

## REPORT REVIEW

# The Republic of Italy BTP Green Allocation and Impact Report

BTP Green Allocation and Impact Report The Republic of Italy

24 June 2024

## VERIFICATION PARAMETERS

### Type(s) of reporting

- BTP Green Allocation and Impact

### Relevant standard(s)

- Harmonised Framework for Impact Reporting (HFIR), updated Jun 2023, as administered by the International Capital Market Association (ICMA)
- The Republic of Italy's BTP Green Allocation and Impact Report (as of May 28, 2024)
- The Republic of Italy's Framework for the Issuance of Sovereign Green Bonds for the Issuance of Sovereign Green Bonds (as of Feb 25, 2021)

### Scope of verification

- Bond(s) identification:

Identification	Maturity	Size of 2023 issuances (EUR billion)
IT0005508590	April 2035	2.4
IT0005508590	April 2035	1.5
IT0005542359	October 2031	10

### Lifecycle

- Post-issuance verification

### Validity

- As long as no changes are undertaken by the Issuer to its BTP Green Allocation and Impact Report (as of May 28, 2024)

## CONTENTS

---

SCOPE OF WORK.....	3
ASSESSMENT SUMMARY.....	4
REPORT 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 HFIR.....	8
PART III: DISCLOSURE OF PROCEEDS ALLOCATION AND SOUNDNESS OF THE IMPACT REPORTING INDICATORS.....	14
ANNEX 1: Methodology .....	22
ANNEX 2: Quality management processes .....	23
About this Report Review .....	24

## SCOPE OF WORK

The Republic of Italy (“the Issuer”) commissioned ISS-Corporate to provide a Report Review<sup>1</sup> on its Green BTP Allocation and Impact Report by assessing:

1. The alignment of The Republic of Italy’s BTP Green Allocation and Impact Report with the commitments set forth in The Republic of Italy’s Framework for the Issuance of Sovereign Green Bonds (as of Feb 25, 2021).<sup>2</sup>
2. The Republic of Italy’s BTP Green Allocation and Impact Report - benchmarked against Harmonised Framework for Impact Reporting (HFIR), updated June 2023, as administered by the International Capital Market Association (ICMA).
3. The disclosure of proceeds allocation and soundness of reporting indicators – whether the impact metrics align with best market practices and are relevant to the Green BTP issued.

<sup>1</sup> A limited or reasonable assurance is not provided on the information presented in The Republic of Italy’s BTP Green Allocation and Impact Report. A review of the use of proceeds’ allocation and impact reporting is solely conducted against ICMA’s Standards (Green Bond Principles) core principles and recommendations where applicable, and the criteria outlined in the underlying Framework. The assessment is solely based on the information provided in the allocation and impact reporting. The Issuer [The Republic of Italy] is responsible for the preparation of the report including the application of methods and internal control procedures designed to ensure that the subject matter information is free from material misstatement.

<sup>2</sup> The Framework was assessed as aligned with the Green Bond Principles as of Feb 25, 2021.

## ASSESSMENT SUMMARY

REVIEW SECTION	SUMMARY	EVALUATION
<p><b>Part 1.</b></p> <p><b>Alignment with the Issuer's commitments set forth in the Framework</b></p>	<p>The Republic of Italy's BTP Green Allocation and Impact Report meets the Issuer's commitments set forth in the Framework for the Issuance of Sovereign Green Bonds. The proceeds have been used to (re)finance renewable electricity and heat, energy efficiency, transport, pollution prevention and control and circular economy, protection of the environment and biological diversity and research in accordance with the eligibility criteria defined in the Framework.</p>	<p><b>Aligned</b></p> <p><i>(however, proceeds have also been allocated to the project "Ecobonus", which does not fully meet the criteria originally set in the framework)</i></p>
<p><b>Part 2</b></p> <p><b>Alignment with the Harmonised Framework for Impact Reporting (HFIR), updated June 2023, as administered by International Capital Market Association (ICMA)</b></p>	<p>The BTP Green Allocation and Impact Report is in line with ICMA's HFIR). The Issuer follows core principles and where applicable key recommendations. The Republic of Italy reports on an annual basis, illustrates the environmental impacts and outcomes, has a system in place to identify and manage ESG risks connected to the projects financed, and is transparent on the currency used when reporting.</p>	<p><b>Aligned</b></p>
<p><b>Part 3</b></p> <p><b>Disclosure of proceeds allocation and soundness of reporting indicators</b></p>	<p>The allocation of the bond's proceeds has been disclosed, with a detailed breakdown across different eligible project categories as proposed in the Framework.<sup>3</sup></p> <p>The Republic of Italy's BTP Green Allocation and Impact Report has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculation methodologies, and granularity reflecting best market practices.</p>	<p><b>Positive</b></p>

<sup>3</sup> The assessment is based on the information provided in the Issuer's report. 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.

## REPORT REVIEW ASSESSMENT


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

The following table evaluates the BTP Green 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 as well as best market practices.

GREEN BOND PRINCIPLES	OPINION	ALIGNMENT WITH COMMITMENT
<p><b>1. Use of Proceeds</b></p>	<p>The Republic of Italy confirms to follow the Use of Proceeds’ description provided in its Framework for the Issuance of Sovereign Green Bonds. The report is in line with the initial commitments set in the Republic of Italy’s Framework for the Issuance of Sovereign Green Bonds. The Issuer’s green categories align with the project categories except for the project fiscal incentives to improve building efficiency, called “Ecobonus”.<sup>4</sup> For all other green categories, they are in accordance with the eligibility criteria set in the Republic of Italy’s framework.</p> <p>The proceeds have been used to (re)finance renewable electricity and heat, energy efficiency, transport, pollution prevention and control and circular economy, protection of the environment, and biological diversity and research. The Issuer discloses the allocated amount of proceeds by project category.</p> <p>The Republic of Italy provides a qualitative and quantitative analysis of the environmental benefits of the projects categories, in line with best market practice. The Issuer confirmed a look-back period of three years and follows the exclusion criteria defined</p>	<p>✓ <i>(with one exception: the project fiscal incentives to improve building efficiency, called “Ecobonus”)</i></p>

<sup>4</sup> With regard to the category Energy 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”. The Issuer has reported the environmental benefits that the financed “Ecobonus” projects have achieved.

	<p>for harmful projects categories, in line with best market practice.</p>	
<p><b>2. Process for Project Evaluation and Selection</b></p>	<p>The Republic of Italy confirms to follow the Process for Project Evaluation and Selection description provided by its Framework for the Issuance of Sovereign Green Bonds. The report is in line with the initial commitments set in the Republic of Italy’s Green Bond Framework: they followed the process to determine whether projects fit within defined categories and identified and managed ESG risks associated with the project categories through an appropriate process.</p> <p>The Department of the Treasury (MEF) identified potential expenses based on an initial screening of budget data received from the General Accounting Department (MEF). To verify eligibility, bilateral interactions with relevant Ministries were carried out. A portfolio of eligible expenditures was finally shared with the Inter-ministerial Committee for information and review. The Committee was responsible for the monitoring and replacement (when needed).</p> <p>The Issuer clearly defines responsibilities in the process for project evaluation and selection and is transparent about it, which is in line with best market practice. Furthermore, the Issuer involves various stakeholders in this process, in line with best market practice.</p>	<p>✓</p>
<p><b>3. Management of Proceeds</b></p>	<p>The Republic of Italy confirms to follow the Process for Management of Proceeds description provided by its Framework for the Issuance of Sovereign Green Bonds. The report is in line with the initial commitments set in the Republic of Italy’s Green Bond Framework: the Republic of Italy tracked and identified the proceeds in an appropriate manner.</p> <p>The proceeds were transferred to a general Treasury Cash account kept by the MEF at the Bank of Italy and were tracked “virtually”.</p> <p>The Republic of Italy allocated the net proceeds to the selected expenditures within 24 months (allocation period). Expenditures no longer eligible would be</p>	<p>✓</p>

	<p>replaced by a new eligible expenditure within twelve months. But this did not occur in 2023.</p> <p>The proceeds collected are equal or less the amount allocated to eligible expenditures, with no exceptions.</p>	
<p><b>4. Reporting</b></p>	<p>The Republic of Italy’s BTP Green Allocation and Impact Report is coherent with the Reporting description provided by The Republic of Italy’s Framework for the Issuance of Sovereign Green Bonds. The report is in line with the initial commitments set in the Republic of Italy’s Framework for the Issuance of Sovereign Green Bonds. The sections “Allocation reporting” and “Impact Reporting” of the BTP Green Allocation and Impact Report comply with the pre-issuance commitment expressed in the Framework. The report is intended to be publicly available on the Issuer’s website.<sup>5</sup></p> <p>The Republic of Italy is reporting annually. The Issuer discloses the location and link of the report, in line with best market practice.</p> <p><i>Further analysis of this section is available in Part III of this report.</i></p>	<p style="text-align: center;"></p>
<p><b>5. Verification</b></p>	<p>The Republic of Italy’s Framework for the Issuance of Sovereign Green Bonds has received a Second Party Opinion (SPO).</p>	

<sup>5</sup> Italian Ministry of Economy and Finance, Department of the Treasury, URL: [https://www.dt.mef.gov.it/en/debito\\_pubblico/emissioni\\_titoli\\_di\\_stato\\_interni/comunicazioni\\_emissioni\\_btp\\_green/post\\_emissioni/](https://www.dt.mef.gov.it/en/debito_pubblico/emissioni_titoli_di_stato_interni/comunicazioni_emissioni_btp_green/post_emissioni/)

## PART II: ASSESSMENT AGAINST THE ICMA HFIR


Reporting is a core component of the Green Bond Principles and transparency is of particular value in communicating the expected and/or achieved impact of projects in the form of an annual reporting. Green bond Issuers are required to report on both the use of green bond proceeds, as well as the environmental impacts at least on an annual basis until full allocation or maturity of the bond. The Harmonised Framework for Impact Reporting (HFIR), updated June 2023, as administered by International Capital Market Association (ICMA) has been chosen as benchmark for this analysis as it represents the most widely adopted standard.

The table below evaluates The Republic of Italy’s BTP Green Allocation and Impact Report against ICMA’s HFIR.

CORE PRINCIPLES		
ICMA HFIR	BTP GREEN ALLOCATION AND IMPACT REPORT	ASSESSMENT
Reporting on an annual basis	The Republic of Italy has reported within one year from issuance and 100% of the proceeds have been allocated: 13,9 billion EUR have been allocated to eligible expenditures. The report will be available on the Republic of Italy’s website. <sup>6</sup>	✓
Illustrating the environmental impacts or outcomes	<p>The assessment and measurement of the impacts generated by the Republic of Italy’s Green Bond(s) covered the following areas:</p> <ul style="list-style-type: none"> <li>▪ number of users</li> <li>▪ quantities of electricity involved (kWh)</li> <li>▪ CO<sub>2</sub> avoided emissions</li> <li>▪ energy saving (GWh/y)</li> <li>▪ estimated increased use of rail for goods transportation</li> <li>▪ tons of CO<sub>2</sub>eq avoided per year</li> <li>▪ air pollutants (PM2.5, NMVOC, SO<sub>2</sub>, and NO<sub>x</sub>) avoided</li> <li>▪ monetization of minor total externalities</li> <li>▪ passenger traffic (millions of passenger-km)</li> </ul>	✓

<sup>6</sup> Italian Ministry of Economy and Finance, Department of the Treasury, [https://www.dt.mef.gov.it/en/debito\\_pubblico/emissioni\\_titoli\\_di\\_stato\\_interni/comunicazioni\\_emissioni\\_btp\\_green/post\\_emissioni/](https://www.dt.mef.gov.it/en/debito_pubblico/emissioni_titoli_di_stato_interni/comunicazioni_emissioni_btp_green/post_emissioni/)



	<ul style="list-style-type: none"> <li>▪ estimated future emissions avoided (tCO<sub>2</sub>eq)</li> <li>▪ future air pollutants (PM<sub>2.5</sub>, NO<sub>x</sub>, NMVOC, SO<sub>2</sub>) reduced (tons/year)</li> <li>▪ decrease in road traffic (million of vehicle-km/ year)</li> <li>▪ scrap materials management (m<sup>3</sup> and % of material reused)</li> <li>▪ recycling rate (measured as % recycled)</li> <li>▪ number of waste treatment plants per type</li> <li>▪ number of sites surveyed for the status of contamination</li> <li>▪ catchment area efficiency</li> <li>▪ number of urban agglomerations without sewage service and purification service which could be mitigated</li> <li>▪ % protection coverage of key biodiversity area surveyed</li> <li>▪ number of national parks and regional parks, and the respective area (million hectares) and % of the territory</li>   <li>▪ number of protected marine areas (EUAP) and submerged parks</li> <li>▪ research activity for environmental protection: scenario projections of CO<sub>2</sub>eq emissions avoided</li> <li>▪ qualitative descriptions of the research projects</li> </ul>	
<p>ESG Risk Management</p>	<p>The Issuer has a system in place to identify and manage ESG risks connected to the projects financed. The Republic of Italy assesses adherence to the EU Taxonomy to all expenditures, including the Do No Significant Harm (DNSH) principle for specific project.</p> <p>Moreover, for specific projects, the Issuer performs an environmental impact analysis (for</p>	<p style="text-align: center;"></p>

	example for investments in railway infrastructure and HS/HC lines.	
Allocation of proceeds - Transparency on the currency	The Issuer has reported all its green bond-related cash flows in one currency, EUR.	✓

**RECOMMENDATIONS**

ICMA HFIR	BTP GREEN ALLOCATION AND IMPACT REPORT	ASSESSMENT
Define and disclose period and process for Project Evaluation and Selection	<p>The entirety of proceeds has been allocated to eligible expenditures. The Issuer clarified that the allocation of proceeds was made selecting the disbursement trends in order to maintain a balance between categories.</p> <p>The Issuer followed a transparent process for selection and evaluation of Eligible Green Projects. Projects financed and/or refinanced through the Green Bond(s) issued under the 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.</p>	✓
Disclose total amount of proceeds allocated to eligible disbursements	A total of EUR 13.8 billion has been raised through the Issuer's Green Bond. 100% of the proceeds have been allocated to eligible expenditures.	✓
Formal internal process for the allocation of proceeds and to report on the allocation of proceeds	The Issuer followed a transparent process for the allocation of proceeds.	✓
Report at project category level	The BTP Green Allocation and Impact Report includes the total amount of proceeds allocated per eligible project category, type within	✓

	categories and per geographical breakdown (country).	
Describe the approach to impact reporting	The Issuer identifies the specific project type within categories and clearly defines, for each project type, the total project's allocated proceeds.	✓
Report the estimated lifetime results and/or project economic life (in years)	The Issuer does report on the average portfolio lifetime results or economic life (in years) for some of the projects.	✓
Ex-post verification of specific projects	The Issuer samples ex-post verification of Renewable Energy, Energy Efficiency and Protection of the environment and biological diversity projects and includes relevant methodologies, as well as results (such as tonnes of CO <sub>2</sub> avoided annually) in the reporting.	✓
Report on at least a limited number of sector specific core indicators	<p>The Republic of Italy reports on sector specific core indicators for most of the project types financed:</p> <ul style="list-style-type: none"> <li>▪ Renewable Electricity and Heat: quantities of electricity involved (kWh) and tons of CO<sub>2</sub> avoided emissions</li> <li>▪ Energy Efficiency: energy saving (GWh/y) and CO<sub>2</sub> avoided emissions</li> <li>▪ Transport: tons of CO<sub>2</sub>eq avoided per year, air pollutants (PM2.5, NMVOC, SO<sub>2</sub>, and NO<sub>x</sub>) avoided and passenger traffic (millions of passenger-km), decrease in road traffic (million of vehicle-km/year)</li> <li>▪ Protection of the Environment and Biological Diversity: scenario projections of CO<sub>2</sub>eq emissions avoided</li> </ul>	✓
If there is no single commonly-used standard, Issuers may follow and disclose their	The Issuer elaborated on its own methodologies to calculate or estimate the impacts. The calculations are transparently disclosed in the BTP Green Allocation and Impact Report.	✓

<p>own calculation methodologies</p>	<p>For renewable energy and heat, the_CO<sub>2</sub> avoided emissions were calculated in terms of the product of electricity generated from renewable sources by the average annual emission factor from fossil sources using the Co2mpare Evolution model developed by ENEA.</p> <p>For transport, the tonnes of CO<sub>2</sub>eq avoided per year were determined by assuming a projection of traffic levels during 2022-2023 and calculating the emissions using the unitary rail-road differential of the average emission factors per tonne-km.</p> <p>For railway infrastructures and HS-HC lines: the estimated future emissions avoided (tCO<sub>2</sub>eq) were calculated as the difference between the climate-changing emissions avoided (deriving from the reduction of road, air, and ship transport) and the climate-changing emissions generated by the increase in train circulation, and future air pollutants (PM<sub>2.5</sub>, NO<sub>x</sub>, NMVOC, SO<sub>2</sub>) reduced (tons/year) (contribution deriving from the reduction in the circulation of vehicles on the road (cars, heavy vehicles, and buses).</p>	
<p>Disclosure on the conversion approach (if applicable)</p>	<p>Where needed, the Issuer uses standard conversion factors and includes appropriate disclosure of the conversion approach in the report. These factors are taken from an Italian nation-wide database by the Italian Institute for Environmental Protection and Research (ISPRA).</p>	<p>✓</p>
<p>Projects with partial eligibility</p>	<p>The Issuer discloses that they accept partial eligibility of projects, more specifically for the project 'Ecobonus'. 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.</p>	<p>✓</p>

<p>When the expected impacts of different project components may not be reported separately, Issuers may use (and disclose) the attribution approach</p>	<p>The impact of the Republic of Italy's projects is reported separately per category and subcategory.</p>	<p>-</p>
--	--	----------

OPINION

*The Republic of Italy follows the Harmonised Framework for Impact Reporting (HFIR), updated June 2023, as administered by the International Capital Market Association (ICMA)'s core principles and key recommendations. The Issuer provides transparency on the level of expected reporting as well as on the frequency, aligned with best practices. The Republic of Italy has reported within the next fiscal year after issuance, illustrated the environmental impacts, and provided transparency on ESG risk management and transparency on the currency used.*

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

### Use of Proceeds Allocation

Use of Proceeds allocation reporting is key to putting the impacts into perspective with the number of investments allocated to the respective Use of Proceeds' categories.

The Use of Proceeds allocation reporting occurred within one year from the issuance, after the full allocation of the proceeds.

This is the third year of allocation reporting and 100% of the proceeds were allocated in 2023. In 2022 the proceeds of BTP Green 2035 were 100% allocated, later, it was reopened one time in November 2022, with a tranche of 2 billion, and two more times in 2023, in March and October, with 2.4 and 1.5 billion respectively. In April 2023, the Republic of Italy issued a new BTP Green with maturity on October 30, 2031. The Use of Proceeds allocation reporting occurred within the regular annual cycle from the issuance.

Italy MEF performed an analysis, jointly with Cassa Depositi e Prestiti S.p.A., of their financed projects and the contribution to the EU Taxonomy's objectives, verifying the application of the EU Taxonomy Technical Screening Criteria and Do Not Significant Harm to the projects.

The assessment was conducted using the most recent version (November 21, 2023) of Taxonomy Compass<sup>7</sup> released by the European Commission, which covers all six objectives of the EU Taxonomy Regulation. The Green Allocation and Impact report also provides an example of the analysis of the railway infrastructure and HS/HC lines.<sup>8</sup>

### Proceeds allocated to eligible projects/assets

The proceeds' allocation is broken down by the project category level and type of project. The Issuer has provided details about the type of projects included in the portfolio. The project categories eligible are Renewable Electricity and Heat, Energy Efficiency, Transport, Pollution Prevention and Control and Circular Economy, Protection of the Environment and Biological Diversity and Research. The proceeds are allocated to public agencies, public and private companies, local authorities, education and research institutes, and households.

The report provides information about projects that were removed from the allocation register, due to the risk of double counting for projects fed with resources from the EU, or critics regarding monitoring and reporting.

The allocation report section of the BTP Green Allocation and Impact Report of The Republic of Italy aligns with best-market practices by providing information on:

- The number of projects (re-)financed

<sup>7</sup> EU Taxonomy Compass. URL: <https://ec.europa.eu/sustainable-finance-taxonomy/taxonomy-compass>

<sup>8</sup> ISS-Corporate has not reviewed or assessed this information and methodology used, and thus cannot comment on the alignment of the financed projects with EU Taxonomy.

- The total amount of proceeds in euro thousands (divided per project category, project type, expenditure year)
- Description of the projects (re)financed

### Impact Reporting Indicators

The table below presents an independent assessment of the Issuer’s report and disclosure on the output, outcome, and/or impact of projects/assets using impact indicators.

ELEMENT	ASSESSMENT
<p><b>Relevance</b></p>	<p>The impact indicators chosen by the Issuer for these bonds are the following:</p> <ul style="list-style-type: none"> <li>▪ <u>Renewable Electricity and Heat</u> – Fiscal incentives focused on the development of renewable and other low-carbon energies: number of users and quantities of electricity involved (kWh), and CO<sub>2</sub> avoided emissions.</li> <li>▪ <u>Energy Efficiency</u> – Fiscal incentives to improve building efficiency: CO<sub>2</sub> avoided emissions (tCO<sub>2</sub>/mln) and energy saving (GWh/y).</li> <li>▪ <u>Transport</u>: Tonnes of CO<sub>2</sub>eq avoided per year, air pollutants (PM<sub>2.5</sub>, NMVOCs, SO<sub>2</sub>, and NO<sub>x</sub>) avoided, and monetization of minor total externalities.</li> </ul> <p>Railway infrastructures and AV-AC lines: estimated future emissions avoided (tCO<sub>2</sub>eq), and future air pollutants (PM<sub>2.5</sub>, NO<sub>x</sub>, NMVOC, SO<sub>2</sub>) reduced (tons/year), decrease in road traffic (million of vehicle-km/ year), scrap materials management (m<sup>3</sup> and % of material reused).</p> <ul style="list-style-type: none"> <li>▪ <u>Pollution Prevention and Control, and Circular Economy</u>: CO<sub>2</sub> avoided emissions (tCO<sub>2</sub>/mln).</li> <li>▪ <u>Environmental Protection and Biological Diversity</u>: CO<sub>2</sub> avoided emissions (tCO<sub>2</sub>/mln); annual energy produced (kWh/year).</li> <li>▪ <u>Research</u>: number of projects financed; qualitative descriptions of the projects, CO<sub>2</sub>eq avoided per year.</li> </ul> <p>These indicators are qualitative, quantitative, and material to the Use of Proceeds categories financed through the bonds and in line with the Suggested Impact Reporting metrics for Renewable Energy, Energy Efficiency, and Transport, by the ICMA Harmonized Framework for Impact Report. This aligns with best market practices. For the project category Research, the Republic of Italy has chosen alternative indicators to the ICMA Harmonized Framework for Impact Report.</p>



### Data sourcing and methodologies of quantitative assessment

For the impact indicators, the Republic of Italy uses specific methodologies and sourcing data from the Interministerial Committee.<sup>9</sup> This Committee is formed by the Representatives of: Presidency of the Italian Council of Ministers; Ministry of Economy and Finance; Ministry of Infrastructure and Transport; Ministry of Environment and Energy Security; Ministry of Enterprise and Made in Italy; Ministry of Agriculture, Food Sovereignty and Forests; Ministry of University and Research; Ministry of Defense, Ministry of Interior, and Ministry of Culture. For data collection and data processing, the Ministries participating in the Committee collaborate with the structure of the Treasury Department at the Ministry of Economy and Finance.

The data collection is carried out by the Institute for Environmental Protection and Research (ISPRA), Agencies from the National System for the Protection of the Environment (ENEA), National Railway Network (RFI).

Renewable energy and heat: CO<sub>2</sub> avoided emissions (The emissions avoided are calculated in terms of the product of electricity generated from renewable sources by the average annual emission factor from fossil sources).

Energy efficiency: CO<sub>2</sub> avoided emissions (CO<sub>2</sub>eq avoided during the period 2020-2023 which was when the measure was financed with the green bonds, to estimate the indicator data collected and published by ISPRA was used).

Transport: Tonnes of CO<sub>2</sub>eq avoided per year (assuming a projection of traffic levels during 2022-2023 and calculating the emissions using the unitary rail-road differential of the average emission factors per tonne-km).

Railway infrastructures and HS-HC lines: estimated future emissions avoided (tCO<sub>2</sub>eq) calculated as the difference between the climate-changing emissions avoided (deriving from the reduction of road, air and ship transport) and the climate-changing emissions generated by the increase in train circulation, and future air pollutants (PM<sub>2.5</sub>, NO<sub>x</sub>, NMVOC, SO<sub>2</sub>) reduced (tons/year) (contribution deriving from the reduction in the circulation of vehicles on the road (cars, heavy vehicles, and buses).


Pollution Prevention and Control, and Circular Economy: Tonnes of CO<sub>2</sub> avoided emissions per year.

<sup>9</sup> Interministerial Committee, [BTP Green Inter-Ministerial Committee - MEF Department of Treasury](#)

	<p><u>Protection of the Environment and Biological Diversity</u>: Tonnes of CO<sub>2</sub> avoided emissions per year.</p> <p><u>Research</u>: positive impact of research and development programs in term of reduction of CO<sub>2</sub> emissions and other climate-altering gases; qualitative descriptions of the projects.</p>
<b>Baseline selection</b>	<p>Some impact indicators are compared to baseline data from the processing of ENEA Report, reports from the Ministry, and ISPRA report. For the assessment of CO<sub>2</sub> reduction, for the categories Energy Efficiency, Transport, Pollution Prevention, and Protection of the Environment and Biological Diversity, MEF used the tool Co2mpare Evolution model, developed by ENEA.<sup>10</sup> For the category Research, MEF used a general economic equilibrium model developed by Oxford Economics. In this sense, the report is in line with the suggestion of the ICMA Harmonized Framework for Impact Reporting.</p>
<b>Scale and granularity</b>	<p>The impact data is presented at the Use of Proceed category level for the indicators.</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 BTP Green Allocation and Impact Report, the impact indicator(s) adopted by the Republic of Italy for its Sovereign Green Bonds can be mapped to the following SDGs, according to ISS ESG SDG Solutions (SDGA), a proprietary methodology designed to assess the impact of an Issuer’s product or services on the UN SDGs.

IMPACT INDICATORS	SUSTAINABLE DEVELOPMENT GOALS
<p><b>Renewable electricity and heat:</b></p> <p>Fiscal incentives focused on the development of renewable and other low-carbon energies:</p> <ul style="list-style-type: none"> <li>▪ number of users</li> <li>▪ quantities of electricity involved (KWh)</li> </ul>	

<sup>10</sup> National Agency for new technologies, energy and sustainable economic development. URL: [Home \(enea.it\)](https://www.enea.it)

- CO<sub>2</sub> avoided emissions (tCO<sub>2</sub>/mln)

**Energy efficiency:**

Fiscal incentives to improve building efficiency:

- energy saving (GWh/y)
- CO<sub>2</sub> avoided emissions (tCO<sub>2</sub>/mln)

**Transport:** CO<sub>2</sub> avoided emissions (tCO<sub>2</sub>/mln)

**Transport:** Air pollutants (PM2.5, NMVOC, SO<sub>2</sub>, and NO<sub>x</sub>) avoided

**Transport:** Scrap materials management (m<sup>3</sup> and % of material reused)

**Pollution prevention and control, and circular economy:** CO<sub>2</sub> avoided emissions (tCO<sub>2</sub>/mln)

**Pollution prevention and control, and circular economy:** number of interventions planned related to integrated sewerage and purification systems

**Pollution prevention and control, and circular economy:** number of interventions to reclaimed environmental sites included in the Sites of National Interest (S.I.N.)

**Environmental Protection and Biological Diversity:**

- CO<sub>2</sub> avoided emissions (tCO<sub>2</sub>/mln)
- Annual energy produced (kWh/year).

**Environmental Protection and Biological Diversity:** number of interventions in water infrastructure



**Environmental Protection and Biological Diversity:**

- number of national parks
- marine protected areas
- submerged parks



**Research:** Tonnes of CO<sub>2</sub>e avoided per year



**Research:** Number of projects financed



OPINION

*The allocation of the bonds' proceeds has been disclosed, with a detailed breakdown across different eligible project categories as proposed in the Framework and the BTP Green Allocation and Impact Report has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculations methodologies and granularity reflecting best market practices. Besides, the impact indicators used align with best market practices using ICMA's recommended metrics, in the HFIR.*

## DISCLAIMER

1. Validity of the External Review ("External Review"): Valid as long as no changes are undertaken by the Issuer to its BTP Green Allocation and Impact Report (as of May 28, 2024).
2. ISS Corporate Solutions, Inc. ("ISS-Corporate"), a wholly-owned subsidiary of Institutional Shareholder Services Inc. ("ISS"), sells, prepares, and issues External Reviews, on the basis of ISS-Corporate's proprietary methodology. In doing so, ISS-Corporate adheres to standardized procedures designed to ensure consistent quality.
3. External Reviews are based on data provided to ISS-Corporate by the contracting party and may change in the future, depending in part on the development of market benchmarks and ISS-Corporate's methodology. ISS-Corporate does not warrant that the information presented in this External Review is complete, accurate or up to date. ISS-Corporate will not have any liability in connection with the use of these External Reviews, or any information provided therein. If the External review is provided in English and other languages, in case of conflicts, the English version shall prevail.
4. Statements of opinion and value judgments given by ISS-Corporate are not investment recommendations and do not in any way constitute a recommendation for the purchase or sale of any financial instrument or asset. In particular, the External Review is not an assessment of the economic profitability and creditworthiness of a financial instrument, but refers exclusively to social and environmental criteria.
5. This External Review, certain images, text, and graphics contained therein, and the layout and company logo of ISS-Corporate, are the property of ISS-Corporate (or its licensors) and are protected under copyright and trademark law. Any use of such ISS-Corporate property requires the express prior written consent of ISS-Corporate. 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.

© 2024 | ISS Corporate Solutions, Inc.

## ANNEX 1: Methodology

### Review of the post-issuance Reports

The ISS-Corporate Report Review provides an assessment of labelled transactions reporting against international standards using ISS-Corporate proprietary [methodology](#).

### 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, the extent to which the Issuers reporting and project categories contribute to related SDGs is identified.

## ANNEX 2: Quality management processes

### ISSUER'S RESPONSIBILITY

Issuer's responsibility was to provide information and documentation on:

- BTP Green Allocation and Impact Report
- Framework for the Issuance of Sovereign Green Bonds
- Proceeds Allocation
- Reporting Impact Indicators
- Methodologies, and assumptions for data gathering and calculation
- ESG Risk Management

### ISS-CORPORATE'S VERIFICATION PROCESS

Since 2014, ISS Group, of which ISS-Corporate is part, has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

This independent Report Review has been conducted by following the ICMA Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews, and its methodology, considering, when relevant, the ISAE 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information.

The engagement with Issuer Name took place in May and June 2024.

### ISS-CORPORATE'S BUSINESS PRACTICES

ISS-Corporate has conducted this verification in strict compliance with the ISS Group Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

## About this Report Review

Companies turn to ISS-Corporate for expertise in designing and managing governance, compensation, sustainability and cyber risk programs that align with company goals, reduce risk, and manage the needs of a diverse shareholder base by delivering best-in-class data, tools, and advisory services.

We assess the alignment of the Issuer's report with external principles (e.g., ICMA Green Bond Principles, Social Bond Principles and Sustainable Bond Guidelines), analyze the alignment of the Issuer's Report against the commitments in the respective Framework, and analyze the disclosure of proceeds allocation, the data source, and calculation methodologies of the reporting indicators against best market practices. Following these guidelines, we draw up an independent Report Review so investors are as well as informed as possible about the proceeds allocation and the impact of the sustainability finance instrument(s).

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

For information on Report Review services, contact: [SPOsales@isscorporatesolutions.com](mailto:SPOsales@isscorporatesolutions.com)

### Project team

#### Project lead

Claudia Muñoz Carmona  
Associate  
Sustainable Finance Research

#### Project support

Anika Leufen  
Associate  
Sustainable Finance Research

#### Project supervision

Marie-Bénédicte Beaudoin  
Associate Director  
Head of Sustainable Finance  
Research