Cooperation under the RES Directive - Case study on a joint project: An offshore wind park in the North Sea (cooperation between the Netherlands, Belgium, UK, and Luxembourg) - DTU Orbit (07/11/2019)

Cooperation under the RES Directive - Case study on a joint project: An offshore wind park in the North Sea (cooperation between the Netherlands, Belgium, UK, and Luxembourg): Task 4 report; A report compiled within the European project “Cooperation between EU MS under the Renewable Energy Directive and interaction with support schemes”

This case study provides an overview of how cooperation on a large joint project could be implemented. It seeks to make the descriptions as close to reality, hands-on and practical as possible. That said, the case is not an actually ongoing case, but should be seen as a potential project idea. The joint project consists of a 1000 MW offshore wind park located on Dutch territory, to be connected to an offshore hub on Belgian territory. Belgium, the Netherlands and the UK will together undertake the joint project and share the production and the RES benefits. Belgium will be the driving force of the joint project, organising the necessary negotiations and initiatives. The country will also assume most risks related to the development of the wind park. Therefore, we assume that the joint project will be shared in the following way: 40% to Belgium, 30% to the Netherlands, and 30% to the UK. We further assume that Belgium can achieve to involve Luxembourg into the project via statistical transfers, corresponding to 10% of the project. Because of the first mover character of such a joint project in the North Sea, with offshore electricity production connected to several countries, we discuss in detail the implications of the set-up and the cooperation. We assume that the countries cooperate on the joint project, but not on their support schemes. The latter aspect might follow in a second step. We show that all involved countries can benefit from the joint project. Belgium benefits from gaining access to additional wind resources, which will help meeting its ambitious RES target. The Netherlands will benefit from the connection of the wind park to the Belgian offshore hub. This will be at lower cost than a connection to Dutch shore – in return, the Netherlands will though only receive 30% of the wind production as compared to own development at the same site. The UK will gain an option on additional offshore wind resources that may be at competitive prices. Luxembourg might have a benefit from using a concrete joint project for the import of RES benefits, as they are more tangible than for e.g. technology-neutral, ‘pure’ statistical transfers. Please note that this study serves as an example for the potential set-up, issues and solutions of joint offshore wind projects in an offshore grid. This is case is highly hypothetical. The Netherlands is already developing the Borssele site for offshore wind, according to the Dutch Energy Agreement and, more specifically, the agreements on offshore wind and the offshore grid.