



Islamic Development Bank (IsDB) External Review of 2019 Green Sukuk Reporting

December 22, 2020

CICERO Green has reviewed IsDB's 2019 Green Sukuk reporting. We review project allocation against framework criteria and impact metrics for relevance and transparency.

CICERO Green finds no discrepancies in our review of the reporting against the IsDB Sustainable Finance Framework. The impact indicators reported are relevant for the project categories and provide investors with good information on the expected or actual environmental impact of projects financed. The reporting is aligned with the principles and recommendations for green bond reporting included in the ICMA Handbook, Harmonized Framework for Impact Reporting.

Project allocation

No discrepancies have been identified in our review of project allocation against framework criteria. The project financed under wastewater management includes the financing of dwellings as an element in the flood mitigation solution. IsDB informs that the share of refinancing is 65 %.

Impact metrics

All projects are reporting at least one relevant project indicator. Most projects are reporting several indicators that together give a comprehensive picture of environmental impacts (e.g. quantity and quality of wastewater treated). IsDB includes reporting on at least one similar metric for all projects in the same category, which allows investors to compare across projects.

Core indicators in the ICMA guidelines are included where relevant. The inclusion of metrics commonly used for green bond and Sukuk reporting allows investors to better compare across issuances in the same sectors. Investors should use caution when making these comparisons as methodologies, assumptions and baselines are typically not uniform. IsDB reporting includes transparency on methodologies used for e.g. avoided emissions.

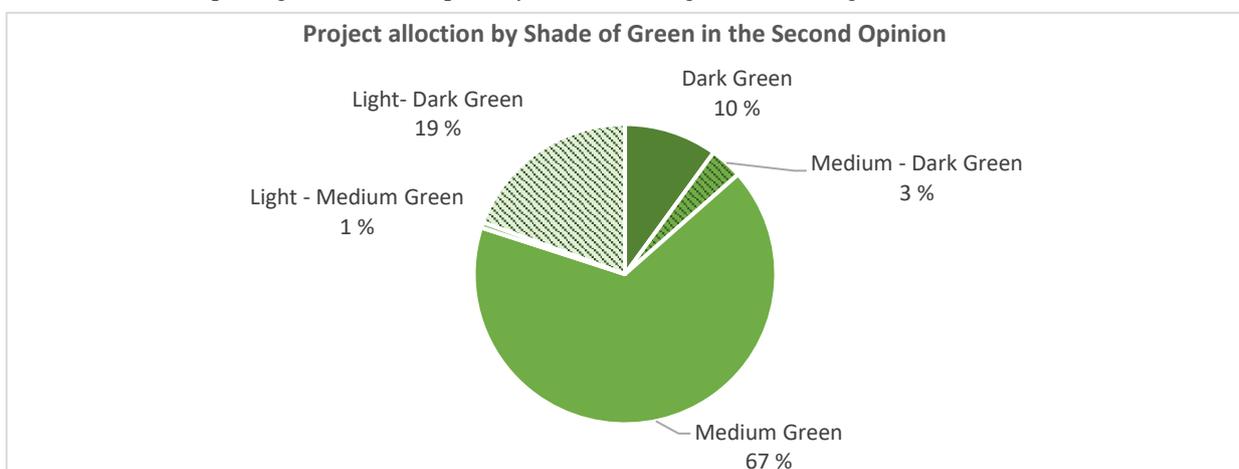


Figure 1: Allocation by category shade of green. Shading is based on evaluation at time of issuance and does not reflect ex-post project verification.

The IsDB Sustainable Finance framework was assigned an overall shading of Medium Green in our 2019 Second Opinion. Projects financed therein could encompass all Shades of Green (please see Table 1 for a detailed review). The majority of financing has been allocated to the Medium Green category Clean Transportation¹, followed by renewable energy and energy efficiency. The remaining categories received less than 5% of total proceeds. The Clean Transportation category in the framework includes the option of financing fossil fuel public transit, the projects financed to date are either infrastructure (railway tracks) or electric trains focusing more on Dark Green solutions. CICERO Green is encouraged that IsDB is seeking to implement zero carbon solutions in this category. In terms of geographical distribution, proceeds were mostly allocated in Turkey (42%), Senegal (33%), Turkmenistan (13%) and the UAE (10%).

Alignment with principles for impact reporting

CICERO Green reviews the impact report against the ICMA Handbook, Harmonized Framework for Impact Reporting². We find that the report is aligned with these guidelines. Some of the core principles and recommendations for good reporting that IsDB is following include that the use of green proceeds and the impacts is reported around one year after the Framework was established and will be reported annually. The time period for allocation is indicated as years of disbursement, and the lifetime of the projects realized is given. Proceeds signed, what is allocated and IsDB's share of financing are included. Impacts from individual projects are reported where possible. Results are either ex ante or ex post, depending on whether the project is finalized. IsDB has reported according to the indicators given in their Framework, and in addition reported on indicators given in the ICMA guidelines where relevant. The methodology used for GHG calculations is indicated. The impact report states that no major deviations from the selection process described in the Framework were observed. The report furthermore concludes that impacts estimated ex ante are mostly in line with realized impacts estimated ex post.

Terms

CICERO Shades of Green provides a review of IsDB's annual reporting based on documentation provided by IsDB and information gathered during teleconferences and e-mail correspondence with IsDB. IsDB is solely responsible for providing accurate information. All financial aspects of the sustainable finance reporting- including the financial performance of the bond and the value of any investments in the bond- are outside of our scope, as are general governance issues such as corruption and misuse of funds. CICERO Shades of Green does not validate nor certify the existence of the projects financed and does not validate nor certify the climate effects of the projects. Our objective has been to provide an assessment of the extent to which the bond has met the allocation and reporting criteria established in the 2019 Sustainable Finance framework. The review is intended to inform IsDB management, investors and other interested stakeholders in the IsDB Sukuk and has been made based on the information provided to us. CICERO Shades of Green cannot be held liable if estimates, findings, opinions or conclusions are incorrect. Our review does not follow verification or assurance standards and we can therefore not provide assurance that the information presented does not contain material discrepancies.

Investors should note that this is a review of IsDB's Green Sukuk and does not include an assessment of the social aspects of projects. Sustainability Sukuk can also be issued under the same framework.

¹ The shade of green was assigned in the Second Opinion process, we do not update the shading based on projects financed

² <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Handbook-Harmonized-Framework-for-Impact-Reporting-220520.pdf>



Detailed Review

Category	Description	Review against framework criteria	Impact Metrics	Relevance of metrics	Transparency considerations
Renewable Energy	Large scale solar power plant in United Arab Emirates and Renewable Energy Program in Turkey	<p>No discrepancies identified</p> <ul style="list-style-type: none"> The TKB renewable energy program can fund new hydropower, geothermal, solar, wind and landfill gas projects. (as well energy efficiency projects mentioned below). IsDB informed us that for the hydropower project, a detailed ESIA & ESMP was required before the approval of the project. Environmental checks were conducted during construction, and the IsDB had regular communication with the developer. 	<ul style="list-style-type: none"> MW total energy generation capacity installed or expected to be installed GWh of clean energy generated per annum tCO2e avoided annually 	<ul style="list-style-type: none"> ✓ Metrics provide a good of indication of project impact ✓ All metrics are commonly used in green sukuk reporting ✓ Indicators in line with core indicators in the ICMA handbook 	<ul style="list-style-type: none"> ✓ Both ex post and ex ante impacts ✓ All projects reporting on all metrics ✓ The selection of baseline impacts the results. IsDB uses a third-party tool to calculate their emission reductions, and the methodology is transparently available
Energy Efficiency <i>(note that this project is also included in Renewable Energy and IsDB reports on project impacts as a whole in their reporting)</i>	Renewable Energy Program in Turkey	<p>No discrepancies identified</p> <ul style="list-style-type: none"> Assumes stringent implementation of the program according to IsDB criteria by the Development Bank of Turkey. The projects financed so far are energy efficiency projects in transmission and distribution networks. The framework does not specify any energy saving thresholds, but the IsDB looks for significant energy efficiency improvements. IsDB considers and validates the total GHG calculations 	<ul style="list-style-type: none"> GWh/yr saved tCO2e avoided annually 	<ul style="list-style-type: none"> ✓ Projects financed can include a broad range of energy efficiency projects, including some with fossil fuel elements. Transparency on impacts is especially important for this category ✓ Energy efficiency can lead to rebound effects, reducing the overall impacts 	<ul style="list-style-type: none"> ✓ Ex post impacts ✓ The selection of baseline impacts results for both metrics. The input for impact metrics was system loss reduction resulting from upgrading of the transmission or distribution line ✓ MDB methodology was used to validate the ex-ante analysis

		<p>from feasibility studies before financing projects.</p> <p>New and existing fossil fuel-based power generation is excluded from the financing under this framework.</p>		<ul style="list-style-type: none"> ✓ Metrics provide a good of indication of project impact ✓ All metrics are commonly used in green sukuk reporting ✓ Indicators in line with core indicators in the ICMA guideline.
Sustainable water and wastewater management	Floods impacts mitigation in Dakar, Senegal	<p>No discrepancies found</p> <ul style="list-style-type: none"> • The project finances a combination of soft and hard engineering solutions to increase resilience against changing climate conditions. The project includes construction of 700 housing units with flood resilience features that will replace shanty settlements along the coastal areas. IsDB has informed us that these dwellings are a necessary component of the flood mitigation solution as these dwellings are a part of the system protecting the larger city from flood impacts. 	<ul style="list-style-type: none"> • Ha of land protected against flood risks • Households with access to dwellings connected to electricity, potable water supply and protected against flood risks 	<ul style="list-style-type: none"> ✓ Metrics provide a partial indication of project impact. The project also finances housing units and it is unclear how the impact of these are reported ✓ Area of protected land is a commonly used metric for green Sukuk reporting ✓ These projects also have significant social impacts ✓ Indicators related to flood risk protection are in line with sustainability indicators in the ICMA handbook

Clean Trans- portation	Construction of railways, light rail, purchase of rolling stock and other rail related projects. Turkmenistan, Turkey and Senegal	<p>No discrepancies identified</p> <ul style="list-style-type: none"> • The framework explicitly excludes financing of transport dedicated to fossil fuels. The Bereket-Etrek railway connects countries with large fossil fuel industries and it could be difficult to ensure that no fossil fuels are transported. • CICERO Green is encouraged that the high-speed train sets, including the Antalya Light Rail Project, are electric and that the regional express train has dual electric and diesel rolling stock. We continue to encourage the use of zero-emission technology where feasible. • Following due diligence, the Bank ensures that no projects related to the transportation of fossil fuels have been supported. • An ESMP (environmental and social management plan) was developed to manage environmental and social issues. Resettlement was addressed in the EMSP, and according to IsDB there was no local resistance. 	<ul style="list-style-type: none"> • Km of railway track constructed upon project completion • Train sets or light rail vehicles operational • Annual tCO2e avoided • Increase modal shift 	<ul style="list-style-type: none"> ✓ Highly project specific metrics (rolling stock) gives good information alongside the more general category metrics (km railway) and the commonly metric (emissions avoided) ✓ Projects financed include fossil fuel rolling stock, transparency on fuel type is encouraged ✓ The modal shift towards public transit is a particularly interesting metric (this is available for one project) ✓ Indicators in line with the core or deployment indicators in the ICMA handbook 	<ul style="list-style-type: none"> ✓ Ex ante and ex post impacts ✓ We encourage transparency on project risks, including risks of the transport mode being used to transport fossil fuels ✓ All projects reporting at least two metrics
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Pollution prevention and control	Construction, expansion and /or improvement of sewerage systems and wastewater treatment. Maldives, Senegal and Uzbekistan	<p>No discrepancies identified</p> <ul style="list-style-type: none"> • Improved sanitation and wastewater treatment are important environmental and social projects • Wastewater treatment plants are included in this category. IsDB informs that the wastewater infrastructures (sewerage networks) are gravity based without power needs. • Construction projects always have local environmental impacts, the issuer has taken the steps described in the framework to mitigate these. Mitigation is usually achieved through the completion of Environmental and social impact assessments (ESIA) and implementation of ESMPs. In certain contexts, more in-depth and detailed assessments and/or environmental risk control options are recommended and followed through the project implementation • Water discharged is treated so that it can be reused locally as much as possible. 	<ul style="list-style-type: none"> • Km of sewerage networks • m3 of wastewater collected and treated daily (or increase in wastewater treated) • Quality parameters of treated effluent 	<ul style="list-style-type: none"> ✓ The quantity and quality measures together provide a comprehensive picture of impacts ✓ All metrics are commonly used in green Sukuk reporting ✓ A bio-gas co-generation plant is included in this project category, and IsDB has reported on the installed energy capacity ✓ These projects also have significant social impacts ✓ m3 of wastewater collected and treated daily is in line with the indicator in the Sustainable water and wastewater category in the ICMA guideline 	<ul style="list-style-type: none"> ✓ Ex ante impacts ✓ All projects reporting on quantity treated (or increase), quality measures are lacking for one project
Hybrid - Environment-ally sustainable management of natural	Integrated agricultural development in Tunisia	<p>No discrepancies found</p> <ul style="list-style-type: none"> • The project finances a multitude of activities that are aligned with the framework criteria including improving irrigation for agriculture, the 	<ul style="list-style-type: none"> • Increase in Agriculture production • Increased farmers' income 	<ul style="list-style-type: none"> ✓ Metrics provide a good of indication of project impact ✓ Some of the metrics are commonly used, others are project specific. IsDB 	<ul style="list-style-type: none"> ✓ Ex ante impacts

<p>living resources and land use and Sustainable water and wastewater management</p>	<p>restoration of agricultural land and strengthening of farmers' organizations.</p> <ul style="list-style-type: none"> • The project is a response to scarcity of water in the beneficiary communities. The irrigation component of the project looks at efficient water use options due to water stress and scarcity. The IsDB's due diligence included in-depth assessment of project location information on the related risks including water stress. • The expansion of livestock is excluded from the framework, however, the projects aims to ensure food security and create an enabling environment for the development of other agricultural activities mainly livestock. • The project also includes the construction of necessary track roads, the financing of these roads is not included in the green Sukuk financing. 	<ul style="list-style-type: none"> • Ha existing irrigation perimeters upgraded or developed • Ha arboriculture developed • Ha of land protected against flood risks • Rural water schemes constructed • Permanent jobs created 	<p>provides estimated increases for each of the targeted crops</p> <ul style="list-style-type: none"> ✓ While the increase in income and jobs created indicators do not provide information on the environmental aspects of the projects, they illustrate the social impacts of the green sukuk issuance ✓ Indicators related to flood risk protection are in line with sustainability indicators in the ICMA handbook ✓ IsDB could consider including indicators on water efficiency and the management of local environmental impacts. These would provide additional information on the impact of irrigation systems and dykes.
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Appendix 1: 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 and the International Institute for Sustainable Development (IISD).

