

Limits to Blue Growth

Joint NGO Position Paper

October 2012



Introduction

This position paper is a reaction to the recent European Commission's Communication on Blue Growth, which 'drives forward the Commission's Integrated Maritime Policy (IMP) and launches a process which will place the blue economy firmly on the agenda of Member States, regions, enterprise and civil society.'¹

With this paper we also aim to inform the Informal Ministerial Meeting on the EU Integrated Maritime Policy that will be organised by the Cyprus Presidency on 8 October 2012 in Limassol². At the ministerial meeting Ministers are expected to sign the 'Limassol Declaration', which should become the milestone for the future development of the EU Integrated Maritime Policy including the Blue Growth priorities. The Declaration is to be subsequently adopted by the General Affairs Council and the European Council in December 2012.

Environmental NGOs wish to express their concerns regarding some of the priorities set in the Blue Growth Communication and to contribute alternative ideas in shaping a truly sustainable blue economy.

We call in particular upon Ministers and policy makers to fully enshrine Good Environmental Status by 2020 and the precautionary principle as prerequisites for the Integrated Maritime Policy and a blue growth agenda in the Limassol Declaration, and to recognise the Marine Strategy Framework Directive (MSFD) as the overarching framework for future development.

The overarching messages the NGOs wish to convey is that a strategy for Blue Growth must:

1. Recognise the centrality of healthy marine ecosystems to the sustainability of the marine resources, most of which are already overexploited. Thus a Strategy for Blue Growth must recognise the overarching role the Marine Strategy Framework Directive plays in managing maritime activities;
2. Adhere to the precautionary principle by avoiding the build-up of activities (such as deep sea mineral mining) that deplete finite marine resources and risk to irreversibly damage ecosystems;
3. Ensure that technology and efficiency gains are not outstripped by growth, i.e. focus on sustainable economic activities that meet the needs of current and future generations, and generate prosperity for society, rather than focus on growth for the sake of growth;
4. Use maritime spatial planning in combination with other policy instruments, including strategic environmental assessment, designation of protected areas, internalisation of environmental costs in prices and a shift of subsidies away from environmentally harmful activities.

In the next sections, these messages are further substantiated and suggestions are given for a sustainable blue development strategy.

¹European Commission, COM(2012) 494 final, Blue Growth - opportunities for marine and maritime sustainable growth (http://ec.europa.eu/maritimeaffairs/policy/blue_growth/documents/com_2012_494_en.pdf)

²<http://www.cy2012.eu/index.php/en/political-calendar/areas/transport-telecommunications-energy/informal-ministerial-meeting-on-eu-integrated-maritime-policy>

1. Healthy oceans are a prerequisite for a sound blue economy- the centrality of the Marine Strategy Framework Directive.

The objective of the Blue Growth initiative is 'to promote smart, sustainable and inclusive growth and employment opportunities in Europe's maritime economic activities in the short-, medium- and long-term time frames'. The Communication states that 'we need to look how the 71% of the planet that is ocean can deliver human necessities such as food and energy in a way that is more sustainable'.

While the communication points out that 'we are increasingly aware that land and freshwater are finite resources', it does not seem to take the same stance for ocean resources. It points out that ocean resources are largely underexplored, but omits to mention that during the last decades European seas and oceans have been steadily degraded by pollution from land- and sea-based sources, overfishing and unsustainable/destructive fishing practices, as well as the looming effects of climate change. Degradation of marine and coastal ecosystems and marine biodiversity is observed in the Baltic, Black, Mediterranean and North-East Atlantic seas, and in the Arctic. The vulnerability of our marine systems has increased.

The Marine Strategy Framework Directive (MSFD) is the first all-encompassing piece of European legislation specifically aimed at the protection of the marine environment. Its ultimate objective is to achieve Good Environmental Status (GES) of all European waters by 2020 at the latest. In pursuing this objective, the Directive requires the implementation of an ecosystem-based approach to the management of all human activities having an impact on the marine environment in the EU.

GES 2020 and the MSFD should be considered as the framework of a Blue Growth Strategy, rather than being considered a mere 'pillar' of the Integrated Maritime Policy. Healthy marine ecosystems and the protection of the vulnerable natural resources, goods and services are the foundation for the development of a sustainable maritime economy.

2. The size and scope of environmental impacts of Blue Growth focus activities are highly uncertain - the Precautionary Principle must guide decision-making in areas where we do not know enough about the intricate complexity of our marine ecosystems.

We therefore commit to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations, and to effectively apply an ecosystem approach and the precautionary approach in the management, in accordance with international law, of activities having an impact on the marine environment, to deliver on all three dimensions of sustainable development (Rio+20 Outcome).³

The precautionary principle is at the core of the EU Treaty, the Rio Declaration and various international agreements and conventions on the protection of the marine environment. It is of particular relevance as many parts of the ocean, particularly in deep-seas, are virtually unknown and the myriad of links and dependencies in the marine environment are still far from being understood.⁴

It is therefore worrying that the Blue Growth Communication makes no reference to the precautionary principle nor does it describe how the principle will be adhered to in its future development.

³ [Rio+20 Outcome - The Future we Want](#)

⁴ UNEP, 2012, Green economy in a blue world - synthesis report

The Communication identifies **five Blue Growth priority areas** that could deliver sustainable growth and jobs in the blue economy, i.e. blue energy, aquaculture, maritime, coastal and cruise tourism, marine mineral resources (i.e. exploitation and mining) and blue biotechnology.

For all five focus areas the magnitude and scope of environmental impacts are highly uncertain and partly unknown. The gaps in data and knowledge for virtually all of them are substantial. While acknowledging some of the environmental risks (see the Annex which lists the environmental impacts identified by the Blue Growth study), the Communication gives little or no indication as to how the precautionary principle will be applied in the further development of those five areas.

- The prioritisation of **deep sea mineral mining** is in particular worrying. Deep-sea minerals are finite resources. Marine mining, by its nature, risks to irreversibly destroy benthic ecosystems. UNEP confirms these concerns:

Determining the “true” value of deep-sea minerals, when additional factors such as possible impacts on ecosystem services are taken into account, is at present challenging. The deep-sea environment is one of the least understood regions of the planet and we still have a fairly rudimentary understanding of the ecosystem services these environments support. To avoid any unintended consequences that may affect society through the loss of unaccounted for ecosystem services, we need to rapidly increase our knowledge of these services and management decisions need to be informed by sound scientific information and guided by the Precautionary Principle. The value of non-renewable resources can no longer be simply measured in terms of their ability to generate monetary returns (UNEP).⁵

Mining is furthermore an industrial activity with a rather short life span, and therefore will not lead to long term employment creation. Its environmental impacts risk however to be substantial, irreversible and costly, often also affecting future generations. Also, there are inherent difficulties in monitoring and controlling such an activity. Rather than mining for more materials, the more efficient use of resources combined with recycling policies would be a much more cost-effective and sustainable approach to meeting our mineral needs than marine mining. The EU is currently recycling only 25% of municipal waste and still landfilling and incinerating 60% of it. If all member states recycled as much as the best EU performers, 560,000 new jobs would be created.⁶

- **Aquaculture** has the potential to play a significant role in meeting our growing demand for food. However, there are still large gaps in knowledge regarding the impacts of the sector, which include pollution and habitat destruction, escaping fish and impacts on ecosystems, diseases, parasites, and use of chemicals, impacts related to fish meal, fish oil, and wild fisheries. An additional risk is the fragmented governance on aquaculture, which is currently scattered across various policy areas and regulations. While the revised Common Fisheries Policy and the European Maritime and Fisheries Fund are clearly set to boost a significant growth of aquaculture as of 2013, the EU has as yet to establish a comprehensive framework for aquaculture. Such a framework is urgently needed and should be rooted in the precautionary approach. It should establish strong, legally-binding environmental standards for the development of a sustainable and responsible industry, while effectively protecting

⁵UNEP, 2012, Green economy in a blue world - synthesis report

⁶ Friends of the Earth Europe (2010) half a million new jobs could be created in Europe by recycling more http://www.foeeurope.org/publications/2010/More_Jobs_Less_Waste_Sep2010.pdf

the broader public interest and common good and preserve wild fish stocks and protecting ecosystems.

- The Blue Growth Communication and underlying study is particularly vague about the possible environmental implications of **blue biotechnology**, only mentioning that ‘the main environmental pressure expected from this activity is the unintended extraction of species. No data could yet be found about the magnitude of this pressure.’⁷ The field of marine biotechnology is as yet ill-defined and poorly regulated. Precautionary approaches should be developed for emerging issues and challenges related to bio-nanotechnology, biomaterials and the introduction of genetically modified fish, shellfish and microorganisms, amongst others. A proper science base should be established to support appropriate ecological risk assessment and management.

A precautionary Blue Growth Strategy should first and foremost:⁸

- Ensure a better understanding of the cumulative impacts of human uses of maritime space, for the five priority areas and beyond, including all maritime sectors.
- Avoid the build-up of activities that lead to long term and irreversible effects and depletion of finite marine resources.
- Acknowledge and address ignorance, as well as uncertainty and risk, in technology appraisal and public policy-making.
- Provide adequate long-term environmental and health monitoring, and conduct research into early warnings.
- Evaluate a range of alternative options for meeting needs alongside the option under appraisal, and promote more robust, diverse and adaptable technologies so as to minimize the costs of surprises and maximise the benefits of innovation.
- Take full account of the assumptions and values of different social groups.

We emphasise that NGOs by insisting on a careful and cautious approach do not wish to shift to ‘paralysis by analysis’ but they expect to see concrete provisions for activities able to reduce potential harm when there are reasonable grounds for concern.

3. Limits to growth – efficiency, technology and innovation are not sufficient to ensure sustainability.

“Better,” “different” and “less” are the triumvirate of sustainability (Heinrich Böll Foundation).⁹

The Blue Strategy Communication, clearly inspired by green economy principles, gives a prominent role to technology, efficiency and innovation and this is in principle positive. However, at the same time, it also seems very much inspired by the imperative of constant growth by which our fossil resources economy of the last two centuries has been driven.

⁷[Ecorys, Deltares, Oecanic, 2012, Blue Growth. Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts.Final Report. Study on behalf of the European Commission, DG MARE.](#)

⁸Based on: European Environment Agency, 2002, Late lessons from early warnings: the precautionary principle 1896-2000

⁹Heinrich Böll Foundation, 2012, Critique of the green economy - Toward Social and Environmental Equity

Growth rates can however outstrip efficiency gains. Efficiency and greener technologies are not always sufficient or able to break the link between environmental damage and economic growth. Assessments by amongst others the European Environment Agency show that more efficient use of resources often results in a 'rebound' effect, i.e. financial savings from increased efficiency are used for additional consumption of goods and services and as a result the environmental benefits of efficiency improvements is negated.¹⁰

The unlimited economic growth paradigm can therefore not be reconciled with a sustainable future. The accumulation of crises of the past years (economic, food, energy, climate and environmental crises), 40 years after the ecological footprint 'overshoot' warning of the Club of Rome, is a dire reminder that there are indeed limits to growth¹¹. We need efficiency, but we also need a policy that 'contains' growth to ensure that development stays within the boundaries of the planet's environmental limits.

The Blue Growth strategy should therefore aim to combine efficient use of resources with moderate growth goals, based on long term needs assessments of current and future generations. This also implies setting the right prices for goods and services (i.e. internalising environmental costs) and ensuring that the market is not being distorted by direct or indirect subsidies to environmentally harmful activities.

4. Maritime Spatial Planning is not a panacea - a mix of policy instruments is needed.

The Commission is promoting maritime spatial planning (MSP) in combination with integrated coastal zone management as the main tool to help deliver sustainable management of the use of space and resources in EU seas and oceans. To be effective, however, MSP needs to be framed by the objectives of the MSFD and furthermore complemented by a variety of other policy instruments.

The development of MSP should simultaneously result in a strengthened MSFD, i.e. by facilitating the implementation of an ecosystem-based approach to the management of human activities at sea. It should assist the MSFD in achieving Good Environmental Status by 2020 in a framework of sustainable use of marine space and resources.

MSP processes must furthermore consistently apply impact assessment rules - such as the Strategic Environmental Assessment Directive - to ensure that developments at sea or along Europe's coasts do not compromise the objectives of nature conservation and environment protection legislation. Environmental spatial protection measure such as Natura 2000 sites and other marine protected areas (MPAs), both individually and as coherent networks, must be duly considered within the planning process and MSP must ensure adequate space and protection for marine biodiversity, ecosystems and the wider marine environment.

In addition to MSP, other policy measures have to be combined, such as the internalisation of environmental costs in the pricing of ocean-based goods and services (according to the polluter pays principle) and a shift of subsidies away from environmentally harmful activities towards services that enhance public goods.

¹⁰ European Environment Agency, 2012, [European consumption still highly unsustainable, despite efficiency gains](#)

¹¹ D.H. Meadows, Donella H. Meadows, et al, 1972, The Limits to Growth.

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Annex: Blue Growth focus areas and their potential environmental risks – extract from the DG MARE Blue Growth study

Focus area	Environmental risks included in the Blue Growth study
Aquaculture	Page 65 - The main environmental pressures of aquaculture include discharges of nutrients (in particular in coastal areas with relatively small total nutrient discharges), organic matter, microbial pathogens, drugs, herbicides and fungicides. Farmed fish stocks of non-native origin may cause adverse impacts when escaping. Algae production is a rather new sector and therefore knowledge on environmental impacts is still limited.
Cruise shipping	Page 73 - Concerns over the ecological footprint of the cruise industry are growing. They include energy use, pressures on water resources, waste management, import of consumer goods/services which themselves create traffic, traffic flows, and CO2 emissions. An average cruise holiday emits around 4.5 times more CO2 per day than an average hotel holiday. A number of regulations are already in place to respond to the water, waste and emissions concerns. In Arctic regions, in particular, cruise tourism not only represents a main source of income but also of pollution in areas that are otherwise pristine. The biggest single threat caused by ship-based activities in these regions comes from the risk of a major oil spill. Other environmental impacts include degradation of regularly-visited sites, air pollution, discharges of sewage and waste water and introduction of non-indigenous species.
Ocean renewable energy	Page 81 - The main environmental concerns related to tidal range energy are: the impact of tidal barrages on flora and fauna, as well as on changes in geomorphology and processes, patterns and rates of sedimentation and erosion, transport and accretion. Adverse environmental impacts of tidal current, wave, OTEC and osmosis are currently expected to be small. Research is still required to confirm this. During the construction of energy farms, the same considerations may apply as mentioned under offshore wind energy. The deep sea and sea floor forms an extensive and complex system which is linked to the rest of the planet in exchanges of matter, energy and biodiversity. Operations on the sea-floor may destroy unique habitats and disturb deep sea ecosystems which could entail changes in fish stock and primary production. Pressure and impacts may also emerge from future activities related to mining, as well as carbon sequestration and gas hydrate extraction. These activities might have consequences on loss of biodiversity and on the flow of deep sea ecosystem goods and services provided by these environments. These risks are being assessed as part of exploration ventures (biologists joining these expeditions).
Marine minerals mining	Page 84 - This activity can bring about considerable but yet unknown environmental concerns, through the disturbance of deep sea ecosystems through the extraction of mineral resources. The deep sea and sea floor forms an extensive and complex system which is linked to the rest of the planet in exchanges of matter, energy and biodiversity. Operations on the sea-floor may destroy unique habitats and disturb deep sea ecosystems which could entail changes in fish stock and primary production. Pressure and impacts may also emerge from future activities related to mining, as well as carbon sequestration and gas hydrate extraction. These activities might have consequences on loss of biodiversity and on the flow of deep sea ecosystem goods and services provided by these environments.
Blue biotechnology	Page 78 - The main environmental pressure expected from this activity is the unintended extraction of species. No data could yet be found about the magnitude of this pressure.

Source: [Ecorys, Deltares, Oecanic, 2012, Blue Growth. Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts.Final Report. Study on behalf of the European Commission, DG MARE.](#)