

SCANIA



2023

GREEN BOND

IMPACT REPORT





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DRIVING THE SHIFT TOWARDS A SUSTAINABLE TRANSPORT SYSTEM

Scania is a world-leading provider of transport solutions, including trucks and buses for heavy transport applications combined with an extensive product-related service offering. We offer vehicle financing, insurance and rental services to enable our customers to focus on their core business. Scania is also a leading provider of industrial and marine engines. Our purpose and strategy, are to drive the shift towards a sustainable transport system, creating a world of mobility that is better for business, society and the environment.

At Scania, we view the United Nations' 2030 Agenda for sustainable development as a shared agenda that requires collaboration across governments, businesses and the wider civil society. We strongly support all the 17 Sustainable Development Goals (SDG's) and believe they have the potential to deliver transformative change for both societies and businesses. Advances in transport will play an integral role in achieving all of the SDG's. Scania commits to the role as a partner in delivering on the Agenda 2030.

Sustainable transport is all about moving people and goods while contributing to economic and social development, without jeopardising human health and safety or endangering the environment. There is no single solution for transforming the transport system. Rather, a holistic approach is called for, considering the specific transport assignment and the maturity of the transport and logistics infrastructure in different parts of the world. Scania's sustainable transport solutions are developed in close cooperation with our customers and other stakeholders. It centres around three pillars: Energy efficiency, Renewable fuels and electrification and Smart and safe transport.

ELECTRIFICATION – THE KEY TO FOSSIL-FREE TRANSPORT

For the transport system to become sustainable, it must be rapidly decarbonised – which largely depends on drastically ramping up the use of electric vehicles. Electric vehicles operate cleanly and quietly, with zero particles and NOx (nitrogen oxide) emissions and a greatly reduced total carbon footprint (especially when electricity provided comes from fossil-free energy sources). Battery technology is improving rapidly, and other solutions such as fuel cell technology are in development.

At Scania, phasing out carbon emissions from our rolling fleet is a key part of our strategy. It is a strategy that is rooted in a clear understanding of the world we operate in, informed by continuous dialogue with our stakeholders, risk assessments, scenario analysis, insights around our life cycle impacts,

and scientific research. Therefore, in line with what is dictated by science and what is needed to reach the Paris Agreement, we have a science-based target in place to support our decarbonisation journey. Shifting to electric is vital to realise that target.

Scania's electrification journey started as early as 2014 with our electric hybrid buses, followed by hybrid trucks in 2016. In 2020, we launched our first battery electric truck, designed for urban applications. The launch was the first phase in an electrification roadmap that will see us ramp-up our production of electric vehicles, including trucks designed to carry increasingly heavier loads over longer distances. The BEV landscape became significantly wider in June 2022, with the launch of our first line of BEV heavy trucks designed for regional haulage. In 2023 Scania's next level of regional battery electric trucks was introduced, with a range of up to 390 kilometres, charging capacity of up to 375 kW and top power levels of 400 or 450 kW (circa 610 hp). Scania continuously expands its BEV offering and in 2024 introduced more electric machines, axle configurations and cab alternatives, as well as several power take-off solutions. Scania's offer includes everything from charging solutions, financing through TRATON Financial Services, repair and maintenance and consultative sales, along with premium digital services.

Customer partnerships play a vital role in helping us develop the electrified transport solutions of the future. In 2023, we collaborated with customers on a range of significant pilot projects, road testing prototype electric solutions from extremely heavy transport to trucks designed for the most demanding mining applications. The work has shown that no application is too heavy to electrify. One such partnership to test extremely heavy transport is trialled with Jula Logistics, part of Sweden's multi-faceted Jula Holding group. In the pilot Jula Logistics is testing two Scania battery-electric vehicle trucks in its road operations, transporting dual 40 foot containers between the combi terminal and the central warehouse. At the same time, we are working with our battery and charging infrastructure partners to make charging points available wherever our customers need them. This effort aims to reduce the charging time required for these vehicles, keeping our vehicles on the road longer.

SCIENCE-BASED TARGETS

To manifest our commitment and be transparent on the progress to phase out carbon emissions, we have set science-based carbon reduction targets (SBT). These commit us to reduce emissions at the scale and pace science dictates is necessary to limit global warming by 2025. Scania will cut CO₂ emissions from our operations by 50 percent and reduce emissions from our products by 20 percent (using a 2015 baseline). This commitment represents a radical leap in our carbon reduction aims, as the targets encompass not only emissions from our direct global operations, but also from our

customers' vehicles when in use. The latter constitutes more than 90 percent of our products' environmental impact.

Read more about our progress on page 40 in Scania's annual and sustainability report 2023: [scania-annual-and-sustainability-report-2023.pdf](https://www.scania.com/content/dam/group/press-and-media/press-releases/documents/Scania-Life-cycle-assessment-of-distribution-vehicles.pdf)

Read more on our Science based targets: <https://www.scania.com/group/en/home/sustainability/initiatives-and-commitments/scania-science-based-targets.html>

See GHG scope reporting on: <https://www.scania.com/group/en/home/sustainability/responsible-business/environmental-footprint/environmental-performance.html>

LIFE CYCLE ASSESSMENT

To get a better understanding of the true sustainability performance of battery electric trucks, and how they measure up against those powered by fossil fuels, Scania needed more insight into the cradle-to-grave impacts. In 2021 we became the first player in the heavy commercial vehicle industry to carry out a full life cycle assessment (LCA) of our battery electric trucks. The assessment which compared a battery electric, European distribution truck with its diesel counterpart was done using the internationally recognised ISO 14040/44 method. Result showed that battery electric vehicles (BEV) show a dramatic total life cycle reduction potential, thanks to the much lower impact from the user phase. Depending on the carbon intensity in the EU electrical grid, the life cycle GHG reduction spans from 38 percent (EU mix 2016) to 63 percent (prognosed EU mix 2030). Powering the vehicle with green electricity is the way to fully utilise the BEV's potential. The results show a life cycle GHG reduction of 86 percent. A BEV entering the EU market after 2020 will have more than 50 percent life cycle GHG reduction compared to the diesel alternative. With today's energy mix (EU), the life cycle climate impact of a battery electric truck will be lower than that of a fossil-fuelled truck within two years of operation. There is also a dramatic reduction potential for other impact categories like fine particle formation, ozone creation and terrestrial acidification. The reduction in these categories lies between 83-97 percent, mainly due to eliminating tailpipe emissions. Tail pipe emissions which is the basis for EU legislation categorise battery electric vehicles as zero-emitting. This is also what is used within the EU Taxonomy regulation.

Read our LCA report on: <https://www.scania.com/content/dam/group/press-and-media/press-releases/documents/Scania-Life-cycle-assessment-of-distribution-vehicles.pdf>

SUPPLY CHAIN DECARBONISATION

Based on our life cycle assessment our studies show that as we move towards more electric transport, the climate impact will shift from the use of vehicles to their production and supply chain emissions. (Scania aims for half of our vehicles sold to be electric by the end of this decade). To address this impact, we are working to decarbonise our supply chain, focusing on the raw

materials we use in manufacturing that are especially carbon-intensive to produce: steel, aluminium, batteries and cast iron. In 2022, we took a major step forward in decarbonising our supply chain, with the launch of a series of industry-leading carbon reduction targets. By 2030, we aim for the batteries, steel, aluminium and cast iron we use in our European production to be 100 percent green. By “green”, we mean that the main sources of emissions used to produce each material will be eliminated using new technologies, renewable energy or recycled material. We are already working closely with our suppliers to ensure these changes happen. For example, we have developed a green steel roadmap for 2030, in close dialogue with our suppliers so that they are aware of their roles and our expectations on the needed ramp-up of green steel production. In 2023, we further strengthened our commitment by turning these targets into mandatory sourcing requirements. In line with these new requirements, we placed our first order of green steel from H2 Green Steel in June 2023. Following this, we agreed with our main steel supplier SSAB to achieve 100 percent decarbonised steel deliveries by 2030. Through the agreement, deliveries of SSAB’s Fossil-free™ steel to Scania will be significantly ramped up, delivering only green steel by 2030 (green steel is manufactured using renewable energy sources and with significantly reduced carbon emissions).

BATTERIES: NEW IMPACTS, NEW CHALLENGES

While the electrification of transport brings major environmental benefits, it also creates new social challenges – in particular, those related to the raw materials needed for battery production. Responsible mineral and battery material sourcing is a major issue on the global sustainability agenda, as extraction of these materials can be linked to violence, conflict and human rights abuses.

As part of the supply chain sustainability work which we carry out within the Volkswagen Group, we have identified four battery raw materials that we consider high-risk: cobalt, lithium, graphite and rare earth elements such as neodymium. Through our supply chain management system, we work continuously to improve the traceability of these materials and identify risks, working with independent auditors and certification initiatives to raise standards and ensure we use minerals from responsible sources.

Scania has the ambition to work with batteries in closed loops, meaning we work in partnership and pilot possibilities to reuse and repurpose the batteries before recycling them at the end of the battery life.

GREEN BOND

In 2020, Scania, as the first pure manufacturer of commercial vehicles, received approval for issuing green bonds. The aim was to use green investment instruments as a means to tap sustainable financing and give

investors the opportunity to fund projects that accelerate the shift towards a sustainable transport system in line with Scania's purpose.

The Green Bond Framework has been developed in cooperation with the bank SEB to align with the ICMA 2018 Green Bond Principles (GBP). The Framework constitutes the basis for identifying, selecting, verifying and reporting projects eligible for financing by Green Bond proceeds. Well-established Norwegian CICERO Shades of Green has rated the Framework 'dark green', a rating allocated to projects and solutions corresponding to the long-term vision of a low-carbon and climate-resilient future.

Scania's Green Bonds strive to reflect best practices in line with evolving market standards. The projects selected for the Green Bond Framework align with the European Union's Taxonomy framework.

The proceeds from Scania's Green Bonds are exclusively allocated to projects that will significantly impact the reduction of CO2 emissions. These include boosting the performance of heavy electric trucks and buses, e-bus-based public transport systems and establishing an efficient charging infrastructure for electric trucks and buses.

GREEN FINANCING GOVERNANCE

Scania has a Green Bond Committee consisting of the Head of Sustainability and the Head of Treasury. The Green Bond Committee evaluates potential Eligible Assets. A decision is made in consensus on which assets meet the requirements of the Framework and will be financed with proceeds from Scania's Green Bonds. Only projects highly likely to have a net positive environmental effect in the long term, are approved.

An amount equal to the net proceeds from the issue of Green Bonds was credited to a segregated Green Account to finance Scania's Eligible Assets. As long as Green Bonds are outstanding and proceeds from issues are available on the Green Account, Scania shall, at the end of every fiscal quarter, deduct funds from the Green Account in an amount equal to disbursements for the financing of Eligible Assets made during that quarter. Until disbursement to Eligible Assets, the Green Account balance will be placed in a bank account. If, for any reason, a financed Eligible Asset no longer meets the eligibility criteria, it will be removed from the pool of projects financed with proceeds from Scania's Green Bonds.

The Green Bond Impact Report is approved by the Scania Sustainability Board (SSB), Scania's internal forum for sustainability coordination, decision making and follow-up. SSB is a cross-functional group, where all corporate functions are represented. SSB is reporting directly to Scania's Executive Board (ExB).

Scania had the Green Bonds Framework reviewed ex-ante by an experienced external reviewer, who will issue an independent Second Party

Opinion. The internal tracking method, the allocation of funds from the Green Bond proceeds and the Green Bond Impact Report are verified ex-post by an external auditor appointed by Scania with the relevant expertise and experience.

ALLOCATED PROCEEDS

The total nominal amount of Green Bonds issued and outstanding is 4,250 MSEK, 31 December 2023.

2021 BOND 1 250 MSEK

2022 BOND 3 000 MSEK

The Green Bond of 3 BSEK was allocated to additional investments related to Scania Electrification R&D in the years 2022 and 2023. The amount was recognised as R&D costs (related to BEV vehicles) in the amount 1 976 MSEK in 2022 and 1 024 MSEK in 2023.

This project has also passed the Taxonomy screening for DNSH criteria (Do no significant harm) and social safeguards, therefore reported as Taxonomy-aligned in the years 2022 and 2023.

SELECTED PROJECTS

The projects selected for funding through Scania's Green Bond are key to supporting the electrification journey in line with Scania's strategic commitment to decarbonisation. The first is through securing the ability to produce batteries and the second is ensuring that Scania develops the most efficient and well-performing battery-electric vehicles.

Due to many elements of uncertainty such as market development and the availability of green electricity for example, Scania cannot provide an exact figure of the CO2 emission reductions from the customers' use phase, that these projects will achieve. However, the LCA report describes the significant reduction impact of BEVs (sold from the end of 2023) funded by Green Bonds.

BATTERY PRODUCTION PROJECT

INTRODUCTION

The Battery Production Project has introduced production capabilities for a new generation of batteries for Scania trucks and buses. The trucks and buses will be fully electric and the new factory was inaugurated in September 2023. The Green Bond funding allocated to the battery factory was used in 2021 to finance the project.

SCOPE OF PROJECT

A new factory was built to produce batteries, as no existing building was available or suitable. Two main assembly lines were needed: one for battery modules and one to make complete battery packs. In addition, logistic flows, storages and IT systems were needed to operate the plant.

To avoid unnecessary transports, the factory is located close to the truck assembly line in Södertälje, Sweden. Specification of the factory building meets Scania's demand for serviceability, longevity and excellent energy performance, which means it exceeds the Swedish "Boverket" requirements by 25 percent.

The building fulfils the requirements of a "Green Building" certification, even though no certification is available for the factory part of the building.

PROGRESS 2023

If 2022 was an eventful year, 2023 was even more so. The construction of the factory building was completed and the line organisation moved in during April. The battery module line was extensively tested and modified for several product updates. The battery pack line was installed during the spring and tested during the summer and fall. The plant was, as previously mentioned, officially inaugurated in September. The complete factory flows were commissioned in late fall and throughout the winter.

Solar panels were installed on the factory roof during the summer. The panels are expected to generate 400 MWh during 2024.

PLAN FOR 2024

We will ramp up production continuously in line with our ambitious electrification plans during 2024.



ELECTRIFICATION WITHIN RESEARCH & DEVELOPMENT



INTRODUCTION

Scania Electrification R&D fully focuses on developing Battery Electric Vehicles (BEV) for heavy commercial use. The priority is on creating a comprehensive range of applications to have a complete BEV-product portfolio before 2030.

In autumn 2023, the first trucks of the new generation range were launched, to offer a highly competitive truck for the important regional haulage segment.

PROGRESS 2023

The division “Electrification R&D”, where design, simulation and testing for all electrical components are concentrated, has slightly increased its resources in 2023 versus 2022. The focus has been on improving our work methods (e.g. increasing the number of test rigs for hardware and software which are up and running) and on the continuous development of our most important assets, our employees.

Next generation Battery-Electric Vehicles

Scania's Electrification Product Roadmap covers introductions of new products from now until 2030.

The earlier delays in the delivery of battery prototypes are now in a better situation due to intense work from Scania and Northvolt.

The first part of the project has concluded, and the second phase, involving the introduction of a fleet of trucks, out in the public, is now in its final validation testing stage.

PLAN FOR 2024-2025

The second part of the project which aims to release a long haulage product and updated city applications is concluding its final validation and is preparing for the production start in the second half of 2024.

In the third step new introductions for an even wider product portfolio and improved truck properties are included with intended production start in 2025.

THE FUTURE OF ELECTRIFICATION AT SCANIA

The shift to electric power will not just radically change the transport system – it will also transform our business. Increasingly, Scania's focus is to provide sustainable transport solutions, and to offer our customers a complete e-mobility solution from sourcing renewable energy to complete charging. The offer is based on a detailed analysis of their fleet and transport requirements and covers everything from installation to management and maintenance of charging equipment. Batteries – including the supply of modules, packs and battery management systems – will also become an increasingly important part of our business.

Electric vehicles are key to cutting transport emissions. But for electric transport to be truly sustainable, we need to reduce impacts at every stage of their life cycle – from operating on fossil-free energy, to the carbon impact of manufacturing vehicles and to the disposal of the batteries. Though we have established a good momentum and a clear plan, the progress we have achieved in electrification to date is just the beginning of our journey.

In June Scania introduced Depot and Destination charging through the separate entity Erinion. It offers predictable, cost-effective, and efficient charging solutions tailored to fleet operations, enhancing operational efficiency, reducing downtime, and supporting sustainability goals.