

# The North Sea Futures Manifest 2017

### THE NORTH SEA PRINCIPLES "LIFE BETWEEN MAN-MADE OCEAN STRUCTURES"

10 Principles for making the North Sea thrive as an ecosystem during transition from fossil to renewable energy production

October 2017

This document manifests the challenges and opportunities for action during the current industrialisation and energy transition in the North Sea, and presents 10 principles for making the North Sea thrive as an ecosystem during – and after - the transition from fossil to renewable energy production.

It has been developed through a 6-month consultation process and an International Dialogue Meeting, held on 26<sup>th</sup> September 2017, in Denmark, involving science, green NGOs and industry representatives and is launched at the occasion of the ongoing review of derogation categories in Decision 98/3 and OSPAR meeting 2018. Its perspective, however, goes beyond this occasion as it addresses the wider challenge of protecting marine ecosystems during the transition and infrastructures development from fossil to renewable energy.

The purpose of launching The North Sea Futures Manifest 2017 is to provide a heads-up for decision makers, scientists and civil society organisations to (re-)consider and discuss how to achieve the most environmentally beneficial results from future offshore installation and decommissioning activities.

The North Sea is a sea of dilemmas: it is the largest nature area in North-Western Europe and one of the most intensively used marine areas in the world. It is also a very different ecosystem from what it used to be 200 years ago and probably just as different from what it will be like 200 years from now.

With the increasingly rapid transition from fossil to renewable energy resources and a vision of the North Sea as the so-called "Silicon Valley' for offshore wind energy, its ecosystem is confronted with an unprecedented challenge: adapting to further intensification of human activities and thousands of new man-made installations creating new habitats and conditions for marine life.

In this process, we need to find feasible solutions for how to protect and strengthen marine ecosystems during the phase-out and removal of existing installations, and through the placement, design and management of new types of offshore installations.

The North Sea Futures Manifest 2017 www.northseafutures.org This endeavour requires knowledge and mobilization of stakeholders and their support for the development of an ecosystem approach to offshore installations that seeks to design, place and manage them in such a way that they support rather than conflict with the conservation of species and the protection of their habitats.

It also requires policy makers and stakeholders to engage in partnerships, pilot projects, progressive dialogue, and collaborations with each other in pursuit of achieving the United Nations' Sustainable Development Goal 14 - to "Conserve and sustainably use the oceans, seas and marine resources for sustainable development" - making intelligent use of the past 30 years of experience with offshore installations in the North Sea and elsewhere.

There is a profound need for an open, fact-based debate about the scientific evidence for the environmental benefits from current decommissioning practice, and for the development of future sustainable design and decommissioning standards

Hence, we encourage all relevant *stakeholders* to take into consideration the 10 principles developed by North Sea Futures in close cooperation with researchers and green NGOs and attached to this Manifest; in particular, we call on:

- The Oslo-Paris Convention's (OSPAR) Contracting Parties and the North Sea Energy Cooperation to take note of the 10 principles addressing both existing and future installations, including renewable energy installations, and to consider to assess if and how future design, placement, management and decommissioning practices can contribute to achieving environmental and sustainable development goals for the North Sea.
- *Governments, academia and sponsors to support and facilitate independent research* needed to support a debate on the best design, placement and management of existing and future installations in the marine environment of the North Sea.
- **Research Institutions and NGO's** to cooperate under the auspices of the current OSPAR rules to contribute to the development of the next best decommissioning practices, which can maximize the benefits for the environment and society.
- **The Offshore industry** to enter into case-by-case multi-stakeholder pilot projects, and make installations available to explore and test environmental effects, liability, legacy and other legal issues of different design, placement, management and decommissioning practices.
- **The Offshore industry** to demonstrate their willingness to contribute to an environmental fund or similar that supports and advances marine ecosystem conservation, restoration and research.

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We recommend that any regulation of offshore installations should carefully consider the perspective of the energy transition and associated industrialisation of our seas, improve clarity on decommissioning regulations for offshore renewable energy installations. Also, it should explicitly provide (limited) room and describe procedures for leaving clean, ecologically valuable parts of offshore installations in situ to continue providing ecosystem services as artificial reefs, in cases where this option can be proven to be the best option for the marine ecosystem and/or the environment in general. In doing so, we invite regulators and industry to be guided by the following principles:

#### Framework conditions

- 1. Regulatory practises for placement, design and management of offshore installations, incl. decommissioning practises, should seek to:
  - Benefit the marine environment by supporting the conservation of species and their habitats.
  - **Consider individual installations in the context of the wider ecosystem** and interactions with other installations and/or reefs (interconnectivity).
  - Make optimal use of resources and space, e.g. by multi-functional use of installations and space and high-quality reuse and recycling of space and material at end-of-life.
  - Guarantee the health and safety of onshore and offshore personnel and future users of the sea.
  - Follow transparent, knowledge-based decision making procedures with early and active stakeholder involvement.

#### **Ecosystem Resilience**

- 2. **Respect for the precautionary principle**, building on the current state of knowledge about the role of offshore installations in the wider marine ecosystem and the cumulative effects of installation, management and decommissioning of offshore installations. In particular, we need to take extra precautions to protect species and habitats that are endangered or under severe pressure. Additional research and policy-efforts are needed to improve our understanding of cumulative and wider ecosystem effects of different placement, design and management options.
- 3. A clear distinction between Marine Protected Areas (vulnerable, natural habitat) and protected areas with man-made habitats that provide important ecosystem services. The placement and protection of man-made habitats should not take place at the cost of proper protection of vulnerable, natural habitats, but preferably be supportive to this, e.g. by enhancing connectivity between natural reefs and increasing the number and areas of refuge from fishing activities.

4. Facilitation of design, materials and governance models for new installations that minimize the risk of a negative impact and maximize opportunities for a positive impact on ecosystem services (eco-design) and considers the full life cycle, planning for potential co-use, reuse, repurposing and up-cycling already in the initial stages of the project. The placement of an installation is the activity with the first and often the largest negative impact on the marine ecosystem. The better use we can make of installations and material that have already been placed in the marine environment, the less negative impact per (economic) service provided. Co-use and reuse can be taken into account already in the design and placement phase. For example, foundation and scouring protection could be developed to facilitate restoration of habitats for valuable species, creating new opportunities for sustainable fishing, while the blades of wind turbines could be made from new materials, which may be recycled without loss of quality. Parts of an installation that may facilitate the spread of invasive species or otherwise threaten habitat authenticity could be designed to minimize marine fouling.

#### Management Systems

- 5. Respect for the polluter pays principle and hence of full removal to shore as being the default option that minimizes the risk that society gets lumbered with the costs of cleaning up after profitable activities of private companies. If clean material from offshore installations is left offshore for environmental or other societal purposes, it is important that liability for this material (excluding any related contaminated material or plugged and abandoned wells) is transferred to an organisation with a societal purpose and guaranteed lifetime that corresponds with the period of time in which the material could cause damage.
- 6. Decommissioning decisions should be made on the basis of solid science and case-by-case assessments, which include considerations of the role of an individual installation within a group of interconnected installations. Regulations should leave explicit room for alternative decommissioning options, where this could help reduce negative environmental impacts of the decommissioning process itself (e.g. energy use/carbon footprint, dispersal of pollutants or damage to valuable coastal or terrestrial ecosystems) and/or contribute to the conservation and protection of valuable marine ecosystems and species and add to the sustainability of the North Sea. If a group of installations are interconnected and in fact function as one reef, decommissioning decisions should preferably be taken for the entire group, rather than for individual installations.
- 7. The framework (set of criteria) for assessing the environmental impacts of placement, design and management options needs to include a thorough assessment of natural capital stocks and ecosystem service flows and transparency about potential trade-offs between different environmental parameters. All decommissioning proposals should include both an 'ecological value analysis', identifying and assessing the role the installation plays as an artificial reef and what ecological impacts it may have to remove that reef, and a comparative carbon footprint assessment. In assessing potentials for reuse and repurposing of (parts of) installations, a comparison should be made with environmental impacts associated with the use of alternative (virgin) materials.
- 8. *If* materials (clean or chemically contaminated, incl. drill cutting piles), are left offshore, the 500m safety zone should be maintained in order to protect ecological value and the safety of all users of the sea and reduce the risk of disturbance of contaminated areas by trawling. Earmarked funds and an organisation whose lifetime corresponds with the period of time in which damage might occur should guarantee long-term monitoring and liability.

### **Operators CSR**

- 9. Though cost-effectivity always plays a role in decisions, reduction of decommissioning costs should not in itself count as the primary motive for leaving material from disused offshore installations offshore. To guarantee transparency, comparative cost assessment of different decommissioning options should be made available as part of public consultations.
- 10. When permission is given to deviate from the default option of full removal to shore for disused existing installations, a percentage of costs should be reallocated into an environment fund or similar programme aimed at conservation and restoration of valuable marine ecosystems and innovative approaches to sustainable use of marine ecosystem services. That way, societal and environmental benefits of a new and more flexible decommissioning regime could be multiplied. Lessons learned from similar funds and repurposing programmes, such as rigs-to-reef programmes, could inspire governance.