon dioxide. We also supply a wide range of products for wind energy. Our curing technology gives increasingly long rotor blades their stability, our base oil enhances the efficiency of wind turbines, and coatings containing our additives protect them from light and weathering.

Evonik is involved in several research projects focused on using CO₂ as a starting product. Through the Rheticus¹ project \Box https://www.creavis.com/en/activities/current-projects/rheticus, for example, we are working with Siemens Energy on the technical feasibility of artificial photosynthesis to produce specialty chemicals from CO₂, water, and green electricity with the aid of bacteria. We are using the same technology platform in our research alliance² with Beiersdorf. Here, the aim is to produce sustainable precursors for personal care products using CO₂ as the starting product.

Climate-related opportunities and risks are key elements of our financial and non-financial reporting. You can find further information in "The environment", "Governance and compliance", and the TCFD index www.evonik.com/sustainability-report

In addition, for a number

of years we have participated in **CDP Climate Change**. In 2020, we improved the ranking of our climate reporting from B to A-. \Box www.evonik.com/CDP-ClimateChange

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