

# Annual Impact Report on IsDB Debut Green Sukuk

15 December 2020



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# Foreword

The vision of the Islamic Development Bank (IsDB) to promote inclusive growth ensures that the development impact in our Member Countries (MCs) is far reaching and leaves no one behind. A strand of this vision is deeply rooted in the tenets of Islam, which guides the operations of IsDB, and that is to make a better world for the future generations. This principle is at the core of what is now a global agenda of sustainability enshrined in the Sustainable Development Goals (SDGs) and a greener world is an integral part of this. IsDB is honored to have followed the 'do no harm' principle in its project designs since its inception, much earlier than its peers and therefore extensively contributed to building sustainable societies across its MCs.



The mainstreaming of the SDGs in IsDB's operations has further reinforced these principles with key pillars being climate action, climate change resilience and transition to green economies. It is in this spirit that IsDB issued its debut €1b Green Sukuk, the first such AAA-rated instrument in November 2019 to raise financing exclusively for green projects in its MCs.

It is my pleasure to present this report to our Green Sukuk investors, who share our vision of a green future and place their trust in IsDB's mission. The report provides an insight into the development impact of the Green Sukuk proceeds with specific measured results on the ground, such as, among others, generating 3,000-plus GWh of clean energy annually and delivering 2,000 climate resilience housing units for the poor. I also share this report with IsDB's stakeholders at large, who continue to support our mission and will appreciate our commitment on the road to our climate finance target of 35% of overall portfolio by 2025.

Across the board, the global community is calling for the recovery from the COVID-19 pandemic to be 'green'. Development of a robust Sustainable Finance Framework and the issuance of the debut Green Sukuk of IsDB reaffirms its commitment as an important partner towards this 'green' recovery and with this report, we are confident that the results can be achieved to this end with innovative financing instruments including future Green Sukuk.

**Dr. Bandar M.H. Hajjar**  
President  
Islamic Development Bank

# A Note from the Climate Change Division

2020 has been a most challenging year in many ways. With a global health crisis, loss of lives and an economic slowdown leading to millions of lost jobs worldwide, it is difficult to think of positive aspects. Nevertheless, if there are positives to be taken from the year, one would be the growing global realization that a low carbon and resilient development is the only way forward.

The COVID-19 pandemic has led to a clear acknowledgement that global systemic challenges require global collective action for building resilient systems. Climate change is one of these major global challenges that can lead to even larger and irreversible damages both environmentally and economically across the globe. With scarce resources available to recover from COVID-19 and increasing pressure on financial systems, there is no room to support unsustainable projects or practices. This has led to development agencies and financial institutions to call for and commit to a sustainable recovery and many countries across the world pledging to the same.



IsDB has already committed to supporting a green and sustainable recovery in line with its Climate Change Policy and its commitment to support a low-carbon and resilient development in its member countries. Last year, the Bank announced its first ever climate finance target of 35% by 2025. It also launched its Climate Change Action Plan (2020-2025) that sets out how the Bank will be working on the climate mandate with its various stakeholders and clients. The Bank also reaffirmed its commitment to Paris Alignment and presented, along with other Multilateral Development Banks (MDBs), the progress made on the MDB Paris Alignment Framework, which is also expected to guide the way for green recovery.

Effective mobilization of finance is key to supporting recovery efforts. With more governments, regulators, development institutions and the private sector committing to a sustainable recovery, the IsDB's Sustainable Finance Framework is a good example of means to validate that finance is being directed where it ought to be going to produce sustainable development results.

Islamic Finance has a significant role to play for climate action and green growth, and IsDB's Green Sukuk are a demonstration of how different development impacts may be realized through Islamic finance modalities in various sectors. As a leader in Islamic Finance and an institution committed and geared towards supporting low-carbon and resilient growth, IsDB continues to ramp up its efforts and work with its partners to mobilize finance towards climate action.

IsDB remains committed to not only issuing Green Sukuk on a regular basis, but to also continue working with government and development partners as well as Islamic financial institutions towards increasing the share of Green Sukuk in the global capital markets to further mobilize Islamic finance towards the achievement of the SDGs in line with the Paris Agreement.

**Dr. Ahmed Al Qabany**  
Manager, Climate Change  
Islamic Development Bank

# Introduction

## IsDB's Mission

"We are committed to alleviating poverty, promoting human development, science & technology, Islamic banking & finance and enhancing cooperation amongst member countries in collaboration with our development partners".

As the world's largest south-south multilateral development finance institution, the IsDB remains committed to meeting the climate change objectives of its member countries by making an increasing share of its financing flow to member countries consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

## Select Strategic Initiatives<sup>1</sup>

-  **Islamic Financial** services available in 56 countries offered by 1,389 institutions
-  Mainstreaming **Women empowerment** policy and **Youth Development** strategy – SheTrades, Tamkeen
-  Mainstreaming **climate change** by carrying out climate risk screening and introducing climate dimensions in all key sectors (agriculture, energy, transport, water and sanitation, etc.)
-  **Science, Technology and Innovation** fund of US\$ 500 million to finding development solutions
-  US\$ 3.9 million benefitting 15 Non-Member countries
-  Implemented **Fragility and Conflict Affected Region Financing** to respond to humanitarian, reconstruction and resilience development



In 2019, IsDB approved projects worth **US\$ 1.63 billion**



<sup>1</sup> IsDB Development Effectiveness Report 2018 – April 2019

# IsDB's Commitment to Climate Change



**Climate Change:** In order to demonstrate its commitment to increasing its climate action, the Bank approved its first Climate Change Policy in February 2019. The policy emphasises mainstreaming climate action in all the Bank's operations, promoting climate change resilience and green growth and supporting the transition to a green economy as three main pillars of the climate change policy. The Climate Policy builds on IsDB's adherence to the Voluntary Principles for Mainstreaming Climate Action within Financial Institutions and the Common Principles for Climate Mitigation Finance Tracking. In addition, the Bank set its first climate finance target at 35% of its total financing commitments by 2025 as outline in its Climate Action Plan (2020-2025). This target reaffirms IsDB's commitment to its member countries long-term vision of a low carbon and climate resilient development. Furthermore, the Bank is committed to the objectives of the Paris Agreement through making it finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development in its member countries.



**Energy Sector:** The Bank remain committed to achieving universal access in member countries through sustainable energy sources. Through its policy, establishes an overall direction for IsDB's energy operations in MCs, including energy access, renewable energy, energy efficiency and knowledge services in the energy sector. The IsDB Energy Sector Strategy (2021–2025) aims to address energy inequality and lack of affordability as well as access to clean and sustainable energy options. IsDB's increasing operations in the energy sector is key towards enabling the Bank to meet its climate finance target of 35% of its annual financing by 2025.



**Transport Sector:** The theme of the Bank's Transport sector policy, 'Sustainable Transport for Inclusion and Prosperity', reflects the importance of sustainability in transport sector interventions of the Bank. The Bank's Transport Sector Strategy (2021 – 2025) focuses on the objectives of (i) developing transport solutions that contribute to human inclusion among the neediest populations, and (ii) improving the performance of transport solutions that contribute to population prosperity. Specifically, the strategy emphasises increased effort on green transport as one of its main pillars with the aim of increasing the share of low carbon and climate resilient transport investments in member countries.



**Water & Sanitation Sector:** In 2020, the Bank developed its first Water Sector Policy which provides a common framework for water operations within the IsDB and establishes the basis for the co-development of projects and programs in member countries. As part of the Bank's commitment to sustainable, smart, resilient and efficient water sector, the focus areas of its water policy are specifically on effective water resources management, resilient water systems, universal and affordable access, water use efficiency and capacity building and solutions transfer in member countries.



**Agriculture & Land Use Management:** Through its Agriculture Sector strategy (2020-2025), the Bank is committed to increasing its investments in raising productivity of small farm agriculture, build resilience to climate change, improve access to markets, and strengthen capacity of member countries. Specifically, the strategy focuses on addressing the increased threats from climate change and climate variability and related weak resiliency in food systems and the opportunities offered through sustainable land use management, ecosystems-based solutions and climate-smart adaptation measures to build overall resilience of the sector.

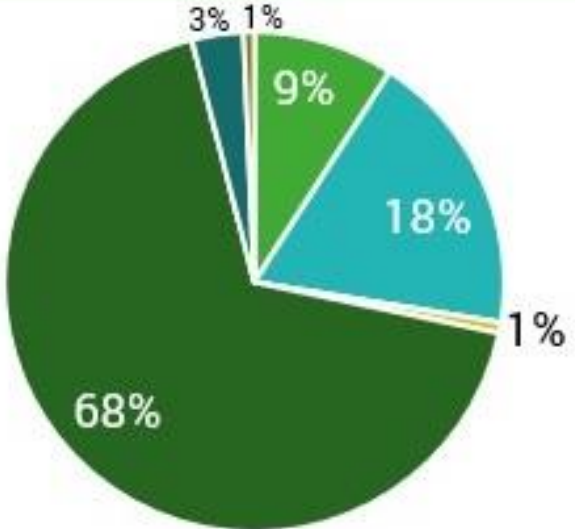
- <https://www.isdb.org/sites/default/files/media/documents/2019-04/IsDB%20Climate%20Change%20Policy.pdf>
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- [https://www.isdb.org/sites/default/files/media/documents/2019-04/IsDB\\_Energy%20Sector%20Policy.pdf](https://www.isdb.org/sites/default/files/media/documents/2019-04/IsDB_Energy%20Sector%20Policy.pdf)
- [https://www.isdb.org/sites/default/files/media/documents/2019-04/IsDB\\_Transport%20Sector%20Policy.pdf](https://www.isdb.org/sites/default/files/media/documents/2019-04/IsDB_Transport%20Sector%20Policy.pdf)

# Green Sukuk Allocation Summary

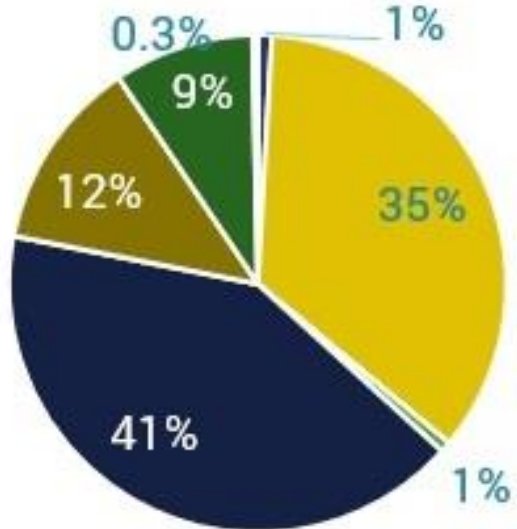
- IsDB issued its debut [Green Sukuk](#) in November 2019 (ISIN: XS2089242064), raising €1 billion which would be committed to projects in renewable energy, clean transportation, energy efficiency, pollution prevention and control, environmentally sustainable management of natural living resources and land use and sustainable water and wastewater management across its 57 Member Countries.
- The Green Sukuk proceeds have been fully allocated<sup>1</sup> to 11 green projects in alignment with the Climate Change Mitigation and Climate Change Adaptation environmental objectives.

By Sector



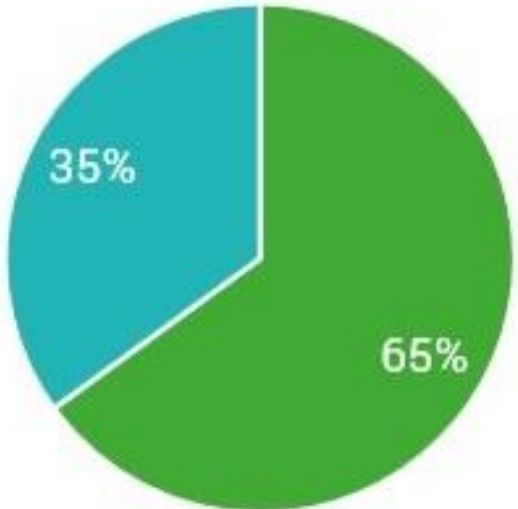
- Renewable energy
- Renewable energy & energy efficiency
- Sustainable water and wastewater management
- Clean transportation
- Pollution prevention and control
- 'Environmentally sustainable management of natural living resources and land use' and 'Sustainable water and wastewater management'

By Location



- Maldives
- Senegal
- Tunisia
- Turkey
- Turkmenistan
- UAE
- Uzbekistan

By Type



- Refinancing
- New Financing

<sup>1</sup> No deviations were observed from the project evaluation and selection process described in IsDB Sustainable Finance Framework

# Green Sukuk Impact Highlights<sup>2</sup>



**1,025 MW** of clean energy generation capacity installed in energy sector



**3,233 GWh** of clean energy generated per annum in energy sector



**291 GWh/yr** saved through energy efficiency projects



**20,000** inhabitants (2000 households) provided access to decent and affordable houses with electricity, potable water supply and protection against flood risks



**69 hectares** of urban development protected from flooding and water disaster



**2,000** climate resilient, decent and affordable housing units constructed for urban poor

<sup>2</sup> No major deviations were observed between ex ante estimations and ex post calculation



# Green Sukuk Impact Highlights (contd.)



**110,000 tCO2e** emissions reduced annually in the transport sector



**361 km** of railway track for low carbon mobility constructed



**1,000-plus jobs** created through high-speed train operations



**4 hours saved** of travel time (17% decrease in overall travel time)



**406 Ha** existing irrigation perimeters upgraded to address climate risks



**315 Ha** of new irrigation perimeters developed to build climate resilience

Arboriculture developed on over **3,100 Ha** of land



**140 km** of sewerage networks constructed, installed and upgraded



**38% increase** in ratio of wastewater treated to wastewater collected



**48,763 m3** of wastewater collected and treated daily

**50%** of annual project energy needs covered through co-generation



**80% reduction** in number of disease patients due to unhealthy urban environment

**1,400 Ha** of agriculture land protected against flood risks





**22 dryland communities** access clean water through rural water scheme

**2,110 permanent jobs** created for climate-smart farming activities


# Green Sukuk Eligible Projects Allocated

## a) Renewable Energy

| Country, Project Name & Code   | Project Description  | Project Scope   | Project Category                      | Environmental Objective   | Nature of Financing | Total Project Amount | Signed Amount | IsDB's share of financing (%) | Amount Disbursed (US\$) | Amount Allocated (US\$) | Year(s) of Disbursement | Expected Project Lifetime (Years) | Impact Results   | Other results   |
|--|--|---|---------------------------------------|---------------------------|---------------------|----------------------|---------------|-------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|--|---|
| Turkey<br>TKB Renewable Energy Program (TUR0176)<br>  | The Renewable Energy Program supports the country's economic development by enhancing the energy security in a sustainable and environmentally friendly manner by enabling the targeted construction of 200 MW of new RE generation capacity in the country as well as enhancing the country's Energy Efficiency.  | Supporting eligible private sector beneficiary enterprises, through Development Bank of Turkey, for constructing new renewable energy power plants (hydropower, geothermal, solar, wind and landfill gas) and energy efficiency projects. | Renewable energy<br>Energy efficiency | Climate change mitigation | Capital Expenditure | 741,340,000          | 220,000,000   | 30%                           | 220,000,000             | 220,000,000             | 2014-2017               | Over 20 years                     | <ul style="list-style-type: none"> <li>225 MW of new RE based clean energy generation capacity installed</li> <li>832.7 GWh of clean energy generated per annum</li> <li>290.85 GWh/yr saved through energy efficiency projects</li> </ul> | 525,124 tCO <sub>2</sub> eq. GHG emissions avoided annually |
| United Arab Emirates<br>DEWA 800MW Photovoltaic Solar Power Plant – Phase III (ARE1003)<br> | The main objective of the project is to support the economic growth of Dubai and the commercial conditions of the different businesses and industries operating in Dubai through the addition of 800MWac of clean and sustainable electricity generation capacity to the grid (total gross installed capacity shall be 1,043MWdc). In other words, the project objective is to support Dubai's strategy to increase the electricity generation capacity to meet the growing demand. Indeed, UAE is set to achieve an average GDP growth of about 4% until 2020 accompanied with an increasing demand for electricity estimated at 5% annually. | The project scope includes financing EPC Contract price, pre-operating costs, development costs, start-up costs, financing costs and contingencies.   | Renewable energy                      | Climate change mitigation | Capital Expenditure | 966,440,000          | 110,000,000   | 11%                           | 108,723,930             | 108,723,930             | 2018-2020               | 25                                | <ul style="list-style-type: none"> <li>800 MW of clean energy generated</li> <li>2,400 GWh of clean energy generated per annum</li> <li>1,623,288 tCO<sub>2</sub>e avoided annually</li> </ul>   | -   |

# Green Sukuk Eligible Projects Allocated

## b) Sustainable Water and Wastewater Management

| Country, Project Name & Code   | Project Description  | Project Scope   | Project Category                            | Environmental Objective   | Nature of Financing | Total Project Amount | Signed Amount | IsDB's share of financing (%) | Amount Disbursed (US\$) | Amount Allocated (US\$) | Year(s) of Disbursement | Expected Project Lifetime (Years) | Impact Results  | Other results   |
|--|--|---|---|---------------------------|---------------------|----------------------|---------------|-------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|---|---|
| Senegal<br>Floods Impacts Mitigation Project in Dakar (SEN0131)<br> | The main objective of the project is to contribute to improving the living conditions in 6 major cities (Dakar, Thies, Saint Louis, Kaolack, Fatick and Joal) by minimizing the impacts of recurrent floods on the population, and preventing the losses of human lives, properties, plus reducing the costs associated with the effects of water-borne diseases. It will also improve urban mobility all year round and accessibility to social services. Overall, the project will therefore contribute to improve local environment conditions, health, hygiene, and urban mobility, and protect key economic assets. | The proposed project components are as follows:<br>(i) Construction works including the construction of water drainage infrastructure and restricting of flooding zones and 1,500 housing units (700 units financed by IDB);<br>(ii) Consultancy services for the supervision of works;<br>(iii) Institutional support to the Sector and to the PMU; and<br>(iv) Financial audit of the project's accounts. | Sustainable water and wastewater management | Climate change adaptation | Capital Expenditure | 60,400,000           | 32,700,000    | 54%                           | 4,476,133               | 4,476,133               | 2016-2021               | 36                                | <ul style="list-style-type: none"> <li>Approximately 20,000 inhabitants (2000 households) to access decent and affordable houses with connection to electricity and potable water supply and protected against flood risks.</li> <li>68.7 hectares of land/urban development protected from flooding and water disaster.</li> </ul> | <ul style="list-style-type: none"> <li>10,000 direct and indirect jobs created in flood-protected zone due to project.</li> <li>2000 climate resilient, decent and affordable housing units constructed to accommodate urban poor.</li> <li>Number of diseased patients due to unhealthy environment reduced by 80% in project location.</li> </ul> |


# Green Sukuk Eligible Projects Allocated

## c) Clean Transportation

| Country, Project Name & Code  | Project Description  | Project Scope   | Project Category     | Environmental Objective   | Nature of Financing | Total Project Amount | Signed Amount | IsDB's share of financing (%) | Amount Disbursed (US\$) | Amount Allocated (US\$) | Year(s) of Disbursement | Expected Project Lifetime (Years) | Impact Results  | Other results   |
|---|--|---|----------------------|---------------------------|---------------------|----------------------|---------------|-------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|---|---|
| Turkmenistan<br>Construction of Bereket-Etrek Railway Project (Tranche 2) (TKM0017) | The project is a part of the main project of a 936 km long North-South railway corridor. Railway tracks of 724 km long will be constructed inside Turkmenistan. The Northern section of 467 km long railway track is being constructed by the Government from its own sources and Asian Development Bank (ADB). The remaining section (Southern) of 257 km railway tracks with 69 km auxiliary lines will jointly be covered by IsDB financing and the Government. | <p>a) Civil works consisting of laying of a total of 325.5 km of railways - 256.5 km of main lines and 69.1 km of auxiliary lines, including roadbed and tracks (rails, sleepers, base plates, etc.), ballast, bridges and drainage structures, as well as necessary electrical and mechanical installations (electricity, communications, blocking system, automatic level crossing gates), as well as construction of 9 stations.</p> <p>b) Machinery, equipment and depots: the component includes, two maintenance depots to be constructed and equipped in Bereket and Etrek. In addition, Etrek depot will be specially equipped for replacing bogies with narrow gauge.</p> <p>c) Consultancy services: the component will include review of detailed design studies and supervision of works.</p> <p>d) Audit: a local auditing firm affiliated with a reputed international firm will be recruited to carry out a yearly audit of the project accounts and report to the IsDB and the Beneficiary.</p> | Clean transportation | Climate change mitigation | Capital Expenditure | 327,656,554          | 148,519,435   | 45%                           | 148,519,435             | 148,519,435             | 2015-2019               | 40-50 years                       | <ul style="list-style-type: none"> <li>325 km of railway track constructed.</li> <li>Amount of CO2 emissions avoided (tCO2e) - By 2020, CO2 emissions reduced to 26,800 tons (in 2008 estimated at 37,000 tons).</li> </ul> | <ul style="list-style-type: none"> <li>Transit freight volume to increase from 3 million tons to 8 million tons per year. Tariffs for passengers and freight transportation reduced by 30%. Travel time reduced by over 30%.</li> </ul> |

# Green Sukuk Eligible Projects Allocated



## c) Clean Transportation (contd.)

| Country, Project Name & Code   | Project Description  | Project Scope   | Project Category     | Environmental Objective   | Nature of Financing | Total Project Amount | Signed Amount | IsDB's share of financing (%) | Amount Disbursed (US\$) | Amount Allocated (US\$) | Year(s) of Disbursement | Expected Project Lifetime (Years) | Impact Results  | Other results  |
|--|--|---|----------------------|---------------------------|---------------------|----------------------|---------------|-------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|---|--|
| Turkey<br>10 High-Speed Train Sets (TUR1004)*<br> | <p>The overarching development objective of the project is to accelerate the socio-economic development of Turkey by providing a cost effective, modern and environmentally friendly high-speed railway facility for long distance traveling. The specific objectives are to:</p> <p>(a) provide high-speed, safe, reliable, comfortable, and efficient railway transportation facility which can operate at a maximum speed of 300 km/hour,</p> <p>(b) realize High-Speed Train (HST) operations contributing to meeting the annual transportation demand, which would increase from 5.6 million passengers in 2015 to 13.9 million passengers in 2023, through HST operations, and</p> <p>(c) shift the majority of passenger traffic between Ankara and Istanbul from less efficient road transport to more efficient rail transport with travel time saving of approximately 3 hours and 30 minutes between Ankara and Istanbul.</p> | <p>10 HST sets project includes procurement, manufacturing, delivery, testing, commissioning, operationalization, maintenance, repair and cleaning services of electricity powered HST sets, provision of spare parts, project management unit (PMU) support, startup workshop and familiarization visit and related contingencies. The IsDB is providing financing for the acquisition of 10 HST sets, PMU support, startup workshop and familiarization visit, and related contingencies. The remaining project scope is being financed by the Government of Turkey (GOT). In addition, the GOT is also providing the financing for 2 additional HST sets under the Project. The HST sets consist of 10 coaches with 470 passengers' seating capacity, capable of acquiring a speed of 300 km/hour.</p> | Clean transportation | Climate change mitigation | Capital Expenditure | 510,044,898          | 373,429,181   | 73%                           | 232,361,127             | 232,361,127             | 2018-2020               | 30                                | <ul style="list-style-type: none"> <li>10 High Speed Train sets consisting of 8-coaches (470 passengers seating capacity) operational.</li> <li>Increase modal shift due to train travel demand of 13.9 million passenger by 2025 from 5.6 million passengers in 2015 (148% increase)</li> <li>93,000 tCO2e reduced annually by 2025</li> </ul> | <ul style="list-style-type: none"> <li>Travel time between Ankara and Istanbul by railway reduced to half in 2025 from 7 hours in 2015 (3 hours 30 minutes saving),</li> <li>Passenger transportation cost decreased from 134 TL for 1000 passenger.km in 2015 to 114 TL for 1000 passenger.km by 2025 (15% reduction).</li> <li>Approximately 1000 number employment through HST operations in 2015 would double to 2000 employment opportunities by 2025.</li> </ul> |

\* The project was approved in EUR currency. Amounts in this line are stated in USD as per the EUR/USD exchange rate as of the Green Sukuk issuance date i.e. 4 Nov 2019 (1 EUR = 1.11 USD)

# Green Sukuk Eligible Projects Allocated



## c) Clean Transportation (contd.)

| Country, Project Name & Code  | Project Description  | Project Scope  | Project Category     | Environmental Objective   | Nature of Financing | Total Project Amount | Signed Amount | IsDB's share of financing (%) | Amount Disbursed (US\$) | Amount Allocated (US\$) | Year(s) of Disbursement | Expected Project Lifetime (Years) | Impact Results  | Other results   |
|---|--|--|----------------------|---------------------------|---------------------|----------------------|---------------|-------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|---|---|
| Senegal<br>Regional Express Train (Dakar City Center to AIBD Airport) (SEN1002)*<br>      | The Regional Express Train project will provide a sustainable transport mode that will help in meeting the increasing demand and improving efficiency in the transport sector in the country. This project will reduce travel time between the Dakar city center to the City of Diamniadio from 1.5 hours to 0.5 hours, improving overall railway transport efficiency, reducing operating costs, in addition to improving safety and reducing air pollution (estimated at 17,000 tons of CO2/year). The project will accommodate the increased flow of travelers induced by the operation of the Express Train line from 15,000 to 113,000 passengers/day. The project will have an increasing role in solving the issues of urban and inter-urban mobility in the country and contribute to the climate change mitigation by reducing Green House Gas (GHG) emissions in the Dakar Region. | The overall project comprises of the following components: (i) Land acquisition & Resettlement; (ii) Design, Construction & Installation of a new 2-line railway and the reconstruction and rehabilitation of the existing metric gauge line used for freight transportation from the center of Dakar to Diamniadio (36 km) Infrastructure; (iii) Design, Construction & Installation of railway electrical & Signalization systems; (iv) Construct & Rehabilitation of thirteen (13) train stations (including docks); (v) Supply of "dual mode operational electrical and diesel" Rolling Stocks; (vi) Consultancy Services; (vii) Support to PMU; and (viii) Financial Audit. | Clean transportation | Climate change mitigation | Capital Expenditure | 1,514,515,385        | 387,782,078   | 26%                           | 346,478,592             | 346,478,592             | 2017-2020               | 40                                | <ul style="list-style-type: none"> <li>36km of rail line constructed for passenger and freight traffic.</li> <li>17,000 tCO2e reduced annually</li> </ul>       | <ul style="list-style-type: none"> <li>Increase market share of passenger rail traffic from 15,000/day (2015) to 113,000/day (2021)</li> <li>Substantial increase in market share of rail freight traffic from 350,000 tonnes (2015) to 3,000,000 tonnes (2021).</li> <li>Reduction in passenger travel time between Dakar City Center and Diamniadio from 1.5 hours (2015) to at least 0.5 hours.</li> </ul> |
| Turkey<br>Antalya Light Rail Project (Phase II) - Urban Transport Program (TUR1008)*<br> | The Antalya Light Rail Project (Phase II) is part of the Turkey Urban Transport Program which aims at the development of safe, efficient and sustainable transport systems in Turkish Cities (Antalya for this project). It aims to meet the growing urban transport needs and help the country achieve its sustainable growth objectives and transport sector strategy, namely through:<br>• Relieving urban transport congestions and ensuring a safe traffic flow; • Strengthening urban transport infrastructure and intelligent transport systems; • Promoting the use of sustainable and climate-smart urban public transport.   | The project consists of 18 vehicles supply, pedestrian connections, extension of depot and consultancy for vehicle supply. On the other hand, the remaining components of the project i.e. construction of the line, stations and electrification and signalization of the line are covered by the Government.   | Clean transportation | Climate change mitigation | Capital Expenditure | 111,297,843          | 32,613,513    | 29%                           | 29,139,844              | 29,139,844              | 2016-2020               | 30                                | <ul style="list-style-type: none"> <li>18 light rail vehicles installed and operational.</li> <li>40% reduction in tCO2e by 2025 from 2016 baseline.</li> </ul> | <ul style="list-style-type: none"> <li>3 million people served throughout the cities.</li> <li>17% decrease in overall travel time.</li> </ul>  |

\* The project was approved in EUR currency. Amounts in this line are stated in USD as per the EUR/USD exchange rate as of the Green Sukuk issuance date i.e. 4 Nov 2019 (1 EUR = 1.11 USD)

# Green Sukuk Eligible Projects Allocated


## d) Pollution Prevention and Control

| Country, Project Name & Code   | Project Description  | Project Scope  | Project Category                 | Environmental Objective   | Nature of Financing | Total Project Amount | Signed Amount | IsDB's share of financing (%) | Amount Disbursed (US\$) | Amount Allocated (US\$) | Year(s) of Disbursement | Expected Project Lifetime (Years) | Impact Results  | Other results   |
|--|--|--|----------------------------------|---------------------------|---------------------|----------------------|---------------|-------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|---|---|
| Maldives<br>Sanitation Project in Five Islands (MDV0044)<br>              | The project development objective is to contribute to improving the quality of life of the population in five selected islands. This objective will be achieved by: (a) significantly improving coverage of sanitation services to achieve full coverage through the provision of satisfactory wastewater collection and treatment facilities; and (b) mitigating the environmental impacts from wastewater pollution. | Construction of sewerage networks (approximate length of 69.2 km) and the associated treatment and discharge facilities in five islands, which are home to about 10,400 people.  | Pollution prevention and control | Climate change mitigation | Capital Expenditure | 18,400,000           | 15,000,000    | 82%                           | 10,980,470              | 10,980,470              | 2016-2021               | 30                                | <ul style="list-style-type: none"> <li>69.2 km of sewerage networks constructed in five islands</li> <li>1,763 m3 of wastewater collected and treated daily.</li> <li>Biochemical oxygen demand (BOD) concentration in effluent decreased from 250 mg/l (2012) to less than 40 mg/l (2019).</li> </ul>  | <ul style="list-style-type: none"> <li>Households connected to sewerage system increased from 0% (2012) to 100% (2019)</li> <li>10,400 inhabitants served with waste treatment and discharge facilities in five islands.</li> </ul> |
| Senegal<br>Northern Dakar Sanitation Improvement Project (SEN0136)*<br> | The project will contribute to (i) satisfying the needs in wastewater treatment facilities of the urban and peri urban population of Dakar, (ii) improve the discharge conditions of treated wastewater in the ocean thereby helping to protect the environment, and (iii) reducing the energy bill of the WWTP of Camberene.  | The project components are as follows:(i) the construction works including the sludge treatment plant and the land and see outfall; (ii) the consultancy services; (iii) the environmental and social management plan; (iv) the IEC; (vii) the project management and, (viii) the financial audit. | Pollution prevention and control | Climate change mitigation | Capital Expenditure | 83,719,684           | 75,860,338    | 91%                           | 22,744,243              | 22,744,243              | 2014-2021               | 30                                | <ul style="list-style-type: none"> <li>Quality parameters of treated effluent as measured by: <ul style="list-style-type: none"> <li>Suspended Solids (SS less than 50 mg/l)</li> <li>Biochemical Oxygen Demand at 5 days (BODs less than 40 mg/l) in 2020.</li> </ul> </li> <li>Ratio of wastewater treated to wastewater collected to increase from 19 percent in 2013 to 57 percent in 2020 (treatment capacity increased from 19,200 m3/d to 52,000 m3/d).</li> </ul> | <ul style="list-style-type: none"> <li>Bio-gas co-generation plant with a capacity of 3,200 Kva installed.</li> <li>Annual energy needs of WWTP in 2020: 50 percent covered through co-generation.</li> </ul>                       |

\* The project was approved in EUR currency. Amounts in this line are stated in USD as per the EUR/USD exchange rate as of the Green Sukuk issuance date i.e. 4 Nov 2019 (1 EUR = 1.11 USD)

# Green Sukuk Eligible Projects Allocated

## d) Pollution Prevention and Control (contd.)

| Country, Project Name & Code   | Project Description  | Project Scope   | Project Category                 | Environmental Objective   | Nature of Financing | Total Project Amount | Signed Amount | IsDB's share of financing (%) | Amount Disbursed (US\$) | Amount Allocated (US\$) | Year(s) of Disbursement | Expected Project Lifetime (Years) | Impact Results   | Other results  |
|--|--|---|----------------------------------|---------------------------|---------------------|----------------------|---------------|-------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|--|--|
| Uzbekistan<br>Reconstruction and expansion of sewerage systems of in the three cities of Gulistan, Shirin, and Yangier of Syrdarya region (UZB0078)<br> | The project aims to improve the coverage and quality of the sanitation services in the three cities of Gulistan, Shirin, and Yangiyer in the Syrdarya Region of Uzbekistan. The project will benefit approximately 140,000 residents of the cities through reconstruction and development of the wastewater treatment facilities, and expansion of the sanitation networks and pumping stations. | Construction of sewage treatment facility of Gulistan city (25,000 m3/day); reconstruct and expansion of Yangiyer city sewage treatment facility (12,000 m3/day); and in Shirin city (4,000 m3/day). (ii) Reconstruction of sewage disposal infrastructure in Gulistan (65 km); in Yangiyer (16 km) and Shirin (14 km); and strengthening the capacity (i) Supply of approx. 30 units of O&M machinery and equipment; (ii) training at least 100 staff of Utility Operator. | Pollution prevention and control | Climate change mitigation | Capital Expenditure | 60,840,000           | 57,500,000    | 95%                           | 5,776,361               | 5,776,361               | 2018-2022               | 15                                | <ul style="list-style-type: none"> <li>41,000 m3 of wastewater treated per day (increased from 0% in 2018 to 80% in 2023).</li> <li>71km of sewerage network installed and upgraded</li> </ul> | <ul style="list-style-type: none"> <li>Improved sanitation coverage at regional level from 25% (2014) to 70% (2030)</li> <li>Reduced incidence of waterborne diseases from 12% (2014) to 5% (2030).</li> </ul> |



# Green Sukuk Eligible Projects Allocated

## e) Hybrid - 'Environmentally sustainable management of natural living resources and land use' and 'Sustainable water and wastewater management'

| Country, Project Name & Code   | Project Description   | Project Scope  | Project Category  | Environmental Objective                | Nature of Financing | Total Project Amount | Signed Amount | IsDB's share of financing (%) | Amount Disbursed (US\$) | Amount Allocated (US\$) | Year(s) of Disbursement | Expected Project Lifetime (Years) | Impact Results   | Other results  |
|--|---|--|---|--|---------------------|----------------------|---------------|-------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|--|--|
| Tunisia<br>Integrated Agricultural Development Project In Kef and Kasserine Governorates (TUN0107) | The project aims at improving, sustainably, the agricultural production and productivity and contributing to improved food security by developing the agricultural potential, restoring natural resources, improving rural income and the welfare of the local population in the most depressed rural areas of the governorates of Kef and Kasserine. | <p>The project includes the following components:</p> <p>A. Agricultural Production and Productivity Enhancement including upgrading of irrigation infrastructure, creation of new irrigated perimeters, development of arboriculture through the plantation of olive and almond trees, construction of 14 hills lakes/ponds and enabling the irrigation of surrounding arable lands, consolidation of fragmented land over an area of 5,000 Ha of rain-fed agriculture, flood control for the protection of an area of 1,400 Ha through construction of diversion weirs, the implementation terraces network, and resizing of some reaches of rivers and the construction of dykes.</p> <p>B. Restoration of Agricultural land within the Sarrath Watershed through the construction of many water and soil conservation works.</p> <p>C. Improvement of Farmers' Access to Markets and to Basic Infrastructure through construction of track roads and water supply systems.</p> <p>D. Strengthening of Farmers' Organizations.</p> <p>E. Setting-up of the Project Implementation Units.</p> <p>F. Consultancy Services.</p> <p>G. Project Financial Audit.</p> | <ul style="list-style-type: none"> <li>Environmentally sustainable management of natural living resources and land and water use</li> <li>Sustainable water management</li> </ul> | Climate change mitigation & adaptation | Capital Expenditure | 43,570,000           | 34,600,000    | 79%                           | 8,432,768               | 6,999,197               | 2015-2021               | 23                                | <ul style="list-style-type: none"> <li>406 Ha existing irrigation perimeters upgraded by project completion</li> <li>315 Ha of new irrigation perimeters developed by project completion</li> <li>Arboriculture developed over 3,100 Ha by project completion</li> <li>1,400 Ha of land protected against flood risks</li> <li>Rural water scheme constructed for 22 communities</li> <li>2,110 permanent jobs created for farming activities</li> <li>Increase in Agriculture production:                             <ul style="list-style-type: none"> <li>Vegetable production from 3,380 tons (2011) to 5,200 tons (at completion)</li> <li>Olive production from 10,589 tons (2011) to 17,778 tons (at completion)</li> <li>Almond production from 606 tons (2011) 2,326 tons (at completion)</li> <li>Pistachios production reached 1,710 tons at completion</li> <li>Fruit production from 3,897 tons (2011) to 6,022 tons (at completion)</li> </ul> </li> <li>Increased farmers' income from US\$ 734/2683 (2011) to US\$ 1007/8718 (at completion)</li> </ul> | <ul style="list-style-type: none"> <li>The Economic Internal Rate of Return (EIRR) is estimated at 15.7% and includes the increase in the value of production and pasture production due to the Water and Soil Conservation works, the increase in the agricultural production in the existing irrigated areas due to the upgrading works, additional production coming from the newly developed irrigated area. In addition to these quantified direct project benefits, the project will also create an enabling environment for the development of other agricultural activities mainly livestock.</li> </ul> |

# Annex I - IsDB's Approach to Calculating Environmental Impact

## Multilateral Development Banks' (MDB) Common Principles

- IsDB currently uses the Multilateral Development Banks' (MDB) Common Principles for Climate Mitigation Finance Tracking and Climate Adaptation Finance Tracking. The MDB Common principles is an ambitious and standardized guideline developed by multilateral development banks to ascertain eligibility and account for environment/climate benefits and impact of financed operations. In other words, the Joint MDB Methodology for Climate Mitigation and Adaptation Finance Tracking consists of a set of definitions and guidelines and a list of eligible activities that allow for consistent accounting and reporting of financial flows identified as climate change mitigation and adaptation finance. The MDB common principles is a comprehensive framework that cover sectors including energy, transport, agriculture, food security, water and sanitation, waste, land-use management, biodiversity, integrated rural development, forestry etc. For more on the MDB common principles, see [https://www.eib.org/attachments/documents/mdb\\_idfc\\_mitigation\\_common\\_principles\\_en.pdf](https://www.eib.org/attachments/documents/mdb_idfc_mitigation_common_principles_en.pdf) for more details. The commonly define approach for accounting for project climate impact in the Joint MDB Methodology for given sectors and context as well as methodology for estimating GHG are followed by IsDB in calculating its project's environmental impact under this Green Sukuk issuance. More information on the MDB Common Principles for Climate Mitigation Finance Tracking and Climate Adaptation Finance Tracking methodology used for calculating environment impact under this sustainable finance framework can be found in Annexes A, B, C and D here: <https://www.isdb.org/sites/default/files/media/documents/2020-08/1257-joint-report-on-mdbs-climate-finance-2019-final%5B1%5D.pdf>

## Project Climate Risk Screening

- In order to ascertain the climate exposure of the project location and investment under IsDB's financing, the Bank integrated the climate risk screening tool "Aware for Projects". "Aware for Projects" is a customized online tool that allows to screen the Bank's investments for potential climate risk with the aim to build the overall resilience of the project and system. The following climate risks are typically identified: temperature increase, wildfire, permafrost, sea ice, precipitation increase and decrease, flood, snow loading, landslides, water availability, wind speed increase and decrease, onshore and offshore category 1 storms, sea level rise and solar radiation change.
- [http://www.acclimatise.uk.com/wp-content/uploads/2018/11/Aware\\_brochure\\_Nov2018.pdf](http://www.acclimatise.uk.com/wp-content/uploads/2018/11/Aware_brochure_Nov2018.pdf)



## Estimating Greenhouse Gases (GHGs) reduced or avoided from clean energy

- To estimate and project the actual and target amount of energy generated or saved from clean energy activities or greenhouse gases (GHGs) reduced or avoided from clean energy, the Bank adopts the Clean Energy Emission Reduction (CLEER) Tool. A simplified and user-friendly calculator based on internationally accepted methodologies, enabling users to calculate emissions reduced or avoided from clean energy activities. CLEER uses up-to-date methodologies and emissions factors from the IPCC, the GHG protocol, and other internationally accepted guidance for estimating GHG emissions and reductions. See <https://www.cleertool.org/>

## Project Results

- As some of the project are active and ongoing, wherever applicable, actual results are reported. However, in most instances, target or expected development results are reported against the predefined core sector and thematic indicators at project formulation and preparation.

# Annex II - IsDB Exclusion List under the Sustainable Finance Framework

IsDB follows the principles of Shariah and as such is not involved in any financing of alcohol, gambling, adult entertainment, or weapons.

In addition, the following kinds of financing is excluded as potential use of proceeds under IsDB's Sustainable Finance Framework:

- Upstream fossil fuel extraction and production (including gas, coal and oil)
- New standalone fossil fuel electricity production
- Energy efficiency of coal infrastructure
- Energy efficiency projects that lead to an increase in CO<sub>2</sub> emissions (through capacity expansion and increased output as a result of the project/investment)
- Processing, storing, marketing of gas, coal, and oil
- Refining of oil
- Nuclear power generation and related assets
- Distribution or transport of fossil fuels
- Construction, maintenance or expansion of roads
- Heavy duty vehicles, infrastructure for fossil fuels (e.g., fuel stations) or bunker fuelled shipping infrastructure
- Landfill construction or expansion
- Any activities involving deforestation
- Palm Oil related activities



**Antalya Light Rail Project (Phase II)**

**\$32.6 million financed by IsDB**

## Authors

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