

## Green Bond Fact Sheet

Ferrovie dello Stato Italiane			Date: 08/07/2019
Issue date: 05-07-2019 Maturity date: 09-07-2026 Tenor: 7 years			
Issuer Name	Ferrovie dello Stato Italiane	Amount Issued	EUR700m/USD788m
Country of risk	Italy	CBI Database	Included
Issuer Type <sup>1</sup>	Government-backed entity	Bond Type	Use of Proceeds
Green Bond Framework	<a href="#">Link to Framework</a>	Second party opinion	<a href="#">Second Party Opinion</a>
Certification Standard	Climate Bonds Standard V2.1, as well as Sector Criteria for: <ul style="list-style-type: none"> <li>• Low Carbon Transport</li> </ul>	Assurance report	<a href="#">Pre-Issuance Verification</a>
Certification Verifier	Sustainalytics	Green bond rating	N/A
Use of Proceeds			
<input type="checkbox"/> Energy	<input type="checkbox"/> Solar <input type="checkbox"/> Onshore wind <input type="checkbox"/> Offshore wind <input type="checkbox"/> Geothermal <input type="checkbox"/> Hydro <input type="checkbox"/> Tidal	<input type="checkbox"/> Biofuels <input type="checkbox"/> Bioenergy <input type="checkbox"/> Waste to energy <input type="checkbox"/> District heating <input type="checkbox"/> Electricity grid	<input type="checkbox"/> Energy storage <input type="checkbox"/> Energy performance <input type="checkbox"/> Infrastructure <input type="checkbox"/> Industry: components <input type="checkbox"/> Adaptation & resilience
<input type="checkbox"/> Buildings	<input type="checkbox"/> Certified Buildings <input type="checkbox"/> HVAC systems <input type="checkbox"/> Energy performance	<input type="checkbox"/> Water performance <input type="checkbox"/> Energy storage/meters <input type="checkbox"/> Other energy related	<input type="checkbox"/> Industry: components <input type="checkbox"/> Adaptation & resilience
<input checked="" type="checkbox"/> Transport	<input type="checkbox"/> Electric vehicles <input type="checkbox"/> Low emission vehicles <input type="checkbox"/> Bus rapid transit <input checked="" type="checkbox"/> Passenger trains <input type="checkbox"/> Urban rail	<input checked="" type="checkbox"/> Freight rolling stock <input type="checkbox"/> Coach / public bus <input type="checkbox"/> Bicycle infrastructure <input type="checkbox"/> Energy performance	<input type="checkbox"/> Transport logistics <input type="checkbox"/> Infrastructure <input type="checkbox"/> Industry: components <input type="checkbox"/> Adaptation & resilience
<input type="checkbox"/> Water & wastewater	<input type="checkbox"/> Water distribution <input type="checkbox"/> Water treatment <input type="checkbox"/> Wastewater treatment <input type="checkbox"/> Water storage	<input type="checkbox"/> Storm water mgmt <input type="checkbox"/> Flood protection <input type="checkbox"/> Desalination plants <input type="checkbox"/> Erosion control <input type="checkbox"/> Energy performance	<input type="checkbox"/> Infrastructure <input type="checkbox"/> Industry: components <input type="checkbox"/> Adaptation & resilience



<input type="checkbox"/> Waste management	<input type="checkbox"/> Recycling <input type="checkbox"/> Waste prevention <input type="checkbox"/> Pollution control	<input type="checkbox"/> Landfill, energy capture <input type="checkbox"/> Energy performance <input type="checkbox"/> Infrastructure	<input type="checkbox"/> Industry: components <input type="checkbox"/> Adaptation & resilience
<input type="checkbox"/> Land use & agriculture	<input type="checkbox"/> Afforestation/parks <input type="checkbox"/> FSC Forestry <input type="checkbox"/> FSC Cellulose & paper	<input type="checkbox"/> Land remediation <input type="checkbox"/> Energy/water efficiency	<input type="checkbox"/> Sustainable agriculture <input type="checkbox"/> Adaptation & resilience
<input type="checkbox"/> Other	<input type="checkbox"/> Adaptation & resilience	<input type="checkbox"/> ICT	<input type="checkbox"/> Industry: process
<b>Issue details</b>			
<b>Reporting</b>	<p>FS will provide annual public reports on the green bond. The reports will include the numbers of trains financed by the proceeds, and quantitative impact indicators such as the estimated electricity saved, and the corresponding amount of avoided CO<sub>2</sub> emissions. The reports will be included in the annual sustainability reports.</p>		
<b>Company information</b>	<p>FS is a state-owned company, which owns and manages the national rail infrastructure across Italy. It wholly owns Trenitalia, which is the national operator of both regional and long - distance trains. FS estimates that it operates 9000 trains per day and carries 600 million passengers per year, as well as 23 billion ton-km of freight traffic.</p> <p>In 2017, FS estimated that its rail network consumed an amount of electricity that is similar to the consumption of an Italian province, Umbria, or 1.3 million average UK detached houses. FS notes that they are one of the largest consumers of electricity in Italy and has a strategy to reduce this consumption. Part of this strategy includes replacing its trains with more energy efficient models.</p> <p>In December 2017, FS issued their first green bond of EUR 600m. Around half of the orders came from institutional investors with sustainability commitments. The issuance received much interest and achieved a coupon of 0.875%, which was the lowest coupon ever obtained by FS.</p>		
<b>Firsts, records and certifications</b>	<p>This is the first Certified Climate Bond to be issued in Italy. This is the second national rail network in Europe to issue Certified Climate Bonds.</p>		
<b>Proceeds description</b>	<p>Within 6 months of the bond issuance, FS will allocate all the proceeds of the bond to a loan issued to Trenitalia, which will be used to procure new passenger and freight trains. The new models of passenger trains are: <b>Pop, Rock, and ETR 1000</b>.</p> <p><b>Pop and Rock</b> are 3 or 4 car double deck regional trains and up to 600 may be procured, mainly to replace older rolling stock. Pop is manufactured by Alstom, whilst Rock is built by Hitachi. They have capacities of 1400 passengers and may travel at speeds of up to 160km/h. They will have modern features to improve passenger comfort and will be up to 30% more energy efficient compared to the trains which they replace. The new trains began entering service in 2019, and the replacement program will take 5 years.</p> <p>The <b>ETR 1000</b> is the fastest long-distance train on the Italy rail network and is one of the fastest in Europe. They operate at speeds of up to 300 km/h. The trains are manufactured by Hitachi and Bombardier. They began service in 2015 and have passenger capacities of approximately 500. They emit 20.5% less CO<sub>2</sub> than the ETR 500 trains which they replaced.</p> <p>The new freight trains to be procured as part of this program include the <b>E494</b>, which is the newest model of TRAXX trains. These are more energy efficient than the previous models.</p>		



	FS sees that this upgrade of its electric train fleet encourages passengers and freight to be carried on its network. Therefore, CO <sub>2</sub> emissions from road transport may be reduced.
<b>Climate Bonds view</b>	A massive modal shift of passengers and freight from fossil fuel powered individual vehicles to a fully electrified rail network is a very essential part of the low carbon transition.
<b>Underwriters</b>	Banca IMI (Gruppo Intesa Sanpaolo), BNP Paribas, CITI, Crédit Agricole CIB, UniCredit acted as Joint Lead Managers and Joint Bookrunners.
<b>Deal comments</b>	
<b>Credit Rating</b>	BBB (S&P, Fitch)
<b>Pricing summary</b>	Coupon at 1.125%, with a final spread set at mid swap +128 basis points; equivalent to 16 basis points under the BTP duration equivalent, at the books' closing.
<b>Investors summary</b>	<p>The robust demand exceeded the offer by 3.5 times, with total orders of around 2.5 billion euro from 156 investors, of which 65% from abroad, largely from France (36%), Germany/Austria (8%) and UK/Ireland (7%).</p> <p>Around 47% of the orders came from SRI investors. The main investors are fund managers and insurance companies (60% of the final allocation).</p>

<sup>1</sup> Issuer categories: ABS, development bank, financial corporate, government-backed entity, loan, local government, non-financial corporate, sovereign

