THE OCEAN FOUNDATION

FUNDING THE SCIENCE WE NEED FOR THE OCEAN WE WANT:

Blended Finance Mechanisms to Support the UN Decade for Ocean Science for Sustainable Development

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The ocean is our planet's life support system. It covers 71% of our planet and we are 100% dependent on it. All of humanity, indeed all life on earth, depends on a healthy ocean, right down to the air we breathe and the food we eat. Improving the human relationship with the ocean underpins all sustainable economic, environmental, and social goals. The foundation of sustainability is equity and justice[1].

How we finance the science we need for the blue economy we want is a question that must be resolved and can be resolved with collaborative and complementary investment or lending by the public sector and the private sector—including both for-profit and not-for-profit entities. The UN Decade of Ocean Science for Sustainable Development offers a framework for identifying those projects and the opportunity to address obstacles to expanding the sustainable blue economy.

SDG 14: The Science we Need

In 2015, the UN's member nations approved the 2030 Agenda, and thus adopted the Sustainable Development Goals to be a "blueprint to achieve a better and more sustainable future for all". SDG 14[2] focuses on life under water and is the lead ocean-relevant SDG, although others certainly have an effect on ocean health and managing human activities to reduce harm to the ocean and support the life-giving services of the ocean.

In 2021, the United Nations (UNESCO) launched the UN Decade of Ocean Science for Sustainable Development—an ambitious program to ensure that the necessary research is undertaken to support SDG 14's goals.

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[1] Agyeman, Julian, Robert D. Bullard, and Bob Evans. "Exploring the nexus: Bringing together sustainability, environmental justice and equity." *Space and polity* 6, no. 1 (2002): 77-90.

[2] UNEP Goal 14 language: https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-14

The UN Decade of Ocean Science for Sustainable Development is not focused on pure scientific research as it relates to exploration and understanding of the marine world and the ocean's systems without regard to practical applications. Instead, it aims to produce *transformative* science that will improve the way we understand and interact with our ocean. Thus, within the Decade we are primarily talking about sustainable development as the focus of applied ocean science to restore abundance and manage harms, with some focus on basic science to elucidate principles of the ocean that will inform management. We need to focus on developing economies and producing a return on investment while pursuing the restoration of ocean health. We do not know what the breaking point is for the ocean's capacity to absorb carbon, provide food, moderate our weather, and generate oxygen. We do not want to find out the hard way-- solutions must move us in the right direction.

There are opportunities-- there are plenty of good ideas in need of funding.

So, how are we going to get the science we need for the ocean we want?

Obstacles and Opportunities

What are the fundamental barriers to financing the science we need to produce the knowledge we need to move to a sustainable blue economy?

- Gaps in our knowledge about the ocean and its economic, social, and environmental value (preliminary research needed).
- Lack of effective and stable regulatory and policy environments to attract quality investment and sufficient funding.
- Government policies that have created an uneven playing field that hampers positive actions and increases inequity and injustice.
- Market distortions that are the result of subsidies for shipping and for fisheries and other resource extraction.
- Beneficiaries and extractors neither consistently nor adequately pay for access, use, and management of ocean resources, nor are they always held accountable for the consequences of their activities.
- The harms to indigenous and other communities from unsustainable activities require mitigation, remediation, and related investments in public health before next steps towards a more sustainable future can be undertaken.
- Access to ocean finance and resources is limited and not equitably distributed.
- Ocean investments, including those for the sustainable blue economy often have a higher risk profile (due to harsh ocean conditions), thus they are harder to finance, or require higher interest rates etc.

So, how do we mitigate or eliminate these obstacles? Philanthropy can influence the following activities to promote greater stability and equity.

- Establish effective and stable regulatory and policy environments to attract investment and funding.
- Governments and multilateral agencies can create attractive financing conditions, including loan guarantees etc.
- Strengthen national, regional, and global data infrastructure to increase transparency, grow knowledge, and build effective human capital worldwide, particularly in developing countries.
- Correct market distortions through taxation, pricing services, and the re-purposing of harmful subsidies to more sustainable and equitable uses.
- Invest in addressing past harms to create a more level playing field going forward.

Investing in Ocean Science: Closing the Gaps

In general, ocean science is under-invested. A December 2020 UNESCO-IOC study raised concerns about the inadequacy of funding for ocean research in general. It found that nation states devote less than 2% of their research budgets to ocean sciences.[3] And, there is enormous disparity across nations, with some nations providing close to no financing for ocean science.

In addition, compared to other Goals, SDG 14 remains under-invested[4]: What investment there is comes from philanthropy and development aid. And, this aid for the sustainable blue economy represents only 1% of global Official Development Assistance. What is missing are investments from multilaterals, private banks, and industry. This is despite the enormous economic opportunities presented by the sustainable blue economy. Without investments in ocean science there is a risk that blue economy activities will be unsustainable, predatory, and extractive, following traditional colonial models of resource extraction.

The Ocean Decade (the Decade) is also being under-invested. As it was structured, the Decade is asserted to NOT be a funding mechanism but rather a common framework to ensure that ocean science can fully support countries to achieve the 2030 Agenda for Sustainable Development. However, I sit on the US National Committee for the Decade; and we are hearing from our Ocean Shots[5] projects, and from Endorsed Actions[6]: "Where is the money?"

A rough calculation shows we have $850m committed, but it is only 12% of the total need if the ocean science we need is going to be fully funded. And, we must monitor such funding for additionality (additionality is the property of whether an intervention is new, and has an "additional" effect when compared to a baseline).

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[3] Global Ocean Science Report https://en.unesco.org/gosr

[4] Financing a sustainable ocean economy https://doi.org/10.1038/s41467-021-23168-y

[5] https://www.nationalacademies.org/our-work/us-national-committee-on-ocean-science-for-sustainable-development-2021-2030/ocean-shot-directory

[6] https://www.oceandecade.org/decade-actions/

To close the financing gap, the public and private sectors, as well as charities and philanthropies all have a crucial role to play.

- Governments will need to clearly align their priorities and take a leading role to create an enabling environment necessary to provide the predictability and stability required to encourage the mobilization of capital.
- The private sector will, including banks, insurers, and investors, have a vital role to play in redirecting their products and services towards transition to a sustainable blue economy and in finding innovative solutions to support the health of the ocean.
- Charities, philanthropies, and similar organizations are also essential via providing grants, enabling capital and concessional financing.
- The private for profit sector and the civil society/philanthropic sector have a joint role to play in defining and supporting the enabling environment for a sustainable blue economy.

We need to focus on how philanthropy can incentivize the kind of public and private investments needed for topnotch science and management in support of a blue economy to get at real Sustainable Development.

Blended Finance as a key finance mechanism

Blended finance has emerged as an important tool to help address the funding gap to achieve sustainable development.

Blended finance is the use of catalytic capital from public or philanthropic sources to increase private sector investment in sustainable development. In the blue economy arena, it is about structuring the finance of an applied ocean science project particularly for emerging markets, developing nations, or frontier issues. It is neither a financial instrument nor an end solution. It is a way of managing risk and creating stability.

Given the nascency of many of the project models in ocean sustainable development (blue economy), they currently have higher risk and probability of loss. Thus, such projects must be nurtured by grants or philanthropy.

It heartening to see the growing recognition of the importance of blended financing approaches to catalyze the development of a sustainable blue economy. Likewise, there is an equally important need to coordinate such mechanisms with national development agendas.

Blended finance, which combines concessional public funds[7] with commercial funds, can be a powerful means of rebalancing risks and enabling investment – thus mobilizing

[7] Put simply, concessional finance is below market rate finance provided by major financial institutions, such as development banks and multilateral funds, to developing countries to accelerate development objectives. (World Bank)

capital. The layers of blended finance are private and public lending, investment, or donations, and can be made up of grants, start-up funding or other early stage support.

So, how can philanthropists trigger or leverage the different layers to make blended finance happen?

Blended finance is already a proven strategy for more mature sectors such as renewable energy, where we already know how to develop solar fields (for example) and investors are willing to invest in project development.

We need to develop the models that demonstrate how specific activities in ocean science – specifically "Ocean Science for Sustainable Development" -- will result in positive impacts for the environment while also creating viable financial results across communities.

Basically, we need to approach funders who may each have different goals for ocean science that supports sustainable development. These may include:

- Natural Capital (natural infrastructure and ecosystem services including carbon sequestration);
- Commodities (fisheries, aquaculture, bioprospecting); or
- Marine and coastal development (ocean renewable energy, transportation, ecotourism, waste management) etc.

Then, we must align a blended portfolio of funders around a single project that meets multiple investment and funding objectives. And, we have to leverage that initial funding momentum to attract additional investment as the project expands, even as we prioritize inclusive planning and equitable frameworks.

According to Convergence, "Fisheries and aquaculture and water infrastructure account for most blended ocean sustainable development (blue economy) transactions to date (both 38%)."[8]

So, what is our "Use of Funds" in the context of fostering a sustainable blue economy? And, how does it relate to natural capital, commodities, or marine and coastal development? It is the cost of providing funding for the following:

- Co-design and co-delivery of ocean science activities,
- Understanding the value of what we are protecting, including learning from local knowledge,
- Long term research programs, continuous monitoring, or observations of ocean change,
- Understanding mitigation and adaptation options and costs (human and non-human communities),

[8] https://www.convergence.finance/resource/9d140afd-ec40-47bb-8e8f-e257827c39ca/view

- Science infrastructure, including tech transfer and long term maintenance of equipment,
- Capacity building, including technical assistance, and
- Many more ideas!

Funding should be provided equitably to those producing ocean science, including for example community sampling partners. Emphasis should be placed on funding projects and partnerships with local leadership and designed to meet local needs.

Innovative Financing Tools

There are best practices and examples of innovative financing tools and instruments that have shown positive results for us to review and get our discussion started today. In these examples, we can pay special attention to how philanthropies effectively mobilized to trigger those tools – particularly for ocean science that supports sustainable development and is aligned with the Decade.

In other words, how can philanthropic investments be effectively used to encourage private funds? How can private and public finance be mutually reinforcing/supportive even as they improve equity?

The answer is straightforward:

- Build on successful models and initiatives,
- Aim for authentic co-design and co-delivery, that produces real impact and volume,
- Scale up with portfolio approaches, and
- Directly address the underlying obstacles.

Most blended finance projects are developed individually. Scaling up with portfolio approaches means thinking in multiples. To deliver ocean science for sustainable development with the necessary pace and urgency, it is necessary to move from individually tailored to portfolio-level approaches.

Higher mobilization can be achieved by selecting the blending instrument(s) that most directly addresses the underlying obstacles and systematically enforce additionality and proportionality in the use of blended finance.

Sources Of Funds

Below is one way to organize thinking about the mechanics of finance opportunities we might blend to support ocean science, particularly to further sustainable development and the accompanying need to address (and prevent) inequity and injustice.

Private Finance includes equity investors, impact investors, venture capitalists, commercial banks, pension funds. Philanthropy can be involved as equity investors, impact investors, and venture capitalists.

Private equity, venture capital, and blended finance are all areas in which philanthropy may be able to play a direct or supporting role. The Netherlands entrepreneurial development bank (FMO), Austrian development bank OeEB, and the European Investment Bank (EIB) have been the top commercial investors in the blue economy. The general elements include:

- 1.1. Direct Investment (from any entity)
  - 1.1.1. Seed funding
  - 1.1.2. Patient investment (slow money)
  - 1.1.3. Incubator
  - 1.1.4. Micro-finance
  - 1.1.5. Layered capital for start-up, mezzanine, etc.
  - 1.1.6. Impact and mission related investing
- 1.2. Donations, grants, and other charity for building the institutional framework and its capacity
- 1.3. Indirect:
  - 1.3.1. Knowledge transfers and capacity building
  - 1.3.2. Support for governance reform and other enabling conditions (safety and security; rule of law and transparency; strong institutions; reliable infrastructure; respect for human rights; sustainable economic development; and human development)

Private finance has to be for the public good. Stepping up requires partnership, since the financing gap far exceeds the capacity of the public or the private sector alone. The world must scale up by linking public and private initiatives and working in a collaborative partnership or series of partnerships, harnessing private finance as an agent for the global public good.

2. Public Finance
   - 2.1. National appropriations providing funding for scientific research study of the impacts of ocean change
   - 2.2. GEF, the German Ministry for Economic Cooperation and Development (BMZ), and USAID have been the top providers of concessional finance to blended transactions in the blue economy to date
   - 2.3. Official Development Assistance such as USAID / MCC development assistance is in decline or is stagnant. China (with strings attached) is filling some of the vacuum. China is working hard to change hearts and minds, and is taking on real infrastructure projects to do so (just maybe not the way we would always like)
   - 2.4. Investment banks and multilaterals
     - 2.4.1. World Bank experimental Blue Bond for Seychelles

        2.4.2. World Bank announced the Pro Blue Ocean Trust Fund at Our Ocean Conference 2018 in Bali with four “windows”:
            2.4.2.1. Fisheries governance
            2.4.2.2. Marine pollution
            2.4.2.3. Bluing other sectors
            2.4.2.4. Integration of the other three windows and capacity building
    2.5. Pension funds, sovereign wealth funds, and large passive investors
    2.6. Fees and fines as revenue sources
    2.7. Philanthropy can invest in efforts to improve governance because strong governance frameworks around decision-making and reporting would help ensure that blended finance achieves value for public money, providing comfort to donors.
    2.8. Establishment of trust funds (role for philanthropy)
3. Private Debt
    3.1. Private loans and guarantees (role for philanthropy)
4. Public Debt
    4.1. Public loans and guarantees
    4.2. Development of credits for biodiversity conservation, storm resilience and (tradeable offset credits for) carbon storage in blue carbon
    4.3. Debt swaps and debt forgiveness
    4.4. Development of blue bonds to fund restoration / conservation of blue carbon resources etc. (example, blue bond for Seychelles to restructure nation debt as part of an agreement to protect ecosystems) [linkage to and learn from social / green / climate / sustainability / environmental impact bonds]

Discussion Guiding Questions

We must tackle the public–private culture gap and establish a mutual understanding of each other’s goals, abilities and constraints, and accountability to build trust. A co-benefit of blended finance is the blending of knowledge and skills. Regardless of the financing mechanism, the success of the Ocean Decade in supporting SDG 14 rests on open-minded dedication to partnering for success, which means finding a way to get money to the projects that offer us the science we need for the ocean we want.

For current and prospective funders, the questions that support fruitful discussions and explorations of opportunities include the following:

- What areas of the blue economy resonate with your funding priorities?
- How do those areas align with your efforts to address inequity and injustice?
- Have you had any experiences (positive or negative) in using philanthropic capital to participate in, or to trigger or leverage a layer in a blended finance scheme?
- What institutions in non-philanthropic sectors might be interested in a blended finance scheme for ocean science?

- How could the Foundations Dialogue support greater adoption of blended financing or other innovative financing mechanisms in the framework of the Ocean Decade?
- How can nation states better understand / express their ocean science funding needs and priorities for sustainable development in a manner that speaks to the various potential funding sources and approaches?
- In addition to funding, what are the main systemic implementation barriers, e.g., capacity, regulatory, infrastructural, etc. that philanthropy might address?
- How can we use finance mechanisms to ensure that blue economy activities do not exacerbate stressors on the ocean, and do not follow colonial patterns?

Conclusion

To put money to work on the toughest challenges that will allow our world to undertake the science we need for the ocean we want within the UN Decade of Ocean Science for Sustainable Development, a blended finance approach is needed. This type of financing brings together philanthropy, government funding and private sector investors and lenders with different risk appetites. We in philanthropy can use our mission-driven funding leverage (and patience) to pursue a goal of decreasing costs and increasing the frequency and scale of blended finance models. As such, philanthropic capital can play an outsized role in addressing significant challenges, such as providing grants that will allow NGOs and others to seek critical catalytic capital from governments and multilaterals that will prime early investments and de-risk projects. In this way, our ocean philanthropic community can help to address the challenges of implementing SDG14, and ensure that private investors can more easily identify and support key investment opportunities within ocean science that will produce authentic sustainable development.