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**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**on a new approach for a sustainable blue economy in the EU
Transforming the EU's Blue Economy for a Sustainable Future**

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1. MAKING THE TRANSITION FROM 'BLUE GROWTH' TO A 'SUSTAINABLE BLUE ECONOMY'

The European Green Deal¹ calls for a transformation of our economy to become a modern, resource-efficient and competitive economy where net emissions of greenhouse gases are phased out and the EU's natural capital is protected. The Recovery Plan for Europe² sets out to boost the green and digital transitions and make Europe's economy fairer, more resilient and more sustainable for future generations. The European Union's blue economy can help achieve this dual challenge: if put on a more sustainable path, it will become a font of action and ideas creating innovation, spurring fast and lasting recovery and protecting our planet.

If the global blue economy, were compared to a national economy, it would be the seventh largest in the world, and the ocean as an economic entity would be a member of the G7. It operates in the planet's vastest ecosystem: oceans hold 97% of all our water and 80% of all life forms. The ocean surrounds and sustains us, providing enough oxygen for every second breath we take, food for almost half of humanity, and critical resources for human health, not to mention a web of economic interactions.

Europe's blue economy provides 4.5 million direct jobs³, many in regions where there are few alternatives. It encompasses all industries and sectors related to oceans, seas and coasts, whether they are based in the marine environment (e.g. shipping, fisheries, energy generation) or on land (e.g. ports, shipyards, land-based aquaculture and algae production, coastal tourism). It is a broad, fast-moving segment of our economy, which over the past decade has taken significant steps to modernise and diversify. Alongside traditional sectors, innovative sectors are evolving and growing, such as ocean renewable energy, the blue bio-economy, bio-technology and desalination, thus providing new prospects and creating jobs.

These and other economic activities have a cumulative impact on the marine environment, from visible pollution such as plastic litter and oil spills to invisible pollution such as microplastics, underwater noise, chemicals and nutrients. The effects of climate change and greenhouse gas emissions are devastating on our ocean, coasts and people living in those areas, ranging from changes in water temperature, to acidification, rising sea levels and more frequent and intense flooding and erosion. Coupled with the major threat posed by biodiversity loss, which is driven by climate change, pollution, over-exploitation of resources and the destruction of natural habitats, these impacts will challenge the resilience of the blue economy and society as a whole.

¹ COM(2019) 640 final.

² COM(2020) 442 final.

³ European Commission (2020), The EU Blue Economy Report 2020.

This communication takes a systemic view that integrates ocean policy into our Europe’s new economic policy. Our ocean, and the ‘blue economy’ it supports, is indispensable to achieving the transformation set out in the European Green Deal. Prominent examples are the contributions of oceans to energy production, to the greening of transport, and to sustainable food production. The contribution of a healthy ocean is essential for a sustainable economy. We need to better connect the green and the blue policies, while extending our approach beyond EU borders and leading the way on international ocean governance.

A sustainable blue economy will create tangible opportunities for new jobs and businesses. They will be created by work to mitigate the impacts on oceans and coasts to build a resilient economic model based on innovation, a circular economy and a respectful attitude to the ocean. This means that businesses that use or generate renewable resources, preserve marine ecosystems, reduce pollution and increase resilience to climate change will be incentivised, while others will need to reduce their environmental footprint. This is as important for people as it is for the planet. The 2030 Agenda for sustainable development acknowledges⁴, without healthy ocean, life on this planet is at risk; without the ocean’s resources, human societies around the planet lose the ability to sustain themselves.

This communication sets out a detailed and realistic agenda for the blue economy to play a major role to achieve the European Green Deal’s objectives. Thanks to its dynamism and innovation potential, the sector is well placed to drive the green transition, replacing unchecked expansion with clean, climate-proof and sustainable activities that tread lightly on the marine environment. The outdated notion that environmental protection conflicts with the economy is giving way to the realisation that, especially in the maritime industry, the environment and the economy are intrinsically linked. We need to shift the focus from “*blue growth*” to a *sustainable* blue economy.

Europe’s seas and oceans are natural and essential allies in tackling the climate and biodiversity crises. A considerable implementation gap must be bridged to scale up marine protection from the current 11% to a 30% area coverage by 2030⁵, meet ambitious depollution targets in our seas and make the most of Europe’s natural and maritime assets to attain Europe’s 2030 targets and climate neutrality ambition. This Communication, together with the planned research **ocean mission**⁶, will set the path to make those goals a reality.

This communication calls for blue economy operators to endorse the principles of the European Green Deal. Over the past 15 years, the EU has laid a solid foundation for an integrated and synergetic maritime policy in Europe by involving its Member States, regions local stakeholders and land-based green economy. The shift to creating a sustainable blue economy will rely on even closer engagement with stakeholders, from businesses large and small to local groups, to young people passionate about the health of our ocean and the general public. It must unite *all* groups and sectors around a common vision. Complementing other current Commission initiatives, this communication presents (in chapter 2) the agenda for the blue economy on decarbonisation, conservation of our natural capital, the circular economy and responsible food production. Though not exhaustive, it announces some new

⁴ Sustainable Development Goal 14 - Conserve and sustainably use oceans, seas and marine resources for sustainable development.

⁵ COM(2020) 380 final.

⁶ Candidate ocean mission “Healthy oceans, seas, coastal and inland waters”.

initiatives and describes some of the tools (chapter 3) and enablers (chapter 4) to achieve the transition.

2. TRANSFORMING THE BLUE ECONOMY VALUE CHAINS

2.1 Achieving the objectives of climate neutrality and zero pollution

A sustainable blue economy offers many solutions to achieve the European Green Deal objectives. Many of the current activities need to reduce their carbon footprint, while new, carbon-neutral activities need to take centre stage. The blue economy can contribute to carbon neutrality by developing offshore renewable energy and by greening maritime transport and ports.

The EU aspires to reduce greenhouse-gas emissions by at least 55% of 1990 levels by 2030 and become climate neutral by 2050. **Offshore renewable energy** could help meet these targets and generate a quarter of the EU's electricity in 2050, mainly (though not exclusively) through offshore wind energy. A sustainable ocean energy mix should include (in addition to bottom-fixed offshore wind) floating wind, thermal, wave and tidal energy - emerging technologies that are expected to reach commercial stage within ten years. To speed up their development, in 2020 the Commission published a new EU offshore renewable energy strategy⁷ that aims to multiply five-fold the capacity for offshore renewable energy by 2030 and 30-fold by 2050.

The European Green Deal calls for a 90% reduction in greenhouse gas emissions from all modes of transport, and this includes **maritime transport**. Our sea lanes are a key link to the global trading system. Though it generates comparatively fewer emissions than transport by road or air, maritime transport generates both carbon and other polluting emissions due to the great volumes and a heavy reliance on fossil fuels. Decarbonising maritime transport (and fishing operations) will abate not only greenhouse gas emissions, but also air and water pollution and underwater noise, while opening up new economic opportunities.

The 2020 communication on a sustainable and smart mobility strategy⁸ aims to bring the first zero emission vessels to market by 2030 and decarbonise maritime transport through an articulate set of measures. These include the possible extension of the EU Emission Trading System to maritime transport and aligning the taxation of energy products with EU energy and climate policies when revising the Energy Taxation Directive⁹. The Commission is also considering incorporating new propulsion systems in the current review of the Recreational Craft Directive¹⁰, and revising the ship source pollution directive. Meanwhile, the FuelEU¹¹ initiative will boost the production and uptake of renewable and low-carbon fuels (such as hydrogen and hydrogen-based fuels, biofuels, synthetic fuels, electricity and other sustainable energies such as wind), as well as the use of onshore power supply for ships at berth. Both the TEN-T Regulation and the Alternative Fuels Infrastructure Directives will be revised and aligned in this sense, namely to ensure a corresponding deployment of adequate refuelling infrastructure. EU shipyards could seize the opportunities arising from the fast-growing

⁷ COM(2020) 741 final.

⁸ COM(2020) 789 final.

⁹ Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity.

¹⁰ Directive 2013/53/EU of the European Parliament and of the Council of 20 November 2013 on recreational craft and personal watercraft and repealing Directive 94/25/EC.

¹¹ <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12312-FuelEU-Maritime->.

markets of innovative energy-efficient service vessels that should significantly reduce fuel consumption and CO₂ emissions.

As part of its zero-pollution action plan, the Commission plans to build on the success of existing emission control areas in EU waters by spearheading efforts to designate new areas in the Mediterranean Sea (thus potentially leading to a reduction of air emissions of SO₂ and NO_x from international shipping by up to 80% and 20% respectively within ten years) and starting similar work in the Black Sea.

Ports are crucial to the connectivity and the economy of regions and countries. As Europe's industrial landscape changes (for example with the expansion of offshore renewable energy), the role of ports will evolve too. The Commission considers that, beyond transshipment and logistics, their future lies in developing their key role as energy hubs (for integrated electricity, hydrogen¹² and other renewable and low-carbon fuels systems), for the circular economy (for collecting, transshipping and disposing of waste from ships and other port industries, and for decommissioning ships), for communication (for submarine cables), and for industry (as industrial clusters). A further aspect that helps achieve decarbonisation and zero pollution is the use of smart digital solutions and autonomous systems, as these optimise traffic flows and cargo handling in and around ports. Taking up these new roles will improve working conditions of operators and living conditions for surrounding communities. Specialised leisure ports and fishing ports should also green their operations.

To support the decarbonisation and depollution of energy production, maritime transport and ports, the Commission will:

- create a **Blue Forum for users of the sea** to coordinate a dialogue between offshore operators, stakeholders and scientists engaged in fisheries, aquaculture, shipping, tourism, renewable energy and other activities. It will develop synergies between their activities and reconcile competing uses of the sea;
- promote the use of EU funds **to green maritime transport** by
 - a) increasing the uptake of short-sea shipping instead of using more polluting modes;
 - b) renovating the EU's maritime fleet (e.g. passenger ships and supply vessels for offshore installations) to improve their energy efficiency; and
 - c) developing the EU's highly-advanced manufacturing and technological capabilities;
- aim to use the new **European Maritime, Aquaculture and Fisheries Fund** to support fishing fleets in adopting cleaner engines and techniques, provided these renovations do not generate overcapacity and overfishing;
- pursue the objective of **zero-emission ports**, as highlighted in the sustainable and smart mobility strategy, including through its work with the sustainable ports sub-group of the European Ports Forum, to discuss with relevant stakeholders and share and promote best practices and bottom-up initiatives in greening port services¹³;
- support Member States, through the reinforced Union Civil Protection Mechanism and anti-pollution measures of the European Maritime Safety Agency, to prepare for and respond to marine pollution accidents.

¹² COM(2020) 301 final.

¹³ The new Atlantic action plan 2.0 also identifies ports as a priority gateways and hubs for the blue economy, while the WestMed initiative has set up a technical group on sustainable transport and green shipping.

2.2 Circular economy and preventing waste

Reducing the impacts of human activities on the sea is a collective responsibility. The blue economy can play a vital role in many aspects of the work to combat pollution and can benefit from new opportunities arising from that work.

Every year around 27,000 tonnes of macro-plastics (mostly single-use plastics, lost or discarded fishing gear and waste discharged from ships) enter European seas¹⁴. Following extensive action taken under the Marine Strategy Framework Directive¹⁵, EU Member States have agreed that a beach should have fewer than 20 items of litter for every 100 metres of coastline. The significant commitment to keep Europe's seas clean will be underpinned by the Single-Use Plastics Directive¹⁶, which targets the single-use plastic products and fishing gear currently representing 70% of marine litter in the EU. Work is underway to do the same for seafloor litter and microplastics. The Commission is taking action to develop standards for the circular design of fishing gear that facilitate re-use and recyclability when the gear is at end of life. Measures to reduce the damage from lost and abandoned fishing gear are included in the Commission's proposal for a revised Fisheries Control Regulation¹⁷. The new European Maritime, Fisheries and Aquaculture Fund¹⁸ Regulation will continue to provide financial support for fishers to retrieve and collect litter and lost fishing gears¹⁹ and to fund proper processing in ports and landing sites as stipulated by the Port Reception Facilities Directive²⁰. The EU values the role of fishers as *stewards of the sea* and encourages this role to be further promoted at national level as well as by the industry itself.

The key, however, is preventing litter from finding its way into the sea in the first place. The EU action plan on zero pollution offers a unique opportunity to step up action on pollution from nutrients (leading to eutrophication), contaminants, litter (largely made up of plastics) and underwater noise.

Alongside reducing pollution, it will be crucial to develop circular models and solutions. The 2020 EU circular economy action plan²¹ sets forth an ambitious agenda for keeping materials and resources in the economy as long as possible and for minimising waste, thus increasing circularity. For the recycling of large ships, the EU has a unique and ambitious set of standards in the Ship Recycling Regulation²², that the Commission plans to revise by 2023 to possibly extend its scope and reinforce the existing regime. For the environmentally sound management and optimal treatment of decommissioned offshore oil and gas platforms, the EU follows the work of the Convention for the Protection of the Marine Environment of the North-East Atlantic and will consider revising the relevant EU legislation.

¹⁴ SWD(2018) 254 final.

¹⁵ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive).

¹⁶ Directive (EU) 2019/904 of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.

¹⁷ COM(2018) 368 (proposal for revision currently in first reading with the co-legislators).

¹⁸ Proposal for a Regulation of the European Parliament and of the Council on the European Maritime and Fisheries and Aquaculture Fund and repealing Regulation (EU) No 508/2014 of the European Parliament and of the Council (EMFF) - political agreement from 3 December 2020.

¹⁹ With possible use of connected gears equipped with Internet of Things sensors.

²⁰ Directive (EU) 2019/883 amending Directive 2010/65/EU.

²¹ COM(2020) 98 final.

²² Regulation (EU) No 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC.

To tackle the main sources of pollution in our seas and to promote recycling solutions, the Commission will:

- take action to halve **plastic litter at sea, nutrient loss into the sea and the use and risk from chemical pesticides** by 2030;
- take action to restrict intentionally added **micro-plastics** and develop labelling, standardisation, certification and regulatory measures on the unintentional release of micro-plastics, including measures to increase the capture of micro-plastics at all stages of the product lifecycle;
- ensure that litter caught in fishing operations is reported at port, and that **fishing gear made from plastic is collected and recycled** after its use. The Commission will prepare the relevant implementing acts and has asked industry standardisation bodies to develop standards for recyclable fishing gear;
- propose revising the **ship recycling** Regulation²³ and the EU requirements for decommissioning **offshore platforms** to ensure proper protection of the marine environment.

2.3 Biodiversity and investing in nature

Biodiversity conservation and protection should be considered as foundational principles of maritime economic activity. Marine biodiversity is not only the prerequisite for economic activities like fisheries, bio-technology and tourism. Biodiversity conservation and restoration also present economic opportunities.

As highlighted in the EU biodiversity strategy for 2030, expanding protection to 30% of the EU's sea area and creating ecological corridors will reverse biodiversity loss, contribute to climate mitigation and resilience and at the same time generate significant financial and social benefits. Investments in marine protected areas, in particular strictly protected areas, have been shown to generate rich economic return and multiply the amount of fish and marine life where protection is effective.

Preserving and restoring coastal vegetation systems such as tidal marshes, mangroves and seagrasses – which accumulate ‘blue carbon’²⁴ in their plants, soils and sediments – can contribute considerably to the European Green Deal's decarbonisation targets. Preserving blue carbon sequestration also goes hand in hand with preserving coastal biodiversity. Similarly, designing artificial reefs, restoring important sea-bed habitats (coral reefs, macro-algal forests and others), and developing solutions to depollute areas or fight eutrophication are key to rebuilding biodiversity and thus the resilience of coastal and marine ecosystems. All these activities may form part of an economic sector in its own right. Clearly, all potential impacts must be addressed in a holistic way for them to be truly sustainable. Blue biotechnologies also offer solutions to produce materials, enzymes, food supplements and pharmaceuticals.

Taking a forward-looking, ecosystem-based management approach under EU legislation²⁵ will reduce the adverse impacts of fishing, mineral extraction and other human activities on

²³ Regulation (EU) No 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC.

²⁴ Carbon stored by coastal and ocean ecosystems.

²⁵ In this regard, full implementation of the following acts is essential: Marine Strategy Framework Directive (2008/56/EC), Birds Directive (2009/147/EC), Habitats Directives (92/43/EEC), Directive 2011/92/EU,

marine ecosystems, particularly on sensitive species and seabed habitats. To minimise the environmental impacts of fishing on marine habitats, the Commission has brought in measures such as specifications for fishing gear and mesh sizes, closed areas and seasons. It is now preparing a report on implementation of these measures and will publish a new action plan with the aim of further reconciling fishing – including bottom-contact fishing – with biodiversity goals. This includes introducing measures, where necessary, to limit the use of fishing gear most harmful to biodiversity, including the use of bottom-contacting fishing gear, which is now the most damaging activity to seabed. The European Maritime, Aquaculture and Fisheries Fund will support the transition to more selective and less damaging fishing techniques.

To preserve and restore marine biodiversity, the Commission will:

- table a **proposal for legally binding EU targets to restore degraded ecosystems**, in particular major fish spawning and nursery areas and areas with the greatest potential to capture and store carbon and to prevent and reduce natural disasters;
- propose a **new action plan to conserve fisheries resources and protect marine ecosystems** by the end of 2021, which will in particular look into actions necessary to protect sensitive species and habitats;
- work with Member States, regions and the European Environment Agency to **identify and designate additional marine protected areas** and to define strict protection by the end of 2021;
- promote and support **local participatory initiatives** (such as community-led local development groups, fisheries local action groups etc.) that combine the regeneration of marine resources with the preservation of local livelihoods.

2.4 Coastal resilience

Protecting our natural and economic assets and infrastructure means adapting to the inevitable consequences of climate change. As an alternative to building yet more ‘grey’ infrastructure (dams, dikes or concrete barriers), climate adaptation should be based on natural and nature-based solutions – wetlands such as salt marshes, seagrass fields, mangroves and dunes, for instance. In coastal regions, developing green infrastructure will help preserve biodiversity, coastal ecosystems and landscapes, strengthening the sustainable development of tourism and of the coastal regions’ economy. These adaptation activities will become a new sector of the blue economy in its own right.

About one third of the EU population lives within 50 km of the coast. Over 200 million citizens live in coastal regions or on one of Europe’s many islands. The IPCC indicated in 2018 that sea levels are likely to rise by 2100 between 0.4 and 0.8m and, if global greenhouse gas emissions stayed on their current trend, in a likely range of up to 1.1m²⁶. Beyond 2100 sea levels will continue to rise for centuries, due to continuing heat uptake and loss of Arctic and Antarctic ice. In addition, due to climate change, the likelihood of extreme weather

Directive 2001/42/EC, Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, EU biodiversity strategy (COM(2020) 380 final).

²⁶ Inter-governmental Panel on Climate Change, Special Report: Special Report on the Ocean and Cryosphere in a Changing Climate, Summary for Policy Makers, section B.3.1, <https://www.ipcc.ch/srocc/chapter/summary-for-policymakers/>.

events that emanate from the seas and oceans and that cause severe damage to populations, economic assets and infrastructures will increase by orders of magnitude.

EU public spending on protecting coastlines from the risk of erosion and flooding is estimated at over EUR 5 billion a year for 1990-2020²⁷. On the other hand, the cost of inaction would amount to 340-360 billion euro per year in terms of lost ecosystem services along EU coasts. A quantum leap in investigating and planning a common response is needed. The new EU strategy on adaptation to climate change²⁸ sets out a response framework through smarter, faster and more systemic adaptation in the EU and stronger international action for climate resilience. Applying the guidelines of that strategy, the Commission will:

- work to **close the knowledge gaps** and stimulate innovation for increased climate resilience for coastal areas; including through a new comparative analysis of traditional and nature-based solutions;
- work to boost the capacity for Copernicus and EMODNet observation, modelling and forecasting to better **anticipate the effects of extreme weather events** (e.g. floods, storm surges) **and regional sea-level rise**;
- **stimulate cooperation between coastal regions and islands** sharing common needs in the same sea basin to develop adaptation strategies and joint approaches to coastal zone management²⁹, invest in sustainable coastal defences and adapt coastal economic activities;
- assist Member States in **long-term planning to phase in investments**, with support from EU funds.

2.5 Responsible food systems

By using marine resources better and by choosing alternative sources of food and feed, the blue economy can help alleviate pressure on our climate and on natural resources for food production.

One of the sectors responsible for carbon emissions, pollution and biodiversity loss is the current system of food production and consumption. Putting the system on a sustainable path is the aim of the Commission's farm to fork strategy³⁰, with a comprehensive approach that ripples through to many aspects of the blue economy. This includes responsible fishing to bring stocks to sustainable levels, sustainable aquaculture to complement the natural limits of wild captures and algae production as an alternative to agriculture.

European fisheries have made considerable strides towards bringing Europe's fish stocks back to sustainable levels and meeting the common fisheries policy's sustainability standard³¹, particularly in the North-East Atlantic. But important challenges remain, including reducing unwanted catches and discards through more selective fishing techniques.

²⁷ <https://www.eea.europa.eu/themes/water/europes-seas-and-coasts>.

²⁸ [SEC\(2021\) 89 final](#).

²⁹ Council Decision 2010/631/EU of 13 September 2010 concerning the conclusion, on behalf of the European Union, of the Protocol on Integrated Coastal Zone Management in the Mediterranean to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean.

³⁰ COM(2020) 381 final.

³¹ Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC.

Discards generate substantial waste and undermine both the sustainable exploitation of marine biological resources and the viability of fisheries. The ongoing revision of the EU fisheries control regulation, the associated debate on the lack of control on the landing obligation, and the need to fully document fisheries and by-catches of sensitive species corroborate how important it is to transition from traditional control methods to new digital systems.

Digitisation and advanced tools for fisheries (such as remote electronic monitoring systems, catch reporting using mobile applications, ecosystem modelling and artificial intelligence tools) can optimise fishing operations and at the same time enable data collection and analysis, improve control and monitoring, reduce administrative burden and ultimately support the sustainable management of marine biological resources without requiring physical presence. Such high-tech systems may well become standard features in the fishing industry. Promoting an EU-based digital know-how for the fishing industry would create a new generation of jobs.

When managed in a sustainable way, **aquaculture** is a valuable, low-impact source of food and feed. EU aquaculture meets high standards in terms of product quality and animal health, but there is still margin for improvement in terms of diversification³², competitiveness and environmental performance. Low-impact aquaculture (such as low-trophic, multi-trophic and organic aquaculture), and environmental services from aquaculture can, if further developed, greatly contribute to the European Green Deal, to the farm-to-fork strategy and to a sustainable blue economy. The new strategic guidelines for EU aquaculture³³ set out the vision and an operational path to achieve this transformation. They support best practice to ensure good environmental performance and encourage circular practices in aquaculture, for instance through environmental monitoring of sites and waste management. The action plan for the development of the organic food sector³⁴ contains a number of initiatives specifically aimed at boosting organic aquaculture production in the EU.

In addition to their potential to produce bio-based products and bio-fuels, **algae** can provide viable and sustainable alternative food and feed materials. Algae-based food can alleviate environmental pressures exerted by agriculture, aquaculture, and fisheries. Investing in micro-algae as a new source of animal feed can help reduce catches of wild fish for animal feed. Although combatting eutrophication primarily requires reducing pollution at source, producing algae in the sea can help remove excess carbon, nitrogen and phosphorus from water. The introduction of new algae- and sea-based food and feed products into the European Union market is a major opportunity for the development of a sustainable food sector. Although several products are already on the market, the introduction of new algae-based foods may be subject to the requirements of the Novel Food Regulation³⁵ and a pre-

³² The EU still imports over 70% of the seafood it consumes. Aquaculture products only represent 25% of the EU's seafood consumption, and EU aquaculture for under 2% of global aquaculture production. Aquaculture production remains highly concentrated in terms of both EU Member States and species farmed, hence the high potential for diversification.

³³ COM(2021) 236 final.

³⁴ <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12555-Organic-farming-action-plan-for-the-development-of-EU-org>.

³⁵ Regulation (EU) 2015/2283 of the European Parliament and of the Council of 25 November 2015 on novel foods, amending Regulation (EU) No 1169/2011 of the European Parliament and of the Council and repealing Regulation (EC) No 258/97 of the European Parliament and of the Council and Commission Regulation (EC) No 1852/2001.

market authorisation. The Commission will also explore the potential of cell-based seafood as an innovative and sustainable alternative.

Consumer demand for low environmental footprint and short supply chains is growing. At the same time, the growing efforts made by fishers and fish farmers to achieve product quality need to be rewarded by the market. The farm to fork action plan includes initiatives on a sustainable food-labelling framework that will enable consumers to make informed choices. An EU code of conduct for responsible business and marketing in the food supply chain will seek ambitious commitments from the middle part of the chain, which will uphold the sustainability efforts of fishers and fish-farmers and ultimately make seafood value chains more sustainable. To strengthen the position of consumers and help ensure that the EU market for fisheries and aquaculture products is a level playing field, the EU seafood marketing standards will be modernised.

To build sustainable food systems in the blue economy the Commission will:

- table by 2023 a legislative proposal for a framework that will include fisheries and aquaculture products, to accelerate and facilitate the transition towards a sustainable food system;
- put forward in 2022 a legislative proposal for **modern, sustainable marketing standards for seafood** to provide comparable information to consumers and operators in the supply chain on the environmental and social sustainability of seafood and on its carbon footprint;
- adopt a **dedicated initiative on algae** in 2022³⁶ to support the development of the EU's algae industry. The initiative will facilitate the authorisation of algae as novel foods by cutting application costs, facilitate market access, increase consumer awareness and acceptance of algae products and close gaps in knowledge, research and innovation;
- support the **digital transition of fisheries control** and promote the enforcement of fisheries rules by revising the fisheries control system in order to move towards advanced digital control mechanisms for fisheries;
- assess the potential and research and investment needs regarding cell-based seafood;
- in **implementing the common fisheries policy**, strengthen fisheries management in the Mediterranean and the Black sea, working closely with all stakeholders on the prompt implementation of the Western Mediterranean multiannual fisheries management plan.

3. SUPPORTING THE DEVELOPMENT OF A SUSTAINABLE BLUE ECONOMY

3.1 Ocean knowledge

Reliable, high-quality and harmonised ocean data are the prerequisite for a sustainable transformation of the blue economy. Better knowledge of the ocean and its ecosystems, together with free access to data, will enable industry, public authorities and civil society to make informed decisions.

³⁶ <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12780-Towards-a-strong-and-sustainable-EU-Algae-sector>.

Through common standards and open access principles, EMODnet³⁷ collates the measurements of hundreds of institutions to make the EU a model of best practice in **sharing marine data** and ocean observations. The Copernicus marine environment service provides satellite data and forecasting services in the EU sea basins and in the world. Work is ongoing to improve the digitalisation of the ocean, the resolution and usability of the data and to transform this data into knowledge and tools for the benefit of a wide range of stakeholders. This work, in particular the development of the Digital Twin of the Ocean³⁸ as a component of the Destination Earth initiative, involves several international institutions and will help tackle complex environmental changes and their socio-economic consequences by monitoring and simulating ocean developments. It will also be a tangible contribution to the United Nations Decade of Ocean Science for Sustainable Development³⁹.

Socio-economic data are important inputs for policy makers and for businesses, who have to make snap decisions in a rapidly evolving environment, especially in times of crisis. Since 2018, the Blue Economy Report has mapped the blue economy in the EU. A user-friendly Blue Economy Indicators⁴⁰ tool tracks economic progress. The European Market Observatory for Fisheries and Aquaculture⁴¹ and the Blue Bioeconomy Report have collected, curated and disseminated data on the fishery and aquaculture markets and on innovative uses of marine biological resources. Since the beginning of the pandemic, new and more frequent analyses have assessed the impacts on the sector in real time, enabling operators to anticipate changes to rules and consumption patterns, adapt and recover faster. This contributes to the European Green Deal's goal to build a more resilient food supply chain.

To create the knowledge needed for the transition to a sustainable blue economy, the Commission will:

- prepare by 2022 an **Ocean Observation Initiative** to structure and harmonise the collection of data in the oceans for different purposes, such as environmental monitoring, fisheries and aquaculture management, research, safe navigation;
- set up in 2021 a **Blue Economic Observatory** with the Commission's Joint Research Centre which will publish **annual blue economy reports** and provide updates on the progress in decarbonising the blue economy;
- release a stable methodology to **integrate the concept of 'natural capital' in economic decisions**. This implies assessing and quantifying both the economic value of marine ecosystem services and the socio-economic costs and benefits derived from keeping the marine environment healthy;
- expand the Copernicus marine service as an EU reference for ocean forecasting and an ocean climate centre for global, pan-European coastal services;
- further invest in modelling to better monitor live ecosystems and fisheries resources in time and space.

³⁷<https://emodnet.eu/en>. EMODnet brings together more than 120 organisations to provide data on the marine environment across seven disciplinary areas: bathymetry, geology, seabed habitats, chemistry, biology, physics and human activities. The data are processed to make them 'FAIR' (easy to find, easy to access, easy to put together and easy to use, or Findable, Accessible, Interoperable, Reusable).

³⁸ The thematic digital twin on oceans will be programmed and added to the Destination Earth system from 2023 onwards.

³⁹ <https://www.oceandecade.org/>.

⁴⁰ <https://blueindicators.ec.europa.eu/>

⁴¹ EUMOFA: <https://www.eumofa.eu/>.

All the above initiatives are in line with the European Commission's European data strategy⁴² in that they make public-sector data available for re-use and enable data to flow freely within the EU and across sectors, to the benefit of businesses, researchers and public administrations.

3.2 Research and innovation

Marine and maritime research and innovation are essential for achieving the EU's ambition to become climate-neutral by 2050, for protecting and restoring marine ecosystems and for making the blue economy a font of ideas and action to generate sustainable innovation.

Innovative technologies such as big data, artificial intelligence, advanced modelling, sophisticated sensors and autonomous systems are likely to transform the blue economy in the immediate future. New technologies can enable traditional sectors such as shipping, fisheries and tourism to improve their sustainability and circularity; emerging sectors such as blue biotechnologies, offshore renewable energies and maritime security rest on innovation for their very existence. Through innovation, coastal communities can rebuild or reshape their economies and become local drivers of sustainability. Community-led local development, funded through the European Maritime, Aquaculture and Fisheries Fund, is a powerful tool to drive this process⁴³.

The role of research and innovation in driving the transformation needed to achieve the Green Deal cannot be overstressed. R&I investment under **Horizon Europe** will support the transformation process to create sustainable blue economy value chains and enable the twin green and digital transitions. The new missions and European partnerships under the Horizon Europe programme will play a critical role by empowering citizens and practitioners (small and medium-sized enterprises, academia, researchers, public authorities and investors) to co-design and co-implement solutions.

In close alignment with Horizon Europe, smart specialisation strategies help boost innovation in the context of the European Regional Development Fund. The new Interregional Innovation Investment initiative will support interregional projects that develop European value chains, while the EU Climate Action Innovation Fund will support demonstration projects of low-carbon technologies in the marine environment.

The Commission will develop a pan-European innovation ecosystem for a sustainable blue economy through the following initiatives:

- The candidate **mission “Healthy oceans, seas, coastal and inland waters”** will aim to reduce the disturbance of marine ecosystems, regenerate marine and freshwater ecosystems, tackle biodiversity loss and pollution and promote blue economy solutions to become climate neutral;
- The **new European partnership for a climate-neutral, sustainable and productive blue economy**, due to start in 2023, will take the shape of a public initiative co-funded by the EU, national governments and national research funding agencies.

3.3 Investment

Meeting the objectives of the European Green Deal will require making big investments. By 2030, one third of investments in the blue economy could still be

⁴² COM(2020) 66 final.

⁴³ Several examples can be found in their network: FARNET.

unsustainable. It is crucial that the issues of sustainability described above (chapter 2) are now mainstreamed into *all* investment decisions, whatever their source.

In terms of **private capital**, the Commission, the European Investment Bank and the WWF, in cooperation with private and public financial institutions, have defined a set of sustainable ocean-specific principles and standards. So far, over 50 financial institutions have joined the voluntary Sustainable Blue Economy Finance Initiative⁴⁴. An important tool to define sustainable maritime economic activities will be the EU taxonomy for sustainable investments currently under development.

EU **public funding** remains crucial for less mature technologies and projects that need to bring in investors, bring down costs and uncertainties, and accelerate market entry. The new InvestEU programme will be highly relevant for maritime transport, ports and offshore renewable energies, as well as for biodiversity conservation and restoration, sustainable aquaculture and ocean observation. For transport, for example, renewing or retrofitting ships with low and zero-emission technologies would sustain a manufacturing industry that gives Europe a strategic advantage. For new offshore renewable energy projects, de-risking and reducing the cost of capital can produce a positive chain reaction incentivising private capital and new investment.

The cohesion policy funds will continue to support projects that assist the transition with green and net zero-carbon solutions in maritime transport, decarbonise port infrastructures and deploy renewable energies, as well as circular economy ventures and local climate adaptation measures. In addition, the Recovery and Resilience Facility will support Member States in their transition to a modern, resource-efficient, competitive and resilient economy. The relevant national plans are expected to support reforms and investments in blue technologies and capacities, and the Facility will exclude measures that do significant harm to the environment or undermine the sustainable use of marine resources.

To scale up public and private investment in key priorities under this Communication, the Commission will cooperate with European financial institutions:

- The Commission will work with the **European Investment Bank** to align efforts to reduce pollution in European seas, in particular in the Mediterranean Sea. Both institutions will consider means to incentivise private investors and public development banks to join that effort;
- The Commission will cooperate with the **European Investment Fund** to explore a framework that would facilitate the use of shared management financial instruments for a sustainable blue economy;
- To help smaller businesses that have transformative ideas but have a hard time accessing private capital, the Commission's BlueInvest⁴⁵ platform will provide customised support, visibility, access to investors and investment-readiness advice. In this context, the EU budgetary guarantee under InvestEU, combined with sectorial programme financial contributions from the EU budget, will leverage private capital to finance venture capital for 'blue tech' start-ups and early-stage companies;

⁴⁴ <https://www.unepfi.org/blue-finance/>.

⁴⁵ <https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1451>.

- The forthcoming revision of the **State aid rules** and the Renewable Energy Directive will lay down conditions to support the roll out of clean energy, including renewable offshore energy, in an environment-friendly and cost-effective way.

3.4 Blue skills and jobs

Despite a generalised slowdown in the job market due to the pandemic, the twin transition offers huge employment potential. To achieve this potential, it is paramount that companies working on the cutting edge of technology can draw on a qualified workforce. We also need to improve the public perception of careers in the blue economy.

On the blue economy's labour market, the transition is already giving rise to job vacancies - up to 30% of offshore renewable energy companies, for instance, complain either that the skills they need are unavailable or there are shortages in existing skills (e.g. technicians). In the offshore wind energy sector alone, the number of jobs could triple by 2030.

The new European Skills Agenda⁴⁶ helps businesses and individuals adapt to digitalised processes and new technologies through upskilling and reskilling. As part of the 'Blueprints for sectorial cooperation on skills'⁴⁷, the maritime alliance for the development of skills for marine technology⁴⁸ launched under Erasmus+ will indicate by the end of 2021 how to bridge the skills gaps in the offshore renewable energy and shipbuilding industries and will propose a skills strategy to be rolled out at national and regional levels.

The Blue Careers programme, which since 2016 has provided grants to retrain and reskill the blue economy workforce, will now expand to cover the training needs stemming from the European Green Deal and the sanitary crisis. To promote gender balance in the maritime professions, the Commission will invest in data collection, consolidation and analysis on women working in the maritime sector.

In 2021, the Commission put forward an ambitious action plan to implement the European Pillar of Social Rights and its 20 principles across the EU. The European Maritime, Aquaculture and Fisheries Fund specifically supports training and upskilling for fishers, as well as other initiatives to invest in people, upskilling, and social dialogue. Several other EU funds (e.g. European Social Fund+ and Technical Support Instrument) also invest in people, jobs and skills. The EU is committed to improving occupational health and safety at sea by working both on the training of workers in blue jobs and on improving the working conditions of seafarers and fishers⁴⁹.

The Commission aims to:

- encourage and facilitate the creation of **skills partnerships** under the Pacts for Skills in the industrial ecosystems relevant for the blue economy as identified in the EU Industrial Strategy (such as in offshore renewable energy or shipbuilding);

⁴⁶ COM(2020) 274 final.

⁴⁷ The blueprint proposes to key stakeholders (business, trade unions, research institutes, education and training institutions and public authorities) to form sector-specific partnerships, develop skills strategies and concrete learning and training programmes to bridge skills gaps in their sectors.

⁴⁸ <https://www.projectmates.eu/>.

⁴⁹ In line with internationally recognized principles and frameworks, including the UN Sustainable Development Goals, the ILO Declaration on Fundamental Principles and Rights at Work, and the Maritime Labour Convention.

- launch in 2022, under the European Maritime, Aquaculture and Fisheries Fund, a **new call for proposals on blue careers** and a specific call for proposals on women aiming at increasing women's representation in the workforce and raising their profile in the formal governance of the blue economy;
- promote the transposition or adoption of International Labour Organisation and International Maritime Organisation's conventions to improve **working conditions and harmonise training requirements for crew members** and thus raise the profession's image.

4. CREATING THE CONDITIONS FOR SUSTAINABLE GOVERNANCE

Oceans and seas create benefits for all but they risk being overexploited, without regard for the consequences. This creates the need for broadly accepted rules and conventions on space planning, citizen engagement, regional cooperation, maritime security and international policy.

4.1 Maritime spatial planning

The greater the demand for use of maritime space, the more crucial it is to have spatial planning. Maritime spatial planning is an essential tool to prevent conflict between policy priorities and to reconcile nature conservation with economic development. Public consultation involving both citizens and stakeholders is a fundamental part of the maritime spatial planning process.

Maritime spatial planning plays a central role in delivering Europe's decarbonisation and biodiversity protection objectives. The EU biodiversity strategy clearly states that, to apply an ecosystem-based management approach, national maritime spatial plans should aim to cover all maritime sectors and activities, as well as area-based conservation and management measures. Planning also improves the level of certainty and predictability of private investments and can promote synergies between economic sectors. The Maritime Spatial Planning Directive⁵⁰ ensures that potential negative impacts on the natural environment are identified and avoided at a very early stage in the planning process and that national maritime spatial plans are coherent with national energy and climate plans, as well as with good environmental status as defined in the Marine Strategy Framework Directive.

The Commission will:

- report on the implementation of the EU Directive on Maritime Spatial Planning in 2022, following the adoption of national maritime spatial plans in March 2021, and prepare **proposals on how the Commission can facilitate cross-border cooperation** and encourage Member States to integrate objectives of off-shore renewable energy development in their national spatial plans;
- start a **review of the Maritime Strategy Framework Directive** in 2021 and, based on the outcome, possibly revise the Directive by 2023;
- prepare **guidance on an ecosystem-based approach to maritime spatial planning** and promote the multi-use of marine space by combining different activities in the same location (for instance, mariculture and offshore renewable energy systems).

⁵⁰ Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning.

4.2 Citizen engagement and ocean literacy

The policy for a sustainable blue economy will both encourage and be improved by citizen engagement.

European citizens and especially young people highly value the health of seas and oceans and are supportive of a sustainable approach to them. Public concern for plastic litter in the oceans shows this, though it remains crucial to expand public awareness of the importance of seas and oceans for life on the planet. Modern mobile applications allow citizens to track, monitor or report on observed environmental damage. One of the tasks of the candidate **ocean mission** is to use new ways to engage and empower EU citizens. This will help ensure the environmental integrity of future undertakings, and will directly support the European Green Deal.

- The EU4Ocean Coalition⁵¹, an initiative recently set up by the Commission, will create **networks for European schools**, which will bring the ocean issue into the classrooms. It will enable organisations working on ocean conservation to run joint projects to engage citizens and amplify the impact and outreach.
- The Commission will cooperate with the Intergovernmental Oceanographic Commission of UNESCO, Member States and international partners to contribute to the **ocean literacy programme** of the UN Decade of Ocean Science for Sustainable Development 2021-2030.

4.3 Sea basins, regional cooperation and support for coastal regions

Coastal regions and islands are key players in the blue economy. Because they often share the same sea basin, there is a clear added value in addressing common challenges and protecting common goods through regional cooperation. The EU will continue to support cooperation, develop tailored strategies for each European sea basin and extend the same cooperative approach to neighbouring countries that share with the EU a basin, marine living resources and geo-economic features.

Sea-basin strategies are proving effective in that they bring together a broad range of stakeholders (national governments, coastal regions, cities, research institutes, education networks and business) and allow them to channel work on specific projects and actions that support a sustainable blue economy, like, for instance, sustainable tourism offers. The Commission supports sea-basin and macro-regional frameworks for cooperation, i.e. the 2020 Atlantic action plan⁵²; the Western Mediterranean maritime strategy⁵³; the common maritime agenda for the Black sea⁵⁴, the EU strategy for the Adriatic and Ionian Region⁵⁵ and the EU strategy for the Baltic Sea region⁵⁶;

Over half of the EU's tourist accommodation establishments are located in coastal areas and 30% of overnight stays are at beach resorts. A pillar of the blue economy and deeply interconnected to many of its other sectors, **maritime and coastal tourism** has suffered severe effects from the pandemic. The lock-downs have affected jobs and livelihoods and significantly reduced the sector's capacity to invest in developing more resilient and sustainable services and supply chains. Investments are needed to bring about social

⁵¹ <https://webgate.ec.europa.eu/maritimeforum/en/node/4484>.

⁵² <http://www.atlanticstrategy.eu/en>.

⁵³ <https://www.westmed-initiative.eu/>.

⁵⁴ <https://blackseablueeconomy.eu/206/common-maritime-agenda-black-sea>.

⁵⁵ <https://www.adriatic-ionian.eu/>.

⁵⁶ <https://www.balticsea-region-strategy.eu/about/about>.

resilience and stimulate job creation and economic opportunities for coastal communities. Against this background, the Commission has set a framework to re-enable safe tourism and pave the way for a more resilient and sustainable sector⁵⁷.

If climate friendly, sustainable travel experiences have been on the rise among travellers' expectations in recent years, the pandemic has further boosted the demand for "slow tourism" and outdoor, nature-based destinations. Sustainability is expected to become more prominent in tourism choices, with regional and local destinations driving the recovery⁵⁸. These ambitions and trends towards more sustainable tourism ecosystem should guide the use of financial resources and investment at European, national, regional and local level.

The European Green Deal commits to paying particular attention to the role of the EU's outermost regions, mindful of their vulnerability to climate change and natural disasters and their unique assets of biodiversity and renewable energy sources.

To support recovery in coastal regions, the Commission aims to:

- help cities and regions manage the green and digital transition at local level and make full use of EU funds and incentives. The Commission will develop a **support package** (a "Blueprint for Local Green Deals") as well as **strategic guidance** (e.g. the "Intelligent Cities Challenge". It will urge Member States to embed sea-basin and macro-regional strategies into the programming of EU funds⁵⁹;
- promote and support, through EU funds, the development of **marine and coastal eco-tourism**. EU support will aim to showcase the diverse maritime heritage of the continent, manage tourist flows smartly, diversify the offer and extend off-season tourism;
- continue to **support outermost regions**, in line with its 2017 Communication⁶⁰, in seizing the opportunities offered by their large exclusive economic zones, in protecting their exceptionally diverse ecosystems, in developing their own sustainable blue economy strategies and in exchanging best practices to address their common climate adaptation challenges;
- continue to invest in a special relationship with **neighbourhood and enlargement countries** to develop blue economy supply chains that enhance links with the EU (in line with the Trade Policy Review Communication). The Neighbourhood, Development and International Cooperation Instrument, the Instrument for Pre-accession Assistance and other EU funds will provide continued support for cooperation initiatives, notably to implement the 2nd Ministerial Declaration on Sustainable Blue Economy⁶¹ by the Union for the Mediterranean, the renewed partnership with the southern neighbourhood⁶² and the Economic and Investment Plan for the Western Balkans.

4.4 Maritime security

⁵⁷ Notably, with the Communication on tourism and transport in 2020 and beyond, the EU vaccination strategy, the safe reopening communication, the digital green certificate, and the re-open EU platform and app.

⁵⁸ UNWTO "Principles for the transition to a green travel and tourism economy".

⁵⁹ SWD(2020) 206 final.

⁶⁰ COM(2017) 623 final.

⁶¹ <https://ufmsecretariat.org/wp-content/uploads/2021/02/Declaration-UfM-Blue-Economy-EN-1.pdf>.

⁶² JOIN(2021) 2.

A safe and secure maritime space is the prerequisite to preserving EU's strategic interests such as freedom of navigation, external border control or the supply of essential materials and for protecting economic activities and citizens, both at sea and on shore.

The EU's maritime security strategy and the related action plan set out a cooperative response to the internal and external maritime security challenges of our time. One such challenge is environmental security, which involves anticipating and managing climate change and prevent illegal discharges, waste dumping, accidents and other environmental risks. Exchanging information, including in-situ, aerial and satellite data, is a crucial factor in addressing security challenges, preventing illegal activities at sea and enforcing the law. Cooperation on coastguard functions between three key EU agencies⁶³ generates significant economies of scale by reducing overlaps, developing multipurpose operations and sharing aircrafts and vessels for search and rescuing operations, oil pollution response etc. To enhance information exchange, the European Commission has developed a common information sharing environment for the maritime domain (CISE)⁶⁴.

The CISE will enable authorities from multiple civilian and military sectors (maritime transport safety, fisheries control, marine pollution preparedness and response, protection of marine environment, customs, border control, general law enforcement and defence) and across borders to exchange real-time information on any occurrence at sea. CISE is voluntary. Its current transitional phase, running until 2023, is managed by the European Maritime Safety Agency with the close involvement of Member States and other EU bodies. The Agency is also the entrusted entity to deliver satellite products under the Copernicus Maritime Surveillance Service.

The Commission will:

- propose **rolling out the CISE's operational** phase in 2024, subject to the results of the transition phase, to create a fully-fledged information sharing system between maritime surveillance authorities in the EU.

4.5 Promoting a sustainable blue economy abroad

Promoting a sustainable blue economy for the European Union cannot stop at our borders. Many blue economy value chains are global and exposed to global competition, and EU operators do business all over the world. Our responsibility therefore lies not only in defending the EU's market from unsustainable products and practices, but also in ensuring a level playing field for EU businesses in the global marketplace and in promoting the EU's expertise, environmental action and rule of law.

In line with the International Ocean Governance Agenda adopted in 2016⁶⁵ and with the legal framework established by the UN Convention on the Law of the Sea, the Commission will continue creating the conditions for a sustainable blue economy internationally. It will continue to push for science-based management of ocean natural resources, including fisheries, by supporting sustainable maritime development within the EU's partnerships and agreements, and by promoting sustainable fishing in regional fisheries management organisations. The Commission will continue to fight illegal fishing and combat fraud in seafood products under EU regulations. Through its Sustainable Fisheries Partnership

⁶³ EMSA, EFCA, and FRONTEX.

⁶⁴ <http://emsa.europa.eu/cise.html>.

⁶⁵ SWD(2016) 352 final.

Agreements, it will continue to improve fisheries governance in partner countries and help develop local economies.

In international negotiations, the EU should advocate that marine minerals in the international seabed area cannot be exploited before the effects of deep-sea mining on the marine environment, biodiversity and human activities have been sufficiently researched, the risks are understood and the technologies and operational practices are able to demonstrate no serious harm to the environment.

The Commission will:

- advocate, at the 15th Conference of the Parties to the **UN Convention on Biological Diversity**, for an ambitious post-2020 global biodiversity framework that protects and restores marine ecosystems and habitats and includes a global agreement to protect at least 30% of the world's sea area;
- support the conclusion of an ambitious, legally binding **agreement on marine biological diversity of areas beyond national jurisdiction** at the 4th Inter-Governmental Conference of the UN Convention on the Law of the Sea with the aim to promote the conservation and sustainable use of high sea resources;
- lead efforts to reach a **global agreement on plastics** and promote the uptake of the circular economy approach on plastics, which would lay the basis for a stronger and more coordinated response to plastic pollution at global level;
- continue to work towards the conclusion of the multilateral negotiations on fisheries subsidies in the World Trade Organisation - implementing Sustainable Development Goal 14.6 - to prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing, and to eliminate subsidies that contribute to illegal, unreported and unregulated fishing;
- use all its diplomatic leverage and outreach capacities to help broker an agreement on the designation of three vast marine protected areas in the Southern Ocean (East Antarctic, Weddell Sea and Antarctic Peninsula) in the framework of the Commission for the Conservation of Antarctic Marine Living Resources;
- **support non-EU countries** in advancing and diversifying their sustainable, inclusive and equitable blue economies. It will secure financial support from the multiple funding sources available to embed the sustainable blue economy approach in cooperation on ocean governance around the world. The Commission will consider setting up an **EU-Africa blue task force**;
- **support multilateral initiatives** such as the UN Decade on Ecosystem Restoration and the UN Decade of Ocean Science for Sustainable Development 2021-2030, in particular on ocean observation, ocean modelling and data sharing infrastructure;
- promote maritime spatial planning internationally through cooperation with the Intergovernmental Oceanographic Commission of UNESCO⁶⁶;
- update its **international ocean governance agenda** in the light of recent consultations and recommendations by the International Ocean Governance Forum. The agenda should ensure that the blue economy protects and does not harm the

⁶⁶ “Joint roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide”, March 2017.

marine ecosystem; it should promote transparent and inclusive decision-making and raise social sustainability standards.

5. CONCLUSION

This Communication puts forward the Commission's proposals for a maritime policy for this decade, to make the transition envisioned in the European Green Deal a reality in the ocean economy. The forthcoming Mission Ocean, Seas and Waters will complement this agenda. The Commission will work with the European Parliament, the Council and other EU Institutions, where appropriate, to implement the tabled agenda and the measures. It will reach out to all maritime stakeholders to engage with them in shaping a sustainable blue economy in a fair and equitable way.