Second-Party Opinion Overview of the New Development Bank Sustainable Financing Policy Framework

Evaluation Summary

Sustainalytics is of the opinion that the overview of the New Development Bank ("NDB") Sustainable Financing Policy Framework ("Framework Overview"), which contains a subset of eligibility criteria described under the NDB Sustainable Financing Policy Framework¹, aligns with the Sustainability Bond Guidelines 2018. This assessment is based on the following:



USE OF PROCEEDS The eligible categories – Clean Transportation, Energy-Efficient Buildings, Energy Efficiency, Renewable Energy, Sustainable Land Use and Biodiversity, Sustainable Waste Management, Sustainable Water Management & Irrigation, Basic Sustainable Infrastructure, Education, Healthcare and Well-Being, and Social Housing – are aligned with those recognized by the Green Bond Principles and Social Bond Principles. Sustainalytics considers that the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDGs 1, 3, 4, 6, 7, 9, 11, 12, 15.



PROJECT EVALUATION / SELECTION NDB's process in evaluating and selecting projects is handled by Treasury and Portfolio Management Division in consultation with the Operations Policy and Project Support Division. Eligible projects undergo a comprehensive environmental and social due diligence to ensure compliance with environmental and social regulations and the Bank's Environment and Social Framework, which is comprised of the Environment and Social Policy and Environmental and Social Standards. Sustainalytics considers the project selection process in line with market practice.



MANAGEMENT OF PROCEEDS NDB will establish a register for the issuance of the bonds (the "Register"). The Register will be managed by Finance, Budget and Accounting Division and Treasury and Portfolio Management Division and include the financing amount, amount of loan disbursed and outstanding, loan maturity and other necessary information to record the aggregate of issuance proceeds and use of proceeds. In the event of pending allocation, unallocated proceeds could be temporarily invested in green, social and sustainability bonds, or money market instruments, or kept in cash in accordance with NDB's Liquidity Risk Management Policy.



REPORTING NDB intends to report allocation proceeds on its website on an annual basis until full allocation. Allocation reporting will include aggregate amounts of bond proceeds allocated to each of the eligible sectors, together with number and description of projects, the balance of unallocated proceeds and regional distribution of projects. In addition, New Development Bank is committed to reporting on relevant environmental and/or social impact metrics. Sustainalytics views this process as aligned with market practice.



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Report Sections

Introduction2	2
Sustainalytics' Opinion3	,
Appendices11	

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¹ NDB Sustainable Financing Policy Framework, at: <u>https://www.ndb.int/wp-content/uploads/2020/05/2020_FC22_AI13_018_b-NDB-Sustainable-Financing-Policy-Framework.pdf</u>



Introduction

The New Development Bank ("NDB" or "the Bank") was established by the governments of the Federative Republic of Brazil, the Russian Federation, the Republic of India, the People's Republic of China and the Republic of South Africa ("the BRICS countries") according to the Agreement on the New Development Bank ("Agreement") signed in 2014. The Bank is mandated to mobilize resources for infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries. The Bank is headquartered in Shanghai, China.

NDB has developed the overview of the New Development Bank Sustainable Financing Policy Framework (the "Framework Overview") under which it intends to issue green, social and sustainability bonds and other debt instruments, and use the proceeds to finance and refinance, in whole or in part, existing and future projects and loans that advance the transition to a low-carbon economy. The Framework Overview contains a subset of eligibility criteria described under the NDB Sustainable Financing Policy Framework,² dated May 2020, and demonstrates eligible projects and relevant criteria to be used in the Bank's upcoming green, social, and sustainability bond issuances. The Framework Overview defines eligibility criteria in seven green and four social areas:

Green Eligible Projects

- 1. Clean Transportation
- 2. Energy-Efficient Buildings
- 3. Energy Efficiency
- 4. Renewable Energy
- 5. Sustainable Land Use and Biodiversity
- 6. Sustainable Waste Management
- 7. Sustainable Water Management & Irrigation

Social Eligible Projects

- 1. Basic Sustainable Infrastructure
- 2. Education
- 3. Healthcare and Well-Being
- 4. Social Housing

NDB engaged Sustainalytics to review the overview of the New Development Bank Sustainable Financing Policy Framework, and provide a second-party opinion on the overview's environmental and social credentials and its alignment with the Sustainability Bond Guidelines 2018 (SBG).³ Sustainalytics' opinion applies under the condition of investing in eligible projects outlined under the Framework Overview only. Details of the Framework Overview has been provided in Appendix 1.

Scope of work and limitations of Sustainalytics Second-Party Opinion

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent⁴ opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Green Bond Principles 2018, Social Bond Principles 2020, and Sustainability Bond Guidelines 2018, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds;

commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.

² NDB Sustainable Financing Policy Framework, at: <u>https://www.ndb.int/wp-content/uploads/2020/05/2020_FC22_AI13_018_b-NDB-Sustainable-Financing-Policy-Framework.pdf</u>

³ The Sustainability Bond Guidelines are administered by the International Capital Market Association and are available at https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/

⁴ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific



• The alignment of the issuer's sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.4.1, which is informed by market practice and Sustainalytics' expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of NDB's management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. NDB representatives have confirmed (1) they understand it is the sole responsibility of NDB to ensure that the information provided to Sustainalytics is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the Framework Overview and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and NDB.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework Overview with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework Overview is the responsibility of the Framework Overview owner.

In addition, the Second-Party Opinion opines on the intended allocation of proceeds but does not guarantee the realized allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that NDB has made available to Sustainalytics for the purpose of this SPO.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the New Development Bank Sustainable Financing Policy Framework Overview

Sustainalytics is of the opinion that the overview of the New Development Bank Sustainable Financing Policy Framework is credible, impactful and aligns with the four core components of the Green Bond Principles 2018 (GBP) and Social Bond Principles 2020 (SBP). Sustainalytics highlights the following elements of NDB's Sustainable Financing Policy Framework:

- Use of Proceeds:
 - The eligible categories Clean Transportation, Energy-Efficient Buildings, Energy Efficiency, Renewable Energy, Sustainable Land Use and Biodiversity, Sustainable Waste Management, Sustainable Water Management & Irrigation, Basic Sustainable Infrastructure, Education, Healthcare and Well-Being, and Social Housing – are aligned with those recognized by the GBP and SBP. The projects financed under the Framework Overview expect to provide positive environmental and social impacts and advance the transition to a low-carbon economy in BRICS and other emerging economies and developing countries.
 - NDB intends to use part of the proceeds for project-based lending and part for general purpose loans for pure-play businesses that derive 90% of revenues from activities identified in the eligible categories. While Sustainalytics recognizes that the GBP, SBP, and SBG prefer projectbased lending and financing, and that there is, in general, less transparency with non-projectbased lending, Sustainalytics views favourably the high threshold that NDB has established to consider a business eligible for inclusion.
 - NDB has not defined a look-back period for its refinancing activities.



- Within the Clean Transportation category, NDB may finance and refinance low-carbon transportation assets, systems, infrastructure, components and services, including passenger rail or freight, tram, metro, bus rapid transit systems and electric vehicles. NDB has confirmed that CO₂ direct emissions from the means of transportation from must comply with the following thresholds: < 75gCO2/p-km for passenger vehicles, < 25gCO2/t-km for freight vehicles and BRT systems certified 'Bronze' or above according to ITBD BRT standard. Sustainalytics notes the exclusion of rolling stock carrying fossil fuel products.</p>
- As for the Energy-Efficient Buildings category, NDB may invest in the development or renovation of new and existing residential, public and commercial buildings that meet recognized environmental standards, namely LEED 'Gold', BREEAM 'Very Good', China Green Building Standard '2 stars' and BEAM Plus 'Gold' or above. For Sustainalytics' assessment of the aforementioned certification schemes, please refer to Appendix 2: Green Buildings Certification Schemes. Additionally, Sustainalytics notes that NDB has set a minimum threshold of 20% energy performance improvement compared to its baseline.
- In the Energy Efficiency category, NDB intends to invest in the development, implementation and manufacture of product or technology that aims to reduce energy consumption or improve energy efficiency. Intended project examples include district/cooling systems, smart grid, LED lighting, energy storage systems, fuel cells, and transmission and distribution infrastructure. Sustainalytics views positively that NDB has confirmed the exclusion of activities that may result in fossil fuel lock-in across any sector, and encourages the Bank to report on estimated or achieved energy efficiency, on a portfolio basis, where feasible.
 - Regarding transmission and distribution infrastructure, NDB confirmed that the financings are limited to connect renewable energy added capacity to the grid.
 - For heating and cooling systems, NDB confirmed that distribution-related projects must be primarily powered (>50%) by renewables and/or waste heat, while heat or cool generation is wholly produced from renewable and/or industrial waste heat.
 - Regarding smart grid investments, while noting the variety of definitions and applications of "smart grid" technology, Sustainalytics views positively investments that are designed to improve grid efficiency and encourages the Bank to select projects that are anticipated to deliver tangible efficiency improvements.
 - NDB clarified that intended fuel cells projects could include power-to-hydrogen energy systems. Sustainalytics notes that the production of hydrogen is restricted to water electrolysis powered by renewables, while the inclusion of hydrogen produced using steam reforming will not be considered as eligible, as confirmed by NDB.
- In the Renewable Energy category, NDB may finance energy generation from renewable sources, including wind, solar, tidal, hydro and waste, as well as the manufacturing of components for renewable energy technologies, as follows:
 - For renewable energy production, hydropower is limited to small-scale facilities below 25 MW capacity. In addition, NDB applies to all hydropower projects an E&S Framework covering an Environmental and Social Impact Assessment, and safeguards to avoid involuntary resettlement and protect indigenous people. Projects are required to meet the E&S standards, thus ensuring adequate implementation of risks mitigation measures. Waste-to-energy facilities are limited to incineration, composting and anaerobic digestion and will use municipal solid waste and industrial waste as feedstock. NDB also commits to select projects that follow the waste hierarchy. While Sustainalytics recognizes that energy from waste could take out of circulation potentially recyclable materials and undermine the objectives of a zero-waste circular economy, Sustainalytics also notes that, due to current constraints of recycling in many parts of the world, energy from waste can offer better residual waste management option than landfills. Sustainalytics strongly encourages NDB to promote the removal of increasing amounts of recyclables, especially plastics and metals, and the monitoring of thermal efficiency of the financed facilities.
 - For the manufacturing of components of renewable energy technology, NDB has confirmed that eligible facilities only manufacture components for renewables. Intended project examples include the manufacturing of wind turbines and solar panels.
- Within Sustainable Land Use and Biodiversity, the Bank may invest in the forestry and agriculture certified by credible schemes. Forestry operations must be certified by the Forest Stewardship Council ("FSC") or by the Programme for the Endorsement of Forest Certification ("PEFC"). For Sustainalytics assessment of these schemes, please refer to Appendix 3. For agricultural activities including palm oil plantations, such activities must be certified against the Roundtable on Sustainable Palm Oil ("RSPO") and/or the Roundtable on Responsible Soy ("RRS") or



equivalent. NDB has clarified to Sustainalytics that if such projects are financed new cultivation in Indonesia and Malaysia are excluded.

- In the Sustainable Waste Management category, NDB may finance products, technologies and solutions related to waste minimization, collection, management, recycling, re-use, processing, and disposal. This may include waste collection and recycling vehicles, equipment and systems for recycling activities, and waste treatment plants.
 - Regarding waste collection and recycling vehicles, NDB has confirmed that eligible vehicles will be electric-powered only.
 - NDB clarified that waste treatment plants aim at promoting recyclable materials before incineration or thermal treatment.
 - NDB clarified that disposal projects include auxiliary abatement technologies to reduce GHG emissions during incineration. Sustainalytics encourages the Bank to invest in these technologies under the condition of separating a majority of recyclables before incineration and reporting on the GHG emissions savings.
- In the Basic Sustainable Infrastructure category, NDB may finance projects that aim at expanding access to affordable basic infrastructure to the population suffering from lack of access. Activities funded under this category could include the construction and development of renewable energy added capacity (only wind, solar and hydropower following the eligibility criteria under the Renewable Energy category) and grid infrastructure in remote areas, irrigation, water resource management and clean sanitation, as well as transport infrastructure, such as roads, bridges and green open spaces. The Bank has confirmed that these projects will be financed in remote areas with a lack of connectivity. Sustainalytics encourages NDB to provide full disclosure on the identification and definition of target population per project upon issuance.
- In the Education category, the Bank may provide financings to projects that seek to increase access to quality and affordable education to groups where education opportunities are not generally available. These activities will be accessible to general public, regardless of ability to pay.
- In the Healthcare and Well-Being category, NDB may finance public healthcare and safety services and related infrastructure, including aimed at addressing the adverse impact of pandemics such as COVID-19. Intended project examples include the production of equipment and supplies, the development and expansion of public hospitals and clinics, financing the provision of pharmaceuticals for the treatment of the pandemic. NDB clarified that safety projects refers to the provision of equipment and supplies to healthcare workers to protect their healthcare and well-being during pandemics, and confirmed that all projects would be accessible to general public regardless of ability to pay.
- Within the Social Housing category, NDB may provide financings to social housing programs defined by governments to provide affordable housing to low-income or vulnerable (e.g. elderly, unemployed) populations, according to local definitions. While Sustainalytics views positively the targeting of low-income or vulnerable people in general, Sustainalytics strongly encourages the Bank to provide full disclosure on the definition of low-income and vulnerable populations, and the mechanisms to ensure affordability for targeted beneficiaries, per project upon issuance.
- Project Evaluation and Selection:
 - New Development Bank's internal process in evaluating and selecting projects is handled by Treasury and Portfolio Management Division in consultation with Operations Policy and Project Support Division ("Operations Division III"). Eligible projects undergo a comprehensive environmental and social due diligence to ensure the compliance with environmental and social regulations and the Bank's Environment and Social Framework ("ESF"), which is comprised of the Environment and Social Policy and Environmental and Social Standards. The Environmental and Social Standards are used to manage project risks related to the environment, involuntary resettlement, and indigenous people. For further information on the risk mitigation policies implemented by NDB, please refer to Section 2. Based on these elements, Sustainalytics considers this process to be in line with market practice.
- Management of Proceeds:
 - NDB will establish a register for the issuance of the Bonds (the "Register"). The Register will
 include the financing amount, amount of loan disbursed and outstanding, loan maturity and
 other necessary information to record the aggregate of issuance proceeds and use of proceeds.
 In the event of unallocated proceeds, the surplus could be temporarily invested in bonds, or in



money market instruments, or kept in cash until they are allocated. The investment of unallocated proceeds will be in accordance with the Bank's Liquidity Risk Management Policy.

- Reporting:
 - NDB intends to report allocation proceeds on its website on an annual basis until full allocation. Allocation reporting will include aggregate amounts of bond proceeds allocated to each of the eligible sectors, together with number and description of projects, the balance of unallocated proceeds and regional distribution of projects. In addition, New Development Bank is committed to reporting on relevant environmental and/or social impact metrics, such as annual GHG emission reduced/avoided (tons of CO₂eq), annual energy savings (MWh or GWh) compared to baseline, number of people benefitting from access to essential financing and financial services, or increase in the number of people with access to affordable healthcare facilities. For an exhaustive list of impact indicators, please refer to Appendix 4: Sustainability Bond/Sustainability Bond Programme External Review Form. Based on these elements, Sustainalytics considers this process to be in line with market practice.

Alignment with Sustainability Bond Guidelines 2018

Sustainalytics has determined that the New Development Bank Sustainable Financing Policy Framework Overview aligns to the four core components of the Green Bond Principles (2018) and Social Bond Principles (2020). For detailed information please refer to Appendix 4: Sustainability Bond/ Sustainability Bond Programme External Review Form.

Section 2: Sustainability Strategy of NDB

Contribution of Framework Overview to New Development Bank's Sustainability Strategy

NDB is committed to supporting infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries.⁵ NDB has developed a General Strategy for 2017-2021 under which NDB is committed to helping BRICS and other emerging economies in achieving the UN Sustainable Development Goals and the 2015 Paris Agreement on Climate Change.⁶ In addition, NDB has implemented an Environment and Social Sustainability Strategy (the "Strategy") that describes the sustainability areas where the Bank is taking action. ⁷ The Strategy focuses on the following areas: (i) Inclusive and Sustainable Development, (ii) Country Systems, (iii) Environmental and Social Interests, (iv) Climate Change, (v) Conservation of Natural Resources, (vi) Gender Equality, (vii) Precautionary Approach, and (viii) Co-operative Functioning and Knowledge Dissemination.⁸

Under focus area (i) Inclusive and Sustainable Development, NDB aims to ensure inclusive sharing of development benefits and opportunities for vulnerable populations, such as low-income, the disadvantaged, women, children, and minorities. Sustainalytics notes that several project types included in the Framework, including access to essential services, education, and health are designed to support the goal mentioned above. As for focus area (iv) Climate Change, NDB seeks to promote mitigation and adaptation measures to address climate change through facilitating investments directly aimed at building resilience to climate change.

In 2019, NDB materialized its commitment to sustainable infrastructure through different initiatives.⁹ For example, the Bank approved projects with 970 MW of renewable and clean energy generation capacity to be installed. NDB also approved projects that aim to save approximately 2.4M tons of CO₂ emissions annually.⁹ In addition, 3.4M people are expected to benefit from improved access to water and sanitation services.⁹ In the transportation sector, NDB approved 60 km of metro and tram networks projects.⁹ Sustainalytics underlines that eligible projects under the Framework Overview could help the Bank expand its sustainable financing activities, notably in the areas of renewable energy, access to clean water and sanitation and clean transportation.

⁸ Ibid

⁵ NDB, "Environment and Social Sustainability", at: <u>https://www.ndb.int/about-us/strategy/environmental-social-sustainability/</u>

⁶ NDB, "NDB's General Strategy: 2017-2021", (2017), at: <u>https://www.ndb.int/wp-content/uploads/2017/07/NDB-Strategy-Final.pdf</u>

⁷ NDB, "Environment and Social Sustainability", at: <u>https://www.ndb.int/about-us/strategy/environmental-social-sustainability/</u>

⁹ NDB, "New Development Bank Annual Report 2019", (2020), at: <u>https://www.ndb.int/wp-</u>

content/NDB%20Annual%20Report/AR2019_UI/downloads/Development-Results.pdf



Sustainalytics is of the opinion that the New Development Bank Sustainable Financing Policy Framework Overview is aligned with the Bank's Strategy and sustainability initiatives and will further NDB's action on its key environmental and social priorities.

Well positioned to address common environmental and social risks associated with the projects

Sustainalytics acknowledges that the proceeds of the Framework Overview will be directed towards eligible projects that are recognized as impactful by the GBP and SBP. However, Sustainalytics is aware that such projects could lead to negative environmental and social outcomes such as worker health and safety, land-use change, biodiversity loss, and community displacement. Sustainalytics is of the opinion that NDB is well-positioned to minimize and/or mitigate potential risks through the measures and systems described the paragraphs that follow.

At the stage of project design, NDB screens and assesses each project based on specific risk categorization.¹⁰ There are four risk categories ("A" through "FI"), each of them requiring distinct environmental and social impact management processes. For projects falling under the categories A and B, NDB obliges project developers to conduct environmental and social impact assessment.¹¹ Category C projects are likely to have minimal or no adverse environmental impacts and shall only include a review of environment and social implication in the project documentation. The category FI is designated for projects that involve the investment of funds or a Financial Intermediary ("FI"). For projects under this category, FIs are required to have in place or establish an appropriate environmental and Social Framework. In addition, at the project appraisal step, NDB corroborates with project owners to ensure the adequate implementation of social and environmental safeguard measures, such as environmental management plan, indigenous peoples plan and resettlement plan.

The environmental coverage of the E&S impact assessment includes considerations related to biodiversity, critical and natural habitats, protected areas, land use, climate change, prevention, resource efficiency and GHG emissions. For biodiversity, the E&S impact assessment evaluates projects' direct and indirect impacts on biodiversity, such as habitat loss, degradation and fragmentation, and seeks to avoid adverse impacts. When avoidance of such impacts is unachievable, the project owner is required to implement measures to minimize adverse impacts and restore biodiversity. Concerning land-use change, the E&S impact assessment should take into account the sustainability of land use in the project area and, where feasible, locate infrastructure projects on land that is already converted or highly degraded.

The social coverage of the E&S impact assessment focuses on vulnerable groups, gender, access to land and natural resources, cultural resources, community safety, and health and labor protection. For access to land and natural resources, the E&S impact assessment evaluates the economic and social impacts of the involuntary taking of land or restriction on access to natural resources. The E&S impact assessment also focuses on the safety and health risks of local communities, by implementing preventive measures, or where avoidance is not possible, to minimize the negative impacts of projects on local communities. As for labor protection, the impact assessment shall assess labor and working conditions of project workers and subsequently implement measures to ensure worker health and safety and prevent accidents, deaths, injuries or diseases. Projects shall also meet labor protection requirements of national laws and regulations.

Based on these systems, standards and assessments, Sustainalytics is of the opinion that NDB has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

All sixteen use of proceeds categories are aligned with those recognized by GBP or SBP. Sustainalytics has focused on two below where the impact is specifically relevant in the context of developing countries.

¹⁰ DNB, "New Development Bank Environment and Social Framework", (2016), at: <u>https://www.ndb.int/wp-content/uploads/2017/02/ndb-environment-social-framework-20160330.pdf</u>

¹¹ For category B projects, the documentation is determined on a case-by-case basis.



Increasing Renewable Energy Added Capacity in Developing Countries

Developing countries¹² energy-related CO₂ emissions increased by 1.85% between 2018 and 2019, reaching 22 Gt.¹³ Globally, the power sector accounted for approximately two-thirds of emissions growth in 2018, highlighting the need to decarbonize electricity generation.¹⁴ Also, the share of developing countries in global energy-related CO₂ emissions increased from 44.88% to 66.07% between 1990 and 2019.¹³ Given the rapid growth of energy-related CO₂ emissions, developing countries totalized 63% of global renewable energy investment in 2017.¹⁵ The investments were mainly located in China, India, and Brazil, with China alone representing 45% of global investment.¹⁵

Sustainalytics notes that the observation mentioned above is particularly relevant in the case of emerging economies such as Africa, which offers an insightful case study. In 2013, Africa 2030 was established as part of IRENA's global REmap 2030¹⁶ analysis, which outlines different opportunities for the deployment of renewable energy technologies across Africa. Based on IRENA's research, it was estimated that by 2030, renewable energy could provide as much as 22% of Africa's total final energy consumption and up to 50% of its total power generation.¹⁶ Electricity demand in Africa is projected to triple by 2030, and in order to meet that demand, an estimated USD 70 billion per annum will need to be invested into generation capacity. Investments into renewables could account for two-thirds of total investments in generation capacity, creating a significant business opportunity.¹⁶

Based on the above, Sustainalytics is of the opinion that NDB's financing of renewable energy for electricity generation offers environmental benefits such as reducing the CO_2 emissions associated with power generation. Moreover, through the financing of such projects and activities, NDB will contribute to the developing countries' transition to a low-carbon economy.

Increasing Access to Health Services and Clean Sanitation in Developing Countries

Universal health coverage ("UHC") implies that all people receive the health services they need, including initiatives to promote better health, prevent illness and to provide treatment and palliative care.¹⁷ Some barriers of access to healthcare services include lack of quality health services, distance to the nearest health facility, and overcrowded facilities that impose long waiting lines or restricted opening hours.¹⁷ In addition, the cost of health services can deter use, especially when out-of-pocket expenditures are needed.¹⁷ According to the WHO data, 400M people lack access to health services, primarily in sub-Saharan Africa and South Asia.¹⁷

Worldwide, 2.4B people lack access to improved sanitation facilities,¹⁸ including the majority of people living in sub-Saharan Africa and South Asia.¹⁷ Lack of sanitation causes tremendous disease burden among low-income populations: in Indonesia, it is estimated that 33,000 children die each year of diarrhea.¹⁹ On the contrary, improved sanitation facilities have positive impacts on aspects of health e.g. diarrhea, soil-transmitted helminth (STH) infections, trachoma, schistosomiasis, and nutritional status.¹⁸ In addition, studies show that access to water and sanitation services generate positive externalities, such as for education, measured by the completed number of school years.²⁰ Sustainalytics is of the opinion that projects that seek to improve access to sanitation could have positive health and social impacts for the targeted populations.

https://www.annualreviews.org/doi/pdf/10.1146/annurev-resource-100518-093759

¹² Advanced economies include Australia, Canada, Chile, European Union, Iceland, Israel, Japan, Korea, Mexico, Norway, New Zealand, Switzerland, Turkey, and United States, while developing countries are defined as the rest of the world.

¹³ IEA, "Energy related CO2 emissions, 1990-2019", (2020), at: <u>https://www.iea.org/data-and-statistics/charts/energy-related-co2-emissions-1990-2019</u> ¹⁴ IEA, "Global Energy & CO2 Status Report 2019", (2019), at: <u>https://www.iea.org/reports/global-energy-co2-status-report-2019/emissions</u>

¹⁵ Arndt, C., et al., (2019), "Faster Than You Think: Renewable Energy and Developing Countries", The Annual Review of Resource Economics, at:

¹⁶ IRENA, "Africa 2030: Roadmap for a renewable energy future", (2013), at: <u>https://www.irena.org/-</u>

[/]media/Files/IRENA/Agency/Publication/2015/IRENA_Africa_2030_REmap_2015_low-res.pdf

¹⁷ WHO/World Bank, "Tracking Universal Health Coverage – First Global Monitoring Report", (2015), at:

https://www.who.int/healthinfo/universal_health_coverage/report/2015/en/

¹⁸ Freeman, C., et al., (2004), "The impact of sanitation on infectious disease and nutritional status: A systematic review and meta-analysis", International Journal of Hygiene and Environmental Health, at:

https://www.sciencedirect.com/science/article/pii/S1438463917301529

¹⁹ Cameron, L., et al., (2013), "Impact Evaluation of a Large-Scale Rural Sanitation Project in Indonesia », World Bank Policy Research Working Paper", at: https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-6360

²⁰ Ortiz-Correa, J., S., et al., (2016), "Impact of access to water and sanitation services on educational attainment", Water Resources and Economics, at: https://www.sciencedirect.com/science/article/abs/pii/S2212428415300153



In addition, pandemics -such as COVID-19- have a significant impact on emerging countries, given the vulnerability of such countries' health systems.²¹ Potential peaks of the pandemic are expected to overburden developing countries' health systems with respect to critical care provision and the capacity to protect healthcare workers.²¹ Furthermore, insufficient critical care provision is expected to result in higher mortality rates. ^{Error! Bookmark not defined.} As such, Sustainalytics notes that by financing projects that are aimed at mitigating the adverse impacts of epidemics and pandemics, NDB could help the BRICS and other emerging countries health systems in providing the necessary care service.

Sustainalytics considers that the projects and companies funded under the Healthcare and Well-Being Basic, and Sustainable Infrastructure categories can generate positive social impacts by expanding access to health services and clean sanitation for the target populations. Furthermore, by financing projects in areas impacted by epidemics or pandemics, such as COVID-19, the Bank could further support BRICS and other emerging countries health systems in addressing the adverse consequences.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This sustainability bond advances the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Clean Transportation	9. Industries, Innovation and Infrastructure	Target 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, in case of transport infrastructure built in a trans-border or rural context
	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
Energy-Efficient Buildings	11. Sustainable Cities and Communities	11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Sustainable Land Use and Biodiversity	12. Responsible Consumption and Production	12.2 By 2030, achieve the sustainable management and efficient use of natural resources
	15. Life on Land	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
Sustainable Waste Management	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

²¹ UNEP, "COVID 19 and health system vulnerabilities in the poorest developing countries", (2020), at: shorturl.at/eiFM2

Sustainable Water Management & Irrigation	6. Clean Water and Sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
Basic Sustainable Infrastructure	1. No Poverty	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
Education	4. Quality Education	4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
Healthcare and Well- Being	3. Good Health and Well- Being	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all
Social Housing	11. Sustainable Cities and Communities	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

Conclusion

NDB has developed the overview of the New Development Bank Sustainable Financing Policy ("Framework Overview") under which it will issue green, social and sustainability bonds and other debt instruments, and use the proceeds to finance and refinance existing and future projects and loans that advance the transition to a low-carbon economy in developing countries and emerging economies. The Framework Overview contains a subset of eligibility criteria described under the NDB Sustainable Financing Policy Framework,²² dated May 2020, and demonstrates eligible projects to be financed in the Bank's upcoming green, social and sustainability bond issuances. Sustainalytics' opinion applies under the condition of investing in eligible projects outlined under the Framework Overview only. Details of the Framework Overview has been provided in Appendix 1.

The Framework Overview outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds.

Furthermore, Sustainalytics believes that Framework Overview is aligned with the overall sustainability strategy of the Bank and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 1, 3, 4, 6, 7, 9, 11, 12, and 15. Additionally, Sustainalytics is of the opinion that NDB has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the use of proceeds.

Based on the above, Sustainalytics is confident that New Development Bank is well-positioned to issue green, social and sustainability bonds and that the Framework Overview is robust, transparent, and in alignment with the four core components of the Green Bond Principles (2018) and Social Bond Principles (2020).

²² NDB Sustainable Financing Policy Framework, at: <u>https://www.ndb.int/wp-content/uploads/2020/05/2020_FC22_Al13_018_b-NDB-Sustainable-Financing-Policy-Framework.pdf</u>

Appendices

Appendix 1: Summary of the Framework Overview

For the purpose of issuing green, social and sustainability debt instruments and use the proceeds from such instruments to finance eligible projects described below, New Development Bank has developed the Framework Overview, which addresses the four key core components of the SBG 2018: use of proceeds, project evaluation and selection process, management of proceeds, and reporting. Sustainalytics notes that the Framework Overview demonstrates eligible projects to be financed in the Bank's upcoming issuances, and contains a subset of eligibility criteria described under the NDB Sustainable Financing Policy Framework,²³ dated May 2020. Sustainalytics' opinion applies under the condition of investing in eligible projects outlined under the Framework Overview only.

1. Use of Proceeds

	Green Eligible Sectors	Description (indicative)
1	Clean Transportation	Low energy or emission transportation assets, systems, infrastructure, components and services (examples include Rail (passenger or freight), Tram, Metro, Bus Rapid Transit systems, Electric Vehicles), and exclude rolling stocks carrying fossil fuel products).
2	Energy-Efficient Buildings	New construction building developments or renovation of existing buildings (including public service, commercial, residential and recreational) which meet recognized environmental standards. Buildings which have reduced life cycle consumption of energy levels of at least 20% less that statute/ city baseline consumption levels.
3	Energy Efficiency	Development of products or technology and their implementation that reduces energy consumption, for underlying asset, technology, product or system(s) across manufacturing, industrial, buildings and other sectors. Examples include improved lighting technology. Energy efficient investments related to fossil fuel assets are excluded. Improved efficiency in the delivery of bulk energy services (examples include district heating/ cooling systems, smart grids, and the storage, transmission and distribution of renewable energy that results in reduced energy losses). Manufacture of components to enable energy efficiency described above (examples include LED lights, fuel cells, smart grid meters).
4	Renewable Energy	Generation of energy from renewable sources (examples include wind, solar, tidal, small hydro power, and waste to energy facilities); Manufacturing of components of renewable energy technology (examples include wind turbines, solar panels).
5	Sustainable Land Use and Biodiversity	Schemes for allocation and protection of environment, local community, biodiversity or equivalent. Forestry with Forest Stewardship Council ("FSC") or Programme for the Endorsement of Forest Certification ("PEFC") certification and agriculture with Roundtable on Sustainable Palm Oil ("RSPO"), Roundtable on Responsible Soy ("RTRS") certification or equivalent.
6	Sustainable Waste Management	Waste minimization, collection, management, recycling, re-use, processing, disposal (such as methane capture) products, technologies and solutions.
7	7Sustainable Management & IrrigationWaterWater collection, treatment, recycling, re-use, technologies infrastructure (examples include water pipes and collection faciliti water/rainwater, treatment plant facilities).	

²³ NDB Sustainable Financing Policy Framework, at: <u>https://www.ndb.int/wp-content/uploads/2020/05/2020_FC22_Al13_018_b-NDB-Sustainable-Financing-Policy-Framework.pdf</u>



		Irrigation infrastructure that contributes to environmental wellbeing as well as sustainable agriculture production.	
	Social Eligible Sectors	Description (indicative)	
1	Basic Sustainable Infrastructure	Projects that incorporate economic, environmental and social criteria in its design, building and operation and are aimed at promoting access to affordable basic infrastructure (e.g. clean energy, transport infrastructure, irrigation, water resource management, and sanitation), in particular to population suffering from lack of access to basic infrastructure.	
2	Education	Projects aimed at increasing access to quality and/or affordability of education; Projects that provide or support the provision of quality education or trainings to society groups where education opportunities are not generally available.	
3	Healthcare and Well- being	Projects that contribute to the goal of improving labor and working conditions for safety and health care purposes; achieving the highest attainable standard of primary healthcare, well-being, safety, and security services, in particular to sectors of society suffering from lack of such services. Projects in the areas impacted by epidemics, pandemics, natural disasters, or other urgent situations.	
4	Social Housing	Projects that deliver affordable, safe, clean housing.	

2. Process Evaluation & Selection

2.1 NDB Environment and Social Framework

In order to achieve balanced economic, social and environmental benefits through its operations and mitigate environmental and social risks and impacts from projects, the Bank has established the ESF including an Environment and Social Policy and Environmental and Social Standards as defined in the ESF. The core standards related to environmental and social issues include: inclusive and sustainable development; country systems; climate change; environment interests; conservation of natural resources; gender equality; precautionary approach; and co-operative functioning and knowledge dissemination.

NDB's Environmental and Social Standards are utilized by the Bank to manage project risks related to environment, involuntary resettlement, and indigenous peoples. Each of the Bank's potential projects undergo a comprehensive environmental and social due diligence to ensure that project complies with relevant environment and social country systems and the Bank's ESF.

2.2 Project Screening

Potential eligible projects for the Use of Proceeds of each Bond will firstly be identified during the project concept review stage by Treasury and Portfolio Management Division in consultation with Operations Policy and Project Support Division (Operations Division III) based on the information provided by Operations Division I and Operations Division II with inputs by the Strategy and Partnerships Division.

For projects identified during the project concept stage as potentially eligible for the Use of Proceeds of each Bond, a set of impact indicators is designed at the project appraisal stage. It is designed by Operations Division I and Operations Division II, Strategy and Partnerships Division, and Treasury and Portfolio Management Division, taking into account the nature of the project and availability of information, to monitor and evaluate the development impact of the project.

Operations Division III, which includes representatives with environmental experience and knowledge, will review and evaluate all proposed projects for the Use of Proceeds of each Bond issue under this Framework. Operations Division III based on its analysis, and with inputs by the Strategy and Partnerships Division, will verify and confirm these projects as Eligible Projects for the Use of Proceeds of each Bond as appropriate in accordance with the standards and processes set out in this Framework.

3. Management of Proceeds



3.1 Planning the Use of Proceeds

Net proceeds of the Bonds will be used to either reimburse the Bank for previously disbursed eligible loans or to fund new eligible loans in accordance with the standards and processes set out in this Framework. Any surplus could be temporarily invested in Bonds issued in the international markets or markets of the member countries of the Bank, or in money market instruments, or kept in cash until they are allocated to projects in Eligible Sectors. The investment of unallocated proceeds will be in accordance with the Bank's Liquidity Risk Management Policy.

3.2 Recording the Use of Proceeds

The Bank will establish a register for the issuance of the Bonds (the "Register"). The Register will contain the following information:

- Details of all Bonds issued under this Framework including the International Securities Identification Number ("ISIN") or equivalent, issue date, maturity date, principal amount and coupon; and
- Details of the Use of Proceeds of all Bonds issued including loan account number, borrower's name, financing amount, amount of loan disbursed and outstanding, loan maturity and other necessary information so that the aggregate of issuance proceeds and Use of Proceeds is recorded at all times.

The Register will be updated regularly to reflect (i) Bonds issued and redeemed and (ii) loans refinanced or repaid, and new loans.

Finance, Budget and Accounting Division and Treasury and Portfolio Management Division will ensure that an accurate Register and the application of proceeds are maintained at all times.

4. Reporting

4.1 Report on Sustainable Development Financing

NDB will prepare and publish a Report on Sustainable Development Financing on an annual basis with the following details on all Bonds issued under this Framework:

- Aggregate amounts of Bond proceeds allocated to each of the Eligible Sectors listed in Section 3.1.1 of the Framework Overview, together with number of projects and description of the projects;
- The balance of unallocated Bond proceeds at the end of reporting period;
- Regional distribution of projects;
- Information on the environmental and/or social impacts of the projects financed under this Framework.

In all cases, information about borrowers, their operations and projects will be subject to permitted disclosure in accordance with relevant confidentiality agreements or disclosure agreements. The Bank will be compliant with applicable information disclosure requirements of local regulators when issuing Bonds.

Treasury and Portfolio Management Division and Strategy and Partnerships Division will ensure that a Report on Sustainable Development Financing is prepared.

Each Report on Sustainable Development Financing will be published on the NDB website.

4.2 Impact Reporting

In each annual Report on Sustainable Development Financing, the Bank will include information on the environmental and/or social impacts of projects in the Eligible Sectors.

Subject to the nature of eligible sustainable development activities and availability of information, the Bank aims to include the following impact indicators selected in line with the best market practices and referenced from indicators within the United Nations Sustainable Development Goals (SDGs) Framework ("Impact Indicators"), which are provided below.

Wherever relevant, such Impact Indicators will be:

- Reported by Operations Division I and Operations Division II as part of project appraisal and implementation activities; and
- Integrated in the Report on Sustainable Development Financing by Treasury and Portfolio Management Division and Strategy and Partnerships Division.



The impact reporting will also provide information on the methodology and assumptions used for calculation of the impact indicators.

Eligible Sectors	Impact Indicators		
Clean Transportation	 Number of passengers/pkm carried Tons of freight carried Length of rail construction Number of rolling stocks (trains/locomotives/wagons) Annual GHG emission reduced/avoided (Tons of CO2eq) Passenger and freight volumes, by mode of transport 		
Education	 Number of projects (universities/schools) financed Number of beneficiaries Increase in number of children and young people with access to education Number of schools with access to basic services and amenities including, but not limited to electricity, internet, computers, infrastructure and materials for students with disabilities, basic drinking water, sanitation facilities; and basic handwashing facilities (as per the WASH indicator definitions) Number of job opportunities created Increase in employment rate 		
Energy Efficient Buildings	 Number of dwellings Annual GHG emission reduced / avoided (Tons of CO2eq) Annual energy savings in MWh or GWh compared to a baseline 		
Energy Efficiency	 Annual GHG emission reduced / avoided (Tons of CO2eq) Amount of energy saved (MWh) 		
Healthcare and Well-being	 Number of beneficiaries Increase in number of people with access to affordable healthcare facilities Number of people with access to safe sanitation services 		
Renewable Energy	 Power generated from renewable energy (MW) Capacity energy renewable built or rehabilitated (MW) Annual GHG emission reduced / avoided (Tons of CO2eq) 		
Social Housing	 Number of beneficiaries Number of residences constructed / renovated 		
Sustainable Land Use and Biodiversity	 Number of beneficiaries Number of conservation programs Number of species protected Hectares of land used / protected 		
Sustainable Waste Management	Volume of waste saved/ treated/ recycled		
Sustainable Water Management	 Volume of water saved / reutilized Number of people with access to safe drinking water services / safe sanitation services Improvement in water use efficiency 		
Basic Sustainable Infrastructure	Number of beneficiaries, particularly in sectors of society suffering from lack of access to basic sustainable infrastructure		

	LEED	HK BEAM ²⁴	CHINA THREE STAR	BREEAM
Background	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.	BEAM Society Limited (BSL) developed the Hong Kong Building Environmental Assessment Method ("HK-BEAM"), a green building assessment tool established in 1996 with the issue of two assessment methods, one for 'new' and one for 'existing' office buildings, largely based on the UK Building Research Establishments' . The HK-BEAM aims to promote buildings that are more sustainable through enhanced design, construction, commissioning, management, operation and maintenance practices.	The Chinese 3- Star Green Building Standard is a Certification System used in China for residential and public buildings (including commercial, hotel and government- owned) that was introduced in 2006 by MOHURD (Ministry of Housing and Urban-Rural Development).	BREEAM (Building Research Establishment Environmental Assessment Method) was first published by the Building Research Establishment (BRE) in 1990. Based in the UK. Used for new, refurbished and extension of existing buildings.
Certification levels	Certified Silver Gold Platinum	Bronze Silver Gold Platinum	1-Star 2-Star 3-Star	Pass Good Very Good Excellent Outstanding
Areas of Assessment: Environmental Performance of the Building	 Energy and atmosphere Sustainable Sites Location and Transportatio n Materials and resources Water efficiency Indoor environmental quality Innovation in Design Regional Priority 	 Site Aspects (location, planning and design, emissions from the site) Materials Aspects (efficient use of materials, selection of materials, waste materials) Energy Use (annual energy use, energy efficient systems, energy efficient equipment, facilities for 	 Land savings and outdoor environment; Energy savings and utilization; Water savings and utilization; Material savings and utilization; Indoor environment; Operations and management. 	Energy Land Use and Ecology Pollution Transport Materials Water Waste Health and Wellbeing Innovation

Appendix 2: Green Buildings Certification Schemes

²⁴ https://www.beamsociety.org.hk/files/_4-04%20New%20Buildings%20(Full%20Version).pdf

		energy, management) • Water Use (water quality, water conservation, effluent) • Indoor Environmental Quality (safety, hygiene, indoor air quality, ventilation, thermal comfort, lighting quality, acoustics and noise, building amenities) • Innovations and Additions		
Requirements	Prerequisites (independent of level of certification) + Credits with associated points These points are then added together to obtain the LEED level of certification There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools-/Retail- /Healthcare New Construction and Major Renovations,	HK BEAM is a credit- based system where the overall weighting is given by the relative number of credits given for the compliance with sub- criteria derived from the above-mentioned areas of assessment. For some of the environmental aspects detailed in HK-BEAM, compliance with legal requirements is taken as a prerequisite for the award of credits. Consequently, when an assessed issue becomes subject to legislation, it will no longer count for an award of credits, and would be amended or deleted in any future revisions of HK- BEAM. The Overall Assessment Grade is based on the percentage of applicable credits gained. The award	Prerequisites The system functions on a checklist basis, with 1-Star buildings meeting 26 criteria, 2-Star an additional 43 items, and 3-Star on a further 14 items. Criteria and weighting differ for public and residential buildings. In public buildings, more weight is given to energy and material savings, while the standard for residential buildings places greater importance on urban land saving and outdoor environments.	Prerequisites depending on the levels of certification + Credits with associated points This number of points is then weighted by item ²⁵ and gives a BREEAM level of certification, which is based on the overall score obtained (expressed as a percentage). Majority of BREEAM issues are flexible, meaning that the client can choose which to comply with to build their BREEAM performance score. BREAAM has two stages/ audit reports: a 'BREEAM Design Stage' and a 'Post Construction Stage', with different assessment criteria.

²⁵ BREEAM weighting: Management 12%, Health and wellbeing 15%, Energy 19%, Transport 8%, Water 6%, Materials 12.5%, Waste 7.5%, Land Use and ecology 10%, Pollution 10% and Innovation 10%. One point scored in the Energy item is therefore worth twice as much in the overall score as one point scored in the Pollution item



Operation and Maintenance).	Platinum 75% - Excellent Gold 65% - Very Good Silver 55% - Good Bronze 40% - Above Average		
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Appendix 3: Forestry Certification Schemes

	Forest Stewardship Council (FSC) ²⁶	Programme for the Endorsement of Forest Certification (PEFC) ²⁷	
Background	The Forest Stewardship (FSC) is a non-profit organization established in 1993 that aims to promote sustainable forest management practice by evaluating forest management planning and practices independently against FSC's standards.	ganization established aims to promotethe Endorsement of Forest Certification (PEFC) is a non-profit organization that promotes sustainable forest management t planning and practices	
Basic Principles	 Compliance with laws and FSC principles Tenure and use rights and responsibilities Indigenous peoples' rights Community relations and workers' rights Benefits from the forests Environmental impact Management plans Monitoring and assessment Special sites – high conservation value forests (HCVF) Plantations 	 Maintenance and appropriate enhancement of forest resources and their contribution to the global carbon cycle Maintenance and enhancement of forest ecosystem health and vitality Maintenance and encouragement of productive functions of forests (wood and no-wood) Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems Maintenance and appropriate enhancement of protective functions in forest management (notably soil and water) Maintenance of socioeconomic functions and conditions Compliance with legal requirements 	
Types of standards/benchmarks	 Forest Management certification (for single/multiple applicant(s) – industrial or private forest owners, forest license holders, community forests, and government- managed forests) 	 Sustainable Forest Management benchmark – international requirements for sustainable forest management. National forest management standards must meet these requirements 	

²⁶ Forest Stewardship Council, FSC Principles and Criteria for Forest Stewardship: <u>https://ca.fsc.org/preview.principles-criteria-v5.a-1112.pdf</u>

²⁷ PEFC, Standards and Implementation: <u>https://www.pefc.org/standards-implementation</u>



	 Small and Low Intensity Management Forests (SLIMFs) program (for small forests and forests that are managed at low intensity would be eligible) Chain of Custody (CoC) certification (for supply chain companies' planning, practices and products – all operations that want to produce or make claims related to FSC-certified products must possess this certificate) Controlled Wood verification (for assurance that 100% virgin fiber mixed with FSC-certified and recycled fiber originates from a verified and approved source) 	 in order to obtain PEFC endorsement Group Forest Management Certification – outlines the requirements for national forest certification systems who have group forest management certification Standard Setting – covers the processes that must be adhered to during the development, review and revision of national forest management standards Chain of Custody – outlines the conditions for obtaining CoC certification for forest-based products PEFC logo Usage Rules – outlines the requirements entities must abide by when using the PEFC logo Endorsement of National Systems – outlines the process that national systems must go through to achieve PEFC endorsement
Governance	The General Assembly is comprised of all FSC members and constitutes the highest decision-making body. Members can apply to join one of three chambers – environmental, social, or economic – that are further divided into northern and southern sub-chambers. Each chamber maintains 33.3% of the weight in votes, and votes are weighted so that the North and South hold an equal portion of authority in each chamber, to ensure influence is shared equitably between interest groups and countries with different levels of economic development.	PEFC's governance structure is formed by the General Assembly (GA) which is the highest authority and decision-making body. It is made up of all PEFC members, including national and international stakeholders. In general, PEFC's governance structure is more representative of industry and government stakeholders than of social or environmental groups. Members vote on key decisions including endorsements, international standards, new members, statutes and budgets. All national members have between one and seven votes, depending on membership fees, while international stakeholder members have one vote each.
Scope	FSC is a global, multi-stakeholder owned system. All FSC standards and policies are set by a consultative process. There is an FSC Global standard and for certain countries FSC National standards. Economic, social, and environmental interests have equal weight in the standard setting process. FSC follows the ISEAL Code of Good Practice for Setting Social and Environmental Standards.	Multi-stakeholder participation is required in the governance of national schemes as well as in the standard-setting process. Standards and normative documents are reviewed periodically at intervals that do not exceed five years. The PEFC Standard Setting standard is based on ISO/IEC Code for good practice for standardization (Guide 59) ²⁸ and the ISEAL Code of Good Practice for

²⁸ ISO, ISO/IEC Guide 59:2019: <u>https://www.iso.org/standard/23390.html</u>

		Setting Social and Environmental Standards.
Chain-of-Custody	 The Chain-of-Custody (CoC) standard is evaluated by a third-party body that is accredited by FSC and compliant with international standards CoC standard includes procedures for tracking wood origin CoC standard includes specifications for the physical separation of certified and noncertified wood, and for the percentage of mixed content (certified and non-certified and non-certified) of products CoC certificates state the geographical location of the producer and the standards against which the process was evaluated. Certificates also state the starting and finishing point of the CoC 	 Quality or environmental management systems (ISO 9001:2008 or ISO 14001:2004 respectively) may be used to implement the minimum requirements for chain-of- custody management systems required by PEFC Only accredited certification bodies can undertake certification CoC requirements include specifications for physical separation of wood and percentage-based methods for products with mixed content. The CoC standard includes specifications for tracking and collecting and maintaining documentation about the origin of the materials The CoC standard includes specifications for the physical separation of certified and non- certified wood The CoC standard includes specifications about procedures for dealing with complains related to participant's chain of custody
Non-certified wood sources	 FSC's Controlled Wood Standard establishes requirements to participants to establish supply- chain control systems, and documentation to avoid sourcing materials from controversial sources, including: a. Illegally harvested wood, including wood that is harvested without legal authorization, from protected areas, without payment of appropriate taxes and fees, using fraudulent papers and mechanisms, in violation of CITES requirements, and others, b. Wood harvested in violation of traditional and civil rights, c. Wood harvested in forests where high conservation 	The PEFC's Due Diligence System requires participants to establish systems to minimize the risk of sourcing raw materials from: a. forest management activities that do not comply with local, national or international laws related to: - operations and harvesting, including land use conversion, - management of areas with designated high environmental and cultural values, - protected and endangered species, including CITES species, - health and labor issues,



	 values are threatened by management activities, d. Wood harvested in forests being converted from forests and other wooded ecosystems to plantations or non-forest uses, e. Wood from management units in which genetically modified trees are planted. 	 indigenous peoples' property, tenure and use rights, payment of royalties and taxes. genetically modified organisms, forest conversion, including conversion of primary forests to forest plantations. 		
Accreditation/verification	FSC-accredited Certification Bodies (CB) conduct an initial assessment, upon successful completion companies are granted a 5-year certificate. Companies must undergo an annual audit and a reassessment audit every 5 years. Certification Bodies undergo annual audits from Accreditation Services International (ASI) to ensure conformance with ISO standard requirements.	Accreditation is carried out by an accreditation body (AB). In the same way that a certification body checks that a company meets the PEFC standard, the accreditation body checks that a certification body meets specific PEFC and ISO requirements. Through the accreditation process, PEFC has assurance that certification bodies are independent and impartial, that they follow PEFC certification procedures. PEFC does not have their own accreditation body. Like with the majority of ISO based certifications, PEFC relies on national ABs under the umbrella of the International Accreditation Forum (IAF). National ABs need to be a member of the IAF, which means they must follow IAF's		
Qualitative considerations	rules and regulations. Sustainalytics views both FSC and PEFC as being robust, credible standards that are based on comprehensive principles and criteria that are aligned with ISO. Both schemes have received praise for their contribution to sustainable forest management practices ²⁹ and both have also faced criticism from civil society actors. ^{30,31} In certain instances, these standards go above and beyond national regulation and are capable of providing a high level of assurance that sustainable forest management practices are in place. However, in other cases, the standards are similar or equal to national legislation and provide little additional assurance. Ultimately, the level of assurance that can be provided by either scheme is contingent upon several factors including the certification bodies conducting audits, national regulations and local context.			

²⁹ FESPA, FSC, PEFC and ISO 38200: <u>https://www.fespa.com/en/news-media/blog/fsc-pefc-and-iso-38200</u>

³⁰ Yale Environment 360, Greenwashed Timber: How Sustainable Forest Certification Has Failed: <u>https://e360.yale.edu/features/greenwashed-timber-how-sustainable-forest-certification-has-failed</u>

³¹ EIA, PEFC: A Fig Leaf for Stolen Timber: <u>https://eia-global.org/blog-posts/PEFC-fig-leaf-for-stolen-timber</u>

Appendix 4: Sustainability Bond / Sustainability Bond Programme - External Review Form

Section 1. Basic Information

New Development Bank
The Overview of the New Development Bank Sustainable Financing Policy Framework
Sustainalytics
October, 2020

Publication date of review publication:

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP and SBP:

\boxtimes	Use of Proceeds	\boxtimes	Process for Selection	Project	Evaluation	and
\boxtimes	Management of Proceeds	X	Reporting			
ROLE(S) OF REVIEW PROVIDER						

- \boxtimes Consultancy (incl. 2nd opinion) \Box Certification
- □ Verification □ Rating
- \Box Other (please specify):

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.



1. USE OF PROCEEDS

Overall comment on section (if applicable):

The eligible categories -- Clean Transportation, Energy-Efficient Buildings, Energy Efficiency, Renewable Energy, Sustainable Land Use and Biodiversity, Sustainable Waste Management, Sustainable Water Management & Irrigation, Basic Sustainable Infrastructure, Education, Healthcare and Well-Being, and Social Housing -- are aligned with those recognized by the Green Bond Principles and Social Bond Principles. Sustainalytics considers that the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 1, 3, 4, 6, 7, 9, 11, 12, 15.

Use of proceeds categories as per GBP:

\boxtimes	Renewable energy	\boxtimes	Energy efficiency		
	Pollution prevention and control	\boxtimes	Environmentally sustainable management of living natural resources and land use		
	Terrestrial and aquatic biodiversity conservation	\boxtimes	Clean transportation		
\boxtimes	Sustainable water and wastewater management		Climate change adaptation		
	Eco-efficient and/or circular economy adapted products, production technologies and processes		Energy-Efficient Buildings		
	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs	\boxtimes	Other (please specify): Sustainable waste management, Basic sustainable infrastructure		
If applicable please specify the environmental taxonomy, if other than GBPs:					
Use	Use of proceeds categories as per SBP:				
	Affordable basic infrastructure		Access to essential services		
\boxtimes	Affordable housing		Employment generation (through SME financing and microfinance)		
	Food security		Socioeconomic advancement and empowerment		
	Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP	\boxtimes	Other (please specify): Education, healthcare and well-being		

If applicable please specify the social taxonomy, if other than SBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):



NDB's process in evaluating and selecting projects is handled by Treasury and Portfolio Management Division in consultation with Operations Policy and Project Support Division. Eligible projects undergo a comprehensive environmental and social due diligence to ensure the compliance with environment and social regulations and the Bank's Environment and Social Framework, which is comprised of the Environment and Social Policy and Environmental and Social Standards. Sustainalytics considers the project selection process in line with market practice.

Evaluation and selection

\boxtimes	Credentials on the issuer's social and green objectives	\boxtimes	Documented process to determine that projects fit within defined categories	
	Defined and transparent criteria for projects eligible for Sustainability Bond proceeds	\boxtimes	Documented process to identify and manage potential ESG risks associated with the project	
	Summary criteria for project evaluation and selection publicly available		Other (please specify):	
Information on Responsibilities and Accountability				

- ☑ Evaluation / Selection criteria subject to □ In-house assessment external advice or verification
- □ Other (please specify):

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

NDB will establish a register for the issuance of the bonds (the "Register"). The Register will be managed by Finance, Budget and Accounting Division and Treasury and Portfolio Management Division and include the financing amount, amount of loan disbursed and outstanding, loan maturity and other necessary information to record the aggregate of issuance proceeds and use of proceeds. In the event of pending allocation, unallocated proceeds could be temporarily invested in green, social and sustainability bonds, or in money market instruments, or kept in cash in accordance with NDB's Liquidity Risk Management Policy. This process is in line with market standards.

Tracking of proceeds:

- Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner
- Disclosure of intended types of temporary investment instruments for unallocated proceeds
- □ Other (please specify):

Additional disclosure:

- Allocations to future investments only
 Allocations to both existing and future investments
 - Allocation to individual disbursements 🛛 🔅 Allocation to a portfolio of disbursements



□ Disclosure of portfolio balance of □ Other (please specify): unallocated proceeds

4. REPORTING

Overall comment on section (if applicable):

NDB intends to report allocation proceeds on its website on an annual basis until full allocation. Allocation reporting will include aggregate amounts of bond proceeds allocated to each of the eligible sectors, together with number and description of projects, balance of unallocated proceeds and regional distribution of projects. In addition, New Development Bank is committed to reporting on relevant environmental and/or social impact metrics. Sustainalytics views NDB's allocation and impact reporting as aligned with market practice.

Use of proceeds reporting:

- □ Project-by-project ⊠ On a project portfolio basis
- □ Linkage to individual bond(s) □ Other (please specify):

Information reported:

☑ Allocated amounts
□ Sustainability Bond financed share of total investment

 Other (please specify): Number and description of projects, balance of unallocated proceeds, and regional distribution of projects

Frequency:

⊠ Annual

□ Other (please specify):

Impact reporting:

- Project-by-project 🛛 🛛 On a project portfolio basis
- □ Linkage to individual bond(s) □ Other (please specify):

Information reported (expected or ex-post):

- GHG Emissions / Savings Energy Savings
- Decrease in water use
 Number of beneficiaries

Clean Transportation:

Semi-annual

- Number of passengers/pkm carried
- Tons of freight carried
- Length of rail construction



- Number of rolling stocks (trains/locomotives/wagons)
- Annual GHG emission reduced/avoided (Tons of CO2eq)
- Passenger and freight volumes, by mode of transport

Education:

- Number of projects (universities/schools) financed
- Number of beneficiaries
- Increase in number of children and young people with access to education
- Number of schools with access to basic services and amenities including, but not limited to electricity, internet, computers, infrastructure and materials for students with disabilities, basic drinking water, sanitation facilities; and basic handwashing facilities (as per the WASH indicator definitions)
- Number of job opportunities created

• Increase in employment rate Energy Efficient Buildings:

- Number of dwellings
- Annual GHG emission reduced / avoided (Tons of CO2eq)
- Annual energy savings in MWh or GWh compared to a baseline

Energy Efficiency:

- Annual GHG emission reduced / avoided (Tons of CO2eq)
- Amount of energy saved (MWh)

Healthcare and Well-being:

- Number of beneficiaries
- Increase in number of people with access to affordable healthcare facilities
- Number of people with access to safe sanitation services

Renewable Energy:

- Power generated from renewable energy (MW)
- Capacity energy renewable built or rehabilitated (MW)



 Annual GHG emission reduced / avoided (Tons of CO2eq)

Social Housing:

- Number of beneficiaries
- Number of residences constructed / renovated

Sustainable Land Use and Biodiversity:

- Number of beneficiaries
- Number of conservation programs
- Number of species protected
- Hectares of land used / protected
- Sustainable Waste Management:
 - Volume of waste saved/ treated/recycled

Sustainable Water Management :

- Volume of water saved / reutilized
- Number of people with access to safe drinking water services / safe sanitation services
- Improvement in water use efficiency

Basic Sustainable Infrastructure :

□ Semi-annual

 Number of beneficiaries, particularly in sectors of society suffering from lack of access to basic sustainable infrastructure

Frequency:

- 🖂 Annual
- \Box Other (please specify):

Means of Disclosure

- □ Information published in financial report □ Information published in sustainability report
- ☑ Information published in ad hoc documents □ Other (please specify):
- Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)



SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- □ Consultancy (incl. 2nd opinion)
- Verification / Audit
- \Box Other (please specify):

Review provider(s):

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP AND THE SBP

i. Second Party Opinion: An institution with sustainability expertise that is independent from the issuer may provide a Second Party Opinion. The institution should be independent from the issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.

Certification

Date of publication:

Rating

- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.
- iii. Certification: An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognized external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green, Social and Sustainability Bond Scoring/Rating: An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialized research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.

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Principles

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