

SECOND PARTY OPINION

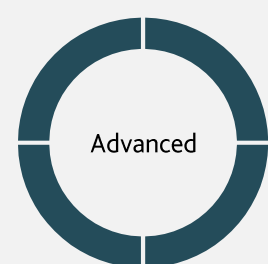
on the sustainability of The Kingdom of Belgium's Green OLO Framework

Moody's ESG Solutions considers that The Kingdom of Belgium 's Framework is aligned with the four core components of the ICMA's Green Bond Principles 2021 ("GBP").



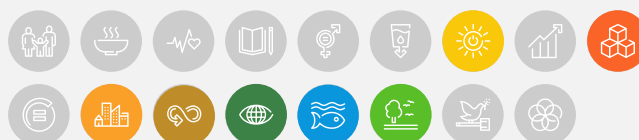
Framework

Contribution to Sustainability:



○ Advanced ○ Limited
○ Robust ○ Weak

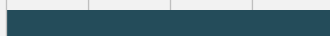
SDG Mapping



Subject to the provisions of this report, Moody's ESG Solutions considers that the criteria of 2 economic activities of 1 Eligible Category are defined in accordance with the EU Taxonomy Criteria (as defined in the Scope section of this report).

Weak Limited Robust Advanced

Expected impacts



ESG risks management



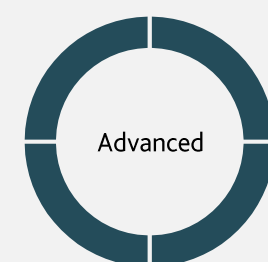
Characteristics of the Framework

Eligible Categories	⇒ Energy Efficiency (Including Green Buildings) ⇒ Clean Transportation ⇒ Renewable Energy ⇒ Circular Economy ⇒ Living Resources and Land Use
Project Locations	Belgium, except for Expenditures from BIO and FPS Foreign Affairs, Foreign Trade and Development Cooperation
Existence of Framework	Yes
Share of Refinancing	Commitment to disclose in the funding plan for the upcoming year's issuance
Look-back Period	24 months

Issuer

ESG Performance as of November 2021

Weak Limited Robust Advanced



○ Advanced ○ Limited
○ Robust ○ Weak

Environment



Social



Governance



Coherence

Coherent

Partially coherent

Not coherent

Moody's ESG Solutions considers that the contemplated Framework is coherent with The Kingdom of Belgium's strategic sustainability priorities and that it contributes to achieving the Issuer's sustainability commitments.

Key findings

Moody's ESG Solutions considers that The Kingdom of Belgium's Framework is aligned with the four core components of the GBP.

Use of Proceeds - aligned with the GBP and best practices identified by Moody's ESG Solutions

- The Eligible Categories are clearly defined. The Issuer has communicated the nature of the expenditures, the eligibility criteria and location of Eligible Green Expenditures for all categories.
- The Environmental Objectives are clearly defined, relevant and set in coherence with sustainability objectives defined in international standards for all Eligible Categories.
- The Expected Environmental Benefits are clear, relevant and measurable. They will be quantified for all Eligible Categories in the reporting.
- The Issuer has committed to transparently communicate publicly the estimated share of refinancing prior to each calendar year when the upcoming year's funding plan and estimated Green OLO issuance is announced. The look-back period for refinanced Eligible Categories will be equal to or less than 24 months from the issuance date, in line with good market practices.

Evaluation and Selection - aligned with the GBP and best practices identified by Moody's ESG Solutions

- The Process for Project Evaluation and Selection has been clearly defined and detailed by the Issuer. The process is well-structured in all the evaluation and selection steps (including the proposal, selection, validation and monitoring of Eligible Green Expenditures). The roles and responsibilities are clear and include relevant internal expertise. The process is publicly disclosed in the Framework.
- Eligibility criteria for project selection have been clearly defined by the Issuer including relevant exclusion criteria for all Eligible Categories.
- The process applied to identify and manage potentially material ESG risks associated with Eligible Green Expenditures is publicly disclosed in the Framework. The process is considered robust: it combines monitoring, identification and corrective measures for all Eligible Green Expenditures (see detailed analysis on pages 22 - 26).

Management of Proceeds - aligned with the GBP and best practices identified by Moody's ESG Solutions

- The Process for the Management and Allocation of Proceeds is clearly defined and detailed and is publicly available in the Framework.
- The allocation period will be 24 months or less.
- The net proceeds of the OLO will be placed in the General Treasury and tracked by the Issuer in an appropriate manner and attested to in a formal internal process.
- Information on the intended types of temporary placement for the balance of the unallocated net proceeds is publicly disclosed.
- For as long as the OLO is outstanding, the Issuer has committed to periodically adjust the balance of tracked net proceeds to match allocations to Eligible Categories.
- The Issuer has provided information on the procedure that will be applied in case of project divestment or postponement and has committed to reallocate, on a best-efforts basis, divested proceeds to projects that comply with the Framework within 24 months.

Reporting - aligned with the GBP

- The Issuer has committed to report on the Use of Proceeds on an annual basis, until full allocation and on a timely basis in case of material developments. The report will be publicly available on the Issuer's website.
- The Issuer has committed to include in the reports relevant information related to the allocation of the OLO proceeds and the expected sustainable benefits of the Eligible Categories. The Issuer has also committed to report on material developments and controversies related to the Eligible Green Expenditures.
- The reporting methodology and assumptions used to report on environmental benefits of the Eligible Categories will be publicly disclosed.
- An external auditor will verify the tracking and allocation of funds to Eligible Categories until full allocation and in case of material changes. The reporting on the environmental benefits of Eligible Categories will be verified internally by the Issuer.

Contact

Sustainable Finance Team | clientservices@moodys.com

SCOPE

Moody's ESG Solutions was commissioned to provide an independent Second Party Opinion ("SPO") on the sustainability credentials and management of the Green OLO¹ (the "Bonds", the "OLO") to be issued by The Kingdom of Belgium (the "Issuer") in compliance with the Green OLO Framework (the "Framework") created to govern their issuance(s).

Our opinion is established according to Moody's ESG Solutions' Environmental, Social and Governance ("ESG") exclusive assessment methodology and to the latest version of the voluntary guidelines of ICMA's Green Bond Principles ("GBP") - edited in June 2021.

Our opinion is built on the review of the following components:

- Framework: we assessed the Framework, including the coherence between the Framework and the Issuer's environmental commitments, the Bond's potential contribution to sustainability and its alignment with the four core components of the GBP 2021
- Issuer: we have assessed the sustainability performance of the Issuer (Sovereign Sustainability Rating©).

We have also considered whether 2 economic activities (namely: Passenger Interurban Rail Transport and Infrastructure for Rail Transport) of 1 Eligible Category (namely: Clean transportation) are defined in accordance with the technical screening criteria ("TSC") set out in Annex I of the Commission Delegated Regulation (EU) 2021/2139 (the "EU Climate Delegated Act") and the Minimum Safeguards set out in Regulation (EU) 202/852 (the "Taxonomy Regulation"), jointly referred to throughout this report as the "EU Taxonomy Criteria". Our work does not constitute a verification or audit of taxonomy alignment.

Our sources of information are multichannel, combining data (i) gathered from public sources, press content providers and stakeholders, (ii) from our exclusive ESG rating database, and (iii) information provided from the Issuer through documents and interviews conducted with the Issuer's managers and stakeholders involved in the Bonds' issuance, held via a telecommunications system.

Our opinion and work has been carried out in good faith. Moody's ESG solutions has not performed any audit, site visit, inspection, nor other tests to establish the accuracy of the information provided by the Issuer. The Issuer is solely responsible for the correctness of the information it has provided and its compliance with, and implementation of, its commitments.

We carried out our due diligence assessment from April 8th to June 24th, 2022. We consider that we were provided access to all documents and interviewees we solicited. For this purpose, we made reasonable efforts to verify the accuracy of all data used as part of the assessment.

Type of External Reviews supporting this Framework

<input checked="" type="checkbox"/>	Pre-issuance Second Party Opinion	<input type="checkbox"/>	Independent verification of impact reporting
<input checked="" type="checkbox"/>	Independent verification of funds allocation	<input type="checkbox"/>	Climate Bond Initiative Certification

¹ The "Green OLO" is to be considered as the bond to be potentially issued, subject to the discretion of the Issuer. The name "Green OLO" has been decided by the Issuer: it does not imply any opinion from Moody's ESG Solutions.

COHERENCE

Coherent
Partially coherent
Not coherent

We consider that the contemplated Framework is coherent with the Kingdom of Belgium's strategic sustainability priorities and that it contributes to the achievement of its sustainability commitments.

In 2015, all United Nations Member States adopted the 2030 Agenda for Sustainable Development, which includes the 17 Sustainable Development Goals (SDGs). In September 2019 at the SDG summit – 10 years before the target year to achieve the SDGs – world leaders called for a "Decade of Action". Achieving sustainable development requires the transition of all economic sectors towards sustainable development models, and immediate action by all private actors. In particular, national governments must mobilise to achieve the SDGs, through regional and global leadership, integrating environmental and social sustainability into policies, budgets, institutions and regulatory frameworks, and working with all stakeholders. In the regional context, in 2019 the European Union presented its strategy, the European Green Deal², which aims to make Europe the first carbon-neutral continent by 2050. To this end, Member States have a responsibility to contribute to the plan's realisation by taking action that limits climate change and introducing national policies and action plans that ensure sustainable growth.

According to a Belgium National Communication Report³ on climate change submitted under the UNFCCC, Belgium is now 2.4 °C warmer than in the pre-industrial period with the most harmful climate effects expected to come from the increased frequency and intensity of extreme weather and climate related events with the annual average sea level rises being significantly higher than at the beginning of the time series (1951) with high vulnerability to flooding being cited as some of the main reasons. General climate trends for Belgium over 100 years can be summarised as follow: a hotter climate, a reinforcement of the precipitation seasonality (decrease in summer and increase in winter), more extreme events (more frequent or intense heavy rains in winter, more intense or frequent heat waves and heavy thunderstorms in summer), a fall in the average summer precipitation and a rise of the sea level at the Belgian coast (most likely between 20 and 90 cm by 2100).

The Kingdom of Belgium appears to acknowledge its role in providing solutions to address sustainability challenges, and appears committed to responding to the UNEP reported "triple planetary crisis" of climate change, biodiversity loss and pollution by ensuring Belgian environmental policy is geared towards achieving European and international objectives.⁴ Following the recent climate summit in Glasgow (COP26), Belgium has committed to increasing its climate funding for poorer nations via its Belgian Investment Company for Developing Countries. Belgian climate finance will be directed mainly towards adaptation, as the least developed nations will suffer the most and soonest because of climate change. As such, Belgium is promoting sustainable urban development and focusing on resilient and climate-smart agriculture.⁵

Having ratified the Paris Agreement, the EU has committed to achieving climate neutrality by 2050, with an intermediate target for 2030 of a net domestic greenhouse gas reduction of at least -55% compared to 1990, with both targets being legally anchored in European climate law. For Belgium to meet its 2030 obligations, significant additional measures will need to be implemented, as laid out in Belgium's 2021-2030 National Energy and Climate Plan (NECP) and Long-term Strategy 2050⁶ adopted in 2020. Although Belgium's NECP was designed to meet the current target, future NECPs will need to be revised (the EU target has been increased) in consideration of the higher non-ETS (EU Emissions Trading System) target which is currently being divided among the Member States.

Belgium is a federal state, where decision-making power is shared between the Federal State and three regions (Wallonia, Flanders and Brussels-Capital Region). The three regions have important responsibilities in areas such as rational use of energy, promotion of renewable energy sources, public transport, transport infrastructure, urban and rural planning, agriculture and waste management, with the federal state being responsible for a large part of fiscal policy.⁷ The long-term climate strategy is also developed and approved at the regional level of government. The long-term strategies of the regions envisage the following overall emissions reductions by 2050 and have been documented in the Long-term Strategy document submitted under the UNFCCC (United Nations Framework Convention on Climate Change):

² https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

³ https://unfccc.int/files/national_reports/annex_i_natcom/application/pdf/7319685_belgium-nc7-br3-1-nc7_en_lr.pdf [page 9]

⁴ The Kingdom of Belgium Green OLO Framework

⁵ https://diplomatie.belgium.be/en/policy/policy_areas/highlighted/planet/belgium_wants_more_climate_ambition_worldwide

⁶ https://unfccc.int/sites/default/files/resource/LTS_BE_EN_summary.pdf

⁷ Belgium's long-term strategy: available at: https://unfccc.int/sites/default/files/resource/LTS_BE_EN_summary.pdf

- The long-term strategy of Wallonia aims to achieve carbon neutrality by 2050, by a reduction of greenhouse gas emissions of 95% compared to 1990, supplemented by measures regarding carbon capture and use, and negative emissions
- The long-term strategy of Flanders aims to reduce greenhouse gas emissions from the so-called non-ETS sectors by 85% by 2050 compared to 2005, with the ambition to move towards full climate neutrality.
- The long-term strategy of the Brussels-Capital Region sets the objective of moving closer to the European target of carbon neutrality by 2050, in the urbanised context of Brussels.

Belgium has submitted its National Energy and Climate Plan for the period 2021-2030⁸; the primary aim of the NECP is to meet Belgium's commitments under the European Union's Effort-Sharing Regulation to achieve the 2030 objectives. Belgium's 2030 commitments will be subject to internal burden sharing among the three Belgian Regions and the Federal State⁹ with there being a clear scope of responsibility between them.

In the context of the European Semester Framework for the coordination of economic policies across the EU, Belgium received four recommendations in 2019, of which one recommendation focused on sustainable mobility, including upgrading the rail infrastructure, the low carbon and energy transition and research and innovation, in particular in digitalisation, taking into account regional disparities.¹⁰ The last country specific recommendation (2020)¹¹ had three recommendations for Belgium of which one was to ensure the effective implementation of measures to provide liquidity to assist small and medium-sized enterprises, the self-employed and improve the business environment. Front-loading mature public investment projects and promoting private investment to foster the economic recovery were also included along with recommendations to focus investment on the green and digital transition, in particular infrastructure for sustainable transport, clean and efficient production and use of energy, digital infrastructure.

In addition, in April 2021 Belgium submitted its National Recovery and Resilience Plan (NRRP)¹² to the European Commission to help accelerate the transition towards more sustainable, resilient and inclusive growth, while reinforcing social, economic and climate resilience. One of the main "strategic axes" of this plan again focuses on mobility and transportation.

The Kingdom of Belgium has stated in their Green OLO Framework that they aim to align with the key sustainability objectives defined at the EU level, and criteria of the EU Sustainable Finance Taxonomy Regulation, in particular for their rail expenditures which responds to the EU Commission recommendation for Belgium.

Regarding biodiversity, although it is a small territory, Belgium has a remarkable diversity of species. Belgium has adopted national legislation and policies to support the conservation, restoration and sustainable use of biodiversity through the implementation of global and regional treaties and EU legislation, notably a National Biodiversity Strategy and regional biodiversity policies with the ambitions of the new EU Biodiversity Strategy for 2030. At EU level, this new strategy aims to turn 30% of land and sea into protected areas; strictly protect 10% of land and sea, including all old growth forests; plant 3 billion trees; restore 25 000 kilometres of rivers to a free-flowing state; halve pesticide use; reduce fertiliser use by 20%; and turn 10% of agricultural area into high-diversity landscape features and 25% into organic farming.¹³

Through its Green OLO Framework, intending to finance expenditures in energy efficiency, clean transportation, renewable energy, circular economy, and living resources and land use, the Kingdom of Belgium coherently aligns with its national, EU and international climate and environmental objectives and commitments, and addresses the main governmental issues to achieve long-term sustainability goals.

⁸ https://ec.europa.eu/info/energy-climate-change-environment/implementation-eu-countries/energy-and-climate-governance-and-reporting/national-energy-and-climate-plans_en

⁹ https://unfccc.int/sites/default/files/resource/BR4_EN_LR.pdf [page 20-21]

¹⁰ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019DC0501> [page 8]

¹¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0501&from=EN>

¹² [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/698931/EPRS_BRI\(2022\)698931_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/698931/EPRS_BRI(2022)698931_EN.pdf) [page-3]

¹³ <https://www.oecd-ilibrary.org/sites/37b09c00-en/index.html?itemId=/content/component/37b09c00-en#section-d1e10183>

FRAMEWORK

The Kingdom of Belgium has described the main characteristics of the Bonds within a formalized Green OLO Framework that covers the four core components of the GBP 2021 (the last updated version was provided to Moody's ESG Solutions on June 24th, 2022). The Kingdom of Belgium has committed to make this document publicly accessible on its website, in line with good market practices.

We understand that The Kingdom of Belgium intends to apply the EU Taxonomy Criteria to 2 economic activities (6.1 and 6.14 of the EU Climate Delegated Act, namely, Passenger Interurban Rail Transport and Infrastructure for Rail Transport) falling under 1 Eligible Category (namely, Clean Transportation) (out of 5 Eligible Categories). As set out in Scope of work, we have considered whether these specific activities of the Eligible Category are defined in accordance with the EU Taxonomy Criteria in a detailed section on page 26.

Alignment with the Green Bond Principles

Use of Proceeds



The net proceeds of the Bonds will exclusively finance or refinance, in part or in full, projects and/or expenditures ("Eligible Green Expenditures" or "Eligible Projects") falling under five Green Sectors ("Eligible Categories"), as indicated in Table 1.

- The Eligible Categories are clearly defined. The Issuer has communicated the nature of the expenditures, the eligibility criteria and location of Eligible Green Expenditures for all categories.
- The Environmental Objectives are clearly defined, relevant and set in coherence with sustainability objectives defined in international standards for all Eligible Categories.
- The Expected Environmental Benefits are clear, relevant and measurable. They will be quantified for all Eligible Categories in the reporting.
- The Issuer has committed to transparently communicate publicly the estimated share of refinancing prior to each calendar year when the upcoming year's funding plan and estimated Green OLO issuance is announced. The look-back period for refinanced Eligible Categories will be equal to or less than 24 months from the issuance date, in line with good market practices.

BEST PRACTICES

- ⇒ The definition and eligibility criteria (selection and exclusion) are clear and in line with international standards for all categories
- ⇒ Relevant environmental benefits are identified and measurable for all Eligible Categories.
- ⇒ The Issuer has committed to transparently communicate publicly the estimated share of refinancing prior to each calendar year.
- ⇒ The look-back period for refinanced assets is equal or less than 24 months, in line with good market practices.

Table 1. Our analysis of Eligible Categories, Sustainability Objectives and Expected Benefits as presented in the Issuer Framework

- Nature of expenditures: federal budget expenditures, federal fiscal expenditures, as well as investment by federal government agencies
- Location of Eligible Projects: All Eligible Green Expenditures are located in Belgium except for projects involving BIO and FPS Foreign Affairs, Foreign Trade and Development Cooperation.¹⁴

ELIGIBLE CATEGORIES	DESCRIPTION AND ELIGIBILITY CRITERIA OF ELIGIBLE GREEN EXPENDITURES	SUSTAINABILITY OBJECTIVES AND BENEFITS	MOODY'S ESG SOLUTIONS' ANALYSIS
Energy Efficiency (including Green Buildings)	<ul style="list-style-type: none"> Construction of new buildings provided that the Primary Energy Demand (PED) is at least 10% lower than the threshold set for nearly zero-energy buildings (NZEB) requirements in national measures implementing Directive 2010/31/EU.¹⁵ The energy performance must be certified using an as built Energy Performance Certificate (EPC). Renovation of existing buildings leading to a reduction of primary energy demand (PED) of at least 30% Individual renovation measures consisting in installation, maintenance or repair of energy efficiency equipment such as addition of insulation to existing envelope components and the installation, replacement, repair or maintenance of existing windows, external doors, light sources, HVAC and water heating systems with new energy efficient versions¹⁶ Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings, such as the installation, maintenance, and repair of zoned or smart thermostats, building automation and control or energy management systems, lighting control systems, energy management systems and smart meters for gas, heat, cool and electricity Installation, maintenance and repair of renewable energy technologies, on-site, consisting of the installation, maintenance and repair of either solar photovoltaic systems, solar hot water panels, heat pumps¹⁷, solar transpired collectors, or thermal or electric energy storage systems as well as the ancillary technical equipment 	<p><u>Climate Change Mitigation</u></p> <p>Energy savings GHG emission avoidance</p>	<p>The Eligible Category is clearly defined and detailed. The Issuer has communicated the nature of the expenditures, the eligibility criteria and the location at national level of Eligible Green Expenditures.</p> <p>The Environmental Objective is clearly defined, relevant and set in coherence with sustainability objectives defined in international standards for the Eligible Category.</p> <p>The Expected Environmental Benefits are clear, relevant, measurable, and will be quantified in the reporting.</p>

¹⁴The Issuer provided a link to the details of all jurisdictions including prohibited territories: <https://www.bio-invest.be/en/where-we-invest>. BIO invests in Least Developed Countries, Low Income Countries, and Lower-middle Income Countries (i.e. the OECD's DAC-list). BIO can also invest in upper middle-income countries and pays particular attention to the partner countries of the FPS Foreign Affairs, Foreign Trade and Development Cooperation and to less developed countries. BIO is not allowed to invest in some countries, including offshore Financial Centers, either directly or indirectly. These countries are defined by Royal Decree and by the "Global Forum on Transparency and Exchange of Information for Tax Purposes" (the "Global Forum").

¹⁵ For buildings larger than 5000 m2:

- Air-tightness and thermal integrity testing with any deviation in the levels of performance set at design stage/defects in the building envelope disclosed to investors /clients or demonstration that robust and traceable quality control processes were in place during the construction process.
- Life-cycle Global Warming Potential (GWP) calculated for each stage in the life cycle and disclosed to investors and clients on demand.

¹⁶ Provided that they comply with minimum requirements set for individual components and systems in the applicable national measures implementing Directive 2010/31/EU and, where applicable, are rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 and delegated acts adopted under that Regulation.

¹⁷ Provided they contribute to the targets for renewable energy in heat and cool in accordance with Directive (EU) 2018/2001

	<ul style="list-style-type: none"> Acquisition and ownership of buildings: <ul style="list-style-type: none"> For buildings built after 31st December 2020: the Primary Energy Demand (PED) is at least 10% lower than the threshold set for nearly zero-energy buildings (NZEB) requirements in national measures implementing Directive 2010/31/EU For buildings built before 31st December 2020: Energy performance certificate of A, or alternatively the Primary Energy Demand (PED) is within the top 15% of the national or regional building stock. Buildings related to fossil fuel activities are excluded <p><i>Examples of Eligible Green Expenditures:</i></p> <ul style="list-style-type: none"> Tax credit for corporates investing in energy efficiency Investments in Sustainable Real Estate Funds with Green certification 		
Clean Transportation	<p>Support the development and extension of:</p> <ul style="list-style-type: none"> Passenger interurban rail transport and infrastructure for rail transport (including infrastructure subject to an electrification plan that will be fit for use by electric trains within 10 years) Urban and suburban transport, and related infrastructure enabling low-carbon road transport and (rail) public transport Operation of personal mobility devices, cycle logistics and related infrastructure for personal mobility, cycle logistics (soft mobility); Electric vehicles and related infrastructure. <p>Where all such modes of transport have zero direct (tailpipe) CO₂ emissions. Infrastructure dedicated to and transport or storage of fossil fuels are excluded.</p> <p><i>Examples of Eligible Green Expenditures:</i></p> <ul style="list-style-type: none"> Federal State's support for investment and operating expenditures related to the extension, improvement and maintenance of public transport and rail-related infrastructure Tax credits in favor of electric vehicles 	<p><u>Climate change mitigation</u></p> <p>GHG emission avoidance</p> <p><u>Pollution Prevention and Control</u></p> <p>Reduction of air pollutants</p>	<p>The Eligible Category is clearly defined and detailed. The Issuer has communicated the nature of the expenditures, the eligibility criteria and location at national level of the Eligible Green Expenditures.</p> <p>The Environmental Objectives are clearly defined, relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected Environmental Benefits are clear, relevant, measurable and will be quantified for in the reporting.</p>

Renewable Energy	<ul style="list-style-type: none"> Develop and support/deploy renewable energy technologies and related investments linked to electricity generation using solar photovoltaic technology. Develop and support/deploy renewable energy technologies and related investments linked to electricity generation from wind power. Develop and support/deploy renewable energy technologies and related investments linked to the construction and operation of battery electricity storage. <p><i>Examples of Eligible Green Expenditures:</i></p> <ul style="list-style-type: none"> <i>Federal State's support to renewable energy infrastructure</i> 	<p><u>Climate change mitigation</u></p> <p>GHG emissions avoidance</p> <p>Increase in the renewable energy installed capacity</p> <p>Increase in the production of renewable energy</p>	<p>The Eligible Category is clearly defined and detailed. The Issuer has communicated the nature of the expenditures, the eligibility criteria and location at national level of the Eligible Green Expenditures.</p> <p>The Environmental Objective is clearly defined, relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected Environmental Benefits are clear, relevant, measurable and will be quantified in the reporting.</p>
Circular Economy	<ul style="list-style-type: none"> Measures promoting the sustainable consumption and production modes of materials through: <ul style="list-style-type: none"> Reducing the use of primary raw materials and increasing the use of recycled, re-used, repurposed or by-products; Sustainable design and manufacture activities aimed at increasing the durability, recyclability and reusability of products; Prolonging the use of products through reuse, repurposing, remanufacturing, upgrade and repairs; and/or Reducing the amount of non-recyclable waste or waste to landfill through waste hierarchy or waste management infrastructure and practices. Projects related to waste to energy, incineration, landfill, and transport of waste activities are excluded. <p><i>Examples of Eligible Green Expenditures:</i></p> <ul style="list-style-type: none"> <i>Tax expenditures for reusable packaging</i> 	<p><u>Circular Economy</u></p> <p>Increase in material recovery and secondary raw material use</p>	<p>The Eligible Category is clearly defined. The Issuer has communicated the nature of the expenditures and the location at national level of Eligible Green Expenditures.</p> <p>The Issuer has specified that for the first issuance, the only identified Eligible Green Expenditure is the tax expenditure for reusable packaging.</p> <ul style="list-style-type: none"> - An area for improvement is to further specify eligible sectors and thresholds for reducing raw materials, prolonging the use of products, and improvement of durability <p>The Environmental Objective is clearly defined, relevant and set in coherence with sustainability objectives defined in international standards for a majority of Eligible Investments.</p> <p>The expected Environmental Benefits are clear, relevant, measurable, and will be quantified in the reporting.</p>

Living Resources and Land Use	<p>Measures supporting:</p> <ul style="list-style-type: none"> The protection, preservation, restoration of terrestrial and marine ecosystems with the aim of preserving or enhancing natural capital (i.e. protection or enhancement programmes, rehabilitation plans); Sustainable land use and management (i.e. sustainable agriculture preventing the degradation of soil and ecosystems, remediation or prevention of contamination through monitoring and remediation, prevention of deforestation and habitat loss¹⁸); Sustainable use of water and protection of marine resources through the prevention and remediation of water pollution and contamination, the improvement of water management (through water efficiency and reuse); and/or The prevention, mitigation or remediation of floods and other natural disasters (as defined in Appendix A of the Climate Change Adaptation Delegated Act). <p>Projects related to livestock are excluded.</p> <p><i>Examples of Eligible Green Expenditures:</i></p> <ul style="list-style-type: none"> <i>Operating expenditures of academic research programs in biodiversity, climate change and other global environmental challenges</i> <i>Investment expenditures for soil rehabilitation and biodiversity restoration</i> <i>Investment in sustainable programs for climate change mitigation and adaptation in developing countries while enhancing biodiversity (i.e. using nature-based solutions as defined in UNEA 5 resolution)</i> 	<p><u>Climate change adaptation</u></p> <p>Increase in number of adaptation and resilience projects</p> <p><u>Biodiversity Protection</u></p> <p>Increase in protected and restored land</p> <p><u>Pollution prevention and control</u></p> <p>Increase in remediated and rehabilitated land</p>	<p>The Eligible Category is clearly defined . The Issuer has communicated the nature of the expenditures and the location at national level of Eligible Expenditures.</p> <ul style="list-style-type: none"> The Issuer has specified in internal documentation that greenfield developments are excluded <p>The Environmental Objectives are clearly defined, relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected Environmental Benefits are clear, relevant, measurable and will be quantified in the reporting.</p>
-------------------------------	---	--	--

¹⁸ Investments are done either via internationally recognised climate funds, or bilaterally by the Foreign Affairs, Foreign Trade and Development Cooperation, either directly via ENABEL or indirectly via non-governmental actors. When the activity is bilaterally financed by the Foreign Affairs, Foreign Trade and Development Cooperation, the Kingdom of Belgium guarantees that only agricultural expenditures receiving organic certifications are financed under this framework.

SDG Contribution

The Eligible Categories are likely to contribute to 7 of the United Nations' Sustainable Development Goals ("SDGs"), namely:

ELIGIBLE CATEGORY	SDG	SDG TARGETS
Renewable Energy		7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy Efficiency (including Green Buildings)	 7 Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Renewable Energy Energy Efficiency (including Green Buildings)		7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
Clean Transportation Renewable Energy	 9 Industry, Innovation and Infrastructure	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
Clean Transportation		9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
Energy Efficiency (including Green Buildings)	 11 Sustainable Cities and Communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
Clean Transportation		11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
Circular Economy	 12 Responsible Production and Consumption	12.2 By 2030, achieve the sustainable management and efficient use of natural resources
		12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Living Resources and Land Use Energy Efficiency (including Green Buildings) Clean Transportation Renewable Energy	 13 Climate Action	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
		13.2 Integrate climate change measures into national policies, strategies and planning
Living Resources and Land Use	 14 Life Below Water	14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

ELIGIBLE CATEGORY	SDG	SDG TARGETS
Living Resources and Land Use		<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p> <p>15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally</p> <p>15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems</p>

Evaluation and Selection of Eligible Projects



- The Process for Project Evaluation and Selection has been clearly defined and detailed by the Issuer. The process is well-structured in all the evaluation and selection steps (including the proposal, selection, validation and monitoring of Eligible Green Expenditures). The roles and responsibilities are clear and include relevant internal expertise. The process is publicly disclosed in the Framework.
- Eligibility criteria for expenditure selection have been clearly defined by the Issuer including relevant selection and exclusion criteria for all Eligible Categories.
- The process applied to identify and manage potentially material ESG risks associated with Eligible Green Expenditures is publicly disclosed in the Framework. The process is considered robust: it combines monitoring, identification and corrective measures for all Eligible Green Expenditures (see detailed analysis on pages 22 - 26).

Process for Project Evaluation and Selection

- For the purpose of the Green OLO, an Inter-Ministerial Working Group has been established, coordinated by the Belgian Debt Agency (BDA) and the Ministry of the Environment.¹⁹ The composition of the Inter-Ministerial Working Group²⁰ will be adapted overtime if needed, in response to the identification of potential new expenditures. Other Ministries (FPS, "Federal Public Service"), departments, Agencies or external experts will be invited and consulted to participate in order to assess the eligibility of such potential expenditures. In the event that the Inter-Ministerial Working Group needs additional information or specific expertise, particularly in the identification of environmental and social risks associated with specific eligible expenditures, the Inter-Ministerial Working Group could also require an external expert view.
- The Inter-Ministerial Working Group is responsible for managing the selection of Eligible Green Expenditures, which is structured in the following steps:
 - The work of the Inter-Ministerial working group starts at the end of each calendar year, when information is gathered on new initiatives that could be eligible for funding by the Green OLO issuance.
 - Each FPS or Federal State agency holds the responsibility for identifying and reporting on Eligible Green Expenditures within its programs, leveraging on existing budgetary processes and relying on its services and agencies. The roles and responsibilities of each have been documented in Service Level Agreements. They must provide data to document the identification of the Eligible Green Expenditures, as well as for the allocation and impact reporting.
 - On the basis of the collected information, the funding plan published by the Belgian Debt Agency in December will contain an estimate of the issuance amount of Green OLOs in the next year.

The traceability and verification of the selection and evaluation of Eligible Green Expenditures is ensured throughout the process:

- The compliance of the selected projects with the eligibility criteria will, throughout the life of the Green OLO, be monitored, and specific actions will be taken to replace projects that no longer comply with the eligibility criteria at least once a year.
- The Inter-Ministerial Working Group also regularly reviews all expenditures already allocated to verify that they are not facing major controversy. The potential occurrence of such a controversy regardless of its nature (political, environmental, social, etc.) can lead to the withdrawal of the project, temporary or definitive, from the portfolio of Eligible Green Expenditures. A new expenditure would then be proposed for allocation as a substitute.

¹⁹ FPS Health, Food Chain Safety and Environment - DG Environment

²⁰ The Prime Minister's department is no longer part of the Inter-ministerial working group.

- Records of the exchanges on the selection process and potential new expenditures, including meeting minutes, are kept by the Belgian Debt Agency.

Eligibility Criteria

The process relies on explicit eligibility criteria (selection and exclusion), relevant to the environmental objectives defined for the Eligible Categories.

- The selection criteria is based on the definitions in the Eligible Categories defined in the Green OLO Framework (please also see Table 1 in the Use of Proceeds section of this SPO).
- The list of examples of Eligible Green Expenditures in the Green OLO Framework is for illustrative purposes only and are not limited to this list of examples. All Eligible Green Expenditures will strictly comply with the eligibility criteria presented in the Framework.
- The Inter-Ministerial Working Group excludes all nuclear activities, all armament and any expenditure related to fossil fuel.
- Eligible Green Expenditures already financed via a dedicated funding Green labelled-source (including EU funds) or that other Belgian agencies could refinance by Green Bond issuances will be excluded.

BEST PRACTICES

- ⇒ Eligibility and exclusion criteria for Project/Expenditure selection are clearly defined and detailed for all of the Eligible Categories
- ⇒ The Issuer reports that it will monitor compliance of selected and financed Projects with eligibility criteria specified in the Framework throughout the life of the instrument and has provided details on the procedure adopted in case of non-compliance.
- ⇒ The Issuer reports that it will monitor potential ESG controversies associated with the financed expenditures throughout the life of the instrument and has provided details on the procedure in case a controversy is found.

Management of Proceeds



- The Process for the Management and Allocation of Proceeds is clearly defined and detailed and is publicly available in the Framework.
- The allocation period will be 24 months or less.
- The net proceeds of the OLO will be placed in the General Treasury and tracked by the Issuer in an appropriate manner and attested to in a formal internal process.
- Information on the intended types of temporary placement for the balance of the unallocated net proceeds is publicly disclosed.
- For as long as the OLO is outstanding, the Issuer has committed to periodically adjust the balance of tracked net proceeds to match allocations to Eligible Categories.
- The Issuer has provided information on the procedure that will be applied in case of project divestment or postponement and has committed, on a best-efforts basis, to reallocate divested proceeds to expenditures that comply with the Framework within 24 months.

Management Process

- The proceeds will be credited to the Issuer's general treasury.
- The Belgian Debt Agency is responsible for the tracking of Eligible Green Expenditures, and for ensuring that the allocation of proceeds does not allow for listing of the same budget allocation twice.
- Temporarily unallocated funds will be held within The Kingdom of Belgium's general treasury, in accordance with national legislation²¹.
- In case of projects postponement, cancelation, divestment or ineligibility, the Issuer has committed, on a best-efforts basis, to replace the no longer Eligible Green Expenditure by a new Eligible Green Expenditure within 24 months.

BEST PRACTICES

- ⇒ The allocation period is 24 months or less.
- ⇒ The Issuer has provided information on the procedure that will be applied in case of project divestment or postponement and it has committed to reallocate divested proceeds to expenditures that are compliant with the Green OLO Framework.

²¹ Loi contenant le budget des Voies et Moyens de l'année budgétaire (<https://vlex.be/vid/loi-contenant-budget-des-853645720>)

Reporting

Not Aligned	Partially Aligned	Aligned	Best Practices
-------------	-------------------	---------	----------------

- The Issuer has committed to report on the Use of Proceeds on an annual basis, until full allocation and on a timely basis in case of material developments. The report will be publicly available on the Issuer's website.
- The Issuer has committed to include in the reports relevant information related to the allocation of OLO proceeds and the expected sustainable benefits of the Eligible Categories. The Issuer has also committed to report on material developments and controversies related to the Eligible Green Expenditures.
- The reporting methodology and assumptions used to report on environmental benefits of the Eligible Categories will be publicly disclosed.
- An external auditor will verify the tracking and allocation of funds to Eligible Categories until full allocation and in case of material changes. The reporting on the environmental benefits of Eligible Categories will be verified internally by the Issuer.

Indicators

The Issuer has committed to transparently communicate at Eligible Category (Green Sector) level, on:

- Allocation of proceeds: The indicators selected by the Issuer to report on the allocation of proceeds are relevant and exhaustive.

REPORTING INDICATORS
<ul style="list-style-type: none"> ⇒ The list of Eligible Green Expenditures financed and descriptions ⇒ The aggregated amount of allocated nominal proceeds, broken down by Green Sector, type of expenditure, and year ⇒ The balance or %, as well as type of temporary unallocated funds (if any)

The Issuer has committed to give at least the same level of information as presented in the 2020 Green OLO Allocation Report²². Of note, information on types of temporary investments is publicly available, following the applicable law.

- Environmental benefits: The indicators selected by the Issuer to report on the environmental benefits are clear and relevant.

ELIGIBLE CATEGORIES	ENVIRONMENTAL BENEFITS INDICATORS
	OUTCOME, OUTPUT AND IMPACT INDICATORS
Energy Efficiency (including Green Building)	<ul style="list-style-type: none"> - Annual energy savings in MWh/GWh (electricity) and GJ/TJ (other energy savings) - Annual GHG emissions avoided in tonnes of eq. CO2 - % of energy use avoided vs local baseline/building code ; and, if relevant % of renewable energy generated on site (specifying relevant renewable energy form)

²² https://www.debtagency.be/sites/default/files/content/download/files/green_olo_86_-_allocation_report_2020_en.pdf

ELIGIBLE CATEGORIES	ENVIRONMENTAL BENEFITS INDICATORS
	OUTCOME, OUTPUT AND IMPACT INDICATORS
Clean Transportation	<ul style="list-style-type: none"> - Annual energy savings in MWh/GWh - Annual GHG emissions avoided in tonnes of eq. CO₂ (per passenger/tonne-km) - Reduction of air pollutants: particulate matter (PM), sulphur oxides (SO_x), nitrogen oxides (NO_x), carbon monoxide (CO), and non-methane volatile organic compounds (NMVOCs) - Number of km of new train lines created / maintained - Passenger-kilometres (i.e. the transport of one passenger over one kilometre) and/or passengers; or tonne-kilometres (i.e. the transport of one tonne over one kilometre) and/or tonnes
Renewable Energy	<ul style="list-style-type: none"> - Annual GHG emissions avoided in tonnes of CO₂ equivalent - Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy) - Capacity of renewable energy systems installed in MW
Circular Economy	<ul style="list-style-type: none"> - Annual absolute (gross) amount of secondary raw materials, by-products and/or waste that is recovered in tonnes p.a. - Monetary value of products (recycled materials, etc.) created from waste processing / products containing a high proportion of recycled materials
Living Resources and Land Use	<ul style="list-style-type: none"> - Area of land remediated / rehabilitated (for polluted sites) - Area of restored land - Maintenance/safeguarding/increase of protected area/OECM/habitat in km² and in % for increase - Number and nature of projects that support climate change adaptation / resilience

BEST PRACTICES
<p>⇒ The issuer report will be publicly available.</p> <p>⇒ The reporting will cover relevant information related to the allocation of Bond proceeds and to the expected sustainable benefits of the Eligible Categories. The Issuer has also committed to report on material development related to the projects, including ESG controversies.</p> <p>⇒ The indicators selected by the Issuer are exhaustive with regards to allocation reporting.</p> <p>⇒ The reporting methodology and assumptions used to report on environmental benefits of the Eligible Categories will be disclosed publicly.</p>

CONTRIBUTION TO SUSTAINABILITY

Expected Impacts

The potential positive impact of the Eligible Green Expenditures on environmental objectives is considered to be advanced.

ELIGIBLE CATEGORY	EXPECTED IMPACT	ANALYSIS
Energy Efficiency (including Green Building)	ADVANCED	<p>Energy Efficiency, notably in buildings, responds to key environmental issues for the Kingdom of Belgium. As highlighted by the SDG index, challenges remain regarding air pollution in urban areas, as well as fuel combustion per electricity output.²³</p> <p>According to the UN IPCC Climate Change 2022: Mitigation report, the total GHG emissions in the building sector reached 12 GtCO₂eq. in 2019, equivalent to 21% of global GHG emissions that year. 57% of GHG emissions from buildings were indirect CO₂ emissions from generation of electricity and heat off-site, 24% were direct CO₂ emissions produced on-site, and 18% were from the production of cement and steel used for construction and refurbishment of buildings.²⁴ In Belgium, buildings are one of the highest contributing sectors to GHG emissions²⁵, and residential emissions represent around 16.5% of GHG emission from energy.²⁶ The International Energy Agency reports that²⁷ in the absence of mandatory energy codes for buildings in two-thirds of countries, more than 3.5 billion square meters were built in 2020 without meeting energy-related performance requirements. The Net Zero Emissions 2050 scenario calls for all countries to adopt zero-carbon energy codes for buildings by 2030, making them fully mandatory for new buildings, as well as 20% minimum threshold for existing buildings. This highlights the relevant role of governments in tackling GHG emissions in buildings.</p> <p>Investing in energy efficiency has positive impacts on lowering energy consumption of buildings, and the Issuer has set the eligibility criteria in accordance with the criteria in the EU Climate Delegated Act, which are currently considered as the most stringent international standards.</p> <p>However, only 57% of GHG emissions from buildings' construction are indirect CO₂ emissions from generation of electricity and heat off-site. According to Framework under analysis, there will be no investment in projects that address other building construction impacts, such as on-site and cement and steel production emissions.</p>

²³ <https://eu-dashboards.sdgindex.org/map/goals/SDG11>

²⁴ https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_Chapter09.pdf

²⁵ <https://ourworldindata.org/co2/country/belgium>

²⁶ <https://www.iea.org/countries/belgium>

²⁷ <https://www.iea.org/fuels-and-technologies/building-envelopes>

ELIGIBLE CATEGORY	EXPECTED IMPACT	ANALYSIS
Clean Transportation	ADVANCED	<p>According to the latest statistics available from the International Energy Agency (IEA), the Transportation sector was the biggest contributor of CO2 emissions (27%) in Belgium (2019).²⁸ Road transport is the most energy-intensive form of transport in Belgium and the number of private vehicles is growing steadily (Belgium has a very high level of car ownership, with one car for every two inhabitants). Road transport still accounts for the bulk of land goods transport with demand for fossil fuels in this sector is expected to continue to rise.²⁹</p> <p>In the context of the European Semester framework for the coordination of economic policies across the EU and of the country report (2019) Belgium received one country-specific recommendation with two sub-parts; one in relation to climate and energy, calling on it to invest in 'sustainable transport, including upgrading rail infrastructure, the low-carbon and energy transition' and one to 'tackle the growing mobility challenges, by reinforcing incentives and removing barriers to increase the supply and demand of collective and low emission transport'.³⁰</p> <p>In this context, the clean transportation project category, in particular the eligible rail projects will play an important role in the Kingdom of Belgium's strategy to promote cleaner transportation. Enhanced rail services lead to the reduced use of cars thus both reducing GHG emissions and improving air quality (in particular in high density populated areas). In addition, the Issuer has set the eligibility criteria in accordance with the criteria in the EU Climate Delegated Act, which are currently considered as one of the most stringent international standards.</p>
Renewable Energy	ADVANCED	<p>According to the UN SDG Dashboard Belgium's progress toward Climate Action has been stagnating and faces major challenges in relation to CO2 emissions from fossil fuel combustion. Significant challenges also remain for the Affordable and Clean Energy SDG driven by the low share of renewable energy in Belgium's total primary energy supply.³¹ An independent energy thinktank estimates that by 2030, Belgium will be one of the few EU countries most reliant on fossil fuels for electricity production; and between 2018 and 2030, Belgium is estimated to be the only country in the EU where the reliance on fossil fuels for electricity generation is actually rising.³²</p> <p>Electricity production in Belgium is still dominated by nuclear power (50%) and gas (30%). A phase-out of nuclear power is prepared for Belgium in the coming years (2025) which would imply a profound change in power provision across the country.³³ This highlights the relevance for public investment in renewable energy, to reach the climate change mitigation objectives of Belgium.</p> <p>The Issuer has set the eligibility criteria in accordance with the criteria in the EU Climate Delegated Act, which are currently considered as one of the most stringent international standards.</p>
Circular Economy	ROBUST	<p>Although Belgium has achieved their SDG for the indicator "non-recycled municipal solid waste", major challenges remain for SDG 12 overall.³⁴ 5 trillion of single use plastic bags are thrown away every year,³⁵ and waste management has significant repercussion on quality of life and biodiversity. As such, reusable packaging projects are considered relevant in addressing the objectives of achieving a circular economy.</p> <p>The expenditures in the Framework focus on prevention of waste, through for example reduction of use of raw materials, improvement in the use of recycled and reused materials, prolonging the durability and reusability of products, which follows the EU's waste hierarchy. Although the Issuer has excluded waste-to-energy, incineration, landfill and transport of waste, the eligibility criteria could be further specified to ensure the best technical choice for all expenditures in this category.</p>

²⁸ <https://www.iea.org/countries/belgium>
²⁹ https://energy.ec.europa.eu/system/files/2020-09/be_final_necp_parta_en_0.pdf [page 4]

³⁰ https://energy.ec.europa.eu/system/files/2021-01/staff_working_document_assessment_necp_belgium_en_0.pdf [page 7]

³¹ <https://dashboards.sdindex.org/profiles/belgium>
³² <https://ember-climate.org/app/uploads/2022/02/NECP-Factsheet-Belgium.pdf>
³³ https://www.ieabioenergy.com/wp-content/uploads/2021/11/CountryReport2021_Belgium_final.pdf
³⁴ <https://dashboards.sdindex.org/profiles/belgium>
³⁵ <https://sdgs.un.org/goals/goal12>

ELIGIBLE CATEGORY	EXPECTED IMPACT	ANALYSIS
Living Resources and Land Use	ROBUST	<p>According to national projections from EU Member States, current measures in place (through its land use, land use change and forestry (LULUCF) activities) with an average removal of 200 Mt CO₂e per year in 2030 will not be enough by to reverse the current decreasing trend of the EU's carbon sink. However, implementing the national measures currently at planning stage could increase the EU carbon sink by 3%. Comparisons of cumulative historical and projected land use, land use change and forestry (LULUCF) emissions and removals by Member States show that for Belgium the cumulative 10-year LULUCF total for 2010-2019 is higher than the projected 10 year LULUCF total for 2021-2030, according to the 'with existing measures' scenario, making this category particularly relevant.³⁶</p> <p>The anticipated outcomes from this project category are expected to benefit primarily local stakeholders (with the exception of deforestation avoidances projects, given that forests have the ability to act as carbon sinks³⁷) as it tackles local ecosystems. It also tackles land use issues through a sustainable approach to agriculture, namely through guaranteeing that when activity bilaterally financed by the Foreign Affairs, Foreign Trade and Development Cooperation, only agricultural expenditures receiving organic certifications are financed under this Framework. Organic farming typically shows sound environmental benefits. Indeed, the longest comparative study conducted on the subject (21 years) shows that this type of agriculture consumes up to 50% less fertilizer than the "conventional" approach and no pesticides (with rare exceptions), which has a positive impact on the ecosystems concerned.³⁸ However, according to a report by the European Commission (2019), the main ways in which the sector could reduce its GHG emissions are related to certain spraying systems and self-steering devices for agricultural machinery and are not related to organic farming per se³⁹. In the absence of further information on what precisely this category entails, it is therefore challenging to make a definitive judgement on its impact, but the focus on rehabilitation plans, prevention of habitat loss and remediation of natural disasters such as floods are likely to positively impact local stakeholders.</p> <p>However, it remains unclear what some of the technical choices would be made for the projects in this category and which thresholds they would follow (e.g. will forestry projects/management practices which aim to prevent deforestation seek certification), making it difficult to assess whether the options considered are the best available in a comprehensive manner.</p>
OVERALL ASSESSMENT		ADVANCED

³⁶ <https://www.eea.europa.eu/data-and-maps/indicators/greenhouse-gas-emissions-from-land/assessment>

³⁷ <https://www.wri.org/insights/forests-absorb-twice-much-carbon-they-emit-each-year>

³⁸ <https://www.letemps.ch/societe/lagriculture-biologique-deux-dengrais-un-rendement-presque-equivalent>

³⁹ <https://publications.jrc.ec.europa.eu/repository/handle/JRC112505>

ESG Risks Identification and Management Systems in Place at Project Level

The identification and management of the environmental, social and governance risks associated with the projects financed by the Eligible Green Expenditures are considered overall **robust**.

The Government of Belgium has in place regulations and policies that allow to consider and identify environmental and social factors in public procurement both at federal and regional levels. In this regard, the Issuer has provided relevant information and documents related to the procedures applied during the execution of public investment projects at federal level. In addition, we have complemented our assessment with relevant publicly available information published by regional governments.

Given Belgium's devolved public governance system, we have less visibility over how the federal government ensures coordination between all federal and regional authorities involved in the public procurement process that allows for effective and integrated oversight of ESG risks and impacts across the selected projects.

Integration of ESG factors in public procurement

At federal level, public procurement in Belgium is governed by the Law of 17 June 2016 on public procurement (*Wet van 17 juni 2016 inzake overheidsopdrachten* in Dutch) and several royal decrees.⁴⁰ Under this legislative framework, companies are prohibited from participating in public procurement if they fall under grounds for exclusion ("*Uitsluitingsgronden*" in Dutch; "*Motifs d'exclusion*" in French), which include involvement in child labour, human trafficking, terrorist activities, criminal organisation, corruption and bribery, fraud and money laundering.⁴¹

Regarding the inclusion of sustainability criteria in public procurement, the Government's *Circulaire* 16/05/2014 indicates that federal authorities are encouraged to examine whether it is beneficial to include environmental and social aspects in the contracts they award in order to improve the general practice and to call on the bidding companies to increase the offer of sustainable products and services.⁴²

To this end, the *Guide for Sustainable Procurement* has been developed at federal level to provide guidelines and criteria that can be included in tender documents, in order to facilitate best practice of ESG inclusion in procurement procedures.⁴³ In addition to the criteria included in the Guide for Sustainable Procurement, federal authorities can also determine supplementary environmental criteria, depending on the scope of each tender contract. These supplementary criteria can take into account, for example, the presence or the absence of toxic substances, air quality (emission of greenhouse gases and pollutants), water quality and consumption, soil quality, noise, biodiversity, the use of space and mobility. In the future, federal authorities will make sustainability criteria mandatory for specific public tenders through Common Procurement Vocabulary (CPV) Codes.⁴⁴ While we note these initiatives of integrating ESG factors in public procurement, they are not yet mandatory and we do not have visibility on how they will be applied to the Eligible Green Expenditures.

The *Federal Procurement Policy 2021-2023* adopted in November 2021 aims to increase the participation of small and medium enterprises (SMEs) in public procurement and all the while to promote environmental, ethical and social aspects in public contracts by providing a list of preferred sustainability-labelled products.⁴⁵

The Issuer has indicated that verification of suppliers in regard to integration of ESG clauses and obligations is not standard policy and difficult to undertake throughout the entire supply chain, however the federal government is currently involved in running several pilot projects with a view to create new policy standards.⁴⁶

In what concerns whistleblowing in the public sector, Belgium is in the process of transposing the *European Whistleblower Directive 2019/1937* in a national bill of law that will be submitted for approval to the Belgian Parliament in 2022. The new bill of law aims to protect persons who report violations in several areas, including (but not limited to) public procurement; money laundering and terrorist financing in financial products and markets; transport safety, environmental protection; nuclear safety; public health; consumer protection; as well as combating tax and social fraud. Whistleblowers will have several

⁴⁰ <https://www.publicprocurement.be/nl/overheidsopdrachten/regelgeving>

⁴¹ As per "Uitsluitingsgronden" in Dutch / "Motifs d'exclusion" in French.

⁴² https://www.publicprocurement.be/sites/default/files/documents/2017_04_18_ar_kb_passation_plaatsing_sect_class.pdf

⁴³ https://www.publicprocurement.be/sites/default/files/documents/circulaire_achats_durables_du_16_mai_2014.pdf, and as per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁴⁴ <https://guidedesachatsdurables.be/fr>

⁴⁵ As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁴⁶ <https://news.belgium.be/fr/politique-federale-dachats-2021-2023>

⁴⁷ As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

internal reporting channels available, including counsel from the Federal Ombudsman and the Federal Institute for the Protection and Promotion of Human Rights, and will be protected against retaliatory measures.⁴⁷

Linked to the Eligible Categories included in the Green OLO Framework, the federal government provides subsidies to several government-owned companies that manage the running of the Belgian public railway system – notably SNCB and Infrabel and to SFPIM – which are allocated as part of the annual federal budget.⁴⁸ The issuer has made available relevant documents that outline policies and procedures that these different public agencies have in order to incorporate specific ESG considerations in their tenders and purchasing activities.⁴⁹ For example, SNCB requires current and future suppliers to comply with SNCB's Supplier Code of Conduct, which outlines SNCB's internal audit procedures that cover specific sustainability areas including environmental protection, labour practices, health and safety, fair trade practices and sustainable purchasing. SNCB has discretionary right to request suppliers to undertake an internal evaluation or an evaluation by an authorised third-party organization to ensure compliance with SNCB's Supplier Code of Conduct. In addition, SNCB requires suppliers to develop relevant environmental management systems that mitigate accidental discharges and the release of toxic substances into the environment, as well as to have whistleblowing procedures that ensure anonymity in case of reports or complaints about breaches of any of the sustainability areas covered by SNCB's Supplier Code of Conduct.

Based on our assessment, while there are robust procedures for the mitigation of internal risks, it remains unclear how the issuer (the Belgian government) identifies and addresses environmental and social externalities and impacts in a consistent way across the many different government or government-related entities that are involved in their purchasing and investment activities.

Environmental risks

Belgium has in place specific regulations and procedures that govern the management of environmental risks associated with the deployment of public projects linked to the Eligible Green Expenditures, specifically in regard to emissions to air and water, environmental impact assessments, waste and environmental issues in transactions.

At the federal level, Belgium has transposed relevant EU Directives related to pollution prevention and noise control, the sustainable use of water, renewable energy, biodiversity and ecosystems, and the transition to a circular economy.⁵⁰

For example, regarding pollution and noise control, federal legislation transposing the *EU Directive 2002/49/EC* requires that measures are undertaken to limit noise through a source-based approach (or at source) and limit the propagation of noise in the environment,⁵¹ while regional governments retain autonomy in the management of noise control under their territorial authority. Regarding environmental impact assessments (EIAs), the Issuer has indicated that they fall under regional competence, except in the case of EIAs for marine activities which are managed at federal level. For example, federal legislation transposing the *EU Directive 2001/42/EC* is governing the development of country-wide plans and programmes by federal authorities with clear requirements for conducting environmental impacts assessments and allowing for the participation of the public during the development stage.⁵²

At regional level, there are specific legal frameworks and procedures exclusively applied by each region (Wallonia, Flanders and Brussels-Capital Region). For example, each region has a different environmental permit system that can cover a wide range of activities, including the operation of commercial or industrial facilities, effluent discharge, waste storage and disposal and groundwater threatening activities, and each regional authorities can impose general or specific operating conditions in the permits.⁵³ Other examples of region-specific practices include the release of an urban development permit prior to the construction, demolition or alteration of buildings in the Brussels Metropolitan region,⁵⁴ or the preparation of noise maps to identify key priorities areas that inform public campaigns prior to implementing transportation developments in the Flemish region.⁵⁵

Regarding climate mitigation, Belgium has committed to a contribution of 17.5% of renewable energy towards the overall European objective of a minimum of 32% renewable energy by 2030, as included in its *National Energy and Climate Plan (NECP)*, submitted in 2019 in response to *EU Regulation 2018/1999* on the Governance of the Energy Union and Climate Action.⁵⁶ Of note, the European Commission's assessment of Belgium's NECP identifies that the enabling frameworks for

⁴⁷As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁴⁸As per Belgium's Green OLO Framework provided to Moody's ESG Solutions (May 2022).

⁴⁹As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁵⁰As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁵¹https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/rfe_partie_2_fr_2019.pdf

⁵²<https://www.health.belgium.be/en/environment/environmental-policy/sea-strategic-environmental-assessment>, and as per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁵³[https://uk.practicallaw.thomsonreuters.com/2-503-5135?transitionType=Default&contextData=\(sc.Default\)&firstPage=true](https://uk.practicallaw.thomsonreuters.com/2-503-5135?transitionType=Default&contextData=(sc.Default)&firstPage=true)

⁵⁴<https://leefmilieu.brussels.themas/geluid/wettelijk-kader>

⁵⁵<https://omgeving.vlaanderen.be/europese-richtlijn-omgevingslawaa>

⁵⁶<https://www.nationalenergyclimateplan.be/admin/storage/nekp/pnec-version-finale.pdf>

renewables described in the NECP need to be more focused on the identification of expected impacts, the associated time horizon, and be governed by coherent administrative procedures.⁵⁷ Competency for Belgium's renewable energy policies and measures is divided between the federal and regional governments, with primary responsibility for renewable energy policy resting mainly with the regional governments. However, the division of competencies and oversight is likely to hinder the development of a shared integrated approach and implementation of coherent renewable energy policies across the country. As also noted by IEA, federal and regional governments need to cooperate to rapidly conclude a new burden-sharing agreement that harmonises policies across the country and accounts for the higher EU targets to provide policy clarity to stakeholders and investors.⁵⁸

In the land use and biodiversity category, the Issuer has included investments in climate change resilience projects in developing countries. Cooperation with selected developing countries is governed by the Belgian law on development cooperation.⁵⁹ To this end, investments in renewable energy and energy are managed through BIO – the Belgian Development Finance Institution (DFI) – in order to support developing or emerging countries gain access to economic growth and sustainable development within the framework of the Sustainable Development Goals (SDGs). Based on the latest external review of climate-related risks and opportunities in BIO's projects conducted in 2020, it was recognized that BIO had a clear legal mandate, however, there was room for improvement in regard to building a highly integrated institutional capacity. Notably, specific recommendations were made in order to better identify, integrate and align the environmental and social risks and opportunities in BIO's projects with the overall investment strategy, policy and processes.⁶⁰ The issuer has further indicated to us that an official representative of BIO's shareholder (i.e. the Development Cooperation Ministry) is part of BIO's Board of Directors, which facilitates the Development Cooperation Ministry provides ongoing oversight and collaboration on climate change topics.⁶¹

As part of our assessment, Moody's ESG Solutions has limited visibility over how the Belgian government and BIO's officials work together to identify and map risks and opportunities linked to the selection of climate resilience projects in the developing countries to be covered under the Eligible Green Expenditures.

The circular economy expenditures are governed under a framework of 21 federal measures adopted in 2016 in response to the EU's *Closing the Loop Action Plan for the Circular Economy*.⁶² Belgium has an overall high recycling rate, with the majority of the plastic it recycles being incinerated.⁶³ Given plastics incineration is responsible for the release of toxic gases, including black carbon (soot), into the atmosphere,⁶⁴ we find that the eligible criteria fail to identify the higher importance of measures that reduce packaging, as well as reuse and repair initiatives for consumer goods. Regarding the latter, the Issuer has noted that the federal government is currently developing a reparability index for five priority consumer product categories, based on the French model, which will be visibly displayed next to each product's price.⁶⁵

Social risks

The social risks associated with the Eligible Green Expenditures are governed under a series of relevant legislative frameworks, measures and procedures.

The Belgian Constitution endorses the guarantee of fundamental human rights and civil liberties, including equality and non-discrimination, labour rights and the right to health.⁶⁶ The Federal Public Service Employment, Labour and Social Dialogue, created by the *Royal Decree of 3 February 2002* (modified on 18 April 2021), is responsible for executing the federal policy on collective bargaining, social dialogue, and the prevention and mediation of social conflicts.⁶⁷ Belgium has also established a National Contact Point (NCP), responsible for promoting the objectives of the OECD Guidelines for Multinational Enterprises and fostering corporate due diligence. The NCP is a tripartite body that brings together representatives from the federal and regional public services and trade union organisations, and has a non-judicial role in dispute resolution.⁶⁸

Following the adoption of the UN Guiding Principles on Business and Human Rights, the federal government has released a National Action Plan on Business and Human Rights, which encourages the federal and regional authorities to actively support Belgian companies (operating in Belgium and abroad) and international businesses operating in Belgium to respect and

⁵⁷ https://energy.ec.europa.eu/system/files/2021-01/staff_working_document_assessment_necp_belgium_en_0.pdf

⁵⁸ https://iea.blob.core.windows.net/assets/638cb377-ca57-4c16-847d-ea4d96218d35/Belgium2022_EnergyPolicyReview.pdf

⁵⁹ https://www.ejustice.fgov.be/cgi_loi/change_lg.pl?language=nl&la=N&cn=2013031906&table_name=wet

⁶⁰ <https://www.bio-invest.be/files/BIO-invest/Our-Impact/CaseStudy/BIO-Climate-Related-Risks-and-Opportunities-Summary.pdf> and https://www.bio-invest.be/files/BIO-invest/Our-Impact/CaseStudy/ECSE_2020_ClimateRisks_MgtResponse_vf.pdf

⁶¹ As per Belgium's additional response to Moody's ESG Solutions (June 2022).

⁶² https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/econ-circ-fr-light.pdf

⁶³ <https://www.greenpeace.org/belgium/nl/tag/plastic/>

⁶⁴ <https://www.unep.org/news-and-stories/story/plastic-bag-bans-can-help-reduce-toxic-fumes>

⁶⁵ As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁶⁶ <https://business-humanrights.be/tool/1/what>

⁶⁷ <https://emploi.belgique.be/fr/propos-du-spf/presentation>, and as per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁶⁸ <https://economie.fgov.be/en/themes/enterprises/oecd-guidelines-multinational/national-contact-point-ncp>

promote human rights, both within their own company and in their sphere of influence. Belgium has not yet established a national human rights mechanism based on the Paris Principles.⁶⁹

With regards to Social Impact Assessments (SIA), the Issuer has stated that all projects executed in Belgium are executed in compliance with Belgian laws and regulations, among which those referring to the social legislative framework in Belgium.⁷⁰ Ex-ante social impact assessment systems that cover a social impact component exists at federal level since 2004 and in the Flanders region since 2005.⁷¹ However, we have no visibility of what specific social impacts have been taken into account prior to selecting the Eligible Green Expenditures and what steps are involved in the social impact assessment process.

As part of Belgium's 2021 Universal Periodic Review undertaken under the auspices of the United Nations Human Rights Council, several Belgian civil society organisations have noted a few instances of concern regarding:

1. the access to the labour market for workers of foreign origin, including young people, who are much less likely to find a job and subsequently more likely to work in low-paid jobs than their peers of Belgian origin; and
2. the need for the federal government to develop robust human rights-based criteria and indicators to ensure the Paris Agreement and the EU environmental targets are achieved, and to facilitate period reviews of the progress towards Belgium's environmental goals and commitments.⁷²

Given construction of new buildings and renovation work usually leverage on low skilled workforce, we have considered in our initial assessment that discrimination on origin grounds, if not adequately addressed, may pose a social risk to the eligible projects in the green buildings category. With regards to human rights and the environment, we also note that a Belgian court ruled in 2021 that Belgium was in breach of the European convention on human rights because the Belgian federal and regional governments had failed to keep up with the country's climate targets and commitments.⁷³

In response to our initial assessment, the Issuer has however referred to long-standing legislation prohibiting discrimination in the labour market, specifically the *Law of 10 May 2007 combating Certain Acts Inspired by Racism and Xenophobia*, which prohibits discrimination on grounds of race, colour, descent, national or ethnic origin, and nationality, and prevents direct and indirect race discrimination with respect to access to employment.⁷⁴ In addition, the Government's *Circulaire 16/05/2014* requires federal contracting authorities for the public contracts for construction or renovation of buildings that reach the threshold of EUR 1,500,000 (incl. VAT) to include a social clause, without any possibility of derogation, aimed at the integration of persons who have difficulty in accessing the labour market.⁷⁵

Based on our assessment of how the Issuer has addressed social risks and adverse social impacts which may be associated with the Eligible Green Expenditures, we have identified a few areas for improvement:

- Ensuring that all the Eligible Green Expenditures undergo formal social impact assessments, which identify and map relevant human rights and labour standards risks affecting specific groups of the population based on the location of the projects covered by Eligible Green Expenditures.
- Ensuring the institutional coordination between all federal and regional authorities allows for a more integrated oversight of social risks and environmental externalities across the selected Eligible Green Expenditures and categories.

Governance risks

At federal level, public procurement is governed by a federal integrity policy, with a deontological code and procedure to alert breaches of integrity.⁷⁶ The Belgian Court of Audit is responsible for controlling public federal, communities, regional and provincial finances, and conducts regularity audits of public procurement contracts awarded by the federal government.⁷⁷ Bribery and corruption, conflict of interest and the receiving of gifts are prohibited by codes of conduct for employees and suppliers involved in public procurement contracts at SNCB and Infrabel, the government-owned companies that will benefit of the Eligible Green Expenditures relating to rail activities.⁷⁸

Belgium ranked 19 out of 180 in the 2021 Corruption Perception Index (CPI). However, the country's CPI has decreased by three points from the previous year, and was the lowest score Belgium had achieved since the earliest comparable year of

⁶⁹ https://www.developpementdurable.be/sites/default/files/content/be_nap_bhr_brochure_en.pdf

⁷⁰ As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁷¹ <https://ec.europa.eu/social/BlobServlet?docId=8144&langId=en>

⁷² <https://www.ohchr.org/en/hr-bodies/upr/be-index>

⁷³ <https://www.france24.com/en/europe/20210617-belgian-court-finds-government-negligent-on-climate-in-landmark-decision> and

<https://www.theguardian.com/world/2021/jun/18/belgium-climate-policy-violates-human-rights-court-rules>

⁷⁴ https://ec.europa.eu/info/sites/default/files/2016-be-country_report_nd_final.pdf

⁷⁵ As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁷⁶ As per Belgium's response to Moody's ESG Solutions' Questionnaire on ESG Risk Management (May 2022).

⁷⁷ https://ec.europa.eu/regional_policy/sources/policy/how/improving-investment/public-procurement/study/country_profile/be.pdf and

<https://www.ccrek.be/EN/Publications/FederalState.html>

⁷⁸ <https://www.belgiantrain.be/fr/3rd-party-services/supplier/b-pi-home/sustainable-procurement> and https://www.tucrail.be/sites/default/files/code_of_conduct_fournisseurs_2018_fr_0.pdf

available data (2012).⁷⁹ According to the EU Anti-Corruption Report (2014), petty corruption does not appear to pose a challenge for Belgium because significant elements of a required anti-corruption framework are in place. Nevertheless, given the varying competences at federal and regional level, corruption represents a risk particularly in the public sector if it is not addressed in an integrated and consistent manner.⁸⁰

⁷⁹ https://images.transparencycdn.org/images/CPI2021_Report_EN-web.pdf

⁸⁰ https://ec.europa.eu/home-affairs/system/files/2020-09/2014_acr_belgium_chapter_en.pdf

EU TAXONOMY

The Kingdom of Belgium has solicited our review of 2 economic activities (6.1 and 6.14 of the EU Climate Delegated Act, namely, Passenger Interurban Rail Transport and Infrastructure for Rail Transport) falling under 1 Eligible Category (namely, Clean Transportation) in accordance with the EU Taxonomy Criteria. The economic activities of the Eligible Category that we reviewed are outlined in the table below.

The assessment against substantial contribution criteria for climate change mitigation (as set out in the TSC) is based on the definition and eligibility criteria established for the Eligible Category set out in the Framework. The assessment against the Minimum Safeguards and Do No Significant Harm criteria ("DNSH", also set out in the TSC) is based on information shared by the Issuer.

For the DNSH, the Issuer has shared a screening of existing applicable national and regional laws that are likely to cover the DNSH requirements, as well as specific policies and action plans of Infrabel and SNCB, which are the government-owned entities responsible for the implementation of the economic activities of the Eligible Category that we reviewed. The Issuer has shared with us how they ensure that all selected expenditures follow the DNSH criteria, as well as confirmed that SNCB and Infrabel fully evaluate the risks described in Appendix A of Annex I of the EU Climate Delegated Act.

We consider the Minimum Safeguards to be covered as the economic activities of the Eligible Category that we reviewed are located in Belgium. The Federal Government of Belgium, together with the Wallonia, Flanders and Brussels-Capital Region Governments, have developed the National Action Plan to implement the "Guiding Principles on Business and Human Rights".⁸¹ Regarding OECD Guidelines for Multinational Enterprises, the Issuer has shared that they established a National Contact Point (NCP), a tripartite body with representatives of federal and regional public services, as well as three employers' and trade union organisations active at the national level.⁸²

Based on the assessment, Moody's ESG Solutions considers that the criteria of the 2 economic activities of 1 Eligible Categories in the table below are defined in accordance with the EU Taxonomy Criteria.

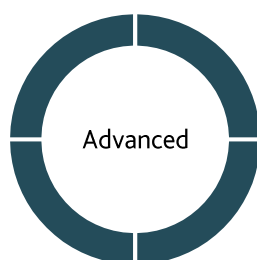
Eligible Category	Corresponding EU Taxonomy economic activities ⁸³	Assessment against Substantial Contribution Criteria	Assessment against Do No Significant Harm Criteria	Opinion on the TSC
Clean Transportation	6.1 Passenger Interurban Rail Transport	The criteria of the category are defined in accordance with the criteria for substantial contribution to climate change mitigation	The criteria of the category and selection process are defined in accordance with the DNSH criteria.	The criteria of the category are defined in accordance with the Technical Screening Criteria for eligible projects under this category.
	6.14 Infrastructure for Rail Transport	The criteria of the category are defined in accordance with the criteria for substantial contribution to climate change mitigation	The criteria of the category and selection process are defined in accordance with the DNSH criteria.	The criteria of the category are defined in accordance with the Technical Screening Criteria for eligible projects under this category.

⁸¹ https://www.developpementdurable.be/sites/default/files/content/be_nap_bhr_brochure_en.pdf

⁸² <https://economie.fgov.be/en/themes/enterprises/oecd-guidelines-multinational/national-contact-point-ncp>

⁸³ In the EU Taxonomy Climate Delegated Act - <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R2139&from=EN>

ISSUER



Sustainability Performance of the Issuer

The Issuer's ESG performance was assessed through a complete process of rating and benchmarking.

According to the *Sovereign Sustainability Rating* © last updated by Moody's ESG Solutions in November 2021, Belgium received a rating of 78/100 which indicates an overall advanced sustainability performance. Belgium ranks 13th out of 178 countries rated in our global sovereign sustainability index, and also 12th out of 38 OECD countries⁸⁴ rated by Moody's ESG Solutions⁸⁵.

Moody's ESG Solutions' assessment of the Issuer's sustainability performance is based on publicly available information and statistics derived from sources that have been agreed for use in the data collection and rating methodologies for the Sovereign Sustainability Rating.

By sustainability pillar, Belgium has an advanced performance across all three pillars: Environmental Responsibility (73/100), Social Responsibility (78/100), and Governance Responsibility (83/100).

PILLAR	COMMENTS	PERFORMANCE LEVEL
Environmental Responsibility	<p>Belgium has an advanced performance in the Environmental Responsibility pillar, however its score of 73/100 is the lowest across the three pillars of sustainability. The country ranks in the top quartile in Moody's ESG Solutions' rated sovereign universe (14th out of 178) and the 12th in the OECD group.</p> <p>Belgium has ratified all the international environmental conventions included in our rating framework, including the Paris Agreement, the Convention on Biological Diversity, the United Nations Framework Convention to Combat Desertification, the Stockholm Convention on persistent organic pollutants and the Aarhus Convention on access to environmental justice.</p> <p>As a member of the European Union (EU), in December 2020, Belgium committed, jointly with the EU member countries, to an updated and enhanced target of a net EU-</p>	Advanced

⁸⁴ There are 38 countries that are members of the Organization for Economic Cooperation and Development (OECD): Australia, Austria, Belgium, Canada, Chile, Colombia, Costa Rica, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. Source <https://www.oecd.org/about/members-and-partners/>. All these countries are covered by V.E in the Sovereign Sustainability Rating.

⁸⁵ Note: The Issuer has not been subject to a review of its ability to mitigate sustainability risks based on the review of stakeholder opinion.

	<p>level reduction of at least 55% in GHG emissions by 2030, compared to 1990 levels.⁸⁶ Belgium ranks the 21st in carbon intensity per unit of economic output (0.10 kg per PPP USD of GDP⁸⁷) in the OECD group. The country needs to strengthen its efforts to reduce consumption-based and transport emissions – according to latest available data, CO2 emissions per capita is higher than the global average though it remains lower than that of the OECD group, while CO2 emissions of transport per capita are higher than both the global average and the OECD group.⁸⁸</p> <p>Belgium performs well in most indicators that measure air pollution. The country's urban pollution levels fare below the OECD average – e.g. the annual mean levels of fine particulate matter (PM2.5) in cities (population weighted) was 12.7 microgram/m3 in 2016.⁸⁹ Air emissions per capita, including emissions of sulphur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and volatile organic compounds (VOC), are below the OECD average, however CO and NOx emissions have the highest levels of the four.⁹⁰ Belgium shows a steady improvement in areas such as energy intensity and transition to renewable energy within the OECD group. The country has the 10th lowest energy intensity (4,687 kg of oil eq./capita⁹¹) and the 13th highest production of electricity from renewable sources excluding hydropower (20.34%⁹²) in the OECD group.</p> <p>Areas related to biodiversity protection, green growth and the transition to a circular economy also need improvement.</p> <p>Regarding biodiversity, Belgium has a mixed performance on ecosystem management. The country has developed a reasonable coverage of protected areas aimed to safeguard its rich terrestrial and marine biodiversity. Compared to its OECD peers, Belgium has an overall high proportion of sites that are important for terrestrial biodiversity which are covered by protected areas (76% in 2020⁹³). The country's Red List Index has recorded a slightly improving trend over time (0.984 in 2021 from 0.982 in 2000), which indicates that the rate of biodiversity loss is decreasing.</p> <p>Focused efforts are also needed in areas related to the transition towards green growth, notably in terms of the nuclear waste production and management, fertilizer consumption and the allocation of public funds for environmentally related R&D.</p> <p>Belgium has a significant share of nuclear energy supply, 17.8% in 2020⁹⁴. It is necessary to focus on developing safety and security improvements to current nuclear waste storage and disposal sites that will ensure the long-term safe disposal of nuclear waste within its territory.⁹⁵</p> <p>The use of fertilizers remains relatively high (293.42 kg per hectare of arable land in 2018) compared to the country's relatively moderate proportion of agricultural land that is covered by organic or sustainable agricultural practices (6.9% in 2019).⁹⁶</p> <p>Overall, Belgium has allocated less environmentally related R&D funding (e.g. 0.7% of total government R&D in 2019), compared to its OECD peers.</p>	Robust
		Limited
		Weak
Social Responsibility	<p>Belgium has an advanced performance in the Social Responsibility pillar with a score of 78/100. The country ranks in the top quartile in Moody's ESG Solutions' rated sovereign universe (14th out of 178) and is 13th in the OECD group.</p> <p>Like most OECD peers, Belgium has high enrolment rates for both primary and secondary education. The government spending on education, which amounted to 6.4% of GDP (2018), is the seventh highest in the OECD group.⁹⁷ Income inequality is</p>	Advanced

⁸⁶ EU's First NDC (Updated Submission), 2020

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Belgium%20First/EU_NDC_Submission_December%202020.pdf

⁸⁷ <https://data.worldbank.org/indicator/EN.ATM.CO2E.PP.GD>

⁸⁸ <https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>

⁸⁹ Adjusted value for 2016, the latest year available at the source. Source: <http://unstats.un.org/sdgs/indicators/database/?indicator=11.6.2>

⁹⁰ Based on V.E analysis of air emissions data published by OECD. Source: <https://data.oecd.org/air/air-and-ghg-emissions.htm>

⁹¹ <https://data.worldbank.org/indicator/EG.USE.PCAP.KG.OE>

⁹² <https://data.worldbank.org/indicator/EG.ELC.RNWX.ZS>

⁹³ <https://unstats.un.org/sdgs/indicators/database/>

⁹⁴ <https://www.iea.org/data-and-statistics/data-browser?country=BELGIUM&fuel=Energy%20supply&indicator=TESbySource>

⁹⁵ <https://www.greenpeace.org/land-use/press-releases/global-crisis-of-nuclear-waste>

⁹⁶ Country agri-environmental / land use indicators. Source: <http://www.fao.org/faostat/en/#data/EL>

⁹⁷ <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS>

	<p>relatively lower than the OECD average, with a Gini coefficient of 0.26 (2018).⁹⁸ Unemployment is high, in particular youth unemployment, which amounted to 15.4% in 2020, well above the OECD average.⁹⁹ Poverty levels are below the OECD average and remained stable over the last ten years (e.g. poverty ratio was 0.08 in 2019).¹⁰⁰ The working population enjoy fundamental rights such as freedom of association and collective bargaining. However, according to International Trade Union Confederation (ITUC), Belgium faced violations of workers' rights in 2020 such as right to free speech and assembly and prosecution of union leaders for participating in strikes.¹⁰¹</p> <p>Belgium fares above the OECD average in areas such as accessibility of healthcare and gender equality. With 19.5 nurses & midwives (2018) and 3 physicians per 1,000 people (2017),¹⁰² the density of medical staff in Belgium is well above the WHO estimates of 2.5 medical staff per 1,000 people needed to provide adequate coverage with primary care interventions.¹⁰³ Belgium has good rates of women in political life and in the labour force.¹⁰⁴ Increasing women's access to education and the labour market is identified as a determinant for change by the Sustainable Development Goals (SDGs) in tackling world poverty.</p> <p>Belgium has an overall moderate performance in the promotion of healthy lives and access to a balanced nutrition, for the areas where there is reported data available to assess performance. Moderate scores are recorded in areas linked to the reduction of infectious diseases and the harmful use of alcohol. Belgium recorded low levels of child malnutrition and stunting, 0.4% and 1.6% respectively.</p>	Robust
		Limited
		Weak
Governance Responsibility	<p>Belgium's performance in the Governance Responsibility pillar is assessed as advanced with a score of 83/100. The country ranks in the top quartile in Moody's ESG Solutions' rated sovereign universe (33rd out of 178), and ranks 24th in the OECD group.</p> <p>Belgium has ratified fundamental conventions relating to human rights, children's rights, and labour rights such as forced labour, freedom of association and collective bargaining. However, Belgium has not endorsed international conventions related to occupational health and safety or the rights of migrant workers. The country abolished the death penalty for all crimes.¹⁰⁵</p> <p>Belgium scores high in all the areas related to the promotion of rule of law, public governance, control of corruption and democratic accountability, voice and accountability that are measured by the Worldwide Governance Indicators. However, the country's performance has recorded a deteriorating trend over the last ten years in the area related to political stability.¹⁰⁶</p> <p>Belgium ranked as the 20th most peaceful country in the 2021 Global Peace Index (GPI), down by 3 points compared to last year's ranking.¹⁰⁷ Belgium shows robust resilience to market risks. According to Coface, Belgium's political and economic governance environment posed a low moderate financial risk for domestic companies in 2021, as the economy and household consumption gradually rebounded following the lifting of</p>	Advanced
		Robust
		Limited

⁹⁸ Where 0 is perfect equality and 1 is perfect inequality. Source : <https://data.oecd.org/inequality/income-inequality.htm>

⁹⁹ <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>

¹⁰⁰ <https://data.oecd.org/inequality/poverty-rate.htm>

¹⁰¹ ITUC Global Rights Index 2021 https://files.mutualcdn.com/ituc/files/ITUC_GlobalRightsIndex_2021_EN-final.pdf and <https://www.globalrightsindex.org/en/2021/countries/bel>

¹⁰² Nurses & midwives per 1,000 people <https://data.worldbank.org/indicator/SH.MED.NUMW.P3>; Physicians per 1,000 people <https://data.worldbank.org/indicator/SH.MED.PHYS.ZS>

¹⁰³ As per the definition of medical staff shortage in the 2006 World Health Report https://www.who.int/whr/2006/whr06_en.pdf?ua=1

¹⁰⁴ Labor force participation rate, female <https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS>; Proportion of seats held by women in national parliaments (%) <https://data.worldbank.org/indicator/SG.GEN.PARL.ZS>

¹⁰⁵ <https://www.amnesty.org/en/location/europe-and-central-asia/belgium/>

¹⁰⁶ Worldwide Governance Indicators (WGI) <https://info.worldbank.org/governance/wgi/>. Vigeo Eiris (VE) calculates performance trends where underlying historical data is available at the source.

¹⁰⁷ The Global Peace Index (GPI) scores countries on a scale of 1-5, where 1 is most peaceful and 5 is least peaceful. Source: https://www.visionofhumanity.org/wp-content/uploads/2020/10/GPI_2020_web.pdf (GPI 2020 rated 169 countries) and <https://www.visionofhumanity.org/wp-content/uploads/2021/06/GPI-2021-web-1.pdf> (GPI 2021 rated 163 countries).

	<p>most of the restrictions linked to the Covid-19 pandemic in the second half of the year.¹⁰⁸ Adjusted net savings, including damage from particulate emission pollution (as a % of GNI) – a measure of the change in the value of natural resources and social welfare in the country – have remained within stable levels of performance over the last two decades.¹⁰⁹</p>	Weak
--	---	------

¹⁰⁸ As per country risk analysis published by Coface to assess the country's business resilience to market risks. Source: <http://www.coface.com/Economic-Studies-and-Country-Risks>

¹⁰⁹ Adjusted Net Saving (ANS) was developed as an indicator to approximate the change in wealth—based on simple economic theory in which savings equals investment, and investment equals the change in wealth. ANS measures gross national savings, adjusted for gains (spending on education) and losses (consumption of fixed capital, depletion of subsoil assets and forests, pollution damages). Source: <https://data.worldbank.org/indicator/NY.ADJ.SVNG.GN.ZS>

METHODOLOGY

In our view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such they cannot be separated in the assessment of ESG management in any organisation, activity or transaction. In this sense, we provide an opinion on the Issuer's ESG performance as an organisation, and on the processes and commitments applicable to the intended issuance.

Our Second Party Opinions (SPOs) are subject to internal quality control at three levels (Analyst, Project Manager and Quality Reviewer). If necessary, this process is complemented by a final review and validation by the Expertise Committee and Supervisor. A right of complaint and recourse is guaranteed to all companies under our review.

COHERENCE

Scale of assessment: not coherent, partially coherent, coherent

This section analyses whether the activity to be financed through the selected instrument is coherent with the Issuer's sustainability priorities and strategy, and whether it responds to the main sustainability issues of the sector where the Issuer operates.

ISSUANCE

Alignment with the Green and/or Social Bond Principles

Scale of assessment: Not aligned, Partially aligned, Aligned, Best Practices

The Framework has been evaluated by Moody's ESG Solutions according to the ICMA's Green Bond Principles - June 2021 ("GBP"), and on our methodology based on international standards and sector guidelines applicable in terms of ESG management and assessment.

Use of proceeds

The definition of the Eligible Projects and their sustainable objectives and benefits are a core element of Green/Social/Sustainable Bonds and Loans standards. Moody's ESG Solutions evaluates the clarity of the definition of the Eligible Categories, as well as the definition and the relevance of the primary sustainability objectives. We evaluate the descriptions of the expected benefits in terms of relevance, measurability and quantification. In addition, we map the potential contribution of Eligible Projects to the United Nations Sustainable Development Goals' targets.

Process for evaluation and selection

The evaluation and selection process is assessed by Moody's ESG Solutions on its transparency, governance and relevance. The eligibility criteria are assessed on their clarity, relevance and coverage vs. the intended objectives of the Eligible Projects.

Management of proceeds

The process and rules for the management and the allocation of proceeds are assessed by Moody's ESG Solutions on their transparency, traceability and verification.

Reporting

The monitoring and reporting process and commitments defined by the Issuer are assessed by Moody's ESG Solutions on their transparency, exhaustiveness and relevance, covering the reporting of both proceeds' allocation and sustainable benefits (output, impact indicators).

Contribution to sustainability

Scale of assessment: Weak, Limited, Robust, Advanced

Our assessment of activities' contribution to sustainability encompasses both the evaluation of their expected positive impacts on environmental/social objectives, as well the management of the associated potential negative impacts and externalities.

Expected positive impact of the activities on environmental/social objectives

The expected positive impact of activities on environmental/social objectives to be financed by the Issuer or Borrower is assessed on the basis of:

- i) the relevance of the activity to respond to an important environmental/social objective for the sector of the activity;¹¹⁰
- ii) the scope of the impact: the extent to which the expected impacts are reaching relevant stakeholders (i.e. the Issuer, its value chain, local and global stakeholders);
- iii) the magnitude and durability of the potential impact of the proposed activity on the environmental/social objectives (capacity to not just reduce, but to prevent/avoid negative impact; or to provide a structural/long-term improvement);
- iv) for environmental objectives only: the extent to which the activity is adopting the best available option.

ESG risk management for eligible activities

The identification and management of the potential ESG risks associated with the eligible projects/activities are analysed on the basis of Moody's ESG Solutions' ESG assessment methodology, international standards and sector guidelines applicable in terms of ESG management and assessment.

ISSUER

Issuer's ESG Performance

Scale of assessment of ESG Performance: Weak, Limited, Robust, Advanced

NB: The Issuer's level of ESG performance (i.e. commitments, processes, results of the Issuer related to ESG issues), has been assessed through a complete process of rating and benchmarking developed by us. The Issuers' ESG performance has been assessed by us on the basis of its:

- Leadership: relevance of the commitments (content, visibility and ownership).
- Implementation: coherence of the implementation (process, means, control/reporting).
- Results: indicators, stakeholders' feedbacks and controversies.

The analysis of the Issuer's sustainability performance is derived from our Sovereign Sustainability Rating, a proprietary rating framework which provides scores, data and information about the Environmental, Social and Governance (ESG) performance of countries. The rating framework is anchored in globally recognised standards and country statistics, and is organised within three equally weighted pillars, 17 factors (sub-domains), 56 criteria and 172 indicators, which are divided between:

- a) Engagement indicators that measure the level of commitment of a country towards sustainability norms and standards endorsed by globally recognised treaties and conventions (e.g. UN treaties, ILO conventions, OECD standards), and
- b) Results indicators that measure the actions undertaken, or the results achieved, by a country across a wide range of ESG factors.

The 172 indicators have been chosen due to their universal applicability and relevance in reflecting the country's level of sustainability in the areas they measure. For each indicator, we source country data and information from authoritative sources available in the public domain, which offer comparable data and statistics for a wide coverage of countries and have regular data updates (e.g. United Nations agencies, the World Bank, the OECD, the World Resources Institute, Coface, the Freedom House, Amnesty International and Transparency International).

The indicators included in our rating framework are also mapped against the Sustainable Development Goals (SDGs), the global blueprint set up in 2015 by the United Nations (UN) and agreed upon by the UN member states as part of the Agenda 2030 for a fairer, greener and more sustainable future. Our Sovereign Sustainability Rating ensures the use of proceeds described in the issuer's Sustainability, Green or Social Bond framework is aligned with the sustainable development needs identified for the issuing country.

¹¹⁰ The importance of a specific social need at country level is assessed on the basis of the country performance on the priority SDG that the project is targeting using data from Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. 2020. The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020. Cambridge: Cambridge University Press.

OUR ASSESSMENT SCALES

Scale of assessment of Issuer's ESG performance or strategy and financial instrument's Contribution to sustainability		Scale of assessment of financial instrument's alignment with Green and/or Social Bond and Loan Principles	
Advanced	Advanced commitment; strong evidence of command over the issues dedicated to achieving the sustainability objective. An advanced expected impact combined with an advanced to robust level of ESG risk management & using innovative methods to anticipate new risks.	Best Practices	The Instrument's practices go beyond the core practices of the ICMA's Green and/or Social Bond Principles and/or of the LMA/APLMA/LSTA's Green and/or Social Loan Principles by adopting recommended and best practices.
Robust	Convincing commitment; significant and consistent evidence of command over the issues. A robust expected impact combined with an advance to robust level of assurance of ESG risk management or an advanced expected impact combined with a limited level of assurance of ESG risk management.	Aligned	The Instrument has adopted all the core practices of the ICMA's Green and/or Social Bond Principles and/or of the LMA/APLMA/LSTA's Green and/or Social Loan Principles.
Limited	Commitment to the objective of sustainability has been initiated or partially achieved; fragmentary evidence of command over the issues. A limited expected impact combined with an advanced to limited level of assurance of ESG risk management; or a robust expected impact combined with a limited to weak level of assurance of ESG risk management; or an advance expected impact combined with a weak level of assurance of ESG risk management.	Partially Aligned	The Instrument has adopted a majority of the core practices of the ICMA's Green and/or Social Bond Principles and/or of the LMA/APLMA/LSTA's Green and/or Social Loan Principles, but not all of them.
Weak	Commitment to social/environmental responsibility is non-tangible; no evidence of command over the issues. A weak expected impact combined with an advanced to weak level of assurance of ESG risk management or a limited expected impact with a weak level of assurance of ESG risk management.	Not Aligned	The Instrument has adopted only a minority of the core practices of the ICMA's Green and/or Social Bond Principles and/or of the LMA/APLMA/LSTA's Green and/or Social Loan Principles.

STATEMENT ON MOODY'S ESG SOLUTIONS' INDEPENDENCE AND CONFLICT-OF-INTEREST POLICY

Transparency on the relation between MOODY'S ESG and the Issuer: MOODY'S ESG has not carried out any audit mission or consultancy activity for The Kingdom of Belgium. No established relation (financial or commercial) exists between MOODY'S ESG and The Kingdom of Belgium. Independence, transparency, quality and integrity requirements are all formalised within our Moody's Code of Conduct.

This opinion aims at providing an independent opinion on the sustainability credentials and management of the Bonds, based on the information which has been made available to MOODY'S ESG. MOODY'S ESG has not performed an on-site audit nor other tests to check the accuracy of the information provided by the Issuer/Borrower. The accuracy, comprehensiveness and trustworthiness of the information collected are a responsibility of the Issuer. The Issuer is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by MOODY'S ESG neither focuses on the financial performance of the Bonds, nor on the effective allocation of its proceeds. MOODY'S ESG is not liable for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction. Restriction on distribution and use of this opinion: The deliverables remain the property of MOODY'S ESG. MOODY'S ESG grants the Issuer all rights to use the final version of the Second Party Opinion delivered for external use via any media that the Issuer shall determine in a worldwide perimeter. The Issuer has the right to communicate to the outside only the Second Party Opinion complete and without any modification, that is to say without making selection, withdrawal or addition, without altering it in any way, either in substance or in the form and shall only be used in the frame of the contemplated concerned issuance. The Issuer acknowledges and agrees that MOODY'S ESG reserves the right to publish the final version of the Second Party Opinion on MOODY'S ESG's website and on MOODY'S ESG's internal and external communication supporting documents.

DISCLAIMER

© 2022 Moody's ESG Solutions France SAS and/or its licensors and subsidiaries (collectively, "Moody's ESG"). All rights reserved.

Moody's ESG provides its customers with data, information, research, analyses, reports, quantitative model-based scores, assessments and/or other opinions (collectively, "Research") with respect to the environmental, social and/or governance ("ESG") attributes and/or performance of individual issuers or with respect to sectors, activities, regions, stakeholders, states or specific themes.

MOODY'S ESG'S RESEARCH DOES NOT ADDRESS NON-ESG FACTORS AND/OR RISKS, INCLUDING BUT NOT LIMITED TO: CREDIT RISK, LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. MOODY'S ESG'S ASSESSMENTS AND OTHER OPINIONS INCLUDED IN MOODY'S ESG'S RESEARCH ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S ESG'S RESEARCH: (i) DOES NOT CONSTITUTE OR PROVIDE CREDIT RATINGS OR INVESTMENT OR FINANCIAL ADVICE; (ii) IS NOT AND DOES NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES; AND (iii) DOES NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ESG ISSUES ITS RESEARCH WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S ESG'S RESEARCH IS NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S ESG'S RESEARCH WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. MOODY'S ESG'S RESEARCH IS NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S ESG'S PRIOR WRITTEN CONSENT.

ALL INFORMATION CONTAINED HEREIN IS OBTAINED BY MOODY'S ESG FROM SOURCES BELIEVED BY IT TO BE ACCURATE AND RELIABLE. BECAUSE OF THE POSSIBILITY OF HUMAN OR MECHANICAL ERROR AS WELL AS OTHER FACTORS, HOWEVER, ALL INFORMATION CONTAINED HEREIN IS PROVIDED "AS IS" WITHOUT WARRANTY, EXPRESS OR IMPLIED, OF ANY KIND, INCLUDING AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. MOODY'S ESG IS NOT AN AUDITOR AND CANNOT IN EVERY INSTANCE INDEPENDENTLY VERIFY OR VALIDATE INFORMATION IT RECEIVES.

To the extent permitted by law, Moody's ESG and its directors, officers, employees, agents, representatives, licensors and suppliers (together, "Moody's ESG Parties") disclaim liability to any person or entity for any (a) indirect, special, consequential, or incidental losses or damages, and (b) direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded); on the part of, or any contingency within or beyond the control of any Moody's ESG Party, arising from or in connection with the information contained herein or the use of or inability to use any such information.

Additional terms For PRC only: Any Second Party Opinion, Climate Bond Initiative (CBI) Verification Report or other opinion issued by Moody's ESG: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

Additional terms for Hong Kong only: Any Second Party Opinion or other opinion that falls within the definition of "advising on securities" under the Hong Kong Securities and Futures Ordinance ("SFO") is issued by Moody's ESG Solutions Hong Kong Limited, a company licensed by the Hong Kong Securities and Futures Commission to carry out the regulated activity of advising on securities in Hong Kong. This Second Party Opinion or other opinion that falls within the definition of "advising on securities" under the SFO is intended for distribution only to "professional investors" as defined in the SFO and the Hong Kong Securities and Futures (Professional Investors) Rules. This Second Party Opinion or other opinion must not be distributed to or used by persons who are not professional investors.