



# atlas

UNDERSTANDING DEEP ATLANTIC ECOSYSTEMS



# Potential roles for industry in coral restoration

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## 9.2M Euros, 25 partners, 12 Case Studies, 2016-20

### Objectives

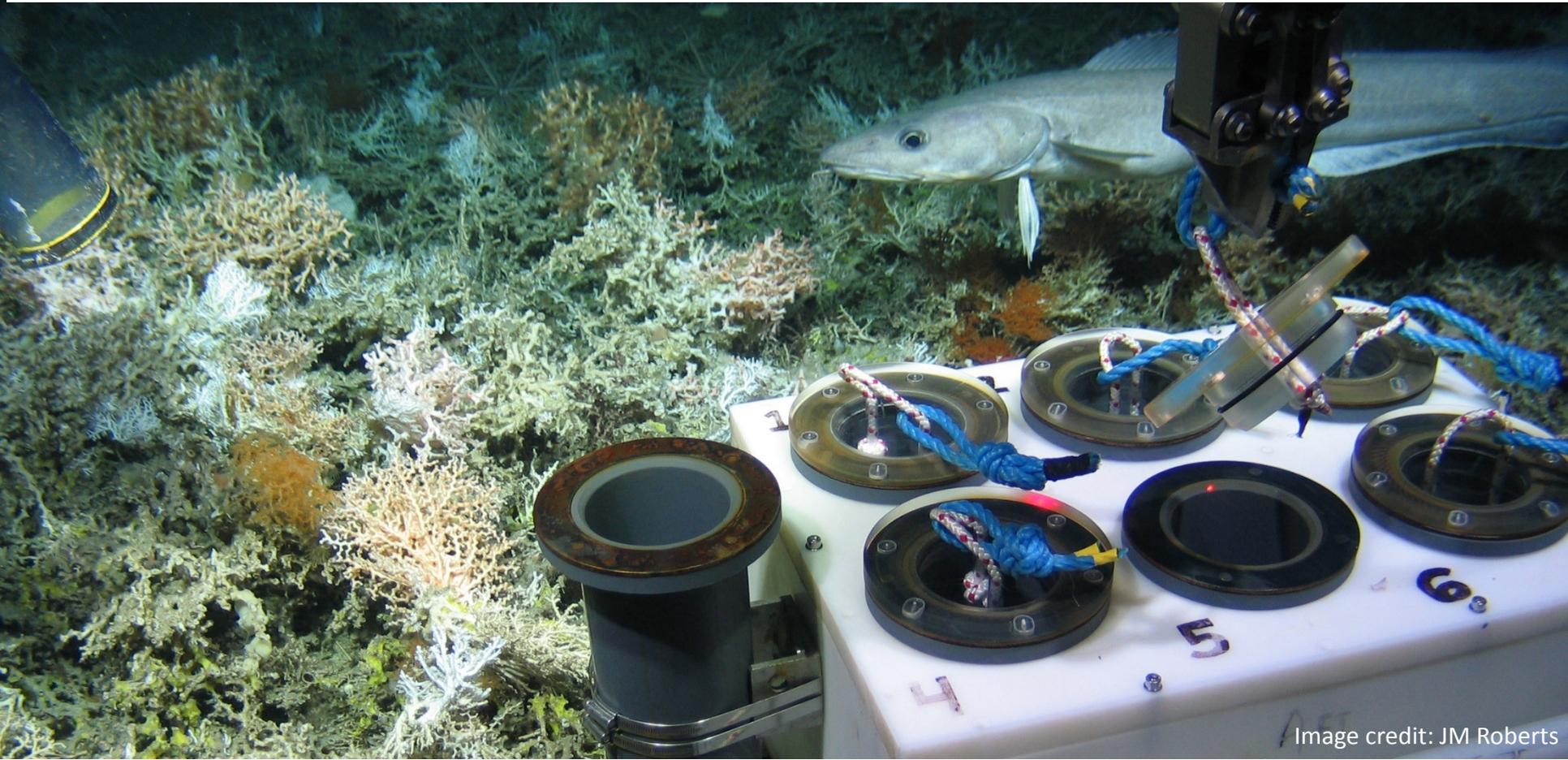
- **Advance** our understanding of deep Atlantic marine ecosystems and populations
- **Improve** our capacity to monitor, model and predict shifts in deep-water ecosystems and populations
- **Transform** new data, tools and understanding into effective ocean governance for the deep ocean
- **Scenario-test** and develop science-led, cost-effective adaptive management strategies that stimulate Blue Growth



# Industry Motivation



*More effective regulation and ocean governance could mean that in future, industry will be required to rehabilitate impact sites or conduct research in adjacent areas to achieve no net loss (NNL) goals*





## Mechanisms towards NNL

### **Biodiversity offsets**

measurable conservation outcomes of actions that compensate for significant adverse biodiversity impacts arising from project development after appropriate mitigation measures have been taken

### **Habitat/species banking**

market-based instrument, in which industry buys biodiversity “credits” by creating or improving habitats to offset impacts of their activities

### **Offsite mitigation**

biodiversity offsetting and habitat banking in a different “offsite” location to the one where industry had adverse impacts

Adapted from Cook & Clay (2013) Marine biodiversity offsetting and habitat banking feasibility study. Crown Estate.

## Positive benefits of including industry



### Oil and gas industry example

- ship-time, toys
- joint initiatives & training
- sources of corals for transplants
- agents of marine connectivity



## *Lophelia pertusa*



Image by Solvin Zenk



Images by Solvin Zenk

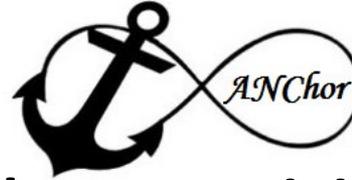




Image by Solvin Zenk



# INSITE



## Appraisal of network connectivity between North Sea oil and gas platforms



National Oceanography Centre

NATURAL ENVIRONMENT RESEARCH COUNCIL

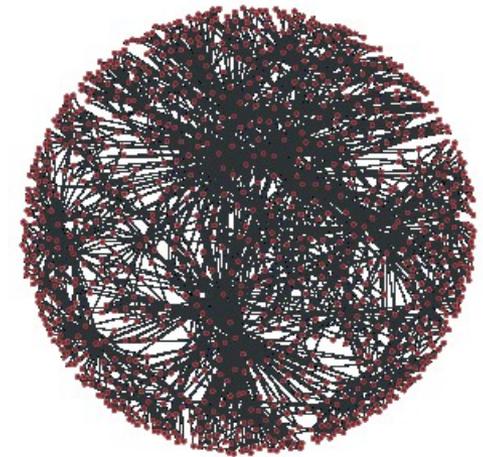
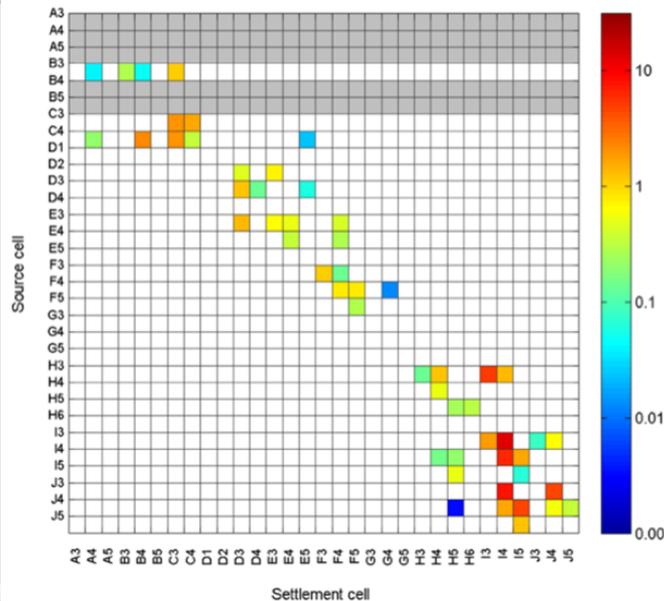
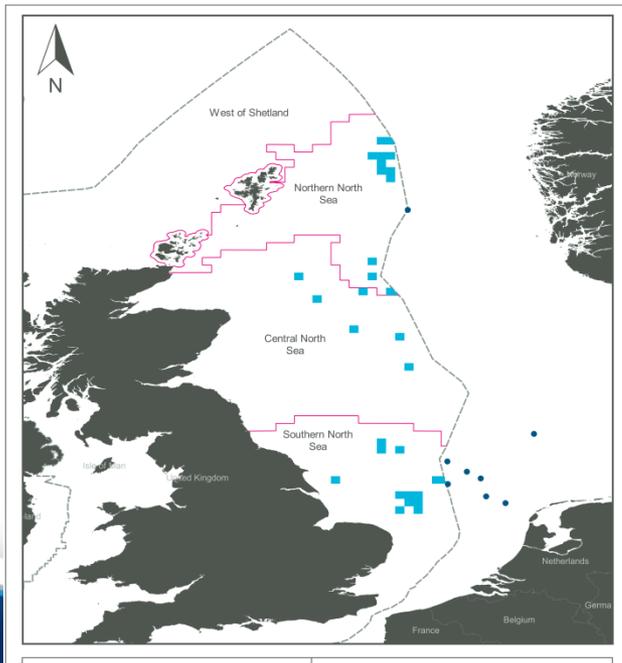




Image by Solvin Zenk

Fox, Henry, Corne & Roberts (2016) Sensitivity of marine protected area network connectivity to atmospheric variability. *Royal Society Open Science* 3, 160494

