



# 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 is 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 UN's Agenda 2030 as a shared agenda that requires collaboration across government, business and the wider civil society. We strongly support all the 17 goals and believe they have potential to deliver transformative change for both societies and business. 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. But, 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. Our 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 FOSSILFREE TRANSPORT

Electrification is central in a sustainable, decarbonised transport system. Electric vehicles operate cleanly and quietly, with zero particles and NOx (nitrogen oxides) emissions and a greatly reduced total carbon footprint (especially when electricity provided comes from fossil-free energy sources). Battery technology improves rapidly, and other solutions such as fuel cell technology are in development.

For the transport system to become sustainable, it must be rapidly decarbonised – and that depends in large part on drastically ramping up the use of electric vehicles. At Scania, to phase out carbon emissions from our rolling fleet is a key part of our strategy, and we have a science-based target in place to support this. Shifting to electric is vital to realise that goal.

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 at Scania ramp up our production of electric vehicles, including trucks designed to carry increasingly heavier loads over longer distances. At the same time, we work with our battery and charging infrastructure partners to reduce the





charging time these vehicles will require. By 2023, we will have trucks capable of carrying 40 tonnes for four hours, or 60 tonnes for three hours, on a 45-minute charge.

To manifest our commitment and be transparent on progress, we have set sciencebased 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 own 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.

In 2021 Scania 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 compares European urban to regional distribution operations in average conditions and electricity mixes, and was done using the internationally recognised ISO 14040/44 method.

Battery electric vehicles (BEV) show a dramatic total lifecycle 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). To power 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% 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.

## **GREEN BOND**

In 2020, Scania, as the first pure manufacturer of commercial vehicles, received approval for issuing green bonds.

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 to identify, select, verify and report 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 that correspond to the long-term vision of a low carbon and climate resilient future.

The proceeds from Scania's green bonds are exclusively channelled to projects that will have a profound impact in reducing CO<sub>2</sub> emissions. These include boosting the performance of heavy electric trucks and buses, e-bus based public transport systems and establish an efficient charging infrastructure for electric trucks and buses.





#### **GREEN FINANCING GOVERNANCE**

Scania has a Green Bond Committee that consists of the Head of Sustainability and the Head of Treasury. The Green Bond Committee evaluates potential Eligible Assets. Decision is made in consensus on which assets that meet the requirements of the Framework and will be financed with proceeds from Scania's Green Bonds. Only projects with a high likelihood that the net, long-term environmental effects are positive are approved.

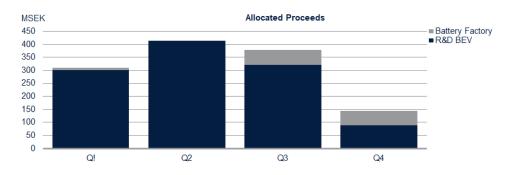
An amount equal to the net proceeds from the issue of Green Bonds was credited to a segregated Green Account with the purpose to finance Scania's Eligible Assets. As long as Green Bonds are outstanding and proceeds from issues are available on the Green Account, Scania shall, at the end of every fiscal 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 on 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 Scania Sustainability Board (SSB) our internal forum for sustainability coordination, decision making and follow up (previously referred to as Sustainability Advisory Board, SAB) 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 is 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 1,250 MSEK, 31 December 2021.



In 2021 the total amount allocated to eligible projects is SEK 1,245,696,000.

100 percent of total proceeds from Scania Green Bond has been used to finance internal projects within the scope of Scania Green Bond Framework.





## SELECTED PROJECTS

The projects selected for funding through Scania's Green Bond are key projects to support the electrification journey. The first one through securing the ability to produce batteries and the second one through making sure that Scania develops the most efficient and well performing battery electric vehicles.

## BATTERY PRODUCTION PROJECT



#### INTRODUCTION

The Battery Production Project introduces production capability for a new generation of batteries for Scania trucks and buses. The design of the batteries is under development by Scania Research and Development (R&D). It is expected to be ready in July 2023.

#### SCOPE OF PROJECT

Scania has decided to build a new factory at the site in Södertälje. The factory requires two main assembly lines, one for battery modules and one to make complete battery packs. In addition, logistic flows and storages are needed, as well as IT systems to operate the factory. The location is close to the truck assembly line to avoid unnecessary transports. The factory building meets Scania's demands on serviceability, longevity and excellent energy performance. The building fulfils the requirements for Green Building certification.





#### PROGRESS 2021

Construction of the building began in February 2021, and investment for equipment was approved in May 2021.

Scania has decided to put solar cells on the factory roof. The equipment investment process progresses with requirement specifications, quotations and supplier selection. Finally, three main orders were placed: battery module line, logistic equipment and battery pack line.

The construction of the building progresses according to schedule.

#### PLAN FOR 2022

During 2022, the building construction will nearly be finished. The battery module line and logistic equipment will be tested and installed. The pack line is expected to be ready for testing during 2022. November and December are devoted to tests, and module production is expected to start in January 2023.

## ELECTRIFICATION WITHIN RESEARCH & DEVELOPMENT



#### INTRODUCTION

Scania Electrification R&D fully focuses on developing Battery Electric Vehicles (BEV) for heavy commercial use. Focus is to develop a great number of applications with the aim to have a complete BEV-product portfolio before 2030.





#### PROGRESS 2021

On 1 January 2022 Scania R&D launched a new organisation where a new sector (Electrification R&D) has been set up. This is where all electrical components design, simulation and testing are concentrated.

The team has increased with 80 percent during 2021 compared to 2020. For 2022 we plan to grow another 35 percent versus 2021. Highly competent engineers have been recruited both internally and externally.

#### Next generation Battery Electric Vehicles

Scanias's Electrification Product Roadmap covers introductions of new products from now until 2030. All projects intended to start 2021 are up and running. Delays in delivery of battery prototypes has stressed the development plan but mitigation actions are in place.

"Small Series" is the internal name for a common initiative aiming for early customer interaction by running prototype vehicles in customer operation to support a "customer first" way of working.

Two vehicles for heavy duty operation have been built during 2021. Customer test will start during 2022.

## 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 offer our customers a complete e-mobility solution from the sourcing of renewable energy to the installation 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 all the way to the disposal the batteries. During 2021 we strengthened our partnership with Northvolt with a further investment in the pioneering sustainable battery company. Northvolt uses a circular model of production, where end-of-life battery materials are recovered and used to make more batteries. Thanks to the backing of Scania and other investors, Northvolt has been able to expand its Swedish factory from 40 GWh to 60 GWh. This makes it possible for the company to meet increased demand as more customers switch to electric vehicles.

Scania's target is for electric solutions to make up 10 percent of our total vehicle sales volume by 2025 and 50 percent by 2030.