

CIO Special

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Ocean finance: redefining the value chain

Key takeaways

- As we mark UN World Oceans Day 2022 today, we face major challenges in building a sustainable blue economy. The global financial sector will play an important role in finding solutions.
- We need to focus on the concept of natural capital, and how to ensure sustainable ecosystem services value chains. Preservation of such value chains can give nature room to recover – facilitating their natural adaptation will also help us in future.
- Information and measurement are key factors in developing ocean finance.
 Assessment and disclosure of risk will also help to define new financing methods and institutions and deliver sufficient capital for meaningful change.

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The "blue acceleration"

Our relationship with the ocean is on the cusp of major change. We are increasingly aware that ocean environments are under great stress – from temperature change, pollution, and other environmental degradation. But, at the same time, technology and greater knowledge appears to be opening the door for further potentially risky ocean exploitation. The possible consequences of this are not known yet.

As a result, the world is now embarking on what some call the "the blue acceleration" – a race to grab resources in terms of food (e.g. fish), materials (e.g. ocean mining, bioprospecting) and geographic space.

The ocean is central to our existence. Our knowledge of how it functions is very incomplete, but it is a vital source of biodiversity, climate management, food, livelihoods and, for many, relaxation and rejuvenation – all through a great range of ecosystem services.

We therefore need to **manage future change** with great care. We know from our (above-water) experience the dangers of getting things wrong and, with the ocean, the threats are even larger.

Managing ocean change is, however, difficult: two key reasons contribute to this.

Firstly, the **ocean itself is incredibly complex** – its size, the interconnectedness of its systems, and the incredible variety of marine biodiversity that lives within it add to the difficulties in understanding and mapping its natural processes. It is also virtually impossible for humans to manage natural processes within the ocean.





Ocean governance

Second, the existing regulatory regime which is underpinned by the United Nations Convention on the Law of the Sea, while groundbreaking at the time that it was negotiated in the early 1980s, may no longer be entirely fit for purpose. It left many issues unaddressed. The current regime gives countries geographically extensive national rights (which can be licensed to third parties) but the UN supervisory framework is fragmented. Most of the ocean is also still defined as international waters, requiring the cooperation of many countries to manage properly. Future developments on ocean mining may put the regime's failings in sharp focus.

Reforming ocean governance is difficult and takes a long time. It has taken nearly 20 years to try to negotiate an agreement at the World Trade Organisation to do away with harmful fisheries subsidies. We have spent almost the same amount of time discussing how to protect biodiversity in the high seas (those marine areas beyond national jurisdictions) and agreement here has yet to be reached. But the threats to the ocean are immediate and profound. There is also a pressing need to integrate ocean needs into an emerging framework of government-agreed environmental targets that are cut across multiple areas and include biodiversity and climate mitigation, adaptation, and resilience.

Natural capital

In this uncertain environment, what rudder can steer us in the right direction? The world's **financial sector** will play a great part in determining appropriate future direction in the **sustainable blue economy** – which also needs to be equitable. Current financial involvement is diverse in size and scope – from small, local (often environmentally-aware) projects to much larger funding of transnational firms in big sectors such as energy or fishing, which may have negative consequences.

These financing needs might seem diverse – but can be seen as part of the same financial **value chain**.

At a conceptual level, in addition to recognising the intrinsic value of the ocean as an Earth system, we need to see it also as a source of **natural capital**, from which we draw **ecosystem services**. Local communities need to be able to use their knowledge to manage these services for both themselves and the global village. Understanding this link between natural capital and ecosystem services will have implications for the financial sector and its future approach to the issue.

New ways of managing these services, for example through Nature-based Solutions (NbS), will require new financing methods (including insurance) that may complement or displace existing investment methods or financial products. Such innovation will affect macro processes (e.g. debt for nature swaps), existing asset classes (e.g. blue bonds) and other forms of resource mobilisation by governments and individual companies.

Finance and value chains

The role of finance in ensuring a sustainable blue economy will depend on the understanding of these value chains.

Financial innovation may change the way we draw on these ecosystem services, at many stages along the value chain from initial extraction to transportation and processing and eventual consumption. By implication, it will also help stop investment in destructive activities which harm natural capital.

Moving from this conceptual reframing to **practical investment implementation** might seem difficult. How, for example, are we to measure the exact size or nature of this natural capital? But seeing ocean resources as "capital" helps focus attention on sustainability and related problems (for example the "tragedy of the commons"). The time dimension – sustainability – becomes a vital part of value chains.

These value chains cover an infinitely broad spectrum of ecosystem activities delivering services to nature. But here we consider a narrower spectrum of projects with direct human involvement.

At one end of the spectrum, as noted above, we have **environmentally focused**, **geographically localised projects** – often involving multilateral agencies and public/private partnerships. The value chain here may short and focused on environmental preservation and sustaining of local communities. Financial support can be seen as a "positive" but is usually small-scale as financial providers develop new "blue" approaches and investors assess likely future rates of return.

At the other end of the spectrum, we can have **investment in major transnational firms** focused on harvesting of widespread existing resources (from natural capital) and redistributing them to global populations. Financial value chains are longer and more complex. Some of these operations may be sustainable (wind power), others may not be (fossil fuels). Financial involvement in some activities, particularly those which appear destructive, may be seen as a "negative".

These two extremes – and the wide range of investment projects on the spectrum between them – might be seen as very different. But in reality, similar factors underly investment in all these different sorts of value chains. We would focus on three: information, measurement, and principles.





Information is key to understanding all stages of these ocean value chains. At a fundamental level, information from scientific research is helping us build our understanding of how the ocean functions. But to make better investment decisions also requires better and more information from individual firms too – through improved reporting, disclosure and analysis across value chains.

Use of information requires agreed standards of **measurement** (in the broadest sense, e.g. by improving and unifying taxonomies). This will allow us to integrate information across financial sector decision-making. Progress here continues: for example, the work of the Taskforce on Nature-related Financial Disclosures (TNFD) will help us understand and build financial screening for nature-related risks. Measurement is key to both implementing ESG considerations effectively – across large and small industries.

Application of information also requires agreed **financing principles**. These are needed not only to build new financial products and develop public-private partnerships but also to improve the functioning and credibility of ocean finance generally. Again, we can see progress here, with Sustainable Blue Economy Financing Principles under the auspices of the United Nations Environment Programme Finance Initiative (UNEP-FI) and guidance on their practical application.

Future priorities

Using these three factors, within a natural capital framework, will help us not only to reassess value chains in the wide range of existing and future ocean industries, but also to redefine what we want from them – and help the ocean to both survive and prosper.

Then we need to act. Capital markets must play a part of any response, as they allow a pooling of shared resources (and risks); this may be coordinated with individual initiatives, for example by venture philanthropy. But financing of new activities

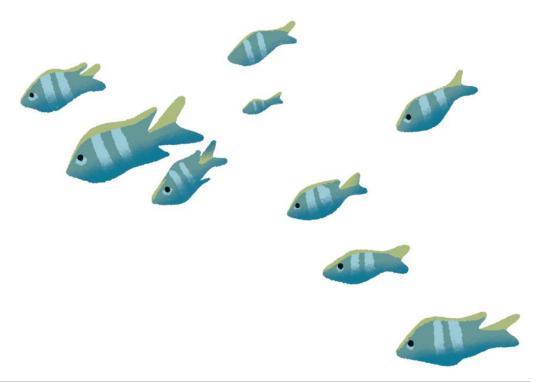
is likely to be accompanied by reconsideration of finance to others. Where information points to clear evidence of harm, investments should be encouraged to transition into climate-and nature-positive areas. Where there is too little information available, caution needs to be applied and there will be strong arguments for pre-empting investment in potentially destructive activities (like deep-seabed mining).

As part of this, we see three key elements as forming a part of the ocean finance response, which will evolve as our understanding of the ocean grows.

First, we need to **recognise**, **disclose**, and **acknowledge future risk**. One approach would be to adopt different or smarter laws similar to what we have seen in France, making sure that institutional investors (pension/insurance, asset managers, banks) factor in nature/biodiversity in lending and investment decisions according to the UN biodiversity convention.

Second, there is a strong case for a targeted multilateral development bank and developed government support in the form of positive subsidies to support investment which regenerates the ocean. Guaranteed investment capacity pockets are likely to be part of this. Investment will benefit from "blue labelling" (as per the International Capital Market Association (ICMA) approach that can identify not only the impact expected on the blue economy, in terms of biodiversity, conservation and potential social benefits (e.g. clean water).

Third, the amount of capital activated must meet the scale of the challenges we face. Appreciating the scale of challenges will require an additional way of looking at returns, as we noted above. Reframing and invigorating investment into nature will require looking beyond immediate financial returns and consideration of "nature returns" and measurement of success through benefits to environmental and ecological health as well as social and economic wellbeing. Our thinking needs to coalesce with indigenous and local communities, as we learn how to confront some of humanity's biggest challenges.





Glossary

Biodiversity means variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems.

A Blue bond is a debt instrument issued by governments, development banks or others to raise capital from impact investors to finance marine and ocean-based projects that have positive environmental, economic and climate benefits.

ESG investing pursues environmental, social and corporate governance goals.

Nature-based solutions (NbS) use natural factors to provide alternative approaches to managing ecosystems and associated social issues.

The sustainable blue economy is the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs, while preserving the health of the ocean ecosystem.

The United Nations Convention on the Law of the Sea establishes a legal framework for international marine and maritime activities.



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