Norske tog

# Impact and allocation report 2023

# Contents

# Introduction

Norske tog AS is owned by the Norwegian Ministry of Transportation and Communications. The role of the company is to procure, own and manage vehicles for passenger train transport to train operators in Norway. Our vision states that the company shall help to make passenger train transport attractive in Norway and contribute to "the green shift" by leasing out a sufficient number of up-to-date vehicles.

As a form of passenger transportation, trains constitute a key component within 'Clean transportation.' Trains are a low carbon alternative with low energy intensity in comparison to other modes of passenger transport, such as transport by car. The Norwegian government has set a goal to half emissions from the transport sector by 2030 compared with the 2005 baseline. Even though there are no specific targets placed on rail, we are committed to support the 2030 reduction target.

The purpose of this annual impact and allocation report is to present an overview of the impact and allocation of the green bond loans used by Norske tog to finance or refinance investments in existing and new electric trains. Our green bond framework is based on the Green Bond Principles GBP's)[1] (2021 version). issued by the International Capital Markets Association (ICMA). ICMA's Green Bond Principles are a set of voluntary guidelines that recommend transparency and promote integrity in the development of the green bond market by clarifying the approach for issuing a green bond. Our intention is to follow best practices in the market as the standards develop and as such the Green Bond Framework may be updated going forward. This report has followed guidance from the Nordic Public Sector Issuer's (NPSI) Position Paper on Green Bond Impact Reporting[2]. The NPSI's Position Paper has been developed as a practical guide on impact reporting for Nordic public sector green bond issuers.

[1] https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf

[2] https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Resource-Centre/NPSIPositionpaper2019final-120219.pdf

# Allocation Report

## Basic information

| | |
|---|---|
| Reporting Period | Nov 2022 to Nov 2023 |
| Reporting frequency | Annual |
| Reference frameworks | • Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting<br>• International Capital Markets Association's Green Bond Principles |
| 2nd opinion provider and result | Cicero, Dark Green classification |
| Project Category | Clean Transportation:<br>New electric trains (all 4 bonds) |

## Outstanding Green Bonds

| No. | Coupon | ISIN | Amount | Issuance date | Maturity |
|---|---|---|---|---|---|
| 1 | 3mN+54 (FRN) | NO0010870009 | 400 MNOK | 2019 | 11.03.2025 |
| 2 | 2.55% (Fixed) | NO0010870017 | 900 MNOK | 2019 | 11.12.2029 |

## Project breakdown

Issuance (100%)

# 17 Class 75 trains

Percentage used to finance projects

**100%**

Outstanding

**1,300 MNOK**

Outstanding (% of total investment)

**96%**

### Outstanding Green Bonds

| No. | Coupon | ISIN | Amount | Issuance date | Maturity |
|---|---|---|---|---|---|
| 3 | 2.375% (Fixed) | NO0011115487 | 1,250 MNOK | 2021 | 05.10.2030 |

### Project breakdown

Issuance (100%)

## 17 Class 74 trains

Percentage used to finance projects

**100%**

Outstanding

**1,250 MNOK**

Outstanding (% of total investment)

**89%**

### Outstanding Green Bonds

| No. | Coupon | ISIN | Amount | Issuance date | Maturity |
|---|---|---|---|---|---|
| 4 | 3mN+43 (FRN) | NO0011115495 | 750 MNOK | 2021 | 05.10.2026 |

### Project breakdown

Issuance (100%)

## 30 N05 trains

Percentage used to finance projects

**100%**

Outstanding

**750 MNOK**

Outstanding (% of total investment)

**17%**

# Governance of the Green Bond Framework

To ensure that the Green Bond Framework delivers on its goals, we have established a comprehensive governance structure. The governance structure is described in detail in the Governance Policy for Norske tog's Green Bond Framework. The policy has been approved by the board of Norske tog.

The main internal body with responsibility for overseeing and developing the Green Bond Framework, is the Climate Committee. The committee reports directly to the CEO and is responsible for managing potential future updates to our Green Bond Framework. It meets on a quarterly basis to review the outstanding green bond portfolio, identify and describe potential case studies, and to approve potential eligible projects.

Norske tog has established a Green Bond Register for green bonds issued by Norske tog. Throughout the duration of the outstanding green bonds, Norske tog will compile and maintain an aggregate amount of assets and projects in the Green Bond Register that is at least equal to the aggregate net proceeds of all outstanding Norske tog green bonds. There may be periods when the total outstanding net proceeds of green bonds exceed the value of eligible projects in the Green Bond Register. Any such excess portion will be held in accordance with Norske tog's normal liquidity management policy and managed as such. The Climate Committee is responsible for keeping the Green Bond Register updated, and the register forms the basis for the impact reporting.

Within one year of the first issuance, and as long as there are green bonds outstanding, Norske tog will annually publish a report on the allocation and impact of green bonds issued under this framework.

## Climate committee meetings

In accordance with the governance policy, climate committee meetings should be held four times a year. During the reporting year 2023, the Committee met four times - in May, June, September, and October. One of the focus areas of the committee throughout 2023 has been to develop competency on the new EU Green Bond Standard, and to work on the gaps between the new framework and today's green bond framework. This fall Norske tog have taken initiative to strengthen our investor dialogue to ensure we will meet their expectations related to sustainability going forward. In order to increase the overall competence on sustainability, a sustainability advisor has joined the committee.

## Third-Party Review (post-issuance)

Norske tog has appointed PwC as an external Independent Auditor to provide annual assurance of Norske tog's selection process for the financing of Eligible Projects and the allocation of the proceeds of Norske tog's green bonds, to ensure that such processes and allocations are in accordance with the Norske tog Green Bond framework.

# Description of eligible projects

In September 2008, NSB, the former state-owned integrated company which Norske tog split from, placed an order for 50 new electric multiple unit FLIRTs with the Swiss manufacturer Stadler. The order included an option for an additional one hundred units. A total of 136 new electric train sets were ordered, comprising Class 75 and 74, alongside 14 Class 76 bimodal trains, which can operate on both electricity and diesel. The final option was called in 2018, and the last trainset was delivered to Norske tog in November 2022. Class 74 and 75 are electric regional trains, where Class 74 is designed to make longer journeys of up to 3 hours. Class 75 is used for suburban rail transport in the Oslo area and as local rail transport in and around Bergen.

In 2022, a procurement agreement was signed with Alstom for 30 new Class N05 electric train sets. In January 2023, and option was called in under the same agreement, comprising additional 6 new Class N05 and 19 new Class N06. Class N05 are local trains and are specifically designed to make journeys of up to 40 minutes and Class N06 are regional trains which will be used for suburban rail transport in the Oslo area.

In Mars 2023, Norske tog signed a procurement agreement with Stadler for 17 new long-distance trains, FLIRT Nordic Express. The agreement includes both electric multiple units and bimodal trains.

### Selected Eligible Projects

The selected eligible projects are 17 Class 75, 17 Class 74 and 30 Class N05 electric trainsets.

Class 74 operates on intercity routes in Eastern Norway, while Class 75 operate routes in both Western and Eastern Norway. The Class N05 vehicles will be local trains. Class 74 and 75 trains have been acquired to maintain and add passenger capacity on selected routes, whereas the Class N05 trains will add passenger capacity. Most of the Class 75 and 74 trains have been delivered to Norske tog in the period between 2017 to 2022 and within the look-back period of 15 years from the time of issuance of outstanding green bonds. The first Class N05 train sets are scheduled to be delivered in November 2025, while the remaining are expected to arrive in the beginning of 2026.

Class 75

Class 74

Class N05

# Production and Key Features
## Class 74, 75 and Class N05

### Class 75

73 200 km/h 295

### Class 74

50 200 km/t 240

### Class N05

30 160 km/h 294

| Production and key features | Train type | | |
|---|---|---|---|
| | Class 74 | Class 75 | Class N05 |
| **Vehicle type** | All trains are single-decker electric motor vehicle sets. | | |
| **Train composition and top speed** | Five coaches, three of which have traction.<br><br>Top speed limit of 200 km/h. | Five coaches, three of which have traction.<br><br>Top speed limit of 200 km/h. | Six coaches, four of which are equipped with traction.<br><br>Top speed limit of 160 km/h. |
| **Intention of use** | Configured for shorter regional routes. | Intended for longer local train routes. | Intended for local train routes.<br><br>*The first Class N05 trainsets are scheduled to be delivered in May 2025.* |
| **Accommodation and passenger capacity** | Accommodation of up to 368 passengers, with 240 seats and 128 standing spaces (2 people per m²).<br><br>Included in the seating capacity for Class 74 trains are 44 comfort seating places. | Accommodation of up to 561 passengers (295 seats and 266 standing spaces (4 people per m²)). | Accommodation of up to 778 passengers, including tip-up seats (294 seated and 484 standing (4 people per m²)). All coaches on Class N05 have tip-up seats in the low floor regions across the driving direction, maximizing flexibility and ensuring a high passenger load, particularly during rush hours. |

| Production and key features | Train type | | |
|---|---|---|---|
| | Class 74 | Class 75 | Class N05 |
| **Comfort for passengers and personnel** | Both Class 74 and 75 are quiet in operation and passenger friendly with spacious low floors and wide gangway areas that can be utilized when there is a need for high capacity. There is also good spacing around catering areas.<br><br>For personnel, the trains have an ergonomically designed working environment to prevent driver fatigue. To increase comfort for both passengers and personnel the trains have increased thermal insulation and high-performance HVAC4 systems for the carriages and control cabs. | | Class N05-trains are passenger-friendly, with large low floors areas and wide gangway spaces that can be employed when high capacity is required. Enhanced thermal insulation and high-performance HVAC systems have been installed in the carriages and control cabs of the trains in order to enhance passenger and crew comfort. The HVAC system is equipped with a $CO_2$ sensor for each saloon area so that it may automatically analyze the passenger load and limit the amount of fresh air required to conserve electricity. |
| **Adaption to climate** | The train sets are designed for the hard winter conditions in the Nordic region. The majority of the technical equipment is situated on the roof or inside the train to mitigate winter issues and facilitate maintenance access. When there is snow on the railroad, a snow plough allows for continued transportation. | | |
| **Reliabillty, Accessibillity and Safety** | The trains have a clear layout of passenger compartments for passenger orientation and safety. Colors and contrasts make it easier for visually impaired passengers to find their way around.<br><br>In addition, the trains are fully compliant with EU accessibility regulations for people with disabilities and reduced mobility. Wheelchair elevators, and barrier-free compartments enable wheelchair access to the train. The train also fulfils requirements regarding standards for crashworthiness (EN 152275) and car body strength (EN 126636).<br><br>The trainsets have incrementally enhanced safety, performance, dependability, and recyclable materials. In addition, the trainsets are being constructed and adapted to operate in severe temperatures, where they have demonstrated their durability. | | |

# Impact:
# Methodology, Baselines and Assumptions

In reporting on the impact indicators contained in this report, the following methodology, baselines, and assumptions have been adopted:

- A high level of transparency around the data sources used for calculations.
- The eligible projects have been acquired to cover passenger growth, increase available capacity to existing intercity routes in Eastern Norway (Class 75 and Class N05), and maintain current train capacity by replacing older trainsets (Class 70 and Class 69) with new trainsets (Class 74 and N05).
- Indicators that use $CO_2$ emissions calculations to measure impact are reported as avoided emissions. To calculate "avoided emissions", a comparison is made between the estimated emissions from new train sets and the alternative transportation. Hence, avoided emissions is the difference in calculated emissions from the newly financed train sets and alternative transportation.
- Baseline: The "baseline" for impact assessments in this report is the "alternative means of transportation". For Indicator 4, the baseline is the emissions from cars and buses that would be used by travelers if the new electric trains were not in operation.
- In order to establish a baseline that is as representative as possible, especially regarding Indicator 4, data from external sources are used to improve the accuracy of input factors. This means that the distribution of vehicles (bus and car) per fuel type is extracted for the municipalities associated with the operation lines where the new train sets are operated. The average distribution of vehicles is then calculated for each individual operation line and used to estimate the emissions from alternative transportation.
- When calculating $CO_2$ emissions for electricity for operation of the trains in Indicator 4, we consider the origin of the electricity purchased by Bane NOR for the operation of all trains in Norway (market-based method). Bane NOR purchases Guarantees of Origins (GO) that ensure that the electricity bought comes from 100% renewable sources. When making these calculations, we also compared figures for $CO_2$ emissions from the Nordic energy mix for 2022 (location-based method)[3]. In our calculations for electricity for operations, which is bought with Guarantees of Origin, we calculate emissions from electricity with 0 emissions. Since difference in result between this figure and the location-based figure was insignificant, only the market-based estimate is reported.

[3] IEA (2021): "IEA EMISSIONS FACTORS 2021", *"ELECTRICITY INFORMATION 2021"

- As a simplified estimation, kwh/seatkm is used in calculating kwh from passengerkm. This is based on what data was available when starting calculations with the indicators. This estimate is in 2022 compared to a now available factor for kwh/passengerkm for general electric trains in the Nordics. As the difference in results is negligible and the factor is considered representative, the factor kwh/seatkm is used further in the calculations in 2022 to provide comparability in the indicator.

- When calculating the impact of Class 74 and Class 75 trainsets, we have used data from 2022 for the relevant routes to get more accurate calculations of the future effect. As all 17 Class 74 and 17 Class 75 train sets were in operation for the entirety of 2022, we are able to calculate each class' impact based on their provided passenger km. Class N05 train sets are yet to be deployed and the impact of the first train sets will not materialize until 2025. To calculate their expected impact, we have used Class 69 trains deployed on the relevant routes. This is considered a reasonable, and restrictive approach, as Class N05 trains are expected to replace Class 69's passenger capacity and therefore have the same amount of passenger km in a year, as a minimum.

# Impact indicators

| Impact indicators | Type of calculation | Data points utilised | Data source | Results | | |
|---|---|---|---|---|---|---|
| | | | | Class 74 | Class 75 | Class N05 |
| **1. Number of electric trains** financed and deployed (electric rolling stock) | Actual number | Total number of new electric trains financed and deployed | • Norske tog | 17 trains | 17 trains | 30 trains |
| **2. Added passenger capacity** provided by new electric trains financed and deployed | Actual number | Total new seating places and standing room places added for new electric trains | • Norske tog | 6,256 sitting and standing places | 9,537 sitting and standing places | 23,970 sitting and standing places |
| **3. Estimated added passenger-kilometres** for new electric trains | **Post ante (Type 74 and 75)** Impact measured after actual operations | Total passenger numbers for relevant routes for electric trains for year 2022 | • Train operator | 242,053,084 passenger km (post ante) | 153,238,266 passenger km (post ante) | 89,136,508 passenger km (ex ante) |
| | **Ex ante (Type N05)** Impacts measured before actual operations | Number of total electric trains deployed on relevant routes for year 2022 | • Train operator | 17 trains | 17 trains | 0 trains |
| **4. Estimated annual $CO_2$ emissions avoided** measured in tons of $CO_2$ compared to alternative transport car/bus and based on estimated added passenger km/year | **Post ante (Type 74 and 75)** Impact measured after actual operations<br>**Ex ante (Type N05)** Impacts measured before actual operations | Estimated added passenger km (indicator 3) | • Indicator 3 | 18,537 tonnes $CO_2$ avoided (post ante) | 11,851 tonnes $CO_2$ avoided (post ante) | 6,555 tonnes $CO_2$ avoided (ex ante) |
| | | $CO_2$ emissions pr. passenger km for added<br>• Tank-to-Wheel (TtW) values<br>• Emissions from electricity production for operation of the trains. Guarantee of Origin | • Norske tog<br>• Bane Nor | | | |
| | | **Baseline for alternative transport – car/bus**<br>• Distribution in passenger/km car/bus for Oslo and Akershus for 2021 | • The Norwegian Public Roads Administration | | | |
| | | • Distribution of cars by fuel type (petrol, diesel, gas, electric) for Oslo and Akershus 2021 | • SSB | | | |
| | | • Kg $CO_2$/km for cars by fuel type for 2022 | • DEFRA Coach (UK) 2022 | | | |
| | | • Kg $CO_2$ for buses by fuel type for 2022 | • DEFRA Coach (UK) 2022 | | | |

# Conclusion

The impact calculations for all trainsets use data from 2022. Although the Covid-19 pandemic is considered to have a slightly negative impact on demand for train transportation also this year, the data is considered representative to calculate the avoided emissions from Class 74, 75, and N05 trainsets. As all Class 74 and 75 trainsets have been deployed for use in 2022, we use kilometer data for these trainsets to get an accurate estimate of impact. For Class N05 trainsets, using kilometer data for Class 69 is considered reasonable, as these are expected to be replaced by the soon-implemented N05 trainsets. We assume that the overall train demand and passenger kilometers per year will increase moving forward, as travel patterns are shifting towards normal levels following the end of the pandemic.

Compared to last year's report, we see a somewhat increase in avoided emissions from Class 75 train sets compared to alternative means of transportation. This is mainly caused by an increase in added passenger capacity compared to last year. For Class 74 and N05, avoided emissions are seen to be slightly lower than last year, which is mainly caused by an update of the methodology used for calculating emissions. The change in methodology is mainly in terms of using a lower emission factor that is considered more representative of other means of transportation today, for example, caused by an increase in the share of BEVs for private cars in the relevant areas that the trains are deployed.

# Qualitative impact analysis

Previous editions of this report have included a qualitative assessment of sustainability impacts and data for the train sets life cycle in comparison to the trainsets replaced. The qualitative impact analysis can be found here.

# Contribution to UN Sustainable Development Goals (SDG's)

| SDG | Sub-goal | Norske togs practice |
|---|---|---|
|  | **SDG Target 9.1**<br>Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all | Through our activities, we contribute to the development of reliable, sustainable and solid infrastructure of high quality that focus on affordability and equitable access for all. The deployment of new electric trains in and around the Oslo greater metropolitan region contributes to expanding a system of public transport to meet the clean transport needs of the public, including those with special needs. By renewing and upgrading the rolling stock, and adapting the trains to a new, digital future, Norske tog plays a part in renewing the rail network and ensuring that Norway's train service align with tomorrow's demand. Furthermore, an increase in train capacity also reduces the infrastructure needs of road transport. |
|  | **SDG Target 11.2**<br>By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons | We include different user groups in the design of the public transport, so that the means of transport are accessible to everyone. Efficient rail transport is particularly important regarding urban centers and in densely populated areas. |
| | **SDG Target 11.6**<br>By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management | Norske tog contributes to the target by providing efficient and environmentally friendly transport, which in turn provides an important foundation for developing good residential environments and local communities. Extra passenger capacity provided by these trains avoids $CO_2$ emissions and contributes to better air quality by reducing particle matter from road traffic and reducing the dependence on diesel- and petrol-powered cars and buses. |

| SDG | Sub-goal | Norske togs practice |
|---|---|---|
| 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | **SDG Target 12.2**<br>By 2030, achieve the sustainable management and efficient use of natural resources | Norske tog contributes to a more efficient utilization of natural resources through the efforts on minimizing waste and incorporating sustainable practices when managing our train sets. We set high sustainability standards in the procurement of our trains and work to ensure that the trains remain productive throughout or beyond their expected lifespan. |
| | **SDG Target 12.4**<br>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 | Norske tog applies an environmentally sound management of chemicals and waste that is in accordance with international frameworks and minimizes impacts on the environment and human health. |
| | **SDG Target 12.5**<br>By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse | Norske tog incorporates practices for preventing, reducing, recycling and reusing trainsets and materials in the management of our trainsets. |
| | **SDG Target 12.6**<br>Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle | We integrate information on sustainability in our reporting and encourages partners and suppliers to adopt and maintain their sustainable processes. |
| | **SDG Target 12.7**<br>Promote public procurement practices that are sustainable, in accordance with national policies and priorities | Procurements conducted by Norske tog are carried out in accordance with national regulations, and national policies and priorities are increasingly leaning towards emphasizing transparency in the supply chain. |
| 13 CLIMATE ACTION | **SDG Target 13.2**<br>Integrate climate change measures into national policies, strategies, and planning | By procuring electrical trains with minimal or no emissions during their operation, we contribute to the overall goal of combating climate change and its impacts. Furthermore, we seek to enhance our institutional capacity on climate change and integrate measures into our strategies. |
| | **SDG Target 13.3**<br>Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning | We constantly aim to identify and better understand emissions in our value chains. The deployment of modern, electric trains provides travelers with the opportunity to commute to work and engage in other activities with a reduced carbon footprint. We publish emissions through our impact indicator 4, which provides an estimate of the emissions avoided through these journeys over a period of one year. The emissions are significant, and thus these trains are a positive contribution to climate change mitigation. |

# Contribution to EU's Environmental Objectives

The EU Sustainable Finance Action Plan is a broad swathe of legislation designed to reorient capital flows towards sustainable activities. One of the most important pieces of legislation in the Sustainable Finance Action Plan is the EU Taxonomy, a classification system for sustainable activities.

A company's economic activity is considered eligible if it is included in the Delegated Acts to the Taxonomy Regulation, thus recognized by the EU as having the potential to contribute to one of EU's environmental objectives[4]. Eligible activities will be aligned with the EU Taxonomy and, therefore, be regarded as sustainable if they meet the following criteria:

1. Substantially contribute to one of the six environmental objectives.

2. Do no significant harm to the other remaining objectives ('DNSH' – 'Do No Significant Harm').

3. Comply with minimum safeguards.

Norske tog's deployment of trains is an economic activity that is covered by the EU Taxonomy through "Passenger interurban rail transport" and thus may be aligned with the framework if found to substantially contribute to either climate mitigation or climate adaption.

Based on a high-level assessment of the technical screening criteria, Norske tog choose to seek alignment with the EU Taxonomy through substantially contributing to climate mitigation.

### Assessment of technical screening criteria

*Substantial contribution – Climate change mitigation*

For the activity "Passenger Rail Transport (interurban)"[5] to meet the requirements of substantial contribution, the activity must comply with one of the following criteria:

a. *the trains and passenger coaches have zero direct (tailpipe) $CO_2$ emissions.*

b. *the trains and passenger coaches have zero direct (tailpipe) $CO_2$ emission when operated on a track with necessary infrastructure and use a conventional engine where such infrastructure is not available (bimode).*

The electric Class 75, 74 and N05 trains financed with green bonds and acquired by Norske tog, meet the environmental technical screening thresholds as they have zero direct (tailpipe) $CO_2$ emissions.

[4] The EU's six environmental objectives are: (1) climate change mitigation, (2) climate change adaptation, (3) sustainable use and protection of water and marine resources, (4) transition to a circular economy, (5) pollution prevention and control and (6) protection and restoration of biodiversity and ecosystems.

[5] Delegated Regulation (EU) 2021/2139: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R2139&from=EN

*DNSH 2 – Climate Adaptation*

To meet the requirements of DNSH 2, Norske tog must perform, and document, the conduction of a robust climate risk and vulnerability assessment based on the identification of relevant climate risks. Further, Norske tog must document the assessment of suitable mitigating measures that reduce the impact from analyzed climate risks.

Norske tog is in the process of assessing relevant climate risks and develop suitable mitigating measures, with the aim of being aligned with the taxonomy criteria.

*DNSH 4 – Circular economy*

DNSH 4 criteria requires the presence and implementation of measures that ensure waste handling in accordance with the waste hierarchy, in particular during maintenance.

Norske tog have implemented various measures that ensures waste handling in accordance with the waste hierarchy during trains' lifetime and are currently assessing today's measures related to maintenance.

*DNSH 5 – Pollution prevention*

DNSH 5 sets requirements related to emissions from engines used for propulsion, with emission limits set out in Regulation (EU) 2016/1628.

Norske tog have assessed the emissions from engines in both electric- and bimode trains and compared their levels with the current limits set out in the EU Taxonomy. Norske tog consider electric trains financed by green bonds to be in line with the requirements of DNSH 5 due to engines having zero emissions.

### Minimum safeguards

Norske tog has relevant policies in place to ensure compliance with Social Safeguards based on UN Guiding Principles and OECD guidelines. In parallel, we are doing work related to the new Norwegian Transparency Act, which entered into force on July 1st this year. These regulations coincide and overlap.

## EU Green Bond Standard

Norske tog has followed the development of the EU Green Bond Standard (EU GBS) over the last years. An updated version was published on July 6th 2021, as a proposed regulation for the European green bonds. In February 2023 the European Parliament and the Council reached an agreement on the Commission's proposal for a European Green Bond Regulation. This regulation is an integral part of the European Green Deal and will be a voluntary standard for green bonds. The main purpose of the new framework is to better regulate the green bond market, ensuring comparability in order to avoid and decrease "green washing". In addition, the new framework ensures stronger supervision and assures investors have legal recourse if an issuer's noncompliance causes a green bond to depreciate. The EU GBS require that all bond net proceeds are allocated in alignment with the EU Taxonomy[6] and that the bonds are subject to supervision by competent authorities.

Norske tog strives to follow best practices in the market and is committed to improving its impact reporting over time. We will follow the development of the EU GBS to determine its relevance and opportunities for Norske tog and will work to close the gap between the current reporting according to ICMA and EU GBS when the latter framework is finally adopted.

[6] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32020R0852

# Experiences from 2023 and the Road Ahead

## Report Development

The reporting year of 2023 is the fourth full operating year for the Norske tog Green Bond Framework. As with the first three years, we are still facing some challenges in meeting the goal of precise and comprehensive impact reporting. The main challenge facing us, is undoubtedly still access to reliable data. The Norwegian rail sector is organised into several public companies, which means that there is one company responsible for procurement of the trains and other companies that are responsible for the operation. Data flow on relevant environmental impact data between these companies is an area of development.

This year we have tried to shorten the impact report to make it more concise. We have also included information on how and where we are in the process with being aligned to the technical screening criteria for our economic activity in the EU Taxonomy. We are committed to improving our impact reporting over time and are closely following developments in EU GBS and the EU Taxonomy. Norske tog plans to close the gaps between today's reporting standard and report according to EU GBS and the EU Taxonomy over the coming years.

## Conclusion

We are very pleased to have completed our fourth year of the Green Bond Framework. The issuance of Green Bonds has proved to be a popular initiative in the financial market and has continued to contribute to the avoidance of $CO_2$ emissions. Since our first year of reporting, we have strived to improve. Looking ahead, we hope that 2024 will be the year we start the process of aligning with the EU Green Bond Standard.

To the Board of Directors of Norske tog AS

## Independent Statement regarding Norske tog AS' Impact and Allocation Report 2023

We have undertaken a limited assurance engagement in respect of Norske tog AS' Impact and Allocation Report 2023 (the Subject Matter).

The scope of our work was limited to assurance over processes and systems for financing of eligible assets and allocating proceeds from the Green Bond to such assets, as described in the "Impact and Allocation report 2023", sections "Governance of the Green Bond Framework" and "Allocation Report" (The Subject Matter Information).

The reporting information was assessed against the "Green Bond Framework" as per December 2022, available on the Company website and attached to the "Impact and Allocation Report 2023" (the Criteria).

Our assurance does not extend to any other information in the Impact and Allocation report 2023. We have not reviewed and do not provide any assurance over any individual project information reported, including estimates of sustainability impacts.

*Management's Responsibility*

Management is responsible for the preparation of the Subject Matter Information in accordance with the applicable Criteria. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of a Subject Matter Information that is free from material misstatement, whether due to fraud or error.

*Our Independence and Quality Management*

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We apply International Standard on Quality Management 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

*Our Responsibilities*

Our responsibility is to express a conclusion on the Subject Matter Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 revised – «Assurance Engagements other than Audits or Reviews of Historical Information», issued by the International Auditing and Assurance Standards Board. That standard requires that we plan and perform this engagement to obtain limited assurance about whether the Subject Matter Information is free from material misstatement.

A limited assurance engagement in accordance with ISAE 3000 involves assessing the suitability in the circumstances of management's use of the Criteria as the basis for the preparation of the Subject

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*Statsautoriserte revisorer, medlemmer av Den norske Revisorforening og autorisert regnskapsførerselskap*

Matter Information, assessing the risks of material misstatement of the Subject Matter Information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Subject Matter Information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and, among others, included:

- Making inquiries of the persons responsible for the Subject Matter;
- Obtaining an understanding of the process for collecting and reporting the Subject Matter Information, including relevant internal controls;
- Performing limited substantive testing on a selective basis of the Subject Matter Information to test whether data had been appropriately measured, recorded, collated and reported;
- Considering the disclosure and presentation of the Subject Matter Information.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Subject Matter Information has been prepared, in all material respects, in accordance with the Criteria.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

*Conclusion*

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Subject Matter Information is not prepared, in all material respects, in accordance with the applicable Criteria.

Oslo, 18 December 2023
**PricewaterhouseCoopers AS**

Marius Thorsrud
*State Authorised Public Accountant*

(2)

Norske tog

# Green bond framework

December 2022

# Introduction

## About Norske tog

Norske tog AS procures, owns, and manages vehicles for rail passenger transport in Norway. The company enters into agreements for the leasing of passenger trains with operating companies that have an agreement with the Norwegian Railway Directorate to run passenger transport trains in Norway. This leads to the efficient procurement and management of trains and ensures that specialist expertise can be found in one place. Norske tog aims to be a leading and innovative company and shall contribute towards a sustainable increase in train traffic and towards "the green shift".

Norske tog AS is owned by the Ministry of Transport and Communications. The state's rationale for ownership of Norske tog is to have a provider of vehicles for rail passenger traffic on competition-neutral terms. As the owner, the state's goal is the cost-effective procurement and leasing of trains.

Norske tog currently owns and manages 279 train sets (237 electric/28 diesel/14 bimodal), 138 passenger coaches and 21 locomotives (16 electric/5 diesel). Norske tog's most important social function is laying the foundations to enable more people to choose to use public transport for their daily travel, by ensuring a sufficient supply of high-quality trains.

Norske tog works systematically to accommodate capacity increases and the demand for replacements, rationalisation, and standardisation of the train fleet. In January 2022, Norske tog announced that the largest train procurement agreement in Norway's history had been signed – Norske tog is buying 30 new commuter trains from Alstom, with the option to buy an additional 170 trains. The new commuter trains will replace Class 69, which currently operates on the Østfold Line, and will increase the capacity by about 40 per cent. The trains consist of 6 carriages, with a total of 12 entrances with wide doors, allowing fast passenger flow during rush hour.

In November 2021, Norske tog announced a tender competition for new long-distance trains. Several of the current long-distance trains are more than 40 years old and have reached the end of their service life. Norske tog will therefore invest in 17 new long-distance trains, with the option to order an additional 83 trains. The estimated cost is NOK 6.5 billion, with a maximum budget of up to NOK 8 billion. Production will start no earlier than 2024, and the trains will be put into service from 2026 at the earliest. The trains will mainly operate on the Dovre Line, the Sørland Line, the Bergen Line and the Nordland Line.

The final option for new FLIRT trains from the Swiss manufacturer Stadler was called in 2018. By April 2023 Stadler will have delivered 150 FLIRT trains to Norway. All FLIRT trains are electric, except for 14 new bimodal trains (Class 76), which can run on both electricity and diesel. The trains will run on electricity where power is available but will use diesel on those parts of the line where the infrastructure is limited and there is no electricity. The bimodal trains are replacing old diesel trains (Class 92) operating in Central Norway, which are now more than 30 years old.

In addition to train acquisitions, modifications and mid-life upgrades are also important investments to ensure the sufficient capacity of rolling stock in Norway and to meet passengers' increasing expectations for travel comfort. Modifications and train upgrade programmes are also important elements in order to impact the train's service life, energy consumption, maintenance costs and safety.

## Climate considerations

The National Transport Plan (NTP) outlines a historically large investment budget in the Norwegian railway sector of approximately NOK 393 billion from 2022 to 2033. The significant upgrade in railway infrastructure has a major impact on Norske tog as the sector's passenger train provider.

The Norwegian population is expected to increase from the current 5.4 million to 6 million people within the next 30 years[1], and urbanisation is a global trend that is increasing the demand for efficient and environmentally friendly transport in urban areas.

Rail transport plays a crucial role in achieving society's environmental and climate goals. Compared to other modes of transport, trains are more energy-efficient and make only a marginal contribution to local air pollution.

The Paris Agreement sets a clear course for future global client initiatives, and businesses and society will have to adjust to new climate goals. Norske tog is aligned with the Norwegian government's National Transport Plan 2022–2033[2], and its objective that the transport sector will reduce greenhouse gas emissions is consistent with the transition to a low-carbon society and the reduction of other negative environmental impacts. Norway is committed to halving emissions from the transport sector by 2030, compared with the 2005 baseline[3], and investments in the transport sector will have a vital role to play in meeting this target.

## Norske tog and green bonds

Norske tog must follow up on the significant investments made in expanding and upgrading the rail network in Norway by making sure there is sufficient capacity in terms of rolling stock. Norske tog has a key role to play in achieving a more efficient and climate-friendly transport system, and the company shall help to both make passenger train transport attractive in Norway and contribute to "the green shift" by leasing out a sufficient number of up-to-date vehicles. To further promote train investments and the upgrading of existing trains, Norske tog has developed a Green Bond Framework and issued several green bonds.

Norske tog has secured NOK 3.3 billion from green bonds issued in 2021 and 2019 to finance the procurement of new electric train sets. The electric trains will contribute to savings in greenhouse gas emissions compared to alternative transport if passengers choose to travel by train rather than by car or bus.

1 Statistics Norway SSB: https://www.ssb.no/en/befolkning/artikler-og-publikasjoner/_attachment/422993?_ts=172758d6808

2 https://www.regjeringen.no/contentassets/fab417af0b8e4b5694591450f7dc6969/no/pdfs/stm202020210020000dddpdfs.pdf

3 The Granavolden Political Platform: https://www.regjeringen.no/contentassets/7b0b7f0fcf0f4d93bb6705838248749b/plattform.pdf

# Green Bond Framework

The International Capital Markets Association's (ICMA) Green Bond Principles (GBP) are a set of voluntary guidelines that both recommend transparency and disclosure and promote integrity in the development of the green bond market by clarifying the approach for issuing a green bond. Norske tog's Green Bond Framework is established in line with the ICMA Green Bond Principles and based on the previous version of Norske tog's Green Bond Framework from 2019.

On 6 July 2021, the European Commission presented a proposal for the regulation of green bonds ("Green Bond Standard"). It is expected that the EU Green Bond Standard (EU GBS) will become the new standard for green bond frameworks, as it both incorporates the EU Taxonomy and establishes a common European standard. This may lead to parts of the current green market, where bonds have been issued in accordance with an old standard, not being able to be classified as "green".

Going forward, Norske tog is committed to improving its impact reporting, and will follow the development of the EU GBS to determine its relevance and the opportunities for Norske tog. Over time, we will work to close the gap between the current reporting according to the ICMA and that according to the EU GBS.

By means of the Eligible Projects defined below, this framework specifically targets the following UN Sustainable Development Goals:

# 1. Use of proceeds

The net proceeds from the green bonds issued by Norske tog will be used to finance or re-finance the Eligible Projects that have been evaluated and selected by Norske tog in accordance with this Green Bond Framework. The refinancing of eligible projects will have a look-back period of no longer than 15 years from the time of issuance.

## Eligible Projects

The net proceeds raised from the issuance of Norske tog Green Bonds will be used in order to finance or re-finance, in whole or in part, a selected pool of assets that promote the transition to low-carbon and climate-resilient growth, as determined by Norske tog ("**Eligible Projects**").

| Categories | Eligible Projects | UN SDG mapping | Environmental objective |
|---|---|---|---|
| Clean transportation | Investments in new or renewed electric train sets and renovation or improvements of the existing electric rolling stock | (11.2) Provide access to safe, affordable, accessible and sustainable transport systems for all | Climate change mitigation<br><br>Pollution prevention and control |

## Exclusions

Trains running partly on fossil fuel (hybrids/bimodal) can qualify under the GBP. Norske tog has decided that trains running either fully or partly on fossil fuels do not qualify under this framework.

# 2. Selection and evaluation of eligible projects

Norske tog has designed and implemented a process to ensure that only projects aligned with the criteria set out above will be selected as Eligible Projects for its issuance of green bonds. Eligible Projects are selected and evaluated by a committee consisting of representatives from the Management (including the CFO), the Treasury, Business Control, Technology and Development department in Norske tog. The CFO is the chair of the committee, and the selection is based on a consensus approach. Eligible Projects will be recorded in a Green Bond Register.

# 3. Management of proceeds

Norske tog have established a Green Bond Register for green bonds issued by Norske tog, for the purpose of monitoring the Eligible Projects and the allocation of the net proceeds from green bonds to Eligible Projects.

Throughout the duration of the outstanding green bonds, Norske tog will compile and maintain an aggregate amount of assets and projects in the Green Bond Register that is at least equal to the aggregate net proceeds of all outstanding Norske tog Green Bonds.

There may be periods when the total outstanding net proceeds of green bonds exceed the value of the Eligible Projects in the Green Bond Register. Any such excess portion will be held in accordance with Norske tog's normal liquidity management policy and managed as such.

The Green Bond Register will form the basis for the impact reporting.

# 4. Reporting

Within one year of the first issuance, and as long as there are green bonds outstanding, Norske tog will annually publish a report on the allocation and impact of green bonds issued under this framework. Where relevant, Norske tog will seek to align the reporting with the latest standards and practices as identified by the ICMA and the guidelines in the Nordic Public Sector Issuer's Position Paper on Green Bond Impact Reporting. The impact report will, to the extent feasible, also include a section methodology, and the baselines and assumptions used in impact calculations.

## Allocation report

The allocation report will, to the extent feasible, include the following components:

- A list of all financed Eligible Projects, including the amounts allocated
- Detailed descriptions and case studies of selected financed Eligible Projects
- Amounts invested in each category, as defined in the Use of Proceeds section, and the relative share of new financing versus refinancing

## Impact report

Norske tog will strive to report on the actual environmental impact of the investments financed by their green bonds. In the event that the actual impact is, for some reason, not observable or is unreasonably difficult to source, the estimated impact will be reported.

The impact indicators may vary according to investment category, as defined in this Green Bond Framework. The impact metrics selected could include the following:

- Clean transportation
  - Annual GHG emissions reduced/avoided
  - Energy savings (GWh saved/reduced)
  - Increase in the use of renewable energy

# External review

## Second-party opinion (pre-issuance)

To ensure alignment with national and international guidelines, Norske tog has engaged Cicero Shades of Green to act as an external verifier of this Green Bond Framework and the Eligible Projects.

## Third-party review (post-issuance)

Norske tog may appoint an external independent auditor to annually assure Norske tog's selection process for the financing of Eligible Projects and the allocation of the proceeds of Norske tog Green Bonds, and to assure that such processes and allocations are in accordance with Norske tog's Green Bond Framework.

## Publicly available documents

The Green Bond Framework, the second-party opinion, the third-party review, the impact and allocation reports, and other relevant documents will be made publicly available on Norske tog's website.

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