# **PROJECT INFORMATION DOCUMENT**

ON A PROPOSED RESULTS-BASED GLOBAL ENVIRONMENT FACILITY FINANCED GRANT (NGI)

## IN THE AMOUNT OF US\$13.76 MILLION

TO THE REPUBLIC OF INDONESIA

FOR A

# Indonesia Coral Bond Project (P181486)

Disclaimer: THE FOLLOWING IS A SUMMARY OF A PROJECT WHICH HAS BEEN APPROVED IN CONCEPT AND IS SUBJECT TO COMPLETION AND AMENDMENT. IT IS NOT AN OFFER OR INVITATION TO SELL THE NOTES OR A SOLICITATION OF AN OFFER TO BUY THE NOTES, NOR DOES IT CONSTITUTE ANY FORM OF ADVICE. THIS SUMMARY IS SEPARATE FROM, AND SHOULD NOT BE READ IN COMBINATION WITH, ANY OFFER OR SALE OF THE NOTES, WHICH WILL BE MADE IN COMPLIANCE WITH APPLICABLE LAWS AND UNDER ENTIRELY SEPARATE LEGAL DOCUMENTATION AND OFFERING MATERIALS AT THE TIME OF OFFER. POTENTIAL INVESTORS SHOULD NOT SUBSCRIBE FOR ANY NOTES REFERRED TO IN THIS SUMMARY EXCEPT ON THE BASIS OF INFORMATION CONTAINED IN SUCH ENTIRELY SEPARATE LEGAL DOCUMENTATION AND OFFERING MATERIALS AT THE TIME OF OFFER. THIS SUMMARY IS VERY HIGH LEVEL FOR SIMPLICITY AND LEAVES OUT MATERIAL INFORMATION AND DOES NOT INLCUDE ANY LEGAL DOCUMENTATION THAT WOULD GOVERN THE NOTES.

#### INTRODUCTION AND CONTEXT

#### A. Country Context

1. After two decades of political and institutional reforms, Indonesia is a stable democracy that has reduced poverty significantly. It is the world's fourth most populous nation, with 279 million people (2022) living throughout an archipelago of more than 6,000 inhabited islands. Indonesia has recently emerged as one of the world's largest economies, with a gross domestic product (GDP) of over US\$1.3 trillion (2022). Between 2015 to 2019, Indonesia maintained an average real GDP growth rate of 5 percent. Growth fell sharply to 2.1 percent in 2020 following the onset of the global COVID-19 pandemic, but the economy rebounded in 2022 (5.3 percent) and 2023 (5.0 percent) as consumption, exports, and investment improved<sup>1</sup>. The government's goal to eliminate extreme poverty by 2024 has been almost met, yet 16 percent of the population remained poor in 2022<sup>2</sup>, with rural areas in Maluku, Papua and Nusa Tenggara having significantly higher poverty levels than the rest of Indonesia<sup>3</sup>.

2. As the second most biodiverse country in the world<sup>4</sup>, Indonesia's natural resources have contributed to economic growth, but natural capital stocks are at risk. Agriculture, forestry, and fisheries accounted for 12.4 percent of GDP in 2022<sup>5</sup>. However, uncontrolled natural resource exploitation is undermining these economic benefits, leading to habitat degradation, biodiversity loss, and carbon emissions<sup>6</sup>. Over the next 25 years, Indonesia is projected to experience lower land and sea productivity, scarcer renewable natural resource goods and services, and more severe climate change impacts. For example, climate change is predicted to cause a 13 to 29 percent decline in total fish catches by 2050—the strongest reduction of any nation and making Indonesia's fisheries sector one of the most vulnerable in the world<sup>7</sup>. These trends pose substantial risk to Indonesia's sustainable development goals, including the targets to become a high-income country with near-zero poverty by 2045<sup>8</sup>.

#### **B. Sectoral and Institutional Context**

3. Indonesia's blue economy, the largest in Southeast Asia, is valued at US\$256 billion annually<sup>9</sup>. Indonesia's coral reefs and associated ecosystems, such as seagrass meadows and mangroves, are globally significant. Coral reefs, home to 25 percent of all marine life, are also one of the most vulnerable ecosystems in the world with one-third of reef building corals facing extinction. Indonesia is home to 16 percent of the world's coral reefs. These coastal and marine ecosystems are vital for Indonesia's economy (the direct economic contribution of fishing and tourism on coral reefs is estimated at US\$3.3 billion

<sup>&</sup>lt;sup>1</sup> World Bank (2023). "Macro Poverty Outlook: East Asia and the Pacific, Annual Meetings 2023."

<sup>&</sup>lt;sup>2</sup> Poverty, measured at the lower middle-income country line of US\$ 3.20 2011 Purchasing Power Parity per day

<sup>&</sup>lt;sup>3</sup> World Bank (2023). "Indonesia Poverty Assessment: Pathways Towards Economic Security."

<sup>&</sup>lt;sup>4</sup> https://news.mongabay.com/2016/05/top-10-biodiverse-countries/

<sup>&</sup>lt;sup>5</sup> World Bank National Accounts Data. Agriculture, Forestry, and Fishing, Value Added (percent of GDP) – Indonesia. Accessed January 9, 2024.

<sup>&</sup>lt;sup>6</sup> World Bank (2019). "WAVES Partnership Policy Brief: Natural Capital Accounts and Policy in Indonesia."

<sup>&</sup>lt;sup>7</sup> Barange, M. et al. (2018). "Impacts of climate change on fisheries and aquaculture: synthesis of current knowledge, adaptation, and migration options."

<sup>&</sup>lt;sup>8</sup> BAPPENAS (2019). Indonesia Vision 2045.

<sup>&</sup>lt;sup>9</sup> OECD (2021). "Sustainable Ocean Economy Country Diagnostic of Indonesia."

annually<sup>10</sup>), social welfare, including nutrition<sup>11</sup>, and provide significant climate change adaptation and mitigation benefits, for example holding 17 percent of the world's blue carbon reservoir. Climate change and local human activities jeopardize Indonesia's coastal and marine ecosystems, with one-third of reefs in poor condition, and an estimated 40 percent of the country's mangroves and seagrasses degraded or lost.

4. Environmental degradation and climate change have increased the vulnerability of Indonesia's coastal communities to flooding, biodiversity loss, deteriorating fish stocks, and declining viability of coastal agriculture and aquaculture. This will only further widen the poverty gap in coastal villages, which is currently 1.27 percent higher than in non-coastal villages, with the average fisher earning less than the minimum wage<sup>12</sup>.

5. The World Bank's Oceans for Prosperity<sup>13</sup> report demonstrated that the future of Indonesia's oceanic sectors, such as fisheries, tourism, and aquaculture, relies on the health of these natural assets. The report proposed key strategies to ensure a sustainable transition to a blue economy in Indonesia, including the need to improve the management of coral reefs, mangrove forests, and seagrass meadows by investing in Marine Protected Areas (MPAs)' effectiveness and providing a sustainable flow of financing for MPA management. Effectively managed MPAs conserve marine and coastal ecosystem services, contribute to healthy fisheries and the wellbeing of coastal communities<sup>14</sup>, and are a key nature-based solution to promote climate adaptation and mitigation<sup>15</sup>. These outcomes are achieved because effective management of MPAs enhances the resilience of marine ecosystems as evidenced by faster recovery rates following marine heat wave events<sup>16</sup>. These benefits far exceed the capital and operational investment into the MPAs.

6. **The Government of Indonesia (Gol) has established 201 MPAs encompassing 24.1 million hectares (ha)**<sup>17</sup>. These MPAs are the main tool used by Gol to reverse the decline of coral reefs and associated ecosystems. Currently 40 percent of Indonesia's coral reef and seagrass meadow areas and 25 percent of mangrove forests are within MPAs<sup>18</sup>. These MPAs include local MPAs managed by the provincial government and national MPAs managed either by the Ministry of Marine Affairs and Fisheries (MMAF) or the Ministry of Environment and Forest (MoEF). The Gol further aims to expand the MPA network to 32.5 million ha of effectively managed MPAs by 2030 and 97.5 million ha 2045<sup>19</sup>.

7. Globally there is growing recognition of the need to transition from MPA establishment to effective management. Yet up to 70 percent of MPAs globally do not reach their conservation goals<sup>20</sup>,

<sup>&</sup>lt;sup>10</sup> Bartelet et al. (2024). "Estimating and comparing the direct economic contributions of reef fisheries and tourism in the Asia-Pacific."

<sup>&</sup>lt;sup>11</sup> Selig, E. R. et al. (2019). "Mapping Global Human Dependence on Marine Ecosystems."

<sup>&</sup>lt;sup>12</sup> Cahagi, D., and Gurning, R. (2018). "A Review on Indonesian Fishermen Prosperity in the Coastal Area."

<sup>&</sup>lt;sup>13</sup> World Bank (2021). "Oceans for Prosperity: Reforms for a Blue Economy in Indonesia."

<sup>&</sup>lt;sup>14</sup> Nowakowski et al. (2023). "Co-benefits of marine protected areas for nature and people."

<sup>&</sup>lt;sup>15</sup> Jacquemont et al. (2022). "Ocean conservation boosts climate change mitigation and adaptation."

<sup>&</sup>lt;sup>16</sup> Ziegler et al. (2023). "Marine protected areas, marine heatwaves, and the resilience of nearshore fish communities."

<sup>&</sup>lt;sup>17</sup> MMAF (2021). "MPA Management Status in 2020."

<sup>&</sup>lt;sup>18</sup> Amkieltiela et al. (2022). "The rapid expansion of Indonesia's marine protected area requires improvement in management effectiveness."

<sup>&</sup>lt;sup>19</sup> MMAF (2020). "MPA Vision 2030 and Roadmap to MPA Management"; BAPPENAS (2023). "Indonesia Blue Economy Roadmap."

<sup>&</sup>lt;sup>20</sup> Bohorquez et al. (2022). "A new tool to evaluate, improve and sustain marine protected area financing built on a comprehensive review of finance sources and instruments."

including in Indonesia<sup>21</sup>. Recent performance assessment of 61 MPAs in Indonesia showed that implementation processes, outputs and outcomes are not aligned with well-designed plans<sup>22</sup>. The main constraints that the project will address are the current underfunding of MPAs (and marine resources management in general), the current focus on MPA management process rather than outcome measures of success, suboptimal stakeholder engagement and benefits, including in the governance and decision-making of MPAs, and the current absence of any independent validation of MPA effectiveness assessments, or use of international Standards for their guidance and improvement. For most MPAs in Indonesia, conservation, and socio-economic priorities are not clearly defined through appropriate targets and indicators. In addition, no routine assessment of socio-economic and equity outcomes takes place. Conservation monitoring is undertaken, typically on an ad hoc basis, with no regular process or defined thresholds for success applied. Consequently, it very difficult for management units to evaluate whether strategies are effective, and to inform management planning accordingly. While effective stakeholder engagement and inclusion is key to the success of MPAs, stakeholders and rightsholders are not explicitly identified in management plans, no targets are set and efforts that focus on increasing stakeholders' participation and benefits are insufficient.

8. The proposed project builds on the Gol's efforts to improve MPAs effectiveness including through the US\$210 million World Bank-financed Oceans for Prosperity Project (or LAUTRA). LAUTRA, approved in March 2023, aims to strengthen the management of Indonesia's marine biodiversity – including coral reefs and associated ecosystems by (i) improving the effectiveness and management performance of twenty marine protected areas (by investing in MPA management infrastructure and equipment, operational activities, and institutional capacity) to a level consistent with the "Implemented" stage of MPA establishment<sup>23</sup>; (ii) developing diversified and sustainable livelihoods for coastal communities; and (iii) developing the necessary enabling environment, policy related interventions, and long-term financing strategies for addressing the financing gap in MPA management and other priority blue economy sectors. LAUTRA uses the Indonesian Government's evaluation tool for the management effectiveness of marine conservation areas, *Evaluasi Efektivitas Pengelolaan Kawasan Konservasi* (EVIKA) to measure an increase in management effectiveness in target MPAs. Furthermore, the Government of Indonesia is keen for EVIKA to receive independent validation and alignment to progress against International Standards.

9. MPAs in Indonesia, even those supported by LAUTRA with the aim to achieve EVIKA Gold rating, the highest ratings under EVIKA, need additional support to move form "Implemented stage" to "Actively Managed" stage of establishment — i.e., all management functions are fully implemented, stakeholders are meaningfully engaged, demonstrable biodiversity outcomes are being achieved, and comprehensive systems are in place to evaluate performance and inform management. Reaching EVIKA Gold rating (the highest standard) will not be enough for meeting all the requirements of the "Actively Managed" stage. For example, in reaching EVIKA Gold, there is no requirement to achieve (a) a reduction in threat intensity or frequency; or (b) an increase in biophysical outcomes. In Indonesia, less than 20 percent of MPAs financial needs to reach "Actively Managed" status are covered. This funding is typically provided by non-profits, philanthropic sources, official development assistance and national and local

<sup>&</sup>lt;sup>21</sup> UNEP-WCMC (2024). "Protected Area Profile for Indonesia from the World Database on Protected Areas." Accessed January 2024; MMAF. (2018). "Our MPAs: Sharing Plans, Investments, and Responsibilities."

<sup>&</sup>lt;sup>22</sup> Meilana et al. (2023). "How Indonesian MPAs are doing: a management performance-based evaluation."

<sup>&</sup>lt;sup>23</sup> As defined in Grorud-Colvert et al (2022). "The MPA Guide: A Framework to achieve global goals for the ocean." This MPA Guide defines four stages of establishment of an MPA: (i) Proposed; (ii) Designated; (iii) Implemented; and (iv) Actively Managed. In the "Implemented stage" management institutions are established and empowered to promote compliance and enforcement, resources users are aware of MPA regulations, and management plans are being implemented.

government budgets and compete with other government services such as Education, Health, and Public Services<sup>24</sup>. The later are given priority, in part due to the lack of understanding of the benefits of MPAs.

10. **Domestic public investment is by far the largest source of biodiversity finance. Private financing for biodiversity is limited**<sup>25</sup>**, especially for marine biodiversity**,<sup>26</sup> **but interest is growing**. There is a recognized need to unlock new funding sources, particularly from the private sector. Key challenges associated with attracting scalable private sector capital to sustainable marine investments, and specifically MPAs, include: (i) poor data related to related to fisheries, coral reefs, and marine ecosystems services<sup>27</sup>; (ii) the lack of data driven impact measurement; (iii) a mismatch between project and investor timelines; (iv) lack of track record of scalable and replicable transactions; and (v) shortages of human capital with skilled expertise for conservation management<sup>28</sup>.

11. The World Bank-issued Wildlife Conservation Bond, or Rhino Bond<sup>29</sup>, pilots an outcome-based instrument to channel private finance for conservation. It addresses the challenges related to metrics and measurement, and provides an innovative structure to mitigate risk, secure project outcomes, and expand partnerships. The key innovation mechanism behind this instrument is the repayment of investors by outcome funders (the GEF) only when pre-defined results have been achieved and independently assured and verified. Compared to traditional marine conservation funding that are output-focused, this outcome-focused instrument allows donors scarce resources to be optimized because capital is only released for successful activities. This innovative, outcome-based model has never been tested at scale for marine ecosystems, due to challenges in defining and measuring robust outcomes. Instruments that "push the envelope" are critical to building capacity and to crowd in additional private capital to finance conservation, both of which are consistent with the World Bank's new vision and mission and are urgently required to close the biodiversity financing gap.

# C. Relationship to CPF

12. The proposed project will directly contribute to the World Bank Group's Indonesia Country Partnership Framework (CPF) for 2021–2025 (Report Number 157221-ID), particularly Engagement Area 4: Sustainable Management of Natural Assets, Natural Resources-Based Livelihoods and Disaster Resilience by strengthening the management of a key ecosystem, contributing to reducing pockets of poverty in coastal regions, and increasing resilience to coastal hazards such as flooding and sea level rise. In addition, the project aligns with the World Bank Group's Gender Strategy (FY2016–23), particularly strategic objective related to enhancing women's voice and agency. The project aims to foster a more balanced distribution of power in decision-making on MPA management. This project will also directly

 <sup>&</sup>lt;sup>24</sup> ADB (2014). "State of the Coral Triangle: Indonesia"; MMAF (2020). "MPA Vision 2030 and Roadmap to MPA Management."
<sup>25</sup> World Bank (2020). "Mobilizing Private Finance for Nature."

<sup>&</sup>lt;sup>26</sup> Friends of Ocean Action (2020). "The Ocean Finance Handbook."

<sup>&</sup>lt;sup>27</sup> Baralon, J. et al. (2021). "Conservation Finance 2021: An Unfolding Opportunity. Coalition for Private Investment in Conservation."

<sup>&</sup>lt;sup>28</sup> Denke, D. et al. (2023). "Building a Capital Continuum for Nature-Positive Investments. Coalition for Private Investment in Conservation."

<sup>&</sup>lt;sup>29</sup> The Rhino bond, launched by the World Bank in 2022 to support conservation of rhinos in South Africa, is a first-of-its-kind outcome-based bond that supports the financing of conservation activities. The Rhino Bond is a non-sovereign, non-debt Sustainable Development Bond also known as a the "Wildlife Conservation Bond", which transfers project risk from donors to investors, who only receive their interest payments when project outcomes are attained. It channels investments to achieve conservation outcomes – measured by an increase in black rhino populations.

contribute to the World Bank Group Scorecard FY24-30 Result Indicator: "Millions of hectares of terrestrial and aquatic areas under enhanced conservation and management".

13. The project will contribute to the implementation of the Nationally Determined Contribution (NDC) actions, such as protection of MPAs and improving the livelihoods of communities living in coastal areas. By investing in the conservation, enhancement and provisioning of marine and coastal ecosystem goods and services, the project will generate climate mitigation and adaptation co-benefits that include carbon sequestration and improved resilience of local communities and coastal areas. The role of marine conservation in climate change adaptation and mitigation is acknowledged in the Indonesia Long-Term Strategy for Low Carbon and Climate Resilience 2050. By ensuring the effective management of MPAs, the project will also contribute to the government of Indonesia's national biodiversity and climate change targets defined in the National Medium Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional, RPJMN) 2020–2024, National Ocean Policy, MPA Vision 2030, Indonesia Blue Economy Roadmap, National Adaptation Plan, and international commitments (for example, SDG14, Coral Triangle Initiative, Convention on Biological Diversity, International Coral Reef Initiative). Specifically, the project will support the government of Indonesia's goal to expand the MPA network. The project will also support MPA Vision 2030 target to identify financing opportunities and mechanisms to enhance the availability of innovative sources of non-tax financing for effective MPA management. This project directly contributes to the progress toward Target 3 of the Convention on Biological Diversity's Global Biodiversity Framework to effectively protect 30 percent of land and ocean areas by 2030.

14. **The project contributes to closing the significant gap in financing Sustainable Development Goal (SDG) 14 (Life Below Water), and more specifically MPAs.** Despite the importance of oceans in supporting life and regulating climate, SDG-14 is the least funded of the 17 SDGs, receiving a 0.01 percent share of all SDG funding from official development assistance<sup>30</sup>, less than one percent of all philanthropic funding<sup>31</sup>, and less than 2% of Green Climate Fund resources<sup>32</sup>. Globally, the gap between ocean conservation requirements and funding available is estimated at around US\$149 billion per year<sup>33</sup>, including US\$8-11 billion for MPAs<sup>34</sup>.

15. The Global Environment Facility (GEF)-8 Programming Directions related to "Mobilizing Private Investment for Environmental Goals through the Blended Finance Global Program (Non-Grant Instruments)"<sup>35</sup> recognizes the need to identify and support new "financial instruments linked to environmental performance." Areas for investment include: (i) disclosure, metrics, and measurement; (ii) the application of methodologies related to Science Based Targets and engagement in the Task Force on Nature Related Financial Disclosure; and (iii) improvement in agency design capacity.

# PROPOSED PDO/RESULTS

<sup>&</sup>lt;sup>30</sup> World Economic Forum (2022). "SDG14 Financing Landscape Scan: Tracking Funds to Realize Sustainable Outcomes for the Ocean."

<sup>&</sup>lt;sup>31</sup> Lewis et al. (2023). "Funding Trends 2023: Tracking the State of Global Ocean Funding."

<sup>&</sup>lt;sup>32</sup> Thomas et al. (2022). "A Commonwealth Guide to Ocean Climate Finance."

<sup>&</sup>lt;sup>33</sup> Johansen et al. (2020). "The cost of saving our ocean - estimating the funding gap of sustainable development goal 14."

<sup>&</sup>lt;sup>34</sup> UNEP (2022). "State of Finance for Nature. Time to act: Doubling investment by 2025 and eliminating nature-negative finance flows."

<sup>&</sup>lt;sup>35</sup> GEF (2023). "GEF-8 Programming Directions."

# A. Proposed Project Development Objective(s)

To protect coral reefs through improved marine protected areas management.

# **B. Key Results**

- i. Select MPAs achieve independently verified conservation outcomes in line with IUCN Green List of Protected and Conserved Areas.
- ii. Live coral cover and reef fish biomass in select MPAs is maintained or increased.





#### PROJECT CONTEXT

#### A. Concept

#### 1. Description

16. The project utilizes an innovative financing model to secure private finance for outcomefocused management of MPAs. It will raise the ambition on marine conservation performance and strengthen marine ecosystem health monitoring as the basis for securing innovative sources of sustainable finance for ecosystem protection. The World Bank will issue a World Bank Sustainable Development Bond, or Coral Bond, replicating aspects featured in the Wildlife Conservation Bond, with resources channeled to finance conservation initiatives in four MPAs that host some of the most biodiverse coral reefs in the world. The bond investors hence become direct co-financiers of conservation efforts in the MPAs, and in return, they can be compensated with a "conservation success payment" if management performance and metrics reflecting coral reef health and management effectiveness meet specified targets at the four MPAs, according to independently assured and verified results.

17. The GEF Non-Grant Instrument (NGI) will fund the Conservation Success Payment to bond holders, contingent on the achievement of pre-agreed impact metrics. In addition, BNP Paribas

Foundation committed to provide additional grant resources as Conservation Success payment for the project. With this approach the donors financing can be optimized as it will only be released upon successful achievement of agreed targets, and project implementation risk is passed to capital market investors. This innovative structure enables institutional bond investors to support an area in need of financing, which is generally funded by bilateral, multilateral, and philanthropic donors. This type of transaction also generates awareness amongst investors and fills a knowledge gap on a structured debt instrument linked to marine conservation outcomes. This instrument and the lessons that will be learned from project implementation will help promote increased institutional investments for marine biodiversity conservation.

18. A key component of the project design and implementation is the identification of robust outcome metrics or Key Performance Indicators (KPIs) by which success will be defined and conservation success payment triggered. To provide assurance of conservation outcomes, and facilitate the mobilization of private sector capital, the proposed KPIs – and payment triggers - for this project are being defined as the combination of the achievement of verified progress against the IUCN Green List Standard for Protected and Conserved Areas and selected biodiversity indicators related to coral reef health (tentatively, live coral cover and reef fish biomass). Third party assurance and verification that these targets have been met will be provided by the IUCN Green List audit process. The third party verification is independent from IUCN. The IUCN Green List process provides an assured assessment of performance and expert validation of progress to participating protected and conserved areas, implemented according to the International Social and Environmental Accreditation and Labelling Alliance (ISEAL) codes and principles.

19. The choice of the IUCN Green List as the impact metric offers a scalable, verified results-oriented model for MPA financing. The intricate ecological characteristics of tropical marine ecosystems, and coral reefs, combined with the unpredictability of climate related impacts calls for going beyond the collection of a single, definitive biodiversity metric that can validate the efficacy of conservation funding. The IUCN Green List is a sustainability standard that recognizes effectively managed and governed terrestrial and marine protected and conserved areas that are achieving their conservation outcomes. It allows for verified claims of site effectiveness, based on quantifiable data and independent verification of assessments and evidence by accredited IUCN evaluators and an independent reviewer. The Standard has four major components, with 17 further criteria consistent with global standards of best practice that must all be met, and independently assured and verified, in order for a protected area to be accepted to the list. One objective of the project is to have the 4 target MPAs fully aligned with all IUCN Green List Standard criteria. Currently the baseline is 35 to 41 percent alignment. The IUCN Green List Standard can be used as a method of benchmarking existing MPA management and using the results of this to develop robust and inclusive management frameworks to enable successful conservation outcomes. Combined with reliable impact metrics and a suitable monitoring programme this provides evidence of successful conservation in an area.

20. **Two biophysical metrics, tentatively coral reef fish biomass and live coral cover, will be tracked to demonstrate the impact management measures put in place on coral reef health**. These have been selected due to their relevance to the coral reef environment, their utility to decision makers and the scientific evidence base for using these metrics to understand reef health, and are recommended by the International Coral Reef Initiative, the Global Fund for Coral Reefs, and the Global Coral Reef Monitoring Network. Monitoring coral cover over time provides information on coral response to management measures and ecosystem condition as well as information on ecosystem function. Percentage coral cover has been a longstanding and globally recognised indicator of coral reef health. Where maintaining or

improving reef health is a goal of management it is highly relevant. Monitoring fish biomass provides information about fish community health and function. Maintaining a healthy reef fish population benefits coral reef resilience and the fish population is likely to contribute to key ecosystem services e.g. tourism and food provision. The project will apply a standardized methodology within all target sites to assess live coral cover and reef fish biomass, building on BRIN's Reef Health Index<sup>36</sup> and using technology such as MERMAID<sup>37</sup> or REEFCLOUD<sup>38</sup> to standardize and streamline coral reef health data collection, analysis and reporting. Underwater Visual Census surveys will be conducted by trained divers inside and outside the MPAs during year one, year three and year five of the project, with results independently assured and verified via the IUCN Green List audit process. The proposed coral bond aim to maintain or increase live coral cover and reef fish biomass inside the select MPAs. Stable live coral cover and reef fish biomass is a sign of good coral reef ecosystem health and contrast with the widespread declines in live coral cover and reef fish biomass reported for many of the world's coral reefs including inside Indonesian MPAs. The two biophysical indicators are provisional at project concept stage. To confirm that these two indicators are the most appropriate biophysical metrics for the proposed Coral Bond, further due diligence and analysis will be conducted during project preparation. This will include defining the baseline, historical trends, future projections, monitoring protocol and targets that will trigger the Conservation Success Payments.

21. During the project identification mission IUCN and World Bank experts conducted a review of existing management plans and undertook field visits and interviews with a subset of stakeholders in each four target MPAs to identify key threats to coral reef ecosystems. These threats were identified as important: (i) overfishing and destructive fishing includes the use of illegal fishing methods such as bomb and cyanide fishing; (ii) zone compliance includes compliance with permit requirements (e.g., seaweed farmers possess the correct licenses and permits), as well as incursions by fishing vessels into protected/restricted zones; (iii) visitor impacts include physical damage to reefs by divers, anchor damage, and pollution (e.g., waste water and/or plastic pollution). Importantly, the mission noted that: (i) the intensity and frequency of these threats does not appear to be well understood by management units; (ii) no prioritization of threats is currently applied; (iii) no information is available to indicate spatial or temporal trends in threats, or to demonstrate how threats intensity/ frequency has changed in response to mitigation measures (i.e., whether threat mitigation is effective); (iv) threat response tends to be reactive rather than strategic (i.e., patrol boats are deployed in response to reported bomb fishing incidents, rather than a strategic response to deter or prevent bomb fishing in known hotspot locations). Long-term monitoring data is available for the four target sites. A preliminary review of these data suggests that only marginal differences in reef health are detected between no-take zones and use zones, and between inside and outside MPA areas. The above key threats are thought to contribute to the current lack of biodiversity enhancement within no-take zones. Demonstrating an understanding of threats and how this informs management action is a requirement of the Green List Standard. Furthermore, addressing these priority threats is a key component of the project's theory of change and delivery of biodiversity outcome targets.

22. The proposed interventions will go beyond LAUTRA by accelerating the target MPAs from the "Implemented" to the "Actively Managed"<sup>39</sup> stage of establishment. The Coral Bond will incentivize improvements in MPA performance, raising the bar of the existing EVIKA scorecard via a more quantitative, evidence-based approach to assessing MPA performance and biodiversity and socio-

<sup>&</sup>lt;sup>36</sup> Giyanto et al. (2017). "Indeks Kesehatan Tereumbu Karang Indonesia."

<sup>37</sup> https://datamermaid.org/

<sup>&</sup>lt;sup>38</sup> https://reefcloud.ai/

<sup>&</sup>lt;sup>39</sup> Grorud-Colvert et al. (2022). "The MPA Guide: A Framework to achieve global goals for the ocean."

economic outcomes. LAUTRA measures an increase in management effectiveness, using the Government of Indonesia's self-assessed EVIKA scorecard. In contrast, Coral Bond uses the world's only independently assessed and audited MPA evaluation tools (the IUCN Green List certification) to assess whether biodiversity outcomes have been achieved. In reaching EVIKA Gold (the highest standard), there is no requirement to achieve (a) a reduction in threat intensity or frequency; or (b) an increase in biophysical outcomes. The Coral Bond project addresses both of these. A preliminary IUCN Green List field assessment of the four target MPAs was conducted by World Bank and IUCN experts in February 2024. The objective of this study was to conduct an initial benchmarking assessment of four MPAs against the IUCN Green List Standard to understand their existing level of alignment. It reveals reasonable alignment with IUCN Green List criteria, with score ranging from 35 to 41 percent alignment. This rapid assessment, which will be further refined during project preparation, determined that achieving significant progress against the IUCN Green List Standard within the timeframe of the Coral Bond project would be feasible for the proposed target MPAs. This assessment also revealed that to fully align with IUCN Green List Standard, site managers will need to improve MPA management beyond what is required under EVIKA and what will be accomplished through LAUTRA (most recent EVIKA score for the four target MPAs ranges between 86 and 88 percent). LAUTRA project places a priority focus on strengthening institutional capacity and governance frameworks. In comparison, the Coral Bond project aims to accelerate MPA management effectiveness beyond EVIKA, and in line with global best practice. This is reflected in two central elements of the Coral Bond project's design: (i) the setting of measurable, MPA-level biophysical targets (something that is not currently mandated in Indonesia's MPA governance frameworks); and (ii) the identification and mitigation of specific threats (again, something that is not currently tracked in the Government of Indonesia's MPA management reporting, and consequently is not addressed by the LAUTRA project). The Coral Bond project is designed to maximize the impact of the investment. It does this via two strategies. First, by leveraging LAUTRA investments into the enabling environment (e.g., human resource capacity, physical infrastructure and assets, regulatory strengthening, etc.), ensuring that Coral Bond investments are targeted towards works "on the ground". And second, by prioritizing investments and actions (and, as a consequence, outcomes) into defined zones within the MPAs (i.e., core zones). Incremental outcomes of getting the MPAs to reach IUCN Green List Standard will include: (i) improved and gender-sensitive stakeholder and rightsholders identification and engagement at each site, including the mapping and development of potential co-management arrangements and the promotion of gender equity and diversity; (ii) improved understanding of the social and economic context, to be reflected in management goals and objectives; (iii) clearly identified biodiversity and socioeconomic targets; (iv) ensuring that major threats, including impacts of climate change, are understood and mitigation activities reflected in management planning and implemented, such as improving management of access to resources and strengthening compliance with resource regulations; (v) enhanced monitoring of conservation and socioeconomic outcomes; and (vi) ensure that arrangements are in place to deal with financial sustainability.

23. The operation presents an opportunity to develop a robust blended finance operation for MPAs with strong IBRD co-financing, leveraging needed private sector finance. If successful, the project will build the capacity of the GoI to develop and execute innovative financing instruments that support conservation outcomes in collaboration with a reputable partner while also providing an opportunity to engage with institutional investors in a vastly underserved sector. By applying the IUCN Green List Standard diagnostic this project will generate the knowledge to inform the effective and efficient allocation of government and development partner resources for MPA, including LAUTRA. The proposed instrument will incentivize increased investment into the ocean health sector by demonstrating the utility of robust metrics in acting as payment triggers and informing outcomes. It will also facilitate mobilization of financial resources for the country's growing MPA network by demonstrating MPAs impacts and

enhancing the credibility and international visibility of the government's efforts to protect its unique marine biodiversity.

24. The project will: (i) finance site-based conservation management activities to improve the management effectiveness of target MPAs to deliver measurable outcomes in line with global standard of best practices (Component 1); and (ii) implement project management and monitoring activities (Component 2). These Components 1-2 will be funded by investors and will fund conservation activities that may trigger the Conservation Success Payment.

## Component 1. Improve Management Effectiveness of Target MPAs to Deliver Measurable Outcomes

25. This component will improve critical shortcomings in MPA management in four LAUTRA MPAs. The four target MPAs are:

- KKN Laut Sawu (or Savu Sea) (3,355,353 ha) located in Nusa Tenggara Timor province and under the jurisdiction of MMAF;
- KKN Raja Ampat (325,085 ha) located in Papua Barat Daya province and under the jurisdiction of MMAF;
- KKPD Raja Ampat (1,348,460 ha) located in Papua Barat Daya province and under the jurisdiction of a provincial government Regional Public Service Agency (BLUD);
- KKPD Selat Pantar (Alor) (276,693 ha) located on East Nusa Tenggara province and under the jurisdiction of East Nusa Tenggara provincial government.

26. These four MPAs were selected due to their global biodiversity significance, institutional setting, and their existing management performance. First, they lie within the globally significant Coral Triangle ecoregion and encompass a significant proportion of two seascapes. The Birds Head Seascape is the most biodiverse marine area with about 1,600 reef fish species and over 550 coral species recorded. The Sunda Banda Seascape is a priority conservation region, harboring over three-quarters of known coral species and forming an important cetacean migration corridor. Institutionally, these MPAs are representative of the two models of MPA management in Indonesia: with two managed by national government, and two managed by provincial governments. Finally, these MPAs have some of the highest MPA management performance levels in Indonesia according to national standards and are strong candidates for accelerating to international standards of management effectiveness for improved conservation outcomes.

27. The component will support technical assistance and investments to (i) assess and benchmark each target MPA performance against the Green List Standard; (ii) develop a detailed action plan outlining the steps needed to make expected improvements against the IUCN Green List Standard; (iii) implement this action plan; and (iv) establish an independent scientific advisory group and undertake annual independent progress audits to verify outcomes, against which outcome-based payments could be made. This component will benefit of US\$4 million of co-financing from LAUTRA.

28. Specific activities to be financed in each target MPA will be confirmed during the performance assessment, and the project will pay for costs to reach incremental conservation outcomes. Preliminary assessments identified already several activities, complementary to LAUTRA activities, that are required to meet the objectives of the project to improve MPA performance and coral reef health: (i) enhance stakeholder engagement (technical assistance to undertake comprehensive stakeholder mapping and to develop inclusive stakeholder outreach, engagement and participation strategies; incremental operating

costs associated with implementing these strategies, including routine operation of MPA Collaborative Forums and other participative management vehicles); (ii) assess the feasibility and identify options for the development of private tourism concessions models and co-management arrangements in MPAs; (iii) develop business plans and build site managers capacity in financial planning and management; (iv) generate knowledge to inform the improvement of MPAs management plans (technical assistance to improve the understanding of the social and economic context; define conservation targets baseline values, limits of acceptable change, and threshold values; comprehensive threat mapping, risk assessment and prioritization; and design threat mitigation strategies); (v) deployment of technologies such as hydrophones to improve the detection and monitoring of bomb fishing; (vi) improving the detection and monitoring of zone violations using platforms such as SMART Conservation Tools<sup>40</sup> to enhance the compilation, analysis and value of intelligence gathered from stakeholder groups such as POKMASWAS; (vii) implementation of strategic (intelligence-led and risk-based) rather than reactive MPA surveillance and monitoring patrols and cross-agency coordination to deter and prevent destructive fishing and deter and prevent zone noncompliance; (viii) supporting small-scale producers to apply for and comply with appropriate licences and permits; (ix) establishing baseline conditions and limits of acceptable change for visitor sites; (x) defining threshold measures and management responses such as adjusting visitor flow and numbers; and (xi) strengthening provisions to mitigate visitor impacts including via the implement of codes of conducts, anchoring restrictions and wastewater management provisions; (xii) development and implementation of scientifically rigorous and statistically robust monitoring of MPAs conservation and socio-economic outcomes (including live coral cover and reef fish biomass); and (xiii) strengthening the centralized digital information systems and decision support systems needed to track progress across multiple sites<sup>41</sup>. All activities will be gender sensitive, and where relevant, will respond to gender gaps identified at the site level, such as disproportionately low representation of women in MPA management bodies, and barriers to accessing the economic development opportunities improved MPA management can provide in adjacent communities.

# **Component 2: Project Management and Monitoring**

29. The IEF as Indonesia's national Climate Finance Agency will serve as the lead Implementing Agency and will distribute funds for the financing of activities to improve conservation outcome of the MPAs. IEF's strategic selection for project implementation responsibility is to enable IEF be part of the learning process of working with such a non-sovereign instrument with the aim that IEF may develop capacity to issue similar instruments in the future. This component will benefit of US\$1 million of co-financing from LAUTRA (respectively US\$0.3 million for Sub-component 2.1, US\$0.3 million for Sub-component 2.2, and US\$0.4 million for Sub-component 2.3).

30. **Sub-component 2.1. Project Management**. This sub-component will support project management accordance with operational, fiduciary, environmental and social risk management requirements. This will include, *inter alia*, staffing, operations, financial management, procurement, environmental and social risk management, including implementation of the grievance redress mechanism.

31. **Sub-component 2.2. Monitoring and Evaluation**. This sub-component will support monitoring, reporting and evaluation of project activities, outputs and outcomes.

<sup>&</sup>lt;sup>40</sup> https://smartconservationtools.org/en-us/

<sup>&</sup>lt;sup>41</sup> Such as the IUCN Green List's COMPASS platform, SIDAKO (https://sidakokkhl.kkp.go.id/sidako/index), MERMAID (https://datamermaid.org/) and REEFCLOUD (https://reefcloud.ai/)

32. Sub-component 2.3. Capacity Building, Coordination, and Knowledge Management. This will include, inter alia, citizen and stakeholder engagement and coordination activities; inter-institutional collaboration and coordination; building IEF's capacity in channeling, monitoring, and reporting requirements consistent with international standards and best practices as defined by the Task Force on Nature related Financial Disclosures (TNFD); and events and knowledge sharing activities. Specifically, knowledge sharing activities will include: (i) engaging in activities to share lessons on access to market for outcome-based instruments to enable IEF build the basic framework to issue such instruments in the future; (ii) sharing Coral Bond lessons learned with Ministry of National Development Planning (BAPPENAS), Coordinating Ministry of Maritime Affairs and Investment (CMMAI), MMAF, Ministry of Environment and Forestry (MOEF) and Ministry of Finance (MOF). A priority vehicle for sharing knowledge and lessons learned is the recently established Blue Finance Advisory Committee (BFAC), which has endorsed the proposed instrument. The BFAC is a cross-ministerial body, established with the support of LAUTRA, and is responsible for the coordination of blue finance activities; and (iii) opportunities to transfer knowledge and lessons learned beyond Indonesia will also be explored, including via the multilateral Coral Triangle Initiative, the International Coral Reef Initiative, and the IUCN Green List community.

## Conservation Success Payment (US\$13.76 million funded by GEF NGI funds)

33. The GEF NGI funds will be used to pay bondholders a Conservation Success Payment. GEF resources will be held by the World Bank until year 5 of the project and will only be paid out (single Conservation Success Payment) if there is verified achievement in the select MPAs of live coral cover and reef fish biomass targets, and possibly also full alignment with IUCN Green List Standard. If these impact metrics are not achieved, GEF funds will be returned to the GEF. In addition, BNP Paribas Foundation recently committed to provide a EUR 1 million grant as Conservation Success payment for the project. This additional contribution to the Conservation Success Payment will be better reflected in the project design during the next stage of project preparation.

#### **Corporate Commitments**

34. Gender. An analysis of gender gaps, action planning, and monitoring was undertaken during LAUTRA preparation and will apply to the proposed Coral Bond project. The identified gender gaps were related to (a) women's representation and capacity in MPA management (in Indonesia, women are underrepresented in marine and resource policy, governance, and management frameworks including being excluded from participation in community-based arrangements), (b) women's access to livelihood activities in MPAs, and (c) barriers to women's access to and control over assets. Actions to address gap (a) will be addressed by project activities outlined under Component 1. To address this gap, the project will focus on (i) gender-sensitive education and awareness activities; (ii) improving participation of women in public consultations and collaborative forums on MPA management; and (iii) ensuring that training of MPA Management Unit and BLUD staff is gender sensitive and extends opportunities for capacity development to women, especially. Demonstrating that MPA governance arrangements help advance gender equity in relation to management of the site is one of the elements of the IUCN Green List Standard. Activities financed under Component 1 will facilitate the identification of gender gaps and the development and implementation of an action plan outlining the steps needed to meet the IUCN Green List benchmark for gender equity in MPA management.

35. **Stakeholder Engagement.** The local communities, indigenous peoples (*adat* communities) and vulnerable groups, were engaged during the project preparation process and will continue to be engaged

throughout project's planning and implementation, including in the forms of, among others, stakeholder workshops, focus group discussion, community meetings, socialization, information dissemination. The project explicitly aims to strengthen participatory decision-making in MPA management. Improving performance against the IUCN Green List Standard will require MPAs to demonstrate equitable and effective governance. This includes having clearly defined, legitimate, equitable, and functional governance arrangements, in which the interests of civil society, rights-holders and stakeholders, are fairly represented and addressed. During LAUTRA preparation an Environmental and Social Management Framework (ESMF) and Stakeholder Engagement Plan, which includes a Feedback and Grievance Redress Mechanism, have been prepared.

36. Gender analysis and action plan, as well as a stakeholder engagement plan will be developed for the Coral Bond project during further project development.

37. The proposed operation is aligned with the goals of the Paris Agreement on both mitigation and adaptation. While Indonesia is exposed to frequent and extreme weather events, which have increased the vulnerability of Indonesia's coastal communities to flooding, risks from climate hazards having a material impact on the operation and its development objective are low, given the nature of activities financed under this project. By investing in the conservation and enhancement of marine and coastal ecosystem goods and services, the project will generate climate mitigation and adaptation co-benefits that include carbon sequestration and improved resilience of local communities and coastal areas. Primary activities financed under this operation fall under the category of Technical Assistance (TA), which aims to enhance the management of the selected MPAs in Indonesia and are universally aligned on mitigation.

# 2. Overall Risk and Explanation

38. The overall Project Risk is currently assessed as Moderate.

39. **Political and Governance (Substantial)**: National elections in Indonesia have been held in February 2024 with a transition period until October 2024. While the government has endorsed the proposed project concept, successful delivery of this innovative instrument will require securing the newly elected government's prioritization of MPA management financing. To mitigate this risk, the team has developed and will continue to maintain robust engagement at technical and senior leadership levels within BAPPENAS, IEF and MMAF. Addressing MPA financing gaps is prioritized in the government medium and long-term development plans. In addition, the strong ownership of the Coral Bond project at different levels of BAPPENAS, IEF and MMAF will help in ensuring that the current government commitment is translated to the new administration.

40. **Sector Strategies and Policies (Moderate)**: Indonesia has huge ambitions to secure financing for its blue sectors. This has motivated several initiatives recently with both state and non-state actors. For example, the Ministry of Finance recently launched a Blue Samurai Bond for financing infrastructure projects that promote eligible SDGs expenditures with blue focus. Therefore, there is a risk of overlapping, or uncoordinated policies and investments with impacts on oceans across multiple sectoral ministries (MMAF, CMMAI, BAPPENAS, MOF) and with provincial governments hosting the relevant MPA project locations. To mitigate this risk, cross sectoral collaboration has been strengthened during design phase by organizing initial Coral Bond Workshops bringing representatives of MMAF, CMMAI, BAPPENAS, IEF, Provincial Marine and Fisheries Department in September and December 2023 and February 2024. This

approach will be further enhanced as project moves to preparation phase to ensure both national and subnational support is secured, and overlapping is avoided for the Coral Bond which is directed solely for improving MPA management effectiveness.

41. **Institutional Capacity for Implementation and Sustainability (Moderate)**: There is adequate policy and governance framework which allows for project implementation and coordination among IEF, MMAF and their MPA management units, as well as with provincial governments. Moderate risk is noted due to limited number of staff and technical capacity, which will be mitigated by using NGOs which have sound technical capabilities and modalities on the ground. Another key constraint is the limited institutional capacity of IEF to implement outcome-focused projects funded with non-sovereign instruments and for the blue economy. IEF is experienced with serving as fund managers for environmental projects, but the Coral Bond will be the first intervention related to the marine sector. This implies managing funds for a new sector and line ministry (MMAF), adding to IEFs coordination challenge. The team has identified this risk at concept stage and has commenced deepened dialogue to identify and close capacity gaps during the project preparation and will continue to offer opportunities to streng then IEF's technical capacity for blue economy project management during implementation, through World Bank financing and oversight.

42. **Technical Design Risk (Moderate)**: Risks associated with the project not meeting its objectives due to poor design at entry are being mitigated by undertaking rigorous stakeholder engagement at concept stage. The World Bank has engaged multiple entities including the IUCN whose green list the project aims to meet. Field visits which include IUCN staff as participants will be conducted to diagnose the exact missing activities required to improve MPA management effectiveness in the project locations to an expected level against the IUCN Green L Standard, and to clearly delineate the Coral Bond activities from LAUTRA activities in a bid to avoid double counting. There is also risk associated with finding sufficient interest from private sector to invest in the Coral Bond. Yet, investors have signaled desire to support this sector, and a well-designed, credible, and compelling project would sufficiently manage this risk.

43. **Fiduciary (Moderate):** Fiduciary risk for the Project is rated Moderate at concept stage, based on the present understanding of the implementation arrangements and capacity of the IEF that would be carrying out the procurement and financial management responsibilities. While IEF is experienced in implementing the World Bank financed operations, and the existing financial management arrangement within IEF is generally adequate to support the project, Risk is noted related to the dispersed project locations and staff capacity stretch in the IEF due to the increase in the number of projects implemented by IEF. The risk will be mitigated by the appointment of Project Management Office (PMO) staff that includes staff from GoI, as well as support from consultants including fiduciary consultants. During appraisal, a fiduciary assessment of the implementing agencies will be conducted, and the fiduciary risk will be updated. The risk mitigation activities and fiduciary arrangements will also be agreed during appraisal.

# 44. Environment and Social Risk

# Environment:

45. The project's primary activities would fall under the category of Technical Assistance (TA) which aims to enhance the management of the selected marine protected areas in Indonesia, including the

assessment, monitoring, and overall management of the four target MPAs, with the ultimate objective to meet the level of IUCN Green List of Protected and Conservation Area Standard performance. The Project will not involve any civil work construction, such as new physical buildings or infrastructure development. It will not procure any substances that could pose serious risks to human health or the environment. The project will not provide funding for Type 1 TA (see the classification of the WB OESRC Advisory Note Technical Assistance and the Environmental and Social Framework), which typically assists the client in various phases of preparing future investments in infrastructure or other sectors. This means that the project will not support the preparation of feasibility studies, detailed technical designs, safeguard instruments, bid documents, etc. in preparation for the future construction of physical infrastructure or for the implementation of other activities with potentially significant physical impacts. The TA activities under the project, if successfully implemented, will improve effective management for the four MPAs (e.g. improved governance and management of MPA, and conservation outcomes) in line with international standards. Potential environmental risks are expected to be limited. At the Concept Stage, the environmental risk is rated as Moderate.

## Social:

46. Social risk rating is considered Moderate given the nature of activities proposed under this Project is a Technical Assistance (TA), with no civil construction anticipated. The activities proposed includes providing funding for conducting workshop and training for MPA' authorities and government to apply Green List Standard (benchmarking MPAs against Green List Standard, including field assessment to applying Green List tool, data integration, in-depth review of each proposed MPAs and further supports to meet the IUCN Green List Standard through strengthening management process and monitoring, data management and reporting). According to the OESRC Advisory Note on TA and the ESF (2019), these typical TAs are categorized as Type 2, e.g., producing documents and technical/ analytics reports, and Type 3 e.g., capacity building. The project does not finance feasibility or design of any future investments in specific footprints with potential downstream adverse impacts. Social risk may involve moderate to low health and safety risks of project workers, as the project will hire a small number of project workers to perform combination of office-based works and in field assessment to apply the Green List Standard. Potential downstream impact resulting from the strengthening of the monitoring of existing MPAs' on artisanal/ traditional and small-scale fishers' access to fishing ground will be monitored and clarified on the Appraisal stage. At Concept stage, social risk is considered to be Moderate.

47. Proportionate to the environment and social risk level, the management of the proposed project's environmental and social impacts will be outlined in the Environment and Social Commitment Plan (ESCP), with some details procedures will be presented in the Project Operations Manual (POM). The ESCP will provide measures that include such as health and safety measures associated with desk-based works, including codes of conduct on respectful behavior covering prevention and management of sexual exploitation and abuse and sexual harassment (SEA/SH), workers grievance mechanism, effective engagement with indigenous peoples and other relevant stakeholders, and project grievance redress mechanism. Detailed Grievance Redress Mechanism (GRM) procedure, and capacity building plan, will be laid out in the POM.

# **B. Economic Analysis**

1. Briefly describe the development impact in terms of expected benefits and costs

48. The proposed project will improve the management of a globally significant public good, while introducing robust management standards and novel sources of finance to lock in long-term benefits.

49. The development impact include: (i) 5.3 million hectares of MPAs (an area bigger than the size of Costa Rica) under independently verified improved management; (ii) 472,234 people in 395 villages directly adjacent to the 4 pilot MPAs benefitting from services offered by healthier ecosystems; (iii) facilitating access to additional financing for MPAs that GoI would otherwise not have access to; (iv) since outcome-based financing models necessitate robust monitoring and evaluation mechanisms, this leads to better data collection, more transparent reporting, and greater accountability in marine conservation projects; (v) GHG emission reduction of 17,292 tCO<sub>2</sub>e per year from the 26,653 ha extent of mangroves within the four MPAs.

50. The Coral Bond project similarly to LAUTRA, is expected to generate quantifiable socio-economic benefits, including: (i) increased fisheries production; (ii) increased tourism activity; and (iii) increased coastal protection from storms. A detailed economic analysis will be conducted during project preparation which will consider the quantifiable<sup>42</sup> benefits on these outcomes by adopting a benefit-cost methodology drawing on a range of ecosystem service valuation studies and a bioeconomic model of select fisheries.

51. The proposed Coral Bond represents one of the first outcome-based ocean finance instruments globally and will generate the necessary experiences to inform new instruments capable of accessing private sector capital for marine biodiversity. It will address critical gaps in agency design capacity, aligning impact reporting with the Task Force on Nature Related Financial Disclosure and demonstrating the viability of a non-grant, performance-based instrument in a priority marine conservation context. Preliminary observations suggest strong market interest in instruments of this nature and, once proven, the Coral Bond model could be readily replicated to other sites within Indonesia, regionally or globally.

52. The following approaches will contribute to the sustainability of project's outcomes: (i) strong ownership of the project by the GoI and involvement in project implementation; (ii) the proposed instrument will incentivize increased investment into coral reef conservation by demonstrating the utility of robust metrics (live coral cover and reef fish biomass) in acting as payment triggers and informing outcomes; (iii) strengthen capacity within Indonesia for outcome-based project design and implementation, aiding the GoI to develop projects for sovereign or non-sovereign bond financing; (iv) ensuring efficient use of limited resources by identifying most strategic activities required to improve MPA performance and coral reef health; (v) demonstrate and raise awareness on MPAs benefits which should lead to increased compliance with MPAs rules and regulations and increased budget allocation for their management; (vi) possibly attracting additional financial resources from development partners and private sector by enhancing the credibility and international visibility of the government's efforts to protect its unique marine biodiversity; (vii) identification of options for the development of private tourism concessions models and co-management arrangements in MPAs; (viii) increased capacity of MPA

<sup>&</sup>lt;sup>42</sup> Biodiversity values (beyond their contribution to other quantified services such as tourism) are not included in the analysis due to data challenges. Biodiversity is recognized for its large global public good value (for example, the Coral Triangle contains 76 percent of all known coral species in the world). This benefit is expected to add to the economic net benefits calculated in this analysis, which should thus be considered conservative.

unit for outcome-focused management and financial planning; (ix) BAPPENAS integrates MPAs financial needs and the development of similar innovative MPA financing instruments into medium and long-term development plans; and (x) increased stakeholder engagement and inclusion in MPA management, a key ingredient to the long-term success of MPAs.

# 2. Rationale for public sector provisioning/financing, if applicable

53. The proposed project addresses globally significant public goods, and will provide local, national, and global benefits through the provisioning of these public goods. By investing in the conservation, enhancement and provisioning of marine and coastal ecosystem goods and services, the project will generate climate mitigation and adaptation Co-Benefits that include carbon sequestration and improved resilience of local communities and coastal areas. By enhancing the sustainable management of coral reef ecosystems, the project will increase the value of natural resources for local, national, and global beneficiaries. For example, the protection of critical spawning and nursery grounds within MPAs will contribute to maintaining the healthy fish stocks that underpin local livelihoods and national food security. The conservation of Indonesia's globally significant marine biodiversity will contribute to enhancing the durability of Indonesia's marine tourism market.

54. The adoption of the IUCN Green List will not only enhance the credibility of Indonesia's MPA management regime but will also enhance government's ability to effectively and efficiently allocate both government and LAUTRA resources for MPA management, over time. The outcome-based financing model piloted by this project contributes to key recommendations arising from a recent public expenditure review undertaken by the GoI with support from the World Bank,<sup>43</sup> including the need to move from an output- to an outcome-based focus, with consideration of sustainability, efficiency, and efficacy principles.

55. GEF Additionality - The Coral Bond presents an opportunity to achieve four areas of additionality as defined by the GEF: (i) Environmental Additionality (evaluation of global biodiversity targets against global standards); (ii) Institutional Additionality (strengthening Gol's ability to achieve and measure conservation and biodiversity targets and to develop and implement outcome-based financing instrument for marine conservation); and (iii) Financial Additionality (generating and deploying additional financing needed to achieve higher management effectiveness and to meet the MPA funding gap); and (iv) Innovation Additionality (development of the first outcome-based financing instrument for MPAs). The Coral Bond outcomes are additional to LAUTRA. While LAUTRA measures an increase in MPA management effectiveness, it does not explicitly measure any reduction in threat intensity or frequency, or any increase in biodiversity outcomes. LAUTRA will: (i) update MPA management governance frameworks (including updating management plans); (ii) enhance human resource capacity for MPA management; (iii) equip MPAs with the infrastructure and assets required for effective management; (iv) strengthen partnerships and collaboration for MPA management; and (v) enhance the livelihoods and benefits that MPAs provide to local communities. The Coral Bond project will: (i) enhance engagement with minority and marginalized stakeholder groups; (ii) mitigate specific priority threats; (iii) establish measurable, MPA-level biodiversity outcome targets. Together, the combined investments of LAUTRA and Coral Bond will deliver measurable biodiversity outcomes and Global Environment Benefits.

<sup>&</sup>lt;sup>43</sup> MOF (2020). "Public Expenditure Review: Spending for Better Results." https://openknowledge.worldbank.org/bitstream/handle/10986/33954/148209.pdf?sequence=1&isAllowed=y

# 3. Value added of the Bank's support

56. World Bank analysis of blue finance mechanisms in Indonesia<sup>44</sup> has found that no pathway exists for a non-sovereign outcome-based financing instrument for MPAs yet. There is so far no functional mechanism to mobilize private sector finance for MPAs. The issuance of the Coral Bond as proposed by the World Bank would be highly catalytic. The Coral Bond will deliver as market-based financial vehicle, a grant to support Indonesia's MPA management objectives while exposing the country to an innovative and novel approach to raising much needed non-sovereign capital for conservation. This outcome bond will allow capital market investors to support a sector not historically considered for debt instruments. The World Bank's unique role is key for attracting private sector capital by issuing this instrument given its experience with the South Africa Rhino Bond, its AAA rated balance sheet, credibility with the GEF, the existing LAUTRA project which will provide critical co-financing to improve management of the target MPAs, and the combined expertise of the World Bank Treasury and ENB teams.

57. The World Bank and other development institutions are increasingly exploring outcome-based financing models, where funds are disbursed based on the achievement of specific, measurable outcomes. The Coral Bond's pay-for-success model is an example of this, as returns to investors are contingent upon the successful progress of MPAs against the IUCN Green List Standard and in effectively protecting coral reefs (as measured by positive changes in live coral cover and reef fish biomass).

58. The underlying philosophy of instruments such as the Coral Bond resonates with the Bank's mission to find innovative solutions for global challenges. Leveraging private sector resources for public goods and ensuring that financial returns are tied to tangible, positive outcomes, while passing project implementation risk to capital market investors, which represents a forward-thinking approach to addressing critical global issues.

59. The Coral Bond builds on the experience of the lessons learned from South Africa Rhino Bond, which identified the need to have robust performance metrics, clearly defined project activities, an outcome payer and reputable channeling and safeguards.

4. Brief description of methodology/scope and next steps

60. The proposed financing instrument will be designed with support of World Bank treasury, sector, and country team experts, working closely with GoI partners. These include MMAF, BAPPENAS, Indonesia Climate Change Trust Fund (ICCTF), IEF, MOF, provincial and local governments, and IUCN.

61. Key elements to be addressed during project preparation include: (i) the financial design of the bond, and payment triggers in particular; (ii) site-level assessment of the target MPAs to identify and cost specific activities to be financed by this project versus those financed by LAUTRA; (iii) development of the project Results Framework and Monitoring and Evaluation Plan; (iv) the channeling and implementation modalities between the national entities and identification of implementing partners (NGOs) for site-level activities; (v) the development of a prospectus for investors. Alongside the prospectus will be the development of the agreement between the World Bank and the Implementing Agency.

62. GEF is envisioned to be the outcome payer for the proposed Coral Bond. In September 2023, a Concept Note proposal was sent in response to the GEF-8 Second Call for Proposals of the Blended Finance

<sup>&</sup>lt;sup>44</sup> ICCTF (2022). "Indonesia Blue Finance Policy Note."

Program to initiate the process of securing the results-based payment from GEF. The GEF Secretariat team has positively screened the initial proposal, however, the proposal must undergo a full GEFSEC technical review and be fully cleared before the project will be considered for an upcoming work program. The World Bank team will continue to engage with GEF in preparing the full and improved proposal for GEF Council approval under the June 2024 work program.

# C. Implementing Agency Assessment

63. Implementation Arrangement. The implementation arrangements will be further defined during project preparation. The lead implementing agency will be Indonesian Environment Fund (IEF), an agency mandated to channel and distribute environmental and climate funds to support Indonesia's sustainability targets. IEF is a public service agency accountable to and structurally operationalized under the MOF. A Project Management Office (PMO) will be established in the IEF to administer the project, and four technical Project Implementation Units (PIU) placed at: 1) DG of Marine Spatial Management (DGMSM) -MMAF; 2) Provincial Marine and Fisheries Department in East Nusa Tenggara and Papua Barat Daya provinces; 3) Natural Resources Management Deputy - BAPPENAS. Some of the activities at the local level will be carried out by NGOs through IEF sub-grant mechanism. The PMO will be staffed with project director, management with support from technical coordinator/assistants, fiduciary and safeguards specialists. The PMO will prepare an annual work program, budget, update monitoring and evaluation indicators based on input from the PIU and will report every six months to a Project Steering Committee. The PMO will also prepare consolidated quarterly financial report and annual financial report. The Project Steering Committee will include representatives at Director level from MMAF, BAPPENAS, Ministry of Finance and the Coordinating Ministry of Maritime Affairs and Investment (CMMAI) and will provide overall strategic guidance to project implementation.

64. IEF is experienced in implementing World Bank-financed operations and is familiar with the World Bank's fiduciary requirements. The projects include Mangrove for Coastal Resilience project (P178009) and Indonesia Disaster Risk Finance & Insurance (P173249). The World Bank also provides technical assistance to support IEF's capacity (P175025) including the establishment of the Management Information System (MIS). On financial management, all BLU financial management-related regulations (includes budgeting, accounting, reporting, internal control, fund flow, and auditing) apply to the IEF during project implementation, since IEF is a public service agency (BLU) under MOF. These are considered adequate to support the financial management aspect of the project. IEF also demonstrated compliance with the financial management requirements of the World Bank-financed operations including timeliness of financial reporting. The project's financial management arrangement will be described in the PAD that considers risk mitigation for all Financial Management-related risks. This include, i) timely and sufficient budget availability to minimize delays of disbursement and project activities, ii) establishment of designated account for the project to avoid comingling of funds, iii) segregation of duties between technical and financial staff and involvement of IEF internal audit unit to ensure adequate internal control, iv) requirements to include the project transactions in MoF accounting system prior to being accounted as project's expenditures, etc. This financial management arrangement will be further detailed in the Project Operations Manual subject the World Bank approval including the FM arrangement between IEF and the implementing partners. There is a risk related to the dispersed project locations and staff capacity stretch in IEF due to increasing size of project portfolio. The risk will be mitigated by the appointment of PMO staff that may include staff from MMAF, as well as support from consultants including fiduciary consultants.

65. MMAF is the Indonesian government agency responsible for developing and implementing marine and fisheries policies, programs, and activities, as well as providing technical support and supervision for marine and fisheries affairs at the sub-national level. Within MMAF, the Directorate General of Marine Spatial Management (DGMSM), is responsible for the management, protection and conservation of coastal and marine ecosystem, restoration, and rehabilitation of over-exploited marine ecosystem, as well as coastal community empowerment. Currently DGMSM-MMAF manages 11 national MPAs through their field offices (Technical Operation Unit/Unit Pengelola Teknis). MMAF is also responsible for the assessment, establishment approval, and supervision of provincial MPAs. MMAF is currently the lead implementing agency (PMO) for LAUTRA (2023 – 2028) and was the lead implementing agency for two of the World Bank-funded COREMAP projects. While the project activities will be implemented by four PIUs, the financial management and procurement will be conducted during project preparation with the objective to agree on robust implementation and fiduciary arrangements during appraisal.

66. **Procurement.** The procurement under the proposed Project will follow the World Bank's Procurement Regulations for IPF Borrowers of September 2023, and the provisions of the Grant Agreement and agreed Procurement Plan. IEF has experience in handling several World Bank-financed projects, therefore, they are familiar with the World Bank's Procurement Regulations. Further procurement assessment during project preparation will assess IEF procurement capacity to identify risks and mitigation activities. During project preparation and with World Bank support, IEF will prepare a Project Procurement Strategy for Development (PPSD) and a Procurement Plan (PP) for the Project to inform fit-for-purpose procurement arrangements and market approaches that will deliver the best Value for Money (VfM) and support the PDO achievement.