



Ferrovie dello Stato Italiane Green Bond Framework

November 16th, 2017

INTRODUCTION

FS ITALIANE GROUP: AN INTERNATIONAL INTEGRATED MOBILITY PLAYER

Ferrovie dello Stato Italiane SpA (Ferrovie or the company) is an Italian state-owned company controlling several companies in the industrial sectors of transport, infrastructure, real estate, and other services.

Ferrovie is the holding company of the Italian railway group (FS Group), which is the main provider of transport services in Italy by rail and bus both passenger and freight.

As **one of the largest industrial groups in the country**, it manages rail networks and transport services, contributing to develop integrated mobility and logistics in Italy and abroad. The Group's transport system carries approximately 830 million rail passengers, 180 million bus passengers and 50 million tons of freight a year on a network of over 16,700 km of railway lines. Of these, around 1,000 km are high speed services¹.

Ferrovie's main operating subsidiaries are:

- **Trenitalia** is the incumbent railway passenger transport operator for national and regional services in Italy and provides services abroad mainly in UK and France.
- **Rete Ferroviaria Italiana** is the infrastructure manager and concessionaire of the Italian national rail network, operating via a 60 years concession started in 2000 whose business is partially regulated by Transport Regulation Authority.
- **Busitalia Sita Nord** provides bus transport, both urban and suburban, as well as long-distance bus services in Italy and abroad.
- **Mercitalia Hub** which provides freight and logistics services to several industries and clients both in Italy and abroad
- Other companies involved in infrastructure engineering, real estate and commercial activities.

Since 2011 FS has expanded its business abroad through the acquisition of foreign transport companies: **Netinera** in Germany, **Trenitalia c2c** in UK, **Qbuzz** in Netherlands, **Thello** in France, **Trainose** in Greece. International development is aiming at making FS Group a leading international operator of integrated mobility.

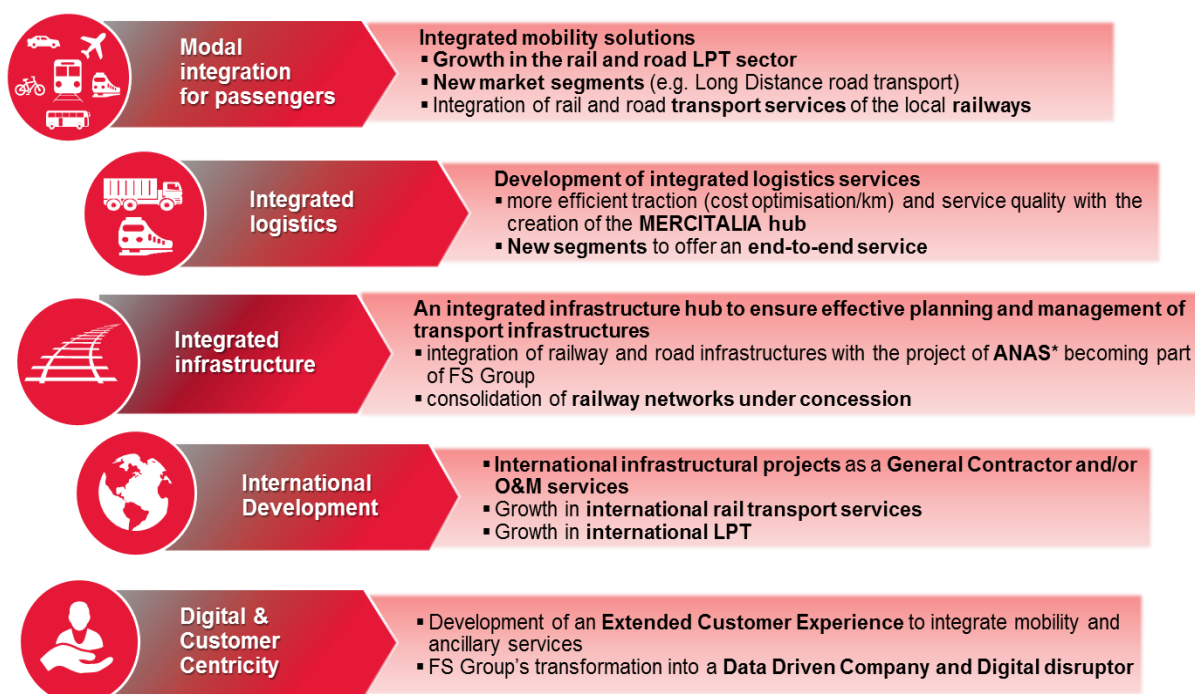
¹ Source: FS 2016 Annual Report, Busitalia 2016 Annual Report, FS Group website

Furthermore on June 2017, FS acquired 36.7% stake in **M5 SpA** - the concessionaire of Line 5 of the Milan Metro, marking another step towards the creation of an integrated infrastructures and services system aiming at improving public transport also in large urban areas. This acquisition meets FS's strategic goals of developing large systems of integrated mobility – train, subway, bus, car/scooter/bicycle sharing – that **make easier a door to door approach by using only public transport system, in order to boost the competitiveness of major cities and, consequently, of the entire country in a global economy.**

The Group's new vision in the new mobility contest

With the 2017-2026 Industrial Plan, as a matter of fact, the FS Group has renewed and strengthened its ambition to develop a sustainable transport services that can create value for the community in a lasting way, through a process of transformation of the sector based on the principle of intermodality.

The new strategy is based on the following five key pillars:



Implementing an offer of integrated and sustainable mobility services and logistics, making use of transport infrastructure in synergy, creating value in Italy and abroad is our goal.

FS Sustainability Commitment

Sustainability principles are at the base of Ferrovie's strategic choices given the company's belief that only a balance between economic, social and environmental aspects can lead to the long term success of the company.

Our approach to sustainability results into a continuous compliance with high international standards with explicit commitments declared in the Group's policies and in the Code of Ethics.

FS Group is also a member of the UIC (*Union internationale des chemins de fer*), which promotes the railway sector around the world as a solution to the challenges of mobility within

a sustainable development framework. The Group signed the “**UIC declaration on Sustainable Mobility and Transport**”, formalising its commitment to responsible practices in terms of human rights, labour conditions, the environment and anti-corruption, in line with the ten principles of the UN Global Compact subscribed in 2017.

FS Group also supports the 17 Sustainable Development Goals launched on September 2015 by the United Nations, so as to promote a common agenda on development until 2030.

Moreover, in 2016 FS established a Group **Sustainability Committee**, an advisory board made of senior managers from the main Group companies, accountable for the integration of social and environmental aspects into economic-financial strategies, the promotion of the values and principles of sustainable development and the fulfilment of stakeholders’ needs and expectations.

Since 2010, FS Italiane has formalised its active role in promoting and coordinating consistent management of environmental issues by maintaining a governance model for the Group companies’ environmental management systems. The level of maturity of this model has led to further progress and, in 2016, a process began that will result in the transformation of the current Environmental Management System governance model into a business model that balances the economic, social and environmental components of Group operations (**Sustainability Model**).

Moreover, in the current Industrial Plan, for the first time, have been added **sustainability related targets** and the related actions to be taken in order to reach them.

The infographic is a vertical red-to-white gradient bar with four white icons and corresponding text boxes. Each icon is a white silhouette on a red background, and each text box is white with a red border and a red arrow pointing right.

- Environment:** Icon of a lightbulb with a plug.
 - **Energy efficiency of the rail infrastructure and passenger transport:** reduction of losses in electrical substations, efficient driving, measurement of consumption on board our trains, smart parking, bus and train renewal
 - **Energy efficiency of stations and fixed installations:** LED lighting and energy requalification of maintenance processes
 - **Reduction of environmental impact for energy supply:** implementation of photovoltaic and wind energy installations for self-consumption and for acquisition of certified green energy
 - **Rationalization** of electricity, methane gas and water consumption
- Safety:** Icon of two people wearing safety vests.
 - **Reduction in the absolute number of accidents at work**
 - **Reduction of the accident frequency** (number of accidents per 1000 employees)
- Community:** Icon of a family (man, woman, child).
 - **Recovery of station properties that are no longer instrumental for railway operations** (e.g. passenger areas) for social purposes, by promoting their reuse and enhancement
 - **Transformation of disused railway lines** in favour of soft mobility
 - **Development of the social inclusion culture and acceptance** in railway areas
- Human Resources:** Icon of a group of people.
 - **Overseeing and developing key people** (graduates, management and potential executives)
 - **Support for the professional development of people** from a perspective of equity, merit and transparency
 - **Diversity management and a reduction in the gender gap**
 - **Employer branding:** increase of the brand recognition and attraction of new skills and capabilities from the market
 - **Support to the customer centric approach**

FS Environmental Policy

Conscious that its wide range of activities – namely the design, creation and maintenance of works and equipment, infrastructure management, circulation of passenger trains and goods, management of railway stations, parking lots, rail property and the relative support services – could potentially interfere with the environment, **FS Group has always been committed to improving its environmental performance, reducing the environmental impact of its business.** FS' aim is to meet the need to move **people and goods** by putting forward a sustainable transport system which is focused on the railway and integrated by other players in the collective mobility.

The FS Italiane Group has always been committed to improving its **environmental performance.** The aim is to meet the need to move **people and goods** by putting forward a transport system which is focused on the railway and integrated by the other players in the collective mobility and sustainability sectors.

The Group's environmental management model inspires and coordinates the environmental path taken, giving short and long-term direction and principles, encouraging the implementation of sustainable strategies and ones that protect the environment.

Because of a constant process of action, monitoring and assessment, the companies translate the Group's environmental strategy into autonomous approaches to improving their performance, maximising the environmental advantages related to their activities and especially insisting on the **rational use of resources**, on the **reduction of CO₂ emissions and other polluting substances** and on the **reduction of the ecological footprint.**

Several are the examples of environmentally conscious projects and activities, such as the following.

Committed with our sustainability drivers is “Frecciarossa 1000” (“ETR 1000”), the first high speed train in the world which obtained the Environmental Impact Certification (EPD). The project was designed to minimize energy consumption and assure a significant efficiency improvement compared to the previous model, the ETR 500.

In addition, the **new regional trains will be produced using the latest energy efficiency technologies such as light alloys, naturally ventilated engines and LED lighting , all employing materials more than 92% recyclable and provided with dedicated areas for transporting and recharging electric bicycles.**

FS is such committed in improving its environmental performance that even from the procurement tender stage it envisages certain sustainable environmental criteria these trains have to be compliant with. This approach has become a standard for many of the Group procurement procedures.

Moving on the rails is the greenest solution: it produces about 76% less CO₂ instead travelling by plane and about 60% less than by car².

However, the Group's commitment is not limited to the trains.

Also, there are many green mobility services achieved in partnership with other operators such as: bike sharing companies, car sharing companies, taxi companies, etc. Meanwhile, FS is promoting the development of a national greenway system dedicated to light mobility on railways no longer in use.

² Source: <http://www.ecopassenger.org>, using the RM-MI route as calculation baseline.

The Group is also involved in the **freight sector** with **Mercitalia Hub** that moves about 40 million tonnes of products, with 1.3 million tonnes of carbon dioxide not released in the atmosphere and replacing 1.5 million trucks which would otherwise be clogging the roads.

In managing its activities, the Group is committed to:

- using natural resources in a rational way;
- improving energy efficiency and promoting the use of renewable energy sources;
- reducing emissions of greenhouse gases;
- safeguarding the territory and biodiversity;
- reducing environmental consequences, such as noise emissions, electromagnetic emissions and atmospheric emissions in the ground and water;
- implementing an Environmental Management System for the entire organisation and improving its performance over time;
- contributing to enhance the environmental awareness of the major stakeholders: customers, personnel, suppliers, competitors;
- complying with and - where possible - improving on the regulations and legal provisions at a European, national and regional level.

The management of environmental aspects and the introduction of sustainable environmental criteria in procurement procedures are at the basis of a path in which all group companies are involved.

More info about FS Group (business description, financial profile, strategy and policies) are available on the following links:

<https://www.fsitaliane.it/content/fsitaliane/en/investor-relations.html>

<https://www.fsitaliane.it/content/fsitaliane/en/Sustainability.html>

1. Rationale of Ferrovie Green Bond Issue

Ferrovie strongly believes that rail and public transport are critical for sustainable development and global efforts to combat climate change, by facilitating the modal shift away from cars into less carbon intensive modes of transport. The company has a deep commitment to sustainability, as signatory to the UIC Declaration on Sustainable Mobility Transport³ and the United Nations Global Compact.⁴ Ferrovie has a strong environmental policy and management system and issues an annual sustainability report in accordance with the Global Reporting Initiative (GRI) Guidelines.

As part of this commitment to sustainability, Ferrovie decided to create a Green Bond Framework which is in accordance with the Green Bond Principles 2017⁵, and under which Ferrovie can issue Green Bond(s) to finance projects with a positive impact in terms of environmental and social sustainability. For each Green Bond issued, Ferrovie asserts that it will adopt (i) Use of Proceeds (ii) Project Evaluation and Selection (iii) Management of Proceeds and (iv) Reporting, as set out in this Framework.

³ http://www.uic.org/com/uic-e-news/207/article/uic-declaration-on-sustainable?page=thickbox_enews

⁴ <https://www.unglobalcompact.org/what-is-gc/mission/principles>

⁵ <https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

2. Use of Proceeds

An amount equal to the net proceeds will be allocated for investments in one or more of the “**Eligible Green Projects**”.

“Eligible Green Projects” include new and on-going projects which may have a disbursement within the past 2 years in which the Notes are issued until the maturity of the Notes.

"Eligible Green Projects" means projects with a positive impact in terms of environmental and social sustainability, in accordance with the broad categorisation of eligibility for green projects set out by ICMA.

Specifically, the Use of Proceeds of the Ferrovie Green Bond will be applied to investments in Public Transport Rolling Stock Renewal, defined as:

- **New Electric Multiple Unit trains for regional passenger transport**, which ensure energy efficiency improvements, carbons emission reduction and modal shift to rail in the local public transport, among other improvements related to air quality and comfort for passengers
- **New High speed Trains “ETR 1000”**, which ensure energy efficiency improvements, carbons emission reduction and modal shift to rail in the long distance transport market, among other improvements related to air quality and comfort for passengers

Ferrovie may amend this Green Bond Framework to include additional Project Categories for future issuances.

3. Process for Project Selection and Evaluation

Project selection and evaluation will be implemented by Ferrovie’s internal Green Bond Working Committee, which will be established to create, review, maintain and implement Ferrovie’s Green Bond Framework. This Committee consists of members of Ferrovie’s Finance and Sustainability teams, as well as those of the subsidiaries involved from time to time. The Committee will be chaired by Ferrovie’s Head of Finance. On a semi-annual basis, Ferrovie’s internal Green Bond Working Committee will review eligible projects to identify projects that meet the eligibility criteria described above. After approval by the Green Bond Working Committee, projects will be recorded in the Green Bond register.

4. Management of Proceeds

Pending allocation of an amount equal to the net proceeds from the sales of the Notes to Eligible Green Projects, the proceeds from the Green Bond will be placed into Ferrovie’s normal treasury accounts.

Ferrovie’s Treasury will allocate, via intercompany loan, the bond proceeds from the Treasury to projects recorded in the Green Bond Register. The Register will include a full list of eligible projects (as approved in the Process for Project Selection and Evaluation section), and the amount of allocation made.

Whilst any bond proceeds remain unallocated, they will be invested in accordance with Ferrovie’s liquidity management policies and guidelines in money market products, such as cash and/or cash equivalents and/or bank deposits.

5. Reporting

On an annual basis, at least until full allocation, Ferrovie will provide the following reporting on its Green Bond(s):

- Allocation reporting: detailing the bond proceeds allocation by category of Eligible Projects
- Performance reporting: for each category of Eligible Projects and where feasible, Ferrovie will report on relevant impact metrics

Examples of relevant metrics could include:

Project Category	Indicative Key Performance Indicators
Public Transport Rolling Stock Renewal	<ul style="list-style-type: none"> • Energy savings (GWh saved) • Total GHG emissions avoided (tCO2 eq) • Other polluting emissions avoided (i.e. NOx, PM, etc)

Ferrovie’s annual Green Bond reporting will be made available on its website. After full allocation, reporting will only be issued in the event of any material changes.

6. External Reviewers

6.1 Second Opinion

Ferrovie has appointed Sustainalytics SARL to provide a Second Party Opinion on this Green Bond Framework. This Second Party Opinion document is published on Ferrovie’s website.

6.2 Post issuance

External auditors appointed by Ferrovie will verify on an annual basis and until the full allocation of an amount equal to the net proceeds, the allocated proceeds to Eligible Green projects and the remaining balance of unallocated proceeds, within the annual report review. Auditors will also verify the compliance of the allocated proceeds with the Eligible Project categories.