

Green bonds in action series: Investing in a sustainable future



Sustainable transportation

Green bonds are financial instruments designed to raise funds for projects that deliver positive environmental impacts.

KEY FACTS AND TRENDS IN TRANSPORTATION

Transport Sector

16-18%
Global GHG emissions

Including road, rail, aviation and shipping¹.

Breakdown of transport emissions:

- Road transport: 72%
- Aviation: 11%
- Shipping: 10%

Emissions Trend



- Emissions have grown steadily over the past decades, approximately doubling since 1990. Without stronger policies and technological shifts, transport emissions are projected to increase by 30-40% by 2050¹.
- **Urbanisation and rising incomes in developing regions** will further increase transport demand, emphasising the need for sustainable infrastructure planning.

THE ROAD TO NET ZERO BY 2050

To reach Net Zero by 2050, approximately US\$2-2.5 trillion is required annually globally by 2030². This includes investment in **electric vehicle infrastructure, public transport, and rail electrification**. In 2024, global investment in electrified transport reached a record US\$757 billion³, suggesting a shortfall of about US\$1.7 trillion.

REQUIRED

2030

Approx. **US\$2-2.5 trillion**



STATUS

2024

Approx. **US\$757 billion**



Global Investment Shortfall

WHERE DO GREEN BONDS FIT IN?

Clean Transport

19%



Allocation in our green bond universe

Eligible Projects Financed



- Rail network electrification and expansion
- EV charging infrastructure and battery manufacturing facilities
- Electrification of public transport fleets
- Urban transport infrastructure supporting active mobility
- Low-emission port infrastructure and shipping electrification projects



¹Source: IEA's World Energy Investment 2023; IPCC AR6 ²Source: SLOCAT Transport and Climate Change Global Status Report (2nd edition)

³Source: BloombergNEF report, Global Investment in the Energy Transition Exceeded US\$2 Trillion for the First Time in 2024, January 30, 2025

Société des Grands Projets - A Metro for the Future


The Société des Grands Projets (SGP), a French state-owned company that provides transportation and infrastructure construction services in the Paris Metropolitan Area, is leading the change toward sustainable urban transportation. The Ile-de-France Region, incorporating the Paris Metropolitan Area, is France's largest urban area, with a total carbon footprint of 38.5 million tonnes of CO₂e, in among which 60% is related to the transport sector.

Committed to achieving net-zero emissions by 2050, SGP is constructing the Grand Paris Express—a new automated electric metro network that represents a robust substitute for automobile use, accommodating over 2 million passengers daily. Capital expenditures related to this project and financed through the green bonds are fully aligned with the EU Taxonomy, complying with stringent criteria.

The new metro lines will also connect underserved suburbs with job hubs, universities and hospitals, contributing to reducing geographic inequalities in public service access.

This ambitious project encompasses

200 km
New electric metro lines



68 New stations

7 New technical centres

All designed to minimize environmental impact

By encouraging a shift from cars to public transport, the metro is estimated To save **CO₂** **27 million tonnes** emissions by 2050

Additionally, the project is expected to create

15,000 Direct jobs per year

Over **115,000** Jobs in total as the network expands

It will enhance accessibility by connecting underserved areas with essential services and opportunities, fostering a more equitable city.

Map illustrating the electronic lines and stations in and around Paris⁴

Line 15 West

- 11 stations, 10 with connections to the RER, metro, or tram system
- 22.4 km of automated metro lines
- 14 municipalities served across 2 departments
- 600,000 passenger trips per day forecast

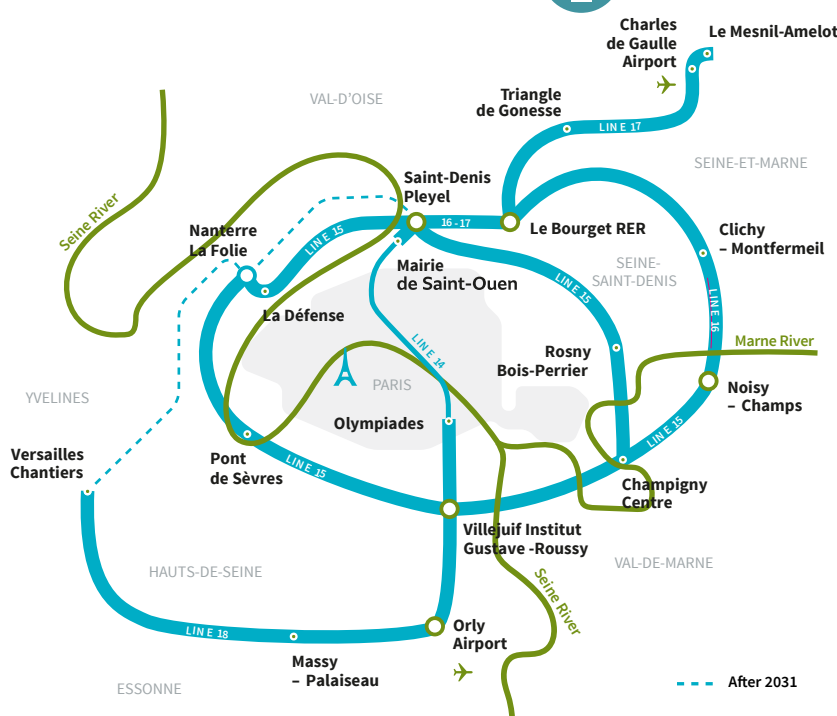
Line 15 South

- 16 stations, all with connections to the RER, metro, or tram system
- 37 km of automated metro lines
- 22 municipalities served across 4 departments
- 300,000 passenger trips per day forecast

Line 15 East

- 12 stations, all with connections to the RER, metro, or tram system
- 23 km of underground lines
- 13 municipalities served across 2 departments
- 300,000 passenger trips per day forecast
- 675,000 local residents served

By 2031, Line 15 will form a 75 km ring around Paris.



Line 18

- 10 stations, 3 with connections to the RER, metro, or tram system
- 35 km of automated metro lines, including 14 km of elevated lines
- 13 municipalities served across 3 departments
- 150,000 passenger trips per day forecast

Line 17

- 9 stations, 5 with connections to the RER, metro, or tram system
- 27 km of automated metro lines, including 5.5 km of elevated lines
- 13 municipalities served across 3 departments
- 130,000 to 160,000 passenger trips per day forecast during trade shows
- 40 to 50 million passenger trips forecast annually

Line 16

- 10 stations, 8 with connections to the RER, metro, or tram system
- 29 km of automated metro lines
- 16 municipalities served across 3 departments
- 200,000 passenger trips per day forecast

Line 14 South

- 7 stations, 5 with connections to the RER, metro, or tram system
- 14 km of automated metro lines
- 13 municipalities served across 3 departments
- 300,000 passenger trips per day forecast

Green bonds are one of the most appropriate debt instrument to accompany issuers committed to transition to a low carbon economy. It supports the decarbonisation of the energy sector by channeling capital towards projects that reduce GHG emissions and provide investors with a higher level of transparency and measurability.

⁴Source: Societe des Grands Projets' Green Bond report 2023 (UK)

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