



# Conferences and meetings

2013 ICES Annual Science Conferences, Reykjavik (Iceland), 23-27 September 2013

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### Seafood Barcelona 2013, Barcelona (Spain), 15-17 October 2013

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ICCAT - Regular Meeting of the Commission, Cape Town (South Africa), 18-25 November 2013

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# Institutional agenda

### **European Parliament Committee on Fisheries**

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- 5 September 2013, Brussels (Belgium)
- 18 September 2013, Brussels (Belgium)
- 3 October 2013, Brussels (Belgium)
- 14 October 2013, Brussels (Belgium)
- 17 October 2013, Brussels (Belgium)
- 27-28 November 2013, Brussels (Belgium)
- 16-17 December 2013, Brussels (Belgium)

## Agriculture and Fisheries Council of the European Union

Website: www.consilium.europa.eu

- 23 September 2013, Brussels (Belgium)
- 17-18 October 2013, Luxembourg (Luxembourg)
- 18-19 November 2013, Brussels (Belgium)
- 16-17 December 2013, Brussels (Belgium)

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We welcome your comments or suggestions at the following address:
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- · Website of Maria Damanaki, European Commissioner for Maritime Affairs and Fisheries
- > http://ec.europa.eu/commission\_2010-2014/damanaki/index\_en.htm
- · Application: the European Maritime Atlas > http://ec.europa.eu/maritimeaffairs/atlas/index\_en.htm
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# Common Fisheries Policy reform: a landmark deal

Following two years of intense negotiation, the fisheries reform package tabled by the European Commission in 2011 finally went through at the end of May 2013. There was overwhelming consensus from EU institutions on the plan, which will come into effect at the start of 2014.

For Maria Damanaki, European Commissioner for Fisheries and Maritime Affairs, this is "a landmark deal that will radically change the way we fish".

European fisheries have been managed at EU level since the 1980s, and have since been subjected to a number of reforms. New challenges, however, call for modern approaches. Overfishing and discarding are unsustainable. Marine ecosystems are fragile, and the well-being of coastal communities and Europe's fishing industry is under pressure. A robust plan of action is needed to accommodate all aspects of sustainability: environmental, economic and social.

Marine biologists and economists agree that catch levels need to match the long-term productivity of fish stocks. This makes sense not only environmentally, but also economically. Fundamental to the reform is a commitment to base all management decisions on scientific evidence, in order to achieve sustainable levels of exploitation within an ambitious time frame.

There is also a specific roadmap to end discards. There are incentives for fishermen to switch to more specialised equipment, to adopt fishing strategies and innovative techniques that prevent unwanted catches, and to diversify into new branches of the maritime economy.

Throughout Europe, those with the greatest expertise will be given more influence to help determine what is best for Europe's fisheries. National authorities will take on management responsibilities, the industry will become an important player, and consumers will have access to better information about the fish they buy.

Far from being a simple face-lift, the reform of the Common Fisheries Policy overhauls the present system. Through many interdependent measures and far-sighted vision, it sets Europe's seas on track to sustainable fishing and Europe's coastal areas on the road to economic recovery.

The Editor





# Reform of the Common Fisheries Policy: a sustainable future for fish and fishermen

European Commissioner for Maritime Affairs and Fisheries, Maria Damanaki, has made eliminating the problem of overfishing a top priority, stating that, "We are paving the way for a sustainable future for our fishermen and our industry. We are going to do that by bringing fishing back to sustainable levels, by basing our fishing opportunities on scientific advice, and by putting an end to wasteful practices such as discarding and public money to withdraw landed fish".

Tackling overfishing whilst securing a stable future for our seas and the communities dependent on them are core objectives of the reformed Common Fisheries Policy (CFP). This means creating a more robust and profitable industry that also protects fish stocks and marine ecosystems.

The political agreement between the EU Council of Ministers and the European Parliament on the CFP Reform was announced on 30 May. The announcement marked the culmination of a process, which began in 2009 with a number of extensive public consultations, and the adoption of the Commission's proposals in July 2011.

Commissioner Damanaki considers the agreement an "historical step for all those involved in the fisheries and aquaculture sectors. We are going to radically change the way we fish in the future."

# Why a reformed CFP?

The CFP is a constantly evolving policy that must continue to adapt to changes in the political, economic, cultural and marine environments. The new reform is a response to the uncertainties and challenges facing the fishing industry today, such as reduced catches, rising costs and a threatened marine environment. It represents a more holistic approach to sea stewardship; one that actively seeks to create a more economically, environmentally and socially stable sector that is less dependent on financial support.

The key challenges facing the industry will be addressed using solid scientific data on the state of resources, and solutions will be implemented with a view to the long term. The scope of the reform is ambitious, but the general consensus from all involved is that now

is the time to act, the stakes are high and this calls for an effective response across all fronts.

Discarding will be prohibited through a landing obligation and more selective fishing. A new, bottom-up management approach will allow Member States and stakeholders in the regions to develop measures based on the circumstances in their own environment and industry.

Replacing the intervention mechanism with a new instrument to help producers better manage and market their products will facilitate the transition to a more market-based policy.

Consumers will also become more engaged and have better information on their food supply chain, in turn allowing fishermen to obtain better market prices.

Whilst fully respecting international laws and agreements, the principles underlying the new CFP will extend to all of the EU's fishing partners abroad. This will make the reformed Common Fisheries Policy an international standard for sustainable fishing and aquaculture.

The changes are based on citizens' best interests, and they come at a time when Europe needs them most. With this reform in place, Europe is telling the world that a comprehensive new approach to international fisheries is underway.

# Sustainable management of fish stocks: Maximum Sustainable Yield

Based on overwhelming evidence, and wide consensus on the issue, the EU is committed to fishing at levels that meet sustainability objectives. Failing to do so would have grave consequences for the industry, environment, and food supply chain as a whole.

It is in this context that achieving Maximum Sustainable Yield (MSY) and healthy fish stocks form the guiding principles of the reformed CFP. Based on scientific advice, fishing must be adjusted to bring exploitation to levels that maximise yields within the boundaries of sustainability. This is already in progress, with a proven link to higher returns on investment and greater profit margins. More selective fishing strategies and techniques to minimise discarding unwanted catches (smaller and less valuable fish) are another pillar of CFP reform. Less fuel will be consumed as it takes less time to fish from larger stocks, resulting in consumers having a wider, healthier choice of fish at their disposal.

There is strong agreement between politicians, managers and stakeholders on the application of MSY, which is also a principle agreed under the United Nations Convention on the Law of the Sea (UNCLOS). The new basic regulation of the Common Fisheries Policy states that fish stocks must be exploited at sustainable levels by 2015 where possible, and at the latest by 2020. This time frame is in line with international and Union commitments, including the Johannesburg Declaration on Sustainable Development of 2002, and the Marine Strategy Framework Directive on achieving a good environmental status for our seas.

The objectives for resource management have only been partially met, which highlights the urgency and importance of achieving Maximum Sustainable Yields in fishery management. The reformed CFP will implement an effective MSY strategy using the instruments of Total Allowable Catches (TACs), quotas, and multi-annual management plans per fishery. This marks a significant shift away from single stock plans and will cover more fish stocks in an effort to achieve greater sustainability.

Fishermen will be given training and incentives to employ more selective fishing. Agreement has also been reached to identify environmentally sensitive areas where fishing may be restricted or prohibited.

# Phasing out discards

Discarding – the detrimental practice of throwing unwanted fish overboard – has been estimated at 23% of total catches, although the figure is substantially higher in some fisheries. This practice will be phased out from 2015 to 2019, through progressive implementation of a landing obligation for all catches of species below catch limits or minimum landing sizes. Fishermen will be obliged to land all the commercial species that they catch. To facilitate this, a series of flexibility instruments will be introduced, such as the possibility for Member States to match quota allocations with catch estimates, swap quotas, borrow or bank a limited volume of quota between years, and where appropriate, qualify for a limited *de minimis* exemption.

The discard ban will lead to more reliable data on fish stocks, support better management and improve resource efficiency. It is above all an incentive for fishermen to avoid unwanted catches by applying technical solutions put forward by the new CFP.

Stakeholders and Member States will be asked to develop tailormade discard plans per region or fishery, and the Commission will incentivise fishermen with financial and practical support to encourage them to welcome technical innovation on their vessels, or to participate in pilot schemes.

Funding will also be allocated to enhance the tools and technology available for more effective compliance reporting, and to improve documentation of fishing activity. At the other end of the scale, quality control and marketing initiatives by producers' organisations, and consumer-targeted marketing campaigns on lesser-known fish species, will create new opportunities and increase consumer knowledge of marine edibles.

# Local knowledge for better decision-making

The EU recognises that different regions and communities dependent on the sea may require locally specific measures. What works for small coastal villages with an artisanal fleet does not necessarily work for large-scale fishing operators. Certain management measures may be adequate for one marine region, but not effective elsewhere. The reformed CFP allows for the design of the implementation plan, and the detailed management of fisheries, to be handed

over to Member States. Under plans or other conservation measures agreed at Union level, Member States may develop a set of recommendations on how to best deploy the available management instruments to ensure that the targets of the plan are met. Member States will have to work closely with stakeholders in this process. This will give a greater sense of ownership and autonomy to the Advisory Councils (ACs), the fishing industry and other stakeholders, and will also provide the Commission with valuable insight into the progress being made at local level. In addition, regionalisation will support the existing Integrated Maritime Policy (IMP) by building greater

cooperation between Member States, and encouraging knowledge

Fleet capacity will also come under close scrutiny. The size and number of vessels in each Member State must be balanced with the resources they exploit. Annual reports will be required, and if a Member State reports overcapacity for a certain fleet segment, it will have to put a reduction plan in place, or risk suspension of EU funding.

Through the EU Market Observatory for Fisheries and Aquaculture Products, the Commission will provide practical support to all stakeholders to improve the economic and market information available on fishery and aquaculture products.

# **Aquaculture and the CFP reform**

and data sharing.

Boosting the EU's aquaculture industry is one of the key elements of the reformed CFP. This is no surprise, as farmed seafood is becoming widely recognised as a vital part of our future food supply. On a global level, the Food and Agriculture Organization (FAO) estimates that about half of the fish consumed today comes from aquaculture. In the EU, imported seafood accounts for 65% of consumption, and the gap between seafood production and demand continues to grow. There are limits on how much capture fisheries can sustainably produce, so it is up to Europe's aquaculture sector to step into the gap. While European aquaculture is at the forefront of technical expertise and environmental regulation compliance, its growth is stagnating. The reformed CFP aims to reverse this trend and unlock the industry's considerable potential.

Bureaucracy has been identified as one of the main inhibitors of aquaculture investment and development in the EU. The

administrative barriers to securing a licence will be reduced in order to encourage entrepreneurship and private funding, without jeopardising the high level of consumer and environmental protection enshrined in EU law. Parallel to this, spatial planning in coastal areas and river basins will help guarantee aquaculture producers adequate access to the space and water they require, whilst minimising impact on the environment and related sectors, such as tourism.

Consumer perception of farmed seafood will also be addressed. When provided with readily available, pertinent information, consumers are often willing to pay a premium for high-quality, sustainable products. Labelling and communication campaigns will make consumers aware of the specifications of EU farmed fish. This will contribute to making the industry more competitive, and encourage niche-market opportunities such as organic aquaculture.

# Better planning of production, better labelling for consumers

The overhauling of the Common Market Organisation (CMO) empowers the EU fishery and aquaculture producers' organisations (POs) to play a greater role in collective management, monitoring and regulation of their members' activities.

In addition, the increased involvement of producers in organising production and marketing will nurture stability, whilst a fresh approach to communication will keep consumers better informed and engaged. New mandatory labelling requirements will conveniently inform consumers at point-of-sale on the origin, and production method used for the fish and seafood on display, further supporting sustainable fisheries.

## Global sustainable fishing

The reformed CFP has an international focus that will reach beyond EU borders. According to the Food and Agriculture Organization (FAO), as much as 30% of the world's fish stocks is overexploited. As the world's largest importer of fisheries products, the EU must conduct itself abroad as it does at home. Therefore, the European Commission will develop alliances with key partners in its endeavours to combat illegal fishing and overcapacity on a global scale. Sustainable Fisheries Partnership Agreements (SFPAs) will replace the existing accords. These new agreements will stipulate that the exploitation of foreign fishery resources takes place on the basis of sound scientific research and evidence, and only targets surplus resources that the partner country cannot, or does not want to fish itself.



# **Next steps**

Sustainability is at the heart of the reformed CFP. The new CFP is about creating the building blocks for a better future for fish and fisheries alike. It will bring fishing back to sustainable levels, it will stop wasteful fishing practices and it will have long-term benefits for Europe and beyond, ranging from food supply to job creation.

The reformed CFP is expected to be formally adopted by the European Parliament and the Council of Fisheries Ministers in the autumn of 2013, and to come into effect at the start of 2014. It will then require broader community engagement to make it work on the ground, and not only within the fisheries sector. Fisheries are our common concern if we want to consume healthy fish from sustainable sources in the future.







# Seafood Expo promotes European innovation

Last April, over 25 800 buyers, sellers and industry representatives came together in Brussels for the world's largest and most prestigious seafood trade fair - the 21st European Seafood Exposition and the 15th Seafood Processing Europe. Participants networked with an international customer base, sampled products, made high-volume buying decisions, and learned about the latest innovations in the industry.

For the 19th consecutive year, the European Commission had its own stand to answer questions and give information about its work in Maritime and Fisheries affairs. It presented its new generation of Sustainable Fisheries Partnership Agreements and gave an overview of what it is doing to ensure the hygiene of bivalve molluscs and fishery products.

The highlight of the event saw Maria Damanaki, EU Commissioner for Maritime Affairs and Fisheries, officially launch the European Market Observatory for Fisheries and Aquaculture products (EUMOFA).

At the click of a button, this online multilingual database provides comprehensive up-to-date information on first sales, whole sales, imports and exports, and consumption across Europe (prices, value and volume). This new web tool will improve market stability and transparency for all stakeholders, from producers to retailers.

The goal of the database (with data emanating mostly from European institutions and public authorities in Member States) is to help the industry fish and sell more efficiently and at better prices, challenging

# **EUMOFA**

# Weekly prices

Main fresh products and place of sale

# Monthly trends

Volume and value by species and place of sale

# Yearly data

Consolidated data by species and Member States

# Price structure

Methodology for understanding prices along the supply chain the reliance on volume as the pre-requisite to economic success. By making more informed fishing and market decisions, all parties can focus on increasing the value, rather than the volume of production, and maximise profits while preventing the oceans from being overfished.

Commissioner Damanaki presented the prizes to the winners of the Olivier Roellinger Culinary Competition for Sustainable Seafood at an award ceremony. The award and its winners embody the kind of innovation and diversification that the Commission has been promoting. Commissioner Damanaki referred to the award as an alliance between all who work with fish "to ensure what we eat is a product of sustainable fishing".

The Commissioner also attended an event with the Norwegian Minister of Fisheries and Coastal Affairs, Ms. Lisbeth Berg-Hansen, where a group of primary school children and a renowned local chef cooked a seafood-based meal together, and discussed the health merits of fish.

The next edition of Seafood Expo will take place in Brussels from  $6-8\,\mathrm{May}\ 2014.$ 



# EUMOFA

European Market Observatory for Fisheries and Aquaculture Products

http://ec.europa.eu/fisheries/market-observatory

"If you want to know market trends and market drivers for wild or farmed seafood products, the Market Observatory is the tool for you," Commissioner Damanaki said. "With this modern tool, we empower economic actors through accurate, real-time market information."





# European Maritime Day: connectivity, sustainable maritime tourism and coastal management

This year, Valletta, Malta set the stage for around 850 stakeholders including national ministers, representatives from the private and public sectors and European Commission officials, to come together for Europe's leading maritime event. With a focus on the Mediterranean basin, the Maltese islands proved a fitting location from which to consider the important role that oceans and seas play for the citizens of Europe and those of its neighbouring states.

Europe celebrates European Maritime Day (EMD) annually on 20 May. The main event is a high-level conference, which attracts delegates and experts from across Europe and beyond. This year's event provided a forward-looking perspective as speakers focused on potential opportunities for the sector, practical deliverables and the sharing of best practices.

The first full day of this sixth edition of EMD was a 'Political Day', in which participants discussed the implementation of the EU's Blue Growth agenda.

Commissioner Maria Damanaki suggested that the future direction of European tourism would include all-year-round offers, like specialised golf in Marbella, and attract visitors from fast-growing countries (Brazil, Russia, India and China), as demonstrated by the Adriatic resorts. Seasonality was one of the key issues highlighted by Commissioner, who remarked that whilst 60% of EU holiday-makers prefered the shore, seven out of ten trips to Europe's coastal areas took place between June and September.

The first plenary session, chaired by Director General Lowri Evans, focused on investment in sustainable maritime and coastal tourism. Ms. Evans encouraged all interested parties to identify growth opportunities and contact their respective regions and Member States so that viable 'blue projects' could be included in upcoming funding priorities. "Last year the EMD helped develop the concept of Blue Growth. This year is about how to make it happen," she said.

Other sessions discussed connectivity and its direct link with the Commission's Blue Growth objectives. There was consensus among EMD participants that in order to create sustainable, long-term jobs and stimulate local economies, more needs to be done to connect islands with coastal areas. The argument is not merely economic; Europeans have always used the Mediterranean and Atlantic not only for transport and exchange of goods, but also as cultural highways.



The second day of EMD 2013 consisted of 19 workshops organised by stakeholders and attended by the Commission. These covered a wide range of topics such as:

- $\bullet \ \, \text{The links between maritime policy and human health and well-being};$
- The North Sea islands as catalysts for sustainable innovation and economic development;
- Tourism and biodiversity What does an expanded tourism season mean for coastal and marine ecosystems?
- The increasing frequency of oil spills in coastal areas, and best practice in responding to them from a tourism perspective;
- Removing litter in Europe's four regional seas;
- · Regional cooperation in offshore wind energy;
- Maritime surveillance for borders, traffic safety and fisheries control, and the role of Copernicus, the EU's Earth Observation programme combining satellite imagery with local data sources.

Running concurrently with the two-day conference were about 15 exhibitions by stakeholders from the maritime sector. These facilitated a great deal of networking between exhibitors and delegates, who were able to share their experience and best practices in fields related to the EU's maritime sector.

Next year, EMD 2014 will be hosted for the first time by a German port city: Bremen. The main topic will be Maritime Technology and Innovation.





# Atlantic Strategy Action Plan seeks to protect marine environments while creating jobs

As part of its commitment to preserve and promote maritime activities in the Atlantic, the European Commission formally adopted an Atlantic Strategy Action Plan on 13 May 2013. This plan will drive cooperation and Blue Growth in the next decade, creating employment, added value and improving quality of life.

Blue Growth is a key part of the EU's 2020 Strategy to promote smart, inclusive and sustainable growth to lift Europe out of its economic crisis. An important component of this is the Integrated Maritime Policy (IMP), which seeks to maximise the activity and output of each of Europe's sea basins: Baltic Sea, North Sea, Celtic Seas, Bay of Biscay/Iberian Coast, the Mediterranean and others. Central to the IMP is the Atlantic Strategy, initially set up by the Atlantic Forum, which focuses on concrete actions and projects to promote the area.

The Atlantic Forum gathered together representatives from the Commission, the European Parliament and EU's five Atlantic States: Spain, Portugal, France, Ireland and the United Kingdom. European Commission departments responsible for regional development and research explained what they can offer within their constraints and deadlines, whilst national and local authorities defined their priorities. Scientists indicated that promising avenues of research exist in areas ranging from wave energy to marine-based pharmaceuticals. Industry identified what additional education, training and skills would be needed.

While formulating the Action Plan, the Commission also examined the commonalities of the Atlantic coastline for future development, and identifying links between communities living on this long stretch of coastline, and their potential for further growth.

The Action Plan has four overarching priorities:

- · to promote entrepreneurship and innovation;
- to protect, secure and enhance the marine and coastal environments;
- to improve accessibility and connectivity;
- to create a socially inclusive and sustainable model of regional development.

While the focus of the Action Plan for Blue Growth is largely on traditional activities such as fishing, aquaculture, shipping and tourism, there is also an emphasis on the emerging fields of mineral mining, renewable energy and biotechnology. Concretely, actions are earmarked for the following areas:

- · education and training
- tourism and culture
- safety and security
- ecosystems
- mining

- biotechnology
- · renewable energy
- infrastructure.

The Action Plan will assist industries such as aquaculture, which accounted for 10% of EU consumption in 2010. If that figure could be raised by 1 per cent, it would result in 3 000 to 4 000 more jobs. Similarly, harnessing offshore renewable energy in the Atlantic — wind, wave, tidal and biomass — has the potential to create thousands of jobs, not to mention reducing EU countries' reliance on fossil fuel and nuclear energy.

The Action Plan sets out concrete initiatives that can provide added impetus to help the Atlantic economy achieve its considerable potential.

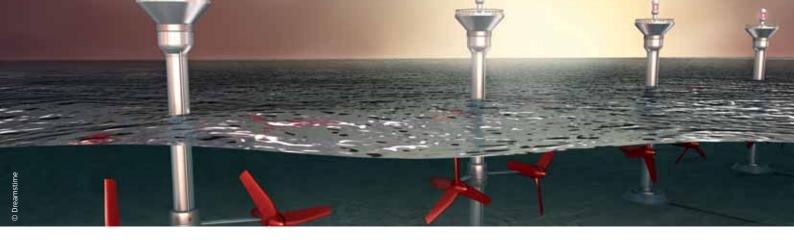
Some of these actions can be implemented through EU instruments for research or territorial cooperation. These allow entities from different regions or Member States to share the effort of exploring and implementing different options for reaching a common objective. Others can be undertaken by individual Member States. The Commission will back this up with an assistance mechanism to enable those who believe they can contribute to find partners and financing from EU programmes, national resources, the European Investment Bank and the private sector.

# **Next steps**

Now that the Commission has formally adopted the Action Plan, it will go to the European Parliament and the Council for endorsement. Partnership Agreements with Member States, including how to use EU funds, are to be put in place by the end of the year.

Europe is not the only continent that borders the North Atlantic. To further internationalise the Action Plan, the Commission, Canada and the United States signed a joint declaration on an Atlantic research partnership on 24 May in Galway, Ireland. This will improve our understanding of the North Atlantic ocean-atmosphere system and contribute to the work of the International Seabed Authority, which has already granted permits for exploration of the mid-Atlantic ridge for polymetallic sulphides.

The Action Plan respects Europe's maritime heritage while planning for its future. "The Atlantic plays an important role in Europe's history and identity," said EU Commissioner for Maritime Affairs and Fisheries Maria Damanaki. "This Strategy and Action Plan will explore the immense potential which the Atlantic possesses to contribute to the continued sustainable development of Europe."





# Ocean energy holds great potential for Europe's low-carbon future

The European Commission is committed to supporting low-carbon sources of energy and promoting the growth of the blue economy, whilst encouraging cooperation among the many stakeholders in Member States and around the world. The Commission is therefore currently assessing the options for supporting ocean energy, a sector with a high growth potential, which has been highlighted in the 2012 communication on Blue Growth.

The Commission has presented three core objectives for its policy on energy supplies: security, sustainability, and EU competitiveness in the global market. The fast-growing ocean energy sector could help the EU to achieve its greenhouse gas reduction targets of 20% by 2020, and 80 to 95% by 2050.

Europe is a leader in this emerging industry. The private sector has already made substantial investments, and since the 1980s, the EU has made important contributions to fund research into these renewable energy technologies. At over 10 megawatts (MW), Europe's capacity for ocean energy is more than double that of China (4.2MW), Canada (0.25MW) and South Korea (0.25MW) combined. This capacity is growing rapidly – four years ago only 4MW were installed, and now there are over 20MW worth of new projects awaiting approval or installation. The European Ocean Energy Association (EU-OEA), which brings together important industry players, believes that installing and generating 100 gigawatts by 2050 is a realistic goal.

Europe's marine energy sector has considerable potential for generating jobs. If it can remain a front-runner in this field and maintain its lead as an exporter of equipment and expertise to the international market, there is the potential to create over 20 000 direct jobs by 2035.<sup>1</sup>

# Renewable 'blue' energy

The Commission hopes to collaborate with the ocean energy sector and others to support economic growth in coastal regions and beyond, create jobs, and facilitate the exploitation of numerous synergies within the blue economy.

The vast energy potential of our seas and oceans can be harvested in many forms, using a variety of technologies.

Tides: Dam-like tidal barrages capture the water's energy as it
moves in and out of bays and estuaries. This method of producing
electricity is best used in areas where there is a significant difference between high and low tides.

Tidal stream technologies are similar in principle and design to wind energy turbines. Energy is generated from the flow of water, so the devices are best placed in high velocity currents in narrow channels.

- Waves: The wind moves water and creates waves. Devices placed at the water's surface or on the sea floor capture the power of this motion and convert it into electricity.
- Ocean Thermal Energy Conversion (OTEC): OTEC is a process that exploits the temperature difference between colder deep ocean water and warmer surface water to generate electricity.
- Salinity Gradient: Also called osmotic power, this method utilises
  the difference in salt concentrations between sea water and fresh
  water. Favourable locations are those with a steep gradient over a
  short distance, such as the fjords in Norway.

# Much potential yet many barriers

The Commission recognises that going forward, Europe needs a greener, smarter and better-connected energy system. Ocean energy can contribute to attaining these objectives – it is a clean, stable and predictable energy resource as it does not rely on irregular winds or periods of sunlight.

The growth of this emerging sector is, however, currently constrained by several barriers. The technology costs remain high and more research and development will be needed to make ocean energy competitive with other energy sources. The high risk inherent to new technologies and long project payback times complicate access to finance. Other challenges include lengthy and complex planning and consent procedures, uncertainties about the environmental impact of ocean energy installations, insufficient grid infrastructure, supply chain restraints and skills shortages. Exploitation of ocean energy must also remain compatible with other uses of the marine space such as navigation, fisheries, marine environmental protection, marine aquaculture, tourism and heritage.

Our seas and oceans are a large untapped energy resource. Their development can complement Europe's array of energy sources, contributing valuable characteristics such as increased predictability and stability. To make the ocean a viable source of power for decades to come and to create the thousands of associated jobs, policy makers and industry stakeholders must work together to ease the bottlenecks, which currently constrain further development of this industry.



### Ending overfishing: much to celebrate, much to do

A decade of concerted effort focused on preventing fish stocks from collapsing and maximising sustainable yields in European waters is bearing fruit.

### The good news

The European Commission's consultation paper on 2014 fishing opportunities, published on 30 May, highlighted the progress being made towards ending overfishing. The number of fish stocks within safe biological limits in the northeast Atlantic and adjacent waters is now at its highest level since the early 1980s, rising slowly from 12 (29%) in 2003 to 24 (59%) in 2013. The percentage of overfished stocks in those regions dropped from 94% in 2005 to 39% this year. And whereas there were only two stocks fished at the Maximum Sustainable Yield (MSY) rate in 2005, there are 25 such stocks today. Maria Damanaki, EU Commissioner for Maritime Affairs and Fisheries, says: "These figures show that responsible fisheries management measures can and do work. Nevertheless we cannot rest on our laurels and we need to strengthen our efforts if we are to end overfishing by our agreed target date."

The depth and breadth of our knowledge of fish stocks continues to expand. Data gathering and compliance have greatly improved in the past decade, thanks to innovations by the International Council for the Exploration of the Sea (ICES). Scientists now know the status of 50% of the fish stocks in the northeast Atlantic and surrounding areas, and can give advice on fishing opportunities for 77 fish stocks - the highest number in a decade.

Alongside the reduction in overfishing is an increase in profits. Due primarily to higher market prices, the net profit from fishing increased by 41% – from  $\in$ 324m in 2010 to  $\in$ 457m in 2011, according to the latest available figures. This rise has occurred despite the higher fuel costs that have made it more costly to run fishing fleets.

### The not-so-good news

Despite all the progress in reducing overfishing, several species are still being caught at unsustainable levels. 88% of fish stocks in the Mediterranean Sea and the Black Sea are overfished. The need for improved international cooperation for sustainable fisheries is highlighted by the case of northeast Atlantic mackerel. The disagreements between Iceland, the Faroe Islands, Norway and the EU are leading to conflict over unilaterally fixed quotas far exceeding scientifically advised Total Allowable Catches (TACs). As a result, the TAC of this species in 2013 was again 36% higher than scientifically advisable.

Discarding catch is contributing to overfishing and stock depletion. This wasteful practice of throwing fish back into the sea, either dead or dying, often occurs when fishermen attempt to respect quotas assigned for other species, trying to maximise the value of their catch or using small-mesh nets to try to catch smaller, but valuable species. The discard rate for cod in the North Sea has been dropping, but on average a quarter of the cod that are caught is still thrown overboard. Some species have an even higher discard rate – around 40% for plaice and 56% for whiting. To achieve a goal of near zero discards (some inadvertent catches are unavoidable in the industry), the EU will progressively phase in discard bans starting 1 January 2015. The effort is anticipated to take four years, during which time fishermen will be able to gradually adapt to this new system and to modify their equipment to improve fish selectivity.

### Much work to be done

The Commission is aligning its approach to next year's fish quotas with scientific advice, to ensure sustainable fishing within the Maximum Sustainable Yields. Before doing so, the Commission is consulting the fishing industry and the Member States about the best way to proceed. Consultations will also be held with Norway and other non-EU countries and more discussions are taking place during the second half of this year. The quotas will be fixed at the end of December.



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