



HOCHBAHN



Hamburger Hochbahn AG

**GREEN BOND
FRAMEWORK**

August 2020

1 Introduction

1.1 HOCHBAHN Business Model

Hamburger Hochbahn AG (HOCHBAHN) is one of the leading local transport companies in Germany. With four subway lines, 114 bus lines and several ferry lines, it carries around 1.2 million passengers a day to their destinations, providing around half of all local transport services in the Hamburg Transport Association (HVV). With 6,000 employees, HOCHBAHN is one of Hamburg's biggest employers. With its numerous subsidiaries and associated companies, including vehicle maintenance, security and cleaning, HOCHBAHN provides a substantial share of transport services in Hamburg. HOCHBAHN is a company organized and managed according to private-sector principles and is wholly owned by the Free and Hanseatic City of Hamburg through HGV Hamburger Gesellschaft für Vermögens- und Beteiligungsmanagement mbH (HGV).

Effective from November 27, 2019, the Free and Hanseatic City of Hamburg granted HOCHBAHN a license to provide bus transportation services for a further ten years and subway transportation services for further 22.5 years in a direct award procedure.

1.2 Impact and Role of HOCHBAHN for the City of Hamburg

With its vision of creating intelligent mobility for a future worth living in Hamburg, HOCHBAHN underlines its role as an important mobility partner for the city and aligns its daily activities with this vision. With innovative and sustainable solutions, it ensures simple and user-oriented mobility for all.

The aim of HOCHBAHN is to reduce private car traffic and minimize environmental impact, which is executed through a strategic paradigm shift in 2019. Anchored in the Hamburg Senate's Climate Plan and Climate Protection Act, and as an instrument of Senate policy, HOCHBAHN is focusing on its services, a consistent expansion of its range of services and on supply oriented service development. In the future, HOCHBAHN will substantially invest in modernizing and increasing the density of the existing range of products and services. The improved service includes longer operating times, shorter travel times, denser frequencies and an increase of capacity. Extending its portfolio by connecting with other mobility offers such as sharing- and ride-pooling service providers, the openness to innovative solutions and the possibilities of digitalization, HOCHBAHN's mission is to design and rethink integrated sustainable mobility in Hamburg.

This will further enhance the attractiveness of public transport. The aim is to make a significant contribution to reducing CO₂ emissions and support the mobility turnaround by reducing the use of private cars.

1.3 Climate Plan of the City of Hamburg

Up to 80% of today's greenhouse gases worldwide are caused by cities¹. The climate action plan² of Hamburg defines specific climate targets for the years 2030 and 2050. By 2030, carbon emissions should be reduced by 55% (compared to the base year 1990). Hamburg aims to be a zero-carbon city by 2050. Shared mobility and public transport are key to achieve these targets. Currently, the mobility sector amounts for around 28.3 % of Hamburg's CO₂-emissions.

To achieve the climate goals of Hamburg city, the mobility transition was defined as one of four 'transformation paths'. A total of approx. 1.4 million tCO₂ should be saved by 2030 in comparison to the year 2017 according to the climate plan.

In February 2020, the Hamburg Climate Protection Law (Hamburgisches Gesetz zum Schutz des Klimas) was passed as the binding legal framework for the Climate Action Plan and the corresponding climate goals.³

The essential elements in the context of public transport are:

A) A far-reaching paradigm shift in public transport from demand-oriented to supply-oriented planning (Hamburg-Takt): By 2030, the aim is to provide passengers with an adequate public transport service reachable within 5 minutes. This implies a considerable expansion of the range of services offered by metros and buses and an integration of on-demand services into public transport. Thus, increasing the share of public transport in total traffic (journeys) from 22% today to 30% in 2030 (denser network and more frequent services) and convincing the people of Hamburg to switch from private cars to public transport.

B) The electrification of vehicle fleets (e.g. buses) by 2030 and use of 100% green electricity

¹<http://siteresources.worldbank.org/INTUWM/Resources/340232-1205330656272/4768406-1291309208465/PartIII.pdf>

² <https://www.hamburg.de/contentblob/13899086/749a6e50662c96eee81d370f1b0cb631/data/d-first-revision-hamburg-climate-plan.pdf>

³<http://www.landesrecht-hamburg.de/jportal/portal/page/bshaprod.psm!?showdoccase=1&st=null&doc.id=jlr-KlimaSchGHA2020rahmen&doc.part=X&doc.origin=bs>

1.4 CSR- and Climate Strategy of HOCHBAHN

Since joining the UN Global Compact in 2017, HOCHBAHN's corporate management has been guided by its ten principles, as well as by the 17 UN Sustainable Development Goals (SDGs). In addition, sustainability has been anchored as an integral part of HOCHBAHN's corporate strategy.

Our mission: We organize sustainable mobility in the smart city of Hamburg.

In 2017, 169 sub-goals of the 17 SDGs were analyzed with the participation of numerous corporate divisions. Five SDGs were prioritized for HOCHBAHN within the focus of sustainable mobility. In order to anchor sustainability in a structured and target oriented manner, five specific top targets were developed for HOCHBAHN based on the prioritized SDGs:

- Positioning HOCHBAHN as sustainable mobility provider in Hamburg,
- Minimize emissions from business activities,
- Take responsibility locally and globally,
- Use resources more efficiently and protect the environment,
- Foster sustainable innovations.

Since January 1st, 2020, HOCHBAHN's Sustainability Management Department has been assigned to the Finance and Sustainability Department and is managed by the Executive Board member responsible for Finance and Sustainability. In order to achieve the top goals of sustainable development, HOCHBAHN relies on a holistic approach in which business parameters are supplemented by ecological and social criterias.

In the procurement area, for example, the 'Sustainability Standards for Suppliers and Business Partners' has been a binding contractual component of HOCHBAHN's procurement transactions since May 1st, 2019. During the tendering procedure for locally emission free buses in 2019, sustainability aspects were therefore defined as criteria relevant to the award of contracts in addition to technical and commercial requirements.

HOCHBAHN has defined a target to become carbon neutral in 2030. This target contributes to the Paris Climate Agreement and puts the CO₂ reduction targets of the City of Hamburg into concrete terms. The main levers for reducing direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions to zero by 2030 are the procurement of locally emission-free buses and the purchase of 100% high-quality certified green electricity. In addition, emissions from upstream and downstream processes (Scope 3) are also analyzed and checked for further potential savings.



2 Rationale of HOCHBAHN Green Bond issue

A sustainable and attractive range of mobility services with adequate capacity is a key factor to achieve a modal transportation shift towards more environmentally friendly modes of transport, and contributes to global efforts of climate change mitigation and helps to maintain the quality of life in a growing city like Hamburg.

As outlined above, HOCHBAHN is committed to the targets set out by the climate action plan of the city of Hamburg, and as a result, is significantly expanding the range of services offered by metros and buses as well as the integration of on-demand services into public transport.

The HOCHBAHN Green Bond issuance is dedicated to the advancement of sustainable transport and will help to accelerate the achievement of the strategic objectives of HOCHBAHN. The HOCHBAHN Green Bond issuance is also an opportunity to attract investors who take sustainability into account in their investment strategies.

3 A framework complying with Green Bond Principles

The Green Bond Framework 2020 of HOCHBAHN is in line with the ICMA Green Bond Principles (GBP) 2018⁴. This Framework enables HOCHBAHN to raise finance in the form of Green Bonds for eligible green investments that support the delivery of the strategy and objectives described before.

For each Green Bond issued, HOCHBAHN commits to deliver information with the required transparency, accuracy and integrity according to the four core components, as set out in this Framework and in alignment with the GBP:

- i. Use of Proceeds
- ii. Process for Project Evaluation and Selection
- iii. Management of Proceeds
- iv. Reporting

3.1 Use of Proceeds

An amount equivalent to the net proceeds of HOCHBAHN Green Bonds will be allocated to investments, located in Hamburg, Germany in order to finance, in whole or in part, new eligible green capital expenditures (“Eligible Green Projects”) and/or to refinance existing Eligible Green Projects whose disbursements occurred no earlier than 36 months (i.e. 3 years) prior to the issue date of the HOCHBAHN Green Bond.

The following table outlines the eligibility criteria for the Eligible Green Projects, Examples of Impact KPIs and their alignment with the UN Sustainable Development Goals. The Eligible Green Projects are aligned with the EU Taxonomy⁵ and make a substantive essential contribution to climate change mitigation, they do not significantly harm any of the other five environmental objectives and comply with minimum safeguards.

⁴ ICMA's Green Bond Principles 2018 <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

⁵ https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

Green Bond Principles Category: Clean Transportation		
Eligibility criteria	Examples of Impact KPI	Alignment with SDG
<p>Refurbishment of our existing metro network</p> <p>(such as acquisition of rolling stock, refurbishment of existing metro infrastructure (tracks and depots))</p>	<ul style="list-style-type: none"> - Increased capacity (available seat km) - Avoided carbon emissions compared to cars (CO₂, NO_x, PM_{2,5})⁶ 	 <p>Affordable and Clean Energy</p>
<p>Expansion and refurbishment of our bus network; transformation to a zero-emission bus fleet</p> <p>(such as acquisition of electric busses (battery, fuel-cell), charging infrastructure, construction of new and refurbishment of existing bus depots for electric busses)</p>	<ul style="list-style-type: none"> - Increased capacity (available seat km) - Avoided carbon emissions compared to cars (CO₂, NO_x, PM_{2,5}) - Avoided emissions compared to diesel bus (CO₂, NO_x, PM_{2,5})⁶ 	 <p>Decent Work and Economic Growth</p>
<p>Refurbishment and improvements of stations, integration of new customer services and on-demand services contributing to increase the share of integrated public transport over individual car use</p> <p>(such as ticketing, traffic information, passenger guidance systems, ticketing-terminals, service centers, and digital ticketing and service solution; integration of on-demand services and construction of mobility hubs)</p>	<ul style="list-style-type: none"> - energy savings (due to refurbishment of metro stations such as new lighting) - number of new services and mobility hubs - average number of users per day - customer satisfaction surveys (qualitative assessment of the projects' contribution to improve the overall usability and accessibility of the public transport system) 	 <p>Industry, Innovation and Infrastructure</p>  <p>Sustainable Cities and Communities</p>  <p>Climate Action</p>

⁶ Avoided carbon emissions = passenger-km with public transport (km) x Modal transfer rate (%) (based on surveys) x emission-factor cars (CO_{2e}/km)

Clean Transportation

Investments falling into this category contribute to the mobility transition transformation path of the City of Hamburg's Climate Plan by including projects aimed towards a significant expansion of our bus and metro network as well as the integration of new digital services that will make our public transport system a true alternative to private car use.

Therefore, it includes the refurbishment of our existing metro network and rolling stock infrastructure, such as tracks and signalling, depots and workshops, the acquisition of new rolling stock and the implementation of new technologies providing enhanced services is also part of this strategy.

Furthermore, the Clean Transportation category includes expansions and refurbishment of our bus network where the focus is the transition of HOCHBAHN's diesel bus fleet to a zero-emission bus network to reduce emissions of greenhouse gases and air pollutants. This includes the acquisition of electric and hydrogen fuel cell vehicles with the corresponding charging infrastructure as well as the expansion and new construction of bus depots to fit the future needs of a growing electric bus fleet. New digital solutions for improvement of the bus operation are also part of the category. The ambition behind these projects is to reach HOCHBAHN's climate neutrality by 2030.

As a third, and equally important, component of the new supply-oriented paradigm in public transport, this Framework includes projects designed to improve the overall usability and accessibility of the public transport system by providing adequate ticketing and passenger service solutions, by modernizing stations and by integrating on-demand services via the installment of mobility hubs and the development of a multimodal mobility app.

HOCHBAHN as well as the Senate headed by the First Mayor of the Free and Hanseatic City of Hamburg are convinced that only the combination of these measures and investments will encourage local residents to leave their cars at home.

Therefore, all these investments will contribute to the overall goal of 30% of journeys in Hamburg made by integrated public transport which is mandatory to reach the Hamburg's climate goal of -55% CO₂-emissions by 2030.

3.2 Project Evaluation and Selection Process

The Project Evaluation and Selection Process will ensure that the proceeds of HOCHBAHN's Green Bonds issued under this framework are allocated to new or existing capital expenditures that meet one or more of the eligibility criteria set out before in Section 3.1 ("Use of Proceeds").

Eligible Green Projects will be selected by a dedicated Green Bond Committee set-up within HOCHBAHN consisting of the Finance and Control department, the department for Sustainable Development, Environment and Safety and the Legal department.

The list of Eligible Green Projects is validated by the Management Board and will be reported to the Supervisor Board of HOCHBAHN.

On an annual basis, the Green Bond Committee will review and approve the aggregated pool of green capital expenditures for alignment with the eligibility criteria listed in Section 3.1 ("Use of Proceeds"), review the Management of Proceeds (as described in Section 3.3) and facilitate ongoing Green Bond reporting (as described in Section 3.4).

3.3 Management of Proceeds

HOCHBAHN's processes for management of proceeds are handled by the Finance and Control department.

HOCHBAHN intends to allocate the proceeds to its general cash pool and an amount equal to the net proceeds will be earmarked for allocation to Eligible Green Projects within the investments plan.

All relevant information regarding the issuance of Green Bonds and Eligible Green Projects (re)financed will be monitored and kept in HOCHBAHN's accounting systems. The balance of the tracked proceeds will be periodically adjusted on a quarterly basis, in order to ensure allocation to Eligible Green Projects during this period.

If for any reasons, a project is no longer eligible, or in case of any major controversy affecting a project in the portfolio of Eligible Green Projects, the Green Bond Committee will substitute such projects with other Eligible Green Projects for an amount at least equal to such projects, as soon as an appropriate substitution option has been identified.

Pending full allocation, the balance will be invested either in short-term liquid ESG instruments managed by HOCHBAHN's treasury team or otherwise deposited on a Deutsche Bundesbank account by the Free and Hanseatic City of Hamburg.

HOCHBAHN intends to allocate the full amount of proceeds within the next 24 months following the issuance of the Green Bonds.

3.4 Reporting

On an annual basis, HOCHBAHN will provide the following:

3.4.1 Allocation Reporting

HOCHBAHN will publish a report, until full allocation of the Green Bonds and in case of significant changes thereafter, containing:

- Information on the Green Bonds (ISIN, currency, amount, etc...)
- Breakdown of allocated amounts (or reallocated amount, as the case may be) to Eligible Green Projects by category;
- A description of Eligible Green Projects at category level;
- The share of financing vs refinancing;
- The breakdown of the type of Eligible Green Projects (capital expenditures)
- The balance of any unallocated proceeds (if any)

The report will also include the publication of the external third-party assurance, as per section 4.2 ("External Verification"), on the satisfactory allocation of the net proceeds in line with this Framework.

3.4.2 Impact Reporting

HOCHBAHN commits to publish an impact report, at least once during the lifetime of the bond after full allocation, that will provide information on the environmental and other sustainable development impact of Eligible Green Projects, including updates and status reports as well as relevant impact metrics, where ever feasible.

Examples of impact metrics are available in the table in the section 3.1 ("Use of Proceeds").

The report will be made available on HOCHBAHN's website: <https://www.hochbahn.de>

4 External Review

4.1 Second Party Opinion

HOCHBAHN has engaged CICERO Shades of Green to provide an External Review in the form of a Second Party Opinion on this Green Bond Framework to confirm its alignment with the 2018 ICMA Green Bond Principles.

The Second Party Opinion will be available on HOCHBAHN's website.

4.2 External Verification

An independent auditor will provide a limited assurance to ensure the allocation of the Green Bonds proceeds, the adherence to asset selection criteria and the reporting commitments are compliant with the Framework.

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