Nature-Inclusive Design: a catalogue for offshore wind infrastructure

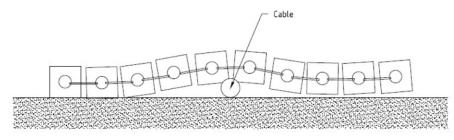
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Introduction

Offshore wind developers in the Netherlands must make demonstrable efforts to design and build the wind farm in such a way that it actively enhances the sea's ecosystem. The question is: how can this be done and what are the costs?

We created a catalogue with Nature Inclusive Design options for the Dutch ministry of LNV to support offshore wind developers. The focus is on providing habitat and shelter to threatened and declining species and to commercial species, using existing technology.

The focus is on optimizing the scour protection layer around the wind turbines, optimizing cable crossings and on add-on options (Figure 1).



FRONT VIEW REEF CUBE MATRESS

Example 1: Optimized cable protection made of Reef Cubes (low carbon alkali activated material)

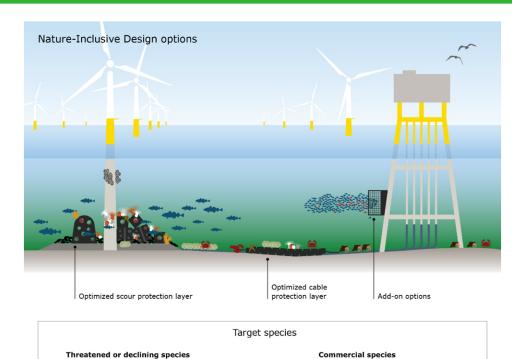
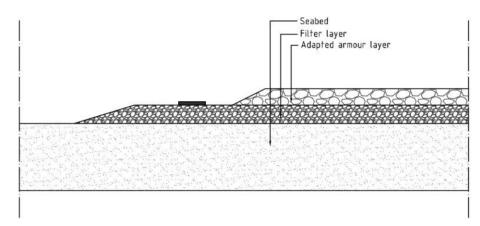


Figure 1: Nature Inclusive Design options for offshore windfarms.

Edible craft

Target species

- OSPAR list: Atlantic cod, poor cod and European flat oyster
- Commercial: crab, lobster



Example 2: scour protection layer with larger stones to create shelter

Download the catalogue

You can download the catalogue of Hermans et al. (2020) here: https://edepot.wur.nl/518699



