

# BLUE BOND INCUBATOR

Channelling  
capital toward  
a sustainable  
ocean economy

Feasibility study partners



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# INTRODUCTION

## The ocean is overused and undervalued despite its critical role in addressing the global challenges of climate change, biodiversity and food security.

The current overexploitation of ocean resources contributes to the risk of a dangerous and simultaneous collapse of climate and ecosystems. Human activities are accelerating the destruction of marine ecosystems that are crucial to the ocean's ability to help regulate the earth's climate, absorb CO<sub>2</sub> and support diverse marine life [1].

Investment in the sustainable ocean economy (SOE) [2] is essential to address this crisis. Currently, funding flows are minimal, yet huge opportunities exist to leverage investment in supporting a transition to the SOE in the following ways:

- **Economically:** two-thirds of all listed companies and their investors face a value at risk exceeding US\$8.4 trillion if they choose to maintain current practices in the ocean. The transition to a SOE could reduce this by 60 per cent [3].
- **Socially:** the livelihoods of 3 billion people [4] around the world depend on a healthy ocean, from fishers to coastal communities. The SOE provides substantial opportunities for protecting and advancing Indigenous rights and for improving gender equality.
- **Climate change:** full implementation of ocean-based climate solutions could overcome up to 35 per cent of the emissions gap between current practice and that needed for the world to be on a 1.5°C trajectory by 2050 [5]. Protected and/or restored coastal ecosystems also represent vital adaptation solutions that can help make ecosystems, people and assets more climate resilient.

While several different investment vehicles can drive the ocean capital market, Blue bonds [6] could play a pivotal role in financing the transition to a SOE due to their efficiency, potentially low transaction costs, large volumes and long maturities.

Despite the SOE's substantial funding needs, policy programmes and private sector projects have not yet attracted bond investors to a significant extent. The Blue bond market has grown recently, with roughly US\$9 billion issued in the past five years. But this represents only a minuscule proportion of the cumulative US\$4.2 trillion issuance of Green and other sustainability bonds [7]. There is both opportunity and demand to expand the market through a more directed, coordinated approach to activating investment.

Because of market barriers, including lack of global standards, expertise and capacity, a dedicated incubator for Blue bonds could serve as the catalyst to kick start sustainable ocean finance at the scale required.

## What are Blue bonds?

Blue bonds are debt instruments designed to finance sustainable ocean investments. To date, these have generally been use-of-proceeds bonds, but sustainability linked bonds (SLBs) can also incorporate key performance indicators tied to ocean health. Projects that are financed using a Blue bond can also have social co-benefits.

### List of acronyms used in this report:

|               |   |
|---------------|---|
| <b>APAC:</b>  | Asia Pacific                              |
| <b>BBI:</b>   | Blue Bond Incubator                       |
| <b>EEZs:</b>  | Exclusive Economic Zones                  |
| <b>LICs:</b>  | low-income countries                      |
| <b>LMICs:</b> | lower middle-income countries             |
| <b>ORRAA:</b> | Ocean Risk and Resilience Action Alliance |
| <b>SCIFF:</b> | Sea Change Impact Financing Facility      |
| <b>SDGs:</b>  | Sustainable Development Goals             |
| <b>SIDS:</b>  | Small Island Developing States            |
| <b>SOE:</b>   | Sustainable Ocean Economy                 |

1. UNESCO, 2021. *World Ocean Assessment II*

2. The SOE is defined as economic activities that provide economic and social benefits for current and future generations. As such, it maintains, restores and protects diverse, productive and resilient ecosystems; halts the loss of biodiversity; enhances energy efficiency; and reduces carbon emissions and pollution while improving livelihoods and jobs. It is based on clean technologies, renewable energy and circular material flows. Non-renewable extractive industries (e.g., offshore oil and gas, dredging, and deep-sea mining) as well as unsustainable practices in other sectors are therefore excluded. (Definition used by UNEP FI)

3. WWF, Metabolic, 2021. *Navigating Ocean Risk*.

4. OECD, 2020. *Sustainable Ocean for All*.

5. Hoegh-Guldberg, Northrop, 2023. *The Ocean as a Solution to Climate Change: Updated Opportunities for Action*. World Resources Institute, Washington DC.

6. Using the definition put forward in *Bonds to Finance the Sustainable Blue Economy: A Practitioner's Guide* (icmagroup.org)

7. Climate Bonds Initiative, 2023. *Guidance to Assess Transition Plans*.

# WHAT IS THE BLUE BOND INCUBATOR (BBI)?

**The Blue Bond Incubator (BBI) is a specialist “one-stop-shop” for structuring Blue bond issues that contribute to a sustainable ocean economy, delivering coastal resilience, climate stabilisation and protecting the most vulnerable ocean ecosystems.**

It will be a new not-for-profit entity supporting governments, private issuers and investors in ocean-facing economies to stimulate additional financing into the SOE by increasing long-term capital flows from bond markets. The BBI aims to support the development of a \$70bn blue bond market in the period to 2030.

It is timely, necessary and appropriate to establish a BBI to catalyse deal-flow into this space to support an orderly but catalytical expansion of private sector and sovereign investment into the blue finance space.

The BBI would work as a:

- (1) market builder (a market advocate for Blue bonds)
- (2) technical and financial advisor, supporting issuers in preparing transactions.

Its purpose is to:

- address the lack of bond finance relative to the significant financing needs in the SOE across six key sectors [8]
- defragment and streamline investable opportunities, promoting high-quality bond finance that delivers beneficial impacts for the SOE
- scale overall investment into the space
- ensure financed activities and policies are impactful while meeting social standards with stakeholder support
- increase investor awareness of the benefits of investing in the SOE, which will increase their willingness to make investments
- reduce transaction and financing costs associated with Blue bond transactions, including introducing concessional finance providers to high-quality projects and sovereign policy programmes
- improve access to bonds for those issuers whose activities will bring benefits to developing countries, especially SIDS, low-income countries (LICs) and lower middle-income countries (LMIC).

## How would it be structured?

It would be structured as a hub-and-spoke model, combining a centre of excellence hub with multiple geographically dispersed “spokes”. Initially work will be concentrated in the Asia Pacific (APAC) augmented using affiliated local organisations.

## How will it be established?

A feasibility study for the BBI (Q1 2024) has been finalised jointly by the Ocean Risk and Resilience Action Alliance (ORRAA), Callund Consulting, and Minderoo Foundation.

**We are now seeking partners to co-design and implement this new Blue Bond Incubator.**



8. The six key sectors are: Sustainable Blue Infrastructure, ridge to reef, ocean-based renewable energy, circular economy, sustainable seafood, and ocean conservation. See Table 1 on page 4 for further detail on these themes.



# SUSTAINABLE OCEAN ECONOMY INVESTMENT NEEDS

The investment needs in the SOE are substantial. Ocean finance will play a crucial role in the global drive to generate sufficient financial resources for climate mitigation and adaptation, and in stemming the further collapse of ecosystems and biodiversity.

We estimate the scale of investment needed [9] in the SOE in the period to 2030 lies within the range of US\$383-717 billion per year, with a midpoint of US\$550 billion per year needed across six blue investment themes (see Table 1) [10].

Table 1: Sustainable Ocean Economy: six identified investment themes

| Investment theme                            | Description  | Estimated investments needed   |
|---|--|--|
| <b>Ocean conservation</b>                   | Improving biodiversity and resilience in coastal communities, creating business opportunities through: <ul style="list-style-type: none"> <li>• Marine Protected Areas</li> <li>• ecotourism</li> <li>• payments for ecosystem services</li> <li>• blue carbon [11]</li> </ul> | US\$34b/year until 2030:<br>Global investment needs for nature-based solutions are US\$23b/year until 2030<br>Investment needs across SIDS are USD\$9.1b, or just under 40% of the total (Pacific SIDS account for 60% of this)<br>Marine Protected Area needs are US\$9.5b/year |
| <b>Sustainable seafood</b>                  | Capital and technical resources for best practice aquaculture and wild-caught seafood businesses and supply chains, particularly in emerging markets and SIDS  | US\$40b/year until 2030  |
| <b>Circular economy and blue technology</b> | Businesses leveraging ocean assets or directly preventing ocean degradation by using innovative new techniques or technologies such as plastic upcycling and waste management  | US\$47b/year until 2030  |
| <b>Sustainable blue infrastructure</b>      | Technologies and efficiencies, including green/blue solutions to freight and passenger shipping and green ports, as well as engineered coastal protection measures required as a climate adaptation measure  | US\$154.5–194.7b/year until 2030<br>Shipping decarbonisation: US\$37.5–75.7b<br>Port adaptation: US\$4.3–6.2b<br>Engineered coastal adaptation: US\$112.8b   |
| <b>Ocean-based renewable energy</b>         | Offshore wind alongside smaller-scale wave, solar and tidal power where investment provides innovation or uniquely leverages the ocean without detriment to biodiversity   | US\$43-139b/year   |
| <b>Ridge to reef</b>                        | Integrated solutions between agriculture, sustainable forestry and land use and wastewater treatment recognising the importance of watersheds and coastal management   | US\$80-245b/year - 50% in APAC<br>Nutrient run-off: US\$17–38.9b<br>Coral reefs: US\$0.1–0.2b<br>Sewage Infrastructure: US\$20.9–80.5b   |

9. See further details in Annex.

10. These also align with those identified by UNEP FI, the Asian Development Bank and ICMA's *Practitioners Guide on Bonds to Finance the Sustainable Blue Economy*.

11. The protection, management and restoration of marine ecosystems – especially mangroves, saltmarshes and seagrasses – to reduce CO2 emissions and increase CO2 removals, and that is at least partly remunerated through policy interventions, such as carbon crediting, that place a financial value on such emissions and removals.

The bulk of this spending will need to be in the Asia Pacific, which our study found accounts for 56 per cent of global investment needs. For the Asia Pacific and Caribbean regions (further 1 per cent of global needs), many countries have investment grade credit ratings strong enough to make bond finance realistic. Further, 39 per cent of the investment need in these regions is in countries eligible for official development assistance.

There is a stark financing gap for much-needed investments in the SOE, particularly in SIDS and LICs. The Exclusive Economic Zones (EEZs) [12] of SIDS represent some 30 per cent of the ocean [13]. This means that the opportunities provided by Blue bonds are crucial for the local economies of SIDS, and their climate resilience.

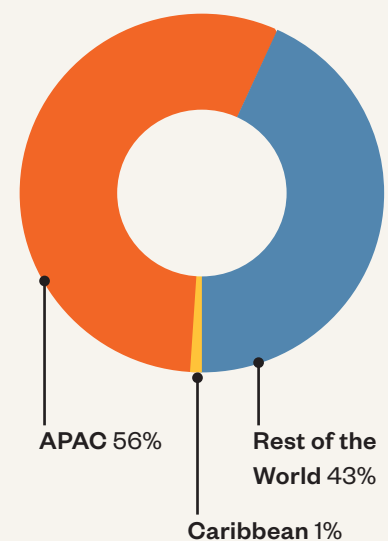
Many SIDS, however, lack deep local capital markets or access to global bond markets – they are either not investment grade or lack a sovereign rating. Given the existential crisis faced by SIDS and the particular importance of supporting their local economies for biodiversity regeneration and climate resilience, it is critical to identify the right investment mix to support the mitigation and adaptation needs of these large ocean states.

While our estimates suggest that only around 3 per cent of the global investment needs for the SOE will be in SIDS, this investment would make a huge impact, underscoring the imperative for multilateral and other development finance to be channelled into these countries.

Debt capital markets and Blue bonds could play a much more central role in financing the SOE. For sovereign debt managers, the potential scale and long maturity of bond finance makes it a good match with the long-term financing needs of SOE activities, which often extend beyond 10 years. At present, these actors lack a dedicated funding instrument for activities that appeal to institutional investors.

Likewise, private sector spending in the SOE could be effectively financed by bond investors, especially in cases with high upfront investment needs and where currency risks can be managed. In all cases, Blue bonds will require issuers to have requisite credit quality along with sufficient governance and transparency standards.

**Figure 1:**  
Investment needs by region. According to our scoping study, 39 per cent of investment needs in the Asia Pacific (APAC) and Caribbean regions is in countries eligible for official development assistance.



12. EEZs are the zones where coastal nations have jurisdiction over natural resources. Typically, these extend to 200 nautical miles offshore.

13. IISD, 2021. *Small Islands, Large Oceans: Voices on the Frontlines of Climate Change*.

# BARRIERS TO PROGRESS

**Blue bonds are a key instrument for securing finance at scale because they have the potential to generate an accelerating effect, build partnerships, and engage guarantees and concessional finance.**

Blue bonds commit issuers to spending on certain projects or to achieving certain policies or outcomes related to the SOE. However, due to the lack of established best practices and limited interest from policymakers until recently, this financial instrument remains relatively immature compared to Green and other sustainability-related bonds.

## GENERAL MARKET BARRIERS

The current lack of Blue bond finance is due to several market barriers and gaps in market infrastructure and transparency. Reasons include:

- The ocean provides hugely valuable ecosystem services, and these extend across borders (such as in fisheries or coral reefs) or across entire economies (such as in coastal regions' resilience to flooding). **Where projects have a public goods character, investable projects and revenue streams cannot be easily defined or monetised.**
- Bond issuance is impeded by an **underlying lack of local capital market development**. Some types of financial markets and instruments simply do not exist in many ocean-facing countries with smaller economies. There is a particular scarcity of long-maturity debt products and of local currency products.
- Unlike Green bonds, **Blue bonds are currently inadequately defined** within the growing landscape of sustainable debt products. Therefore, investors may not understand the type of impact that Blue Bonds may deliver, the outcomes local issuers may commit to, or their rights under the terms of individual bond products. A variety of Blue bond guidelines have emerged, and these have only recently become more coherent [14].
- **Sovereign issuers have specific challenges in signalling credible and impactful policies to investors** who are mandated to pursue certain outcomes and impact.

## BARRIERS FACED BY ISSUERS

Due to these market barriers, issuers regularly confront barriers and challenges in structuring Blue bonds. This includes:

- **the lack of investor understanding** about the importance of the ocean in delivering climate action, biodiversity restoration and social benefits, while **investors undervalue the potential impact of Blue bonds**
- the difficulty in capturing SOE **benefits within** the prevailing Green bond frameworks, with some Blue bonds seen to suffer from **quality problems**, such as the somewhat vague taxonomies that govern eligible project spending
- **the challenge of reflecting policy outcomes** in sustainability-linked bonds (SLBs)
- **the fact that debt for nature swaps (or conversions) are subject to lengthy and costly negotiations**, with no general standard emerging for the provision of public guarantees within these transactions
- **sovereign issuers facing difficulties in credibly committing to SOE outcomes** over the long term independently or needing **external guarantees** to mitigate specific political or macroeconomic risks
- the scarcity of **private bond transactions in the market that are distinctly "blue" due to the broader challenges in defining SOE investment projects, leading to issuers' ad-hoc and opportunistic choices** between "blue" and "green" labels
- **difficulties in establishing enough investable deals**, with the following problems often cited [15]:
  - a lack of capacity among relevant issuers to develop high-quality projects and interact with investors
  - the high cost of quantifying impacts and lack of standardised metrics
  - a lack of evidence based on the possible benefits from undertaking projects
  - high monitoring costs.

14. UNEP FI, UN Global Compact, ICMA, IFC & ADB, 2023: *Bonds to Finance the Sustainable Blue Economy – A Practitioner's Guide*

15. Coalition for Private Investment in Conservation, 2021: *Scaling private investments in conservation: five barriers and five solutions*





## BARRIERS AND OPPORTUNITIES FOR INVESTORS

A further challenge is that **many possibly relevant activities** (especially around Marine Protected Areas and nature-based solutions) **are in countries with limited or no credit ratings**. Hence, bespoke blended finance and aggregation are crucial.

Similarly the market barriers identified above, research commissioned by Minderoo Foundation and ORRAA in 2023 by Callund Consulting identified several key barriers and opportunities from an investor perspective (see Table 2) [16].

Table 2: Barriers and opportunities — from an investor’s perspective

| Barriers  | Opportunities   |
|---|---|
| There are concerns over the absence of monitoring protocols and small ticket sizes.   | There is potential to increase finance flows to the SOE and the potential to mainstream a blue perspective into existing green investment themes, especially through incorporating biodiversity concerns into renewables. |
| There is a perceived challenge in developing a pipeline of “shovel-ready” activities attractive to investors.   | Sovereign bonds have greater opportunity in the near term, and they can be enabled through bundling and the use of tax revenues for repayments.   |
| Market development requires certainty. To drive certainty, robust and rigorous Key Performance Indicators (KPIs) or criteria that are independently verified are needed.  | Sustainability-linked bonds (SLBs) have good growth potential because of low capital intensity, but they have credibility issues because of the lack of KPIs.   |
| More information on the potential impacts of investments is welcome, but there is little enthusiasm for new labels or taxonomies.   | Local currency Blue bonds are especially attractive in markets with deep domestic capital markets.  |
| A clearer narrative is needed on the benefits of SOE investments and how investments link to broader investment themes such as climate mitigation, food security, energy independence, resilience and social inclusion. | There is significant opportunity to develop SOE transition plans for sustainability.  |

16. Callund Consulting interviewed a selection of 16 organisations from across the public and private sectors, including Ninety One, Aurum Research Limited, SWEN Capital Partners, the Asian Development Bank, Nordic Investment Bank, Nomura AM, DNV, Greensquare Ventures, South Pole and the World Bank.

# THE BBI SOLUTION

## A STRONG BLUEBOND MARKET SUPPORTED BY A BLUE BOND INCUBATOR (BBI) COULD BE THE SOLUTION.

At scale, Blue bonds are an important instrument for financing the transition to a SOE given their efficiency, with potentially low transaction costs, large volumes and long maturities. The instrument would also meet the mandates of institutional investors who increasingly seek impact on UN Sustainable Development Goal (SDG) outcomes, including in the SOE, nature and biodiversity.

Over the past decade, sustainable bonds [17] have soared in use across the globe. In 2023, more than US\$1 trillion worth of sustainable bonds were issued [18]. Green bonds continue to constitute the greatest share of this market — accounting for US\$575 billion of issuances in 2023 — with growth in social bonds, sustainability bonds and sustainability-linked bonds. In comparison, since 2019, transactions reportedly labelled as “blue” reached a total value of just US\$9 billion [19]. This stands in stark contrast to the global SOE investment needs of US\$550 billion per year on average.

**There is currently no entity dedicated to focusing on ocean financing, and existing initiatives do not cover this space.**

A major stocktake identified additional annual funding needs of US\$1.8 trillion on climate change and US\$1.2 trillion on other SDGs until 2030 [20]. While the bulk of these funds would be mobilised through domestic resources, this would need to be supported by development financing and private capital in roughly equal proportions [21,22]. Without a mature market for Blue bonds, a sizeable portion of these financing needs would not be met, only further deepening the ocean and planetary crises.

**The BBI will mobilise debt markets to invest at scale into the SOE.** This will be particularly important in territories that are least served by capital markets, such as SIDS and LICs. The BBI can overcome a range of market failures and barriers that are due to the public goods nature of underlying investments, difficulty in establishing investable projects, and risks of investing in countries that lack capital markets and related infrastructure. Due to the relative novelty of Blue bonds, investors demand increased transparency regarding the delivery of targeted projects and policies in the SOE, and the BBI will play a key role in delivering this confidence.

**The BBI will fill an important gap in the existing development finance ecosystem.**

Even though several public and private institutions seek to support sustainable bond issuance in emerging markets and promote relevant best practices, the requirements of ocean finance, especially in SIDS and other ocean-facing economies, are not adequately served. The BBI would, therefore, have a unique mandate to increase knowledge and showcase best practice on Blue bond finance, acting as an intermediary between investor and issuer communities, as well as providing dedicated support to expedite high-quality and impactful Blue bond transactions.

**A specialist body such as the BBI would concentrate the relevant expertise and act as a “one-stop-shop” for advice and structuring of primary bond issues.** This would build expertise on blue finance relevant for institutional investors in a single body and create significant benefits from scale economies and network effects. The BBI would, therefore, meet the demand for expertise, support and promotion of high-quality transactions arising from both the investor and the development finance communities. At the same time, the BBI will seek partnerships and synergies with the existing institutions in the sustainable bond space.

**We therefore see the BBI as a key market building-block for channelling capital toward an SOE.**

In the near term, a BBI would deliver:

- **Market building:** the BBI will provide blue finance expertise and market knowledge to issuers, investors and concessional finance providers and the wider market with an interest in stimulating Blue bond issuance and promoting best practices.
- **Technical and financial advisory:** the BBI will support issuers to prepare high-quality Blue bond transactions [23] that meet impact and additionality criteria.

In the longer term, and subject to stakeholder support, the required risk management expertise and balance sheet strength, the BBI may also consider plugging another market gap by providing financing support for Blue bond issuance.

17. For an overview of different types of bonds, see annex.

18. Bloomberg Professional Services, 2023: *Green bonds reached new heights in 2023*

19. Climate Bonds Initiative, 2023: *Guidance to Assess Transition Plans*

20. UNEP, 2023: *State of Finance for Nature*

21. Independent Experts Group, 2023. *Strengthening Multilateral Development Banks*

22. Songwe, Stern, & Bhattacharya, 2022. *Finance for climate action: scaling up investment for climate and development*

23. including use of proceeds bonds, sustainability-linked bonds, debt for nature and development impact bonds

Figure 2: The BBI Theory of Change

**IMPACT**

A sustainable ocean economy delivering coastal resilience, climate stabilisation and protecting the most vulnerable ocean ecosystems

**LONG-TERM IMPACT**

Increased long-term, additional capital flows, using bonds, into impactful ocean economy activities, targeting \$70 billion cumulative issuance in 2030

**INTERMEDIATE OUTCOMES**

- Increased investor awareness of blue economy opportunities
- Enhanced pipeline of bankable activities and policy funding strategies
- Reduced costs for Blue bond issuances
- Improved access to bonds for SIDS and LMICs

**OUTPUTS**

- Conferences, workshops etc
- Knowledge products
- Market intelligence
- Engagement in policy dialogues
- Financing strategy support
- Pre-issuance transaction support
- Post-issuance support

Market builder

Technical and financial advisor

Financing partner

**INPUTS**

- Expert staff
- Financial resources
- Network of partners



# PROPOSED ACTIVITIES AND MANDATE

The broad mandate of the BBI will be to address the lack of bond finance relative to the significant financing needs in the SOE.

**Its high-level mission will be to:**

- stimulate additional [24] financing into the sustainable ocean economy by increasing long-term capital flows from bond markets, with a potential target of US\$70 billion of Blue bond issuance in the period to 2030
- ensure that financed activities and policies are impactful while meeting social standards with stakeholder support [25].

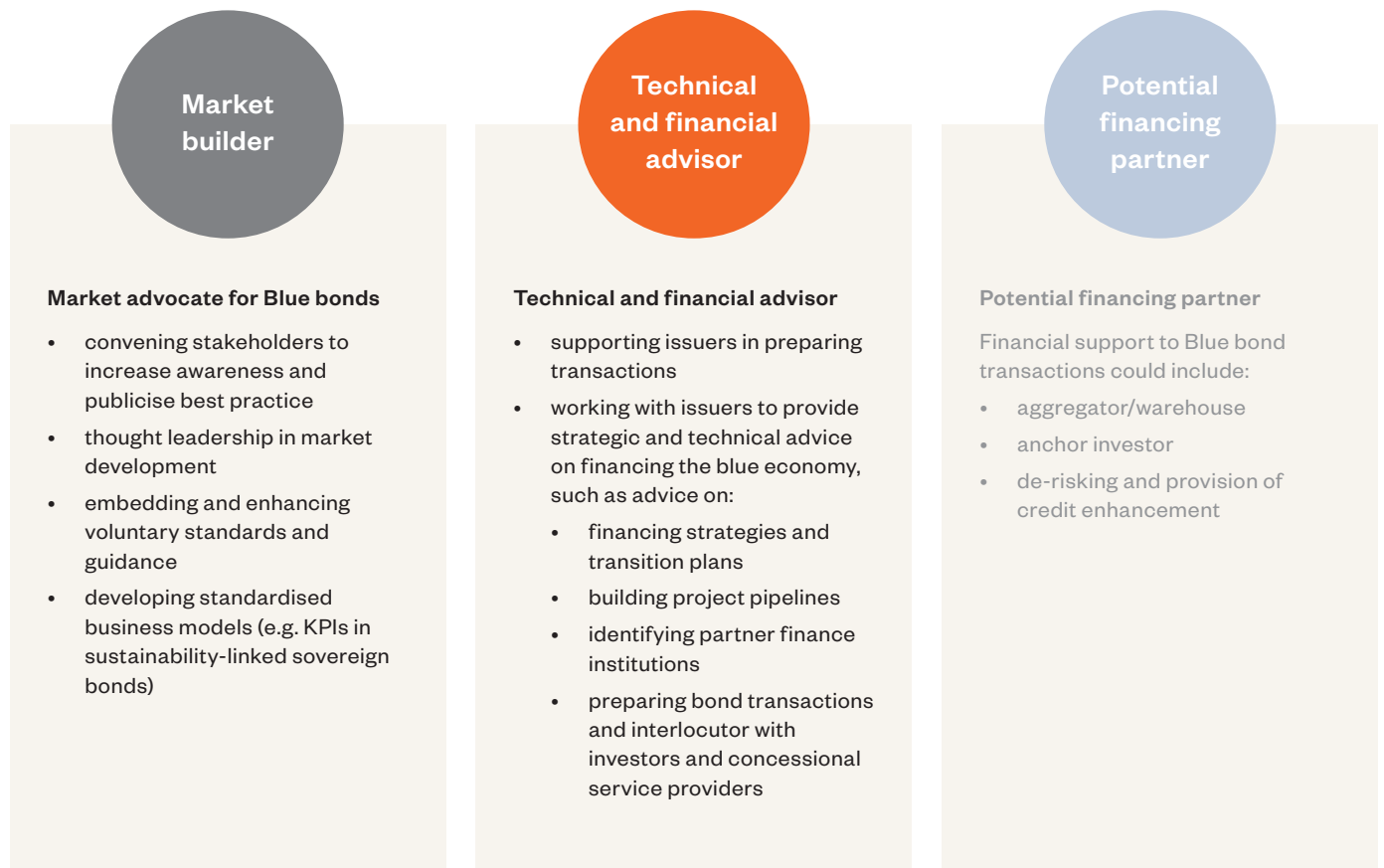
**The vision for the BBI’s role will be expressed in several specific objectives, which include:**

- increased investor awareness of the benefits of investing in the SOE, which will increase their willingness to make investments
- an enhanced pipeline of bankable and credible projects and, for sovereign issuers, enhanced funding strategies for SOE policies

- reducing both transaction and financing costs associated with Blue bond transactions, including introducing providers of concessional finance to high-quality projects and sovereign policy programmes
- improving access to Blue bonds for those issuers whose activities will bring benefits to developing countries, especially SIDS and low- and middle-income countries.

**To deliver on its mission and objectives, the BBI will initially focus on two main types of activities (or pillars), as per Figure 3.**

Figure 3: BBI activities and roles



24. Additionality would be defined in terms of access to finance not otherwise available (from whatever source), or not available on similar terms (based on risk sharing, maturity, diversification of investor base). Qualities of issuer conduct that are incentivised through bond finance (e.g. policy conditionality) could also be aspects of additionality.

25. A basis for assessing impact could be existing high-level international policy frameworks, such as the SDGs, or the Kunming-Montreal Global Biodiversity Framework (GBF) and the nature plans signatories will submit under this agreement.

# HOW DO BLUE BONDS FIT INTO THE GLOBAL SOE MARKET-BUILDING WORK?

**A successful BBI would form a complementary part of the international community's drive to attract funding for global public goods from private capital markets in support of a transition to an SOE.**

Several initiatives [26] have picked up on the huge risks that the global economy, humanity and the planet are exposed to if a business-as-usual approach to ocean resources continues. There has been a big focus on providing much needed knowledge and guidance to the private sector and governments on how to support the financial transition to an SOE, laying the groundwork for implementation.

These globally leading efforts would build the bedrock for the BBI and are further contributing to ongoing work streams across Minderoo Foundation and ORRAA that have SOE market building at the core.

## NEXT STEPS

**We are seeking partners to collaborate on growing the Blue bond market.**

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## ABOUT US

**This study was led jointly by Minderoo Foundation and ORRAA.**

Minderoo Foundation is a proudly Australian philanthropy that forges a fairer future and seeks effective, scalable solutions to dismantle the systems that entrench inequality. We incubate ideas, advocate for change and accelerate impact. We uplift communities, advance gender and equality, protect the oceans and respond to emerging challenges.

Minderoo's Oceans work aims to return the ocean to a healthy state, free from pollution and safeguarded for future generations.

We are keen to improve ocean stewardship. The most urgent problems to tackle are closing the ocean funding gap and transitioning global economic activities from harmful toward sustainable. Minderoo is working to systematically support the transition to a SOE.

**You can learn more about Minderoo Foundation here: [minderoo.org](https://minderoo.org)**

The Ocean Risk and Resilience Action Alliance (ORRAA) is the only multi-stakeholder convenor connecting the international finance and insurance sectors, governments, non-profits and stakeholders from the Global South focused on driving financial innovations to deliver a sustainable and equitable blue economy and more resilient coastal communities.

ORRAA is spearheading the Sea Change Impact Financing Facility (SCIFF), an open ocean financing architecture designed to drive at least US\$1 billion of private investment into coastal and ocean ecosystems by 2030, with a focus on the Global South. The SCIFF is building an ocean financing ecosystem to complement ORRAA's development of an investible project and product pipeline and will integrate sustainable blue finance into broader climate and biodiversity finance ecosystems.

ORRAA is working together with its members on a blue finance delivery roadmap between now and 2025, developing financing instruments (including the BBI), bridging policy frameworks, building financial literacy, and developing pathways and scalable tools to unlock financing for coastal and ocean resilience and regeneration.

**You can learn more about the SCIFF here:**

[oceanriskalliance.org/sciff/](https://oceanriskalliance.org/sciff/)



# ANNEX

## Types of bonds:

To achieve the scale of investments required, and to meet the needs of public and private issuers in the developing world, the global Blue bond market will need to be much larger and more mature. Blue bonds will overwhelmingly be in one of four different formats:

- **Use of proceeds (UoP) bonds** must be invested in specific activities that meet certain criteria (for example, climate mitigation activities, etc). These are the most common kind of Green bonds.
- **Sustainability-linked bonds (SLBs)** are bonds that allow proceeds for any activity but bond terms change depending on whether the issuer meets predefined performance indicators.
- **Debt for nature swaps (or conversions) (D4N)** involve the restructuring of outstanding debt, which may include bonds, in exchange for nature or climate activities. These are not bonds per definition but are often included in current discussions of the Blue bond space
- **Development Impact Bonds (DIB)** are results-based contracts where investors finance development activities and receive repayment and any “interest” based on the programme’s success in achieving agreed outcomes. Currently these are at the experimental stage and are not widespread.

## Investment needs per theme and region (US\$)

Figure 4: Investment needs in NBS in marine areas, US\$b per year to 2030

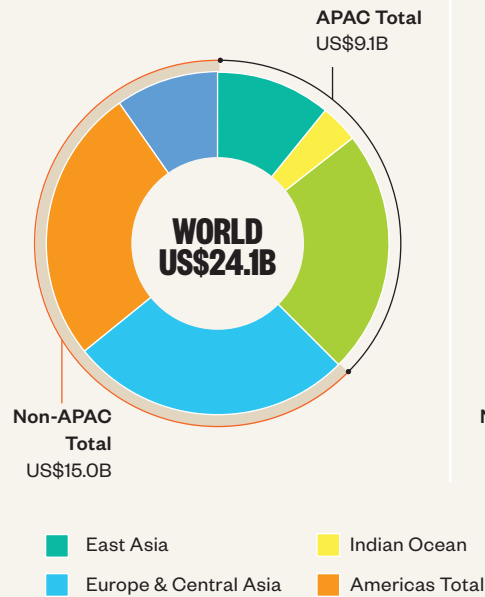


Figure 5: Marine Protected Areas US\$b per year to 2030

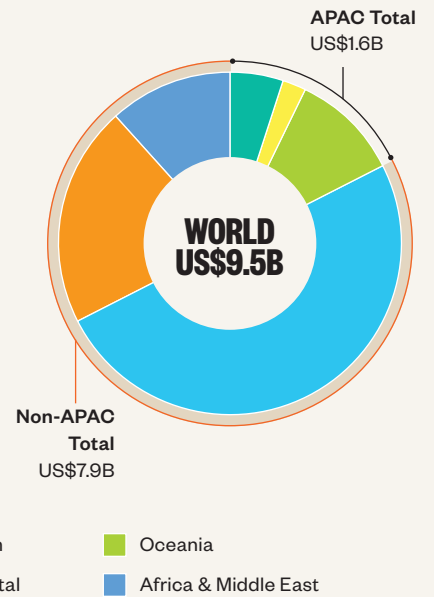
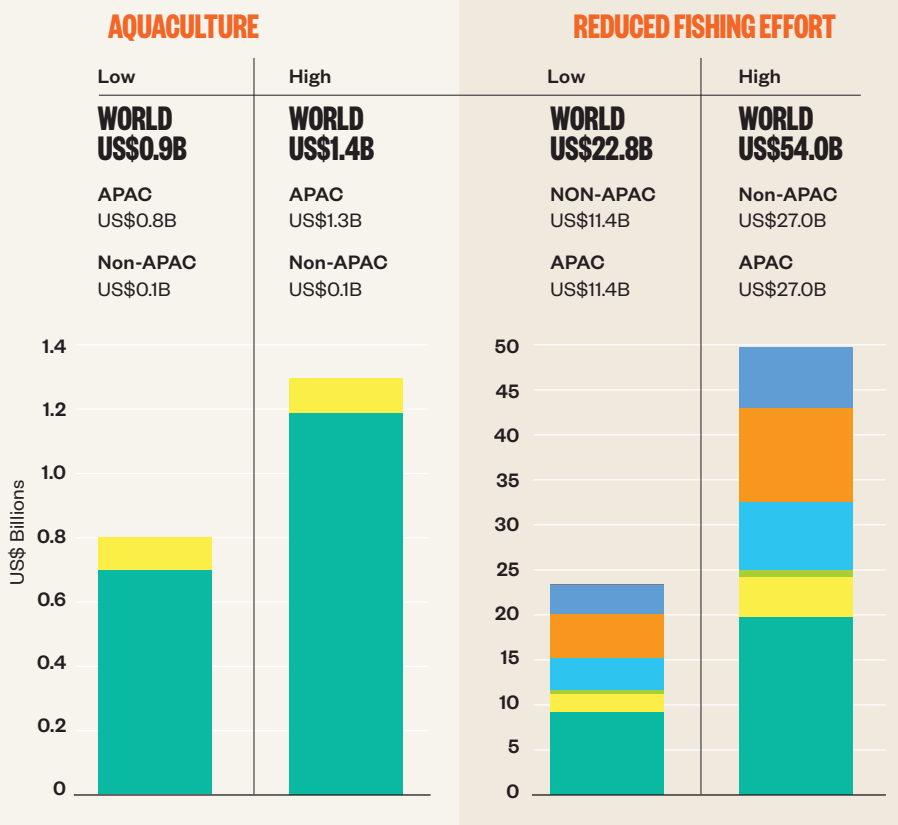
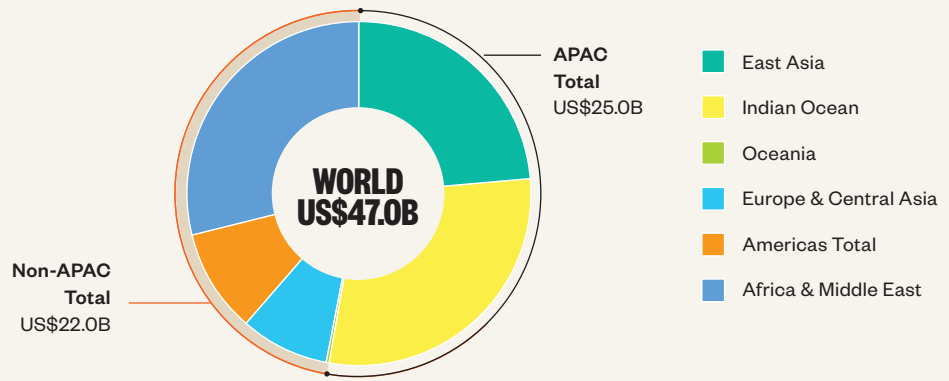


Figure 6: Sustainable seafood investment need

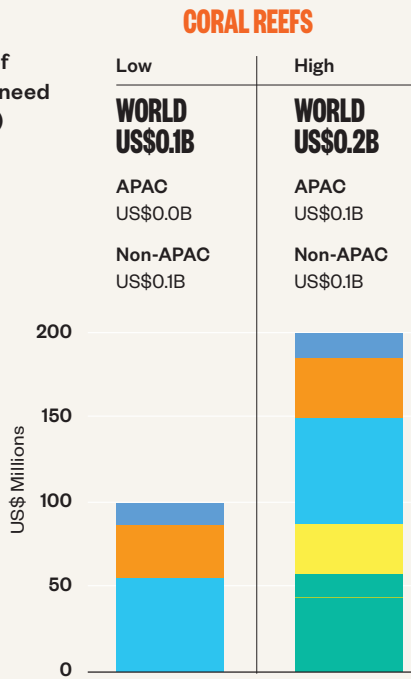


## ANNEX (CONT.)

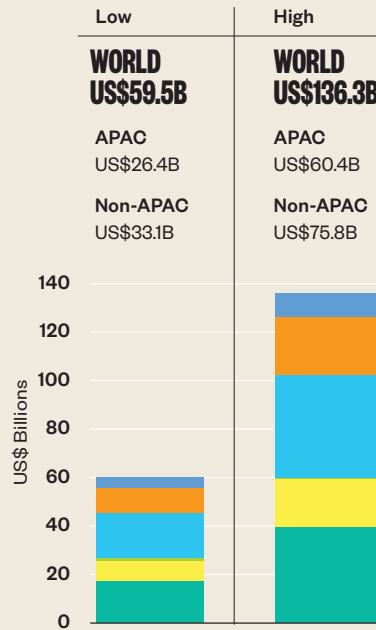
**Figure 7:**  
Cost of preventing ocean plastic pollution per annum US\$ billion



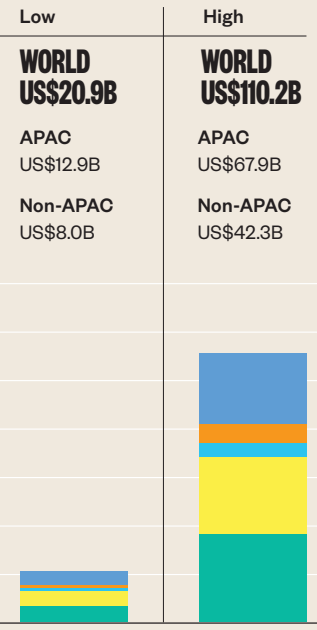
**Figure 8:**  
Ridge to reef investment need (US\$ billion)



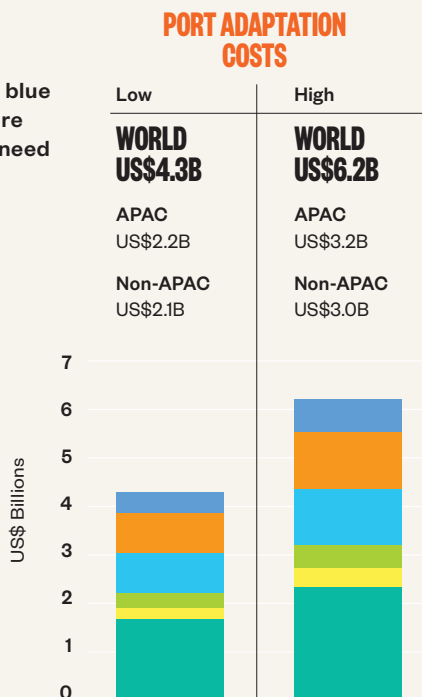
### NUTRIENT FROM UPSTREAM AGRICULTURE



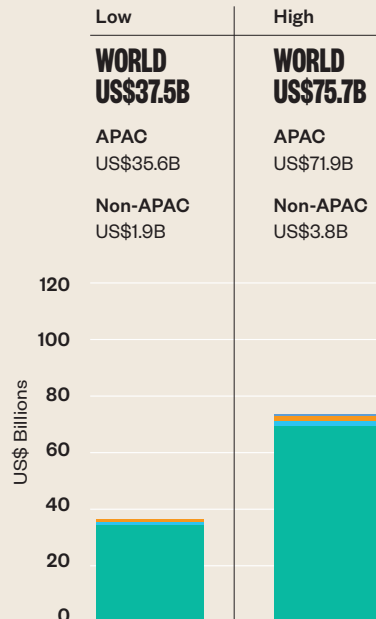
### SEWAGE INFRASTRUCTURE



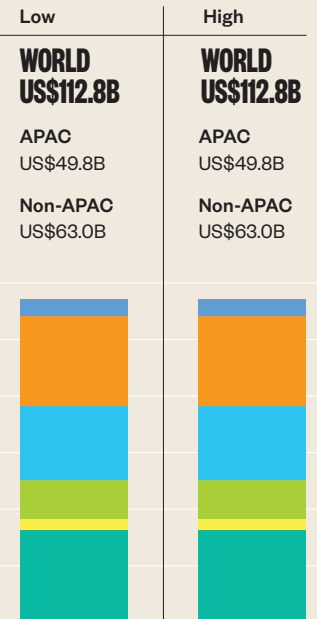
**Figure 9:**  
Sustainable blue infrastructure investment need

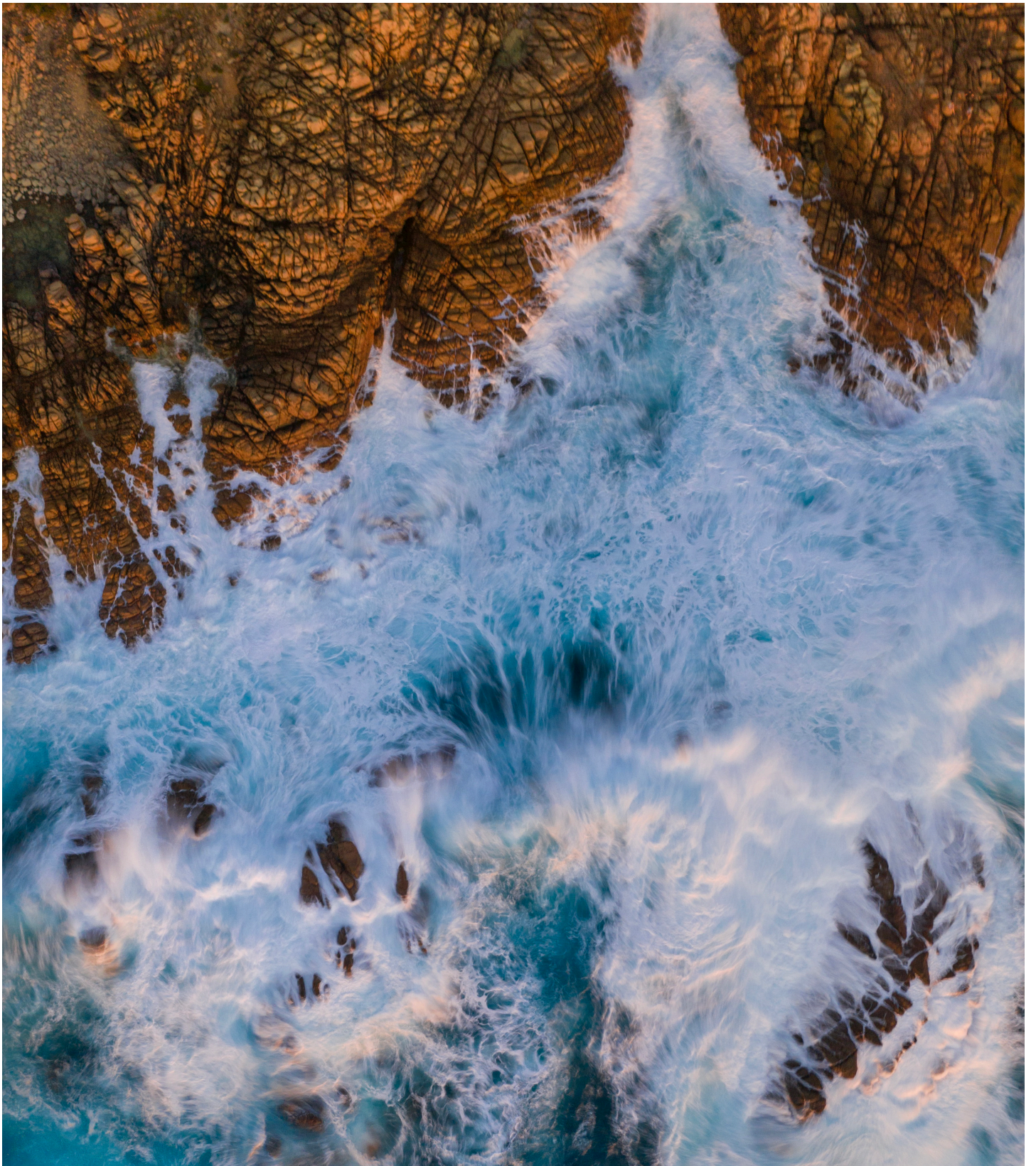


### DECARBONISATION OF SHIPPING



### ENGINEERED COASTAL ADAPTATION





Feasibility study partners

