



Republic of Indonesia SDGs Framework Second Opinion

1 September, 2021

The Republic of Indonesia is the fourth most populous country in the world with over 270 million people, the tenth largest economy in the world, and the largest economy in ASEAN. 52% of the country's emissions come from agriculture, forestry, and land use (AFOLU), which includes emissions from deforestation and peat fires. Energy comprises 37% of total emissions, coming from Indonesia's high dependency on coal-fired power generation. Coal looks to stay central to Indonesia's economy, with the government recently sharing that its 2050 primary energy mix includes a 34% share for coal in its most ambitious scenario. Overall the framework positively reflects Indonesia's holistic approach to financing its sustainable development. It is designed to support Indonesia's NDC and its roadmap to achieving the 2030 SDGs.

The issuer shared that the specific allocation of proceeds cannot be determined at this stage, but the first issuance is expected to be a social bond or sukuk, focused on healthcare, education, and ICT. According to the issuer, proceeds from subsequent green issuances will follow previous green sukuk issuances' focus on renewable energy, sustainable transport, climate resilience, and waste to energy and waste management. The issuer has also shared that proceeds for blue projects will most likely support the development of certified sustainable fisheries.

A broad range of projects can be financed across green, blue and social project categories. Direct investments in fossil fuels and related infrastructure are excluded. Other stated exclusions include but are not limited to nuclear, hydropower projects with >30 MW capacity, biomass/biofuels projects that compete with food production and adversely impact biodiversity and soil carbon, and agriculture linked with forest conversion. In addition, the issuer shared that palm oil projects are ineligible. Such exclusions represent an improvement from the issuer's 2018 framework. Other green/blue categories include energy efficiency, sustainable management of natural resources on land, sustainable management of natural resources on ocean, green tourism, green buildings, and sustainable water and wastewater management. Social categories include employment generation and SME/micro financing, socioeconomic advancement and empowerment, food security and sustainable food systems, access to essential services, and basic infrastructure. It should be noted that operating expenditures, including salaries and administrative expenses, are eligible and not subject to any cap.

SUSTAINABILITY BOND GUIDELINES

Based on this review, this framework is found to be in alignment with the green bond principles, social bond principles, and sustainability bond guidelines.

Included in the overall shading is an assessment of the governance structure of the SDGs framework. CICERO Shades of Green finds the governance procedures in the Republic of Indonesia's framework to be **Good**.



SOCIAL ASSESSMENT

Based on our review, the eligible social projects credibly aim for enabling sustainable development that will be supported by proposed comprehensive reporting of impacts.

SHADES OF GREEN

Based on our review, we rate the Republic of Indonesia's green bond and sukuk issuances under this framework **CICERO Medium Green**. CICERO Green does not assign an overall shading for social bond and sukuk issuances.



The framework could include projects that indirectly support fossil fuels and generate rebound effects due to Indonesia's coal-dependent grid. There are also inherent risks of deforestation and other adverse biodiversity impacts from projects requiring additional use of land and seascapes. Indonesia's ongoing efforts to address deforestation should be acknowledged, and all high-risk projects are subject to environmental and social impact assessments (AMDAL). However, recent controversies around purported environmental deregulation under the Omnibus Law, which was introduced to ease job creation, should be noted. Successful avoidance of these impacts will depend heavily on the Indonesian government's commitment to safeguarding natural capital and biodiversity, on top of the comprehensiveness and robustness of Indonesia's environmental laws and regulations and their uniform implementation and enforcement. The issuer's governance process for project selection and monitoring will also be critical.

Regional climate resilience and adaptation measures are to be implemented as part of national regulatory frameworks and Indonesia's updated NDC, but further transparency around specific measures and criteria would be helpful. The issuer has shared that planning, design and implementation of projects will incorporate insights from SIDIK, a tool that assesses climate vulnerability at the level of administrative regions, as well as the country's Climate Resilience Development Policy. Indonesian regulations require administrative regions to develop disaster mitigation plans, and Indonesia's newly updated NDC also outlines specific adaptation measures, including the integration of adaptation into spatial planning and infrastructure development and maintenance. However, it remains unclear what specific climate resilience criteria will be applied to project selection and implementation, and we encourage the issuer to disclose these wherever possible.

There is a strong social foundation to the framework, with social project categories targeting the lowest 40% of the population by household income. The broadness of this threshold means that a large proportion of Indonesia's population could benefit from financed eligible projects. We encourage the issuer to provide greater transparency on which specific populations within the poorest 40% will benefit from the proceeds, which would allow better assessment of the likely social impacts of issuance proceeds. The issuer has committed to providing detailed and quantitative post-issuance reporting on social impacts.

Questions remain on how negative impacts of social projects on the environment and vice versa will be avoided or managed. For instance, irrigation projects could facilitate increased agricultural expansion and land use change. At the same time, green/blue projects could undermine social objectives by shifting the balance of job demand across sectors. The issuer clarified that social projects financed under the framework will not pose any major environmental threats/risks; and vice versa for green projects. However, from both the environmental and social perspectives, decisions made regarding the use of proceeds can lead to lock-in of suboptimal environmental and/or social development trajectories.

The Republic of Indonesia can leverage the capacity it has already developed on budget tagging, proceeds management and reporting from its prior issuances of green sukuk, which have been adapted to include SDG and social projects. Project selection is based on initial tagging by line ministries and decided in coordination with the National Development Planning Agency (BAPPENAS) and the Ministry of Finance. Considerations for climate resilience, life cycle emissions and supply chain sustainability may not be implemented uniformly across all project categories. The issuer is committed to continue reporting on allocation and impacts at the project level as it has done for prior green sukuk, while adding reporting for eligible expenditure types.

Based on the overall assessment of the green and social project categories in this framework, and governance and transparency considerations, the Republic of Indonesia's SDGs framework receives a **CICERO Medium Green** shading for green bond and sukuk issuances. CICERO Green does not assign an overall shading for social bond and sukuk issuances. The CICERO Green shading for combined issuances (sustainability bonds and sukuk) will depend on the relative weight of the relevant green and social project categories for the issuance. The framework receives a governance score of **Good**.



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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the issuer's framework dated August 2021. This second opinion remains relevant to all issuances under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the issuer to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the issuer's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

Expressing concerns with 'Shades of Green'

CICERO Green second opinions are graded Dark Green, Medium Green or Light Green, reflecting a broad, qualitative review of climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in projects across all shades of green are necessary in order to successfully implement the ambition of the Paris Agreement. The shades are intended to communicate the following:

CICERO Shades of Green



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.

Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available

The overall Shade of Green reflects the distribution of shadings across project categories in the framework and the categories' relative importance in immediate issuances, to the extent this information is shared by the issuer. A shading is not assigned to social project categories where there are no clear environmental benefits. To be included in sustainability finance frameworks such social project categories should not present obvious environmental risks, either due to their inherent nature or because of exclusions or screening criteria applied by the issuer.

Assessment of social benefits and risks

The Second Opinion for the issuer's framework also accounts for social dimensions of the framework in total and of eligible social asset categories in particular. The International Institute for Sustainable Development provides expertise on social benefits and social risks to be considered for the financing of infrastructure and other projects with environmental and social targets.



The social benefits, consistency and effectiveness of eligible social asset categories of this framework are reviewed against the issuer's overall social targets and the United Nations Sustainable Development Goals (SDGs). This reference framework for analyzing the benefits of social asset categories was chosen because SDGs are increasingly accepted and applied within the (impact) investment community, the International Capital Market Association (ICMA) encourages to pay attention to the SDGs as they recently published a high-level mapping on the alignment between the SDGs and green/social asset categories of Green/Social/Sustainability Bond Frameworks, and many countries are working actively on implementing the SDGs.

To complement the SDGs as a basis for this assessment, the International Organizations for Standardization (ISO) 26000 standard has been consulted. This standard on Social Responsibility has been published as a guidance document rather than a basis against which organizations can be certified. It includes a framework that links the SDGs to other popular standards for social responsibility, including the Organisation for Economic Cooperation and Development (OECD), International Labour Organization (ILO) conventions and the Global Reporting Initiative (GRI).

Social risks of eligible green and social asset categories are assessed based on IISD's extensive experience from infrastructure sustainability assessments as well as best practice guidelines and safeguards (such as the Environmental and Social Performance Standards of the International Finance Corporation). The assessment covers the issuer's capacity for anticipating and assessing adverse social risks when selecting eligible green and social projects. It is also reviewed whether the issuer has implemented policies that require project beneficiaries to have systems in place to avoid, reduce or minimize adverse social impacts.

Governance assessment

Sound governance and transparency processes facilitate delivery of the issuer's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green, social or sustainability bonds or sukuk are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the issuer's governance processes: 1) the policies and goals of relevance to the framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



2 Brief description of Republic of Indonesia's SDGs Framework and related policies

The Republic of Indonesia is the fourth most populous country in the world with over 270 million people. It is a member of the Association of Southeast Asian Nation (ASEAN) and has a territory of 1.9 million square km across some 17,000 islands, making it the largest archipelagic nation in the world. Its economy is the largest in Southeast Asia and the tenth largest in the world on a purchasing power parity basis, placing it in the World Bank's upper-middle income classification.¹ In the thirty years until the Covid-19 pandemic, the country has experienced consistent economic growth, leading to a halving of its poverty rate between 1999 and 2020.² Indonesia is considered highly developed on the UN's Human Development Index (HDI), on which it is ranked 107 out of 189 countries and territories.³ Indonesia is a presidential republic and the third largest democracy in the world. Its capital is Jakarta, which has nearly 11 million residents. Its current president is Joko Widodo (or "Jokowi"), who was first elected in 2014 and was re-elected in 2019 for a second and final term.

Indonesia is a signatory to the Paris Agreement and has issued its Nationally Determined Contributions (NDCs), which it updated in July 2021. Indonesia has also committed to achieving the 2030 SDGs, as mandated by a Presidential Regulation concerning the Implementation of Achieving SDGs, under which national development targets are set in Indonesia's Medium-Term Development Plan (RPJMN). The plan addresses national development priorities such as human development, development of leading sectors, equity, and territorial, and in particular, addressing regional inequality. Of 169 SDGs target, 124 were mainstreamed to the RPJMN for the year 2020–2024, covering all 17 SDGs. The Presidential Regulation concerning the Implementation of Achieving SDGs also mandates the development of an SDG roadmap and action plan.

Environmental Strategies and Policies

Indonesia's main sources of emissions

Based on Indonesia's Second Biennial Update Report submitted to UNFCCC in December 2018, national greenhouse gas (GHG) emissions were 1,458 Gt CO_{2e} in 2016, which represents an increase of 42% from year 2000. The main contributing sectors were agriculture, forestry and other land use (AFOLU) including peat fires (52%), and energy (37%). Energy emissions have grown in prominence from 2000, when they comprised 31% of total emissions, compared to 59% for AFOLU including peat fires.

Within AFOLU emissions, agriculture accounted for 16% and other forestry and land use (FOLU) accounted for 84%. FOLU emissions fluctuate annually due to peat fires exacerbated by drought and heatwaves linked with El Nino years and climate change. For instance, 2015 emissions were the highest since 2000 because of exceptionally severe peat fires. Peat decomposition and conversion of non-cropland to cropland (e.g. via deforestation) were also major FOLU emissions sources.

Emissions from energy came mainly from power generation (43%) and transportation (25%). As demand for electricity has grown and Indonesia has bolstered energy security by promoting domestically abundant energy sources such as coal, the share of coal-fired power generation has grown from 37% in 2000 to 55% in 2016. This

¹ <https://www.worldbank.org/en/country/indonesia/overview#1>

² Ibid.

³ http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/IDN.pdf



corresponds to annualized growth of 9%. In contrast, renewable energy sources (hydro and geothermal) comprised 12% of the power generation mix in 2016. Geothermal and hydropower saw annualized growth of 11% and 6%, respectively over the corresponding period between 2000 and 2016. Although still a very small percentage of final energy consumption in 2016, biofuels were notable for very rapid annual consumption growth (34%) between 2000 and 2016 as a result of ambitious national biofuel blending mandates for transportation, industry and power generation that will depend heavily on palm oil feedstocks.⁴

Climate mitigation and adaptation

Indonesia was the first developing country to voluntarily pledge to reduce greenhouse gas emissions at COP 15 in Copenhagen in 2009. Indonesia's Nationally Determined Contribution (NDC), updated in July 2021, maintains its unconditional reduction target of 29% against a business as usual scenario by 2030. An additional 12% reduction is conditional on technology transfer, capacity building, results for payment, and access to finance. Indonesia publicly reports on progress through submissions to the UNFCCC on a biennial basis. In 2011, Indonesia translated its commitment under the Paris Agreement into Presidential Regulations, including a national action plan to reduce GHG emissions (RAN-GRK) and the implementation of a national GHG inventory. In 2014, Indonesia developed the national action plan on climate adaptation (RAN-API). Climate change-focused regulations focus on the sectors of energy, waste, industrial processes and product use, and agriculture and Forestry. In July 2021, Indonesia submitted its Long-Term Strategy on Low-Carbon and Climate Resilience 2050 (LTS-LCCR 2050)⁵ to the UNFCCC, outlining three development scenarios. Under the most ambitious scenario, Indonesia's emissions peak in 2030 and reach net zero in 2060, requiring substantial investment to support decarbonization in its forestry and energy sectors.

Indonesia's 2030 SDGs Roadmap aims to limit deforestation such that forest cover reaches 45% in 2030, compared to 40% under business as usual and a 2017 figure of 51%. Government efforts to address AFOLU emissions include moratoria on the conversion of primary forests and peatland that have been in place since 2011 and 2016, respectively. The government has worked to restore over two million hectares of degraded peatlands via the Peatland Restoration Agency since 2016. The agency had its mandate extended in 2020 to 2024 and widened to cover mangrove restoration as well.⁶ Under the most ambitious scenario in its LTS-LCCR 2050, Indonesia anticipates the AFOLU sector becoming a net carbon sink by 2030 by reducing deforestation; accelerating reforestation and peat restoration; improving agricultural productivity and land use efficiency; addressing food loss and waste; and improving diets, food diversification and access.⁷

Indonesia's approach to decarbonizing its energy system is governed by its National Energy Policy (KEN). The National Energy General Plan (RUEN) outlines the approach to implementing this policy, with targets of reducing final energy consumption by 17% by 2025 and 39% by 2050, and by reducing energy intensity by 1% annually between 2015-2025. Indonesia's energy efficiency policy and program includes energy conservation targets for various sectors to achieve by 2025, including industry (17%), transport (20%), residential (15%), and building/commercial (15%)⁸.

Indonesia has adopted a National Action Plan on Climate Change Adaptation (RAN-API). The action plan recognizes the risks posed to Indonesia by climate change and provides a national framework for adaptation initiatives that has been mainstreamed into the National Development Plan. The medium-term goal of Indonesia's

⁴ https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Biofuels%20Annual_Jakarta_Indonesia_06-22-2020

⁵ <https://www.appi.or.id/public/images/img/27e6305e-54ce-4369-9a67-3f31d21338e7.pdf>

⁶ <https://www.thejakartapost.com/news/2020/12/25/jokowi-extends-broadens-authority-of-peat-restoration-agency.html>

⁷ https://unfccc.int/sites/default/files/resource/Indonesia_LTS-LCCR_2021.pdf

⁸ https://www.apec.org/egcec/Meeting_top/-/media/Satellite/EGEEC/Files/INDONESIA_update.pdf



climate change adaptation strategy is to reduce risks to all development sectors by 2030 through local capacity strengthening, improved knowledge management, convergent policy on climate change adaptation and disaster risks reduction, and application of adaptive technology. The plan identifies four priority sectors: water, agriculture, marine and coastal, and health, outlining delivery strategies and indicative interventions for each. Local governments and line ministries are responsible for monitoring the plan's implementation and progress towards targets, and reporting on these to BAPPENAS. In April 2021, BAPPENAS launched a Climate Resilient Development Policy, which will guide local and regional governments and other relevant institutions on addressing climate change and implementing the RPJMN. In July 2021, Indonesia updated its NDC with more details on its approach to climate adaptation and resilience, which include measures applied to sustainable agriculture and plantations, integrated watershed management, reducing deforestation, and restoring degraded land, as well as community-focused measures like capacity building and developing disaster preparedness programs.⁹

Biodiversity protection

Indonesia has ratified the Convention on Biological Diversity (CBD), the Cartagena Protocol and the Nagoya Protocol. Law Number 5/1994 on their ratification mandated the development of a policy, strategy and action plan on biodiversity. Indonesia has reported on its implementation of the CBD regularly since its ratification. The most recent Indonesian Biodiversity Strategy and Action Plan (IBSAP) 2015-2020 outlines the country's approach to biodiversity conservation and how biodiversity management can support Indonesia's development. It identifies four focal areas: research, biodiversity utilization, maintenance and preservation, and capacity building. IBSAP 2015-2020 also outlines 22 national biodiversity management targets prepared using the Aichi Biodiversity Targets framework. Indonesia has also ratified the ASEAN Agreement on the Conservation of Nature and Natural Resources.

Sustainable blue economy

Indonesia has access to substantial maritime resources. Development of its blue economy is relevant across multiple SDGs, including SDG 13 Climate Action and SDG 14 Life Below Water. The 2045 Indonesia Vision expects the contribution of the maritime sector to reach 12.5% of National GDP by 2045, which is double the current marine sector contribution. Indonesia's focus on developing the blue economy for sustainable development is reflected in its RPJMN and in the 2017 Indonesian Ocean Policy lays out all maritime programs and activities. Such programs and activities build on existing laws on marine and coastal development. In particular, Article 14, Law No. 32/2014 mandates that the development of marine resources be conducted using blue economy principles, including "sustainable marine management and conservation of sea and coastal resources and their ecosystems." Most recently, Indonesia's LTS-LCCR 2050 has highlighted the importance of marine ecosystems for climate mitigation and adaptation and sustainable development, singling out areas such as blue carbon sequestration by mangroves and seagrass meadows, potential for marine-based eco-tourism, and coastal protection programs for enhancing resilience.¹⁰

Social Strategies and Policies

As highlighted above, Indonesia has set national development targets under the RPJMN which included mainstreaming 124 of 169 SDG targets. At the subnational level, each provincial government is mandated to prepare a subnational action plan, including both provincial programs and activities and district-level programs and activities. Many of these address the social goals and issues addressed below.

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<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/Indonesia%20Updated%20NDC%202021.pdf>

¹⁰ https://unfccc.int/sites/default/files/resource/Indonesia_LTS-LCCR_2021.pdf



Employment generation including through the potential effects of SME financing and microfinance socioeconomic advancement and empowerment

After peaking at 8% in 2008, Indonesia's unemployment rate has fluctuated slightly above 5% in recent years. Indonesia's unemployment rate is higher than most ASEAN countries with substantial variations across demographics. Young people, aged 15-24, are four times more likely to be unemployed than older adult men and women.¹¹ The ongoing pandemic poses further employment challenges for Indonesian workers and is a key national priority.

The government has been actively seeking solutions to Indonesia's current unemployment issue. One such measure has been the introduction of the Omnibus Law to ease job creation and simplify regulations. The law reformed Indonesia's labor legislation to make it easier for companies to secure permits, relax the foreign ownership rules, local content requirements, and land procurement regulations. The bill also changed the minimum wage system by linking wages to regional economic performance rather than a national wage. As a part of the program, the government introduced an unemployment insurance program under which those who lose their jobs are eligible for cash payments amongst other benefits. Despite the bill being the subject of protests due to its expected impact on the protection of the environment and working conditions, the bill was enacted in November 2020.¹²

Many Indonesian SMEs face issues accessing financing. To respond to these issues, the Indonesian government launched a financing scheme called People Business Credit Program or Kredit Usaha Rakyat (KUR) in 2007, with the objective to act as a bridge for SMEs to obtain a financing scheme from a financial institution. A total of IDR 499.32 trillion was allocated to the program between 2007-18.¹³ The program has been quite successful, with a 0.24% low rate of non-performing loans.¹⁴

Indonesia continues to reform its social security system to be sustainable and universal. Reforms to the system included the addition of workers' welfare programs such as unemployment insurance, long-term care and health insurance for workers. One of the policy strategies has been synchronizing administration systems between national health insurance (JKN) and national social security (SJSN). Despite significant challenges remaining, the poverty headcount ratio for both \$1.90/day and \$3.20/day is on track to meet SDG targets.¹⁵ Financial inclusion and unemployment rates are also on track to achieve SDG targets.¹⁶

In pursuit of advancing gender equality, the government has improved access to family planning services under the national health insurance (JKN) scheme. As well, the ratio of female to male labor force participation is increasing, female education levels (measured in mean years of education) is also increasing, while female representation in national parliaments has remained stagnant.¹⁷

Food security and sustainable food systems

Over the past decade, Indonesia has halved the percentage of its population living in hunger and extreme poverty.¹⁸ According to Indonesia's latest voluntary national review (VNR), prevalence of undernourishment decreased from 10.73% in 2015 to 7.63% in 2019 but increased to 8.34% in 2020.¹⁹ Achieving food security and improved nutrition for all Indonesians is possible, particularly if the government's capacity to address malnutrition and adapt

¹¹ <https://www.oecd-ilibrary.org/sites/1f8c39b2-en/index.html?itemId=/content/component/1f8c39b2-en>

¹² <https://investmentpolicy.unctad.org/investment-policy-monitor/measure/3567/indonesia-omnibus-law-on-job-creation-has-been-enacted>

¹³ <https://www.oecd-ilibrary.org/sites/67ce6854-en/index.html?itemId=/content/component/67ce6854-en>

¹⁴ Ibid.

¹⁵ <https://dashboards.sdindex.org/profiles/IDN/indicators>

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ <https://www.wfp.org/operations/id01-indonesia-country-strategic-plan-2017-2020>

¹⁹ https://sustainabledevelopment.un.org/content/documents/280892021_VNR_Report_Indonesia.pdf



to climate change and prepare for disasters is augmented. Food sovereignty and nutrition were central pieces to the recently-concluded National Medium-Term development plan (2015-2019). The next strategic plan (2020-2024) is based on a strategic review of food security and nutrition, incorporating feedback from the government, civil society, private sectors and other development partners.

Access to essential services: Good Health and Well-being

Indonesia struggles with serious public health concerns. Among ASEAN peer countries it has the highest rate of maternal mortality and suffers from the third highest amount of tuberculosis cases in the world. To tackle these issues Indonesia introduced the Universal Health Coverage in 2014. The National Health Insurance (JKN) has successfully improved health equity and access to healthcare. In 2015, the Health Ministry also launched the Nusantara Sehat (Healthy Archipelago) campaign which deploys teams of health workers to peripheral areas in Indonesia that desperately need to transform their primary healthcare services and their overall well-being.

With the help of these programs, neonatal mortality, the mortality rate, rate of new HIV infections, universal health coverage (UHC) index of service coverage, and traffic deaths are all on track to achieve SDG targets. However, the incidences of tuberculosis, life expectancy at birth, adolescent fertility rate, death related to cardiovascular disease, and other chronic ailments are stagnant.²⁰

As of June 30, 2021, it is reported that more than 58,000 Indonesians have died due to Covid-19—more than any other country in ASEAN. Unfortunately, at time writing, Covid-19 daily case counts are surging to new highs and less than 11% of Indonesians have received at least one dose of a vaccine.²¹

To control the virus transmission, Indonesia rolled out mass COVID-19 vaccination in which it prioritized health workers, the elderly, and public officials. As of July 13, 2021, almost 37 million of the 270 million Indonesian population had received at least one dose of a COVID-19 vaccine. The government predicts Indonesia will achieve herd immunity by the first quarter of 2022.

Access to essential services: Quality Education

Indonesia has made significant progress in education, including large improvements in enrolment and gender parity. Since 2002, spending for education has increased by an estimated 200%. Student enrolment has increased over the same period by more than 31% at primary and secondary levels. Also, the government recently introduced 'School Zoning System' policies to improve educational equality, which has proven successful.²²

With the help of these policies, the net primary enrolment rate is on track to meet SDG achievement and Indonesia's lower secondary completion rate is increasing.

Affordable basic infrastructure

Providing basic infrastructure and ensuring access to adequate housing is a top priority for the government as there is a shortage of affordable housing. Towards this end, the government has launched national programs like the Satu Juta Ramah (One Million Homes), and the National Affordable Housing Program Project (NAHP), backed by the World Bank. Spending on public infrastructure rose to \$29.2 billion in 2017 from \$23.9 billion in 2016.

Use of proceeds

Using the framework, the Republic of Indonesia can choose to issue bonds or sukuk under thematic labels including green, blue, sustainability, SDGs, social and gender. Issuance proceeds can be used for five expenditure

²⁰ <https://dashboards.sdindex.org/profiles/IDN/indicators>

²¹ <https://ourworldindata.org/coronavirus/country/indonesia>

²² <https://riseprogram.org/blog/indonesia-equity-access-quality-education>



types, including 1) investment expenditures; 2) subsidies, grants and loans to local state-owned enterprises and their subsidiaries; 3) tax expenditures (to incentivize environmental or social objectives through tax forfeitures and tax policy exceptions), 4) operating expenditures (relating to provision of public good and services), and 5) intervention expenditures (including transfers or contributions to public entities and public-private partnerships).

The framework lists a broad range of project categories that will help the Republic of Indonesia achieve its targets under the 2030 Sustainable Development Goals. These include categories that promote climate mitigation adaptation and biodiversity, as well as those promoting key social goals such as poverty eradication, food security and provision of basic infrastructure.

Projects will only be included in the pool of eligible expenditures if they meet relevant Indonesian regulations and have been identified as contributing to Indonesia's climate mitigation and adaptation objectives and SDGs Roadmap, as summarized in the section on project selection. The proceeds from issuances under the framework can be used both for new projects and refinancing of eligible projects. The issuer informed us that for bond issuances, the majority of financing will be for new expenditures; for sukuk, 49% will be for new financing and 51% for refinancing in order to comply with sukuk structuring requirements. The issuer also shared that the lookback period for refinancing is two years.

Exclusions under the framework include:

- Luxury sectors (precious metals wholesale or brokerage, precious minerals wholesale or brokerage, artworks and antiques wholesale or brokerage);
- Child labour and forced labour;
- Adult entertainment;
- Weapons;
- Alcohol;
- Tobacco;
- Fossil fuels;
- Nuclear and related assets;
- Hydropower projects exceeding 30 MW in capacity; and
- Biomass/feedstock that
 - Will be derived from sources that compete with food production
 - Will be grown in areas currently or previously high in biodiversity
 - Will decrease carbon pools in soil
 - In addition, for facilities producing electricity from biofuel/feedstock, GHG emissions must be < 100g CO₂ eq/kWh
- Infrastructure projects which are highly-polluting or carbon-intensive in nature, such as airports and new roads;
- Agriculture projects related to forest conversion.

Additional exclusions shared by the issuer include palm oil projects and other industrial agriculture (including plantation forests).

The issuer has clarified that proceeds will not be used to finance state-owned enterprises under the first three issuances. Additionally, the issuer informed us that operating expenditures will consist primarily of salaries, other administrative costs, and purchase of equipment directly associated with eligible projects. This cannot include purchases of fossil fuel powered equipment and vehicles or fuel. The issuer has shared that public procurement using the proceeds will be subject to sustainable procurement regulations and guidelines.



According to the issuer, the first issuance will finance purely social projects, with a focus on healthcare, improved ICT infrastructure, and education. Subsequent green issuances will likely follow prior green sukuk by financing projects in renewable energy infrastructure, sustainable transportation, climate resilience and waste management. Blue projects of focus are anticipated to include support for sustainable fisheries.

Selection

The selection process for inclusion in the pool of eligible expenditures begins with a budget tagging process. In 2015, the Republic of Indonesia introduced a system for “tagging” of ministry budgets to identify expenditures that deliver specified climate change benefits in accordance with the Republic of Indonesia’s climate objectives. In 2018, BAPPENAS in association with the Ministry of Finance and Ministry of Administrative and Bureaucratic Reform released KRISNA²³, an integrated planning, budgeting, and monitoring system.

KRISNA allows BAPPENAS to conduct budget tagging according to a list of outputs that are agreed with 22 line ministries²⁴ and are aligned with Indonesia’s SDGs action plan and roadmap, taking into account opinions from consultants and peer review from external organizations including the World Bank. Consistency with Indonesia’s environmental goals and SDGs are assessed by individual ministries and BAPPENAS, and validated by the Ministry of Environment and Forestry. Consistency of social projects with the SDGs Roadmap is assessed by individual ministries and BAPPENAS, and supported by the SDGs Secretariat of BAPPENAS. The Ministry of Finance then endorses the project as “tagged” for budget allocation. Second, the Ministry of Finance together with BAPPENAS and line ministries will select “tagged” projects that meet the framework’s eligibility criteria and have a project development timeline consistent with the tenor of bonds or sukuk issued under this framework. The issuer has clarified that Ministry of Finance and BAPPENAS together hold final veto power over the final project and expenditure list.

Allocation of proceeds lies within the authority of the Directorate General of Budget Financing and Risk Management (DGBFRM) within the Ministry of Finance. DGBFRM is also responsible for conducting the final project selection process, monitoring and any replacement of assets/projects. As a part of state budget monitoring, the Ministry of Finance will regularly conduct monitoring of project progress and compliance with the involvement of related line ministries. If projects are identified as non-compliant during the tenor of the issuance, the projects will be replaced by other eligible projects of the same amount."

All projects must meet minimum environmental and social safeguards before implementation. An environmental impact assessment (AMDAL) is mandatory for high risk projects, including those that overlap with, or may impact on, any of twenty classifications of protected areas including forests, national parks, and reserves, or that involve the following:

²³ KRISNA (*Kolaborasi Perencanaan dan Informasi Kinerja Anggaran*) is the national government’s integrated planning, budgeting, and monitoring system, released by Bappenas in 2018 in association with the Ministry of Finance and the Ministry of Administrative and Bureaucratic Reform.

²⁴ Complete list of 22 line ministries involved in the Budget Tagging Process (others may be added later): (i) Ministry of Agriculture, (ii) Ministry of Environment and Forestry, (iii) Ministry of Maritime Affairs and Fisheries, (iv) Ministry of Energy and Mineral Resources, (v) Ministry of Transportation, (vi) Ministry of Public Works and Housing, (vii) Ministry of Health, (viii) Ministry of Home Affairs, (ix) Ministry of Agrarian Affairs and Spatial Planning/National Land Agency, (x) Ministry of Law and Human Rights, (xi) Indonesian Institute of Sciences, (xii) National Institute of Aeronautics and Space, (xiii) Geospatial Information Board, (xiv) Assessment and Application of Technology Agency, (xv) Indonesian Agency for Meteorology, Climatology and Geophysics, (xvi) Indonesian Central Board of Statistics, (xvii) Ministry of Social Affairs, (xviii) Ministry of Communications and Informatics, (xix) Ministry of Education, Culture, Research and Technology, (xx) Ministry of Religious Affairs, (xxi) Ministry of Tourism and Creative Economy, (xxii) BAPPENAS



- Alteration of landform and landscape;
- exploitation of both renewable and non-renewable natural resources;
- processes and activities that potentially lead to waste, pollution and environmental degradation, and the deterioration of natural resources in their utilization;
- processes and activities whose outcomes affect the natural environment, the artificial environment, and the social and cultural environment;
- processes and activities whose results will affect the conservation of resource conservation areas and / or protection of cultural heritage;
- introduction of plant species, animal species, and types of microorganisms;
- manufacture and use of biological and non-biological materials;
- technological advances that are expected to have considerable potential to affect the environment;
- activities that have a high risk, and or affect the state defense.

The issuer has shared that AMDAL includes social impact assessment, and that social projects will also be subject to screening against the exclusion criteria. Additionally, project locations must comply with spatial planning regulations, for which strategic environmental assessments (KLHS) are conducted. Where projects do not require AMDAL, the implementing party must submit a statement of ability to comply with management and monitoring requirements (UKL-UPL).

The issuer has informed us that they will take into account life cycle emissions considerations across all projects, where the data are available. Climate resilience will also be taken into account across all projects; the issuer describes this as applying recommendations from the Climate Resilience Development Policy, which indicates sector and location priorities for climate resilience investment. It also includes assessing vulnerability using the Indonesia Disaster Risk Index and the Vulnerability Index Information System (Sistem Informasi Indeks Inventarisasi Kerentanan, or SIDIK). The issuer has informed us that SIDIK provides information about different administrative areas' climate vulnerability, defined as exposure, sensitivity and adaptive capacity. This enables the design and implementation of necessary interventions to enhance resiliency. Further, the issuer pointed out that line ministries are responsible for disaster risk evaluation and management, and according to Indonesia's National Action Plan for Disaster Risk Reduction (2010-2012), disaster risk analysis at the level of administrative regions should be followed up with disaster risk reduction efforts via multiple channels, including spatial planning guidelines, regional regulations on spatial planning, location permits, land use permits, building permits, function certificates, and AMDAL.

Management of proceeds

According to the framework, net proceeds of bonds or sukuk issued under the framework will be managed within the issuer's general account in accordance with sound and prudent treasury management policy. Upon request from the line ministries, the proceeds will be credited to a designated account of the relevant ministries for funding exclusively projects as defined in the framework. Disbursement of proceeds and proceeds allocation will be tracked with a system managed by the Ministry of Finance. Each eligible project will be identified through a unique budget code number by which the process of disbursement can be traced. Pending application to eligible expenditures, proceeds will be held in cash in the Government's general account at Bank Indonesia. The issuer has informed us that they are committed to maintaining an eligible project pool larger than the expected outstanding issuance amount.

The Ministry of Finance shall manage the processes for allocation of the proceeds of each issuance, and make sure that the proceeds are used in accordance with the framework. The respective ministries utilizing the proceeds shall track and monitor, and report to the Ministry of Finance, the environmental and social benefits of the eligible expenditures in their portfolio which are funded by the proceeds. The issuer has shared that a clear mandate and



guidelines for formulating such reporting is not yet in place, but they plan to implement this. In case of asset divestment, the Republic of Indonesia will mark the proceeds as “unallocated” until the proceeds are used to finance or refinance other eligible expenditures.

A Green and SDGs Securities allocation register will be established to record the allocation of each Green and SDGs Securities proceeds. The register will contain, for each Green and SDGs Securities issued, information including details of each Green and SDGs Securities: ISIN, pricing date, maturity date, etc., and a list of eligible expenditures, including:

- Summary of projects details;
- Amount of proceeds allocated to each eligible projects;
- Expected environmental and/or social impacts of eligible expenditures;
- Aggregate amount of proceeds of Green and SDGs Securities allocated to eligible expenditures;
- Remaining balance of unallocated proceeds;
- Other necessary information.

Reporting

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs. Procedures for reporting and disclosure of green finance investments are also vital to build confidence that green finance is contributing towards a sustainable and climate-friendly future, both among investors and in society.

The Republic of Indonesia, represented by the Ministry of Finance, will prepare reporting annually for each individual issuance, though these may be combined in the future. The reporting approach for bonds or sukuk issued under the framework will follow reports issued for the three green sukuk issued between 2018-2021. Reports for other thematic issuances will contain at least:

- A list with brief description of the projects and the type of expenditures, to which proceeds have been allocated;
- The amount of proceeds allocated to such projects;
- Alignment and impact.

Environmental and/or social impacts from eligible expenditures will be reported where possible. The framework includes a list of indicative impact indicators. The issuer has informed us that for mitigation projects, the reduction in greenhouse gas emissions will be reported in accordance with the National Registry System on Climate Change (SRN) methodology. Some indicators pertaining to climate mitigation include: renewable energy production and capacity, annual energy savings, number of clean vehicles deployed. Some reporting indicators pertaining to climate resilience include: number of negative climate events predicted and accuracy of flood risk assessments. Indicators pertaining to biodiversity include land/ocean area conserved or protected, number of wildlife species conserved and number of projects that support climate change mitigation and adaptation/resilience. The example environmental indicators listed in the framework largely align with ICMA harmonized guidance on impact reporting; the issuer indicates it will refer to this where possible but this may be limited by data availability. Indicators that deviate from ICMA guidance are drawn from SDG criteria embedded in national planning documents and are already reflected in government planning and budgeting systems. The social indicators forwarded in the framework are robust and well-aligned with the SDGs.

Whereas reporting on prior green sukuk has been limited to proceeds allocation and impacts, the issuer has clarified that future reports will also provide transparency on use of proceeds across eligible expenditure types. Reports will



be published no more than one year after date of issuance on the Ministry of Finance website (www.djppr.kemenkeu.go.id).

The issuer has shared that it will establish a dedicated team consisting of Ministry of Finance, BAPPENAS, and line ministries for impact reporting. In addition, UNDP has agreed to provide technical assistance on the development of the impact reports, including institutional strengthening and capacity building, as required.



3 Assessment of the Republic of Indonesia’s SDGs framework and policies

The framework and procedures for the Republic of Indonesia’s SDGs bond and sukuk investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where the Republic of Indonesia should be aware of potential macro-level impacts projects.

Overall shading

The Republic of Indonesia may issue green (including blue) and sustainability bonds or sukuk under this framework. Based on the overall assessment of the green and social project categories in this framework, and governance and transparency considerations, the Republic of Indonesia’s SDGs framework receives a **CICERO Medium Green** shading for green bond and sukuk issuances. CICERO Green does not assign an overall shading for social bond and sukuk issuances.

The CICERO Green shading for combined issuances (sustainability bonds and sukuk) will depend on the relative weight of the relevant green and social project categories for the issuance.

Eligible projects under the Republic of Indonesia’s SDGs framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental and social benefits. Through selection of project categories with clear environmental and social benefits, green, social, and sustainability sukus aim to provide investors with certainty that their investments deliver sustainability returns as well as financial returns.

The following table provides an assessment of the eligible SDGs expenditures with green and blue focus:

Category ²⁵	Eligible project types	Green Shading and some concerns	Social considerations and some concerns
Renewable energy* <i>Marine renewable energy (Blue Economy)</i>	<ul style="list-style-type: none"> • Generation and transmission of energy from renewable energy sources: including offshore and 	<p>Dark Green</p> <p>✓ This shading is based on the criticality of this category for a 2050 climate solution and assumes adherence to best</p>	<p>✓ The transition to renewable energy production may provide employment opportunities, enhance</p>

²⁵ Categories relevant to the blue economy as identified by the issuer are denoted with an asterisk. Specific blue economy categories and their details are provided in Appendix 5 of the issuer’s framework. We have included these categories in our table, marking them as such under “category.” Where Appendix 5 includes blue economy subcategories that are not well reflected in the framework’s main project table, we have included these subcategories in our table under “eligible project types” and marked them with footnotes. SDG mappings are as provided by the issuer in the framework.



SDG 7: Affordable
and Clean Energy

SDG 13: Climate
Action

SDG 14: Life
Below Water

onshore wind,
solar, tidal,
hydropower,
biomass and
geothermal

- Research and
development of
products or
technology
("R&D") for
renewable energy
generation,
including turbines
and solar panels

- ✓ Consider emissions and other
pollution across the life cycle
for all technologies. The issuer
notes that environmental
assessment reports will be
provided if feasible for the
manufacture of components.
The issuer has also informed us
that all renewable energy
projects will comply with a life
cycle emissions threshold of
<100g CO₂ eq/kWh.
- ✓ This project category has
inherent risks linked with
deforestation and other impacts
on terrestrial and marine
biodiversity and ecosystems,
e.g. in project construction and
operation, and from feedstock
production for biomass/
biofuels.
- ✓ Biomass/biofuels projects in
will utilize wastes and
agriculture residues, non-food
crops, and algae. The issuer
noted that biomass/biofuel
projects using deforestation-
linked commodities (incl.
waste from processing), e.g.
palm oil, pulp & paper, as
feedstock are ineligible.
- ✓ The issuer has informed us that
there is no expected heavy
metal pollution in the
geothermal sector. There are
risks that geothermal power
projects emit more emissions
than the 100g CO₂ eq/kWh
threshold.
- ✓ The issuer shared that only
projects scoring 3 or above (i.e.
aligned with good practice) on
relevant aspects of the

- community development and
can improve labor practices.
- ✓ For onshore energy
development, issuer was
unclear whether compensation
schemes exist for displaced
residents, damage to cultural
heritage, and, in the case of
hydropower, increased risk
and prevalence of water-
related diseases.
 - ✓ The transition to renewable
energy production may affect
employment opportunities,
community development and
labor practices.
 - ✓ An increased share of
renewable energy may not
automatically lead to equal
access of marginalized and
vulnerable populations to
sustainable energy.

Hydropower Sustainability Assessment Protocol or compliance with IFC Performance Standards will be eligible. However, the issuer did not clarify if one is ever required over the other and when.

Energy Efficiency*



SDG 7: Affordable and Clean Energy

SDG 9: Industry, Innovation and Infrastructure

SDG 13: Climate Action

SDG 14: Life Below Water

- Improvement of the energy efficiency of infrastructure, which results in an energy consumption of at least 10% below the average national energy consumption of an equivalent infrastructure
- Research and development of products or technology (“R&D”) and their implementation that reduces energy consumption of underlying asset, technology, product or system(s); including LED lights, improved chillers, improved lighting technology, and reduced power usage in manufacturing operations

Light to Medium Green

- ✓ Light or medium green depends on the level of ambition of projects in this category.
- ✓ Be aware of lock-in of obsolete technologies. Careful consideration should be taken in assessing projects to ensure that best possible technology is utilized.
- ✓ Be aware of rebound effects, e.g. this category includes investments in Area Traffic Control Systems (ATCS), which may reduce vehicle emissions from idling but encourage more driving with improved traffic conditions.
- ✓ Investments in grid efficiency could also provide indirect support for fossil fuels given Indonesia’s coal dependency and contribute to rebound effects.
- ✓ The issuer’s framework indicates implementation of energy performance standards and energy efficiency labels; these will be subject to energy efficiency requirements in Ministry of Energy and Mineral Resources Regulation No.14 Year 2012 (see information under Green Buildings category).

- ✓ Costs associated with increasing efficiency and reducing energy consumption may increase costs for implementing businesses and may lead businesses to dismiss employees.
- ✓ The issuer indicated that MSMEs will need to bear the additional costs for energy audits and maintenance costs (e.g. to replace lighting fixtures, build/construct windows, ensure circulation).



<p>Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction*</p> <p><i>Disaster Management and Risk Reduction (Blue Economy)</i></p>	<ul style="list-style-type: none"> • Research leading to technology innovation with sustainability benefits • Flood mitigation • Drought management • Public health management • Research on infrastructure for disaster risk reduction²⁶ • Research on ocean disaster management (mitigation, preparedness, response, recovery)²⁶ 	<p>Dark Green</p> <ul style="list-style-type: none"> ✓ This category is important given climate change scenarios, including higher frequency of extreme weather conditions and Indonesia’s vulnerability to sea level rise. ✓ The issuer has clarified that resilience investments for fossil fuel linked infrastructure, e.g. roads, ports, cannot be financed, and that ‘drought management’ also includes fire management projects. ✓ Consider potential emissions and impacts on terrestrial/marine biodiversity and ecosystems in supply chains and construction phase. E.g. dams can have substantial local impacts and have high embodied emissions. ✓ Implement nature-based solutions (NbS) and green infrastructure where possible to take advantage of climate mitigative effects as well. The issuer has shared that flood mitigation projects will employ both NbS and man-made solutions, depending on feasibility and site conditions. NbS for flood mitigation will be leveraged mainly in more densely populated areas. 	<ul style="list-style-type: none"> ✓ Construction of flood mitigation and drought management systems may displace residents.
 <p>SDG 3: Good Health and Well-being</p> <p>SDG 9: Industry, Innovation and Infrastructure</p> <p>SDG 13: Life on Land</p> <p>SDG 14: Life Below Water</p>			

²⁶ These are additional blue economy project subcategories from Appendix 5 of the framework that are not well reflected in the framework’s main project categories table.



<p>Sustainable Transport</p>   <p>SDG 9: Industry, Innovation and Infrastructure</p> <p>SDG 11: Sustainable Cities and Communities</p> <p>SDG 13: Climate Action</p>	<ul style="list-style-type: none"> • Developing clean transportation systems • Transportation network upgrade to higher climate resilient design standards • Procurement of electric and hybrid vehicles for public transportation • Associated infrastructure such as EV charging stations 	<p>Medium to Dark Green</p> <ul style="list-style-type: none"> ✓ To avoid lock in of obsolete technologies we encourage seeking zero emission technologies where feasible. ✓ The issuer has informed us that it is formulating a National E-Mobility Plan, under which 90% of public transport in urban areas will be electrified by 2030. Indonesia also has a target under its National Energy Plan to achieve the share of public transit to 30%. ✓ Current investment in this sector is focused on building electrification infrastructure, e.g. vehicle charging stations. ✓ Hybrid vehicles' dependency on fossil fuels should be noted as a possible risk relating to continued support for fossil fuels. The issuer has shared that passenger cars and light duty vehicles be zero emissions, and public transportation vehicles must have direct emissions below 50g CO₂ eq/passenger-km. Biofuel-based transportation projects are ineligible. ✓ Climate resilience measures will be important especially for long-lived infrastructure. The issuer has shared that it is currently conducting studies to develop climate resilient design standards for its transportation network but the timeline for their implementation is unclear. 	<ul style="list-style-type: none"> ✓ Vulnerable and marginalized population groups can benefit from affordable access to transport by rail and mass transit modalities. ✓ Access to transport increases the likeliness of achieving gender equality, education and health objectives. ✓ Large infrastructure projects, such as major new railways, may affect poor, marginalized and vulnerable populations and might lead to relocation. ✓ Issuer stated that investments in sustainable transport will include special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons, however details were not provided.
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Waste to Energy and Waste Management*

Waste Management (Blue Economy)



SDG 7: Affordable and Clean Energy

SDG 12: Responsible Consumption and Production

SDG 13: Climate Action

SDG 14: Life Below Water

- Waste prevention, treatment, management and recycling projects examples include but not limited to municipal waste treatment following the waste hierarchy
- Improving waste management
- Transforming waste to renewable energy source
- Rehabilitation of landfill areas
- Air pollution prevention facilities and monitoring systems
- Management of marine debris/litter

Medium to Dark Green

- ✓ This shading assumes adherence to the waste hierarchy, consideration for life-cycle emissions in waste to energy projects, and ineligibility of new landfill development.
- ✓ A more circular economy is a key aspect of achieving a low-carbon and resilient future, but following the waste management hierarchy and consideration for life cycle emissions is critical to maximize climate mitigative effects.
- ✓ Waste to energy (i.e. incineration) is best combined with ambitious waste avoidance and recycling policies to ensure adherence to the waste management hierarchy. Further, it involves fossil fuel use and could require transporting waste over long distances.
- ✓ The issuer has informed us that current investment in this category will focus on raising public awareness and other projects aimed at waste avoidance, minimization or recycling. Expenditures will include construction of recycling centers throughout Indonesia and incentive programs for local governments to improve waste management. The issuer also shared that implementation of waste to energy plants will take place in the longer-term as this electricity source is currently uncompetitive.

- ✓ Waste prevention, treatment, and management plays an important role in health risk for marginalized and vulnerable communities.
- ✓ Recycling and reuse may strengthen local employment opportunities, especially for population groups that already depend on it.
- ✓ Waste to energy projects that divert recyclable waste streams (such as biowaste or recyclable plastics) to incineration, are a risk to both environmental quality and employment related to recycling.



Sustainable
Management of
Natural Resources
on Land



SDG 13: Climate
Action

SDG 15: Life on
Land

- Sustainable management of natural resources which substantially avoids or reduces carbon loss / increases carbon sequestration (through planting of new forest areas and/or replanting of degraded areas, the use of drought / flood / temperature resistant species)

- Habitat and biodiversity conservation (through sustainable management of land use change, sustainable management of agriculture/forestry , pest management

Light to Medium Green

- ✓ This shading assumes equal weight between conservation/restoration projects and sustainable agriculture/forestry and takes into consideration controversies around the Omnibus Law.
- ✓ Indonesia is a signatory to the Convention on Biological Diversity and the ASEAN Agreement on the Conservation of Nature and Natural Resources
- ✓ This is a broad category, and includes sustainable agriculture/forestry, as well as re-forestation/afforestation projects and other projects contributing to biodiversity protection. Sustainable land use is vital for a 2050 climate solution and halting biodiversity loss.
- ✓ The issuer has informed us that palm oil, industrial farming methods, use of artificial fertilizers, and any agriculture/other-related projects and practices that could lead to deforestation and changes in the landscape or do not meet regulations and minimum environmental and social safeguards are ineligible.
- ✓ There are inherent risks of deforestation and other adverse impacts on terrestrial biodiversity and ecosystems in this project category. We strongly encourage the avoidance of such impacts for

- ✓ Sustainable management of natural resources can offer employment opportunities in agroforestry, planting forest areas and/or replanting of degraded areas.
- ✓ Forest protection and management decreases likelihood of flooding which may offer rural residences enhanced flood resilience without a cost to citizens.



all projects in this category. Successfully avoiding such risks will depend heavily on Indonesia’s commitment to safeguarding natural capital and biodiversity, on top of Indonesia’s system of national regulations and policies around spatial planning and environmental permitting, and their uniform implementation and enforcement.

- ✓ Additionally, sustainable agriculture and forestry could indirectly support fossil fuels due to operation of fossil fuel machinery and possible expansion of supporting road networks.

Sustainable Management of Natural Resources on Ocean*

Marine and Coastal Protection and Restoration of Biodiversity and Ecosystems (Blue Economy)

Sustainable Fisheries (Blue Economy)



SDG 13: Climate Action

SDG 14: Life Below Water

- Sustainable management of natural resources which substantially avoids or reduces carbon loss / increases carbon sequestration (through planting of new mangrove and seagrass areas and/or replanting of degraded areas)
- Habitat and biodiversity conservation (through sustainable management of marine ecosystems, sustainable management of fisheries and aquaculture, protection of

Light Green

- ✓ This is a broad category that includes dark green elements, notably the protection and rehabilitation of key marine ecosystems, e.g. mangrove and seagrass, which are critical for climate mitigation and provide coastal resilience benefits. The category also includes support for sustainable fisheries (both wild caught and aquaculture).
- ✓ Sustainability of fisheries will depend on implementation of international standards, and the extent to which fish feed contains deforestation-linked commodities, e.g. soy.
- ✓ The issuer has shared that projects not certified under the Aquaculture Stewardship Council (ASC) and Marine Stewardship Council standards will be ineligible. ASC includes some safeguards against deforestation by

- ✓ Planting of new mangrove and seagrass areas and/or replanting of degraded areas may offer economic opportunities to vulnerable populations.
- ✓ The issuer explained that its sustainable fisheries programs is expected to lead to greater productivity for fishermen and higher welfare.



coastal and marine environments

requiring fish farms to establish traceability of feed to a responsibly managed source, but the source is not yet required to be sustainably certified. As such the issuer needs to make additional efforts to ensure deforestation-free feed supply chains.

- ✓ The issuer has confirmed that the purchase of fossil fuel-powered vessels and fuel, e.g. in relation to sustainable fisheries, is ineligible, and that all projects in this category will need to comply with minimum environmental and social safeguards.
- ✓ There are inherent risks of adverse impacts on coastal and marine biodiversity and ecosystems in this project category, including conversion and overexploitation of marine species. We strongly encourage the avoidance of such impacts for all projects in this category. Successfully avoiding such risks will depend heavily on Indonesia’s commitment to safeguarding natural capital and biodiversity, on top of Indonesia’s system of national regulations and policies around spatial planning and environmental permitting, and their uniform implementation and enforcement.

Green Tourism*
Eco-tourism (Blue Economy)



- Developing tourism resiliency against climate change risk
- Eco-tourism in coastal/marine area

Medium Green

- ✓ This shading assumes the exclusion of new hotel development from this category and that eco-tourism projects support conservation of land and seascapes with

- ✓ Increased tourism can provide employment opportunities.
- ✓ Green tourism may provide these opportunities to areas which have not been tourism areas in the past and can diversify local economies.



<p>SDG 8: Decent Work and Economic Growth</p> <p>SDG 13: Climate Action</p> <p>SDG 14: Life Below Water</p> <p>SDG 15: Life on Land</p>	<ul style="list-style-type: none"> • Application of sustainable practices in tourism ✓ • Development of tourism and economy creative supply chains 	<p>critical climate mitigation and adaptation benefits.</p> <p>✓ Sustainable tourism development is guided by RPJMN and the 2020-2024 Strategic Document of Indonesia’s Ministry of Tourism and Creative Economy; the issuer has shared that this document outlines standards and criteria for construction of new eco-tourism infrastructure.</p> <p>✓ Development of new eco-tourism projects could catalyze additional environmental impacts from development of supporting infrastructure and emissions from additional air travel.</p> <p>✓ The issuer has committed not to finance carbon-intensive infrastructure and shared that expenditures will focus on conservation of natural heritage and village/ community-based tourism, including promotion and enhancement with digital technology and social media.</p> <p>✓ We strongly encourage tourism projects that are climate resilient and avoid significant emissions and biodiversity impacts.</p>	<p>✓ Tourism development, and the investments made to support access to these developments may affect poor, marginalized and vulnerable populations and might lead to relocation.</p>
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<p>Green Buildings</p>  <p>SDG 9: Industry, Innovation and Infrastructure</p>	<ul style="list-style-type: none"> • Developing green buildings in line with Greenship developed by Green Building Council Indonesia (“GBC Indonesia”), which 	<p>Light Green</p> <p>✓ Green building certifications include many important environmental aspects. However, these certifications alone do not necessarily ensure improved energy performance or that no deforestation or other environmental impacts</p>	<p>✓ As green buildings will be concentrated in urban areas, access to these buildings is not equitable.</p> <p>✓ The purpose of these buildings is unclear; whether they will provide affordable housing, employment opportunities, increased</p>
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<p>SDG 11: Sustainable Cities and Communities</p> <p>SDG 13: Climate Action</p>	<p>contains six categories:</p> <ul style="list-style-type: none"> - Appropriate Site Development - Energy Efficiency and Conservation - Water conservation - Material & resources cycle - Air quality & leisure air (water indoor health & comfort) - Building & environment management 	<p>result from the project's construction or supply chains. For example, it is possible to achieve a Bronze or a Silver GreenShip certificate with no energy efficiency credits. The issuer has shared that only Gold certified buildings are eligible to be financed.</p> <ul style="list-style-type: none"> ✓ According to the issuer, buildings in this category will be subject to energy efficiency requirements in Ministry of Energy and Mineral Resources Regulation No.14 Year 2012, which take into account Scope 1 and 2 emissions, and emissions from construction materials and components. Requirements include energy management and conservation measures, e.g. energy audits, using energy saving lighting (max 12-13 W/m²) and air- conditioning, using motion- sensor escalators, etc. ✓ According to the issuer, buildings are also subject to sustainable building material requirements under Government Regulation No. 16 Year 2021, which targets net zero emissions from material use in buildings, but the timeline for the target is unclear. ✓ It is unclear what climate resilience screening and adaptation measures will be applied beyond and following vulnerability analysis at the level of the administrative region using the SIDIK system. ✓ The issuer has informed us that the Green Buildings financed under the framework will be 	<p>access to education or healthcare facilities, etc.</p>
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restricted to buildings in urban areas.

- ✓ Indirect support for fossil fuels is possible due to their use in the construction phase and if buildings generate additional trips in fossil fuel-based transportation.

Sustainable Water and Wastewater Management



SDG 6: Clean Water and Sanitation

SDG 11:

Sustainable Cities and Communities

SDG 13: Climate Action

- R&D and implementation on technologies for water saving and treatment
- Development of agricultural infrastructure for efficient water management (i.e. irrigation systems and rainwater collection & storage facilities)
- Investments in tail water recovery systems which collect run-off water from fields that is recycled for agricultural production purposes
- Hydrological monitoring construction of water diversion canals to lakes located in flood plains and reforestation actions
- Construction and improvement of public water

Light to Medium Green

- ✓ This shading assumes the likely dependence of water and wastewater management systems on a fossil fuel intensive grid, embodied emissions in infrastructure and possibility of broader environmental impacts.
- ✓ Ensuring access to clean water and sanitation is fundamental to climate adaptation measures. However, water infrastructure could still run on fossil fuels in the short term, which may result in lock in of emissions. The issuer has shared that no specific energy efficiency criteria are required beyond existing government regulations for improving energy efficiency of existing infrastructure.
- ✓ Wastewater treatment can also be associated with generation of GHGs, e.g. nitrous oxides and methane, depending on conditions and capture technology.
- ✓ The issuer has informed us of a greater focus in this category on household wastewater management projects; water projects that support heavy industries like pulp & paper, mining, etc., and purchase of

- ✓ Efficient wastewater management drainage reduces risks of water-related diseases.



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- | | |
|---------------------------------------|---|
| distribution and treatment facilities | fossil fuel powered equipment (e.g. pumps, generators) are not eligible. The issuer has shared that desalination projects are also eligible in the long term. While such projects can enhance resilience, they are highly energy intensive and should be run on renewable energy sources. |
|---------------------------------------|---|
- Development of water related hazard emergency plans
 - ✓ Robust environmental impact and watershed analysis will be critical to avoid adverse impacts on surface and groundwater hydrology and freshwater ecosystems. Resilience assessments are also needed to avoid lock in of water-dependent development in vulnerable areas. Care should be taken to ensure irrigation does not support unsustainable agricultural expansion.
 - ✓ The issuer has informed us that irrigation systems are developed in accordance with Ministry of Agriculture Regulation No. 79, Year 2012 on the guidelines for Guidance and Empowerment of Water-Using Farmers for National Food Security. The issuer shared that the regulation does not specify minimum water efficiency criteria, but mandates local governments to develop technical guidance based on their local context that also incorporates climate mitigation and adaptation concerns. We encourage use of best technology wherever possible.
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- ✓ NbS and green infrastructure should be considered wherever possible.

The following table provides an assessment of the eligible social asset categories:

Category	Eligible project types	Green Shading and some concerns	Social considerations and some concerns
Employment Generation including through the Potential Effect of SME Financing and Microfinance	Improve Welfare / Poverty Eradication	No clear environmental benefits or obvious environmental risks	✓ The issuer disclosed that much of the focus of investments will be on increasing productivity through education and matching skill improvement with industries suffering a skilled labor shortage.
Socioeconomic Advancement and Empowerment	Rural development	✓ The issuer has shared that training will include capacity building for local governments and civil society organizations on strategic environmental assessment (KLHS) and non-degree training to increase regional capacity for formulating and implementing sustainable development; it is unclear how else and at what scale training and reskilling efforts will focus on enhancing climate mitigation and adaptation efforts.	✓ The issuer confirmed that all government programs, especially social programs that target poverty, refer to addressing the needs of the poorest 40% of the Indonesian population.
SDG 1: No Poverty	• Social protection and assistance programs aiming to extend basic, universal social welfare in Indonesia	✓ No shading has been assigned to this category as it does not generate clear environmental benefits, nor are there any obvious associated risks.	✓ Issuer indicated that worker productivity and industry competitiveness is measured at both micro and macro levels.
SDG 5: Gender Equality	• Empowerment of rural communities and governance, especially in borders and disadvantaged villages, to provide local employment opportunities by managing existing local resources.	✓ The category could include indirect support for employment in fossil fuels and other environmentally impactful sectors, as upgraded skills could be transferable across sectors, but such risks are minimal.	✓ The issuer has indicated that gender issues were mainstreamed in National Medium-Term Development Plan (RPJMN) and that it has a system to track gender responsive budget allocations, but project types and impact indicators are only focused on family planning, reproductive health, and marriage.
SDG 8: Decent Work and Economic Growth	Employment generation	✓ Women and underprivileged groups are more vulnerable to climate change. Empowerment and socioeconomic advancement should take into	
SDG 9: Industry, Innovation and Infrastructure	• Provision of technical training to unemployed people		
SDG 10: Reduced Inequality	• Support client-centric public employment services		
	• Strengthen select active labor market programs		
	• Facilitate labor market monitoring and analysis and project management		



- Gender equality
- Provision of access and quality services for family planning and reproductive health
- ✓ Education and empowerment of women can have significant positive effects on the climate
 - ✓ There are clear synergies in integrating environmental and social considerations.

Food Security and Sustainable Food Systems



SDG 2: Zero Hunger

- Production subsidies to small and medium farmers for basic food production including training, facilities and infrastructure
- Light Green**
- ✓ Increasing land made available for farming in pursuit of food security can lead to deforestation and other environmental impacts. According to the issuer, palm oil projects, industrial agriculture, purchase of fossil fuel powered agricultural equipment, application of mineral fertilizers, and projects that support livestock production are ineligible.
 - ✓ The issuer has clarified that support for Indonesia’s controversial food estates program (see background section) will be ineligible, as is support for all agriculture associated with forest conversion.
 - ✓ The issuer has clarified that all support for projects in this category will be conditioned on adherence to sustainability criteria, e.g. organic farming, climate-smart agriculture, integrated farming, and precision farming.
 - ✓ Concerns expressed under ‘Natural Resources Management on Land’, especially pertaining to
- ✓ Nutrition intervention programs and supporting sustainable food production can decrease rates of undernourishment and improve health outcomes.
 - ✓ Improving product quality standards can prevent adverse health impacts.
 - ✓ The issuer expect that investments in agricultural infrastructure and productivity will not impact agriculture employment levels.
 - ✓ A focus on increased food production can incentivize the use of pesticides which may lead to adverse health outcomes of consumers.
 - ✓ Increasing land made available for farming in pursuit of food security can lead to deforestation and other environmental impacts which may undermine other social objectives like employment, natural disaster sensitivity, and public health (e.g. from air pollution and increased flooding).



deforestation and biodiversity impacts, apply to this category.

<p>Access to Essential Services</p>	<ul style="list-style-type: none"> • Trainings for health human resources to improve quality health services 	<p>Light Green</p>	<ul style="list-style-type: none"> ✓ Improved healthcare provision and access is key for resilience to climate change-induced increases in vector-borne diseases such as dengue fever and malaria.
	<ul style="list-style-type: none"> • Communicable disease control through screening and case detection, prevention services, surveillance, and treatment 	<ul style="list-style-type: none"> ✓ Buildings will contribute to increased emissions in Indonesia’s fossil fuel-heavy context due to increased energy demand; they may have high embodied emissions and environmental impacts in construction materials. 	<ul style="list-style-type: none"> ✓ While any increase of health services benefits social development, marginalized communities that have not been explicitly included as a target population may risk having less access to these services.
<p>SDG 3: Good Health and Well-being</p>	<ul style="list-style-type: none"> • Non-communicable disease control through early detection, education and promotion of healthy lifestyle, regulation, and treatment 	<ul style="list-style-type: none"> ✓ The issuer has clarified that all new buildings constructed in this project category will be subject to the same requirements as the Green Buildings project category. 	<ul style="list-style-type: none"> ✓ Setting the target group at a general level keeps the door open to all potential beneficiaries, but also bears the risk of not reaching the most marginalized (including women, disabled persons, poorest segments of society, etc.). The issuer has shared that education programs will target those receiving social assistance and those enrolled in the Smart Indonesia Program.
<p>SDG 4: Quality Education</p>	<ul style="list-style-type: none"> • Improve access to reproductive health and family planning 	<ul style="list-style-type: none"> ✓ It is unclear what climate resilience screening and adaptation measures will be applied beyond and following vulnerability analysis at the level of the administrative region using the SIDIK system. 	<ul style="list-style-type: none"> ✓ Improving the quality of education and vocational programs has few to no negative external effects so long as there are no barriers to access.
	<ul style="list-style-type: none"> • Strengthen the national vaccine program 	<ul style="list-style-type: none"> ✓ The provision of basic services is important from a social sustainability perspective and is not perceived to have significant environmental impacts, however, we encourage the integration of environmental consideration where appropriate and reporting on environmental impacts. 	<ul style="list-style-type: none"> ✓ Issuer indicated that many enhancements to education would be focused on the online delivery of education but recognized that access is dependent on technological infrastructure.
	<ul style="list-style-type: none"> • Improvement of preparedness for public health emergencies, including surveillance and early detection and outbreak control 		
	<ul style="list-style-type: none"> • Improve integration and utilization of health information and e-health solutions 		
	<p>Quality Education</p> <ul style="list-style-type: none"> • Quality improvement of 		

primary and secondary education, including training for teachers and financial assistance such as grants and scholarships

- Construction and maintenance of campus and accommodation
- Provision of public vocational education including courses and trainings, supports of facilities and infrastructure for vocational schools and colleges, and scholarships

Affordable Basic Infrastructure



SDG 6: Clean Water and Sanitation

SDG 7: Affordable and Clean Energy
SDG 11: Sustainable Cities and Communities

- Provision of public housings
- Construction and maintenance of basic sanitation facilities and infrastructure, such as toilet, handwashing facilities and sewerage treatment
- Improvement of reliability and sustainability of internet or connectivity services

Light Green

- ✓ Buildings and infrastructure will contribute to increased emissions in Indonesia’s fossil fuel-heavy context due to increased energy demand; they may have high embodied emissions and impacts in construction materials.
- ✓ The issuer has clarified that all new buildings constructed in this project category will be subject to the same requirements as the Green Buildings project category. There is a risk of locking in inefficient infrastructure; we encourage careful consideration when assessing projects to ensure the best possible technology is utilized.
- ✓ It is unclear what climate resilience screening and adaptation measures will be

- ✓ Access to basic services is a crucial element in achieving the Sustainable Development Goals, as well as assuring equitable access to environmental and economic benefits.
- ✓ The issuer has shared that ICT infrastructure provision programs will target vulnerable groups or regions currently lacking telecommunications and internet access.



applied beyond and following vulnerability analysis at the level of the administrative region using the SIDIK system.

- ✓ Concerns expressed under ‘Renewable Energy’ and ‘Sustainable Water and Wastewater Management’ apply here as well, especially for new infrastructure construction.

Table 1. Eligible social project categories

Background

Indonesia enjoys world-class biodiversity and is home to 10% of the world’s flowering plants and 12% of the world’s mammals. Spread across the bottom half of the Coral Triangle, it benefits from a wealth of marine resources, including 76% of the world’s coral species and 37% of the world’s coral reef fish species. The country also boasts substantial natural resources, including deposits of fossil fuels, including crude oil, natural gas, coal, and metals such as bauxite, nickel, tin, gold and copper.

While the government is aiming to increase its share of manufactured exports and processed commodities, Indonesia’s economic growth has been strongly dependent strongly on natural resources and extractive industries. In particular, the country is notable as the world’s largest producer of palm oil and nickel. Consequently, development thus far has come at a cost to the country’s environment—half the country’s forest cover has been lost to agriculture-linked deforestation, and marine resources such as mangroves, corals and seagrasses have been damaged by coastal development, illegal logging and destructive fishing practices.²⁷ Environmental degradation contributes to climate change, degrades Indonesia’s natural capital, and erodes its climate resilience. Biodiversity loss also threatens the livelihoods of rural populations; some 40 million Indonesians are estimated to depend on biodiversity for subsistence needs.²⁸

The Omnibus Law on Job Creation and Food Estates Program

Indonesia has implemented ambitious targets and enacted significant regulations to address deforestation and AFOLU emissions. However, there have been controversies around the 2020 enactment of the Omnibus Law, which was introduced with the goal of strengthening the economy by increasing competitiveness and supporting job creation. Legal analysis suggests that the law simplifies environmental reporting and licensing procedures and eases restrictions around issuance of forestry permits;²⁹ as such there have been civil society protests against the law and engagement from institutional investors with Indonesia’s government over its possible impacts on deforestation.³⁰ Among other highlighted concerns, the Law reportedly entails less scope for public participation in the environmental permitting process and the removal of a regulatory requirement for forest cover in river basins and islands to be maintained at 30% of land area. The issuer shared with us in response that public participation remains protected under the new regulation; environmental assessments are reviewed by government-certified

²⁷ <https://www.cbd.int/countries/profile/?country=id>

²⁸ Ibid.

²⁹ https://insightplus.bakermckenzie.com/bm/environment-climate-change_1/indonesia-omnibus-law-impacts-on-environment-and-forestry

³⁰ <https://www.reuters.com/article/us-indonesia-economy-law-investors-idUSKBN26Q1GZ>



experts, who will invite impacted communities and NGO to share their views if not represented. The issuer also reiterated its commitment to preserving nature and that it recognizes the contribution of forests to multiple SDGs.

There has also been controversy over the government's announcement of its food estates program in late 2020, which aims to address threats to food security from the Covid-19 pandemic by expanding agricultural production in North and South Sumatra, Central Kalimantan, East Nusa Tenggara and Papua. Concerns over the program's impact on deforestation comes from the associated issuance of Regulation No. 24/2020 of the Minister of Environment and Forestry on the Provision of Forest Areas for Food Estate Development, which allows conversion of forest areas into farmland.³¹

Projected coal dependency

As the second largest producer country of coal globally, Indonesia has a highly coal-dependent economy. In May 2021, Indonesia's state-owned utility, Perusahaan Listrik Negara (PLN), announced it would no longer build new coal-fired power plants after 2023 and retire 49 GW of coal capacity by 2056. However, this excludes plants that are already under construction or have reached financial close, and up to 20 GW more of coal capacity will be added under Indonesia's original 2015 energy plan.³² For the longer-term, the most ambitious scenario in Indonesia's recently published LTS-LCCR 2050 projects that coal is expected to be around 30% of primary energy supply in its most ambitious scenario, compared to around 45% in its current policy scenario.³³ While Indonesia's government expects to mitigate emissions from coal by equipping 76% of coal plants with carbon capture and sequestration (CCS) technology, this will require successfully overcoming implementation costs and challenges with transportation and storage of captured carbon dioxide.³⁴

Governance Assessment

Four aspects are studied when assessing the Republic of Indonesia's governance procedures related to its SDGs Framework: 1) the policies and goals of relevance to the framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.

Indonesia has national climate mitigation and adaptation targets and has integrated the SDGs into its medium-term development plan (RPJMN). It is also a signatory to the Convention on Biological Diversity. The selection process involves environmental and SDG-specific competence on the part of line ministries, the Ministry of Environment and Forestry, and BAPPENAS. Considerations for climate resilience, life cycle emissions and supply chain sustainability may not be implemented uniformly across all project categories.

Given its previous issuances of green sukuk, the Republic of Indonesia already has much of the internal capacity in place to adequately manage the proceeds supported by its SDGs framework. The issuer was clear that the previous governance procedures have been adapted to include social project categories. The development of the KRISNA budget tagging system provides assurance that BAPPENAS will ensure that investment activities contribute to climate mitigation, adaptation and the SDGs. Decisions on inclusion of projects via the KRISNA budget tagging system involve consensus among line ministries, BAPPENAS and the Ministry of Finance. This also provides some assurance that financed activities contribute to climate mitigation, adaptation, and the SDGs.

³¹<https://wri-indonesia.org/en/blog/3-reasons-why-food-estate-does-not-answer-food-security-and-nutrition-agenda>

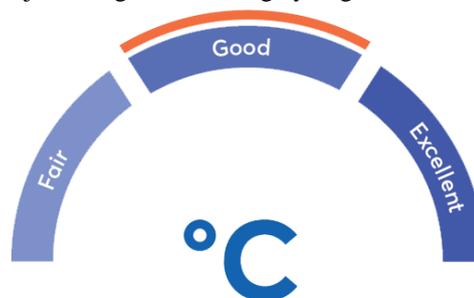
³²<https://www.climatechangenews.com/2021/05/11/indonesian-utility-pledges-stop-building-coal-plants-beyond-existing-pipeline/>

³³ https://unfccc.int/sites/default/files/resource/Indonesia_LTS-LCCR_2021.pdf

³⁴ <https://www.rff.org/publications/explainers/carbon-capture-and-storage-101/>



Project selection depends on compliance with minimum environmental and social regulations and safeguards, although there has been controversy over whether these have been weakened by the Omnibus Law. Indonesia is committed to use of proceeds and impact reporting at the project level and will also report on eligible expenditure types. Proposed impact indicators are generally appropriate for project categories and largely aligned with ICMA harmonized guidance. A Green and SDGs Securities allocation register will be established to record the allocation of proceeds from Green and SDGs Securities proceeds. Indonesia is committed to securing third party assurance on its reporting and the compliance of Green and SDG Securities issued under the framework. The overall assessment of the Republic of Indonesia's governance structure and processes gives it a rating of **Good**.



Strengths

Overall the framework positively reflects Indonesia's holistic approach to financing its sustainable development. The framework is designed to support Indonesia's NDC and its roadmap to achieving the 2030 SDGs. In many cases, the project categories are tightly aligned with national policies and backed by specific pieces of legislation. This alignment supports our belief that the eligibility criteria for projects will be followed. Moreover, the framework aligns the project categories with Indonesia's 2030 SDG targets and reassures that bonds and sukuk issued under the framework support long-term government planning. The inclusion of blue categories is a strength given the criticality of a sustainable blue economy to climate mitigation and adaptation efforts and the strategic nature of marine resources to Indonesia's economy.

A clear strength of the framework is its explicit exclusion of all fossil fuel-based projects and activities across all eligible expenditure types. For instance, besides investment expenditures on fossil fuel-based generation capacity, the following are also ineligible: fossil fuel-powered vehicles and equipment, operating expenditures on purchase of diesel or petrol. Relatedly, there is a strong focus on electrification of its public transportation systems. Clear and ambitious emissions thresholds for passenger vehicles and light-duty vehicles support Indonesia's ambitious target of electrifying 90% of urban public transport by 2030. This represents an improvement from Indonesia's 2018 green bond and sukuk framework, which allowed for investments in fossil fuel-powered transportation.

This framework has a strong social foundation. It proposes project categories for social development by targeting poverty alleviation and employment, access to basic infrastructure and services, food security, and increased access to health care and education. The issuer indicated that the proceeds allocated to social projects will be primarily targeted to specific projects of which the lowest earning 40% of the population (calculated on the basis of household income) are the main beneficiaries. The broadness of this threshold means that a large proportion of Indonesia's population could benefit from projects funded from bond and sukuk proceeds.

The issuer is committed to transparent reporting that will include allocated proceeds across a list of projects and eligible expenditure types and environmental and social impacts. The issuer will use external auditors to review the annual use of proceeds and reporting and has shared that the methodologies used for reporting will be publicly available.

Based on its exclusion of fossil fuel power generation projects and projects linked with alcohol, gambling, tobacco and weaponry, the framework is in alignment with the ASEAN Green Bond Standards and ASEAN Social Bond Standards, as well as ICMA's Green Bond Principles and ICMA's Social Bond Principles. The framework is hence also aligned with the ASEAN Sustainability Bond Standards and ICMA's Sustainability Bond Guidelines.



Weaknesses

Except for education and ICT, the issuer has identified a generic target population for social projects—the lowest 40% of the population by income. While we acknowledge that this target is meaningful considering Indonesia's stage of development, the issuer could specify more precise populations across all project categories. The framework also leaves vague the specific direct benefits and indirect benefits that will accrue to each target population.

A minor weakness of the framework is that the specific target populations addressed by specific social project categories are not detailed throughout the framework. The framework provides the specified target recipients for some social programs but not all, even though the issuer demonstrated during discussions that social projects meet specific target populations. The issuer has committed to providing detailed and quantitative post-issuance reporting on social impacts.

The proposed impact reporting indicators disclosed in the framework remain indicative. The issuer indicated that impact reporting will only capture Indonesia's current level of progress toward specific SDGs. This type of reporting could undermine the ability of users to understand how specific bond or sukuk proceeds contribute to the SDGs. For example, if there is an increase in the proportion of Indonesian 4th graders who achieve minimum proficiency in mathematics from 27% to 30%, framework and impact report users will not know how much of this increase is attributable to investments of bond or sukuk proceeds and how much of this increase is attributable to regular government budgetary spending.

Pitfalls

The risk of deforestation and other adverse impacts on terrestrial and marine ecosystems is inherent to all project categories that involve changes in land and sea use, notably renewable energy, sustainable management of natural resources on land, sustainable management of natural resources on ocean, food security and sustainable food systems, basic infrastructure, etc. While we recognize that the issuer will subject all projects to several layers of screening and environmental and social safeguards, including budget tagging, strategic environmental assessment, and AMDAL for high risk projects, recent controversies around the Omnibus Law should be noted, and there is a possibility that controversial projects could be financed. Avoidance of these risks will depend heavily on the Indonesian government's commitment to safeguarding natural capital and biodiversity, on top of the comprehensiveness and robustness of Indonesia's environmental laws and regulations and their uniform implementation and enforcement.

Indonesia's current and anticipated long-term dependency on coal is a pitfall that is relevant to all project categories that will depend on the grid. For instance, even if irrigation pumps are electrified, they will most likely remain dependent on fossil fuel infrastructure. In this context, ambitious energy efficiency criteria are all the more important, but besides the criteria of 10% improvement from average, there is insufficient clarity around sector-specific thresholds, e.g. for green buildings. A related concern is the risk of rebound effects from energy efficiency investments in a fossil fuel-heavy power grid.

Indirect support for fossil fuels is another possible pitfall. For example, buildings constructed in the green or social categories could encourage increase driving if not readily accessible via public transit and hybrid vehicles are still fossil fuel dependent. Similarly, eco-tourism development could lead to increased emissions from travel.

The issuer's commitment to a maximum threshold of 100g CO₂ eq / kWh life cycle emissions for all renewable energy projects is welcomed given its alignment with international best practice. It should be noted however that while considered a renewable energy source, geothermal power plants can have GHG emissions exceeding



similarly sized fossil fuel plants, depending on concentration of GHGs in the reservoir fluid. Attention must thus be paid to the type of geothermal resources being utilized and mitigative measures to avoid excessive emissions.

Climate resilience of all project categories is a cross-cutting concern, especially due to Indonesia's exposure to acute and physical climate risks such as sea level rise, flooding and extreme weather. The issuer has shared that a climate vulnerability assessment system (SIDIK) will inform resiliency considerations for projects at the administrative region level. According to Indonesia's National Action Plan for Disaster Risk Reduction (2010-2012), disaster risk analysis at the level of administrative regions should be followed up with disaster risk reduction efforts via multiple channels, including spatial planning, location permits, land use permits, building permits, etc. It should also be noted that climate adaptation measures mentioned in Indonesia's updated NDC build on this and include the integration of adaptation into spatial planning and infrastructure development and maintenance. However, it remains unclear what specific climate resilience screening criteria will be used in project selection for this framework, and we encourage the issuer to disclose these wherever possible.

As documented already, there are risks that investments in some social categories may lead to negative environmental outcomes like deforestation. Conversely, investments in green categories could have the potential to undermine social objectives by shifting the balance of job demand across sectors. From both the green and social perspectives, decisions made regarding the use of proceeds can lead to lock-in of suboptimal environmental and/or social development trajectories.

For many of the green and social categories outlining projects that involve constructing buildings or other forms of infrastructure, the lack of details regarding how residential relocations may be addressed is a pitfall. As population density varies significantly across the country, it is likely that a share of these investments will have significant impacts on groups of citizens.

Indonesia's approach to sustainable tourism development is guided by the RPJMN and the 2020-2024 Strategic Document of Indonesia's Ministry of Tourism and Creative Economy. According to the issuer, the latter document outlines specific standards and criteria pertaining to eco-tourism development, including new eco-tourism infrastructure. We encourage the issuer to mitigate this pitfall by providing increased transparency around projects in this category.

The eligibility of expenditure types such as operating expenses means that use of proceeds can be applied to salaries and other administrative expenses. There is no clear cap on their proportion of the proceeds, and the issuer could face challenges, e.g. appropriately screening for eligibility of staff salaries if they are not fully dedicated to eligible projects. The issuer has not ruled out the inclusion of intervention expenditures (including transfers to state-owned enterprises) in the future, meaning that state-owned enterprises linked with fossil fuels could potentially benefit from the use of proceeds depending on how the framework's screening criteria are applied.



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Republic of Indonesia SDGs Government Securities Framework, August 2021	
2	Green Sukuk Allocation and Impact Report, March 2020	Indonesia's second annual sovereign green sukuk report
3	First Nationally Determined Contribution Republic of Indonesia, November 2016	Description of Indonesia's NDC
4	Updated Nationally Determined Contribution Republic of Indonesia, July 2021	Update of Indonesia's NDC
5	Indonesia Second Biennial Update Report under the UNFCCC	Status update on Indonesia's climate mitigation and adaptation efforts under the Paris Agreement
6	National Adaptation Plan: Executive Summary, December 2019	Description of Indonesia's approach to climate adaptation
7	Indonesian Biodiversity Strategy and Action Plan 2015-2020	Description of Indonesia's approach to biodiversity conservation
8	Presidential Decree of the Republic of Indonesia 16/2017 - Indonesian Ocean Policy	Description of Indonesia's strategy and policies for developing its maritime resources
9	UNDP – Blue Financing Strategic Document, May 2020	Document providing basis for an Indonesian blue bond framework
10	Roadmap of SDGs Indonesia: A Highlight, Ministry of National Development Planning / National Development Planning Agency	Presentation about Indonesia's roadmap for achieving the SDGs



11	Strategic Plan: Sustainable Tourism and Green Jobs for Indonesia, 2012	Strategic plan exploring development of green tourism for Indonesia
12	Indonesia's Voluntary National Review (VNR) 2021	Review of Indonesia's progress towards achieving the 2030 Sustainable Development Goals
13	National Action Plan for Disaster Risk Reduction 2010-2012	Provides national guidelines and references on disaster risk reduction policy in Indonesia



Appendix 2: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University, the International Institute for Sustainable Development (IISD), and the School for the Environment and Sustainability at the University of Michigan.





Appendix 3: About IISD

The International Institute for Sustainable Development (IISD) is an independent policy research organization working to deliver the knowledge to act. From offices in Winnipeg, Geneva, Ottawa, Toronto and New York, IISD's work impacts lives in nearly 100 countries.

IISD provides practical solutions to the growing challenges and opportunities of integrating environmental and social priorities with economic development. IISD reports on international negotiations and shares knowledge gained through collaborative projects, resulting in more rigorous research, stronger global networks, and better engagement among researchers, citizens, businesses and policy-makers.

The Public Procurement and Infrastructure Finance Sub-Program at IISD provides advisory services to public and private sector clients for the design and implementation of policies, programs and tools to prepare, finance and de-risk sustainable and low-carbon infrastructure.

IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the International Development Research Centre (IDRC) and from the Province of Manitoba. IISD receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations, the private sector and individuals.

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