



# 2024 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. They centre around three pillars:

- Energy efficiency
- Renewable fuels and electrification
- 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 science-based targets in place to support our decarbonisation journey. Shifting to electric is vital to realise that target. Our science-based targets are supported by a suite of near-term and long-term decarbonisation targets and commitments across our full value chain.

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, 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 2024, we teamed up with SKF, via Scania's LOTS Group, to establish one of the longest electric truck routes in Europe. This project is a strong example of how, with effective logistics, electric transport can deliver both sustainability and economic benefits. We're also focused on supporting our customers by simplifying the transition to electrification—reducing complexity and risk while boosting flexibility. A recent example is JUNA, our joint venture that enables customers to use electric trucks on a pay-per-use model, removing the need for full ownership and making it easier to adopt electric transport solutions.

### CLIMATE 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 (using a 2015 baseline). Scania aims to cut CO2 emissions from our operations (scope 1





and 2) by 50 percent (absolute target) and reduce emissions from our products by 20 percent (scope 3, category 11, intensity target) 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.

New interim targets

Our commitment to decarbonise is unwavering and we will continue with the ambition to phase out emissions in line with science. To achieve this Scania during 2024 introduced new interim targets for 2022–2032, committing us to halving emissions every decade. Scania's new interim climate targets for 2032, aiming for 45 percent reduction of emissions in scope 3 (category 11, intensity target) as well as 50 percent reduction of emission from operations (scope 1 and 2, absolute target).

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

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

### LIFE CYCLE ASSESSMENT

To get a better understanding of the 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.

In 2024, Scania conducted a comprehensive LCA comparing a battery electric long-haulage truck with its diesel counterpart, adhering to ISO 14040/44 standards. The study revealed that, although the production of the battery electric vehicle (BEV) results in a higher environmental burden— primarily due to battery cell manufacturing—the overall life cycle greenhouse gas (GHG) emissions are significantly lower for the BEV. Specifically, the BEV's total life cycle emissions were reduced by 68 percent compared to the diesel truck when using the projected European electricity mix. Moreover, the CO<sub>2</sub>e break-even point, where the BEV's higher production emissions are offset by its lower operational emissions, occurs within less than a year of operation. Utilising low-carbon electricity sources, such as wind power, can further enhance the GHG reduction potential, achieving up to a 90 percent decrease in life cycle emissions. These findings underscore the substantial

Read more about our progress and challenges on page 35 in Scania's annual and sustainability report 2024: <u>https://www.scania.com/content/dam/group/investor-relations/annual-review/download-full-report/scania-annual-and-sustainability-report-2024.pdf</u>





climate benefits of transitioning to electric heavy-duty vehicles, especially when supported by clean energy infrastructure

Life cycle assessment of long haulage trucks

### 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. To address this impact, we are working to decarbonise our supply chain by using our purchasing power to enable suppliers to make their transition. Focus is on the raw materials we use in manufacturing that are especially carbonintensive 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. The new targets aim for the decarbonisation of batteries, steel, aluminium and cast iron we use in our European production by tackling the main sources of emissions used to produce each material. The emissions will be reduced using new technologies, renewable energy and recycled material.

Achievning these ambitious targets will depend on progress in availability and industrialisation, therefore in support of this, we are in close dialogue with our suppliers on their roles and our expectations.

### 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 our commitment to supply chain sustainability within the Volkswagen Group, Scania has implemented a raw materials due diligence management system aligned with OECD guidelines. This system helps us identify, assess, and mitigate actual and potential human rights risks across our upstream raw material supply chains. In the past year, our efforts have focused on high-risk materials such as battery raw materials (including cobalt, lithium, graphite, and rare earth elements), conflict minerals, and natural rubber.

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. Wellestablished 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-busbased 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 3,250 MSEK, 31 December 2024.

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 Taxonomyaligned 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 new factory was inaugurated in September 2023 and will support production for fully electric trucks and buses. The Green Bond funding allocated to the battery factory was used in 2021.

### SCOPE OF PROJECT

A new factory was built to produce batteries with two main assembly: 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.

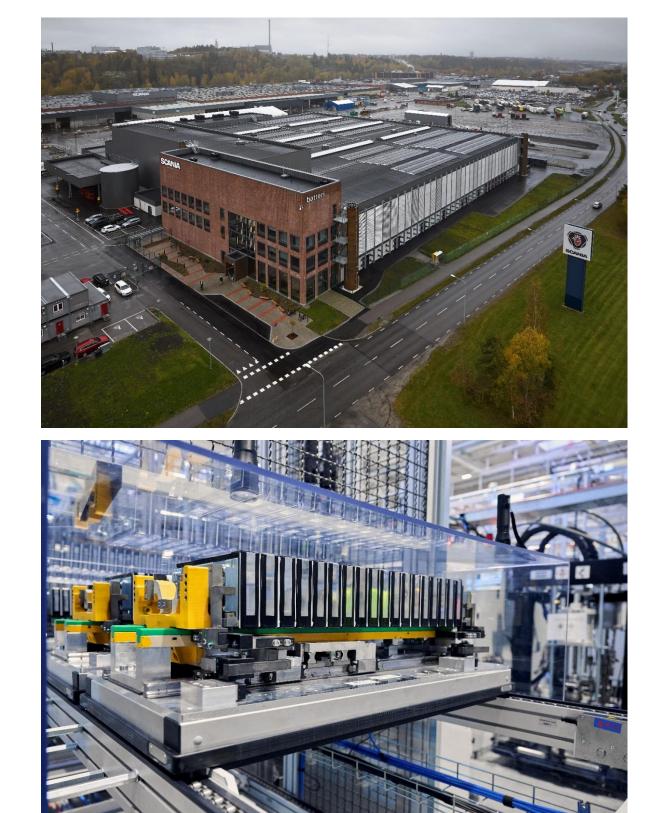
#### PROGRESS 2024

2024 was the year production started in earnest. Most of the subsystems were operational, quality assurance was completed and deliveries to customers ran throughout the year. Circumstances outside the Battery Production unit slowed the planned ramp up and affected the output to some extent. Inside the factory, several improvement activities have been introduced to increase our abilities, such as introducing IT functionalities within several steps, and also introducing several upgrades in the production.

Solar panels were installed on the factory roof during the summer of 2023. During 2024 the panels generated approximately 328 MWh.

#### PLAN FOR 2025

We will ramp up production continuously in line with our ambitious electrification plans during 2025.











### 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 2024, Scania introduced several projects to increase the truck application witdh in order to provide tailor made solutions for our customers. The autumn was also the start of pre-production of our new generation of efficient electric motors.

#### PROGRESS 2024

The division "Electrification R&D", where design, simulation and testing for all electrical components are concentrated, has slightly increased its resources in 2024 versus 2023. A lot of focus has been directed to improve our capabilities to smoothly introduce the widened spread of applications.





### PLAN FOR 2025 AND AHEAD

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 during 2025.

In the third step new introductions for an even wider product portfolio and improved truck properties are included with intended production start in the end of 2025 and during 2026.

### 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.

Scania has acquired Northvolt Systems Industrial Division to strengthen its off-road electrification capabilities, adding battery production and R&D operations that support applications in construction, mining, and material handling.

We're committed to shaping the future of charging infrastructure. Through continuous improvements in charging technology—including Megawatt Charging Systems (MCS)—Scania is taking active steps to influence how transport solutions evolve. Our collaborations with innovative partners like Milence and our investment in Scania Depot Solutions, also known as Erinion, enable us to develop customized charging solutions that meet customer needs and enhance accessibility