Casos de éxito de implementación de políticas de Green Financing en Italia

Conferencia sobre finanzas verdes en Perú

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1 Overview

- The issue of the first Italian Green Bonds took place on March 2, 2021 for a total of € 8.5 billion;
- Deadline April 2045;
- With a yield 12 basis points higher than the BTP maturing in March 2041;
- For the first issue, eligible "green" expenses were selected for an amount of approximately € 10.5 billion (compared to the 8.5 billion of bonds issued there is therefore a "buffer" of approximately € 2 billion).

A full endorsement for the climate achievements

The Republic of Italy is fully committed at all levels for achieving the goals set by the European Commission and in Paris Agreement

United Nations

- **1994:** Adoption of the Framework Convention on Climate Change
- **1997:** Kyoto Protocol
- **2015:** 2030 Agenda for Sustainable Development
- **2015:** Paris Agreement

European Commission

- **2013:** EU Strategy on Adaptation to Climate Change
- **2015:** Energy Union Strategy
- **2019:** European Green Deal
- **2020:** EU Climate ambition step-up

2030 & 2050 Targets

Republic of Italy

- **1994:** Implementation of the Convention on Biological DIversity
- **2011-2020:** Strategic Plan for Biodiversity
- **2017:** National Sustainable Development Strategy
- **2019:** Integrated National Energy and Climate Plan
- **2021:** Inaugural Green BTP issuance

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Environmental objectives through a Green BTP Issuance

Italy will finance public expenditures **in line with the environmental objectives of the EU Sustainable Finance Taxonomy**:

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

Use of Proceeds from the Green BTP will finance expenses related to the following 2030 UN SDGs:

The Green Bond Framework

- The Green Bond Framework (GBF) defines the sustainability strategy of the Republic of Italy aligned with the EU environmental objectives as well as the core mechanisms of each Green BTP issuance
- EUR 34.8bn of Eligible Green Expenditures have been identified in the 2018-2021 Italian State budget and include tax expenses, capital expenses, current expenses and transfers coming from the following six sectors: Renewable electricity and heat, Energy efficiency, Transport, Pollution prevention and control and circular economy, Protection of the environment and biological diversity and Research

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Second Party Opinion

- A second Party Opinion of the Green Bond Framework has been received by Vigeo Eiris validating its consistency with:
  - The environmental objectives and the overall sustainability strategy of the Republic of Italy
  - The quantification of climate and environmental benefits
  - The compliance of the eligible expenditures with ICMA's Green Bond Principles and the draft EU Green Bond Standards, currently under development by the European Commission

Expected impact of eligible expenses on Italy environmental objectives

- According to **Vigeo Eiris** the most relevant contribution to Italian sustainability strategy with the higher expected impact come from the following projects within the eligible categories:
  - Best technology available in renewable electricity sector allowing to smoothly decarbonize energy mix
  - Massive investment to improve energy consumption (two notches efficiency scale upgrade) by refurbishing private/public buildings
  - Massive investments to reduce reliance from oil in local transport sector, intermodal, freight and port infrastructures
  - "Advanced" is the expected impact coming from the policies implemented to finance biodiversity and ecosystem protection
- The above higher expected impact projects refer to areas in which Italy has more room for improvement

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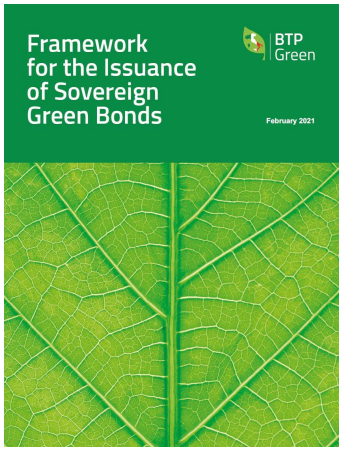
Green Bond Framework Overview



Overview of the Green Bond Framework

The Green Bond Principles

The Republic of Italy's Framework is aligned with the "Green Bonds Principles" issued by the International Capital Market Association (ICMA) in June 2018 and, as much as possible, with the draft EU Green Bond Standard

1. Use of proceeds
2. Project Evaluation and Selection
3. Management of proceeds
4. Reporting

Second Party Opinion

The Framework received an **external review from Vigeo Eiris**. This review constitutes an *ex ante* validation of the consistency of the approach used in the Framework with the environmental objectives of the Republic of Italy, as well as conformance of the Framework with ICMA's Green Bond Principles

External review

Prior to publication, the 'Italian Sovereign Green Bond Allocation and Impact Report' will undergo **an independent and external verification**

Through the issue of Sovereign Green Bonds (SGBs), Italy will finance public expenditures intended to contribute to the achievement of one or more of the environmental objectives of the EU Sustainable Finance Taxonomy

The use of proceeds will help Italy support the 2030 SDGs, by contributing to:

- Goal 6: Clean Water and Sanitation
- Goal 7: Affordable and Clean Energy
- Goal 11: Sustainable Cities and Communities
- Goal 12: Responsible Consumption and Production
- Goal 13: Climate Action
- Goal 14: Life below Water
- Goal 15: Life on Land

Use of Proceeds (1/3)

- **Eligible expenses:** tax expenses, capital expenditures, current expenses and transfers in favour of subjects external or internal to the public administration. They must be financed by general taxation and contribute to the achievement of the environmental objectives. The public SGBs' proceeds can also be used to finance State-funded expenditures
- For each issuance under the Framework, eligible expenses will be selected from a period **between three years before** and **one year after** the bond issuance

Renewable electricity and heat	▪ 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 gCO_2e/kWh threshold
	  ▪ Hydrogen will be produced by the electrolysis with average carbon intensity of the electricity produced that is used for hydrogen manufacturing that is at or below 100 gCO_2e/kWh
	  ✓ This category excludes high carbon stock land, high biodiversity value and conversion from forest and arable land

Energy efficiency	▪ Expenditures that trigger at least a two levels improvement on the Italian energy efficiency scale ▪ Smart grids to manage a higher renewable energy production will be considered and SF6 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 and the transmission and distribution of electricity
Transport	▪ Railway Transport that comply with the different thresholds for diesel passenger trains and freight trains ▪ Road-related public transportation, following the EU Directive on Alternative Fuels Infrastructure (DAFI) ▪ Maritime port related infrastructures facilitating emissions reduction in shipping (e.g., "cold ironing")

Use of Proceeds (2/3)

Pollution prevention and control and circular economy	▪ Sustainable consumption and production modes and aimed at developing pollution monitoring and control systems ▪ Waste water management ✓ Incineration, landfill, waste-to-energy and desalination assets are excluded from this category
Protection of the environment and biological diversity	▪ Sustainable land use and protection as well as protection and restoration of terrestrial and marine biodiversity and ecosystems ▪ Sustainable management of water resources ▪ Water collection and saving that comply with suitable thresholds

Research	▪ Research projects on:
	  ▪ 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 technology aimed at improving energy efficiency, weather forecast, meteorology and climatology, and also related to climate research centres and institutes

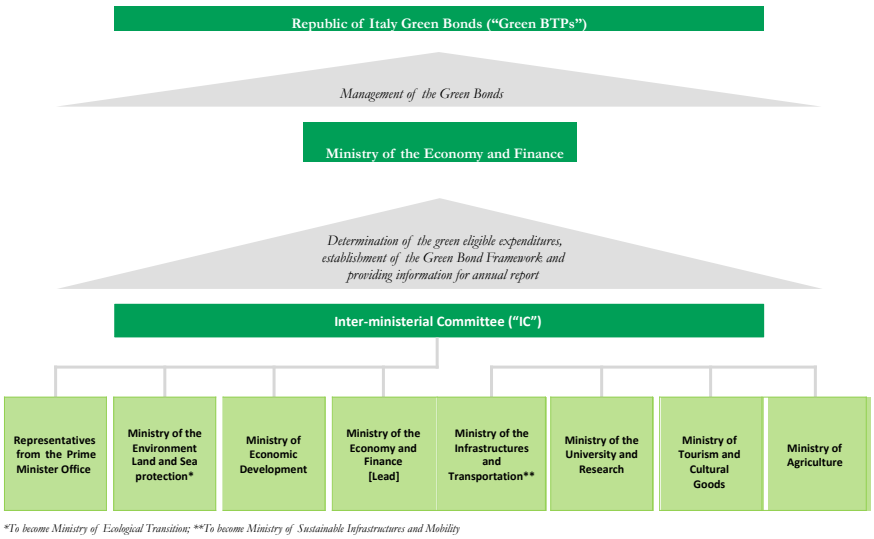
- **Exclusions**: expenses, or portions of expenses, for which the Italian State has dedicated forms of revenues or financing. As well as any expenditure mainly related to: exploration, manufacturing and transport of fossil fuels; nuclear power; energy plants with CO_2 emission level of more than 100g CO_2/kWh; manufacturing and production of alcoholic beverages; military contracts; gambling; arms manufacturing; manufacture and production of tobacco products; mining

Use of Proceeds (3/3)

- Through the issue of SGBs, Italy will finance public expenditures intended to contribute to the achievement of one or more of the environmental objectives of the EU Sustainable Finance Taxonomy.
- The Framework will be **reviewed on a regular basis**, including its alignment to updated versions of the Green Bond Principles, the EU Taxonomy for Sustainable Activities and, when it becomes available, the future EU Green Bond Standard.

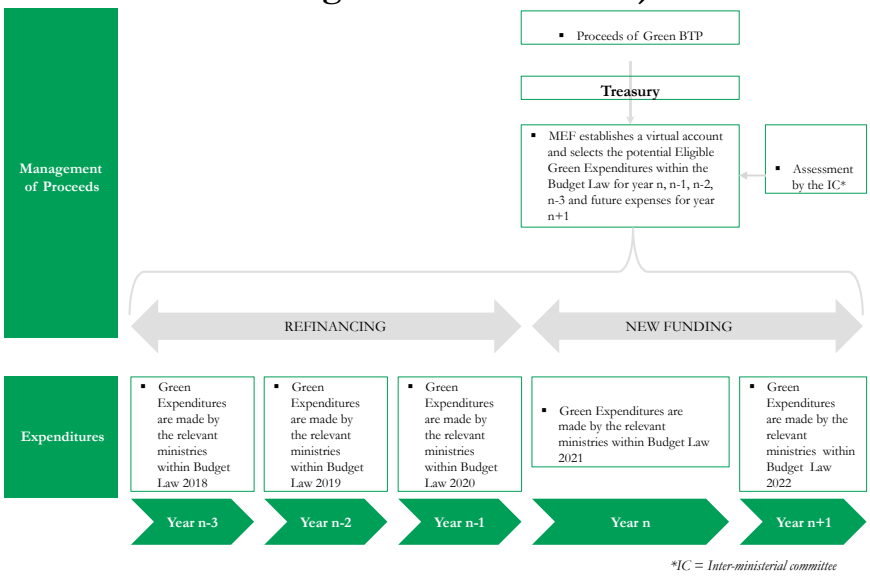
Green sectors / EU Environmental Objectives	Renewable electricity and heat	Energy efficiency	Transport	Pollution prevention and control and circular economy	Protection of the environment and biological diversity	Research
Climate change mitigation	✔	✔	✔			✔
Climate change adaptation					✔	✔
Sustainable use and protection of water and marine resources;				✔	✔	✔
Transition to a circular economy				✔		✔
Pollution prevention and control			✔	✔		✔
Protection, restoration and improvement of biodiversity, ecosystems and ecosystem services.				✔	✔	✔

Governance of the Green BTP Program



*To become Ministry of Ecological Transition; **To become Ministry of Sustainable Infrastructures and Mobility

Management of Proceeds)



Reporting

- A report, entitled the 'Italian Sovereign Green Bond Allocation and Impact Report', will be published **annually**. The report will firstly show the allocation of proceeds arising from the SGB issued in the previous year, as well as in the **previous years,** as well as in the **years prior to the last reporting year**

Italian Sovereign Green Bond Allocation and Impact Report

1. Allocation reporting

It will include:
- Information on the progress of the disbursement of the proceeds, at least at the sector level,
- A summary sheet of the progress of the implementation of the financed interventions.

Prior to publication, the report will undergo an independent and **external verification**

2. Impact reporting

The same report will provide information on the environmental impact of green expenditures. The information will be based on data and analysis provided by State administrations. The report will also refer to the environmental objectives of regulation EU 852(2020) and it will provide information on contribution of each project to the achievement of objectives

Indicative impact reporting:

1. Renewable electricity and heat	▪ GHG emissions avoided (tCO_2e) ▪ Power capacity installed (MW) ▪ Annual power output (MWh)
2. Energy efficiency	▪ GHG emissions avoided (tCO_2e) ▪ Expected energy savings (MWh/year)
3. Transport	▪ Expected energy savings (MWh/year) ▪ GHG emissions avoided ($tCO2e_2$ per passenger/tonne-km) ▪ Number of electrical vehicles financed annually ▪ Kilometres of public transport constructed or renovated
4. Pollution prevention and control and circular economy	▪ Volume of treated water (m3/year) ▪ Volume of treated waste (m3/year) ▪ Amount of recyclable goods produced (tons) ▪ Amount of wastewater for reuse (%) ▪ Amount of sludge used (tons/year) (%): t/year reused sludge / t/year produced ▪ Restoration of reservoir storage capacity (m3)
5. Protection of the environment and biological diversity	▪ Hectares of sustainable agriculture ▪ Hectares of sustainable forest ▪ Number of Natura 2000 sites ▪ Hectares of protected areas restored / maintained
6. Research	▪ Number of funded projects

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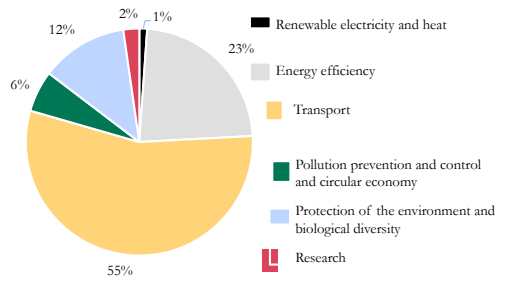
Green Expenditures

Eligible Green Expenditures & Investments: an indicative breakdown

Breakdown by Green Sector



- The domination of transport related expenditures is consistent with the planned much needed reduction of GHG emissions and air pollution and in line with other European Countries
- Italy's commitment to address environmental priorities and climate change is proved by the growing trend of sustainable expenditures over time

Breakdown by year (EUR mn)

Green Sector	2018	2019	2020	2021	2018-2021
Renewable electricity and heat	60	63	64	202	**389**
Energy efficiency	1,659	2,007	2,040	2,326	**8,032**
Transport	4,890	5,146	4,839	4,413	**19,288**
Pollution prevention and control and circular economy	199	157	499	1,200	**2,055**
Protection of the environment and biological diversity	667	1,225	1,291	1,136	**4,319**
Research	223	154	224	189	**791**
Total	**7,699**	**8,751**	**8,958**	**9,466**	**34,873**

Eligible Green Expenditures & Investments for 2018-2021

	Green Sector	Examples of Eligible Green Expenditures	Amount (2018 - 2021)
1	**Renewable electricity and heat**	▪ Expenses for supporting the production and distribution of energy from renewable sources	EUR 0.38 bn
2	**Energy efficiency**	▪ Tax allowances for energy efficiency measures (real estate refurbishment bringing at least two energy classes level improvement)	EUR 8.03 bn
3	**Transport**	▪ Railways and road public transportation ▪ Incentive for acquisition of hybrid or electric cars ▪ Shore-to-ship power (SSP) port infrastructure to develop the cold ironing process ▪ Bicycle lanes	EUR 19.28 bn
4	**Pollution prevention and control and circular economy**	▪ Expenses for supporting water purification, sanitation, recycling, treatment. ▪ Expenses for collecting, treating and recycling waste ▪ Expenses for reducing packaging or for reducing the related environmental impact, recycling goods and raw materials ▪ Tax credit to incentivize an increased use of recyclable packaging ▪ Tax credit for enterprises buying recycled and reused products	EUR 2.05 bn
5	**Protection of the environment and biological diversity**	▪ Expenses for reforestation or protection interventions of forest and forestry, wildlife and fish heritage ▪ Expenses for the conservation and restoration of threatened marine, river and swamp ecosystems ▪ Expenses for protection interventions of the environmental heritage against fire, drought, floods ▪ Payments for ecosystem services ▪ Expenses for water collection and for supporting water-saving interventions ▪ Expenses for monitoring water quality ▪ Preservation of parks, protected areas and reserves	EUR 4.31 bn
6	**Research**	▪ Research projects on policy measures to prompt the achievement of the UN SDG targets ▪ Research projects on innovative production processes to reduce water and carbon footprint ▪ Research projects on new technologies that help the preservation and enhancement of natural capital, biodiversity, and ecosystems ▪ Research projects on new technologies aimed at improving energy efficiency, weather forecast, meteorology and climatology	EUR 0.79 bn
	Total		**EUR 34.8 bn**

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Selected Cases of Eligible Expenditures

Case Study 1

Venetian Lagoon Protection and MOSE System

Project	▪ Venetian Lagoon Protection and MOSE System
Objective	▪ Implementation of measures to safeguard Venice and its lagoon (UNESCO site) ▪ Environmental defence (i.e. protection of lagoon habitats and biodiversity; securing of polluted sites)
Output	▪ The MOSE barriers are being constructed at the three lagoon inlets of Lido, Malamocco and Chioggia ▪ Local defence from floods of natural habitats and urban centers ▪ Defence from sea storm through the reinforcement of the littorals ▪ Restoration and protection measures ranging from actual reconstruction to morphological restoration and experiments involving techniques able to accelerate the restoration of diversified habitats ▪ Isolating the polluted land to block the dispersion of contaminants from the canal shores in Porto Marghera and from dumps used in the past to dispose of industrial waste. ▪ Creation of "*phytobiopurification*" areas – special wetlands between the mainland and lagoon able to filter the water coming from the mainland and reduce the content of pollutant
Achievements	▪ On October 2020, the MOSE was activated for the first time in the occurrence of a high tide event, successfully preventing some of the low-lying parts of Venice from being flooded ▪ The Eligible Expenditures for this project amount to approx. EUR 300mn for the 2018-2021 period

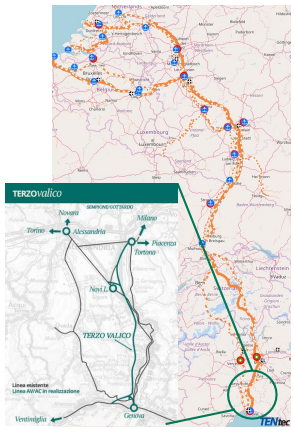
Green Sector:
Protection of the environment and biological diversity

https://www.mosevenezia.eu/?lang=en
http://sistemavenezia.regione.veneto.it/contenuti/salvaguardia-di-venezia

Case Study 2

New high speed line Tortona-Genova "Terzo valico"

Project	▪ New rail high speed line between Tortona and Genova
Objective	▪ Increase rail track speed and capacity ▪ Increase the share of rail usage
Output	▪ The track is a core part of the Rhine-Alpine Corridor (TEN-T) that constitutes one of the busiest freight routes in Europe ▪ The total length is of 53 km (of which 36 km in the tunnel and 12km of interconnections) ▪ The rail tracks are prepared for train speeds up to 250 km/h ▪ The new line will allow "rolling highway" and High Cube containers
Achievements	▪ The Eligible Expenditures for this project amount to approx. EUR 500mn for the 2018-2021 period ▪ The project is expected to be completed and activated in 2023



Green Sector:
Transport

https://www.terzovalico.it/progetto/il-tracciato.html
https://www.italiadecide.it/content/italiadecide/it/opere-strategiche/terzo-valico.html
https://ec.europa.eu/transport/themes/infrastructure/rhine-alpine_en

Case Study 3

Tax credit for increasing energy efficiency of buildings

Project

- Energy efficiency of Italian buildings

Objective

- Increase the buildings' energy efficiency
- Reduction of GHG emissions

Output

- The subsidy, granted for the expenses incurred for refurbishment of existing buildings, aims at accelerating the energy efficiency
- The tax credit benefit was proved very effective and further improved in the latest years
- **Some of the new tax credits initiatives (among which the introduction of 110% tax credit on the expenditures that trigger at least a two levels improvement on the Italian energy efficiency scale) will be financed through the NGEU Program and as such they will not be covered by Green BTP**

Achievements

- Tax credit for increasing the energy efficiency of buildings amount to over EUR 7.5bn for the 2018-2021 period
- 3,710 GWh/yr reduction for the 2017-2019 period under the "Ecobonus" [1]
- 1,550 GWh/yr reduction for the 2018-2019 period under the "Bonus Casa" [1]

Green Sector:
Energy efficiency

[1] https://www.efficienzaenergetica.enea.it/detrazioni-fiscali/ecobonus.html;
https://www.efficienzaenergetica.enea.it/pubblicazioni/rapporto-annuale-detrazioni-fiscali.html;
https://www.enea.it/it/seguici/events/rapportoape_2020/Rapporto-APE-2020_estratto.pdf

Case Study 4

National Parks and Natural Reserves

Project

- Preservation and Protection

Objective

- Increase protection of National Parks and Natural Reserves
- Preservation of Italian Protected Areas

Output

- Italy has 871 protected areas for a total of over 3mn/hectares on land and 2.85mn/hectares in the sea as well as 658km of coast
- 24 National Parks (for 1.5mn/hectares on land and 71k in the sea)
- 32 marine protected areas for 222k/hectares
- 2 Underwater Parks (near Naples) plus the Pelagos Sanctuary for Marine Mammals that covers an area of more than 8.7mn/hectares of the Mediterranean sea of Italy, France and the Principality of Monaco

Achievements

- The Eligible Expenditures for the preservation and protection of Natural Parks, Natural Reserves and Protected Areas amount to approx. EUR 360mn for the 2018-2021 period

Green Sector:
Protection of the environment and biological diversity

https://www.minambiente.it/aree-protette/mappa-parchi-nazionali;
https://www.minambiente.it/aree-protette/mappa-aree-marine-protette

Muchas gracias por su amable atención!

For additional information:
http://www.dt.mef.gov.it/en/debito_pubblico/btp_green_info/index.html