In our News and Articles section, we bring you extracts from a recently published article by Morgan Stanley (11th April 2023), which gives us an overview of current investment opportunity in marine protection and other related projects tackling climate change, and assesses the climate, biodiversity and socioeconomic effects of these "blue economy" investments, alongside financial performance.



It is reported that "Tackling climate change, protecting biodiversity and fostering inclusive economic growth will require more than \$3 trillion of investments in the world's oceans in the coming decades." (Morgan Stanley 2023)

According to its website (Morgan Stanley 2023), the economic, social and environmental benefits of oceans are at risk from the threat of climate change and a recent UN agreement has established a legal framework that creates protected maritime areas and sets 2030 targets to maintain the health and biodiversity of the oceans. All positive news for the sustainable investor:

The world's oceans help mitigate some of the most severe effects of climate change. Not only do they absorb almost 90% of global warming emissions and produce half of the oxygen we breathe, but they also drive economic progress and job creation. Ocean-related industries generate \$2.5 trillion of economic value globally and support almost 3 billion people's livelihoods in industries including seafood, port construction and coastal tourism.

However the economic, social and environmental benefits of oceans are at risk. Heightened levels of CO₂ in the atmosphere are making the seas more acidic, threatening species, entire ecosystems and a thriving fishing economy—the ocean's largest source of direct employment. Approximately 3% of global emissions can be attributed to the maritime shipping industry each year. In addition, rising sea levels and record-setting hurricanes or cyclones could displace coastal communities from Mumbai to Miami—possibly as many as 400 million people this century.

Of the 17 United Nations Sustainable Development Goals, the "Life Below Water" goal has received the least amount of public money. But that could change with the recent UN agreement on the High Seas Treaty, a legal framework that creates protected maritime areas and sets 2030 targets to maintain the health and biodiversity of the oceans.

"With a framework for ocean conservation now in place, there is a strong case for investors to assess opportunities in the blue economy," says Jessica Alsford, Morgan Stanley Chief Sustainability Officer and CEO of the Institute for Sustainable Investing. "Over \$3 trillion of funding is needed in the coming decades to protect our oceans so that they can continue to play a critical role in tackling climate change, curbing biodiversity loss and supporting inclusive economic growth."

(Morgan Stanley 2023)

Morgan Stanley (2023) identifies the different asset classes with significant investment exposure and funds in the so-called "blue economy":

- Venture capital firms and other early-stage investors are especially active in circular
 economy solutions, such as plastic waste reduction and removal; innovative uses for
 seaweed and other marine life; and emerging blue technologies like tidal turbines.
- In public markets, nearly 500 equity funds had an average exposure of more than 3% to the "Life Below Water" goal in 2022, with more than 100 of those funds' exposures at 10% or more. While some of those funds are dedicated solely to water, others consider broader themes in which healthy oceans play a crucial role, such as the future of food production or the clean energy transition.
- In the fixed-income space, blue bonds are beginning to emerge to fund sustainable ocean economy projects. For example, Morgan Stanley acted as joint bookrunner for The Export-Import Bank of Korea's \$3.5 billion bond issuance in 2022, which included a \$1 billion blue tranche for sustainable marine transportation.

(Morgan Stanley 2023)

In its analysis, Morgan Stanley (2023) describes in some detail, the key areas of marine protection investment to watch out for, across public and private domains, and highlights where the 4 largest investment opportunities lie:

Meeting the UN High Seas Treaty's commitments and supporting a sustainable blue economy will require the continued participation of public and private funds, as well as philanthropic and non-governmental organizations. The four largest areas for investment are:



Highcharts.com

Source: International Energy Agency, United Nations Environment Programme, University Maritime Advisory Services, The Nature Conservancy.

1. Decarbonizing the Maritime Industry

Oceans are the world's highway: Maritime shipping carries 80% of global trade by volume and 70% by value, and approximately 3% of annual global greenhouse gas emissions are attributed to the industry. International Maritime Organization, which regulates ship emissions, set a goal in 2018 to halve the emissions from the industry by 2050 through low-carbon fuel, ship modification and other solutions. Those efforts are expected to cost \$50 billion to \$70 billion annually from 2030 to 2050.

2. Marine Solutions to Protect Ecosystems

As sea levels rise, coastal communities will need ways to protect critical infrastructure, such as roads and homes. Marine nature-based solutions, such as seagrass beds, mangroves, and salt marshes, are proven to protect coastal communities from storms and flooding while also removing carbon from the atmosphere. Scaling these solutions will require approximately \$1.1 trillion in investment between 2022 and 2050.

3. Marine Renewable Energy

Oceans could unlock more opportunities to facilitate the global transition to clean energy. Fixed offshore wind farms in shallow coastal waters are currently the largest marine-based source of clean energy. However, other technologies are also emerging, such as floating offshore wind turbines in deeper waters and tools to harness wave and tidal energy. By 2040, global offshore wind sites could meet projected demand for almost all global electricity needs. To move toward a clean energy economy, wind farm construction will require \$840 billion in capital expenditures.

4. Sustainable Aquaculture

Approximately half of global seafood production today comes from farmed sources, or aquaculture, mostly in Asia. The other half comes from wild fish stocks, which are facing pressure from overfishing as global seafood demand continues to grow. Expanding aquaculture to meet this demand is a major investment opportunity, with an estimated \$150 billion to \$300 billion in capital expenditures needed to expand capacity in the next 10 years, which should be accompanied with efforts to mitigate the water pollution and labour risks inherent to the aquaculture industry. In some cases, sustainable aquaculture can also serve climate objectives as fish farms can also be co-located with new renewable energy sites and farmed seafood is a comparatively low-carbon source of protein.

(Morgan Stanley 2023)

One issue that investors need be acutely aware of, is the measurement of investment performance for these "blue economy" projects and Morgan Stanley (2023) outlines key indicators for investors to consider and explore further:

Looking Ahead: Measuring Blue Economy Performance.

Identifying key performance indicators for blue economy projects can be complex, and investors should monitor how standardization and metrics evolve. There's no single metric to quantify impact toward ocean economy goals as there is for land-based projects that aim to reduce greenhouse gas emissions. To address this, the International Capital Markets Association is formalizing guidance for "Blue Bond" issuance, and an industry collective recently created the Ocean Impact Framework, which identified more than 30 KPIs across six impact themes. Investors should use both to help assess the climate, biodiversity and socioeconomic effects of blue economy investments alongside financial performance. (Morgan Stanley 2023)

References

Morgan Stanley (2023) '4 WAYS TO INVEST IN A SUSTAINABLE "BLUE ECONOMY"', April 11th, 2023. Available at: https://www.morganstanley.com/ideas/blue-economy-investing-ocean-priorities (Accessed 16 August 2023).

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