

ASSESSMENT

14 November 2024

Send Your Feedback

Contacts

Amaya London AVP-Sustainable Finance amaya.london@moodys.com

Krister Koskelo Associate Lead Analyst – Sustainable Finance krister.koskelo@moodys.com

Adriana Cruz Felix SVP-Sustainable Finance adriana.cruzfelix@moodys.com

Agence Française de Développement

Second Party Opinion – SDG Financing Framework Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 Sustainability Quality Score (very good) to the Agence Française de Développement's (AFD) Sustainable Development Goals (SDG) financing framework dated November 2024. The AFD has established its SDG financing framework with the aim of financing projects across three eligible green categories and thirteen eligible social categories. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2021 (including the June 2022 Appendix 1) and Social Bond Principles 2023, and the Loan Market Association's, the Asia Pacific Loan Market Association's and the Loan Syndications & Trading Association's (LMA/APLMA/LSTA) Green Loan Principles (GLP) 2023 and Social Loan Principles (SLP) 2023. The framework demonstrates a significant contribution to sustainability.



Scope

We have provided a second party opinion (SPO) on the sustainability credentials of the AFD's framework, including the framework's alignment with the ICMA's GBP 2021 (with June 2022 Appendix 1) and SBP 2023, and the LMA/APLMA/LSTA's GLP 2023 and SLP 2023. Under the framework, the development bank, including its subsidiaries, plans to raise sustainable financing through green, social or sustainability instruments to finance green or social assets across 16 eligible categories, as outlined in Appendix 3 of this report. The sustainable SDG bonds to be issued include climate bonds, social bonds, and sustainability bonds.

Our assessment is based on the last updated version of the framework received on 13 November 2024, and our opinion reflects our point-in-time assessment¹ of the details contained in this version of the framework, as well as other public and non-public information provided by the organization.

We produced this SPO based on our <u>Assessment Framework: Second Party Opinions on Sustainable Debt</u>, published in November 2024.

Issuer profile

The Agence Française de Développement (AFD) is France's national development bank, with €69.5 billion in reported total assets as of 2023, and it is fully owned by the Government of France. Currently, the AFD provides financing in developing and emerging-market countries, as well as to French overseas territories, with financing for private-sector enterprises in emerging economies implemented through its subsidiary Proparco. Most of this financing takes the form of loans (both market rate and concessional), though some financing also goes towards subsidies, guarantees, and towards equity investments. The bank further provides technical assistance for projects overseas through its subsidiary Expertise France, and also has several other small subsidiaries focused on specific territories and localities. The AFD Group has around 3,600 employees and is active in more than 150 countries and 11 overseas departments and territories of France. Africa accounts for the greatest portion of new financing (38% in 2023), followed by Asia (30%) and Latin America (18%).

The AFD is headed by a Director general and is overseen by the Ministry of Foreign Affairs through its Directorate for Cooperation and Development. The AFD has a Council for Strategic Orientation which ensures alignment between France's broader international development policies and the operations of the AFD. As a financing institution, the AFD is supervised by the French financial regulator, the Autorité de Contrôle Prudentiel et de Résolution (ACPR). In terms of its sustainability strategy, the bank aims to be 100% compliant with Paris Agreement climate goals, for 100% of activities to have a social link, and to be 100% focused on the UN Sustainable Development Goals. In 2023, climate-related financing reached €7.5 billion, or 62% of the total that year.

Strengths

- » All projects are highly relevant for a sovereign-backed development financial institution (DFI) such as the AFD, particularly in light of the local context of the countries in which the AFD operates.
- » All social projects are expected to target vulnerable populations including the most vulnerable ones, especially in terms of access to essential services.
- » The environmental and social benefits associated with the eligible projects are clearly defined and relevant.

Challenges

- » No exhaustive eligibility and exclusion criteria for a majority of categories.
- » Several eligible technologies are not in line with best market practices, or lack technical thresholds or criteria, notably desalination and biomass projects.
- » Lack of transparency on scoring requirements or thresholds for the internal *Analyse de Développement Durable* analysis used to determine project eligibility.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Alignment with principles

The AFD's SDG bond framework is aligned with the four core components of the ICMA's GBP 2021 (with June 2022 Appendix 1) and SBP 2023, and the LMA/APLMA/LSTA's GLP 2023 and SLP 2023:



Clarity of the eligible categories – ALIGNED

The AFD has communicated the nature of expenditures, the eligibility and exclusion criteria, and the location of the eligible projects. The types of financing under the present framework can include: budgetary financing for public policies; budgetary program-specific financing; thematic credit lines; concessional loans; market rate loans; loans for French overseas territories and collectivities; long term loans; or credit lines, among other formats. The development agency has confirmed that the projects will be located in its target geographies, which are emerging market countries globally, mainly Africa, Latin America and Asia, with some projects located in French overseas territories or collectivities. We note that while the eligibility and exclusion criteria are well defined for the vast majority of planned projects, these are not as clearly defined for the specific loans to French overseas territories and collectivities. Across eligible categories, the AFD has provided descriptions and examples of the eligible projects that could be financed.

The cornerstone of the ICMA's Green Bond Principles (GBP) and Social Bond Principles (SBP) is the full utilization of net bond proceeds for eligible projects with clear environmental or social benefits. Some of the contemplated types of financing, notably with regards to budgetary financing for public policies, could introduce concerns in terms of alignment to sustainability objectives, allocation and traceability at the asset level, or impact reporting. In this case, the issuer reports that all investments, no matter the format, must meet eligibility criteria, be subject to the rigorous evaluation and selection processes (described below in detail), and demonstrate linkage to sustainability objectives, with quantifiable impacts that will be reported. Notably, this type of thematic financing is tied to disbursement-linked indicators, which are part of the external verification of impact reporting (see Reporting section). With these mitigation measures in place, we consider the structure of the framework to be in line with current market practices.

Clarity of the environmental or social objectives - BEST PRACTICES

The organization has clearly outlined the environmental and social objectives associated with its eligible categories. All eligible categories are relevant to the respective objective to which they are aiming to contribute, notably the UN Sustainable Development Goals (SDGs) in the articulation of the objective of the eligible green categories, making the framework coherent with international standards (see Appendix 1 for more details).

Clarity of expected benefits – BEST PRACTICES

The organization has identified clear expected environmental and social benefits for all categories and these benefits are relevant based on the projects likely to be financed under each category. Relevant and measurable benefits are identified in the framework for each of the sixteen eligible categories it contains. The benefits will be assessed by the issuer and quantified for all eligible project categories in the corresponding annual reporting. The issuer has committed to disclose an estimation of the refinancing share before each issuance to investors, as well as an estimation of the look-back period. ì

Process for project evaluation and selection

			\mathbf{V}
Not aligned	Partially aligned	Aligned	Best practices

Transparency and clarity of the process for defining and monitoring eligible projects- BEST PRACTICES

The organization's decision-making process for the evaluation and selection of projects is clear and structured. The process of identifying and selecting eligible loans relies on various internal structures within AFD and its subsidiary Proparco, carried out throughout the project life-cycle. Process identification and initial evaluation starts with the operational teams, partnering locally-based teams and Paris-based experts, who conduct a first analysis. Analysis continues with the specialized in house ESG risk evaluation team. The most extensive evaluation occurs through the "Avis Developpement Durable," or opinion on sustainable development, conducted by a dedicated internal team. In this opinion, all potential projects are evaluated on seven key dimensions of sustainability, namely: biodiversity, carbon transition, resilience (adaptation), social impact, gender equality, economy, and governance. Each proposed project is 'scored' for each of the above factors, on a five level scale from -2 to +3, indicating impacts ranging from significant negative ones to very substantial positive ones. For the purposes of selection for the pool of assets for the present SDG bond framework, projects must have received, as a minimum, no negative scores (i.e. at least a score of 0 on all dimensions), and at least one positive score. Supported by this Opinion, final decisions on projects are made by the AFD's Credit committee. A very similar, although separate, process occurs at Proparco.

For the purposes of the SDG bond framework, the AFD has set up a dedicated Committee for monitoring thematic bonds (COSOT, by its French acronym), composed of relevant internal expertise in the form of representatives from the AFD's treasury and financing, operational, and strategy and research divisions and from Proparco's impact reporting team. The COSOT committee will meet at least twice annually and is responsible for examining and validating the inclusion of loans in the eligible portfolio for SDG bonds, as well as for continued monitoring and reporting. COSOT will propose replacements for loans that exit the portfolio, whether due to maturing or non-adherence with eligibility criteria, and will examine and validate annual allocation and impact reporting.

In case a project is no longer compliant with the eligibility criteria, the bank commits to substitute for another eligible project. Traceability of the process is ensured through meeting minutes and reports, all managed through an internal tool.

The AFD conducts environmental and social risk identification, evaluation and mitigation, including monitoring for controversies, both as part of the project evaluation and selection process, and throughout the life cycle of projects. The AFD has a dedicated ESG risk management team that evaluates proposed projects and monitors them once implemented. All AFD projects receive a score from the ESG risk management team, separate from the Opinion on sustainable development described above, which also considers environmental and social risks and externalities. Policies will continue to be applied throughout the project life-cycle, and throughout the life of the instruments issued under the framework. The AFD discloses detailed information on its risk management processes in its annual reporting.

Management of proceeds

Not aligned

Partially aligned

Aligned

Best practices

Allocation and tracking of proceeds – BEST PRACTICES

The AFD has defined a clear process for the management and allocation of proceeds in its framework. Net proceeds from issuances under the framework will be placed in the company's general treasury and will be tracked by the issuer to ensure that those are allocated only toward the eligible project pool. Periodic adjustments of proceeds will be conducted, and the organization has committed to ensure that the net proceeds of the SDG bonds never exceed the portfolio of eligible projects, including by maintaining a small margin to act as a safety cushion. The AFD commits to allocate net proceeds within the calendar year following each issuance.

Unallocated proceeds will be managed by the treasury of the AFD and placed in socially responsible funds and monetary products on a best effort basis. If a project is postponed, canceled or otherwise becomes ineligible, the organization has stated its commitment

to reallocate the funds to other qualifying projects. This reallocation process, overseen by the COSOT committee, will adhere to the processes outlined in the Management of Proceeds section until the funds are successfully assigned to other eligible projects.

Reporting



Transparency of reporting – BEST PRACTICES

The AFD has committed to publish annual reporting on its SDG bonds until the maturity of the instruments. The report will be publicly available on the AFD's website and will cover relevant information about the allocation of proceeds and the expected sustainable benefits of the projects. Any relevant material developments, issues or controversies related to the projects or assets will also be included. The calculation methodologies and assumptions used to report on environmental and social benefits will be made available to bondholders or lenders on demand. The allocation reporting will be verified by an independent auditor on an annual basis until maturity of the instruments. The impact reporting, which will be subject to an independent assessment in line with best practices, will include case studies to report on the social impacts and benefits of the projects.

Contribution to sustainability

The framework demonstrates a significant overall contribution to sustainability. This reflects a preliminary contribution to sustainability score of significant, based on the relevance and magnitude of the eligible project categories, and we have not made an adjustment to the preliminary score based on additional contribution to sustainability considerations.



Preliminary contribution to sustainability

The preliminary contribution to sustainability is significant, based on the relevance and magnitude of the eligible project categories. Based on information provided by the agency, we expect proceeds to be relatively evenly distributed among categories, with democratic governance and justice, mobility, resilient economy, food security, and renewable energy expected to represent the most important categories for allocation from forthcoming issuances. We have therefore assigned a higher weight to these categories in our assessment of the overall framework's contribution to sustainability. A detailed assessment by eligible category is provided below.

Climate change adaptation

R	Relevance					▼
	Magnitude				▼	
		Poor	Limited	Moderate	Significant	High

Climate change adaptation is considered very material and in line with international targets, notably SDG 13. It is considered a highly relevant sustainability issue for a sovereign-backed development financial institution (DFI) such as the AFD to address. Climate change is a worldwide crisis and hence relevant across geographies; however, physical climate impacts are generally expected to be more severe in the target geographies of the AFD. In general, emerging economies are more vulnerable to physical climate risk compared with advanced economies. The average physical risk score (on a scale of 1-5) of 109 emerging economies rated by Moody's was 3.4,

compared to an average of 2.3 for advanced economies. All the most vulnerable economies with the highest exposure to physical climate risk (score of 5 out of 5) are either low-income countries or island nations (including countries such as Mozambique, Papua New Guinea and St Vincent and the Grenadines).

The magnitude of eligible projects is considered significant. While the projects are expected to have positive long-term impact, with little to no negative externalities, there is some lack of information on the financed programs and the extent of their reach. Recent investments by the AFD in adaptation projects have ranged from ones with a narrow scope to ones for broadly improving resilience and capacity. Key recent examples of projects include financing to support Indonesia's weather service, or better modelling of climate impacts for France's pacific overseas territories, as well as a broad project providing support and assistance to 17 African governments to improve their preparedness for, and resilience toward, the impacts of climate change.

Renewable energy and energy efficiency



Renewable energy projects aiming for climate change mitigation are considered highly relevant for a sovereign-backed development finance institution (DFI) such as the AFD, and are in line with international targets, notably SDGs 7 and 13. Renewable energy projects are considered highly relevant In the focus geographies of the AFD. In many of these regions, the electricity grid is still highly carbon intensive. In Africa as a whole, the continent making up the largest share of the AFD's lending, 75.6% of electricity generation (as of 2021) came from fossil fuels (coal, oil and natural gas).

Overall, the magnitude of eligible projects is considered moderate. The absence of clear criteria for various eligible projects limits our visibility of their potential contribution to energy efficiency improvement and climate change mitigation. Many included project types in this category are expected to have a highly positive long-term impact, use best available technologies and have minimal negative externalities, notably electricity generation from wind, solar photovoltaic (PV) panels or tidal energy; electricity transmission and distribution; urban district heating and cooling networks; energy research; and energy policy support. However, the category does contain some types of projects that have the potential for greater negative externalities, notably biomass power plants expected to use mainly agricultural or forestry residues, for which detailed thresholds were not provided. Finally, the category includes energy efficiency projects, but without specified thresholds and little visibility on what types of projects or industries are involved.

Terrestrial and aquatic biodiversity protection



Biodiversity protection and restoration projects are considered highly relevant for a sovereign-backed DFI, and in line with international targets, notably SDGs 14 and 15. Biodiversity loss is a worldwide crisis and hence relevant across geographies. For example, according to the World Wildlife Fund and Zoological Society London, the relative abundance of populations of mammals, birds, amphibians, reptiles and fish has fallen by 69% on average between 1970 and 2018. In Africa alone, the main focus geography of the AFD, an estimated 6,400 animal species and 3,100 plant species are at risk of extinction, and populations of vertebrate species are estimated to have fallen by 39% since 1970.

The magnitude of eligible projects is considered high due to their expected positive, large-scale and long-term impact, with little to no negative externalities. This category is dedicated to biodiversity protection, conservation and restoration across geographies. Regarding scale and protected areas, projects respond to key objectives and needs for local environments and ecosystems in targeted countries, and do so at large enough scale to protect entire ecosystems and habitats. Projects typically also include a governance component,

such as support to national park authorities, other local and regional authorities, and national governments. Key recent examples of projects include the landscape scale protection and restoration of the Parana river in Santa Fe province, Argentina; support to the Moroccan government for the country's Forest Strategy 2020-2030; and ecological restoration of Pingnan, Fujian Province, China.

Access to essential services: Health



Access to health is considered highly relevant sustainability issue for a sovereign-backed DFI, in line with international targets, notably SDG 3. A significant gap in access to health continues to exist globally, predominantly impacting low- and middle-income countries (LMICs). Nowadays, an significant number of individuals in LMICs continue to be unable to access crucial healthcare services and the COVID-19 pandemic underscored these disparities, underlining the pressing need for united global efforts to an increased access to quality and affordable healthcare.

The magnitude of eligible projects is considered high. All projects are expected to have substantial positive long-term impact for relevant target population, focusing primarily, if not exclusively, on the most vulnerable groups. Projects in this category aim to improve access to high-quality healthcare services that are free or affordable. This includes constructing public or non-profit hospitals and facilities, training medical personnel, funding health campaigns (such as vaccination drives or COVID-19 response), or implementing public policies to achieve universal coverage. These types of projects have few negative externalities and a high/long-term positive impact.

Access to essential services: Education



Access to education is considered highly relevant sustainability issue for a sovereign-backed DFI, and in line with international targets, notably SDG 4. For example, although many developing countries have made substantial progress in increasing access to education, largely due to an increase in educational infrastructure, government policies, and international aid over the past few decades, the quality of education and learning outcomes continue to be a crucial challenge in these countries, especially in the aftermath of the Covid-19 crisis. For instance, as reported by the World Bank, the proportion of children subjected to Learning Poverty (defined as the percentage of 10-year-olds who are unable to read and comprehend a simple, age-appropriate text) in low- and middle-income countries has escalated from 57% pre-pandemic to an estimated 70% in 2022.

The magnitude of eligible projects is considered high. All projects are expected to have substantial positive long-term impact for relevant target population, focusing primarily, if not exclusively, on the most vulnerable groups. Projects in this category are expected to participate in improving access to affordable and quality education from early childhood through to post high school and vocational training, and includes both the construction of school facilities and infrastructure; teacher training and education research; or vocational training and learning. These types of projects have few negative externalities and a high/long-term positive impact.

Access to essential services: Poverty reduction



Poverty reduction is considered highly material sustainability topic for a sovereign-backed DFI and is in line with international targets, notably SDG 1. According to the World Bank, the COVID-19 pandemic and other significant disruptions during 2020-2022 have severely obstructed poverty reduction efforts, effectively undoing three years of progress. As of 2022, the number of individuals living in extreme poverty worldwide rose to 712 million, marking an increase of 23 million people since 2019. According to the global multidimensional poverty index 2023, roughly five out of six poor people live in Sub-Saharan Africa or South Asia, the main focus geography of the AFD.

The magnitude of eligible projects is considered high. All projects are expected to have substantial positive long-term impact for a relevant target population focusing exclusively on the most vulnerable ones. Projects in this category to finance various types of projects that share a common objective of contributing to poverty reduction including projects aimed at providing access to microcredit (Propaco). They primarily focus on living standards basics services and aim to lift the target populations out of poverty. Key recent examples of projects include initiatives and programmes supporting family farms (smallholders) in several African countries. Such projects could finance activities with inherent negative externalities (e.g., cattle farming or non-sustainable fishing). However these externalities are expected to be limited due to the relatively small scale of the funded projects and the projects have a high/long-term positive impact.

Employment creation - Resilient economy



Employment creation and a resilient economy are considered highly material for a sovereign-backed DFI, in line with international targets, notably SDG 8. According to the UNSDSN SDG index, major challenges remain in providing decent employment and promoting economic growth in the geographical zones where the AFD operates, particularly in its priority countries (least developed countries, including sub-Saharan countries).

The magnitude of eligible projects is considered significant because these projects are likely to generate a long-term impact and contribute to decent employment and economic growth, but they do not exclusively target the most vulnerable populations nor specific sectors, particularly those sectors/companies expected to generate positive social or environmental outcomes. This category finances a wide range of projects targeting local economic actors, particularly small and medium-sized enterprises (SMEs) and entrepreneurs. These include public policy, administrative and financial management, job creation, labor rights, social dialogue, education/training in banking and financial services, SME development, trade policy, tourism management, disaster risk reduction, general budget support aid, activities involving financial intermediaries (both official and unofficial), and debt-related actions. Although this category is sector-agnostic, the AFD's exclusion list applies to funded projects, meaning projects are unlikely to finance GHG-intensive or controversial sectors, which limits potential negative externalities.

Socioeconomic advancement and empowerment : Gender equality



Gender equality is considered highly material for a sovereign-backed DFI, in line with international targets, notably SDG 5. According to the UNSDSN SDG index, major challenges remain in promoting gender equality in the geographical zones where AFD operates, particularly in its priority countries, which include the least developed countries, South Asian countries, and sub-Saharan countries.

The magnitude of eligible projects is considered high. All projects are expected to have a substantial positive long-term impact on a relevant target population, focusing primarily, if not exclusively, on the most vulnerable groups, thereby contributing to increased access to gender equality. However, detailed information about eligibility criteria, beyond the target population, is not provided and the projects and program do not target specific sectors, particularly those sectors/companies expected to generate positive social or environmental outcomes.

Socioeconomic advancement and empowerment : Democratic governance and justice



Democratic governance and justice are considered highly material for a sovereign-backed DFI, in line with international targets, notably SDG 16. According to the UNSDSN SDG index, major challenges remain in Democratic Governance and Justice in the geographical zones where the AFD operates, particularly in its priority countries (least developed countries, including sub-Saharan countries).

This category has a significant magnitude because the projects are likely to generate a long-term impact; however, detailed information about the target population or funded projects is not provided. We anticipate that a significant portion of the eligible expenditure in this category will be directed toward public policy budgetary financing. It should be noted that this type of financing is not allocated to specific investments or projects but to a business plan or a commitment matrix (result-triggered financing through the achievement of 'disbursement linked indicators'). For the analysis of this type of loan, the sustainable development opinion relies on three elements of the AFD's doctrine on budgetary finances in foreign states, adopted in 2021: (i) an analysis of public policy, which assesses its relevance and credibility in view of the country's overall public policies; (ii) an institutional analysis of the counterparty, which focuses on the partner's ability to steer, coordinate, and report on public policy; and (iii) an analysis of the robustness of the financing structure, through an evaluation of the staggered payment schemes. This structured selection system with multiple filters, coupled with the ongoing monitoring of project implementation and effectiveness, ensures comprehensive public policy execution, despite the lack of detailed information on the financed projects.

Socioeconomic advancement and empowerment: Reduction of social inequality



Reduction of social inequality and increased access to social welfare is considered highly material for a sovereign-backed DFI, in line with international targets, notably SDGs 1, 3 and 10. Social welfare projects including the implementation of universal coverage are highly relevant given the significant inequalities in access to quality and affordable healthcare in the least developed countries, especially in Sub-Saharan Africa. According to the ILO, governments of low- and middle-income countries will need to increase

spending to ensure universal social protection by an estimated additional US\$1.4 trillion if they are to provide basic social protection for all . For low-income countries in particular, bridging the gap would require the mobilization of four times annual government expenditure.

The magnitude of eligible projects is considered high. All projects are expected to have substantial positive long-term impact for relevant target population, focusing primarily, if not exclusively, on the most vulnerable groups. Projects in this category are expected to contribute to increasing access to social welfare and implementing universal health coverage at country or local level. an allocation program aimed at disadvantaged populations (widows, elderly people, people with disabilities) to address the Covid-19 crisis. These types of projects have few negative externalities and a long-term positive impact.

Socioeconomic advancement and empowerment: Sport and culture



Financing of social inclusion via sport and cultural initiatives is considered significantly relevant for a sovereign-backed DFI, in line with international targets, notably SDGs 3 and 10. Sport and culture have an important role to play in achieving sustainable development in the least developed countries; however, compared to other fundamental services such as health or education, they are less critical. Nonetheless, they constitute a powerful enabling tool for social inclusion, community development, and peace promotion. For example, the role of sport in achieving sustainable development was recognized in a UN General Assembly resolution in 2018. Sport can foster health and well-being, contributing to the achievement of Sustainable Development Goal (SDG) 3. It also promotes gender equality (SDG 5) by providing opportunities for girls and women to participate in activities that are traditionally male-dominated.

This category have a moderate magnitude, because the projects are likely to generate positive indirect and direct mid to long terms impacts for relevant target population, focusing primarily, if not exclusively, on the most vulnerable groups. However, detailed information on eligibility criteria of funded projects is not provided. Key examples of projects include support for public policies and construction/rehabilitation of local sport infrastructure. To be noted that in 2022, no projects within this category have received funding.

Affordable basic infrastructure: Water and sanitation



Provision of water and sanitation is considered highly relevant for a sovereign-backed DFI, and is in line with international targets, notably SDG 6. Improving access to clean water and sanitation is particularly relevant in the focus geographies of the AFD. Sub-Saharan Africa is the region of the world where the population has least good access to drinking water and sanitation services.

The magnitude of eligible projects is considered limited primarily due to the inclusion of desalination projects where no technical thresholds or criteria were specified. The framework specifies that desalination projects will comply with the AFD's policy, which takes into account energy consumption and brine management, and its methodological note which the issuer has shared with us. While this note outlines certain important analytical considerations for selecting desalination projects, it lacks exclusions, specific thresholds, and detailed eligibility criteria, making it difficult to ascertain the environmental impact of these projects. Desalination projects are considered to have such severe negative externalities (from high energy use, and from the impact of brine) that, without specified criteria, they lead only to a very limited positive impact, even if they can provide a source of clean drinking water. Other projects in this category, such as provision and improvement of water and sewerage infrastructure in locations where these are inadequate or lacking, are generally considered to have substantial positive impact for the population in greatest need. Please note that the issuer has

informed us in writing that, as of now, there are no desalination projects in the pool of eligible projects, but that there is no intention on their part to strictly exclude them in the coming years.

Affordable basic infrastructure: Mobility



Provision of transport is considered highly relevant for a sovereign-backed DFI, and in line with international targets, notably SDG 11. Improving transport and mobility are particularly relevant in the focus geographies of the AFD, which are emerging markets and low-income countries. High-income countries account for 43% of the world's road network, while low-income countries have only 3%.

The magnitude of eligible projects is considered moderate primarily due to the potential inclusion of projects with substantial negative environmental externalities, even though projects are expected to have positive social impact. Some types of projects, such as projects to provide 'soft' non motorized mobility, such as bicycle lanes or better infrastructure for walking, are likely to have little to no negative externalities and substantial positive social impact. Other types of included projects, most notably road building, can have substantial negative environmental effects from both construction (pollution, local area) and operation (the carbon lock in from encouraging combustion engine-powered transport). In general, there are no exclusion criteria regarding carbon-intensive transport, except for the transportation of fossil fuels itself. Finally, there is a lack of visibility on which transport projects fall under this category, and which fall under "Urban development".

Affordable basic infrastructure: Digital infrastructure



Provision of digital connectivity is considered highly relevant for a sovereign-backed DFI, and in line with international targets, notably SDG 9. Improving digital connectivity is particularly relevant in the focus geographies of the AFD. Sub-Saharan Africa is currently the region of the world where the population has least good access to the Internet, followed by central and south Asia, both of which are geographies in which the AFD operates.

The magnitude of eligible projects is considered significant. While the majority of projects are expected to have substantial positive long-term impact for the relevant target population most in need, there is some lack of clarity on the financed projects, notably on whether data centers are included. Most projects in this category are expected to either provide connectivity to populations still lacking it, such as through the financing of telecommunications networks or internet connections, or supporting digital entrepreneurship. These types of projects have few negative externalities and a large positive impact. However, data centers are heavy consumers of electricity and also require large amounts of water for cooling, especially in warmer climates, raising concerns around water stress.

Affordable basic infrastructure: Urban Development



Investing in urban development is considered highly relevant for a sovereign-backed DFI, and in line with international targets, notably SDG 11. Improving urban housing, waste collection and transport are particularly relevant in the focus geographies of the AFD. Africa,

for instance, is rapidly urbanizing, with the number of cities having doubled since 1990, from 3300 to 7600, and their cumulative population has increased by 500m people. Access to public transport in Africa remains very limited, with only 31.7% of the population (as of 2020) able to access some form of public transport within 0.5-1.0km, below the global average of 56%.

The magnitude of eligible projects is considered moderate due to the potential inclusion of projects with negative environmental externalities, and to the lack of thresholds or criteria. Waste management projects do follow a publicly disclosed approach, but nonetheless lack thresholds. For affordable housing, no explicit criteria or thresholds around the social (target population) or the green (energy efficiency) characteristics of buildings were included in this category. Public transport projects using internal combustion engine technologies, such as diesel buses, entail a carbon lock-in effect and may also have other effects such as pollution. Finally, there is a lack of visibility on which transport-related projects fall under this category, and which fall under "Mobility". Nonetheless, the rigorous approach using AFD's opinion on sustainable development for project selection, including detailed evaluation on key sustainability dimensions, ensures a high baseline for project quality and consideration of negative externalities.

Food security



Ensuring food security and supporting resilient, sustainable agriculture is considered highly relevant for a sovereign-backed development finance institution (DFI) such as the AFD, and is in line with international targets, notably SDG 2. Improving food security is considered highly relevant in the focus geographies of the AFD. Sub-Saharan Africa is the region of the world with the greatest prevalence of undernourishment, with a number of countries where a substantial share of the population has a food intake insufficient to meet dietary energy requirements for a minimum of one year. The world's highest rate of undernourishment can be found in Madagascar (51% of the population).

Overall, the broad range of projects to be financed under this category will generate a moderate contribution to food security. Many included project types in this category, such as support to small-scale farmers, agricultural cooperatives, pest control initiatives to protect harvests, agricultural training and education programs, and sustainable agricultural development are all activities that are expected to have a positive long-term impact. Concrete recent examples of projects focusing on fundamental food security include initiatives to ensure adequate and nutritious food production and access in hard-hit conflict areas of Chad or Niger.

However, the category does contain some other types of projects that are not as impactful, either through targeting a less urgent social need, or through the presence of substantial, inherent negative environmental externalities. A notable project type targeting a less urgent social need is the inclusion of industrial harvesting of crops for export, which, while contributing to economic development and income generation, does not improve domestic food security in the target country. Notable project types with a potential for negative environmental externalities include fishing and aquaculture (risks of overfishing and pollution); forestry projects including plantations; and animal herding, including ruminants such as cattle, sheep and goats that cause GHG emissions and can cause local pollution of waterways and ecosystems. Nonetheless, the rigorous approach using AFD's opinion on sustainable development for project selection, including detailed evaluation on key sustainability dimensions, ensures a high baseline for project quality and consideration of negative externalities.

Additional contribution to sustainability considerations

We have not applied a negative adjustment to the preliminary contribution to sustainability score based on additional considerations.

As regards ESG risk management, the AFD conducts very comprehensive and thorough environmental and social risk identification, evaluation and mitigation, including monitoring for controversies, both as part of the project evaluation and selection process, and throughout the life cycle of projects. This work is carried out by a dedicated ESG risk management team. The AFD discloses detailed information on its ESG risk management processes in its annual reporting.

As regards coherence, we note that the eligible project categories, which are themselves closely associated with the UN SDGs, are fully coherent with the overall AFD's overall goals. The organization's previous Strategic orientation plan 2018-22, which was extended to cover 2023, includes the goal for the entire bank to be 100% compliant with Paris Agreement climate goals and for all activities to have a social link. Looking ahead, the bank aims to extend and broaden these goals by positioning itself as the first development finance institution fully focused on the UN Sustainable Development Goals. Furthermore, the bank's responsibility strategy includes the integration of sustainable development across its operations, including commitments around governance, transparency and dialogue with stakeholders, and its own environmental impact. In 2023, climate-related financing reached \in 7.5 billion, or 62% of the total that year, and engagements toward gender equality stood at \notin 4.7 billion, or 50% of the total.

		Component	Component score	Sub-factor score	Factor scor
	Clarity of the eligible categories	Nature of expenditure	А		
		Definition of content, eligibility and exclusion criteria for nearly all categories	А	Aligned	
		Location	А	Aligned	Aligned
		BP: Definition of content, eligibility and exclusion criteria for all categories	No		
		Relevance of objectives to project categories for nearly all categories	А		
	Clarity of the objectives	Coherence of project category objectives with standards for nearly all categories	А	Best practices	
Jse of proceeds		BP: Objectives are defined, relevant and coherent for all categories	Yes		
		Identification and relevance of expected benefits for nearly all categories	А		-
		Measurability of expected benefits for nearly all categories	А		
	Clarity of expected	BP: Relevant benefits are identified for all categories	Yes	Post	
	benefits	BP: Benefits are measurable for all categories	Yes	Best practices	
		BP: Disclosure of refinancing prior to issuance and in post-allocation reporting	Yes		
		BP: Commitment to communicate refinancing look-back period prior to issuance	Yes		
	Transparency and clarity of the process for defining and monitoring eligible projects	Clarity of the process	А	Best practices	Best practices
Process for		Disclosure of the process	А		
project evaluation and selection		Transparency of the environmental and social risk mitigation process	А		
		BP: Monitoring of continued project compliance	Yes		
		Tracking of proceeds	А	Best practices	Best practices
	Allocation and	Periodic adjustment of proceeds to match allocations	А		
Management of proceeds	Allocation and tracking of proceeds	Disclosure of the intended types of temporary placements of unallocated proceeds	А		
		BP: Disclosure of the proceeds management process	Yes		
		BP: Allocation period is 24 months or less	Yes		
		Reporting frequency	А	Best practices	Best practices
		Reporting duration	А		
		Report disclosure	А		
		Reporting exhaustivity	А		
Reporting	Reporting transparency	BP: Allocation reporting at least until full allocation of proceeds, and impact reporting until full bond maturity or loan payback	Yes		
		BP: Clarity and relevance of the indicators on the sustainability benefits	Yes		
		BP: Disclosure of reporting methodology and calculation assumptions	Yes		
		BP: Independent external auditor, or other third party, to verify the tracking and allocation of funds	Yes		
		BP: Independent impact assessment on environmental and social benefits	Yes		

Appendix 1 - Alignment with principles scorecard for the AFD's framework

Legend: BP - Best practice, A - Aligned, PA - Partially aligned, NA - Not aligned

Appendix 2 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The sixteen eligible categories included in the AFD's framework are likely to contribute to sixteen of the United Nations' Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals	Eligible Category	SDG Targets	
GOAL 1: No Poverty	Socioeconomic advancement and	1.2: Reduce at least by half the share of people living in poverty according to national definitions	
	empowerment: Poverty reduction	1.3: Implement social protection systems and measures for all, and achieve substantial coverage of the poor and the vulnerable	
GOAL 2: Zero Hunger	Food security	2.1: End hunger and ensure access by all people to safe, nutritious and sufficient food all year round	
		2.3: Double agricultural productivity and incomes of small-scale farmers through equal access to resources and opportunities	
		2.4: Ensure sustainable food production systems that improve productivity and support ecosystems and climate change adaptation	
		2.A: Enhance agricultural capacity in emerging markets through investment in rural infrastructure, research and technology	
GOAL 3: Good Health and Well-being	Access to essential services: Health	3.8: Achieve universal health coverage with access to quality and affordable essential health-care services and medicines for all	
		3.B: Support the R&D of and provide access to vaccines and medicines for diseases that primarily affect emerging markets	
		3.C: Increase health financing and promote the recruitment, development and training of the health workforce in emerging markets	
GOAL 4: Quality Education	Access to essential services: Education	4.1: Ensure that all children complete quality primary and secondary education leading to relevant and effective outcomes	
		4.3: Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education	
		4.4: Increase the number of youth and adults with technical and vocational skills for employment and entrepreneurship	
		4.5: Eliminate gender disparities in education and ensure equal access to education and training for vulnerable persons	
GOAL 5: Gender Equality	Socioeconomic advancement and	5.1: End all forms of discrimination against all women and girls everywhere	
	empowerment: Gender equality	5.5: Ensure women's full participation and equal opportunities for leadership at all levels of political and economic life	
GOAL 6: Clean Water and Sanitation	Affordable basic infrastructure: Water	6.1: Achieve universal and equitable access to safe and affordable drinking water for all	
GOAL 6: Clean Water and Sanitation	and sanitation	6.2: Achieve access to adequate sanitation and hygiene for all and end open defecation	
		6.4: Increase water-use efficiency across all sectors and ensure sustainable supply of freshwater to reduce water scarcity	
		6.B: Support and strengthen the participation of local communities in improving water and sanitation management	
GOAL 7: Affordable and Clean	Renewable energy and energy efficiency	7.1: Ensure universal access to affordable, reliable and modern energy services	
		7.2: Increase substantially the share of renewable energy in the global energy mix	
		7.B: Expand infrastructure and upgrade technology for sustainable energy services to all in emerging markets	

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 8: Decent Work and Economic Growth	Employment creation - Resilient economy	8.3: Promote policies that support productivity, job creation, entrepreneurship, innovation, and encourage the growth of SMEs
GOAL 9: Industry, Innovation and Infrastructure	Employment creation - Resilient economy	9.3: Increase SMEs' access to finance, and their integration into value chains and markets, particularly in emerging markets
	Affordable basic infrastructure: Digital infrastructure	9.C: Increase access to information and communications technology and provide universal and affordable access to the Internet
GOAL 10: Reduced Inequality	Socioeconomic advancement and	10.2: Empower and promote the social, economic and political inclusion of all
	empowerment: Reduction of inequalities	10.3: Ensure equal opportunity and reduce inequalities, including by promoting legislation, policies and action
GOAL 11: Sustainable Cities and Communities	Affordable basic infrastructure: Urban	11.1: Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
	development	11.2: Provide access to safe, affordable, accessible and sustainable transport systems for all
		11.C: Support least developed countries, including through financial and technical assistance, in building sustainable buildings using local materials
GOAL 12: Responsible Consumption and Production	Affordable basic infrastructure: Urban development	12.5: Substantially reduce waste generation through prevention, reduction, recycling and reuse
GOAL 13: Climate Action	Renewable energy and energy effiency	UN SDG 13 consists of taking urgent action to combat climate change and its impacts from their operations and value chains. DFIs can contribute to this goal through financing projects for climate change mitigation (reducing GHG emissions) or adaptation.
	Climate change adaptation	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
		13.B: Promote mechanisms for raising capacity for effective climate change- related planning and management in least developed countries
GOAL 14: Life Below Water	Terrestrial and aquatic biodiversity protection	14.2: Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts
	Food security	14.B: Provide access for small-scale artisanal fishers to marine resources and markets
GOAL 15: Life on Land	Food security	15.2: Promote the implementation of sustainable management of all types of forests
	Terrestrial and aquatic biodiversity protection	15.5: Reduce the degradation of natural habitats and biodiversity loss, and prevent the extinction of threatened species
		15.6: Promote equitable sharing of the benefits from genetic resources and promote appropriate access to such resources
		15.A: Mobilize and increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
GOAL 16: Peace and Justice Strong Institutions	Socioeconomic advancement and empowerment: Democratic governance and justice	16.3: Promote the rule of law at the national and international levels and ensure equal access to justice for all

The United Nations' Sustainable Development Goals (SDGs) mapping in this SPO considers the eligible project categories (or key performance indicators) and associated sustainability objectives/benefits documented in the issuer's financing framework, as well as resources and guidelines from public institutions, such as the ICMA SDG Mapping Guidance and the UN SDG targets and indicators.

Eligible categories	Description	Sustainability objectives	Impact reporting
Climate change adaptation	Projects to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks by maintaining or increasing the adaptability and resilience through the production of information and knowledge, capacity development, and the planning and implementation of climate change adaptation measures (for example, the development of weather monitoring services).	Climate change adaptation	 Number of people with reduced exposure to physical climate risks Reduction of water consumption in areas of water stress
Renewable energy and energy efficiency	Projects aiming to limit anthropogenic emissions of greenhouse gases (GHGs) into the atmosphere, as well as to protect or improve the natural sinks and reservoirs of GHGs. The types of projects contributing to these goals consist of: - supporting public policies and regulatory frameworks related to energy; - the production of energy from renewable sources (hydraulic, solar, wind, marine, geothermal, biomass); - the development of heating, cooling, and electricity networks as well as electric infrastructure for mobility; and - measures for energy saving and energy efficiency.	Climate change mitigation	 CO2 emission avoided (tCO2e) Total installed or rehabilitated capacity (MW) Number of people gaining access to sustainable energy Number of beneficiaries of improved electric provision Renewable power financed Energy savings (GWh/yr)
Terrestrial and aquatic biodiversity protection	Projects aiming to provide for the conservation and restoration of biological diversity (ecosystems, species, genetic resources) in order to ensure its resilience, as well as the sustainable and equitable use of this biological diversity, through local and inclusive economic development.	Terrestrial and aquatic biodiversity protection	 Area benefitting from conservation/restoration programs (ha)
Access to essential services: Health	sexually transmitted infections, fertility and family planning), the development of health infrastructures, health research, and training programs for health personnel. Target population: local population, especially the most vulnerable population	Access to essential services	 Number of people benefiting from improved access to health Number of healthcare professionals trained Number of vaccinated children
Access to essential services: Education	deprived of access to health services. Projects contributing to education policies and programs (from early childhood, primary, secondary, higher, and professional); to the development of school facilities and infrastructure; to teacher training and education research; to vocational training and apprenticeships. Target populations: local population, especially the vulnerable population needing access to educational services	Access to essential services	 Number of patients Number of beneficiaries of professional or technical training Number of teaching institutions Number of children completing primary education Number of girls enrolled in technical or professional training Total number of enrolled students Number of tutors trained
Access to essential services: Poverty reduction	Projects aiming to provide basic social services, reduce geographical isolation, and promote economic development in rural and peripheral areas, as well as projects for the reconstruction and rehabilitation of infrastructure and services post-emergency. For PROPARCO, the projects in this category aim to provide access to microcredit.	Access to essential services	 Number of people benefiting from improved social protection Number of beneficiaries of essential services Number of recipients of a micro-credit loan
	Target population: local population, especially the population poorly served by essential goods and services		

Appendix 3 - Summary of eligible categories in the AFD's framework

Eligible categories	Description	Sustainability objectives	Impact reporting
Employment creation - Resilient economy	Projects to assist public policies aimed at strengthening the productive sector, the investment climate, and budget sustainability; the development of small and medium-sized enterprises (SMEs) and entrepreneurial ecosystems; the promotion of financial services for the population and businesses, as well as sustainable financing models for economic activities. Target population: Micro/small/medium enterprises/startups, female entrepreneurs, companies in the social economy.	Employment creation	 Number of financial actors benefiting from AFD financing Number of companies benefiting from support in recruitment, improving job quality, or considering gender Number of beneficiaries of a local financial service Percentage of women with access to credit (%) Number of individuals supported in their efforts to create a business or become self- employed Number of full-time equivalent (FTE) jobs created or maintained by the AFD/PROPARCO
Socioeconomic advancement and empowerment: Gender equality	Projects to promote economic, social and civic inclusion of women, as well as projects to combat discrimination between women and men. Target population: women	Socioeconomic advancement and empowerment	 Proportion of women with access to credit Proportion of women using a public transport line Percent of women at leadership or senior management level Percent of women employees at the company
Socioeconomic advancement and empowerment: Democratic governance and justice	Projects aiming to transform government and public sector processes (for example: through digitalization) in order to increase the efficiency and transparency of public services; inform citizens about their rights: improve citizens' access to justice; and develop civil protection. Target populations: general population, particularly those with poor access to public services.	Socioeconomic advancement and empowerment	 Number of institutions benefiting from strengthened capacity Number of civil society partners involved in the project
Socioeconomic advancement and empowerment: Reduction of social inequalities	The projects aim to improve access to basic social services for disadvantaged populations, support allocation programs, and improve and widen access to social and medical coverage. Target populations: disadvantaged local populations, needing improved access to essential basic services.	Socioeconomic advancement and empowerment	- Number of beneficiaries of improved social protection
Socioeconomic advancement and empowerment: Sport and culture	Projects for policies and programs related to sports, culture, and leisure, especially when they allow the reduction of inequalities and have educational purposes. Target population: local populations poorly served by sports, leisure, and cultural infrastructure	Socioeconomic advancement and empowerment	- Number of project beneficiaries

Eligible categories	Description	Sustainability objectives	Impact reporting
Affordable basic infrastructure: Water and sanitation	Projects supporting policies and programs related to water governance; aiming to preserve water resources; provide water supply and sanitation; improve flood prevention; and implement education and training in water and sanitation distribution.	Affordable basic infrastructure	 Number of people benefiting from access to potable water Production capacity for drinking water (m3/day) Volume of water treated (m3)
	This category includes desalination projects following the AFD doctrine and methodological note, which takes into account environmental externalities linked to energy consumption and brine management.		
	Target population: general population (improvement of public infrastructure) and population without access to water and sanitation.		
Affordable basic infrastructure: Mobility	Projects supporting transport regulation; roadworks aimed at deploying soft mobility in cities, or the building of targeted secondary roads aimed at opening up rural areas for which other transport alternatives are not feasible.	Affordable basic infrastructure	 Length of routes (roads/ railways) built or renovated Number of beneficiaries of the infrastructure or transport
	Target population: local population, especially those poorly served by transport infrastructure		service
Affordable basic infrastructure: Digital infrastructure	Projects aiming to develop telecommunications networks and communication policies; providing support to businesses and entrepreneurship in the digital sector; ensuring the diffusion of digital technology in public services and within the population.	Affordable basic infrastructure	 Number of people connected to a telecom network Number of people with internet access Number of users of
	Target population: local population, especially those poorly served by digital infrastructure (areas of poor or low connectivity)		communication services
Affordable basic infrastructure: Urban development	Projects for sustainable urban infrastructure, including waste treatment, public transport, land management, low-cost housing, and emergency services such as fire, rescue services, and preparation for multi-risk interventions.	Affordable basic infrastructure	- Number of inhabitants with improved quality of life - Number of people with improved access to sustainable
development	Target population: Local populations in urban environments		urban transport - Number of public transit passengers on financed sections - Volume of managed waste (tons)
Food security	Projects for the development of agriculture, forestry, fishing, and aquaculture; support for local production and development; support for research and training in the fields of fishing and agriculture, with a view to preserving land and resources and aiming for food security. Target populations: farmers and fishermen, food sector.	Food security	 Number of EFAs with improved economic performance Additional availability of strategic food commodities (kg) Volume of food commodities produced or distributed annually (kg/year)

Endnotes

<u>1</u> Point-in-time assessment is applicable only on date of assignment or update.

Moody's assigns SPOs in alignment with the main tenets of the ICMA Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews and the LSTA/ LMA/APLMA Guidance for Green, Social and Sustainability-Linked Loans External Reviews, as applicable; Moody's practices may however diverge in some respects from the practices recommended in those documents. Moody's approach to assigning SPOs is described in its Assessment Framework, and is subject to the ethical and professional principles set forth in the Moody's Investors Service Code of Professional Conduct.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (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 regulators. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

© 2024 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES. CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS, CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK. INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS 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 CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

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 PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE 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 obtained by MOODY'S 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 of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials. To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information chained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any 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, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V, I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Calificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (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.

REPORT NUMBER 1429022