



# Asian Development Bank Green and Blue Bond Second Opinion

August 10, 2021

**The Asian Development Bank (ADB) is a regional development bank, based in Manila.** It is owned by the region's 68 member governments and assists its members by providing loans, technical assistance, grants, and equity investments to promote social and economic development. The largest recipient countries in 2019 were China, Indonesia, Bangladesh, Pakistan and India. The region's energy systems are still heavily reliant on fossil fuels.

**The green and blue bond framework covers mitigation (renewable energy, energy efficiency, sustainable transport), adaptation, and projects which support marine and coastal ecosystem management, restoration, pollution control and sustainable coastal and marine development.** Some of these categories are indirectly linked to fossil fuel use. ADB informed us that the use of palm oil for the production of biofuel is not eligible. Both new financing and refinancing are permitted, and both OPEX and CAPEX. The issuer has a pipeline of projects in place already, partly based on previous green bond issuances. Project screening and impact assessments are robustly undertaken, in line with what is expected from a multilateral financial institution.

**ADB's inclusion of blue economy projects is commendable and shines a light on a sector which is often undervalued and overlooked.** While the blue category selection criteria lack detail in places, previous thematic issuances and solid corporate safeguards suggest the selection of projects will be ambitious. Categories which may or may not be very ambitious depending on the local context include waste management, agricultural adaptation and energy efficiency projects.

**The framework is considered to be in alignment with the Green Bond Principles but could in places be more robust.** The framework's selection procedure could be improved by introducing life-cycle analysis and consideration of rebound effects. As for management of proceeds, investors should be aware that by permitting government-related securities, temporary investments could be invested in fossil-fuel backed portfolios.

**ADB has a considerable focus on climate adaptation and resilience but its corporate climate ambitions are not best-in-class.** The bank has been slow to adopt policies on fossil fuels and it does not have targets for increasing specific categories in its lending portfolio (such as renewable energy). ADB has begun internally preparing to eventually follow the TCFD recommendations.

Based on an assessment of the framework's alignment with the Green Bond Principles, the project categories and ADB's governance, ADB's green and blue bond framework receives **CICERO Medium Green** shading and a governance score of **Good**. To improve, ADB could more fully adopt scenario analysis in its climate risk assessments, sign up to and implement the TCFD's principles, and start reporting on emissions from its portfolio (Scope 3) - in line with global best practice.

## SHADES OF GREEN

Based on our review, we rate ADB's green and blue bond framework as **CICERO Medium Green**.

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



## GREEN BOND PRINCIPLES

Based on this review, this framework is found in alignment with the principles.





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# 1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated June 2021. This second opinion remains relevant to all green bonds and/or loans issued 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 client 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 client'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 the 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 all shades of green projects 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

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green bond are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green bond 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 ADB's green and blue bond framework and related policies

The Asian Development Bank (ADB) is a regional development bank, based in Manila. It is owned by the region's member governments and assists its members by providing loans, technical assistance, grants, and equity investments to promote social and economic development. It was established in 1966 and has 68 members countries. At end of 2019, ADB's total assets were \$222 billion.

In 2019 it provided \$21.64 billion in loans, grants, equity investments and guarantees. It also provided technical assistance and managed several trust funds. The largest recipient countries in 2019 were China, Indonesia, Bangladesh, Pakistan and India. Transport was by far the most important sector in 2019 (35% of commitments), followed by public sector management (14%), energy (12%), agriculture (10%) and finance (10%).

### Environmental Strategies and Policies

By 2030, ADB aims to have at least 75% of its committed operations (on a 3-year rolling average, including sovereign and non-sovereign operations) addressing climate change mitigation and adaptation, and climate finance from ADB's own resources is targeted to reach \$80 billion for the period 2019–2030 (the issuer has clarified that this corresponds to about 30% of its annual portfolio). Although the majority of the Bank's energy lending portfolio is in transmission & distribution and renewables, it is still involved in financing fossil fuel infrastructure (its new draft energy policy signals the exit from coal, oil and natural gas exploration and extraction activities). The bank has a number of projects and trust funds dedicated to climate mitigation and resilience activities.

In May 2019 the bank launched an 'Action Plan for Healthy Oceans and Sustainable Blue Economies' for Asia and the Pacific alongside an ADB Oceans Financing Initiative. The Plan and Initiative aim to support the protection and restoration of marine ecosystems while promoting inclusive livelihoods, in line with SDG 14 (life below water).

Emissions targets, reporting and disclosure: The ADB does not currently have a target in place for GHG reductions. It publishes a Sustainability Report every two years, the most recent one being from December 2020. It reports that greenhouse gas reductions from project investments totalled almost 13 million tonnes CO<sub>2</sub> equivalent in 2019, up from 2.4 million in 2018. We understand that part of the reason for the increase in reductions is that the 2018 figure included energy sector project emissions only while 2019 numbers include all projects which reported GHG emission reductions in their results. ADB informs us that it uses 'Guidelines for Estimating Greenhouse Gas Emissions of ADB Projects' to report on project emissions<sup>1</sup>. The bank reports on Scope 1, 2 and 3 emissions (but Scope 3 covers staff travel only), according to the GRI. ADB's GHG inventory does not include GHG emissions from its investment portfolio, although we understand that work is currently being undertaken to develop such a methodology. ADB has not yet engaged with the Task force for Finance Related Disclosures (TCFD) and does not use scenario analysis in its climate risk assessments. ADB informed us it has initiated work on TCFD recommendations, including forming an internal working group.

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<sup>1</sup> See: <https://www.adb.org/documents/guidelines-estimating-ghg-energy-projects> and <https://www.adb.org/documents/guidelines-estimating-ghg-emissions-adb-transport-projects>



The bank's operation plan for climate change has three pillars: (i) Climate change mitigation increased (ii) climate and disaster resilience built, and (iii) environmental sustainability enhanced. It works with member countries to achieve objectives in these areas. Many of the bank's member countries, particularly low-lying and small island developing states, are highly exposed and vulnerable to natural hazards and impacts of climate change. As a result, climate risk and resilience are important components of ADB's strategy, in line with the Sendai Framework for Disaster Risk Reduction. The bank's operational framework has guidance on integrating resilience and climate change in projects.

Climate change risks and other social and governance aspects (e.g., poverty reduction, gender, labour, and anticorruption) are addressed during project preparation in accordance with ADB's operational policies and strategies. The safeguards require ADB borrowers to promote reduction of GHG emissions and projects that produce significant quantities of GHG emissions (the bank has a general threshold for 'significant' of 100,000 tons CO<sub>2</sub> eq of Scope 1 and 2 emissions per year) must quantify direct and indirect GHG emissions. All ADB projects are screened for physical climate risks and those found to be medium or high risk are then subject to a detailed climate risk and adaptation assessment.

ADB's projects have to conform with safeguards – specifically ADB's Safeguards Policy Statement (SPS) (2009) covering environment (SR1), involuntary resettlement (SR2) and indigenous people (SR3). The policy aims to (i) avoid adverse impacts of projects on the environment and affected people, where possible; and (ii) minimize, mitigate, and/or compensate for adverse impacts when avoidance is not possible. The policy is implemented through a process of impact assessment, planning, and mitigation. It is managed by ADB's own safeguard specialist and safeguard documents are disclosed to the general public in a form, manner, and language accessible to them. All ADB investment projects are screened and categorized on a sliding scale of A to C, based on the significance of potential impacts or risks, or categorized as financial intermediary at the project identification stage.

ADB works to implement sustainability measures in its own operations: it has achieved certifications in International Organization for Standardization (ISO) 14001, ISO 50001, and Occupational Health and Safety Assessment Series (OHSAS) 18001, and Leadership in Energy and Environmental Design (LEED) gold certification for operating and maintaining green buildings in ADB headquarters. It sources its electricity from renewable sources (geothermal and solar (the latter on-site)) and monitors its headquarter's GHG emissions and energy. The ADB field offices owned by ADB (including Bangladesh and India Resident Missions) are ISO certified. Work is ongoing to fully inventory emissions for all field offices (ADB owned or otherwise) and to make existing voluntary initiatives mandatory.

The ADB has since 2011 worked with other Multilateral Development Banks (MDBs) on a joint approach for tracking and reporting of climate change mitigation and adaptation finance. This joint approach is a harmonized methodology for reporting on climate change finance. Based on the principles of the general typology of mitigation and adaptation activities included in the joint MDB approach, ADB has been assessing, tracking and reporting its annual climate change mitigation and adaptation finance since 2011. The ADB is a signatory to *A Framework and Principles for Climate Resilience Metrics in Financing Operations* developed by regional development banks.

The bank has already issued several green bonds in different currencies, with its inaugural green bond framework dating from 2014. A total of about \$7.6 billion have been raised so far through the bank's green bond programme, with the vast majority of proceeds (just under 70%) funding projects in the transport sector (the next category, taking up 23% was renewable energy). The current framework expands the scope of financing compared to the 2014 framework by including investments in sectors in or impacting on the marine environment. In this Second Opinion, CICERO Green has not validated already financed projects but rather assessed the updated framework (for blue and green bonds)' ability to support low-carbon and climate resilient growth in the region.



### Use of proceeds

ADB has developed its framework to be in line with the Green Bond Principles and UNEP's Sustainable Blue Economy Finance Principles. This second party opinion analyses alignment with the former only.

Green bonds include investments that support climate change mitigation (renewable energy, energy efficiency, and sustainable transport) and climate change adaptation (energy infrastructure resilience, water supply and infrastructure, agriculture, and transport). Blue bonds can cover investments that support marine and coastal ecosystem management and restoration (management, restoration, sustainable fisheries, and sustainable aquaculture), pollution control for marine and coastal environments, including the rivers that drain to the ocean (solid waste management, non-point source pollution, and wastewater management), and sustainable coastal and marine development (sustainable tourism, sustainable ports and shipping, and marine renewable energy). Eligible distances from the project site to the ocean are described, where appropriate.

Both investments in the construction of new assets, as well as maintenance, enhancement, improvement or repair of existing assets are eligible. Projects from all risk ADB categories (A-C) are eligible, provided they conform with the Bank's safeguard policy.

In some instances, a project may be inherently both green and blue and therefore eligible for both blue and green bond issuance allocation. When such circumstances arise, ADB will determine which type of bond (green or blue) to allocate the project towards based on the primary project objectives, target results, and market demand. No project shall be allocated to both green and blue bonds: projects shall be allocated fully either the green bond portfolio or to the blue bond portfolio.

Exclusions: no fossil fuel projects shall be supported. The full list of exclusions is listed in ADB's safeguard policy and include weapons, tobacco, alcohol, gambling, and unsustainable fishing and forestry practices.

### Selection

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

Eligible projects are identified by ADB energy, climate change, transport, and environmental specialists on a continuous basis firstly using the joint 2011 MDB approach for tracking and reporting of climate change mitigation and adaptation finance and then by taking into account the additional selection criteria, including the project's classification, as outlined in the use-of-proceeds section.

The green and blue bond working group meets on a quarterly basis. Sector experts select and confirm eligibility and then the climate and environment team check to see if in compliance with SPS and other criteria set out in internal frameworks, such as whether a project has an ongoing compliance case. Projects are nominated for discussion by sector exports and the group decides to include projects based on consensus. The precautionary principle is normally followed to exclude projects where there is any doubt. A list of eligible projects is summarized in the annual impact report which obtains sign off from senior management (i.e., Director General of the Sustainable Development and Climate Change Department). ADB informs us that selection process discussions are not documented but that the outcomes are.

All of ADB's lending has to comply with the bank's environmental and social safeguard policies. Life-cycle analysis is currently not part of the selection screening process.



### Management of proceeds

CICERO Green finds the management of proceeds of ADB to be in accordance with the Green Bond Principles.

Green and blue bond net proceeds will be allocated within ADB's treasury to special sub-portfolios that will be linked to ADB's lending operations to "eligible projects" as described above. So long as the green and blue bonds are outstanding, the balance of the relevant sub-portfolio will be reduced at the end of each quarter by amounts matching disbursements made during the quarter in respect of eligible projects. Pending such disbursement, the sub-portfolio will be invested in liquid instruments, consistent with ADB's liquidity policy (highly-rated cash deposits and low-risk securities comprising mostly of government and government-related securities, and in conformity with ADB's general Exclusions List). ADB does not have a maximum time frame for disbursing proceeds but informs us that they ensure that their pool of eligible project loans well exceeds the proceeds from bond issuances.

### 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.

Information about ADB projects and green and blue bond issuance will be available on the ADB website. Green bond and blue bond newsletters will provide allocation and impact reporting, specific example eligible projects and relevant impact indicators. All financed projects will be listed and impacts shown on a project-by-project basis. If co-financing, ADB will list the total project cost and loan approval amount. Reporting of GHG emission reductions will be based on the Multilateral Development Banks' Harmonized Approach to GHG accounting<sup>2</sup>.

Development effectiveness and compliance with environmental, social and governance aspects (as covenanted in the legal agreement) is monitored on an ongoing basis by ADB during project implementation in accordance with ADB's operational policies and strategies. Each eligible green or blue project loan will also have applicable environmental and social safeguard documents which will be available on ADB's website. There will be no external verification of allocation or impacts.

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<sup>2</sup> The Framework dictates that ex-ante estimates of GHG emissions (and reductions) should be provided on a project gross/net basis and that funders should list total project cost and own funding contribution. Details can be found here:

[https://unfccc.int/sites/default/files/resource/International%20Financial%20Institution%20Framework%20for%200a%20Harmonised\\_rev.pdf](https://unfccc.int/sites/default/files/resource/International%20Financial%20Institution%20Framework%20for%200a%20Harmonised_rev.pdf)



### 3 Assessment of ADB's green and blue bond framework and policies

The framework and procedures for ADB's green and blue bond 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 ADB should be aware of potential macro-level impacts of investment projects.

#### Overall shading


Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in ADB's green and blue bond framework, we rate the framework **CICERO Medium Green**.

#### Eligible projects under ADB's green and blue bond framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the "overall environmental profile" of a project should be assessed and that the selection process should be "well defined".

Under ADB's framework, both CAPEX and OPEX are eligible, and both refinancing and the financing of new projects (of green projects) is possible although the issuer expects the majority of proceeds to go towards new projects. The planned lookback period for refinancing is one year.

#### Green Bond Categories

Category	Eligible project types	Green Shading and some concerns
<b>Renewable Energy</b> 	<p>This is defined as an energy resource that can be naturally replenished. Qualifying renewable energy projects include those that support solar, wind, geothermal or small hydro energy generation<sup>3</sup>.</p> <p>Renewable energy projects relying on ocean resources (e.g., tidal, offshore wind, wave, ocean thermal energy) and renewable energy projects that support blue economy sectors (e.g.,</p>	<b>Medium Green</b> ✓ Renewable energy has a crucial role to play in decarbonizing Asian economies but some technologies have sustainability pitfalls. Rather than using emission thresholds to further refine the selection, the issuer instead relies on corporate policies and safeguards to guide the selection. Whilst a requirement for alignment with internal policies is understandable, the lack of

<sup>3</sup> Small hydro is quantified as equal to or below 20 MW. Any hydro project with a greater output will be excluded from the green bond.





aquaculture and fishing) are included in blue bonds

explicit additional criteria is barrier to transparency for investors

- ✓ Biofuel and bioenergy projects are permitted. While bioenergy/fuel from waste is considered sustainable, food crops (including palm oil) are seen as an unsustainable type of biomass because of impacts on land use and deforestation. The issuer confirmed that the use of palm oil for the production of biofuel is not eligible for green bond financing. We understand that first-generation biofuels are not eligible, as per the joint MDB list of mitigation activities.
- ✓ Hydropower, while a renewable energy source, can have emissions (from reservoirs) as well as environmental and social impacts associated with it. The ADB's has had a policy on involuntary resettlements since 1995.
- ✓ We understand that ADB does not permit geothermal power plants with high carbon dioxide content in the geothermal fluid that cannot be reinjected. Although no threshold is provided, ADB carries out an examination of material lifecycle sources.
- ✓ Waste-to-energy projects are permitted. Whilst such projects can represent an effective way of handling waste and producing energy in resource-poor locations, they emit local as well as globally damaging pollutants.
- ✓ The category includes transmission/distribution projects. Investors should be aware that although these will be selected to enable the roll-out of renewable sources, they may also support mixed grids which include fossil fuels.

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**Energy efficiency** Qualifying projects include demand side energy efficiency measures, such as street lighting improvements, or supply side energy efficiency measures, such as smart metering installation, but will exclude fossil fuel-related projects.



**Light Green**

- ✓ It is positive that the issuer has excluded fossil fuel-related projects from this category, as such projects can



encourage lock-in of fossil fuel infrastructure

- ✓ However, investors should be aware that efficiency measures can be indirectly tied to fossil fuels – for instance as part of the infrastructure in a value chain that otherwise is fossil fuel intensive
- ✓ No thresholds are required, which means that even relatively minor efficiency improvements are eligible
- ✓ Rebound effects are a concern with energy efficiency projects: improvements which lower energy costs can induce increased energy use and partially offset the energy savings. This in turn can have the end result of lower reductions in GHG emissions than anticipated and is a risk implementers should screen for and seek to mitigate through e.g. the use of smart meters, etc.

**Sustainable Transport**



A sustainable transport system is one that is environmentally friendly, accessible, safe, and affordable. A sustainable transport system minimizes emissions, use of land, waste, and noise. Qualifying projects include those that support:

- (a) urban public transport projects;
- (b) inter-urban railway projects;
- (c) non-motorized transport (including cycling lanes and those that support pedestrian mobility); and
- (d) projects that promote low-carbon travel (e.g. electric mobility).

The transport of fossil fuels is ineligible.

**Medium to Light Green**

- ✓ A shift to sustainable (and mass) transport systems is positive, but large construction projects, e.g., for new railway tracks, can have substantial emissions and environmental impacts. Also, significant fossil fuel elements can remain in the system
- ✓ Urban public transport projects using fossil fuels are eligible, as are hybrid vehicles. No emission thresholds have been defined.
- ✓ Inter-urban railway projects can run on fossil fuels, although the issuer points out that electrification is being scaled up across modes
- ✓ The issuer’s definition of ‘low-carbon travel’ is wide-ranging and could include systems which represent marginal improvements

**Adaptation: Energy Infrastructure Resilience**

Climate change will impact on energy infrastructure resilience due to floods and tropical storms causing damage to generation plants, transmission and distribution systems, or

**Dark Green**

- ✓ The issuer has clarified that adaptation measures can be a combination of



due to changing precipitation patterns affecting the generation capacity of hydropower plants. Qualifying adaptation projects include those that help Developing Member Countries improve their energy infrastructure resilience (e.g., designing wind turbines to cope with typhoons).

Energy infrastructure projects will not be fossil fuel related.

structural (such as engineering-based) or non-structural measures

It is positive that the issuer has excluded fossil fuel-related projects from this category, as increasing the resilience of such assets can prolong their lifetime and encourage lock-in  
Any construction activity can cause local pollution, and 'grey' infrastructure often cause GHG emissions through the use of cement and virgin materials. We understand that ADB is aware of this and seeks to adopt 'green' – or natural- infrastructure solutions whenever possible.

**Adaptation:  
Water Supply  
and Other Urban  
Infrastructure  
and Services**

Qualifying adaptation projects include those that improve water security or the livelihoods of vulnerable urban populations. It includes, for example, climate-proofing water supply infrastructures and provision of urban flood protection.



**Dark Green**  
✓ The same concern about the impacts of construction activities and use of GHG-intensive materials apply here as well  
✓ It can be difficult to define what constitutes a climate adaptation measure and as such this category could include fairly standard water supply/infrastructure projects  
✓ Wastewater facilities are positive for the local environment but can emit significant amounts of greenhouse gases if they are powered by fossil fuels  
✓ The issuer has clarified that projects which are related to industrial and power sector facilities are not eligible

**Adaptation:  
Sustainable  
Transport**

Qualifying adaptation projects include those that reduce the vulnerability of transport infrastructure to climate change impacts (e.g., by increasing the embankment heights and bridge clearances, and improving storm water drainage).



Projects to improve the environmental performance of ports and shipping are included in blue bonds

**Light Green**  
✓ Adaptation measures related to roads and airports are positive in themselves but may prolong the use of fossil-based infrastructure and lead to increases in GHG emissions as more and more prolonged activity is encouraged  
✓ ADB informs us that climate proofed projects that lead to increased GHG emissions will not be considered or nominated for green bonds issuance under this category. However, there is a risk of projects related to climate



adaptation of roads could be included under the framework – while these projects could be excluded based on potential increase in emissions, the projects could still be associated with currently emission intensive road transportation. We note that ADB informed us of its efforts to scale up electric mobility.

**Adaptation:  
Agriculture**



Qualifying adaptation projects would include those that (i) promote improved water and soil management practices; (ii) strengthens agriculture infrastructure such as irrigation systems; (iii) promotes research, development and use of climate-resilient crop varieties and planting techniques; (iv) diversification of climate-sensitive livelihood activities; and (v) improved use of early warning systems to inform agricultural planning.



**Medium to Dark Green**

- ✓ Making agriculture, and the livelihoods that depend on it, resilient to climate change is crucial. ADB’s approach to defining resilience and adaptation in agriculture appears detailed and well thought-through.
- ✓ Agricultural activity may lead to deforestation. We understand that deforestation is covered in ADB’s safeguard policy which states that projects which impact natural habitats should generally speaking be avoided (or impacts minimized).
- ✓ ADB’s safeguard policy prohibits investments in commercial logging operations and the purchase of logging equipment for use in primary tropical moist forests or old-growth forests. Moreover, the joint MDB policy on mitigation activities excludes plantations related to first-generation biofuels.
- ✓ Cattle ranching is a permitted project activity, but only when managed in what ADB deems to be a sustainable manner (e.g. better rangeland management in Mongolia). The issuer informed us it is unlikely that such projects will be considered under the framework, regardless of how the innovative the adaptation aspect of it would be.

Table 1a. Eligible green bond project categories

**Blue Bond Categories**



Category	Eligible project types	Green Shading and some concerns
<b>Ecosystem and Natural Resource Management</b>   	<ul style="list-style-type: none"> <li> <b>Ecosystem management and natural resources restoration.</b> Sustainably manage, conserve and/or restore the health and resilience of coastal, marine, and river ecosystems. Qualifying projects include marine protected area establishment and management; management and restoration of coral reefs, mangroves, coastal wetlands, salt marshes, river embankments, and seagrasses; and eradication or control of invasive species. Projects must be within 100km of the coast, rivers that drain to the ocean, and/or in the marine environment.         </li> <li> <b>Sustainable fisheries management.</b> Improve environmental sustainability of fisheries and the seafood value chain. Qualifying projects include ecosystem-based fisheries management; improved cold storage and processing, certification schemes, and traceability; integration of bycatch exclusion devices and other fishing gear modification programs; and using policy and technology to strengthen traceability of seafood supply chains.         </li> <li> <b>Sustainable aquaculture.</b> Improve environmental sustainability of aquaculture, mariculture, and algaculture. Qualifying projects include development of new or upgrades to existing infrastructure for sustainable aquaculture, algaculture, or mariculture; development of alternative (not wild-caught) feeds for aquaculture; and development of new technologies and systems to reduce pollution from aquaculture systems and supply chains.         </li> </ul>	<b>Medium to Light Green</b> <ul style="list-style-type: none"> <li>✓ The world’s oceans are a vital environmental resource but are often undervalued. The issuer’s focus on the blue economy and on sustainable management of marine ecosystems is therefore welcome.</li> <li>✓ Methods for eradication/control of invasive species can in some cases cause damage to the wider environment (in addition to being ineffective) however we understand that ADB’s policy in this area relies on non-toxic approaches.</li> <li>✓ Sustainable fishing and aquaculture have the potential to produce sources of protein with a lower carbon and environmental footprint than meat. This will be crucial as the global population grows and consumption patterns become more resource-intensive. However, overfishing is a serious concern, and both fishing and aquaculture present sustainability risks – through e.g. the use of unsustainable or deforestation-causing (soy) feed in aquaculture feed and through fishing practices based on over-exploitation and using a fossil-fuel based fleet of vessels. Certification schemes and ‘sustainable practices’ can go some way towards allaying those concerns but have been criticized for lack of stringency and loopholes.</li> <li>✓ The issuer has clarified that the majority of sustainable fishing projects do not involve the purchase of fishing vessels, with the exception of e.g. enforcement vessels. In addition, ADB clarified it will not contribute to increased fishing capacity.</li> <li>✓ The issuer’s planned investments in farm-raised fish for aquaculture feed is an improvement over wild-caught feed, but the lack of exclusion criteria related to soy is a concern due to soy</li> </ul>



cultivation’s link to deforestation. The issuer informed us it is actively promoting feed alternatives and the minimization of soy in feeds.

- ✓ According to the issuer, certification schemes are not available in all locations and eligibility for funding will in those cases depend on ADB’s interpretation of ‘sustainable’. In some cases, this means an ecosystem-based fisheries approach - which has a holistic approach to marine resources and includes the precautionary principle - but may also include less stringent management systems.
- ✓ Plastic pollution related to fishing is a concern: we understand that projects financed by ADB have to follow standard safeguards and will have in place measures to reduce plastic pollution (including capacity/knowledge building)

### Pollution control



- **Solid waste management. Reduce Medium Green**

marine debris and/or associated impacts to marine life. Qualifying projects include integrated solid waste management systems and infrastructure; rehabilitation of coastal or riverside landfills or open dumps; and improvement of stormwater management systems.

Projects must be within 50 km of the coast or a river that drains to the ocean.

- **Resource efficiency and circular economy. Reduce marine debris and/or associated impacts to marine life. Qualifying projects include implementation of waste exchange programs; new business models that ‘design-out’ plastic waste; green supply chain management programs to reduce plastic waste; and innovative technologies or approaches that reduce single-use**

- ✓ Measures to improve landfills and dumps are welcome, but should be done with as low an impact on the local environment as possible – both during construction and after. Green (natural) infrastructure solutions should be sought whenever possible (rather than ‘grey’).
- ✓ The same concern applies to measures to improve wastewater pollution and treatment systems. For these, fossil-fuel energy generation (to power treatment plants) is also a concern. To counter this, the issuer could consider requiring the installation of on-site renewable energy generation.
- ✓ The construction of landfills is eligible under this framework, provided they reduce marine debris compared to the status quo. Properly constructed landfills are positive for local pollution, but also a significant source of methane (a potent GHG). ADB informs us that it supports circular economy and 3R



plastic production and consumption.

- **Non-point source pollution.**

Reduce pollution (e.g., nutrients, sediments, and chemicals) of coastal and/or marine environments. Qualifying projects include sustainable agriculture programs that reduce inputs of fertilizer and agrichemicals; riparian zone protection and reforestation to prevent soil erosion on rivers that flow to the ocean; and new technologies to reduce agricultural pollution from entering coastal and marine waters. Projects must be within 200 km of the coast or within 50 km of rivers (and their tributaries) that flow to the ocean.

- **Wastewater management.** Reduce wastewater pollution of coastal and/or marine environments. Qualifying projects include wastewater collection and treatment systems built or upgraded; new technologies or systems to prevent wastewater pollutants from entering coastal and marine waters. Projects must be within 100 km of the coast and/or the marine environment.

approaches first, and integrated solid waste management (ISWM) programs/investments. In exceptional circumstances, particularly in small island developing states, engineered sanitary landfills or waste to energy may be one component of a larger ISWM and 3R/circular economy program. Landfills are build according to best available technology (BAT).  
✓ Improvements to the waste handling sector, although positive in reducing pollution, can lead to increased volumes of waste to the extent that they create a 'license to produce' and extend the lifetime of landfills. This risk can be mitigated if steps are simultaneously taken to reduce consumption of virgin materials and to recycle. We understand ADB is promoting 'reduce, reuse, recycle' approaches and circular business models.  
Waste-to-energy projects are permitted under this category. Whilst such projects can represent an effective way of handling waste and producing energy in resource-poor locations, they emit local as well as globally damaging pollutants.

**Sustainable coastal and marine development**



- **Ports and shipping.** Increase environmental performance and sustainability of maritime infrastructure and transport. Qualifying projects include reduction and mitigation of ship strike, invasive species, pollution, and other impacts to the ocean.
- **Marine renewable energy.** Reduce GHG emissions and increase contribution of marine and offshore renewable energy

**Light to Medium Green**

✓ Shipping is a significant GHG producing sector globally. We understand that ADB increasingly is focusing on measures to reduce fossil fuel consumption in ports. Best practice in this area include just-in-time practices and reduced waiting times in ports, and the uptake of renewable fuels as soon as they become commercially available.  
✓ ADB confirms that proceeds will not go towards additional fossil fuel infrastructure.



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(e.g., offshore wind, tidal, wave, or ocean thermal energy) and renewable energy projects that support blue economy sectors (e.g., aquaculture and fishing). Increase capture and storage of GHG emissions using marine-based solutions and technologies.	✓ Ocean thermal energy requires large seawater pumps and piping systems and can have negative impacts on the local environment. ADB informed us it will not develop ocean thermal energy infrastructure in sensitive marine habitats.
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Table 1b. Eligible blue bond project categories

## Background

Asia is the world's most populous region, home to some 4.6 billion people. It contains a large share of the world's poor: 263 million living on less than \$1.90 a day and 1.1 billion on less than \$3.20 a day<sup>4</sup>.

Asia Pacific is the highest GHG emitting region in the world, responsible for about three times the emissions of the next region (North America)<sup>5</sup>. Yet on a per capita basis, emissions are low and are likely to grow as Asia's economies continue to develop. The vast majority of coal consumption takes place in Asia and is not predicted to decrease significantly in the next few years<sup>6</sup>.

The region is also highly vulnerable to the impacts of climate change. Low-lying regions are already experiencing the effects of rising sea levels, erratic and changed weather patterns are significantly impacting agriculture, and extreme events (such as typhoons) are becoming more frequent. The region is facing significant environmental pressures, including air pollution, freshwater and marine pollution, inadequate waste management, deforestation, unsustainable fishing practices, land and coastal ecosystem degradation, and biodiversity loss.

Under the Paris Agreement, 189 countries committed to nationally-determined contributions (NDCs) to transform multiple carbon-intensive sectors<sup>7</sup>. Also, as part of the Paris Agreement, developed countries committed to providing financial resources to assist emerging markets with respect to both mitigation and adaptation and achieving their NDCs. However, only seven countries in the Asia-Pacific region submitted updated NDCs in 2020, and insufficient available funding is seen as an impediment to further NDC developments<sup>8</sup>. Eight countries in Asia and the Pacific region (Bhutan, China, Fiji, Japan, Marshall Islands, New Zealand, Singapore, Republic of Korea) have announced 2050 carbon neutrality targets, and China 'by 2060 or earlier'.

## Governance Assessment

Four aspects are studied when assessing the ADB's governance procedures: 1) the policies and goals of relevance to the green bond 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

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<sup>4</sup> Source: ADB <https://www.adb.org/who-we-are/main>

<sup>5</sup> Source: Statista <https://www.statista.com/statistics/205966/world-carbon-dioxide-emissions-by-region/>

<sup>6</sup> See e.g. <https://www.iea.org/reports/coal-2020/demand>

<sup>7</sup> Source; <https://unfccc.int/topics/climate-finance/the-big-picture/climate-finance-in-the-negotiations>

<sup>8</sup> <https://www.unescap.org/resources/progress-ndc-implementation-asia-pacific-framework-and-preliminary-findings>





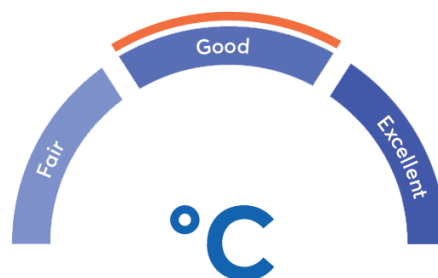
grading is given on governance strength falling into one of three classes: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.

The ADB is a well-established multilateral funding body with a number of partnerships in place with other international financial institutions: as such it has – broadly speaking – well developed and sophisticated environmental policies and safeguards in place. However, in certain areas it is not as ambitious as one could have expected: for instance, it has not yet adopted a full scaling back of investments in fossil fuels, nor has it implemented TCFD’s recommendations or set itself a GHG reduction target.

The green and blue bond framework has been developed with guidance from The Sustainable Blue Economy Finance Principles. While the principles are high level and our analysis has not assessed the quality of the alignment, we see the reference to these principles as a strength of ADB’s framework.

The bond framework’s selection procedure could be improved by introducing life-cycle analysis and consideration of rebound effects. As for the management of proceeds, investors should be aware that by permitting government-related securities, temporary investments could be invested in fossil-fuel backed portfolios. Finally, the framework’s reporting plans are not very detailed but previous thematic bond issuances have been accompanied by regular, public and detailed reporting – which bodes well for the likely reporting under this new framework.

The overall assessment of ADB’s governance structure and processes gives it a rating of **Good**.



### Strengths

ADB plays a crucial role in the financing of sustainable projects in the Asia Pacific region and has the potential to be a trendsetter and role model for other regional banks. As such, their green and blue bond framework should be welcomed for showing ambition and intention for promoting mitigation and adaptation projects in the coming years which may have additional positive spillover and leverage effects.

The world’s oceans are a vital environmental resource but are often undervalued- both from a climate change and broader resource perspective. ADB’s inclusion of blue economy projects in the framework is therefore welcome.

The bank’s safeguard policies, focus on adaptation, and its resilience screening of projects are impressive.

### Weaknesses

We find no obvious weaknesses in ADB’s framework.

### Pitfalls

Some of the eligibility criteria are broadly worded and as a result it can be difficult to assess the climate impacts of some of the categories. The issuer’s energy efficiency and adaptation categories are examples of such categories, where impacts may range from significant to minor and a good climate impact cannot be guaranteed on the basis of the criteria alone. However, impacts will be possible to assess once concrete projects have been selected and ADB’s track record of detailed reporting provides comfort in this regard.



Careful consideration should be given to projects that might have substantial adverse effects, such as projects associated with cattle ranching, adaptation of roads or fossil fuel related shipping infrastructure. It is the responsibility of the issuer to implement the framework according to its green ambitions.

ADB's corporate climate ambitions are not best-in-class and may influence the implementation of the green and blue bond framework: The bank has been slow to adopt policies on fossil fuels, although its new energy policy (to be confirmed) is likely to be an improvement compared to the status quo. It does not have targets for increasing specific categories in its lending portfolio (such as renewable energy), an approach which other likeminded institutions have adopted. And it has not yet engaged with the Task force for Finance Related Disclosures (TCFD). Since the financial sector's carbon footprint is concentrated in its investment/lending portfolio, we encourage ADB to urgently align itself with the TCFD and implement a methodology to monitor investment portfolio Scope 3 emissions. ADB informed us it has initiated work on TCFD recommendations, including forming an internal working group.



# Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Asian Development Bank green and blue bond framework – July 2021	
2	ADB Policy Paper, 2009: Safeguard Policy Statement	ADB’s Safeguard Policy
3	ADB STRATEGY 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific, JULY 2018	
4	ADB Annual Report 2019	
5	Strategy 2030: Operational plan for priority 3: tackling climate change, building climate and disaster resilience and enhancing environmental sustainability, 2019–2024	
6	ADB Climate Change Operational Framework 2017–2030	
7	ADB Sustainability Report 2020	
8	ADB Sustainability Report 2020: Part II Detailed GRI content index	
9	ADB Results Framework Indicator Definitions, August 2019	
10	Eligible project lists for Green ( <a href="https://www.adb.org/sites/default/files/page/149831/adb-green-bonds-eligible-projects-20210331.pdf">https://www.adb.org/sites/default/files/page/149831/adb-green-bonds-eligible-projects-20210331.pdf</a> ) and Blue bonds	Pipeline of green and blue projects



## 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 and the International Institute for Sustainable Development (IISD).

