

SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Green Bond Asset Pool

SNCF Réseau
22 July 2019

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Overall Evaluation of the Green Bond

SNCF Réseau commissioned ISS-oekom to assist with its Green Bond Programme by assessing three core elements to determine its sustainability quality:

1. SNCF Réseau’s Green Bond framework – benchmarked against the International Capital Market Association’s (ICMA) Green Bond Principles (GBPs).
2. The asset pool – whether the projects aligned with ISS-oekom’s issue-specific key performance indicators (KPIs) (See Annex 2).
3. SNCF Réseau’s sustainability performance, according to the ISS-oekom Corporate Rating.

ISS-oekom ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION ¹
Part 1: Performance against the GBPs	The issuer has defined a formal concept for its Green Bonds regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the ICMA GBPs.	Positive
Part 2: Sustainability quality of the asset pool	<p>The overall sustainability quality of the asset pool in terms of sustainability benefits, risk avoidance and minimisation is good based upon the ISS-oekom Green Bond KPIs. The Proceeds will be allocated to assets belonging to the eligible category “Maintenance, upgrades and energy efficiency of rail infrastructure” defined in the Green Bond Framework.</p> <p>All assets of the asset pool are located in France, a highly regulated and developed country where legislative frameworks set high standards, which reduce environmental and social risks.</p>	Positive
Part 3: Issuer sustainability performance	<p>The issuer itself shows a good sustainability performance and has been classified as ‘Prime’ within the methodology of the ISS-oekom Corporate Rating. It is rated 2nd out of 53 companies within the sector Transport Infrastructure as of 22.07.2019.</p> <p>SNCF Réseau only provides rail transport and its contribution to sustainability it therefore via climate-friendly transport. In France, whilst SNCF Réseau contributes to the transportation of 10% of passengers, it emits less than 1% of the CO₂ related to transportation.</p>	<p><i>Status:</i> Prime</p> <p><i>Rating:</i> B-</p> <p><i>Prime threshold:</i> C+</p>

¹ The ISS-oekom’s present evaluation will remain valid until any modification of the Green Bond Framework by the issuer and as long as the issuer’s Corporate Rating does not change (last modification on the 22.01.2019).

Contribution of the Green Bond to the UN SDGs

Based on the assessment of the sustainability quality of the Green Bond asset pool and using a proprietary methodology, ISS-oekom assessed the contribution of the SNCF Réseau’s Green Bond to the Sustainable Development Goals defined by the United Nations (UN SDGs).

This assessment is displayed on 5-point scale (see Annex 2 for methodology):



Each of the Green Bond’s Use of Proceeds categories has been assessed for its contribution to, or obstruction of, the SDGs:

USE OF PROCEEDS CATEGORY	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Maintenance, upgrades and energy efficiency of rail infrastructures	Limited contribution	 

SNCF Réseau’s Green Bond has a limited contribution to the SDGs 7 and 13 thanks to its Use of Proceeds category promoting sustainable energy use and mitigation of climate change.

ISS-oekom SPO ASSESSMENT

PART I: GREEN BOND PRINCIPLES

1. Use of Proceeds

An amount equal to such net proceeds will be allocated for investments in one or more of the “Eligible Green Projects”. Eligible Green Projects include new and ongoing projects with disbursements within the past 2 years in which the Notes are issued until the maturity of the Notes.

“Eligible Green Projects” include:

I. Investments related to maintenance, upgrades and energy efficiency of the rail system

This category includes projects associated with SNCF Réseau’s efforts to ensure the efficiency of the rail system and promote a low carbon mass transportation, throughout its various worksites.

Typology of worksites could be: path, catenary or signaling system regeneration, capacity enhancement project, electrification of a railway line...

More information is available on the SNCF Réseau’s website:

- Worksite map 2019: https://www.sncf-reseau.com/sites/default/files/2019-02/chantiers_2019_584x410_%20FRANCE_BAT_HD_D5.pdf

II. Investments related to new rail lines and rail lines extensions which ensure access to the network and the efficient movement of people and freight

This category includes projects for the rail development which are already put into service or expected high-speed line.

More information on example of high-speed or development project:

- LGV CNM: <http://www.ocvia.fr/>
- Projet EOLE: <http://www.rer-eole.fr/>

III. Other Investments linked to the global climate change challenges, the protection of biodiversity and natural resources²:

This category will include projects which ensure the inclusion of the protection of biodiversity and natural resources in the management approach of the existing railway network and in development projects.

- Conservation of biodiversity and the quality of natural environments: <https://www.sncf-reseau.com/fr/entreprise/newsroom/sujet/preserver-biodiversite>
- Circular economy and recycling of disposed products: <https://www.sncf-reseau.com/en/entreprise/newsroom/sujet/ecodesign>
- Fight against climate change: <https://www.sncf-reseau.com/en/entreprise/newsroom/sujet/green-bonds-sncf-reseau-pioneers>

² SNCF Réseau expects the majority of the allocation to the first eligible green project category. The inclusion of other investments linked to the protection of biodiversity and natural resources is essential to SNCF Réseau’s overall environmental and sustainability strategy.

Examples are intended for illustrative purposes only and no assurances can be provided that disbursements for projects with these specific characteristics will be made by SNCF Réseau.

IN MILLION EURO	2016 ALLOCATION	2017 ALLOCATION	2018 ALLOCATION	2019 PROJECTION	2020 ³ PROJECTION	2021 ⁴ PROJECTION
A. Maintenance and upgrades	710	1,508	0	3,308	TBD	0
Tracks and switches	590	1,170	0	2,143	TBD	0
Signaling and operation	100	215	0	558	TBD	0
Electric traction	20	52	0	335	TBD	0
Civil engineering structures and tunnels	0	108	0	185	TBD	0
Other activities	0	0	0	86	TBD	0
B. New rails and rail lines extensions	176	225	0	0	TBD	0
LGV Est-Européenne	14	6	0	0	TBD	0
LGV SEA	73	23	0	0	TBD	0
LGV BPL	53	147	0	0	TBD	0
LGV CNM	36	50	0	0	TBD	0
Projet EOLE	0	0	0	0	0	0
Other investments	0	0	0	0	0	0
Total	886	1,734				

Opinion: ISS-oekom considers the Use of Proceeds description provided by SNCF Réseau's Green Bond Framework as aligned with the GBPs and with the sustainability strategy of the issuer. The distribution of proceeds between project categories is disclosed and precise examples of eligible green projects are provided in the Framework.

³ SNCF Réseau as an issuer might issue bonds (hence green bonds) until June 30th 2020.

⁴ In 2021 onwards, SNCF Réseau will no longer issue any debt and be replaced by SNCF SA.

2. Process for Project Evaluation and Selection

The Treasury and Funding Department in coordination with the Accounting and the Environment and Sustainable Development Departments will review the allocation of the projects annually.

Projects that are aligned with the Use of Proceeds identified in section 2.1 above will be considered for eligible green bond proceeds allocation.

If projects are considered eligible, they will be recorded in the SNCF Réseau Green Bond Register and tracked for the life of the involvement in the Green Bond.

Opinion: *ISS-oekom finds that the process for Project Evaluation and Selection broadly aligns with the GBPs. This process is described but not further documented or structured. However, the responsibilities are fairly distributed across relevant SNCF Réseau departments and sufficiently transparent.*

3. Management of Proceeds

Pending allocation of an amount equal to the net proceeds from the sales of the Notes to Eligible Green Projects, SNCF Réseau will temporarily invest an amount equal to the net proceeds from the sales of the Notes in monetary funds managed following a responsible investment approach, bank deposits, cash, and/or cash equivalents. Payment of principal and interest of the Notes will be made from our general funds and will not be directly linked to the performance of the Eligible Green Projects. Portfolio balance in and out is monitored through an external audit mission available on SNCF Réseau's website.

Opinion: *ISS-oekom finds that the management of proceeds is in line with the GBPs. The proceeds are appropriately tracked, and the expected allocation period and temporary investments are disclosed and aligned with the market best practices.*

4. Reporting

Within one year of the issuance, and until the full allocation of an amount equal to the net proceeds of SNCF Réseau Green Bonds issued, SNCF Réseau will provide to investors (i) annual updates on website (<https://www.sncf-reseau.com/en/entreprise/newsroom/sujet/green-bonds-sncf-reseau-pioneers> and <https://www.sncf-reseau.com/fr/entreprise/newsroom/sujet/green-bonds-sncf-reseau-pionnier-finance-responsable>) on the amounts allocated to the Eligible Green Projects, (ii) relevant expected impact metrics and where feasible actual impact metrics, related to the Eligible Green Projects where competition and confidentiality reasons allow. (iii) Auditors or any other third party appointed by SNCF Réseau, will issue an annual report on SNCF Réseau's compliance in all material respects with the Eligible Green Project criteria set forth in these documents.

Examples of relevant metrics could include:

1. Investments related to maintenance, upgrades and energy efficiency of the rail system
 - Total GHG emissions of the maintenance project (tCO₂eq)
 - Total GHG emissions avoided because of the project (tCO₂eq)
 - Estimated FTE's creation on the maintenance site
 - Age of the railway by type of railway
 - Volume of wooden sleepers recycled for energy purposes (tons)
 - Share of ballast re-used on the maintenance project (tons)
 - Share of concrete sleepers recycled from the maintenance project (tons)
 - Share of re-used rails from the maintenance project (tons of steel)
2. Investments related to new rail lines and rail lines extensions which ensure access to the network and the efficient movement of people and freight
 - Total GHG emissions of the project (tCO₂eq)
 - Modal shift: Number of passenger or goods transferred to the train
 - Total GHG emissions avoided because of the project (tCO₂eq)
 - Estimated FTE's creation on the construction site
 - Estimated average time saving because of the project (min)
3. Other investments linked to the global climate change challenges, the protection of biodiversity and natural resources (*currently metrics are not yet available in this category but expect to be developed over time*)

Examples of impact metrics are intended for illustrative purposes only and no assurances can be provided that these exact metrics will be provided. Relevant impact metrics will be provided and may/will differ depending on the type of project.

Opinion: ISS-oekom finds that the reporting is aligned with the GBPs and market best practices. A high level of transparency is provided on the level, information, frequency, scope and duration of reporting, both in terms of allocation and impact.

External review

Second Opinion

SNCF Réseau commissioned ISS-oekom to assist the finalization of the Green Bond Framework in 2016 and to provide Second Party Opinions on this framework since then.

Climate Bond Certification

SNCF Réseau selected ISS-oekom to act as a verifier for obtaining a Climate Bond Initiative Certification.

The Climate Bond Initiative certification will be related to the Low-Carbon Transportation Standard.

PART II: SUSTAINABILITY QUALITY OF THE GREEN BOND ASSET POOL

Evaluation of the assets

Maintenance and upgrades of rail infrastructures

As a Use of Proceeds category, maintenance and upgrades of rail infrastructure has a limited contribution to the SDG 7 “Affordable and clean energy” and 13 “Climate action”. Additionally, when considering the deeper ESG management, maintenance and upgrades of rail infrastructure can be associated to other SDGs.

The table below presents the findings of an ISS-oekom assessment of the assets (re-) financed against KPIs and the association with SDGs based on a mapping methodology.

ASSESSMENT AGAINST ISS-OEKOM ESG KPI	ASSOCIATION WITH THE SDGS
1. Consideration of environmental impacts at planning stage	
<ul style="list-style-type: none"> ✓ All relevant assets underwent environmental impact assessment at planning stage. For every project, systematic carbon assessments were conducted. 	
<ul style="list-style-type: none"> ✓ None of the assets are located in key biodiversity areas according to national legislation (e.g. Ramsar sites, UNESCO Natural World Heritage Sites). 	
<ul style="list-style-type: none"> ✓ All assets meet high environmental standards during construction phase in compliance with national environmental legislation and certifications (e.g. ISO 14001, ISO 9001). 	
2. Community dialogue	
<ul style="list-style-type: none"> ✓ All relevant assets feature community dialogue as an integral part of the planning process in compliance with national legislation (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes.) 	 
3. Working conditions during construction, operation and maintenance	
<ul style="list-style-type: none"> ✓ All the assets are located in France, where high labour and health and safety standards are in place for construction, operation and maintenance work (e.g. ILO core conventions). 	
4. Transport safety	
<ul style="list-style-type: none"> ✓ For all assets, a comprehensive transport safety management system is in place (including e.g. risk assessment, monitoring, training programs, emergency management). 	

ASSESSMENT AGAINST ISS-OEKOM ESG KPI

ASSOCIATION
WITH THE SDGS

5. Environmental aspects of public transport infrastructure

✓ All projects are located in France where maximum noise levels regarding train services are in place. Additionally, specific measures to reduce transport-related noise emissions are in place (e.g. collection of performance data and audits).



✓ For all projects, environmentally friendly disposal of components is ensured (e.g. removal of hazardous materials, recycling and re-using of waste).



6. Social aspects in supply chain

✓ For all assets, high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).



Controversy assessment

No controversy assessment at the asset level has been carried out due to the low controversy risk of maintenances and upgrades operations in France, where legislation provide for high environmental and social standards. At the company level, SNCF Réseau does not face any controversies.

The methodology for the asset evaluation can be found in Annex 2.

PART III: ASSESSMENT OF SNCF RÉSEAU'S ESG PERFORMANCE

The ISS-oekom Corporate Rating comprises a rating scale from A+ (excellent) to D- (poor).

COMPANY	RATING	STATUS
SNCF Réseau	B -	PRIME

This means that the company performed well in terms of sustainability, both compared against others in the industry and in terms of the industry-specific requirements defined by ISS-oekom. In ISS-oekom's view, the securities issued by the company therefore all meet the basic requirements for sustainable investments.

As of 22.07.2019, this rating places SNCF Réseau 2nd out of 53 companies rated by ISS-oekom in the Transportation Infrastructure sector.

Key Challenges facing companies in term of sustainability management in this sector are:

- Reduction of air emissions
- Worker health and safety and product safety
- Responsible land use and biodiversity management
- Business ethics and government relations
- Stakeholder responsibility

In all of the key issues, SNCF Réseau rates above the average for the sector. A very significant outperformance has been performed by the company on "Responsible land use and biodiversity management".

The company does not face any controversy which is in line with the minor controversy risk of its sector.

Details on the rating of the issuer can be found in Annex 1.



Robert Hassler, Head of ISS-oekom
London/Munich/Rockville/Zurich

DISCLAIMER

1. Validity of the SPO: For SNCF Réseau's potential Green Bond issuances occurring between 07/2019 and 07/2020.
2. ISS-oekom uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition, we create a Second Party Opinion (SPO) on bonds based on data from the issuer.
3. We would, however, point out that we do not warrant that the information presented in this SPO is complete, accurate or up to date. Any liability on the part of ISS-oekom in connection with the use of these SPO, the information provided in them and the use thereof shall be excluded. In particular, we point out that the verification of the compliance with the selection criteria is based solely on random samples and documents submitted by the issuer.
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ANNEX 1: ISS-oekom Corporate Rating

The following pages contain extracts from SNCF Réseau's 2019 ISS-oekom Corporate Rating.

SECOND PARTY OPINION

Sustainability Quality of the
Green Bond Asset Pool



SECOND PARTY OPINION

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ANNEX 2: Methodology

ISS-oekom Green Bond KPIs

The ISS-oekom Green Bond KPIs serves as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of the use of proceeds of SNCF Réseau’s Green Bond Programme.

It comprises firstly the definition of the use of proceeds category offering added social and/or environmental value, and secondly the specific sustainability criteria by means of which this added value and therefore the sustainability performance of the assets can be clearly identified and described.

The sustainability criteria are complemented by specific indicators, which enable quantitative measurement of the sustainability performance of the assets and which can also be used for reporting.

To review the KPIs used in this SPO, please contact Federico Pezzolato (details below) who will send them directly to you.

Asset evaluation methodology

ISS-oekom evaluates whether the assets included in the asset pool match the eligible project category and criteria listed in the Green Bond KPIs.

All percentages refer to the amount of assets within one category (e.g. wind power). Additionally, the assessment “no or limited information is available” either indicates that no information was made available to ISS-oekom or that the information provided did not fulfil the requirements of the ISS-oekom Green Bond KPIs.

The evaluation was carried out using information and documents provided to ISS-oekom on a confidential basis by SNCF Réseau (e.g. Due Diligence Reports). Further, national legislation and standards, depending on the asset location, were drawn on to complement the information provided by the issuer.

Assessment of the contribution and association to the SDG

The 17 Sustainable Development Goals (SDGs) were endorsed in September 2015 by the United Nations and provide a benchmark for key opportunities and challenges toward a more sustainable future. Using a proprietary method, ISS-oekom identifies the extent to which SNCF Réseau’s Green Bond contributes to related SDGs and has a positive association with their respective sub-targets.

The contribution assessment is split into two Levels:

1. **Level 1:** Contribution and/or obstruction of the Use of Proceeds categories to be financed through the bond to the UN SDGs
2. **Level 2:** Association of the assets’ ESG performance with further SDGs

About ISS-oekom SPO

ISS-oekom is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries regarding their environmental and social performance.

As part of our Sustainable (Green & Social) Bond Services, we provide support for companies and institutions issuing sustainable bonds, advise them on the selection of categories of projects to be financed and help them to define ambitious criteria.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of the issuer themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.

Learn more: <https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/>

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