


Project title	<b>O&amp;O Nobelwind</b> – Design validation and optimisation and residual lifetime estimation of innovative offshore foundations at the Nobelwind offshore wind farm
Duration	01-02-2016 → 31-08-2019
Abstract	<p>O&amp;O Nobelwind is a joint research project with long-standing partner Parkwind with the support VLAIO. The O&amp;O Nobelwind aims to reduce the cost of future offshore wind farms by in-depth monitoring of the foundation piles and the interface connection. The project involves the instrumentation of three of the monopile foundations with state of the art optical strain gauges prior to pile installation, solutions for interface monitoring and the assessment of the soil-structure interaction.</p> <p>In addition to the innovative instrumentation, the O&amp;O Nobelwind also investigates innovative solutions for residual useful life (RUL) estimation of offshore wind turbines on monopile foundations. Including the development and validation of virtual sensing and the fleet leader. While the first is a method that allows to reconstruct strain histories even where no strain gauges are installed. Complementary the fleet leader concept will allow to assess the fatigue life for every turbine in the fleet by doing the most with the available operational data.</p> 
Project Coordinator	VUB-AVRG
Involved Industrial partners	
<ul style="list-style-type: none"> <li>• Parkwind</li> </ul>	
Total budget	€ 865 400
Type of funding	O&O
Financing body	Vlaio
External website link	/

