

EX-POST EXTERNAL REVIEW

Impact reporting

“Italian Sovereign Green Bond Allocation and Impact Report” The Republic of Italy

12 May 2022

VERIFICATION PARAMETERS

Type(s) of reporting	Green Bond Allocation and Impact Report
Relevant standard(s)	Harmonized Framework for Impact Reporting (HFIR), as administered by ICMA (as of June 2021)
Scope of verification	Italian Sovereign Green Bond Allocation and Impact Report (as of May 12, 2022) The Republic of Italy’s Framework for the Issuance of Sovereign Green Bonds (as of February 2021)
Lifecycle	Post-issuance verification
Validity	As long as no material changes are undertaken by the issuer to its Green Bond Allocation and Impact Report as of May 12, 2022

CONTENTS

SCOPE OF WORK	3
THE REPUBLIC OF ITALY OVERVIEW	3
ISS ESG ASSESSMENT SUMMARY	4
ISS ESG EXTERNAL REVIEW ASSESSMENT	5
PART I: ALIGNMENT WITH COMMITMENTS SET FORTH IN THE FRAMEWORK FOR THE ISSUANCE OF SOVEREIGN GREEN BONDS.....	5
PART II: ASSESSMENT AGAINST THE ICMA HARMONIZED FRAMEWORK FOR IMPACT REPORTING (HFIR).....	14
PART III: DISCLOSURE OF PROCEEDS ALLOCATION AND SOUNDNESS OF THE IMPACT REPORTING INDICATORS	18
ANNEX: Methodology	22
About ISS ESG External Review	22

SCOPE OF WORK

The Republic of Italy ('the Issuer') commissioned ISS ESG to provide an External Review on its Green Bond Allocation and Impact Report by assessing:

1. The alignment of the Republic of Italy's Sovereign Green Bond Allocation and Impact Report with the commitments set forth in the Framework for the Issuance of Sovereign Green Bonds (February 2021 version).
2. The Republic of Italy's Sovereign Green Bond Allocation and Impact Report - benchmarked against Harmonized Framework for Impact Reporting (HFIR), as administered by ICMA (as of June 2021).
3. The disclosure of proceeds allocation and soundness of reporting indicators¹ – whether the metrics align with best market practices and are relevant to the Green Bonds issued.

THE REPUBLIC OF ITALY OVERVIEW

Italy is a parliamentary republic; it has a population of 62.335.424 (as of 2020). Italy is a founding member of the European Union, the NATO, and member of the G7. The Republic of Italy is committed to the European Commission's framework for achieving climate neutrality by 2050 and the goals set out in the European Green Deal. In December 2019, Italy published its Integrated National Plan for Energy and Climate (INPEC), establishing national targets for 2030 on energy efficiency, renewable energy (30% of final energy demand) and for the reduction of CO₂ emissions (33% reduction for plants not covered by the EU Emission Trading System compared to 2005).

The Republic of Italy fosters a partnership between the public and private sectors to further develop the supply of sustainable finance. To that end, initiatives are being taken by: (1) the Government, through the implementation of the Non-Financial Reporting Directive and the issuance of SGB, for example; (2) the Bank of Italy, through favouring greater purchases of green assets; and, (3) Borsa Italiana, through listing climate-friendly and social bonds. The Republic of Italy has decided through the Budget Law for 2020, to extend its commitment to the environment by issuing Sovereign Green Bonds.

¹ ISS ESG's review does not follow auditing or assurance standards or guidance. ISS ESG does not provide assurance on the information presented in The Republic of Italy Sovereign Green Bond Allocation and Impact Report. ISS ESG solely conducted a review of the Use of Proceeds' allocation and impact reporting against ICMA's Harmonized Framework for Impact Reporting (HFIR) core principles and recommendations where applicable, and criteria outlined in the Issuer's Framework

ISS ESG ASSESSMENT SUMMARY

REVIEW SECTION	SUMMARY	EVALUATION
<p>Part 1</p> <p>Alignment with the Issuer's commitments set forth in the Framework</p>	<p>ISS ESG finds that The Republic of Italy's Italian Sovereign Green Bond Allocation and Impact Report meets the issuer's commitments set forth in the Framework for the Issuance of Sovereign Green Bonds.</p>	<p>Aligned</p> <p>(however, proceeds have also been allocated to the project "Ecobonus²", which does not meet the criteria originally set in the framework)</p>
<p>Part 2:</p> <p>Alignment with the ICMA Harmonized Framework for Impact Reporting (HFIR)</p>	<p>ISS ESG finds that the Italian Sovereign Green Bond Allocation and Impact Report is in line with ICMA's Harmonized Framework for Impact Reporting (HFIR). The Issuer follows core principles and where applicable key recommendations.</p> <p>Allocation of proceeds is disclosed at a project category level. The report was produced on an annual basis and includes impact indicators for most of the financed projects.</p>	<p>Aligned</p>
<p>Part 3:</p> <p>Disclosure of proceeds allocation and soundness of reporting indicators</p>	<p>ISS ESG finds that the allocation of the bond's proceeds has been disclosed, with a detailed breakdown across different eligible project categories³.</p> <p>The indicators are relevant and align with the reporting criteria set forth in the Issuer's Framework.</p> <p>The impact indicators are qualitative and material to the Use of Proceeds categories financed through this bond, as they draw from the suggested impact reporting metrics from the ICMA HFIR. The Issuer uses internal methodologies to assess the impact indicators and sources data from internal data systems.</p>	<p>Positive</p>

² The Green Allocation and Impact report includes a project category which was not identified in the eligibility criteria included in the original Framework. However, the Issuer has transparently reported on the rationale for it. The project category financed can still be considered in line with the ICMA Green Bond Principles. As such, ISS ESG considers the Green Allocation and Impact Report as overall aligned with the commitments set forth in the Framework.

³ ISS ESG bases its assessment on the information provided in the allocation reporting. The Issuer is responsible for the preparation of the report including the application of methods and procedures designed to ensure that the subject matter information is free from material misstatement

ISS ESG EXTERNAL REVIEW ASSESSMENT

PART I: ALIGNMENT WITH COMMITMENTS SET FORTH IN THE FRAMEWORK FOR THE ISSUANCE OF SOVEREIGN GREEN BONDS

The following table presents ISS ESG’s assessment of the Italian Sovereign Green Bond Allocation and Impact Report against the commitments set forth in The Republic of Italy’s Framework, which are based on the core requirements of the Green Bond Principles 2018 as well as best market practices.

CORE GBP REQUIREMENT OR BEST MARKET STANDARD	THE REPUBLIC OF ITALY’S FRAMEWORK FOR THE ISSUANCE OF SOVEREIGN GREEN BONDS	THE REPUBLIC OF ITALY’S SOVEREIGN GREEN BOND ALLOCATION AND IMPACT REPORT	ALIGNMENT WITH COMMITMENT
1. Use of Proceeds			
.1. Alignment with project/ categories defined by the GBP	<p>The net proceeds will be exclusively allocated to finance or re-finance projects in the following categories:</p> <ul style="list-style-type: none"> • Renewable electricity and heat • Energy efficiency • Transport • Pollution prevention and control and circular economy • Protection of the environment and biological diversity • Research 	<p>In accordance with the eligibility criteria established in the Framework, the proceeds have been used to finance or re-finance projects in the following categories:</p> <ul style="list-style-type: none"> • Renewable electricity and heat • Energy efficiency • Transport • Pollution prevention and control and circular economy • Protection of the environment and biological diversity • Research <p>With regard to the category Energy</p>	<p style="text-align: center;">✓</p> <p>(with only one exception, the project Fiscal incentives to improve building efficiency, called “Ecobonus”)</p>

		<p>Efficiency, the project financed (Fiscal incentives to improve building efficiency, called “Ecobonus”) is not in line with the criteria “Investment expenditures that bring at least two levels improvement on the Italian energy efficiency scale”. This incentive is targeted at interventions such as building insulation, fixtures upgrade, solar panels installation. After the intervention it is required to provide a new EPC but the increase of two levels is not mandatory.</p>	
<p>.2. Defined and transparent criteria for eligible projects</p>	<p><u>Renewable electricity and heat:</u></p> <ul style="list-style-type: none"> Expenditures focused on the development of renewable and other low-carbon energies such as wind, solar, hydropower, geothermal, hydrogen and other (e.g. heat pumps). All assets have to respect a 100 gCO₂e/kWh threshold. Hydrogen will be produced by the electrolysis with an average carbon intensity for producing the electricity that is used for hydrogen manufacturing that is at or below 100 gCO₂e/kWh. <p><u>Energy efficiency:</u></p> <ul style="list-style-type: none"> Investment expenditures that bring at least a two levels improvement on the Italian energy efficiency scale. 	<p>The Issuer has for the most part financed projects with the same criteria as identified in the Framework The issuer transparently reports on the deviation from the eligibility criteria in the framework and has a provided its rationale for it.</p>	<p style="text-align: center;">✓</p>

- Smart grids to manage a higher renewable energy production will be considered and SF6 gas leakage prevention measures will be included.
- Eligible heating networks use at least 50% renewable energy, excluding biomass.
- Thresholds set by Law are applied when selecting expenditures related to energy efficiency of buildings.

Transport

- Expenditures related to Railway and Road Public Transportation that comply with the following thresholds:
 - For diesel passenger trains, emissions must be less than 50g CO₂e per passenger-kilometer (gCO₂e/pkm) until 2025 (subsequently only electric or hydrogen locomotives will be allowed).
 - For freight trains, the emissions per tonne-kilometer (gCO₂e/tkm) must be less than 50% of the reference average indicated in the "Heavy Duty CO₂ Regulation" and will be updated in 2025.
 - For road related public transportation, expenditures related to the acquisition of new local Road Transport will follow the EU Directive on Alternative Fuels Infrastructure (DAFI) which requires that the energy

	<p>supply of vehicles to be at least 25% from electricity, methane, liquified natural gas and hydrogen. Incentives for the acquisition of hybrid or electric cars by private individuals or companies are also included.</p> <ul style="list-style-type: none"> • Expenditures related to Maritime Transport: <ul style="list-style-type: none"> ○ Expenditures for electrical infrastructures in ports to reduce ship fossil fuel use. ○ expenditures to finance maritime transport complying with the IMO legislation which requires (from 1 January 2020) the use of fuels for ships with a limit of 0.5% m / mto sulphur emissions¹⁵, the reduction of GHG emissions, and of CO₂ produced <p><u>Pollution prevention and control and circular economy:</u> Expenditures targeted to promote:</p> <ul style="list-style-type: none"> • Sustainable consumption and production modes and aimed at developing pollution monitoring and control systems. • Wastewater management. <p><u>Protection of the environment and biological diversity:</u></p> <ul style="list-style-type: none"> • Expenditures focused on: <ul style="list-style-type: none"> ○ sustainable land use and protection as well as protection and restoration of terrestrial and marine 		
--	---	--	--

	<p>biodiversity and ecosystems</p> <ul style="list-style-type: none"> ○ water collection and saving. • Primary investments in the security of water supply. • Expenditures on sustainable management of water resources Investments aimed at reducing losses in water distribution networks. <p><u>Research:</u></p> <ul style="list-style-type: none"> • Expenditures on research projects on: <ul style="list-style-type: none"> ○ linear to circular paradigm; ○ policy measures to prompt the achievement of the UN SDG targets (such as policy tools related to nudging, subsidies, incentives schemes, public private partnership, etc.); ○ innovative production processes to reduce water and carbon footprint; ○ new technologies that help the preservation and enhancement of natural capital, biodiversity, and ecosystems; ○ new technologies aimed at improving energy efficiency, weather forecast, meteorology and climatology. • Expenditures related to climate research centres and institutes. 		
<p>.1. Description of the expected environmental and/or social benefits of the project categories</p>	<p>Environmental objectives and benefits are defined for each project category in The Republic of Italy’s Framework.</p>	<p>A detailed description of core environmental impacts for each target area is available in the report.</p>	<p style="text-align: center;">✓</p>

.2. Refinancing/ Financing	An amount equal to the net proceeds of the Bonds will be exclusively allocated to finance or re-finance, in whole or in part, new and/or existing loans/projects.	As of December 31, 2021 the Republic of Italy has allocated all of the proceeds, which have been assigned to existing and new projects, for a total amount of EUR 13.26 billion.	✓
.3. Exclusion of harmful project categories	<p>The Republic of Italy will not allocate proceeds received from the issuance of Green, Bonds to any expenditure mainly related to the following sectors:</p> <ul style="list-style-type: none"> • Exploration, manufacturing and transport of fossil fuels • Nuclear power (fission) • Energy plants (including biomass) with CO₂ emission level of more than 100g CO₂/kWh; • Manufacturing and production of alcoholic beverages; • Military contracts; • Gambling; • Arms manufacturing; • Manufacture and production of tobacco products; and, • Mining. 	The proceeds have been not allocated in any of the excluded sectors listed.	✓
2. Process for project evaluation and selection			
2.1 Documented process to determine whether projects fit within defined categories	The Department of the Treasury (MEF) is responsible for identifying potential expenditures based on the screening of budget data received from the General Accounting Department (MEF), which is then followed by interactions with the relevant Ministries, in order to verify the	The Eligible Green Projects were designated by Inter-ministerial Committee for Sovereign Green Bonds.	✓

	<p>eligibility of expenditures in the portfolio. This portfolio of eligible expenditures is shared with an Inter-ministerial Committee (“the Committee”) for information and review.</p>		
2.2 Information on responsibilities and accountability	<p>The potential Eligible Green Projects will be designated by the Committee. The roles and responsibilities of the Committee were disclosed in the framework.</p>	<p>The Eligible Green Projects were designated by the Inter-ministerial Committee.</p>	✓
2.3 Stakeholders involved in the process	<p>The committee is composed of representatives of the:</p> <ul style="list-style-type: none"> • Prime Minister’s office, • Minister of Ecological Transition, • Minister of Economy and Finance, • Minister of Infrastructure and Sustainable Mobility, • Minister of Economic Development, • Minister of Agricultural and Forestry Policies, • Minister of University and Research, • Minister of Culture. 	<p>The Issuer confirms that various stakeholders are involved throughout the process.</p>	✓
3. Management of Proceeds			
3.1 Green Bond proceeds tracked in an appropriate manner	<p>The Republic of Italy will manage the net proceeds of the bonds on a portfolio basis. As long as the bonds under this Framework are outstanding, the Republic of Italy aims to allocate an amount equivalent to the net proceeds of these instruments towards its Eligible Green/Social Projects, as defined in the “Use of Proceeds” section.</p> <p>The net proceeds of the Bonds will be placed in the General cash Account of the Treasury at the Bank of Italy and will be tracked by the Issuer in an appropriate</p>	<p>The proceeds have been fully allocated.</p>	✓

	manner and attested to in a formal internal process.		
3.2 Disclosure of intended types of temporary investment instruments for unallocated proceeds	<p>The Republic of Italy intends to fully allocate the proceeds as soon as possible by selecting expenditures that will be incurred in within six months. Certain expenditures, due to their nature (e.g. infrastructure projects) belong to multi-annual budgets and will be disbursed over the course of several years, in which case the first disbursements will take place within 24 months.</p> <p>The net proceeds of the Bonds will be credited to the Treasury General cash Account at the Bank of Italy and will be managed in cash.</p>	The proceeds have been fully allocated.	✓
3.3 Procedure in case of divestment or postponement	In case of expenditure postponement, cancelation, divestment or ineligibility, the Issuer has committed to replace the no longer Eligible Expenditure by a new Eligible Expenditure. The Issuer commits to reallocate the divested proceeds within twelve months.	The proceeds have been fully allocated.	✓
3.4 Disclosure of portfolio balance of unallocated proceeds	The Republic of Italy will produce a report on its Green Bonds which will include the balance of unallocated proceeds, if any.	The proceeds have been fully allocated.	✓
4. Reporting			
4.1 Use of Proceeds reporting	The annual report will show the allocation of proceeds arising from the Sovereign Green Bonds issued in the previous year. It will include details on the progress of the disbursement of the proceeds, at least at the sector level, and will contain a summary	The section “Allocation reporting” of the Italian Sovereign Green Bond Allocation and Impact Report complies with the pre-issuance commitment expressed in the framework and	✓

	sheet of the progress of the implementation of the financed interventions.	with the requirements defined in the GBP. <i>Further analysis of this section of the report is displayed in Part III of this report.</i>	
4.2 Impact reporting	The Republic of Italy will report annually on environmental impacts of the Eligible Green Projects (re)financed by the net proceeds of the Green Bonds. The impact report will refer to the environmental objectives of regulation EU 852(2020) and it will provide information on contribution of each project to the indicators of sustainability and the achievement of the objectives.	The section “Impact Reporting” of the Italian Sovereign Green Bond Allocation and Impact Report complies with the pre-issuance commitment expressed in the framework and with the requirements defined in the GBP. <i>Further analysis of this section is available in Part III of this report.</i>	✓
4.3 Means of disclosure: where the information is published	This reporting will be published on the website of the Ministry of Economy and Finance.	The report is intended to be publicly available.	✓
4.4 External review	A Second Party Opinion (SPO) will be issued by an independent external verifier in order to provide an external verification on The Republic of Italy’s Framework for the Issuance of Sovereign Green Bonds.	The Republic of Italy has obtained a Second Party Opinion (SPO) on its Framework for the Issuance of Sovereign Green Bonds.	✓

Opinion: ISS ESG finds that the Italian Sovereign Green Bond Allocation and Impact Report meet the general conditions set forth in The Republic of Italy’s Framework for the Issuance of Sovereign Green Bonds. Core components as defined by ICMA have been considered in the Framework and have then been transposed accordingly in the Italian Sovereign Green Bond Allocation and Impact Report.

PART II: ASSESSMENT AGAINST THE ICMA HARMONIZED FRAMEWORK FOR IMPACT REPORTING (HFIR)

Reporting is a core component of the GBP. Green bond issuers are required to report on both the use of green bond proceeds, as well as the expected environmental impacts at least on an annual basis. The ICMA Harmonized Framework for Impact Reporting has been chosen as benchmark for this analysis as it represents the most widely adopted standard.

The table below presents the findings of an ISS ESG assessment of the Italian Sovereign Green Bond Allocation and Impact Report against ICMA Harmonized Framework for Impact Reporting.

CORE PRINCIPLES		
ICMA HFIR	ITALIAN SOVEREIGN GREEN BOND ALLOCATION AND IMPACT REPORT	ASSESSMENT
Reporting on an annual basis	The Republic of Italy has reported on an annual basis from issuance and all the proceeds have been fully allocated. The report will be available on the Italian Ministry of Economy and Finance website.	✓
Illustrating the expected environmental impacts	<p>The assessment and measurement of the impacts generated by the Italian Sovereign Green Bonds covered the following areas:</p> <ul style="list-style-type: none"> a. <u>Renewable electricity and heat</u> – Fiscal incentives focused on the development of renewable and other low-carbon energies: CO₂ avoided emissions. b. <u>Energy efficiency</u> – Fiscal incentives to improve building efficiency: CO₂ avoided emissions. c. <u>Transport</u> – <ul style="list-style-type: none"> Subways: improving the overall performance of public transport through a modal shift from private car use to public electric transport. Impact data will be available in the following reports. Incentives for rail freight transportation: estimated increased use of rail for goods transportation. Incentives for high-speed rail connections: future estimated decrease of energy consumption and CO₂ emissions. Rapid mass transport: vehicles emissions reduction. Inland water transportation: estimated reduction of noise, air, water, and soil 	✓

	<p>pollution; estimated energy consumption reduction.</p> <p>d. <u>Pollution prevention and control, and circular economy</u> Financing of water infrastructure: impact data will be available in the following reports.</p> <p>e. <u>Protection of the environment and biological diversity</u> Protected marine areas, national parks and state natural reserves: CO₂ avoided emissions⁴</p> <p>f. <u>Research</u>: number of projects financed; qualitative descriptions of the projects</p>	
Transparency on the currency	Allocated proceeds have been reported in a single currency. Projects on which proceeds have been allocated have been disclosed.	✓

RECOMMENDATIONS

ICMA HFIR	ITALIAN SOVEREIGN GREEN BOND ALLOCATION AND IMPACT REPORT	ASSESSMENT
Define and disclose the period and process for including projects in their report	The entirety of proceeds has been allocated to Green Assets. No modifications of the portfolio are planned so far.	✓
Indicate the total signed amount and the amount of environmental bonds proceeds allocated to eligible disbursements.	A total of EUR 13.26 billion has been raised through Issuer's Green Retail Bond. The entirety of the proceeds has been allocated to Green Assets.	✓
Put in place a formal internal process for the allocation of proceeds linked to their lending and investment operations for Green Projects and to report on the allocation of proceeds.	The Issuer followed a transparent process for selection and evaluation of Eligible Green Projects. Projects financed and/or refinanced through the Green Bonds issued under Framework for the Issuance of Sovereign Green Bonds were evaluated and selected based on compliance with the Eligibility Criteria as laid out in the Framework.	✓

⁴ The issuer confirmed that all protected areas, national parks, and state natural reserves under its jurisdiction have been transversally financed under this project category.

Provide a list of projects to which environmental bonds proceeds have been allocated, or report solely on a portfolio level	The Italian Sovereign Green Bond Allocation and Impact Report includes the total amount of proceeds allocated per eligible project category, type of sub-projects within categories and per year of investment.	✓
Describe the approach to impact reporting	The issuer identifies the specific eligible projects and clearly defines, for each project, the total project's allocated proceeds.	✓
Report the estimated lifetime results and/or project economic life (in years)	The Issuer has not disclosed this information.	○
Ex-post verification of specific projects	The Issuer does not sample ex-post verification of specific projects.	N/A
Report on at least a limited number of sector specific core indicators for projects included in their green bond programmes	The Republic of Italy has reported on sector specific indicators for most of the projects financed.	✓
For the calculation of indicators, where there is no single commonly-used standard, issuers may follow their own methodologies, disclosing the methodologies	The issuer elaborated its own methodologies to calculate or estimate the impacts of the financed projects. The calculations are transparently disclosed in the Sovereign Green Bond Allocation and Impact Report.	✓
Elect to convert units reported for individual projects. Disclosure on the conversion approach	Where needed, the issuer has used conversion factors. These factors are taken from Italian nationwide database.	✓
Be transparent about projects with partial eligibility	The project Fiscal incentives to improve building efficiency, called "Ecobonus", does not meet the eligibility criteria set in the framework. The issuer has transparently reported on the matter and the project can still be considered in line with the ICMA GBP.	✓
In case the expected impacts of different project components may not be reported separately, issuers may	An attribution approach has been developed for the investments on "Water infrastructure". These type of projects have two dimensions: management of water distribution and wastewater treatment. As details necessary to identify the different	✓

attribute the results to each component based on their relative share in the related financing, disclosing the attribution approach

components within each project are missing or hard to obtain, It was decided to split the expenses in half between the project category “Pollution prevention and control, and circular economy” and “Protection of the environment and biological diversity”.

Opinion: ISS ESG finds that The Republic of Italy follows the ICMA Harmonized Framework for Impact’s core principles and key recommendations. The issuer provides transparency on the level of expected reporting as well as on the frequency, scope and duration, aligned with best practices. Allocation of proceeds is disclosed at a project category level. The report was produced on an annual basis and includes impact indicators for most of the financed projects.

PART III: DISCLOSURE OF PROCEEDS ALLOCATION AND SOUNDNESS OF THE IMPACT REPORTING INDICATORS

Methodology note: ISS ESG's review does not follow auditing or assurance standards or guidance. ISS ESG does not provide assurance on the information presented in The Republic of Italy Sovereign Green Bond Allocation and Impact Report. ISS ESG notes that it has not verified or audited the allocation reporting and thus cannot provide any assurance on its soundness. ISS ESG solely conducted a review of the Use of Proceeds' allocation and impact reporting against ICMA's Harmonized Framework for Impact Reporting's core principles, recommendations and best market practices.

Use of Proceeds Allocation

Use of Proceeds allocation reporting is key to put the impacts into perspective with the number of investments allocated to the respective Use of Proceeds categories. ISS ESG solely conducted a review of the Use of Proceeds' allocation reporting against ICMA Green Bond Principles' requirements on the level, scope and information to be provided in the allocation reporting. ISS ESG finds that The Use of Proceeds allocation reporting occurred on an annual basis from the issuance, after full allocation of the proceeds.

Proceeds allocated to Eligible Projects

The proceeds' allocation is broken down by the project category level, and also by type of project. The issuer has provided detail about the type of projects included in the portfolio.

ISS ESG finds that the allocation report section of the Sovereign Green Bond Allocation and Impact Report of The Republic of Italy aligns with best market practices by providing information on:

- The types of projects (re-)financed
- The total amount of proceeds in million euros (divided per environmental project)

Impact Reporting Indicators

ISS ESG finds that the impact indicators used by the Sovereign Green Bond Allocation and Impact Report of the Republic of Italy align with best market practices using ICMA's recommended metrics, in the HFIR. The table below shows the assessment conducted by ISS ESG. The issuer measures and discloses relevant indicators for each Use of Proceeds project category.

ELEMENT	ASSESSMENT
Relevance	<p>The impact indicator chosen by the issuer for this bond is the following:</p> <ol style="list-style-type: none"> a. <u>Renewable electricity and heat</u> – Fiscal incentives focused on the development of renewable and other low-carbon energies: CO₂ avoided emissions b. <u>Energy efficiency</u> – Fiscal incentives to improve building efficiency: CO₂ avoided emissions c. <u>Transport</u>: Incentives for rail freight transpiration: estimated increased use of rail for goods transportation Incentives for high-speed rail connections: future estimated decrease of energy consumption and CO₂ emissions. Rapid mass transport: vehicles emissions reduction. Inland water transportation: estimated reduction of noise, air, water, and soil pollution; estimated energy consumption reduction. d. <u>Pollution prevention and control, and circular economy</u> <u>Financing of water infrastructure: impact data will be available in the following reports.</u> e. <u>Protection of the environment and biological diversity</u>: Protected marine areas, national parks and state natural reserves: CO₂ avoided emissions f. <u>Research</u>: number of projects financed; qualitative descriptions of the projects <p>These indicators are qualitative and material to the Use of Proceeds categories financed through this bond and draw from the Suggested Impact Reporting metrics for Green Building Projects by the ICMA Harmonized Framework for Impact Report for Green Bonds. Some indicators were designed by the issuer to capture the specificity of their projects. This aligns with best market practices.</p>
Data sourcing and methodologies of quantitative assessment	<p>For the impact indicator, the issuer uses internal methodologies and sourcing data from the Interministerial Committee. For data collection and data processing Ministries use in-house companies and specialized agencies. Some data are calculated using conversion factors provided by Italian nation-wide database.</p>
Baseline selection	<p>The impact data is compared with relevant baseline, where needed, as relevant internal data were used.</p>
Scale and granularity	<p>The impact data is presented at the Use of Proceed type of project level for the indicator(s).</p>

High-level mapping of the impact indicators with the UN Sustainable Development Goals

Based on the project categories financed and refinanced by the bonds as disclosed in the issuer's Sovereign Green Bond Allocation and Impact Report, the impact indicator(s) adopted by the Republic of Italy for its Green Bond can be mapped to the following SDGs, according to the ICMA "A High -Level Mapping to the Sustainable Development Goals"⁵.

IMPACT INDICATORS	SUSTAINABLE DEVELOPMENT GOALS
<p>a) Renewable electricity and heat Fiscal incentives focused on the development of renewable and other low-carbon energies: CO₂ avoided emissions</p>	 
<p>b) Energy efficiency Fiscal incentives to improve building efficiency: CO₂ avoided emissions</p>	 
<p>c) Transport Incentives for rail freight transportation: estimated increased use of rail for goods transportation</p>	 
<p>c) Transport Incentives for high-speed rail connections: future estimated decrease of energy consumption and CO₂ emissions</p>	 
<p>c) Transport Rapid mass transport: vehicles emissions reduction.</p>	 
<p>c) Transport Inland water transportation: estimated reduction of noise, air, water, and soil pollution; estimated energy consumption reduction.</p>	    
<p>e) Protection of the environment and biological diversity Protected marine areas, national parks and state natural reserves: CO₂ avoided emissions</p>	 

⁵ <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Mapping-SDGs-to-Green-Social-and-Sustainability-Bonds-2020-June-2020-090620.pdf>

DISCLAIMER

1. Validity of the External Review: As long as no material changes are undertaken by the issuer to its Green Bond Allocation and Impact Report as of May 12, 2022
2. ISS ESG uses a proprietary methodology to assess the post-issuance reports. In doing so, we adhere to standardized procedures to ensure consistent quality of responsibility research worldwide. In addition, we conduct External Reviews solely based on data provided by the issuer.
3. We would, however, point out that we do not warrant that the information presented in this External Review is complete, accurate, or up to date. Any liability on the part of ISS ESG in connection with the use of this External Review, 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.
4. All statements of opinion and value judgments given by us do not in any way constitute purchase or investment recommendations. In particular, the External Review is no assessment of the economic profitability and creditworthiness of a bond but refers exclusively to the social and environmental criteria mentioned above.
5. We would point out that this External Review, certain images, text, and graphics contained therein, and the layout and company logo of ISS ESG are the property of ISS and are protected under copyright and trademark law. Any use of such ISS property shall require the express prior written consent of ISS. The use shall be deemed to refer in particular to the copying or duplication of the External Review wholly or in part, the distribution of the External Review, either free of charge or against payment, or the exploitation of this External Review in any other conceivable manner.

The issuer that is the subject of this report may have purchased self-assessment tools and publications from ISS Corporate Solutions, Inc. (“ICS”), a wholly-owned subsidiary of ISS, or ICS may have provided advisory or analytical services to the issuer. No employee of ICS played a role in the preparation of this report. If you are an ISS institutional client, you may inquire about any issuer’s use of products and services from ICS by emailing disclosure@issgovernance.com.

This report has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While ISS exercised due care in compiling this report, it makes no warranty, express or implied, regarding the accuracy, completeness or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. In particular, the research and scores provided are not intended to constitute an offer, solicitation or advice to buy or sell securities nor are they intended to solicit votes or proxies.

Deutsche Börse AG (“DB”) owns an approximate 80% stake in ISS HoldCo Inc., the holding company which wholly owns ISS. The remainder of ISS HoldCo Inc. is held by a combination of Genstar Capital (“Genstar”) and ISS management. ISS has formally adopted policies on non-interference and potential conflicts of interest related to DB, Genstar, and the board of directors of ISS HoldCo Inc. These policies are intended to establish appropriate standards and procedures to protect the integrity and independence of the research, recommendations, ratings and other analytical offerings produced by ISS and to safeguard the reputations of ISS and its owners. Further information regarding these policies are available at <https://www.issgovernance.com/compliance/due-diligence-materials>.

© 2022 | Institutional Shareholder Services and/or its affiliates

ANNEX: Methodology

ISS ESG Review of the post-issuance Reports

The external review of post-issuance reports provides the Issuer with an independent opinion on the soundness of its post-issuance report and of its alignment with recognized market guidelines and it provides investors with independent information regarding the reliability of the report produced. On the basis of the information provided by the Issuer, ISS ESG assesses the alignment of the report with recognized market guidelines, the metrics chosen by the Issuer and the soundness of process and methodology of reporting. The analysis of the metrics adopted is based on specific sets of indicators developed by ISS ESG referring to common market guidelines.

High-level mapping 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 based on ICMA's Green, Social and Sustainability Bonds: A High-Level Mapping to the Sustainable Development Goals, ISS ESG identifies the extent to which the issuers reporting and project categories contribute to related SDGs.

About ISS ESG External Review

ISS ESG 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 / Green Bond Principles, Social Bond Principles and Sustainable Bond Guidelines), 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 External Review 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/>

For information on External Review services, contact: SPOsales@isscorporatesolutions.com

For more information on this specific Green Bond Allocation and Impact Report External Review, please contact: SPOOperations@iss-esg.com

Project team

Project lead

Marta Farina
Associate
ESG Consultant

Project support

Alice Wong
Associate
ESG Consultant

Project supervision

Marie-Bénédicte Beaudoin
Associate Director
Head of ISS ESG SPO Operations