



# THE BLUE ECONOMY

## MAKING WAVES

|                           |                    |            |                                |                      |                |             |                            |                               |                   |                 |
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| WHAT IS THE BLUE ECONOMY? | WHY OCEANS MATTER? | PROTECTION | ILLEGAL UNREPORTED UNREGULATED | FISHERIES MANAGEMENT | HUMAN SURVIVAL | AQUACULTURE | FINANCING THE BLUE ECONOMY | SHIPPING & NET ZERO EMISSIONS | ATTRACTING TALENT | TEJARAH TALKING |

About Tejarah Talks

# INSPIRE EDUCATE ENTERTAIN

Tejarah Talks is organized by Oman Business Forum in association with the Ministry of Commerce, Industry & Investment Promotion. With a firm focus on Oman's current and future business, export and investment environment, Tejarah Talks is a series of informal, interactive evening discussions that brings together some of Oman's most inspirational and innovative thinkers and doers to share their stories, insights and ideas with an enthusiastic crowd. It is a platform for positive interaction.



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Executive Producer  
RealityCG



## Talking Point 1

# WHAT IS THE BLUE ECONOMY?

The concept of the Blue Economy is relatively new having been introduced at the United Nations Conference on Sustainable Development (UNCSD) in Rio de Janeiro in June 2012.<sup>1</sup> However, although it has received increased attention from the public and policy-makers, interpretation of the term differs from one organization to another.

Broadly the following definitions are in use:

1

According to the World Bank, the Blue Economy is the “sustainable use of ocean resources for economic growth, improved livelihoods and jobs while preserving the health of ocean ecosystem.”



2

European Commission defines it as “All economic activities related to oceans, seas and coasts. It covers a wide range of interlinked established and emerging sectors.”



3

The Commonwealth of Nations considers it “an emerging concept which encourages better stewardship of our ocean or ‘blue’ resources.”



## Footnotes

- 1 United Nations, Blue Economy Definitions
- 2 UNEP, Setting Sail: Target setting in the Sustainable Blue Economy

4

According to Conservation International: “Blue Economy also includes economic benefits that may not be marketed, such as carbon storage, coastal protection, cultural values and biodiversity.”

5

The Centre for the Blue Economy says “it is now a widely used term around the world with three related but distinct meanings- the overall contribution of the oceans to economies, the need to address the environmental and ecological sustainability of the oceans, and the ocean economy as a growth opportunity for both developed and developing countries.”

6

A United Nations representative recently defined the Blue Economy as an economy that “comprises a range of economic sectors and related policies that together determine whether the use of ocean resources is sustainable. An important challenge of the Blue Economy is to understand and better manage the many aspects of oceanic sustainability, ranging from sustainable fisheries to ecosystem health to preventing pollution. Secondly, the Blue Economy challenges us to realize that the sustainable management of ocean resources will require collaboration across borders and sectors through a variety of partnerships, and on a scale that has not been previously achieved. This is a tall order, particularly for Small Island Developing States (SIDS) and Least Developed Countries (LDCs) who face significant limitations.”

## Fast Flowing Waters

Today, the Blue Economy has an estimated annual value of US\$2.5 trillion. Think shipping and fishing alongside tourism and energy. Against this backdrop, the impacts of climate change, from rising sea levels to marine pollution are threatening the future of the global fisheries industry. However, partnerships, finance and government policies for accelerating a sustainable Blue Economy are coming to the fore. An example of this is the UN Environment Program’s (UNEP) recently published Setting Sail: Target Setting in the Sustainable Blue Economy - a manual designed to guide public and private sector organizations on setting targets to support the transition to a sustainable Blue Economy in line with the Kunming-Montreal Global Biodiversity Framework and the Paris Agreement.<sup>2</sup>

## Moving Parts

The Blue Economy covers a wide spectrum of economic activities linked to oceans, seas and coastal areas designed to balance economic growth with the sustainable use of marine resources. Key elements include:



**Sustainable Fisheries & Aquaculture**  
Promote responsible fishing practices and aquaculture to ensure long-term productivity and ecosystem health.



**Marine Renewable Energy**  
Develop offshore wind, wave and tidal energy as alternatives to fossil fuels.



**Maritime Transport & Logistics**  
Enhance the efficiency of shipping and port operations while reducing environmental impacts.



**Tourism & Recreation**  
Encourage eco-friendly coastal and marine tourism that benefits local communities and protects marine environments.



**Marine Biotechnology**  
Harness marine biodiversity for pharmaceutical and industrial applications, contributing to the development of new products and markets and job creation.

## Talking Point 1 - What is the Blue Economy?

### Agreements

Several international organizations and agreements are also playing an important role in advancing the Blue Economy, these include:

- UN Sustainable Development Goals (SDG 14): Life Below Water, part of the 2030 Agenda for Sustainable Development, emphasizes the conservation and sustainable use of oceans, seas and marine resources.<sup>3</sup>
- Introduction of the 2023 UN High Seas Treaty aims to place 30% of the world's oceans into marine protected areas (MPAs) to safeguard wildlife and ensure equal access to marine genetic resources.<sup>4</sup>
- The UN's 1982 Convention on the Law of the Sea sets out the legal blueprint for activities on the oceans and seas along with state responsibilities.<sup>5</sup>
- The Port States Measures Agreement (PSMA) aims to prevent, deter illegal, unreported and unregulated fishing.<sup>6</sup>
- The International Maritime Organization's (IMO) regulations on global shipping are designed to reduce carbon emissions from international shipping by 40% by 2030 and 70% by 2050 versus 2008 levels.<sup>7</sup>
- The Ocean Panel is an initiative led by a group of 18 world leaders committed to promoting policies and investments that protect and support the Blue Economy.<sup>8</sup>

### A sustainable Blue Economy is a marine-based economy that ...

- Provides social and economic benefits for current and future generations by contributing to food security, poverty eradication, livelihoods, income, employment, health, safety, equity and political stability.
- Restores, protects and maintains the diversity, productivity, resilience, core functions and intrinsic value of marine ecosystems - the natural capital upon which its prosperity depends.
- Is based on clean technologies, renewable energy and circular material flows to secure economic and social stability over time, while keeping within the limits of one planet.

#### Footnotes

- 3 [www.globalgoals.org/goals/14-life-below-water/](http://www.globalgoals.org/goals/14-life-below-water/)  
 4 UN News, Beyond borders: Why New 'High Seas' Treaty is Critical for the World  
 5 UN, United Nations Convention on the Law of the Sea  
 6 WTO, Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing  
 7 IMO, Initial IMO GHG Strategy

- 8 High Level Panel for a Sustainable Ocean Economy: What is The Ocean Panel?  
 9 WWF, Principles for a Sustainable Blue Economy  
 10 UNEP, The Principles, Sustainable Blue Finance  
 11 [www.globalgoals.org/goals/14-life-below-water/](http://www.globalgoals.org/goals/14-life-below-water/)

### Is governed by public and private processes that are ...

- Inclusive
- Well-informed, precautionary and adaptive
- Accountable and transparent
- Holistic, cross-sectoral and long-term
- Innovative and proactive

### To create a sustainable Blue Economy public and private actors must ...

- Set clear and measurable goals and targets.
- Assess and communicate their performance on their goals and targets.
- Create a level economic and legislative playing field that provides the Blue Economy with adequate incentives and rules.
- Plan, manage and effectively govern the use of marine space and resources.
- Develop and apply standards, guidelines and best practices.
- Recognize maritime and land-based economies are interconnected and that many of the threats facing marine environments originate on land.
- Actively cooperate, share information, knowledge, best practices, lessons learned and ideas to realize a sustainable and prosperous future for all.<sup>9</sup>

## Blue Mediterranean Partnership

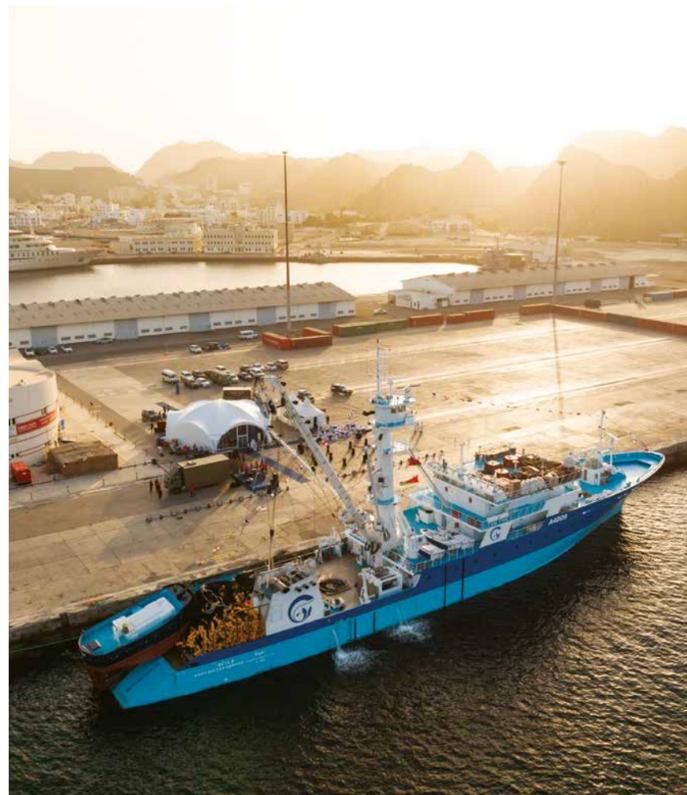
An example of regional partnership and finance - first proposed at COP27 - is the launch of the Blue Mediterranean Partnership (BMP) which aims to tackle the threats the Mediterranean Sea faces by coordinating the financing of Blue Economy projects in the Mediterranean and Red Sea regions, focusing initially on Egypt, Jordan and Morocco.

The Mediterranean Sea basin is a recognized marine biodiversity hotspot and a vital resource of economic activities for 480 million people living in the region's 22 countries. It is the 5<sup>th</sup> largest economy in the region after France, Italy, Spain and Türkiye generating more than US\$450 billion annually. It is also warming at a rate 20% faster than the global average and threatened by pollution and overexploitation.

The BMP will promote the Sustainable Blue Economy Finance Principles<sup>10</sup> the world's first global guiding framework ensuring alignment of investments with the UN Sustainable Development Goal (SDG) 14 Life Below Water.<sup>11</sup>

The Partnership aims to support policy reforms as well as attract investment in the sustainable Blue Economy, prioritizing innovation and including where possible, natural capital and nature-based solutions for climate mitigation and adaptation. Financing wastewater treatment facilities, solid waste management and plastic waste reduction will help reduce pollution going to the sea, decrease pressure on fisheries through sustainable aquaculture, improve coastal resilience investments and reduce emissions through sustainable marine mobility.

The BMP intends to create a new financial vehicle, pooling contributions from donors and beneficiary countries in the region to provide both capital expenditure and technical assistance grants for sustainable Blue Economy projects in Egypt, Jordan and Morocco that will help close an estimated US\$6.4 billion investment gap in the next 8 years.



Talking Point 2

# WHY OCEANS MATTER

Footnotes

- 12 World Bank, How Can the Blue Economy Drive Development and Jobs for Youth?
- 13 NCSI Monthly Bulletin May 2023 & May 2024
- 14 British - Omani Society, Oceans, Sustainability & Heritage Oman's Blue Economy
- 15 FAO, Trade in Fisheries & Aquaculture Products: A Major International Commodity

### Economic Contribution

Business related to the use of the oceans provides employment for 3 billion people, generates up to US\$6 trillion in revenue annually - approximately 10% of the world's GDP - and facilitates the transport of 80% of the world's traded goods. This economic value is projected to double by 2030. At the same time, healthy oceans support goals for sustainability, contribute to climate change mitigation, carbon capture and marine biodiversity.<sup>12</sup>

In Oman, the fisheries sector plays an important economic role, the total value of domestically caught fish reached US\$1.3 billion in 2023 up from US\$1.1 billion in 2022 an increase of 22.6%.<sup>13</sup> This growth is driven by the expansion of both traditional and commercial fishing operations which have seen increases in catch volumes and export revenues. The government's focus on enhancing fishing infrastructure and promoting sustainable practices is also boosting the sector's contribution to GDP, exports and employment.

### Five Upwellings

Oman's sea and coasts are home to highly productive marine ecosystems and globally significant biodiversity. Situated at the northern end of the Indian Ocean, the coasts of Dhofar, Al Wusta and Ash Sharqiyah are home to some of the world's most important upwelling areas - areas where nutrient rich waters from deep in the ocean come to the surface and fuel marine ecosystems. It is this feature that turbo-charges Oman's marine environment.<sup>14</sup> It is interesting to note that approximately 25% of the world's marine fish catch comes from five upwellings - the Canary Current off Northwest Africa; the Benguela Current off southern Africa; the California Current off California and Oregon; the Humboldt Current off Peru and Chile; and the Somali Current off Somalia and Oman - which occupy just 5% of total ocean area.

**In Oman, the fisheries sector plays an important economic role, the total value of domestically caught fish reached US\$1.3 billion in 2023 up from US\$1.1 billion in 2022 an increase of 22.6%**

**OVER 800 MILLION PEOPLE WORLDWIDE DEPEND DIRECTLY OR INDIRECTLY ON FISHERIES AND AQUACULTURE FOR THEIR LIVELIHOODS.**



**AQUACULTURE IS THE WORLD'S FASTEST GROWING FOOD PRODUCTION SYSTEM WITH AN AVERAGE ANNUAL GROWTH RATE OF 6.7% OVER THE PAST THREE DECADES.**



**FISHERIES AND AQUACULTURE PRODUCTS ARE AMONG THE MOST TRADED FOOD COMMODITIES WORLDWIDE<sup>15</sup>**

## Talking Point 3

# PROTECTION

While oceans and seas are a primary source of food, are central to the carbon cycle, regulate the climate and produce about half the oxygen we breathe, human activities at sea and on land are disrupting the vulnerable balance of the marine environment to the extent of reducing the ecosystem services they provide.

The damage caused by pollution, such as oil spills and marine litter - in particular plastics - overfishing and climate change has serious economic consequences, for example, losses in tourism and fisheries. Marine ecosystems need protecting, not only to conserve nature, but also to support the millions of livelihoods that depend on them.

## Footnotes

- 16 IPCC, Climate Change 2023, Synthesis Report  
 17 NOAA, In Hot Water: Exploring Marine Heatwaves  
 18 Malin L. Pinsky, Rebecca L. Selden, and Zoë J. Kitchel, Climate-Driven Shifts in Marine Species Ranges: Scaling from Organisms to Communities, Annual Reviews  
 19 William Cheung, Large-scale Redistribution of Maximum Fisheries Catch Potential in the Global Ocean under Climate Change, Global Change Biology  
 20 Concern Worldwide, 10 Countries with Water Stress and Scarcity - and How We're Helping

## Warming Waters

Sea surface temperatures have increased by approximately 1.2°C since the late 19th century with the last 10 years being the warmest on record.<sup>16</sup> This warming trend has led to a sharp increase in the frequency and intensity of marine heatwaves which increased by 54% between 1982 and 2022 affecting 84% of the ocean surface.<sup>17</sup> These heatwaves have devastating effects on marine ecosystems, causing mass coral bleaching, disrupting marine food webs and leading to the loss of critical habitats.

Rising temperatures are also driving significant changes in species distribution. Warmer waters are forcing marine species to migrate toward the poles and into deeper waters to find suitable habitats. Over 60% of marine species have shifted their ranges poleward or to greater depths due to rising temperatures, altering local ecosystems and affecting fisheries.<sup>18</sup> Some fish stocks in tropical regions have experienced a 10-30% decrease in maximum sustainable yield due to thermal stress and reduced growth rates.<sup>19</sup>

## Water Stress & Scarcity by Numbers

### 2.3bn

According to UN-Water, 2.3 billion people live in water-stressed countries.

### 1.42bn

According to UNICEF, 1.42 billion people – including 450 million children – live in areas of high or extremely high water vulnerability.

### 785mn

785 million people lack access to basic water services.

### 884mn

The WHO reports 884 million people lack access to safe drinking water.

### 2/3

Two-thirds of the world's population experience severe water scarcity during at least one month of the year.

### 700mn

The Global Water Institute estimates 700 million people could be displaced by intense water scarcity by 2030.

### 3.2bn

3.2 billion people live in agricultural areas with high water shortages or scarcity.

### 73%

Approximately 73% of people affected by water shortages live in Asia.

### 200mn hours

The global water crisis is a women's issue: In what UNICEF calls "a colossal waste of time," women and girls spend an estimated 200 million hours hauling water every day.<sup>20</sup>

## Talking Point 3 - Protection

### Acidification

The increase in CO<sub>2</sub> absorption by the oceans has caused the average surface ocean pH to drop from 8.2 to 8.1 making oceans 30% more acidic than in pre-industrial times.<sup>21</sup> This acidification process reduces the availability of carbonate ions, essential for calcifying organisms like corals, mollusks and certain plankton to build their shells and skeletons. Coral reef calcification rates have declined by 15-20% since the 1970s, threatening reef health and biodiversity.<sup>22</sup> Acidification-related changes in plankton communities can also disrupt marine food webs with some studies predicting a 40% reduction in fish larvae survival rates due to altered plankton composition.<sup>23</sup>

### Sea Level Rise

Sea level rise compounds these challenges with the average global sea level rising by about 9.4 centimeters since 1993.<sup>24</sup> This rise increases the risk of coastal flooding, erosion and habitat loss, impacting both ecosystems and human communities. By 2050, 570 coastal cities are projected to face significant impacts from sea-level rise, affecting 800 million people.<sup>25</sup> Coastal habitats such as mangroves, salt marshes and seagrass beds that serve as nurseries for many marine species are particularly vulnerable. In 2023, global mangrove coverage decreased by 2%, largely due to sea level rise and coastal development.<sup>26</sup> Additionally, fisheries infrastructure, including ports, harbours and processing facilities, is at risk, necessitating expensive adaptations.

### Climate Adaption

Oman is addressing climate change through a variety of policies with an emphasis on clean energy transition. The main policy that sets out the future path is Oman Vision 2040 which focuses on four objectives: a society of creative individuals; a competitive economy; responsible state agencies; and an environment with sustainable components. Under the fourth pillar, it establishes a vision of a gradual transition to a low-carbon economy, putting the development of renewable energy sources and energy efficiency at the heart of its commitments - increasing the share of renewables in power generation from 0% in 2015 to 30% by 2030.

In 2022, Oman launched the National Strategy for an Orderly Transition to Net Zero which aims to reach net zero by 2050 based on five principles: environmental sustainability; minimized energy system costs; optimization of economic impacts; social implications; and security of supply. Electrification, energy efficiency improvement, transition to EVs and the deployment of renewable power generation are identified as key priority levers.<sup>27</sup>

### Collaboration

Cooperative efforts with international organizations and neighbouring countries on climate adaptation strategies and fisheries management can enhance the effectiveness of national measures. In line with this approach, Oman participates in the Indian Ocean Tuna Commission and other regional bodies to address shared challenges and implement coordinated responses to the climate crisis.<sup>28</sup>

The serious challenges of climate change impact our oceans and their ecosystems and with this species distribution and fisheries. Rising sea temperatures, ocean acidification and sea level rise require adaptive management strategies that integrate climate projections and develop resilient practices.

By leveraging technology, enhancing monitoring and fostering international cooperation, Oman along with other nations can mitigate the impact of climate change on marine resources and ensure sustainable fisheries management for future generations.

#### Footnotes

- |    |  |    |  |
|----|--|----|--|
| 21 | IPCC, Climate Change 2023, Synthesis Report  | 25 | G40.org, The Future We Don't Want  |
| 22 | Ove Hoegh-Guldberg, The Ocean as a Solution to Climate Change: Updated Opportunities for Action, High Level, oceanpanel.org  | 26 | IUCN, More than Half of all Mangrove Ecosystems at Risk of Collapse by 2050, First Global Assessment Finds     |
| 23 | Kristy J. Kroeker, Exposure to Extremes in Multiple Global Change Drivers: Characterizing pH, Dissolved Oxygen and Temperature Variability in a Dynamic, Upwelling Dominated Ecosystem, Limnology & Oceanography | 27 | Ministry of Energy & Minerals, The Sultanate of Oman's National Strategy for an Orderly Transition to Net Zero |
| 24 | NASA, NASA Analysis Sees Spike in 2023 Global Sea Level Due to El Nino   | 28 | Oman News Agency, Oman Participates in Meeting of Indian Ocean Tuna Commission                                 |
|    |  | 29 | 2023 Global Water Monitor Report   |

**APPROXIMATELY 2.3 BILLION PEOPLE, OR AROUND 29% OF THE WORLD'S POPULATION EXPERIENCED A LOCALLY RECORD WARM ANNUAL AVERAGE IN 2023. OVERALL, AROUND 17% OF THE PLANET SET A NEW RECORD, INCLUDING 23% OF THE LAND AND 14% OF THE OCEAN.**

**NO LOCATION ON THE PLANET EXPERIENCED RECORD COLD TEMPERATURES OR EVEN TOP-5 RECORD COLD TEMPERATURES FOR THE YEAR AS A WHOLE.<sup>29</sup>**



**IN 2023, 77 COUNTRIES SAW THEIR WARMEST YEAR ON RECORD**

Talking Point 4

Research estimates that at least 1 in 5 fish caught globally are caught illegally with a total cost to coastal nations between US\$10 billion to \$23.5 billion representing 11–26 million tonnes of fish.<sup>30</sup> This illicit activity depletes fish stocks, skews competition and destabilizes local economies, particularly in countries heavily reliant on fishing as a primary economic activity.

# ILLEGAL UNREPORTED UNREGULATED



Contributing to fish stock depletion



Destroying habitats



Threatening species extinction



Disrupting marine food webs



Decreasing the value of fisheries



Increasing food security risks

Footnotes

- 30 The High Level Panel for a Sustainable Ocean Economy, Blue Paper
- 31 Muscat Daily, Illegal Fishing Plagues Omani Coastal Cities



## Oman's IUU Fishing Challenges

Oman's Exclusive Economic Zone - covering over 533,000 square kilometers - experiences IUU fishing due to its rich marine biodiversity and valuable fish stocks. Unauthorized vessels engage in illegal fishing activities, including the capture of species under strict quotas and the use of banned fishing gear, resulting in significant economic and ecological consequences. To combat IUU fishing, Oman has taken a number of steps:

- **Advanced Surveillance Technologies:** Oman utilizes satellite-based Vessel Monitoring Systems and Automatic Identification Systems to track fishing vessels in real-time. This technology helps identify suspicious activities, such as unauthorized vessel entry into restricted zones and illegal transshipment at sea.
- **Enhanced Patrolling & Enforcement:** The Omani Coast Guard and maritime authorities have increased patrolling efforts, deploying more vessels for surveillance. Joint operations with neighbouring countries and regional partners enhance enforcement capabilities and deter illegal activities.<sup>31</sup>
- **International Collaboration:** Oman participates in international agreements and regional fisheries management organizations to strengthen its efforts against IUU fishing. In fact, it was the first country in the Near East and North Africa region to join the FAO's Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing - referred to as the Port State Measures Agreement (PSMA). These collaborations provide an opportunity to share data, coordinate surveillance and take joint action.

## Global Initiatives

Addressing the IUU fishing crisis requires international cooperation. The PSMA adopted by the FAO in 2009 is a landmark treaty aimed at preventing illegally caught fish from entering the market. By enhancing port controls and inspections the PSMA helps close ports to IUU fishing vessels, reducing their operational capacity and profitability. As of 2023 the PSMA has been ratified by over 70 countries, signaling a significant step forward in global efforts to combat IUU fishing.

## Big Data

The use of big data and machine learning is revolutionizing the fight against IUU fishing. Analytical tools can process vast amounts of data from satellite imagery, vessel tracking systems and other sources to identify patterns associated with illegal activities. These technologies provide authorities with actionable intelligence, improving the efficiency and effectiveness of enforcement operations. Ultimately, tackling IUU fishing requires a holistic approach that integrates technology, robust legal frameworks, international cooperation and community engagement. Strengthening governance, enhancing transparency and promoting sustainable practices are essential to safeguarding marine resources and ensuring the long-term viability of the global fisheries sector.

Talking Point 5

**It is estimated improved fisheries management could recover more than US\$80 billion in annual economic benefits.<sup>32</sup>**

This potential for economic recovery highlights the inefficiencies and losses incurred by current management practices worldwide. Oman's approach to fisheries management involves strategies aimed at achieving long-term sustainability and establishing 13 MPAs covering significant portions of the country's marine environment.<sup>33</sup> MPAs help preserve critical habitats and breeding grounds essential for stock recovery. Oman's MPA network now covers over 16% of its marine areas, in line with international conservation targets set by the Convention on Biological Diversity.<sup>34</sup> This protection helps enhance biodiversity, improve fish stocks and support Oman's fishing industry by providing spillover benefits where fish populations increase outside the protected zones.



# FISHERIES MANAGEMENT

Footnotes

- 32 The Nature Conservancy, A Healthy Ocean Depends on Sustainably Managed Fisheries
- 33 Muscat Daily, Oman Affirms Commitment to Environment Preservation
- 34 <https://www.protectedplanet.net/country/OMN>
- 35 Times of Oman, Oman Reports 12% Oncrease in Fish Biomass within MPAs
- 36 Sustainable Fisheries, How Many Fisheries are Overfished and What Does That Mean?
- 37 Global Scafood Alliance, Newly Established Global Fishing Index Says Nearly Half of Global Fish Stocks Overfished – But is it Right?
- 38 Times of Oman, Harmful Fishing Methods Pose Major Threat to Sustainable Fishery in Oman
- 39 Ministry of Primary Industries, Fish Quota Management System
- 40 Ibid
- 41 Government of Canada, Fisheries Act Registry: Pollution Prevention

In addition to MPAs, Oman has implemented fishing controls, such as Total Allowable Catches (TACs) and seasonal fishing bans. For example, a nine-month ban on shrimp fishing and trading took effect 1 December 2023. These measures are based on scientific stock assessments and key to preventing overfishing. In 2023, Oman reported a 12% increase in fish biomass within MPAs, indicating the effectiveness of these controls in enhancing stock recovery and sustainability.<sup>35</sup>

## Overfishing

The Global Fishing Index (GFI), a comprehensive report on the state of marine fisheries worldwide, found that nearly 50% of global fish stocks have been depleted to less than 40% of their pre-fishing population. This finding is considerably higher than the previous global estimate of 34%. Half the world's assessed fish stocks are overfished and nearly 10% are on the point of collapse – threatening not only ocean ecosystems but also the livelihoods and food security of millions of people.<sup>37</sup>

In Oman, the sustainability of key fish stocks is a growing concern. The Ministry of Agriculture, Fisheries & Water Resources has reported certain high-value species, including the Indian mackerel are experiencing pressures from increased fishing intensity. To address this, the government has implemented stricter fishing quotas and enhanced monitoring systems to prevent overfishing and ensure the long-term sustainability of its marine resources.<sup>38</sup>

## Kiwi QMS

New Zealand serves as a leading example of effective fisheries management through its Quota Management System (QMS).<sup>39</sup> Introduced in 1986, the QMS allocates individual transferable quotas (ITQs) to fishers, providing economic incentives to maintain sustainable catch levels. As of 2023, the QMS covered 97 species across 642 fish stocks and has been credited with stabilizing and rebuilding key fish stocks.<sup>40</sup> The system's success is attributed to its market-based approach that is aligned with the economic interests of fishers with conservation goals, helping reduce overfishing and improving stock management.



## Canadian Experience

Canada has also demonstrated the benefits of integrated fisheries management. The country's approach combines science-based stock assessments with adaptive management strategies that account for ecological variability and socio-economic factors. Canada's Fisheries Act, revised in 2019 mandates the rebuilding of depleted fish stocks and includes provisions for precautionary and ecosystem-based management.<sup>41</sup> These measures have led to the successful recovery of several species, such as Atlantic mackerel and northern shrimp, contributing to a more resilient and profitable fisheries sector.



## Talking Point 5 - Fisheries Management

### EU Initiatives

The EU Common Fisheries Policy (CFP) governs fisheries management across member states and aims to ensure the sustainable use of marine resources. The policy includes measures such as TACs, multi-annual management plans and landing obligation to reduce bycatch. As of 2023 the EU's CFP contributed to the recovery of 44 fish stocks to sustainable levels, generating economic benefits for the EU's fishing industry.<sup>42</sup>

Economic analysis of the CFP's impact reveals sustainable management has led to a 20% increase in fish biomass and a 15% rise in fisheries sector revenue across the EU between 2020-23. The policy's emphasis on rebuilding fish stocks has enhanced the profitability of the sector, demonstrating the economic advantages of sustainable management practices.<sup>43</sup>

### Global Efforts

Globally, several agreements highlight the importance of international cooperation in fisheries management. For example, the UN's SDG 14 Life Below Water calls for the effective regulation of fishing and the restoration of fish stocks to sustainable levels.<sup>44</sup> The UN's Decade of Ocean Science for Sustainable Development (2021-30) initiative supports SDG 14 by promoting science-based management and international collaboration. In 2023, the UN launched the Global Fisheries Transparency Initiative (GFTI) created to enhance data transparency and accountability in fisheries management. The GFTI encourages the adoption of standardized reporting and open data practices, facilitating better monitoring and compliance globally.

#### Footnotes

42 European Commission, Questions & Answers on the Common Fisheries Policy Today & Tomorrow

43 European Commission, The Common Fisheries Policy Today and Tomorrow: A Fisheries and Oceans Pact Towards Sustainable, Science-based, Innovative and Inclusive Fisheries Management

44 UN Sustainable Development Goals: Goal 14 Life Below Water

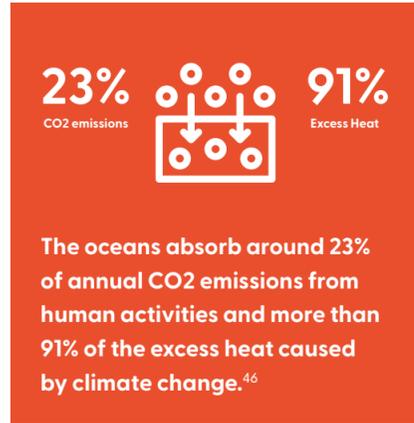
45 2024 The State of World Fisheries & Aquaculture report

Global fisheries and aquaculture production in 2022 surged to 223.2 million tonnes a 4.4% increase on 2020. Production comprised 185.4 million tonnes of aquatic animals and 37.8 million tonnes of algae.<sup>45</sup>



### Talking Point 6

Oceans are indispensable to global sustainability, underpinning the economic, environmental and social fabric of our planet – they cover three-quarters of the Earth’s surface, contain 97% of its water and represent 99% of living space by volume. They are essential for human survival, providing key resources such as food, medicine and biofuels. Marine ecosystems play vital roles in waste breakdown, pollution mitigation and buffering against storm damage, while also acting as the planet’s largest carbon sink.



### Plastic Waste

Despite their critical importance, oceans are facing severe threats from pollution and climate change. Marine pollution, particularly plastic waste. When plastic was introduced in 1907 it changed many industries – it is a versatile and cheap material used in everyday products, from electronics to food packaging. Around the world, one million plastic bottles are purchased every minute while up to five trillion plastic bags are used worldwide every year. In total, half of all plastic produced is designed for single-use purposes – used just once and then thrown away. It is estimated that 75 to 199 million tonnes of plastic is currently found in our oceans. Unless we change how we produce, use and dispose of plastic, the amount of plastic waste entering aquatic ecosystems could nearly triple from 9-14 million tonnes per year in 2016 to a projected 23-37 million tonnes per year by 2040.<sup>47</sup>

Putting this in perspective, every day, oceans, rivers and lakes receive plastic waste equivalent to more than 2,000 garbage trucks.<sup>48</sup> This widespread pollution extends its harmful reach into the natural world, affecting various marine species. Plastic remnants have been found in the digestive systems of almost every marine turtle species and nearly half of all surveyed seabird and marine mammal species.

Footnotes

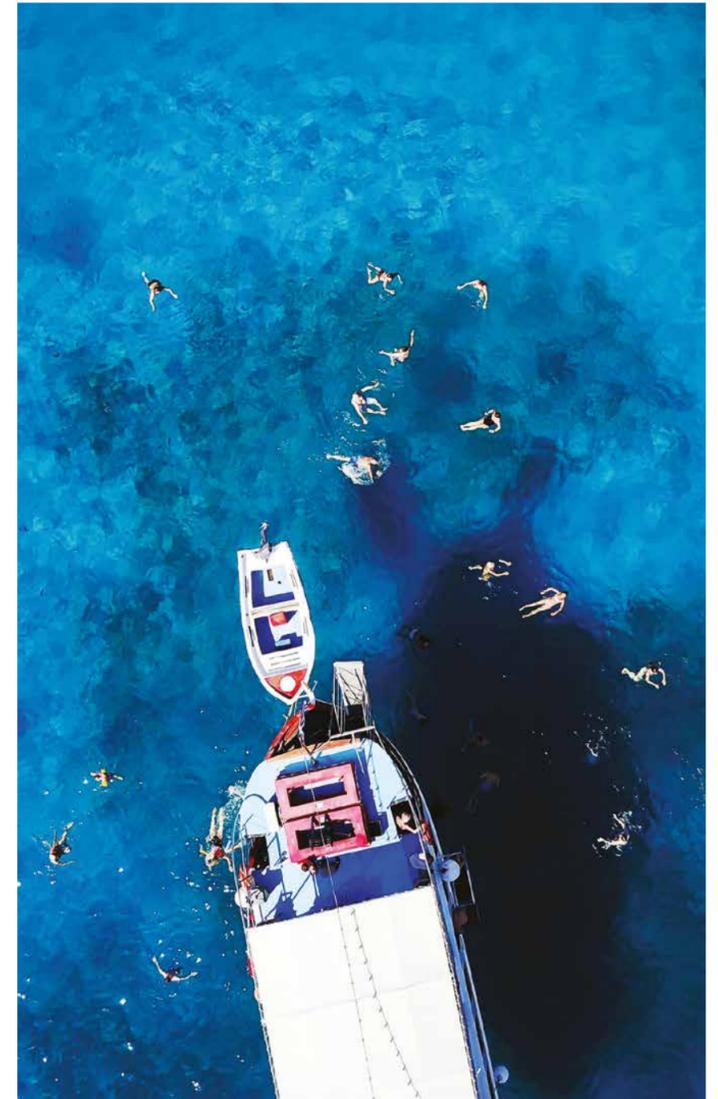
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### Fisheries & Coastal Tourism

A major segment of the global travel industry is deeply linked to the health of the oceans. About 80% of all tourism takes place in coastal areas. The ocean-related tourism industry grows an estimated US\$134 billion per year and in some countries, the industry already supports over a third of the labour force.<sup>49</sup> However, expansion of tourism must be managed carefully to prevent environmental degradation, such as habitat destruction and pollution. Sustainable tourism practices such as eco-certification and effective waste management are key to minimizing negative impacts and enhancing the economic resilience of coastal communities.



FROM 1950 TO 2023, THE CUMULATIVE PRODUCTION OF PLASTIC REACHED 9.5 BILLION TONNES. IN 2023 ALONE, THE WORLD PRODUCED 390 MILLION TONNES OF PLASTIC - MORE THAN THE TOTAL WEIGHT OF EVERY SINGLE PERSON ON EARTH.<sup>50</sup>



# HUMAN SURVIVAL

*Talking Point 6 - Human Survival*

**EXPECTED TO DOUBLE IN SIZE BY 2050, AQUACULTURE IS CURRENTLY THE WORLD'S FASTEST-GROWING FOOD PRODUCTION SYSTEM - SUPPLYING HALF OF ALL SEAFOOD CONSUMED.**



## Talking Point 7

# CULTURE

Predicting the future is typically risky. There are however a few safe bets. Perhaps the safest prediction is that the output of high-quality protein from the global aquaculture industry will continue to increase over the next several decades. There are few who would argue that the production of high-quality proteins and fats from farmed aquatic animals is not essential for humanity to feed itself as our population swells to 9 to 10 billion over the next 30 years.<sup>51</sup>



## Roadmap

According to the Aquaculture Stewardship Council and the Blue Food Partnership's Road to Sustainable Aquaculture report, aquaculture can significantly contribute to food security, climate action, employment and community development.<sup>52</sup> However, certain aquaculture practices continue to pose risks to habitats and communities, highlighting the need for more sustainable approaches.

The Blue Food Partnership, driven by the World Economic Forum's Friends of Ocean Action with backing from the UK's US\$637 million Blue Planet Fund, focuses on promoting science-based actions to establish sustainable blue food value chains, including aquaculture. This effort is channeled through their Sustainable Aquaculture Working Group which investigates the complexities and trade-offs within aquaculture, producing a globally applicable roadmap for sustainable sector growth.

In collaboration with FUTUREFISH - which brings together aquaculture industry leaders from Asia and Africa - the Sustainable Aquaculture Working Group created a set of key recommendations designed to optimize the socio-economic and environmental benefits of aquaculture by 2030.

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## Recommendations

### Responsible Production

Adopt a planet-first approach, essential for ensuring the sustainable supply of nutritious aquaculture products. By maintaining a diverse range of species and production systems, aquaculture can enhance resilience, nutritional value and boost global biodiversity targets. The sector, contributing over 52% of the world's fish supply, must adopt best practices and innovations to support inclusive growth and nature-positive outcomes.

### Improve Livelihoods

Address current disparities in benefits and risks among aquaculture stakeholders, particularly the workforce and local communities. While aquaculture employs over 20 million people globally more must be done to secure equitable opportunities, particularly for women and youth.<sup>53</sup> Systemic changes across value chains are necessary to rebalance inequalities, promote collaboration and foster community-based cooperatives, ultimately reducing poverty and enhancing fairness within the industry.



### Healthy Consumption

Aim to equalize access to blue foods, which are vital nutritional resources. Despite their benefits, access remains uneven with millions lacking affordable and consistent sources of these foods. To build sustainable consumption patterns there must be increased awareness among retailers, distributors and food service providers about the health benefits of diverse blue foods. This involves developing responsible solutions that make these foods accessible to all, helping improve global dietary patterns.

### Enabling Environment

Focus on establishing conditions conducive to sustainable aquaculture. Effective stakeholder partnerships can enhance dialogue and governance, while policies at national and international levels should incentivize and enforce responsible practices. Investment in innovation, data sharing platforms and governance structures are vital for demonstrating and supporting sustainable growth models.<sup>54</sup>



Talking Point 8

# FINANCING THE BLUE ECONOMY



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.<sup>55</sup> In addition, rising sea levels and record-setting hurricanes or cyclones could displace coastal communities from Mumbai to Miami – according to The Future We Don't Want analysis, the total urban population at risk from sea level rise, if emissions do not go down, could number over 800 million people, living in 570 cities, by 2050.<sup>56</sup>

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## POPULATION AT RISK FROM SEA LEVEL RISE OVER 800 MILLION PEOPLE BY 2050.

Of the 17 UN SDGs, Life Below Water has received the least amount of public money. But that could change with the recent UN High Seas Treaty, a legal framework created to protect maritime areas and sets 2030 targets to maintain the health and biodiversity of the oceans.<sup>57</sup>



## US\$3 Trillion

With the adoption in June 2023 of the UN High Seas Treaty there is now a strong case for investors to assess opportunities in the Blue Economy. According to Morgan Stanley, over US\$3 trillion of funding is needed in the coming decades to protect our oceans so they can continue to play a critical role in tackling climate change, curbing biodiversity loss and supporting inclusive economic growth.<sup>58</sup>

The Blue Economy has already attracted diverse investors with assets in venture capital, public equity and fixed income. Indeed, VC 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 SDG in 2022 with more than 100 of those funds' exposures at 10% or more.<sup>59</sup> While some funds are dedicated solely to water, others consider broader themes in which healthy oceans play an important role, including the future of food production and the clean energy transition.

In the fixed-income space, the green, social, sustainability and sustainability-linked bond (GSSSB) market is likely to reach between US\$0.95 trillion and US\$1.05 trillion in 2024.<sup>60</sup> These bonds fund a variety of projects, including sustainable fisheries, marine conservation and clean maritime transport.

Green, social, sustainability and sustainability-linked bonds fall into two main categories:

**Sustainability-linked Bonds**

Any type of instrument for which the financial or structural characteristics can vary depending on whether the issuer achieves predefined sustainability objectives.

**Use-of-proceeds Bonds**

Any type of instrument where the net proceeds - or an equivalent amount to the net proceeds - are exclusively used to finance or refinance, in part or in full, new and/or existing eligible green and/or social projects. The three main subcategories of use of proceeds instruments are:

- **Green Bonds:** Instruments that raise funds for projects with environmental benefits including renewable energy, green buildings, and sustainable agriculture.
- **Social Bonds:** Instruments that raise funds for projects that address or mitigate a specific social issue and/or seek to achieve positive social outcomes, such as improving food security and access to education, health care and financing, especially but not exclusively for target populations.
- **Sustainability bonds:** Instruments that raise funds for projects with both environmental and social benefits. Finally, transition bonds can be either sustainability-linked or use-of-proceeds bonds issued specifically to support climate transition goals, geared toward issuers in hard-to-abate sectors. Projects those bonds support may not always be "green" but still aim at supporting climate transition.<sup>61</sup>

Talking Point 8 - Financing The Blue Economy

**Public & Private Sector Investment**

Investing in the Blue Economy is essential for harnessing the oceans' economic potential while addressing environmental challenges. Opportunities exist in decarbonizing maritime shipping, scaling marine nature-based solutions, expanding marine renewable energy and promoting sustainable aquaculture. As the world moves towards a greener future, coordinated efforts from public, private and philanthropic sectors will be crucial in driving the investment needed to protect our oceans and support inclusive economic growth. With a projected need of over US\$3 trillion in funding by 2050 the Blue Economy represents both a critical challenge and a profound opportunity for sustainable development.

**Decarbonizing Maritime Shipping**

Investing in technologies and infrastructure to decarbonize maritime shipping is important. As of 2023 the market for alternative marine fuels including LNG and biofuels was valued at US\$15 billion with expectations to grow as the industry seeks cleaner options.<sup>62</sup> Innovations in ship design, such as the use of wind-assisted propulsion and energy-efficient hull forms are also playing their role. Maersk and CMA CGM are leading investments in green methanol and ammonia-powered ships, anticipating that these fuels will play a central role in reducing emissions. The International Energy Agency estimates that the global transition to low-carbon maritime shipping could require investments totaling US\$1.2 trillion by 2050.<sup>63</sup>

**Marine Nature-based Solutions**

Marine nature-based solutions, including the restoration and preservation of seagrass beds, mangroves and salt marshes offer a dual benefit of protecting coastal communities from storms and flooding while sequestering carbon. The investment required to scale these solutions is projected at US\$1.1 trillion between 2022 and 2050.<sup>64</sup> These ecosystems not only act as carbon sinks but also enhance biodiversity and provide natural barriers against sea-level rise. Projects like the Great Barrier Reef Foundation's coral restoration initiative is a successful example of large-scale investment in marine ecosystem preservation. Building on a 15-year partnership with the Foundation, Qantas will invest US\$10 million over 10 years in the Reef Restoration Fund to support scientists, traditional owners and local tourism operators restore corals across the Great Barrier Reef and other iconic Australian coral reefs.<sup>65</sup>

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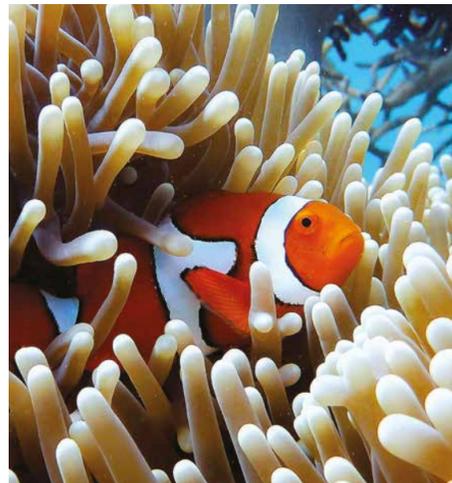
**Marine Renewable Energy**

Oceans provide substantial potential for renewable energy generation. Fixed offshore wind farms are currently the largest marine-based source of clean energy, but emerging technologies such as floating wind turbines and wave and tidal energy converters are expanding opportunities. By 2024, the global market for offshore wind energy was valued at US\$30 billion with capital expenditures for wind farm construction expected to reach US\$840 billion by 2040.<sup>66</sup> Investment in these technologies will help meet global clean energy demands and mitigate the impact of climate change.

**A general lack of ocean literacy within the financial sector poses risks, as many financiers are unaware of the specific challenges and opportunities associated with ocean-related projects. This gap leads to underestimation of risks and missed investment opportunities.**

**Sustainable Aquaculture**

Half the world's seafood production now comes from aquaculture which is projected to increase as wild fish stocks face pressure from overfishing. The investment needed to expand aquaculture capacity is estimated to range between US\$150 billion to US\$300 billion over the next decade.<sup>67</sup> Sustainable practices in aquaculture can also contribute to climate objectives by reducing reliance on wild fish stocks and integrating renewable energy sources into fish farming operations. Notably, companies like Grieg Seafood and Cermaq are investing in sustainable aquaculture methods, including integrated multi-trophic aquaculture systems that reduce environmental impacts and enhance productivity.<sup>68</sup>



## Talking Point 9

# SHIPPING & NET ZERO EMISSIONS BY 2050



**International shipping, responsible for carrying 80% of global trade, is a major contributor to greenhouse gas emissions. If it were a country, shipping would rank among the top 10 largest polluters globally.**

To combat climate change effectively, the shipping industry must aim for net zero emissions by 2050. The IMO has set a target to achieve net zero emissions “by or around” 2050 though some critics argue the target is too vague.<sup>69</sup>

Most commercial shipping vessels currently use heavy fuel oil which has a high energy density and is relatively cheap as it is a byproduct of oil refining. However, heavy fuel oil contributes to approximately 3% of all human-driven emissions annually and produces harmful pollutants, including 9% of global sulfur oxide and 18% of nitrogen oxide emissions. These pollutants are known to cause respiratory problems and acid rain.<sup>70</sup>

With maritime trade volumes expected to triple by 2050 emissions will continue to rise unless the industry takes decisive action. New research by the Ocean Panel indicates decarbonizing shipping could cut annual emissions by 2 gigatonnes by 2050 - the equivalent of removing 400+ million cars from the road each year.<sup>71</sup>

## Decarbonizing Shipping

In 2011, the IMO established minimum fuel efficiency standards for ships, marking the first mandatory greenhouse gas reduction regime in international transport. Measures such as slow steaming, bulbous bows and propeller upgrades have reduced shipping’s carbon intensity by over 30% since 2008. Wind sails combined with energy-efficient ship designs can reduce fuel use by up to 30%. However, these improvements are limited and not scalable for the larger vessels that dominate the industry.

To align with the goal of limiting global warming to 1.5 degrees Celsius, estimates suggest 5% - whilst striving for 10% - of shipping fuel must be zero emissions by 2030. Currently, no commercially viable zero emissions fuel is available at scale. Several low-carbon fuel options are being explored, but each has significant challenges.<sup>72</sup>

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- |    |   |    |   |
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## Liquefied Natural Gas (LNG) Temporary Solution

LNG emits 25% less CO<sub>2</sub> than conventional marine fuels and is currently the only commercially viable alternative. However, LNG is a fossil fuel with a high risk of methane leaks, making its climate benefits questionable. Studies show LNG engines can emit up to 70% more life-cycle greenhouse gases than traditional marine fuels. Additionally, switching to LNG could result in financial losses of up to US\$850 billion by 2030 as the industry may shift away from fossil fuels leading to stranded assets.<sup>73</sup>

## Methanol Promising But Costly

Maersk is investing in green methanol, produced from captured CO<sub>2</sub> and clean hydrogen. Methanol can be used in existing ships and stored at many of the world’s largest ports. However, producing green methanol at scale is expensive due to the high costs of capturing CO<sub>2</sub> and obtaining hydrogen from renewable resources. Without significant incentives, methanol may not become the dominant fuel.<sup>74</sup>

## Ammonia & Hydrogen Long-term Solutions

Ammonia, made from nitrogen and hydrogen, emits almost no CO<sub>2</sub> and has a high energy density. However, it is toxic, requiring specialized handling and safety measures. Hydrogen, when produced from renewable sources, burns cleanly, emitting only water vapour. It has three times the energy density of heavy fuel oil but requires storage at cryogenic temperatures -150 °C to absolute zero -273 °C - adding to costs and safety concerns. Both fuels require substantial infrastructure development and investment.

## Biofuels & Electric Ships Limited but Useful

Biofuels, derived from biomass, offer renewable and low-carbon options but their environmental benefits depend on the feedstock used. Ethical concerns about using agricultural resources for fuel instead of food limit their scalability. Electric ships and shoreside power can be effective for short-sea trades and small ferries but infrastructure limitations restrict broader application.

## Road to Net Zero Emissions

Decarbonizing shipping will require a substantial increase in renewable energy production. Producing hydrogen, ammonia and methanol needs large amounts of clean energy which is lacking currently, with only 30% of the world’s energy derived from renewable sources. Accelerating the transition to renewable energy is critical to producing enough zero emissions fuel by 2050.

Stronger commitments beyond the IMO’s 2023 strategy are necessary to align with the Paris Agreement’s goals. Initiatives like the Green Shipping Challenge encourage governments and companies to commit to net zero emissions. The EU’s inclusion of shipping in its carbon market and proposals for a global levy on greenhouse gas emissions from shipping represent significant steps toward incentivizing decarbonization. Achieving decarbonization goals will require an estimated US\$1.2 trillion by 2050 in investment for developing and deploying low-carbon fuels and infrastructure. Financing mechanisms, such as the Poseidon Principles and public-private investments will be essential in driving this transition.<sup>75</sup>

Talking Point 10

ATTRACTING

TALENT

Attracting young talent to Oman’s fisheries industry is vital to its continued growth and sustainability. Playing a major role in Oman’s economy, fisheries not only contribute to GDP but also play a crucial role in food security, employment and cultural heritage.

With fisheries contributing approximately US\$3.3 billion to the economy in 2023 and employing over 50,000 people directly. The sector’s continued development is key to the success of Oman Vision 2040. However, the industry faces challenges in appealing to the younger generation who often view careers in fisheries as low-skilled and unexciting. To combat these misperceptions and secure the sector’s future, it is imperative the industry’s image be modernized, presenting the diverse and rewarding career opportunities it offers. This involves integrating advanced technologies, fostering educational partnerships and creating compelling career pathways. Drawing lessons from successful initiatives in Norway, for example, can provide valuable insights for Oman. In fact, Norway has attracted young talent through innovative training programs and summer internships that highlight the modern, dynamic and impactful nature of careers in fisheries.

By showcasing the sector’s potential for career advancement, travel, leadership and entrepreneurship, Oman can create a compelling narrative that resonates with young people. Emphasizing the integration of technology, sustainability and global opportunities will be central to reshaping the industry’s image and attracting the next generation of professionals Oman’s fisheries industry requires.



FISKERIDIREKTORATET

Success Story: Norway

Administered by the Norwegian Directorate of Fisheries, Norway’s Youth Fishing Program gives 12-to-25-year-olds the opportunity to work in summer jobs as fishers. The ultimate goal of the program is to offer young Norwegians an introduction to fishing as a career option. In 2023, over 650 participants registered for the program. Indeed, summer internship programs play an important role in helping Norway remain Europe’s top fishing nation.

- The Youth Fishing Program runs 12 June - 18 August and each registered youth fisher can sell catches for up to US\$4,600.
- Youth fishing can be done with rods, hand lines, jiggers, nets up to 210 meters in total length, lines with up to 300 hooks and 20 traps or pots.



- At 100,915 kilometers including all islands, Norway’s coastline is the second longest in the world
- Norway is the world’s second largest exporter of seafood. Only China can claim to export more.
- The fishing industry is so large it is the second largest contributor to Norway’s economy after oil and gas.
- The export value of Norwegian seafood reached an all-time high in 2023 with seafood worth US\$16 billion. This equates to 39 million meals served every day, all year round.



Credit: Helge Skodvin

NOFIMA

The Norwegian food research institute, NOFIMA has trained more than 5,000 16-to-30-year-olds through its targeted youth programs, addressing the need for skilled professionals in the fisheries industry. These initiatives cover practical workshops, internships and educational courses. Collaborating with schools and universities, NOFIMA programs reach over 1,200 students annually, covering topics ranging from modern fishing techniques and aquaculture management to food processing technologies. The success of these initiatives is highlighted by 60% of graduates pursuing direct careers in the fishing industry. Programs are aligned with industry demands for innovation and sustainability, crucial to the ongoing success of Norway’s fisheries industry which contributed US\$16 billion to the national economy in 2023.

## Q&amp;A

**ZAKARIYA AL HASNI**  
CEO  
INTERNATIONAL SEA FOOD COMPANY  
(SIMAK)



### Can you tell us about SIMAK's new cannery?

SIMAK was set up under the auspices of Fisheries Development Oman and our new US\$67.5 million cannery on the Special Economic Zone at Duqm represents a major milestone in Oman's ambition to transform Duqm into a central hub for the seafood industry. The facility, completed in March this year, is part of the government's broader strategy to boost Oman's global aquaculture, commercial fishing and seafood processing profile.

# TEJARAH TALKING

Today, SIMAK's cannery is fully operational with the capacity to process 30,000 tons of seafood annually, divided evenly between sardines and tuna. We have also integrated sustainability into our operations by producing fish oil from processing byproducts. This not only maximizes resource use but also aligns with our strong environmental goals. Overall, the cannery is not just a processing plant it is also helping boost economic growth, create quality jobs for Oman's talented youth and increase the value of Oman's seafood exports.

Having said that, it is important to put what we do in an international context and understand how large and competitive the fisheries industry is. Almost 200 countries supply fish and seafood products to the global marketplace and more than 800 species of fish are actively traded. Indeed, with sales of over US\$120 billion the total value of internationally-traded seafood products exceeds the trade of grains, meats and beverages. It is big business.

### How does Oman's fisheries sector contribute to the national economy?

Oman's fishing industry plays an important economic role employing over 50,000 this includes fishers as well as those working in processing and support roles. Indirect employment adds thousands more, boosting coastal economies across Oman. In 2023, Oman produced 788,681 tonnes of fish valued at over US\$1.3 billion. In terms of exports, key markets include the GCC, EU and Asia with significant growth in canned and processed fish exports an area SIMAK looks to capitalize on.

### How does SIMAK integrate sustainability into its operations and what specific initiatives have you implemented to reduce the environmental impact of your production processes?

We are deeply committed to sustainability - integrating eco-friendly practices throughout our operations, from reducing water usage and waste to using solar energy. We also ensure sustainable sourcing by partnering with local fishers and SMEs which supports the Duqm economy while maintaining high environmental standards. SIMAK is firmly committed to protecting and conserving the natural resources within our oceans. Our goal is to balance growth with the health of the planet - ensuring we leave a positive legacy for future generations.

### Given SIMAK's proximity to Duqm Industrial Fishery Port how does this location benefit your supply chain and support local fishers?

You are right, we are just three kilometers from the port - which is clearly a huge advantage. It allows us to source fresh produce directly from local fishers, reduce transport costs and support local business ecosystem. This proximity also helps streamline SIMAK's supply chain, ensuring the freshest seafood for our processing plant and fostering strong relationships with the local fishing community. It is a win-win, enhancing our efficiency and supporting both the local and national economy.

## Q&amp;A

### How does SIMAK utilize track and trace systems to ensure product quality and safety?

Track and trace systems are integral to SIMAK's operations, providing transparency and control throughout our supply chain. By monitoring each step from sourcing to processing, we ensure our seafood meets the highest quality and safety standards. This system helps us quickly identify and address any issues, enhancing product reliability. It also reinforces our commitment to sustainability, as we can trace the origins of our seafood, ensuring it comes from responsible and ethical sources.

As domestic and international consumers become more environmentally conscious, it is clear that meeting the basic legal standards is clearly not enough for seafood companies to be successful. In this regard, we work really hard to measure and report on how we meet not just the legal mandates but also sustainability standards.

### What markets are you targeting for exports and how does SIMAK ensure its products meet the diverse regulatory standards of these regions?

We are targeting diverse markets including the MENA region, the US, EU and Africa. As mentioned earlier, to ensure our products meet regulatory standards, we adhere to stringent quality controls and certifications like FDA and ISO. This commitment to quality and compliance helps us navigate the complexities of international regulations, ensuring our seafood products are trusted and enjoyed by consumers around the globe.



### With the largest seafood processing capacity in the Middle East how does SIMAK maintain efficiency and quality control in its high-volume operations?

This is a great question. With the largest seafood processing capacity in the Middle East we are laser focused on maintaining efficiency and quality through advanced technology and rigorous quality control. Our facility will shortly process 100 million cans annually, thanks to our state-of-the-art infrastructure and dedicated team.

**By constantly refining our processes and investing in cutting-edge solutions as well as staff training we ensure high-quality products that meet the demands of our growing markets.**

### Can you share some examples of recent innovations or new products developed by SIMAK and how they cater to changing consumer demands?

Innovation is at the heart of we do. Recently, we have developed new product lines that cater to evolving consumer tastes, such as premium canned tuna and sardine varieties. We also invest in R&D to enhance our products' nutritional value and sustainability. By staying attuned to market trends and consumer preferences, we are continuously evolving our offerings to deliver high-quality, innovative seafood products.

### What are the biggest challenges facing the seafood processing industry in Oman and how is SIMAK positioned to address them?

The seafood industry faces multiple challenges, from regulation, competition to sustainability issues. At SIMAK, we address these by adhering to strict quality standards, investing in sustainable practices and continuously improving our supply chain. By focusing on innovation and maintaining strong relationships with domestic and international partners, we are well-equipped to navigate these challenges and thrive in today's highly competitive market.

### What role does branding play in SIMAK's strategy to enhance market presence?

Branding is vital for distinguishing SIMAK in a competitive market. Our branding strategy focuses on highlighting our commitment to quality, sustainability and local sourcing. This helps build trust with consumers and partners here at home and overseas, reinforcing our reputation as a provider of premium seafood products. By consistently communicating our values and quality standards through our brand we create a strong market presence that fosters loyalty among customers.

### What are SIMAK's long-term goals for expansion and growth?

Looking ahead, we aim to expand our market reach domestically and globally. We plan to enhance production capacity, explore new markets and introduce innovative products that meet global standards. Our long-term vision includes strengthening SIMAK's sustainability efforts and continuing to support the national economy, ensuring we remain a leader in the seafood industry. The future looks bright.

Tejarah Talks are held at Oman Convention & Exhibition Centre



**THANK YOU**  
TO OUR PANELISTS & ALL  
THOSE WHO ATTENDED

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2. Navigating discussions
3. Hooked on the debate
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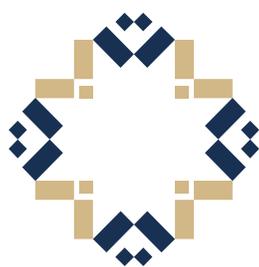
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