Evonik Green Bond Allocation Report 2023

April 2024

EVONIK
Leading Beyond Chemistry

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Introduction

Evonik is one of the world leaders in specialty chemicals. According to our purpose "Leading beyond chemistry to improve life, today and tomorrow" we are interlinking disciplines, skills, and perspectives so that we can create value-generating and sustainable solutions for our customers. These solutions play a key role in our customers' products and help them meet their sustainability goals and position themselves for the future. For that we rely, above all, on our innovative capability, which is based on our strong innovation culture.

Evonik embarked on the next phase of its strategic business transformation in 2022. As part of Next Generation Evonik, sustainability has become an integral element of important core processes such as portfolio and innovation management, production and technology, and human resources work. This strategic integration paves the way for us to meet our promise to be an enabler of sustainability in a wide range of markets and areas of life. Therefore, we set ourselves ambitious sustainability targets.

Evonik's Green Finance Instruments offer investors the opportunity to contribute to the financing of Eligible Green Projects as defined in Evonik's Green Finance Framework. The Green Finance Framework was set up in 2021 and updated in 2023 in line with the ICMA Green Bond Principles as well as the LMA Green Loan Principles and received a Second Party Opinion from ISS Corporate Solutions. The Green Finance Framework and the Second Party Opinion are available on our **website.**

Evonik Industries AG issued its first Green Finance Instrument in the form of a green hybrid bond in 2021, with a nominal volume of €500 million. The proceeds have been fully allocated in 2021. Evonik issued its second Green Finance Instrument in the form of a green senior bond on May 25, 2022, with a nominal volume of €750 million (ISIN: XS2485162163). In March 2023 Evonik published the report "Evonik Green Bond Allocation and Impact Report 2022" confirming the allocation of €580 million out of €750 million of the proceeds received by the issuance of second Green Finance Instrument. The subject of this allocation report is the remaining €170 million which together with the first allocated amount of €580 million concludes the allocation of the proceeds from the second Green Finance Instrument in full.

Use of Proceeds according to Evonik's Green Finance Framework

An amount equivalent to the net proceeds from Evonik's Green Finance Instruments will be used to finance or refinance, in whole or in part, existing and/or future Eligible Green Projects that meet the Eligibility Criteria as defined below and are financed by Evonik through operating and/or capital expenditure (collectively referred to as 'Expenditure'). In the case of refinancing existing Eligible Green Projects, expenditures which have been made within the 3-year period preceding the year of issuance of a Green Finance Instrument shall be considered for inclusion as Eligible Green Projects.

Eligible Green Projects

GBP/GLP Category	Eligibility Criteria	UN SDG	EU Environmental Objective
(a) Eco-efficient products acting as low carbon transition enablers and sustainability enablers in various industries	**Capital expenditure** related to the manufacturing of "**Next Generation Solutions**" Only the highest level of sustainable products (solutions referred to as "Next Generation Solutions") is eligible. These products have a substantial sustainability contribution in the value chain and include "Leader" (A++) and "Driver" (A+) products and solutions, based on the WBCSD sector standard approach for Portfolio Sustainability Assessments. More details of Evonik's Sustainability Analysis based on this approach can be found in section 2.2 of the Green Finance Framework. **Expenditure** related to **research, development and innovation (RD&I)** specifically aimed at further developing and enhancing the sustainability impact of "**Next Generation Solutions**"		• Climate Change Mitigation • Climate Change Adaptation • Sustainable Use and Protection of Water and Marine Resources • Transition to the Circular Economy • Pollution Prevention and Control • Protection and Restoration of Biodiversity and Ecosystems

(b) Energy Efficiency	**Capital expenditure** related to "**Next Generation Technologies**". These investments focus on ongoing development of production processes and infrastructure to reduce GHG emissions including heat integration, energy saving measures and electrification. Furthermore, **expenditure** related to **additional measures** to increase **energy efficiency** in Evonik's production processes including among others energy monitoring systems, lighting upgrades, smart devices to optimize energy consumption, switching to more energy-efficient units (ventilation, compressors, engines etc.), thermal energy storage systems, building refurbishment and any other sustainability-oriented construction materials		• Climate Change Mitigation
(c) Renewable Energy	**Expenditure** related to sourcing of **renewable energy**, i. e. through long-term Power Purchase Agreements, guarantees of origin for green electricity and biomethane certificates[1]		• Climate Change Mitigation

[1] Only bundled guarantees or certificates

Handprint: Evonik's Sustainability Analysis and "Next Generation Solutions"

In order to define "**Next Generation Solutions**", Evonik uses a method called Portfolio Sustainability Assessment which has been assured by an external auditor. The methodology is based on the World Business Council for Sustainable Development (WBCSD)'s framework for portfolio sustainability assessments (PSA)[2], which Evonik was involved in developing from the outset. The objective is to proactively steer Evonik's product portfolio towards improved sustainability performance and to identify strengths and weaknesses of Evonik businesses. The Sustainability Analysis is a key component of the Evonik sustainability strategy used to assess our businesses and innovations.

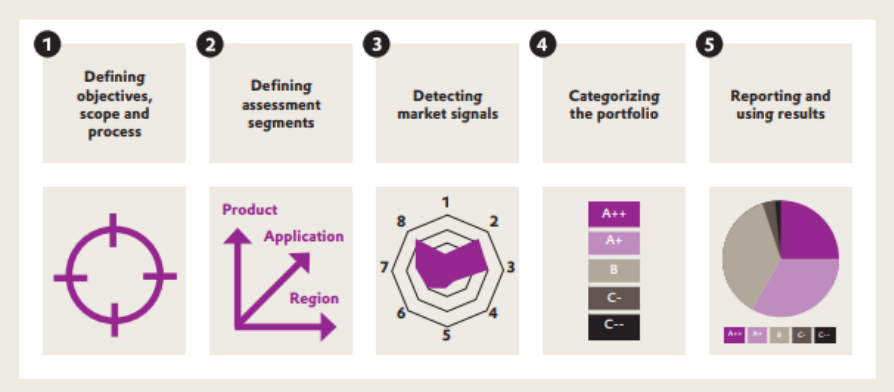
The unit of assessment is defined as a so-called product-application-region-combination (PARC). PARCs group combinations of products, applications and regions for which sustainability performance – in terms of both favorable and unfavorable sustainability signals – is similar.

Sustainability signals relate to material ecological or social aspects along the value chain, from the supply chain through production and subsequent use to end of life.

The PSA methodology describes the signal categories (SCs) of specific relevance for the chemical industry:

1. Chemical hazard and exposure across the life cycle (SC 1)
2. Global regulatory trends (SC 2)
3. Sustainability ambitions in the value chain (SC 3)
4. Authoritative ecolabels (SC 4)
5. Sustainability performance compared to alternative solutions (SC 5)

Figure 1: Portfolio Sustainability assessment (PSA) framework:



[2] World Business Council for Sustainable Development: Portfolio Sustainability Assessment https://www.wbcsd.org/Projects/Chemicals/Resources/Framework-for-portfolio-sustainability-assessments

Evonik follows this approach and evaluates the signal categories 1 to 5 to determine the sustainability performance of our portfolio.

The findings are used in a structured overall evaluation of the PARC's sustainability performance, resulting in allocation to the performance category A++ (Leader), A+ (Driver), B (Performer), C- (Transitioner) or C-- (Challenged). Equal weight is given to all material signals; negative signals are not offset by positive signals.

A++ (Leader):

A++ indicates PARCs that take the lead in meeting the standards for sustainable business defined by Evonik's stakeholders and our impact. PARCs in the A++ category fully meet the requirements. They do not show any material negative signals. Moreover, material strong positive signals have been identified in one or more signal categories.

A+ (Driver):

A+ indicates PARCs that are at an advanced stage of meeting the standards for sustainable business set by Evonik's stakeholders and our impact. PARCs in the A+ category meet almost all the requirements. They do not show any material negative signals. Unlike those in the A++ category, however, only material weak positive signals were identified for one or more signal categories.

Together, the categories "Leader" and "Driver" cover the "**Next Generation Solutions**".

Footprint: "Next Generation Technologies"

Evonik has committed to mitigate climate change and reduce its environmental impact. To achieve this, Evonik has set ambitious targets to reduce its scope 1 and 2 emissions by 25% between 2021 and 2030 and reduce scope 3 emissions in all upstream categories and the category "downstream transportation and distribution" by 11%[3] in the same period. Evonik joined SBTi[4] in 2022 and is committed to the SBTi target "well below 2°C". In this way, Evonik actively supports the Paris Agreement on Climate Change. Against this backdrop, we head for climate neutrality at Evonik by 2050.

To achieve its scope 1 and 2 targets, Evonik has put in place a wide range of measures, including exiting coal-fired power generation at its site in Marl (Germany), ongoing global development of production processes and infrastructure ("**Next Generation Technologies**"), and switching to renewable energy.

In the first half of 2022, the Evonik Assessment for Greenhouse Gas Emission Reduction (EAGER) project identified the potential to reduce GHG emissions at our sites. A cross-functional team identified potential to reduce CO_2eq (scope 1 and 2 emissions) at the top 20 sites around the world by around 1 million metric tons (including the related costs of emissions avoidance), in accordance with the "well below 2 °C" target. The top 20 sites account for 80 percent of Evonik's GHG emissions[5]. In the period to 2030, we plan to invest €700 million in "**Next Generation Technologies**", i.e., in the ongoing development of production processes and infrastructure to reduce GHG emissions. We are continuously developing our GHG reduction path in consultation with the business lines and multi-user sites and have started to implement the first measures.

[3] Exact target 11.07%.

[4] SBTi is a partnership of CDP, the United Nations Global Compact, the World Resources Institute, and the World Wide Fund for Nature. It defines and encourages best practices for science-based target-setting and independently evaluates targets set by companies from this perspective. It has now become an internationally accepted standard.

[5] Based on greenhouse gas emissions from our sites in 2020

Amount of Proceeds allocated to Eligible Green Projects

As of December 31, 2023, Evonik has allocated €170 million to Eligible Green Projects to finance new projects with capital expenditures in 2023, thereof:

1. €81 million were allocated to capital expenditures related to projects of "**Next Generation Technologies**"
2. €89 million were allocated to capital expenditures related to projects of "**Next Generation Solutions**"

Thereby Evonik has, together with expenditures allocated in 2023 (please see the "Evonik Green Bond Allocation and Impact Report 2022"), completed the allocation of €750 m proceeds of its green senior bond issued in 2022.

Allocation 2023

GBP/GLP Category	Eligibility Criteria	Allocation Amount (in € m)
Eco-efficient products acting as low carbon transition enablers and sustainability enablers in various industries	**Next Generation Solutions** Capex	89
	Next Generation Solutions RD&I Opex	-
Energy Efficiency	**Next Generation Technologies** Capex	81
	Expenditure related to additional measures to increase energy efficiency	-
Renewable Energy	Expenditure related to sourcing of renewable energy	-
Total Eligible Green Projects		**170**

Evonik has set scope 1 and 2 targets and put in place a wide range of measures to reduce GHG emissions by ongoing development of production processes and infrastructure ("**Next Generation Technologies**"). In 2023 Evonik invested €81 million in "**Next Generation Technologies**" projects. The proceeds from the green senior bond were allocated to capital expenditures for these projects.

One example of such kind of projects is the construction of a new facility in Singapore for carbon-neutral production of alkoxide catalysts, which are primarily used in biodiesel production and in synthesis applications in the pharmaceutical and agricultural industries. In future, alkoxide catalysts will also play a bigger role in the circular economy through their use in the chemical recycling of PET plastics. Another example is the expansion of production capacity for MetAMINO® (DL-methionine) in Singapore.

In 2023, Evonik generated 43% of sales by "**Next Generation Solutions**" and the clear ambition is to increase this share to above 50% by 2030. Evonik is already well equipped today to reach this objective as the portfolio is concentrated around four Sustainability Focus Areas:

- Fight Climate Change,
- Drive Circularity,
- Safeguard Ecosystems and
- Ensure Health and Well-being

Therefore, the proceeds from the green senior bond were allocated primarily to capital expenditures for "**Next Generation Solutions**" in Sustainability Focus areas with a positive signal for at least one environmental signal category.

The allocation includes, for example, capital expenditures for the manufacturing of the following "**Next Generation Solutions**":

Fumed metal oxides in Lithium-ion batteries

High-quality metal oxides from Evonik are used as additives in Li-ion batteries (LIB) to increase their performance, service life, and safety. AEROXIDE® fumed alumina and fumed titania are produced by flame hydrolysis and consist of nanostructured aggregates with mean aggregate sizes of approx. 100 nm. The white powder provides a very narrow particle size distribution and exhibits high chemical purity. As dry coating on the surface of cathode materials AEROXIDE® acts as a defined cathode electrolyte interface (CEI). It prevents undesired reactions and makes batteries last longer. This increases the service life of a Li-ion battery significantly by about 50%.

Excel rejuvenation of catalysts

Evonik's Excel® rejuvenation process is a step beyond regeneration. It offers a means for restoring spent catalyst and gives refiners an excellent alternative to fresh catalyst in a wide range of hydrotreating applications from naphtha to heavy gas oil. The Excel® technology rejuvenates catalysts and consequently helps avoiding wastes and reducing the CO2 emissions compared to a fresh catalyst production for refiners (lower use of virgin raw materials and lower energy consumption for processing). Thus, it makes an active contribution to circular economy by maximizing catalyst reuse and minimizing catalysts wastes.

High-performance structural foam ROHACELL®

The high-performance structural foam ROHACELL® contributes to resource efficiency and avoidance of emissions. It is lightweight and strong at the same time. Therefore, it is a substitute for metal construction in the aviation industry but also used in automobiles as especially for electric cars lowering vehicle weight is of particular importance.

The auditing firm KPMG has conducted an external verification of the allocation report according to ISAE 3000 (“limited assurance”) and confirmed the allocation of an amount equivalent to the net proceeds to Eligible Green projects (please click on the Link to get the certificate).

This report constitutes the second and the final allocation report for Evonik’s 2022 green senior bond.

Disclaimer

In so far as forecasts or expectations are expressed in this report 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 report.

Evonik Green Bond Impact Report 2023

April 2024

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Sustainability impacts of "Next Generation Solutions" and "Next Generation Technologies"

GBP/GLP Category	UN SDG	Sustainability impact metric	Impact result
Eco-efficient products acting as low carbon transition enablers and sustainability enablers in various industries		Sales of all "**Next Generation Solutions**" in 2023: • Amount • Percentage of total sales[1]	 **~€ 6.1 billion** **43%**
		CO_2e avoided by using selected "**Next Generation Solutions**" sold in 2023:	**48.2 million metric tons CO_2e**
Energy Efficiency		Scope 1 and Scope 2 CO_2e emissions to be annually avoided from 2026 through investments into "**Next Generation Technologies**" currently being implemented:	**170,000 metric tons CO_2e p.a. from 2026**

[1] The sustainability analysis covers all external sales of our chemicals manufacturing divisions. Consequently, the Technology & Infrastructure division is not part of the scope.

Handprint of selected Evonik's "Next Generation Solutions"

We define handprint as positive sustainability impacts that Evonik products enable along the value chain compared with other established products and applications on the market. Often this positive contribution occurs downstream of Evonik's production processes (i.e. in customer's production processes or during consumer use). These products make a relevant contribution to a direct (measurable) improvement regarding one or more environmental and/or social indicators.

In 2023 we generated 43% of our sales by products and solutions that come with superior sustainability benefits above or well above market reference, the "**Next Generation Solutions**". Our goal is to grow the "**Next Generation Solutions**" sales share beyond 50% by 2030. On the one hand, this is to be achieved through the further development of existing "**Next Generation Solutions**". On the other hand, we are focusing research and development on generating additional sales with new "**Next Generation Solutions**". At the same time, we intend to reduce the sales share of products classified as "transitioner" or "challenged" through targeted reformulation or withdrawal from the relevant businesses. Our target is to keep the proportion of sales from "challenged" products permanently <5 percent.

Evonik offers a variety of products enabling greenhouse gas emission reductions over the life cycle of their application compared to using conventional alternatives.

Assessments of avoided greenhouse gas emissions of products and their applications follow an internal method developed by Evonik to evaluate the handprint. This is based on the Avoided Emissions Guidance published by the WBCSD and the International Council of Chemical Associations (ICCA) and on the WBCSD's new cross sector guidance[2]. The internal Evonik life cycle management team works in close cooperation with experts from the responsible business lines and performs life cycle assessments (LCAs) in accordance with the requirements of DIN ISO 14040 ff. Greenhouse gas emission savings are calculated on the basis of the life cycle emissions of applications of selected Evonik products compared to conventional alternatives. Both the emission-saving product and the reference solution must deliver the same function to the user and be used for the same application.

Additionally, the reference solution must be available on the market, interchangeable for the typical customer in the selected market, and as similar as possible to the emission-saving product in terms of data quality, methodology, and assumptions. The simplified calculation methodology as mentioned in the internal method on handprint evaluation is applied, so that identical steps and corresponding emissions over the life cycle for the reference and Evonik solution are excluded from assessments. This approach has no impact on the final amount of calculated greenhouse gas emission reductions.

For 2023 we have extended our avoided emissions' calculation to eleven "**Next Generation Solutions**".

The avoided emissions reported here result from applying the following eleven Evonik

[2] https://files.evonik.com/shared-files/avoided-emissions-2022-methodology-9364.pdf

solutions, to which, among others, proceeds of the 2022 green senior bond issuance have been allocated as Capex:

- Green tire technology
- POLYVEST® in green tire tread compounds
- Hydrogen peroxide to propylene oxide (HPPO) process
- Fumed metal oxides in Lithium-ion batteries
- Amino acids in animal feed
- Improved hydraulic fluids for construction machinery and for stationary equipment
- Additives enabling the use of renewable raw materials for in polyurethane flexible foams
- Easy-to-disperse silica based rheology modifiers for inks and coatings
- Excel® rejuvenation of catalysts
- Silica for paper
- Linerless release coating

Within the sustainability analysis, it has been checked that the selected PARCs are rated as "**Next Generation Solutions**" so that these products do not reveal any negative signals. In 2023, the use of the eleven selected Evonik Next Generation Solutions results in the avoidance of 48.2 million metric tons CO_2e.

Each "**Next Generation Solution**" provides a measurable improvement over the life cycle and the associated Evonik products have either a fundamental, extensive, or at least a substantial contribution to reducing greenhouse gas emissions compared to conventional alternatives[3].

For further detailed information about the selected eleven "**Next Generation Solutions**" for the year 2023 please refer to our brochure "Next Generation Solutions – Their contribution to the sustainability focus areas" Edition 2023 on our **website.**

[3] The significance contribution of chemical products to value chain avoided emissions is described in the WBCSD "Avoided Emissions" Guideline. World Business Council for Sustainable Development (WBCSD) und International Council of Chemical Associations (ICCA), 14 Avoiding Greenhouse Gas Emissions – Guidelines: Accounting for and Reporting Greenhouse Gas (GHG) Emissions Avoided along the 14 Value Chain based on Comparative Studies, Version 2, December 2017.

Selected examples of "Next Generation Technologies"

In 2023, SBTi validated our targets for reducing direct and indirect greenhouse gas emissions in our production and processing. Selective investment in "**Next Generation Technologies**" will help reduce our scope 1 and 2 emissions by 25 percent between 2021 and 2030. The first measures to achieve this were developed by our global project "Evonik Assessment of GHG Emissions Reduction" (EAGER) and are currently being implemented. Evonik invested around €81 million in EAGER projects in 2023. Our aim is to reduce scope 1 and 2 CO_2 emissions by 170,000 metric tons CO_2e p.a. from 2026.

One example of such kind of projects is the construction of a new facility in Singapore for carbon-neutral production of alkoxide catalysts. The mid double-digit million euro investment will enhance supply security for customers in the region and further strengthen the company's global alkoxides business. The new plant will be a modern facility with state-of-the-art technology aiming for zero scope 1 & 2 carbon emissions. The new facility will be fully electrified with the use of MVR (Mechanical Vapor Recompression) technology. This technology allows to re-use process heat within the process itself. This saves energy required for heating and as well as energy required for cooling down the excess heat, thus achievement of carbon emission reduction. Alkoxide catalysts are primarily used in biodiesel production and in synthesis applications in the pharmaceutical and agricultural industries. In future, alkoxide catalysts will also play a bigger role in the circular economy through their use in the chemical recycling of PET plastics.

Another example is the expansion of production capacity for MetAMINO® (DL-methionine) in Singapore by 40,000 metric tons to around 340,000 metric tons per year. The high double-digit million euro investment in this further technological development is to reach target capacity by the third quarter of 2024. These technological adjustments are an important building block in the sustainability strategy of Evonik. The carbon footprint of the additional volume will be reduced by 50 percent thanks to process improvement measures. The reduction is achieved by energy integration in which steam turbines are utilized for steam access and green hydrogen is generated via electrolysis. This green hydrogen replaces hydrogen produced with steam reforming, with is a process with a high carbon intensity. Together these measures will improve the carbon footprint of MetAMINO® produced in Singapore by six percent.

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