



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 RenewableEnergy Directive and interaction with support schemes"

Kitzing, Lena; Nysten, Jana; Gephart, Malte; Klessmann, Corinna; Katz, Jonas

Publication date:
2014

Document Version
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):

Kitzing, L., Nysten, J., Gephart, M., Klessmann, C., & Katz, J. (2014). 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 RenewableEnergy Directive and interaction with support schemes". Ecofys.

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Task 4 report

Authors: Lena Kitzing (DTU), Jana Nysten (BBH), Malte Gephart (Ecofys), Corinna Klessmann (Ecofys)

with contributions from: Jonas Katz (DTU)

A report compiled within the European project "Cooperation between EU MS under the Renewable Energy Directive and interaction with support schemes"

Disclaimer: This report has been elaborated with the kind support of Sue Harrison (DECC, International Energy, EU & Resilience), Georges Reding (Energy Department of the Luxembourg Ministry of Economy), Jan Hensmans (Algemene Directie Energie, Algemene Beleidscoördinatie en Internationale Betrekkingen), and the Energy and sustainability Department in the Directorate-General for Energy (Telecommunications and Competition; Dutch Ministry of Economic Affairs). However, the sole responsibility for the content of this publication lies with the authors. The views expressed in this report do not necessarily represent those of the European Commission or of the involved Member States. The European Commission is not responsible for any use that may be made of the information contained therein.

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Executive Summary

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 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.

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1 Setting

1.1 Description of the case

The technical set-up of this case is aligned with a related case study currently being undertaken in the NorthSeaGrid project (www.northseagrid.info). It comprises a joint offshore wind project of 1000 MW, located in the Borssele area on Dutch territory. The project is expected to exploit two offshore hubs that Belgium is in the process of planning on its territory. The eastern offshore hub will be the major connection point for the joint offshore wind park. From the hubs, there will be interconnectors to Belgium (a line of ca. 30 km at 900 MW), to the Netherlands (a line of ca. 50 km at 1500 MW), and to the UK (a line of ca. 110 km at 1000 MW). It is assumed that part of these interconnectors can be used for the export of wind power from the joint project, while the remaining part will be used as a market interconnection.



Figure 1: Setting of the joint project in the offshore grid

We assume that Belgium is the driving force behind the development of the joint project. The Belgium federal government is willing to proceed with the development of the 1000 MW wind park including commitment to respective support payments. It will also coordinate the scope of involvement of the other Member States in the project.

The Netherlands would have to make the site available for the joint project. There is a natural reluctance towards this, as the Netherlands considers the site to be important for future own developments of offshore wind. We therefore assume that a compensation mechanism needs to be established.

The UK is interested in the joint project if electricity from renewables can be generated at a competitive price as compared to their domestic sources. Due to national legislation, the UK would require a physical import of the electricity from the joint project if it should be eligible for support. The UK is not interested in statistical transfers only.

Other, not physically connected countries could be interested to participate in the joint project based on statistical transfers. In our case, we use the example of Luxembourg, who is willing to purchase virtual RES benefits that count towards its renewable target.

1.2 Design characteristics

Due to the first-mover character of the project, we pursue what can be called a semi-integrated strategy for the cooperation, in which Belgium is the main driver of the joint project, being the sole contractual partner with the wind park investor and assuming most of the risks related to the project in the first place. In practice, this means that Belgium will drive the development of the wind park with the project developer and overtake the obligation to support the wind park fully, in case no offtake agreement can be established with the Netherlands and the UK.

We find this cooperative, but semi-integrated strategy most realistic for such a first-mover project, assuming that a more integrated strategy can only be established after a first project has demonstrated the viability of joint offshore wind projects in the North Sea. A more integrated strategy could be one in which the participating countries also cooperate in the contacts towards the wind park investor. This would entail, for instance, the setting up of a joint fund from which the support payments can be paid out. Such strategy could be beneficial if a large scope of cooperation is envisaged for the future, e.g. including several wind parks across the North Sea. However, currently Member States seem to be reluctant to establish such related fund and to follow this integrated approach.

Specific design characteristics of the cooperation

Belgium, the Netherlands and the UK sign a joint project agreement that establishes a minimum cooperation between the countries. This will give Belgium access to the Borssele site, on which the wind park shall be built, as well as right of way for respective connection cables to the offshore hub. It will also regulate the conditions for the issuance of permits and licenses between Belgium and the Netherlands. These shall be agreed within a specially established 'Responsible Body', consisting of at least one representative of each party from relevant Belgian and Dutch authorities. Specific conditions for the permit are agreed upon amicably between the countries. In addition, the Netherlands and the UK get the right, but not the obligation, to each off-take 30% of the total wind energy production from the wind park, corresponding to 300 MW maximum production.

As a first step, the wind park will be integrated into the Belgium support scheme (Belgium prefers the use of its own support scheme instead of setting up a separate scheme). In the current policy framework, the offshore wind park will receive one green certificate¹ per generated MWh from the Federal Electricity Regulatory Authority (CREG). The federal grid operator (ELIA) is obliged to purchase the green certificates for a period of 20 years at a minimum price of 107 EUR per certificate for electricity generated resulting from the first 216 MW of installed capacity and of 90 EUR per certificate above that (Art. 14, Arrêté royal du 16 juillet 2002).

¹ Belgium's support scheme might be changed into a (sliding) premium scheme with competitive pricing. However, considerations are ongoing, which is why we make reference to the existing scheme.

If the Netherlands or the UK will make use of the option after having made a direct agreement with the wind park operator on support payments, the respective part of the wind park will then not be supported through the Belgium support scheme anymore.

Also in the Netherlands and in the UK, the wind park shall be integrated into the existing support schemes (again, this reflects the preference of both countries). In practice, this means that the Netherlands will allow the project investor to participate with a capacity of up to 300 MW in SDE+ rounds. Should the wind park not win any contract within the normal SDE+ rounds, then the 300 MW (or 30% of the production of the wind park) will remain integrated in the Belgian support scheme. Should the wind park have won a contract under the Dutch SDE+ scheme, then after the end of the support period (after 15 years), this part of the wind park will not be eligible for support in any other country. In the UK, the wind park operator will be eligible to bid for a Contract-for Difference (CfD) for up to 300 MW (or 30%). Again, should the wind park investor and the UK not come to an agreement, then this share will continue to be supported under the Belgian scheme.

In practice, one can say that in this set-up, each country will consider part of the wind park as just another RES installation within their territory. The project will only be granted support if it is competitive with other RES sources within the respective country. This way, the level of cooperation, compensation payments between countries and necessary changes in national laws are minimised. In later stages (e.g. once a first project has shown the feasibility joint projects in the North Sea), more integrated solutions, e.g. including a joint support scheme, could be pursued (also see the task 5 report of this project, Busch et al. *forthcoming*). This will result in a less complicated set-up for the joint project, but require more cooperation and changes in regulations and laws.

The agreement between Belgium and the project investor will include a commitment by the project developer to bid into the UK CfD scheme and the Dutch SDE+ scheme at a level corresponding to the support given under the Belgian scheme². This shall incentivise the project developer in enforcing cooperation within the joint project and decrease the risk that Belgium would have to support the full 1000MW project. At the same time, the risk for the project developer is minimised as they are ensured to receive the same support level as guaranteed by the Belgium government. If the project developer does not win any of the contracts with the UK or the Netherlands, they shall be obliged to bid into the schemes again in subsequent years, e.g. at least five times. The details of these obligations should already be described in the tender specifications.

In addition to the cooperation between the neighbouring countries, Belgium might also want to utilise statistical transfers to diversify their risks. We assume that Belgium agrees with Luxembourg on the sale of up to 10% of the generated RES benefits for an agreed period, e.g. 5 years or even 20 years, at a price negotiated between the two countries (see section 2.3 below).

² The 'corresponding support level' would need to be defined in more detail. In principle, it should be ensured that the income for the wind park operator remains the same. The actual support level required in the other countries will thus also depend on the respective market prices, potential grid access costs and costs of capacity bookings on interconnectors that the wind park operator might incur.

Transfer of RES benefits

Each country shall receive an amount of RES benefits for target achievement from the project that directly corresponds to the amount of RES electricity supported by that country. Since the wind park is located on Dutch territory, the RES benefits are in the first instance automatically accredited to the Netherlands. We suggest that the joint project agreement between the Netherlands and Belgium includes an immediate transfer of all RES benefits to Belgium in the first place, at a price to be determined (see below). Then, in line with the (potentially) successful agreement between wind farm operator and the Netherlands and the UK, respectively, Belgium will further transfer the RES benefits to the respective countries according to the production measured at the feed-in point of the wind park at the Belgian offshore hub, at a price to be determined (see section 2.3 below).

Market access and physical flows

The wind park will need market access to at least one country's power market to sell the generated electricity. This shall include future, spot and balancing markets. Market access and regulations for a wind park feeding into an interconnector rather than directly into a national market are not yet determined.

With the ongoing creation of the internal electricity market in Europe, the UK, the Netherlands and Belgium are all part of a single market, with price coupling. Flow directions on the interconnector thus depend on price differences between market areas. The flow directions are, in the normal market set-up with implicit capacity auctions, not predictable or controllable by single actors like a wind park operator. It is a regulatory question of how to deal with the volumes generated by the wind park, and into which market area the volumes should be integrated.

In general, there are several options on how to organise the market access for a wind park in an offshore grid, as discussed by NSCOGI (2013)³ and by Kitzing and Schröder (2012)⁴. Following the conclusions by NSCOGI, we assume that in the first instance, the future offshore hub system will not have an own market price area, but the wind park will be allocated to the respective country market areas⁵. Here, even if connected to different price zones at the same time, the wind park should not be allowed to choose between markets to avoid cherry-picking problems, which could especially be an issue with sliding premium support mechanisms.

Concretely, the market arrangements for the wind park also depend strongly on the arrangements for the grid infrastructure. We assume that the wind park investor will be responsible for connecting the wind park to the offshore hub. The connection between the offshore hub and the Belgian electricity grid will most likely be defined as a domestic connection line, where it is likely that the wind park has

³ The North Seas Countries' Offshore Grid Initiative, Discussion Paper: Possible Market Arrangements for Integrated Offshore Networks www.benelux.int/files/5613/9702/3931/options.pdf

⁴ Kitzing, L and Schröder, ST, 2012, Regulating future offshore grids: economic impact analysis on wind parks and transmission system operators, European University Institute, RSCAS 2012-65, http://cadmus.eui.eu/bitstream/handle/1814/24679/RSCAS_2012_65.pdf

⁵ Note that the solution where the wind farms would form their own market area is also being further investigated by NSCOGI.

to cover part of the construction cost, whatever applicable. Then, the wind park will have direct market access into the Belgian electricity market at its market access point at the offshore hub.

This is less clear for the market access to the UK and to the Netherlands: Here, the connection between the onshore electricity grid and the offshore hub is most likely to be defined as a trans-national interconnector. NSCOGI discusses several options of how to grant market access for a wind park through an interconnector. The preferred options are that the wind park will be granted a 'virtual grid connection' on the interconnector, at each point in time amounting to the capacity of foreseen actual generation per share. This means that the wind power production receives priority over other flows on the interconnector and the transfer flows between markets might be reduced by the respective wind power flows. It might be a requirement that the wind park has to book and pay for the used capacity on the interconnector in order to compensate the operator of the interconnector for the lost congestion rents. This is especially relevant if the interconnector is built and operated by merchant third parties rather than national TSOs. In such case, it might become difficult for the wind park to make competitive bids on the markets due to the increased marginal costs.

Alternatively, the wind park might be granted market access directly at the offshore hub, for each market according to the share that is supported in the respective country. In this case, part of the interconnector will be redefined as 'domestic' cable and no capacity bookings will be necessary. This way, also issues with adverse flows through the interconnector could be reduced. This suggested solution is illustrated in Figure 2:

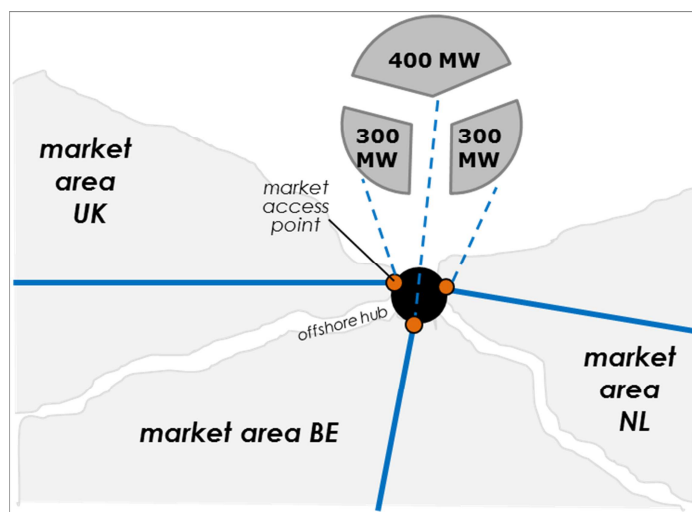


Figure 2: Virtual split of the joint project and direct market access into all respective power markets

While the wind park is located in the Netherlands, it is connected via the offshore hub on Belgian territory. It is, however, not yet clear if the market areas can easily be extended into foreign countries (i.e. the UK market would then reach into Belgian territory) and what the practical implications might be related to that. Further legal investigations will be required.

In a first instance, we assume that the Belgian TSO ELIA will be responsible for imbalance settlements. The wind park will become part of the Belgian balancing market. With direct access of the wind park to the UK and Dutch electricity markets, this first assumption might however have to be revisited.

The market access to the UK and the Netherlands is necessary because both countries grant support in form of sliding premium schemes. Therefore, the reference market price, from which the sliding premium is determined, should coincide with the actual market income of the wind park. This might, however, be circumvented if a country would accept a foreign reference price in their support system, for instance, if the Netherlands accepted a Belgian reference price as basis for the sliding premium under the SDE+ scheme. If the Netherlands also accepted that the electricity does not have to be physically imported, then the joint project can be planned without direct access to the Dutch market. However, this requires a change in current Dutch regulation in relation to the opening up of the SDE+ scheme for 'external' production. Moreover, if the average electricity prices structurally differed between Belgium and the Netherlands, the resulting changes in premium payments might have to be reflected in a compensation mechanism.

The UK, on the other hand, currently requires that all electricity eligible for support under the British renewable support scheme is physically fed into the British electricity system. Because of the implicit capacity allocations on the interconnectors and the actual physical flows which can deviate from this capacity allocation, this requirement might become an issue. For this case study, we assume that the physical feed-in of the wind park at the offshore hub is sufficient prove of delivery to the UK, if the market area is extended to reach to the offshore hub and the part of the interconnector used by the wind park is deemed a 'domestic' connection. This will, however, also require changes in legislation. Alternatively, the UK could also decide to relax the restriction on physical import. This is further discussed in section 3.2.

1.3 Effects of building the offshore wind farm at Borssele

The Borssele area was assessed by the Dutch government in their 2009 'Policy Document on the North Sea'⁶ as follows:

Borssele area

At least 1,000 MW can be realised in this 344 km² area.

It is a reasonably favourable area off the Zeeland coast (Walcheren): little shipping traffic, limited water depth and middle category in terms of distance to the coast. Landing provisions exist at Borssele.

Points of attention for creation of the area Borssele wind farm

- 1 The area overlaps with a potentially ecologically valuable area in the southeast (Zeeland Banks). Although its natural values appear limited, further studies will take place as part of Natura 2000 and MSFD until 2012. Based on those studies, further conditions and/or limitations may be imposed on the construction of wind farms in this area.
- 2 There is a relatively high cable and pipe density in the area, which may mean that not the entire surface area is available for wind turbines.
- 3 Incorporation of generated capacity in the national electricity grid is limited to a maximum of 1,000 MW. The area is far removed from the electricity grid, which is extremely unfavourable for the development of the Dutch electricity grid. The realisation of wind farms in this area will require high investments in the grid infrastructure for landing points for wind energy.
- 4 The area is also a search area for a multifunctional island for energy storage and production that may be constructed there.

Effect on	Assessment (see ¹)
Shipping	Increased risk of collision, but controllable
Oil and gas recovery	No effect
Sand extraction	5% more expensive if extracted outside 12-mile zone
Defence	No effect (not currently used as military site)
Fishing	Possibilities for shared used by sustainable fishing to be investigated
Nature	In extreme south east (Zeeland Banks), detrimental effects possible.

The North Sea is one of the busiest seas in the world, with over 110,000 shipping movements to and from Dutch seaports each year¹. The value of ocean transport to the Dutch economy is great. When the wind farm at Borssele is constructed, a safe distance of two nautical miles between the wind farm

⁶ http://www.noordzeeloket.nl/en/Images/Policy%20Document%20on%20the%20North%20Sea%202010-2015_931.pdf

and shipping routes would be created. Shipping within the wind farm and in the 500-metre safety zone around it will be prohibited. This will affect current shipping movements, as can be seen from Figure 3 below:

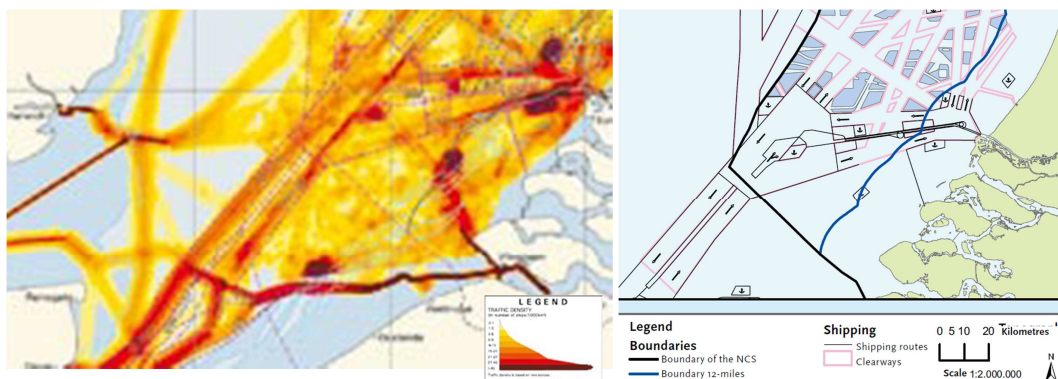


Figure 3: Utilisation of Borssele site (shipping movements)

Contrary to the assumptions in the above mentioned assessment, we assume that the joint project is connected not to the Dutch shore, but to a Belgian offshore hub. This eliminates the grid integration issues mentioned in the Dutch assessment above.

2 Costs and benefits

In the following cost assessment, we assume that all partners described above are part of the joint project, i.e. that the wind farm operator has concluded contracts with Belgium, the Netherlands and the UK on support payments. Belgium and Luxembourg have agreed on statistical transfers.

2.1 Benefit of the joint solution as compared to purely national initiatives

This case study uses the synergies with the NorthSeaGrid project (www.northseagrid.info). The NorthSeaGrid project is currently undertaking an economic assessment of the benefits of jointly developing the grid infrastructure, including offshore hubs and a connection to an offshore wind park for a UK-Benelux-case (Case 2)⁷. We use this case as basis for the joint project here.

The NorthSeaGrid project selected this case based on a preliminary assessment of the overall benefits of an integrated solution as compared to purely national initiatives (e.g. the cost benefits from interconnection through a joint offshore hub rather than shore-to-shore). The NorthSeaGrid case will include a detailed cost inventory of the case, a quantification of the benefits, different models for cost and benefit allocations, and more.

⁷ www.northseagrid.info/project-description

The focus of this case study here lies on the practical implementation issues of a joint wind park project within that common offshore infrastructure. It focuses on the set-up and the cooperation options. Our starting point of analysis is the assumption that the common grid infrastructure and the formation of an interconnected offshore hub are deemed beneficial and respective grid investments will be undertaken by the involved actors. The wind park on Dutch territory that shall be connected to the offshore hub (on Belgian territory) is subject to our further investigation.

We show in the following, how a joint project can be created in which all involved countries can benefit from the wind park development.

2.2 Identifying the different cost and benefit elements

We begin by identifying the most relevant cost and benefit elements and determine, in which countries they show most effect (in some cases roughly). Subsequently, we compare them to each other and estimate the requirement for compensation payments.

	BE	NL	UK	LUX
Shares of RES				
<i>Electricity from the wind park</i>	40%	30%	30%	-
<i>RES benefits for targets</i>	30%	30%	30%	10%
Direct Effect				
Support cost to wind park	40%	30%	30%	-
Payment from statistical transfers	-10%			10%
Infrastructure cost (interconnection)	40%	20%	40%	-
Indirect Side Effects				
System integration costs Grid related costs Ancillary service costs Impact on conv. capacity	40%	30%	30%	-
Displaced alternative utilisation of area		100%		
Biodiversity and landscape costs	-	100%	-	-
Avoided local air pollution	40%	30%	30%	-
Greenhouse gas savings	40%	30%	30%	-
Security of supply	40%	30%	30%	-
Employment effects	<i>Allocation uncertain, depending on contracts</i>			
Innovation effects	<i>Allocation uncertain</i>			

With market access directly at the offshore hub, the wind park operator will sell the respective share of the production directly into the respective market, i.e. 30% of the produced electricity from the wind farm will be sold on the British market, 30% will be sold on the Dutch market, and 40% will be sold into Belgium. This does not necessarily correspond to a physical flow of the same shares into each system. For simplicity, we assume that once all interconnectors are in place (the cost of which are discussed below), on average, the shares of physical flows do not deviate significantly from the shares of production sold at each market. This means that the flow of electricity, and therewith also the cost of system integration (including onshore grid reinforcement, balancing, impact on conventional capacity etc.), the security of supply effect (in terms of providing electricity from local sources), and the effect on greenhouse gas savings and local air pollution (by replacing conventional electricity generation technology) correspond directly to the share of support paid. Of course, there might be differences in the level of e.g. balancing cost in the UK and the Netherlands, however, all other eligible renewable production of the same kind would cause the same costs, so these are not additional costs of the joint project and should not be part of compensation payment considerations.

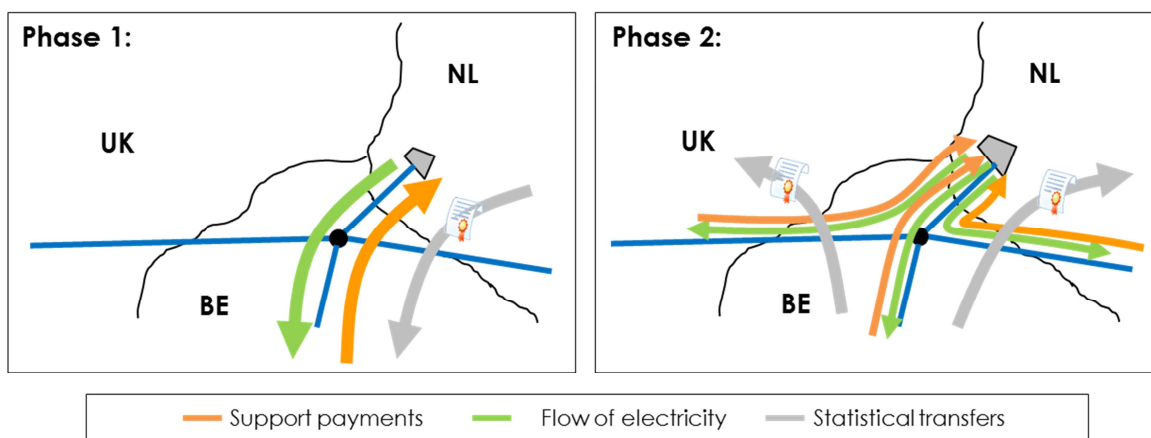
Other cost and benefit elements are unequally distributed and need to be further investigated. Most importantly, this relates to infrastructure costs. For a first rough estimation, we look at interconnection cable lengths and the maximum capacities that will be used by the wind park. Since we assume that the offshore grid infrastructure will be built independently of the joint project, the costs connected to the joint project arise from the lost opportunity of using the interconnector cables for transfer between markets. The costs are thus mainly lost income of congestion rents accrued by the respective operator of the interconnector (TSO or third party investor) and the corresponding 'stranded investment' into the cable. The connection from the offshore hub to Belgium is 30km; and the full cable capacity of ca. 1000MW will be required (at least at first and while it is still uncertain whether the wind park receives support by the UK and the Netherlands). The interconnection from the offshore hub to the Netherlands is 50km; and 300MW are needed for the wind park at times of maximum production. The distance to the UK is 110km; and also here, 300MW can be attributed to the wind park. This corresponds to a rough cost distribution of 40%-20%-40%. Here, the UK has comparatively high cost and the Netherlands comparatively low cost. It has to be noted that a loss of income only occurs on that part of the interconnector, where the physical transfer flows are reduced by the flow from the wind park, i.e. in the direction of flow between markets. Since three countries are connected to the offshore hub, only one of the connections to the offshore hub will be affected at each time. With our simplified assumption from above (i.e. that on average the physical flows correspond to the RES support shares), all TSOs will be affected rather equally over a longer time horizon. However, it should be subject to further investigation if the impact on income can realistically be expected to be equal.

The Netherlands incurs 100% of all cost related to the location of the wind farm. As mentioned above, the area is currently used for sand extraction and for shipping routes. A displacement of such alternative utilisation of the area may be costly for the Netherlands. Biodiversity and landscape cost could also be incurred, especially regarding the Zeeland Bank area, as mentioned above. We assume the costs from landscape effects (especially visual impacts) to be very limited, as the site is located well outside the 12-mile zone.

The amount and allocation of employment and innovation effects in each country depends on the number of contracts signed with equipment manufacturers and service providers. We assume that, based on competitive principles, procurement tenders will be undertaken by the TSO as well as the wind park investor. Companies from each of the countries may bid to win contracts. Installation and maintenance services, for instance, could be operated from several possible ports – the ones that can offer the best prices will win the contracts. Realistically, this will probably be either Dutch or Belgian ports.

2.3 Transfers and compensation: creating a win-win situation

The below figure illustrates broadly the transfers in the two separate phases of the joint project.



In the first phase of the project, a joint project agreement is made between Belgium, the Netherlands and the UK, including access rights, procedures for granting permits and licenses, and the optional transfers of RES benefits generated by the wind park.

The joint project agreement should include compensation payments from Belgium to the Netherlands that, in the first instance, should cover at least the following elements:

1. displaced alternative utilisation of the area (sand extraction and shipping routes)
2. biodiversity and landscape costs
3. lost option value of using the site for Dutch offshore wind development

No visual impacts or other adverse landscape effects are foreseen. If detrimental effects on Zeeland Bank can be excluded, for instance, from placing the wind farm in the north-west part of the Borssele site, the biodiversity and landscape costs can be assumed to be around zero. We suggest that the Netherlands are compensated for their displaced alternative utilisation of the area (sand extraction and shipping routes), and for the lost option value of using the site for Dutch offshore wind development. We suggest these compensation payments to be directly linked to the amount of off-taken electricity (in MWh annually). This will ensure that whenever the 300 MW of the wind park are

transferred into the Dutch scheme, the compensation payments are reduced accordingly. The compensation payments shall include all required payments, so that the statistical transfers do not have a separate price.

In the second phase, when the wind park operator has concluded support agreements with the Netherlands and the UK, the RES benefits must be transferred according to the share of support that each of the participating countries has taken over.

In this phase, the optional transfers from the joint project agreement are activated. Between Belgium and the Netherlands, all cost allocation is done through the compensation payments. We thus suggest simple netting out of the RES benefit volumes, so that the RES benefits are transferred at the same net 'price' in both directions. It should though be noted that the Netherlands incur a relatively low interconnection cost as compared to the other two countries. Additionally, the wind farm might bid into the Dutch scheme at relatively low cost as compared to a comparable domestic development, because of the shorter connection cost (to the offshore hub as compared to Dutch shore) and because of the securities placed by the Belgian government ('fall-back' option into Belgian support scheme). If the Netherlands have incurred a benefit there, it might be reasonable that this benefit is shared in some way, for instance, through a reduction of the compensation payments.

In regards to the UK, the incurred costs for the RES development are already relatively high, because of the long interconnector. In principle, Belgium could be compensated somewhat for assuming the risk of developing the wind park in the first instance and providing the fall-back guarantee on support payments. Since this is however in the interest of Belgium, we do not find additional reasoning for compensation payments between the two countries. We therefore suggest setting the price of the transfers of RES benefits between Belgium and the UK to zero, or to a symbolic 1 EUR per year (this is assuming that neither of the countries are more or less affected by physical flows or income loss than their share of the project).

In regards of the statistical transfer from Belgium to Luxembourg, the contract would include a project-specific transfer of RES benefits. In principle, one could also imagine that statistical transfers are made on a more abstract, technology-neutral level. However, in this case, the production volumes and the price shall be directly linked to the joint project. Therefore, we suggest agreeing on volumes in terms of a certain percentage of the annual production from the offshore wind park, i.e. 10%. The price of the RES benefits could be directly linked to the amount Belgium pays for the support plus an 'administration fee' and a risk premium for Belgium. This way, the relation of Luxembourg to the offshore wind park becomes more immediate and tangible. Potential issues with this set-up could be that the annual volumes from the project for Luxembourg will be uncertain, as is the total payment from Luxembourg to Belgium. On the one hand, such varying payments might not be approved by parliament in Luxembourg, where at least a limit on maximum annual payments is expected. On the other hand, the benefit from having a share in a concrete project could be for Luxembourg to have a better chance of getting public support for the action, as a tangible production is connected to the payments. Even physically, some of the production might end up in the grid in Luxembourg.

Overall, all countries can benefit from the joint project. Belgium benefits from gaining access to additional wind resources, which will help meeting the ambitious RES targets. 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 which might 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. The following table summarises some of the economic benefits and risks of the cooperation:

Table 1: Overview of economic benefits and risks for entering into the joint project

	BE	NL	UK	LUX
Benefits	- access to additional offshore wind on Dutch territory	- savings on connection cost (wind park connected to offshore hub instead of Dutch shore) - option on 300MW offshore wind at comparably low cost	- option on 300MW offshore wind at competitive cost	- option on RES benefits from 100MW offshore wind development
Risks	- Might end up with having to support the full 1000MW project	- Lost opportunity to develop the full 1000MW on Borssele site - Lower interconnection capacity to offshore hub and lost income from congestion rents	- Lower interconnection capacity to offshore hub and lost income from congestion rents	- Volumes on RES benefits are more uncertain than with a technology-neutral statistical transfer

3 Potential obstacles and how to overcome them

3.1 Pricing the option

The joint project agreement will include a compensation payment to the Netherlands regarding the lost option value of using the site for Dutch offshore wind development.

It may be difficult for the Netherlands to put a price on this lost option, especially since there is still discussion regarding the 2030 renewables targets and uncertainty about further developments afterwards. Also, due to unforeseen developments in other renewable energy technologies, more or less offshore wind might be required even if national targets are defined. As a consequence, the Netherlands might be reluctant to give up the site and might either not want to grant the site to the joint project at all or only at a high premium. The option to 'buy back' 30% of the wind park if desired should act as partial mitigation measure.

Additionally, the joint project agreement could include a clause that opens up for additional cooperation and new joint projects, also on Belgian territory, where the Netherlands could get access to additional offshore wind production, up to a total of 700 MW, so that no loss in option value occurs. In this case, Belgium would pay the Netherlands for giving up the options of offshore development at the Borssele site with an additional option of offshore development elsewhere. Of course, the conditions need to be somewhat comparable and potentially the amount might have to be adjusted accordingly.

3.2 Electricity market integration and power flows

The issue of market access and physical flows has been discussed in some detail in section 1.2. There are still some open questions related to this issue, especially in the area of where market access can and best should be granted as well as what the consequences would be. The current requirement of physical import of RES electricity into the British electricity system poses additional challenges. In the ongoing discussions with Ireland, this issue was 'worked around' as there the joint project is envisaged to have a direct connection to the British grid only without access to the Irish system. This way, all volumes generated by the joint project would automatically be proven to be imported. Our case is significantly more complicated than that and thus some open issues remain related to the import requirement.

If the wind park got its UK market access point directly at the offshore hub, it could feed into the British system from there. Delivery into the UK system would be implicitly proven, no matter into which direction the electricity flows on the interconnector. It is still an open issue if the UK can grant such a market access point on Belgian territory and if it would be possible to grant such a market access point at the offshore hub, where then three markets would be directly adjacent.

As the eligible volumes for the CfD support in the UK are (under the current framework) most probably connected to physical (measured) import volumes and not trading volumes, another issue could arise regarding volume determination. If the wind park would send production volumes to the UK via trades and capacity bookings, then these volumes would be traded volumes, which are not necessarily the exact production volumes, because of forecast errors, block sizes etc. However, accepting trading volumes as basis for RES support determination is common practice for other similar schemes (Germany, Denmark). It should also be noticed that in case of LECs⁸, the UK has previously accepted traded volumes and flows rather than physical flows to determine eligible volumes for support. If the UK accepted trading volumes as proof of import, then alternatively, also capacity bookings on an existing interconnector project (such as the NEMO cable) would be possible, so the joint project could be undertaken even if the UK's direct connection to the offshore hub will not be realised.

As there currently exists no regulation regarding electricity production in offshore grids, these considerations are currently still rather hypothetical and will most likely only be solved with the implementation of the first wind park in an offshore grid. Further investigations are required in order to give final answers on this issue.

3.3 The issue of different stakeholders involved

Potential obstacles could arise from the integration of the joint project into the newly developed offshore grid infrastructure. We assume that the interconnector construction is done separately to the joint project and creates value in itself. However, the joint project will affect the income on the interconnector. This poses a risk for the investors in the interconnectors, if they are not compensated for the loss. Potential compensation payments to the TSOs need thus to be investigated. However, if additional costs are imposed on the wind park, e.g. through capacity payments for the interconnector, this might affect the investment attractiveness of the wind park itself. Moreover, discrimination issues might arise if the offshore wind park has to cover more of the connection cost than a comparable offshore renewable producer in the respective countries.

On the other hand, the TSOs might be affected differently from the wind park, depending on the prevailing flow of electricity through the interconnector lines. It might then be necessary to include these elements in the compensation payments between countries as part of the joint project agreement.

Finally, there might be very different approaches required if one of the interconnectors is built on basis of a merchant approach (which is likely in the UK), as compared to national TSOs.

⁸ Levy Exemption Certificates, issued under the Climate Change Levy

3.4 Non-compliance risks

There are several different risks of non-compliance. All parties involved in the joint project could be subject to non-compliance.

We have added sanctions for non-compliance in the template agreements in the appendix, e.g. if the host Member State fails to transfer the RES benefits in due time etc. Section 4.1 mentions the most important sanctions for the joint project agreement.

Also, in the support agreements between the wind park operator and the different countries, sanctions are envisaged – however, these would not differ much from ‘normal’ RES producers.

An important source of non-compliance issue could be interconnector downtime and related imbalances or sales losses on power markets for the wind park operator. With the suggested set-up as described in section 1.2, in which the market access points of the wind park are directly at the offshore hub, the risks should be minimal for the wind park operator – He will be only eligible for downtime on the connection from the wind park to the offshore hub, which we anyway suggest should be operated by the wind park operator himself.

In general, much of operating and contractual risk should be covered as Belgium gives a guarantee to support the wind park 100% if no agreements with the other countries are made. So, there is a rather simple fall-back position for the wind park with stable income and a fixed support payment. All other contractual arrangements with the Netherlands and with the UK will increase the benefit for the joint project without risking a loss.

3.5 Public opinion

As with any other Cooperation Mechanism and potential support of RES outside a country’s own territory, there might arise public acceptance issues. The Netherlands are currently exploring options of ‘opening up’ the SDE+ scheme for RES production from abroad. However, the energy agreement from autumn 2013 still indicates a strong emphasis on domestic deployment, including offshore wind.

In the UK, the current requirement to physically import all RES production that might be eligible for support also reflects the public opinion that whatever electricity is paid for by British consumers should also be consumed by them. With the set-up of a joint project within an offshore grid, this requirement is challenging, as it might require suboptimal capacity bookings – and not even then is the physical flow direction guaranteed. Such requirement should thus be revisited. It is as yet unclear what the public reaction might be. Here, a joint project that is actually connected to the UK grid via an interconnector seems though less challenging than, for instance, statistical transfers with a country on the other side of Europe.

Belgium, in its here described role as driving force behind the joint project, will assume a large risk, as in the first phase of the project it will be yet unclear if the wind park operator will be able to agree with the UK and the Netherlands on respective support payment arrangements. If this is not the

case, Belgium will be left with the full wind park, both in terms of support payments and in terms of integration into the market and domestic grid.

Luxembourg seeks statistical transfers. However, connecting the transfers to a specific project, especially an offshore wind park might lock Luxembourg in a position where they end up paying more for the RES benefits than absolutely necessary. There will be a trade-off between procuring the tangible RES benefits stemming from the joint project and a potential lower cost option. Both cases might have benefits and disadvantages in regards to public communication and will depend very much on the character and mood in the public discussion at the time of decision.

3.6 State aid issues

All Member States involved in this case study have a support scheme that has been notified and authorised as State aid. As in principle opening up the support scheme to installations in other Member States would not take away nor change the nature of the State aid involved but would only extend it to a wider range of beneficiaries one might consider such unproblematic from a State aid perspective, and one may as regards the compatibility assessment refer to the respective decisions of the European Commission.

Still, it would – as State aid can only be authorised when necessary and proportionate – need to be ensured that the renewable energy installation in another Member State / the joint project will not receive financing from two Member States at the same time to such extent that it results in overcompensation. Thus it may be advisable to integrate a provision into the national renewable laws that no aid will be paid to a producer who for the same amount of energy already receives financial support from another Member State.

However, certainly the changes would need to be notified to the European Commission. Further, one may note, that according to the Guidelines for Environmental and Energy Aid 2014-2020 as they have entered into force in July 2014, a change to an existing support scheme may trigger the need for its adaption to the provisions of the Guidelines (par. 251). Whereas the UK has recently received approval for its new support scheme under the new State aid rules, for the schemes of Belgium and the Netherlands there might be a need for certain adaptations. However, both of the latter already run schemes which comply with fundamental principles of the EEAG (tendered premiums or certificate scheme), so a systemic change will in fact not be needed⁹. This – in particular the related administrative efforts – may constitute a disincentive by itself. However, for this case study we assume that they all bring their support schemes in line with the Guidelines, and - as the case may be – all introduce some form of tendering, so that but for the amendments needed, there should be no further State aid concerns.

⁹ Belgium's support scheme might though be changed into a (sliding) premium scheme with competitive pricing. However, considerations are ongoing, which is why we make reference to the existing scheme.

As regards Luxemburg, there would be no change to the support scheme and no payments to any industry or undertaking foreseen, but under the contract for the statistical transfer Luxemburg merely pays a certain amount of money to the Belgian State. It has not been mentioned for what purposes Belgium is going to use that amount of money. Thus, there are for the moment no State aid concerns.

3.7 Other legal barriers

Directive 2009/28/EC in Art. 7 and 8 refers to the host Member State for doing the notifications on a joint project. However, in this case study, the Netherlands, as the host Member State, would not be the Member State where the electricity is fed into the grid and thus measured. This would be Belgium. So it would be more practical if Belgium could do the notifications, which however would sit uncomfortably with the provisions of the Directive. Thus here the provisions of the Directive pose a certain barrier.

For the rest, no other legal barriers have been identified in the case study. The problem of the (potential) need to adapt the support schemes to the requirements set out in the Guidelines for Environmental and Energy Aid 2014-2020 when changing them has been mentioned above.

In addition, there may be problems with the licensing it appears from the context, but those may be addressed in the contract for the joint project. Extraterritorial application of Belgian law however does not seem a suitable solution. A solution in this regard is suggested below, i.e. solving such issues in the tendering specifications, thus in the context of the Responsible Body wherein the Netherlands and Belgium may work together.

4 Practical arrangements

4.1 Concrete contractual requirements between countries

The following contracts are necessary for the undertaking of the joint project in the above described setting.

- Agreement for a joint project between Belgium, the Netherlands and the UK
- Agreement for a statistical transfer between Belgium and Luxemburg

This assumes that the option for the transfer of RES benefits is directly described in the joint project agreement (as implemented in the template agreement in Appendix A). If this is not desired, also separate agreements on statistical transfers could be made (Appendices C and D).

We also assume that the access to land and related compensation payments are fully described in the joint project agreement. Alternatively, also a separate land lease agreement could be made.

Joint Project Agreement:

Responsibilities of Belgium	Responsibilities of the Netherlands	Responsibilities of both	Responsibilities of the UK
Provision of financial support to the project operator. Grid access for project, off-taking of all electricity, whenever technically possible. Measuring of the production. In case of non-compliance, Belgium will lose all rights under the agreement and the area will again be at disposal for the Netherlands.	Transfer of RES benefits to Belgium and the UK according to shares <i>(depending on if option is called upon)</i> . Notification of the European Commission about joint project In case of non-compliance, either a financial compensation or a statistical transfer of alternative RES benefits is possible.	Permitting and licensing (through 'Responsible Body')	Providing market access to the joint project

4.2 Permits and licensing

The Dutch state is the legal owner of the territory in the EEZ (Exclusive Economic Zone). Mandated authority is the *Rijkswaterstaat*, which is part of the Ministry of Infrastructure and the Environment¹⁰. To build and operate an offshore wind farm in the Dutch North Sea, a permit is needed, based on the Public Works Act. To obtain the permit, an Environmental Impact Assessment (EIA) has to be executed. The granted permit is valid for a period of 2 years. It is not transferable without permission by the Ministry in advance.

In 2009, the Government wanted to formulate a new licensing regime to optimally link the allocation of grants under the SDE and obtaining the required permit under the Water Act.

In Belgium, offshore wind parks need three permits:

- A domain concession (the right to occupy the space), granted by the federal Minister of Energy, after application to the Commission for Regulation of Electricity and Gas (CREG)
- A licence (the right to operate the wind farm), granted by the Ministry of Environmental Affairs
- An authorisation (the right to build and construct the wind farm), granted by the Ministry of Environmental Affairs

Additionally, a number of permits have to be obtained on regional level (Flemish), with regard to onshore grid connection. However, since we assume a connection to the offshore hub, this is not directly relevant for this case.

For the joint project, we suggest that representatives from each relevant authority from the Netherlands and Belgium become part of a 'Responsible Body' and agree on the specific permitting and licensing conditions for the joint project. We suggest that, in the joint project agreement, the Netherlands ensures that all necessary construction and operation permits are obtainable in a non-discriminatory manner and could be issued without delay. As a special exception to Dutch national rules, it could be of benefit to guarantee that the joint project will not be subject to more stringent provisions than what would be applied under Belgium law. This seems to be not an issue in this case, but a detailed analysis of specific regulation has still to be undertaken (including, for example, limits for noise levels etc.). The same should be the case for additional permits required on Belgium territory, such as right of way, and the connection to the Belgian offshore hub.

4.3 Finding the project developer

We suggest that the project developer is selected based on a tender procedure. The 'Responsible Body' could set the tender specifications, so that Belgium and the Netherlands are both able to influence the specifications according to their national regulation. The winning party will then both be

¹⁰ <http://www.government.nl/ministries/ienm>

able to obtain the necessary permits and licenses from Dutch and Belgian authorities, and will be granted financial support under the Belgian renewable support scheme.

4.4 Grid Access

The joint project will feed into the grid via an offshore hub in Belgium. This has never been done before in this way. Arrangements will have to be found with ELIA.

4.5 Granting of renewable support

In Belgium, the Federal Electricity Regulatory Authority (CREG) is responsible for the granting of support for offshore wind. As mentioned above, the support for offshore wind consists of a (minimum) fixed price certificate system¹¹. The minimum price is determined by law.

In the Netherlands, the Ministry of Economic Affairs¹² is responsible for the granting of support. They apply the SDE+ system to allocating support to renewable installation. Part of the joint project shall be made eligible for bidding in to the SDE+ system. The SDE+ system pays out premiums, which are adjusted depending on the Dutch market price. The premium to be paid out is determined by a competitive auctioning process. Currently, the Dutch scheme only grants support for domestic production that is directly connected into the Dutch grid. Respective required changes in law are discussed in the next section.

In the UK, the electricity market reform has triggered a change in renewable support. As of April 2014, a new scheme, namely the 'Contracts for Difference' (CfD) for Renewables has come into force. This is a sliding feed-in premium system, with reference market price based on the British spot market. The level of the guaranteed price ('strike price') is negotiated or allocated through a competitive auction process (currently under discussion). During three years, there is a transition period in which new installations can choose between the new CfD system and the Renewable Obligation system.

4.6 Suggested amendments to national renewable energy laws

In this case study, three Member States (Belgium, the Netherlands and the UK) want to 'open up' their national renewable energy laws and give access to generation first fed into the grid in another Member State. All of them want to 'open up' on equal terms, thus do not seek special provisions for the production from the joint project. Accordingly one needs to look to their national renewable energy laws and see how this can be done.

¹¹ Belgium's support scheme might be changed into a (sliding) premium scheme with competitive pricing. However, considerations are ongoing, which is why we make reference to the existing scheme.

¹² <http://www.government.nl/ministries/ez>

4.6.1 Belgium

Provision: Energy Law of 1999

Art. 6. § 1. Met inachtneming van de bepalingen vastgesteld krachtens §,2, en onverminderd de bepalingen van de wet van 20 januari 1999 ter bescherming van het mariene milieu in de zeegebieden onder de rechtsbevoegdheid van België, kan de minister, (na advies) van de commissie, domeinconcessies voor een hernieuwbare duur van maximum dertig jaar verlenen voor de bouw en de exploitatie van installaties voor de productie van elektriciteit uit water, stromen of winden, in de zeegebieden waarin België rechtsmacht kan uitoefenen overeenkomstig het internationaal zeerecht. <W 2005-06-01/32, art. 6, 010; Inwerkingtreding : 09-11-2008>

§ 2. Bij een in Ministerraad overlegd besluit, na advies van de commissie, bepaalt de Koning de voorwaarden en de procedure voor de toekenning van de concessies bedoeld in § 1, en inzonderheid:

- 1° de beperkingen ter vermijding dat de bouw of de exploitatie van bedoelde installaties het gebruik van de reguliere scheepvaartroutes, de zeevisserij of het wetenschappelijk zeeonderzoek in overdreven mate zou hinderen;
- 2° de maatregelen die moeten worden genomen voor de bescherming en het behoud van het mariene milieu, overeenkomstig de bepalingen van voornoemde wet van 20 januari 1999;
- 3° de technische voorschriften waaraan de betrokken kunstmatige eilanden, installaties en inrichtingen moeten beantwoorden;
- 4° de procedure voor de toekenning van bedoelde concessies, met zorg voor een gepaste publiciteit van het voornemen tot toekenning van een concessie alsook, in voorkomend geval, voor een effectieve mededinging tussen de kandidaten;
- 5° de regels inzake de overdracht en de intrekking van de concessie.

De maatregelen bedoeld in het eerste lid, 2°, worden vastgesteld op gezamenlijke voordracht van de minister en van de federale minister die bevoegd is voor de bescherming van het mariene milieu.

§ 3. Artikel 4 is niet van toepassing op de installaties bedoeld in § 1.

Belgian law allows the Minister to give concessions for offshore wind parks in territories over which Belgium may exercise jurisdiction in accordance with international law of the seas. Normally this would be what is considered "Belgian territory".

The law on financial support refers to offshore wind parks having a concession according to this very Art. 6.

Thus it would be the easiest solution to add a paragraph according to which – by exception and based on a valid international agreement with the other respective Member State(s) – the Belgian Minister can give a concession to offshore wind parks in the territory over which he may do so in accordance with the international agreement.

Alternatively one may argue that the agreement between the Netherlands and Belgium would – though limited for a certain period of time – give Belgium (limited) jurisdiction over such respective territory, so that no change to Art. 6 would be required. However, given that the definition of jurisdiction is more comprehensive than what is covered by a lease agreement, it would be recommendable to make a separate provision as suggested above.

Suggestion for a change:

Add:

Art. 6. §1bis "Under the same conditions as applicable to offshore wind parks in territories over which Belgium may exercise jurisdiction according to the international law of the seas as set out in this article, the Minister may grant concessions for the construction and exploitation of installations for the production of electricity from water, waves of wind in territories over which other Member States have jurisdiction, provided that there is a valid international agreement between Belgium and such other Member States granting Belgium such right. Such concessions shall in no event extend further than the rights Belgium has acquired over such territory in accordance with said international agreement."

4.6.2 The Netherlands

Provision: Renewable Energy Act of 2007

Art. 1

„j. elektriciteitsnet: een net als bedoeld in artikel 1, eerste lid, onderdeel i, van de Elektriciteitswet 1998 en een elektriciteitsnet dat is gelegen binnen de Nederlandse exclusieve economische zone dat is verbonden met een net als bedoeld in artikel 1, eerste lid, onderdeel i, van de Elektriciteitswet 1998;“

Dutch law distinguishes between support to electricity fed into the Dutch grid and electricity not fed into the Dutch grid. Principally, with that, it would be already possible to get support for electricity not fed into the grid. However, this would be under different conditions.

Thus it would be easiest to extend the definition of "grid" into which the electricity needs to be fed into in order to be supported. Two options are possible: Either opening to all electricity from all Member States (by deleting the definition) or including a reference to an international agreement in the definition, to limit it to the specified projects.

In both cases physical import would not be a requirement, as support would become available at the moment the electricity is fed into the grid elsewhere.

If physical import would have been desired, a different arrangement would need to be found.

Suggestion for a change:

Option 1: opening to production everywhere in the EU

Delete the definition of electricity grid in Art. 1 j

(if no link to the Electricity Law and thus the grid being on Dutch territory, then support principally open to all installations)

Option 2: opening to production only from the joint project

Change Art. 1:

"j. electricity grid: a grid as referred to in Art. 1, par. 1, sub I, of the Electricity Law 1998, a grid within the Dutch exclusive economic zone connected with a grid as referred to in Art. 1, par. 1, sub I, of the Electricity Law 1998, or a grid equivalent to the former based on a valid international agreement between the Netherlands and the Member State in which such grid is located, provided that it is connected to a grid as referred to in Art. 1, par. 1, sub I, of the Electricity Law 1998, or a grid within the Dutch exclusive economic zone connected with a grid as referred to in Art. 1, par. 1, sub I, of the Electricity Law 1998"

4.6.3 The UK

Provision: Law of 2012 (Feed in Tariffs Order)

Art. 9 (10)

"grid connection agreement" means an agreement in writing with a transmission licence holder or distribution licence holder for the making of a grid connection; and "transmission licence holder or distribution licence holder" means the holder of a licence under section 6(1)(b) or 6(1)(c) of the 1989 Act(16);

British law distinguishes between installations connected to the grid and installations not connected to the grid. For installations connected to the grid, a grid connection agreement with a British grid operator is required for accreditation of the installation.

Two options exist:

One could delete the reference to the British grid operator, in principle opening to all power plants, or one could use a specification by referencing an international agreement.

However, as the UK currently politically requires physical import, further arrangements are necessary, and one would have to make sure not only that there is a grid connection agreement but that there is a grid use (in case interconnector use) agreement which allows for the electricity to “arrive” in the UK.

Suggestion for a change:

Option 1: opening to all installations

Art. 9 (10)

“grid connection agreement” means an agreement in writing with a transmission licence holder or distribution licence holder for the making of a grid connection; in case of transmission licence holders or distribution licence holders other than the ones referred to under section 6(1)(b) or 6(1)(c) of the 1989 Act(16), in addition, an agreement over the grid use has to be provided allowing for the use of sufficient grid and interconnector capacity for the amounts of electricity to be produced to reach the grid of a transmission licence holder or distribution licence holder referred to under section 6(1)(b) or 6(1)(c) of the 1989 Act; ”

Option 2: opening only to specific projects

“grid connection agreement” means an agreement in writing with a transmission licence holder or distribution licence holder for the making of a grid connection; “transmission licence holder or distribution licence holder” means the holder of a licence under section 6(1)(b) or 6(1)(c) of the 1989 Act(16), or any transmission licence holder or distribution licence holder equated with such due to a valid international agreement ; in case of such trans-mission licence holders or distribution licence holders other than the ones referred to under section 6(1)(b) or 6(1)(c) of the 1989 Act , in addition, an agreement over the grid use has to be provided allowing for the use of sufficient grid and interconnector capacity for the amounts of electricity to be produced to reach the grid of a transmission licence holder or distribution licence holder referred to under section 6(1)(b) or 6(1)(c) of the 1989 Act; ”

4.6.4 Luxembourg

Luxembourg does not need to open up its national support scheme. Instead of supporting the electricity generated in the joint project by its own feed-in system, Luxembourg will enter into a pure statistical transfer agreement – and will pay a certain amount of money to Belgium for the renewable energy credits. Little is known on how this shall work and how it shall be financed, but it appears a relatively easy solution to finance the statistical transfer either from the same fund as the renewable energy support is generally financed in Luxembourg or by establishing a separate fund. Changes to the renewable energy legislation *strictu sensu* are however not required.

4.7 Notification to the European Commission

After the joint project has been agreed between Belgium and the Netherlands, the Netherlands (as the host country) shall notify the European Commission of their intentions. The following information must be submitted:

- A description of the proposed installation
- The proportion or amount of energy generated by the offshore wind park that shall be counted towards the national target of Belgium instead of that of the Netherlands
- The time period for which the electricity generated by the joint project shall be counted towards the target of Belgium, in full years
- Written consent by Belgium about the content of the notification

When the project is in operation, the European Commission shall, within three months of the end of each year, be notified of the total amount of energy generated by the project as well as the amount of that energy which is to count towards Belgium.

5 Potential implementation process & timing

5.1 Ambitious time plan: Operation until 2020

If the joint project shall contribute to reaching the 2020 targets on renewable energy, then the following time plan should be considered:

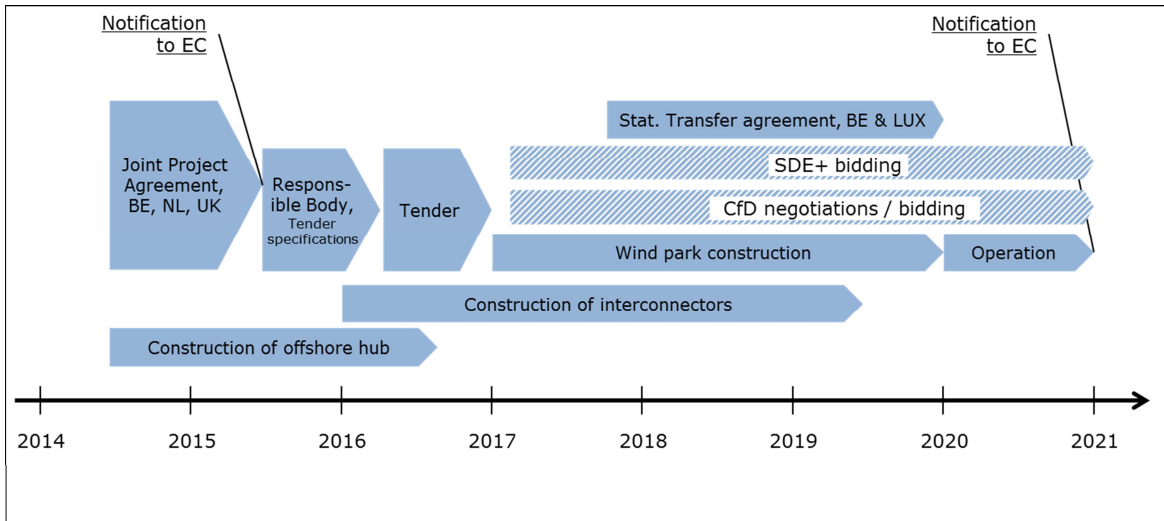


Figure 4: Ambitious time plan with a targeted operation of the joint project until 2020

If the wind park shall be operational by 2020, then construction needs to start in 2017 at the latest. Allowing for approximately three years of construction is already a quite ambitious assumption for such a large wind park. Additionally, there should be at least 8-9 months reserved for the undertaking of the tender for the wind park. This, of course depends on the design specifications, for instance, if there should be one or two bidding rounds, etc. This means that by the end of 2016, all specifications necessary to undertake the joint project need to be in place. At least, this needs to comprise the joint project agreement as well as the establishment of the 'Responsible Body', which defines all tender specifications, including also the permitting and licensing situation. This leaves only a very limited amount of time for the negotiations around the joint project agreement. We suggest that this needs to be in place by mid-2015, so that the ambitious timing can be realised.

In parallel, the project requires significant infrastructure construction. The offshore hub will need to be built in Belgium, best until mid-2016, before the end of the tender process – otherwise the associated risks might prohibit investor interest. Then, interconnection lines to the UK and the Netherlands need to be in place, best by mid-2019, so that the wind park project can start bidding into the UK and Dutch support schemes. However in our case set-up, the actual timing of the interconnectors is flexible, as the joint project also can start operating in a smaller setting (full

support by Belgium), and then the broadening of the scope can be added optionally with flexible timing.

5.2 Alternative time plan: Operation before 2030

The above described ambitious time plan may in principle make it possible to start operation of the joint project until 2020. However, it would require that the tendering and development of the wind park begins even before the necessary offshore infrastructure (i.e. offshore hub and interconnectors) are in place. This poses a rather large risk on the project.

Therefore, we will here present an alternative time plan, which is developed on a bottom-up basis. In this case, it has to be noted that the development of the joint project is no longer mainly driven by a 2020 target fulfilment, but rather by a long term cooperation interest of the participating countries. Such a bottom-up process could be based on the following principles (Figure 5):

- After the negotiation of a joint project agreement, required changes in laws in the respective countries may take 10-18 months, before the 'Responsible Body' can be established.
- The construction of the offshore hub and the interconnectors might take 5-10 years, depending on the deemed urgency of the infrastructure development (e.g. their inclusion in the Ten Year Network Development Plan).
- The joint project will only be tendered when the offshore hub and at least the interconnector from the offshore hub to the Netherlands are certain and a commissioning date foreseeable.
- At least one year should be reserved for the tender, if it should be undertaken in two rounds (a pre-qualification round and a final bidding round). This will be especially relevant if a competitive element is included in the support scheme (e.g. sliding premiums).

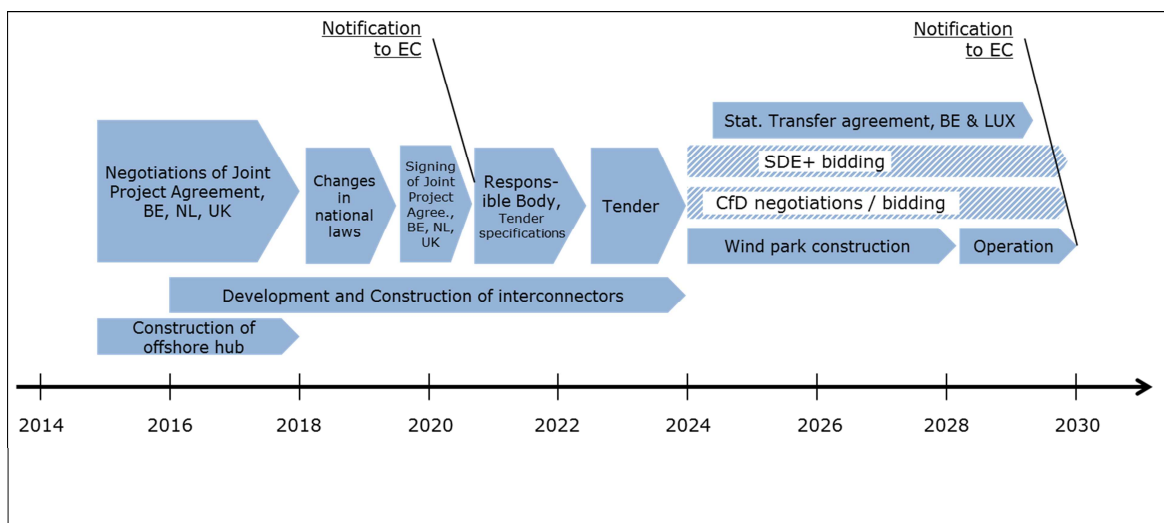


Figure 5 Alternative time plan with a possible operation of the joint project until 2028

6 Conclusions

The focus of this case study was to practically show how such cooperation could look like in order to be politically feasible.

We have shown that all involved countries can potentially benefit from the joint project. Belgium benefits from gaining access to additional wind resources, which will help meeting the ambitious RES targets. 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 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.

The here described joint project and the suggested set-up are heavily influenced by their first-mover character and the ambitious time planning – if the project should have a chance of coming online before 2020, then a 'semi-integrated' solution for the cooperation seems most realistic. In this case, the Member States will cooperate regarding coordination of infrastructure development and timing, and also regarding statistical transfers, but not regarding the support scheme. In an alternative time plan, where operation could be possible in 2028, also a more integrated strategy, e.g. including a joint fund for the support payments, could be envisaged.

In the described setting, we assume that each country will treat part of the joint project as being on their own territory and will integrate it into their own renewable support system. So, in Belgium, the wind park will receive certificates at a minimum price, in the Netherlands, the wind park will be able to bid into the SDE+ scheme and win a premium price, and in the UK, the wind park might negotiate a CfD contract. In order to minimise the risk for the investor and upkeep investment incentives, Belgium will guarantee the wind park operator that the full production can be granted support in Belgium. The contracts with the other two countries are thus regarded as a source of potential alternative income for the investor. This setting minimises the need for collaboration between Member States (e.g. no joint fund need to be agreed upon for support payments), and it also minimises the need for changes in national law.

Once a project has shown the feasibility of joint projects for offshore wind in the North Sea, a more integrated strategy could however be beneficial. E.g. a joint support scheme for the area could make it easy to add new projects in a common scheme and the whole area could be more strategically developed over time.

APPENDIX A: Proposed Template Agreement for a Joint Project between Belgium, the Netherlands and the UK

<p style="text-align: center;">Agreement between</p> <p style="text-align: center;">Belgium, in the following referred to as “the off-taking Member State”</p> <p style="text-align: center;">and</p> <p style="text-align: center;">the Netherlands, in the following referred to as “the host Member State”</p> <p style="text-align: center;">and</p> <p style="text-align: center;">the United Kingdom, in the following referred to as “the secondary off-taking Member State”</p> <p style="text-align: center;">on</p> <p style="text-align: center;">THE ESTABLISHMENT OF A FRAMEWORK FOR A JOINT PROJECT FOR THE GENERATION OF ENERGY</p> <p style="text-align: center;">FROM RENEWABLE SOURCES</p> <p>Preamble</p> <p>[...]</p> <p>Part I OBJECTIVE AND DEFINITIONS</p> <p>Article 1 Objective</p> <p>(1) The objective of this Agreement is to provide a legal framework for the implementation of a Joint Project under Articles 7 and 8 of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (hereafter: Directive 2009/28/EC) which provide the basis for Member States of the European Union to cooperate to realise joint projects relating to the production of electricity, heating or cooling from renewable energy sources.</p>
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The aim of the implementation of joint projects between Member States is to share the produced energy for the purpose of accounting towards their respective targets.

(2) The Parties enter into this Agreement with the purpose to

- a) contribute to the cost-efficient achievement of the EU Member States' mandatory national targets by allowing them to count the Joint Projects' renewable electricity production towards their national renewable energy target;
- b) enable the construction of additional renewable energy generation capacity based on wind power, to be exploited by an offshore wind park located within the Dutch exclusive economic zone;
- c) [... additional points]

Article 2 Definitions

Pursuant to the Agreement the following terms are defined as

- a) Joint Project: the installations generating energy from renewable sources and which are operated under this agreement;
- b) Directive 2009/28/EC: Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC;
- c) National support scheme: according to Art. 2 lit. k) of the Directive 2009/28/EC any instrument, scheme or mechanism applied by a Member State or a group of Member States, that promotes the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased;
- d) Renewable energy target amounts: the statistical value of energy from renewable sources for the purpose of compliance with the mandatory national targets for the share of energy from renewable sources in final energy consumption as set out in the third column in part A of Annex I to the Directive 2009/28/EC;
- f) Joint Project operator: legal entity implementing and operating the Joint Project;
- g)...

Part II RIGHTS AND OBLIGATIONS OF THE PARTIES

Article 3 Cooperation

The Parties shall co-operate in order to establish and maintain necessary and favourable conditions for the implementation of the Joint Project.

Article 4 Obligations of the host Member State

(1) The host Member State ensures that construction permits and all other necessary permits and licenses for the construction and operation of a Joint Project shall be obtainable in a non-discriminatory manner and shall be issued without delay. In particular, the host Member State ensures that – as a special exception to its own national rules - for the construction and operation of the Joint Project no more stringent provisions will be applied than would be under the national law of the off-taking Member State. The conditions for the issuance of permits and licenses will be discussed within the Responsible Body established in accordance with Art. 6 of this Agreement and may be used in order to select the Joint Project in the course of the tendering procedure.

(2) The host Member State shall ensure that the Joint Project Operator is able to comply with all obligations with regard to the monitoring of production and create the necessary conditions to enable him to provide the required proof.

Article 5 Obligations of the off-taking Member State

(1) The off-taking Member State guarantees the financial support of the renewable energy production of the Joint Project during the entire support period in accordance with and at the same level as in its national support scheme.

(2) Without prejudice to Art. 5(1), in case the host Member State exercises the option to let 30% of the actual renewable energy production from the Joint Project participate in its national support scheme and use it for target compliance, as provided for below in Art. 9(2) and Art. 12(2) and in case such production wins a contract under the host Member State's national support scheme, then the host Member State has to guarantee the financial support as in accordance with its national support scheme for the production for which a contract was won.

(3) Without prejudice to Art. 5(1) and 5(2), in case the secondary off-taking Member State exercises the option to let 30% of the actual renewable energy production from the Joint Project participate in its national support scheme and use it for target compliance, as provided for below in Art. 9(3) and Art. 12(3) and in case such production wins a contract under the secondary off-taking Member State's national support scheme, then the secondary off-taking Member State has to guarantee the

financial support as in accordance with its national support scheme for the production for which a contract was won.

(4) The off-taking Member State commits to compensate the host Member State for the inability to use the land where the Joint Project is located, as well as the environmental and other direct or indirect negative impacts. The compensation payment is set at [xxx] per MWh. It shall be paid on an annual basis...

(5) The off-taking Member State ensures that grid connection, access and use as well as all licenses and permits necessary to that end shall be obtainable for the Joint Project on a non-discriminatory basis and shall be issued without delay.

(6) The off-taking Member State provides the host Member State with all information necessary in order for the host Member State to be able to meet its reporting obligations under Art. 10 of this Agreement.¹³

Article 6 Responsible Body

(1) A Responsible Body consisting of at least one representative of each party to this agreement shall be established. Each Party shall have one vote with the Responsible Body deciding by consensus.¹⁴

(2) The Responsible Body shall have the following tasks:

- a) Identification of the Joint Project and definition of the details;
- b) Definition of the tendering procedure including specification of the evaluation criteria and determination of their weighting;
- c) Selection of the bidder;
- d) Supervision of the implementation of the Joint Project, including the permitting and licensing procedures, as well as the regulations regarding monitoring, tracking and issuing of proof and verifications;
- f) Reporting back to the Parties on a regular basis.

¹³ According to the RES Directive, the host MS shall report – though in this setting, this is not the most logical set-up.

¹⁴ The exact composition has to be decided. All affected authorities should be represented in the Responsible body.

Part III SPECIFICATIONS OF THE JOINT PROJECT

Article 7 Specifications of Joint Projects

- (1) This Agreement covers a project with a maximum capacity of 1000 MW installed.
- (2) The Joint Project shall use wind power, which is to be generated in an offshore wind park located in the Borssele area, in order to be eligible under the tender procedure according to Art. 8 of this Agreement.

Article 8 Selection of Joint Projects and Tender Procedure ¹⁵

- (1) The Joint Project supported in the framework of this agreement is identified according to a tender procedure, based on transparent, non-discriminatory criteria, set and published in advance.
- (2) The tender specifications shall be agreed upon by the Responsible Body according to the terms laid down in this agreement and will inter alia include:
 - a) Local environmental aspects for the construction and operation of the project, both positive and negative;
 - b) Economic and financial, as well as technical and professional capacity of the tenderers;
 - c) In case the host Member State has communicated its intention to exercise its option for a Statistical Transfer under this Agreement, the requirement that the Joint Project for the first five years shall bid into the support scheme of the host Member States in accordance with the national legislation of the host Member State and the terms of this Agreement;
 - d) [...]
- (3) The contracts will be awarded to the project best meeting the criteria determined by the Responsible Body.

Part IV RENEWABLE ENERGY TARGET ACCOUNTING

¹⁵ In the current support framework, the tender will be about selecting the project operator. In a future competitive support mechanism, the tender might also involve competitive bidding on support levels, i.e. in a competitive sliding premium scheme as currently discussed in Belgium.

Article 9 Distribution of production for target compliance purposes

(1) The renewable energy target amounts corresponding to the energy produced in the course of the Joint Project during the production period according to Article 12 of this Agreement and fed into the off-taking Member State's electricity grid will in its entirety be statistically transferred to the off-taking Member State for target compliance purposes under Directive 2009/28/EC and under any European legislation succeeding Directive 2009/28/EC.

(2) However, as in accordance with Art. 5(2) of this Agreement, the host Member State shall retain the right to have 30% of the production to be counted to its own target for target compliance purposes under Directive 2009/28/EC and under any European legislation succeeding Directive 2009/28/EC. The host Member State may exercise such right provided that the Joint Project is successful in getting a contract for financial support in the host Member State's national support scheme within the first five years of operation of the Joint Project. In such event, the host Member State shall notify the off-taking Member State immediately.

(3) Without prejudice to the provisions above, in accordance with Art. 5(3) of this Agreement, the secondary off-taking Member State shall retain the right to have 30% of the production to be counted to its own target for target compliance purposes under Directive 2009/28/EC and under any European legislation succeeding Directive 2009/28/EC. The secondary off-taking Member State may exercise such right provided that the Joint Project is successful in getting a contract for financial support in the host Member State's national support scheme within the first five years of operation of the Joint Project. In such event, the host Member State shall notify the off-taking Member State immediately.

Article 10 Notification to the European Commission

(1) After a Joint Project has been agreed upon between the host Member State and the off-taking Member State, the host Member States shall notify the European Commission of their intentions and shall submit the following documents according to Art. 7 (3) of the Directive 2009/28/EC:

- a) A description of the proposed installation;
- b) The identification of the Member State in whose favour the notification is being made and written consent with the content of the notification by the off-taking Member State;
- c) The proportion or amount of energy generated by the plant that shall be counted towards the national target of each respective EU Member State;
- d) The time period for which the electricity generated by the joint project shall be counted towards

the Member States' respective targets in full years.

(2) Once the plant is in operation, the host Member State shall, within three months of the end of each year falling into the period notified according Art. 11 (1d), notify to the European Commission and the off-taking Member State the total amount of energy generated in the joint project as well as the amount of that energy which is to count towards the off-taking Member State's national target.¹⁶

(3) Members of the Responsible Body shall receive a copy of this notification.

Part V FINANCING ARRANGEMENTS

Article 12 Financial Commitments

(1) The financial support for the Joint Project will be provided in the form of operational support by the off-taking Member State. The operational support will be paid through the existing instruments and according to the rules of the national support scheme of the off-taking Member State. The off-taking Member State will make the necessary adaptations to its national support scheme to allow for such financing of the Joint Project.

(2) However, in accordance with Art. 5(2) and Art. 9(2) of this Agreement, the host Member State will provide financial support for the Joint Project in accordance with its national support scheme when exercising its right to use 30% of the production for target compliance under the Directive 2009/28/EC and such production has won a contract under the national support scheme. In such case, and in order to allow the participation of the Joint Project in its national support scheme, the host Member State will make the necessary adaptations to its national support scheme to allow for such financing.

(3) Further, and in accordance with Art. 5(3) and Art. 9(3) of this Agreement, the secondary off-taking Member State will provide financial support for the Joint Project in accordance with its national support scheme when exercising its right to use 30% of the production for target compliance under the Directive 2009/28/EC and such production has won a contract under the national support scheme. In such case, and in order to allow the participation of the Joint Project in its national support scheme, the secondary off-taking Member State will make the necessary adaptations to its national support scheme to allow for such financing.

¹⁶ In this joint project, the off-taking Member State has access to the measuring data. However, Art. 7 and 8 of the Directive refer to the host Member State for being responsible for reporting to the European Commission.

(4) After expiry of the support period determined by the off-taking Member State's national support scheme, the production from the Joint Project which received support from the off-taking Member State's support scheme shall no longer be eligible for support from the host Member State in the course of its national support scheme and vice versa.

(5) The Member State granting the support is responsible for notifying the European Commission for state-aid compatibility, if applicable.

Article 15 Network integration

(1) The costs for potential grid reinforcements necessitated by the Joint Project will not be borne by the project operator but by Member State in which they occur. These costs will be determined at the sole responsibility of the respective Member State.

(2) The costs of grid connection to the offshore hub are borne directly by the project operator.

(3) The costs of necessary grid reinforcements are borne by the responsible transmission system operator.

Article 16 Payment Procedure

The payments of operational support shall be made directly to the Joint Project Operator after the submission of the required proof as laid down in Art. 20 of this Agreement.

Part VI EXECUTION OF THE OPTION FOR STATISTICAL TRANSFER

Article 17 Execution of the option

(1) If the host Member State and/or the secondary off-taking Member State intend to exercise the option for a Statistical Transfer granted under this Agreement, the off-taking Member State shall be notified immediately. The host Member State and/or the secondary off-taking Member State deciding to exercise the option take the necessary measures to allow the participation of the Joint Project in its national support scheme.

(2) Contracts in the host Member State and the secondary off-taking Member State are awarded periodically. The host Member State and/or the secondary off-taking Member State shall allow the production from the Joint Project participation in the award procedure on equal terms as electricity produced within their own territory.

(3) The concrete amount of electricity to be statistically transferred as in accordance with this agreement depends on the actual production of the Joint Project. For the production to be transferred, such transfers shall be made annually.

(4) When the production from the Joint Project has won a contract, the host Member State and/or the secondary off-taking Member State immediately notify the off-taking Member State. The off-taking Member State thereupon undertakes to notify the statistical transfer of the respective 30% of the production of the Joint Project to the European Commission within the deadline set out in Article 6 paragraph 2 of Directive 2009/28/EC.

(5) In such event, the host Member State and/or the secondary off-taking Member State guarantee for the operational support for the 30% of the production from the Joint Project in accordance with the terms of its own national support scheme. Those 30% of the production shall not be eligible for support in the off-taking Member State anymore, neither during the duration of the support by the host Member State, nor after the end of such support. The host Member State and/or the secondary off-taking Member State pay the operational support owed in accordance with the terms of its own national support scheme directly to the Joint Project Operator. There is no obligation of the host and/or the secondary off-taking Member State to make any payments to the off-taking Member State.

(6) The off-taking Member State allows for the physical transfer of the production which has won a contract under the national support scheme of the host Member State and/or the secondary off-taking Member State to the host Member State and/or the secondary off-taking Member State over the interconnector: In this context, the following obligations apply:

a) the off-taking Member State shall guarantee and provide for the grid enforcement for all grids within its national territory as in accordance with its national legislation;

b) the off-taking Member State shall guarantee and provide for all the enforcements necessary with regard to the interconnection capacity needed for the transfer to the buying Member State;

c) the host Member State and the secondary off-taking Member State shall guarantee and provide for the grid enforcement for all grids within their national territory;

d) the costs which are, according to the legislation of the respective Member State, to be passed on to the user of the grid shall be borne by the Joint Project Operator and shall be considered within the price for which the production from the Joint Project is offered in the procedure for awarding support in the national support scheme of the host Member State.

Physical transfers shall be made in real time, as in accordance with the production from the Joint

Project.

Article 18 Notification to the European Commission

(1) Statistical transfers as agreed between the Parties, shall be notified jointly by the Member States involved in the specific transaction to the European Commission according to Art. 6 paragraph 2 of the Directive 2009/28/EC, specifying the exact amount of energy from renewable sources to be statistically transferred from the off-taking Member State to the host Member State and/or the secondary off-taking Member State for each relevant calendar year measured in ktoe, as well as the corresponding price paid by the host Member State and/or the secondary off-taking Member State. As there is no compensation for the off-taking Member State, the notification shall state that a price of 0 Euro was paid.

(2) To enable the off-taking Member State to transfer energy from renewable sources statistically to the secondary off-taking Member State, the notification of the statistical transfer between the host Member State and the off-taking Member State shall be executed by notification first.

(3) A copy of the respective notification shall be sent to the partaking Member States' contact point at least a month in advance of the deadline provided for in Article 6 paragraph 2 of Directive 2009/28/EC. Through the joint notification in accordance with Art. 18(1) of this agreement, the Member States involved are deemed to have notified their agreement with the statistical transfer within the deadline of Article 6 paragraph 2 of Directive 2009/28/EC.

(4) To facilitate the European Commission's task of monitoring the overall progress of implementation of and compliance with Directive 2009/28/EC the Parties will also notify the Commission of the overall content of this Agreement in particular including the amounts to be transferred during the entire time period of the Agreement, possible options for additional transfers and price adaptation arrangements within a month after the coming into force of this Agreement.

PART V RESPONSIBILITIES OF THE JOINT PROJECT PARTIES (RISK SHARING)

Article 19 General Commitment

(1) In case of non-compliance with any obligation under this Agreement a party is obliged to compensate the injured party fully for any damages incurred.

(2) The payment of such damages shall not limit the right to seek further compensation under the Agreement or otherwise.

(3) Sanctions towards the project operator will be laid down and further specified in the tender

specifications in case he fails to construct the Joint Project by the date determined in the tender specifications or in case yearly production of the Joint Project falls beneath [xx MWh].

Article 20 Responsibilities of the host Member State

(1) The host Member State guarantees the transfer to the off-taking Member State for target compliance purposes under the Directive of the entire actual yearly production of the Joint Project, notwithstanding the provisions in Art. 5(2), Art. 9(2), Art. and 12(2) of this Agreement.

(2) The host Member State guarantees the transfer to the secondary off-taking Member State for target compliance purposes under the Directive of the 30% of the entire actual yearly production of the Joint project for which the option according to this Agreement has been exercised.

(3) When exercising its right to use 30% of the entire actual yearly production for its target compliance in accordance with Art. 5(3), Art. 9(2) and Art. 12(2), the host Member State guarantees the transfer to the off-taking Member State of 70% of the entire actual yearly production of the Joint Project, or, as the case may be should the secondary off-taking Member State have exercised its option, 40% to the off-taking Member State and 30% to the secondary off-taking Member State.

OPTION 1 (financial compensation)¹⁷

(3) In case and to the extent that a breach of the host Member State's obligations under this Agreement causes the off-taking Member State and/or the secondary off-taking Member State to fail to reach its target under Directive 2009/28/EC, the host Member State is under an obligation pay to the off-taking Member State and/or the secondary off-taking Member State a penalty amounting to [the price for a statistical transfer to make up for it/the penalty imposed for an infringement of European law by the European Court of Justice/fixed amount per MWh].

OPTION 2 (replacement obligation)

(3) In case of failure of the host Member State to transfer the production of the Joint Project to off-taking Member State and/or the secondary off-taking Member State, the host Member State is under an obligation to compensate this shortfall by purchasing statistical transfers according to Article 6 of Directive 2009/28/EC from other Member States which have a surplus available. Such obligation shall not apply to the extent the host Member State has exercised the option to retain 30% of the production for its own target compliance and has complied with the provisions for doing so set out in

¹⁷ To be decided. However, NL should not stand in for failure of the Joint Project to deliver the production expected - such risks should be for BE.

this Agreement and any other relevant Agreement.

Article 21 Responsibilities of the off-taking Member State and the secondary off-taking Member State

(1) In accordance with Art, 5 and Art. 12 of this Agreement the off-taking Member State as well as the secondary off-taking Member State, in case the latter exercises its option, will be responsible for the provision of the financial support over the agreed time period.

(2) In case they fail to comply with tis obligations leading to a shortfall in support payments to the project operator, they lose all rights under this Agreement. ¹⁸

Part VII MONITORING, PROOF AND VERIFICATION

Article 22 Eligibility Criteria and required proof

(1) In accordance with Art. 7 (2) of Directive 2009/28/EC the Joint Project needs to comply with the following requirements in order to receive the support payments:

- a) The energy is produced exclusively from renewable energy sources;
- b) The energy is produced by a newly constructed installation that became operational after 25 June 2009 or by the increased capacity of an installation that was refurbished after that date.

(2) In accordance with Article 16 of this Agreement, the Joint Project Operator shall be granted production support after presenting proof of electricity production from renewable energy sources, stating the amount, time period and renewable origin of the electricity produced by the Joint Project.

Article 23 Verification

Power meter and energy production shall be verified annually by an independent verifier. The verification needs to confirm that:

- a) The electricity comes from an eligible renewable energy plant;
- b) The electricity is produced from renewable sources;
- c) The meter operates correctly and is properly accounted for.

¹⁸ No penalty payment to the host MS necessary, as normally there should be no obligation to support the plant under Dutch law, if no contract under SDE+ is won (or cannot be won as NL has not opened its support scheme and does not want to participate).

Part VIII GENERAL PROVISIONS

Article 24 Relationship between this Agreement and other International Obligations

Nothing in this Agreement shall derogate from the rights or obligations of any State under any relevant international treaty or rule of international law.

Article 25 Force Majeure

(1) Responsibility for non-performance or delay in performance on the part of any Party to this Agreement with respect to any obligations or any part thereof under this Agreement, other than an obligation to contribute financially, shall be suspended to the extent that such non-performance or delay in performance is caused or occasioned by Force Majeure, as defined in this Agreement.

(2) Force Majeure shall be limited to:

a) Natural disasters (earthquakes, landslides, cyclones, floods, fires, lightning, tidal waves, volcanic eruptions and other similar natural events or occurrences);

b) War between sovereign States where the relevant State has not initiated the war under the principles of international law, acts of terrorism, sabotage, rebellion or insurrection;

c) International embargoes against States other than the relevant State, provided, in every case, that the specified event or cause of the above mentioned types and any resulting effects preventing the performance by the relevant State of its obligations, or any part thereof, are beyond the relevant State's control.

(3) If a Party to this Agreement is prevented from carrying out its obligations or any part thereof under this Agreement (other than an obligation to pay money) as a result of Force Majeure, it shall notify in writing the other affected Parties to which performance is owed. The notice must:

a) Specify the obligations or part thereof that cannot be performed;

b) Fully describe the event of Force Majeure;

c) Estimate the time during which the Force Majeure will continue; and

d) Specify the measures proposed to be adopted to remedy or abate the Force Majeure.

Following this notice, and for so long as the Force Majeure continues, any obligations or parts thereof which cannot be performed because of the Force Majeure, other than the obligation to pay money,

shall be suspended.

Article 26 Dispute Settlement

(1) Any dispute, controversy or claim arising out of or relating exclusively to this Agreement, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules.

(2) The following conditions will apply:

- a) The appointing authority shall be ... [name of institution or person];
- b) The number of arbitrators shall be ... [one or three];
- c) The place of arbitration shall be ... [town and country];
- d) The language to be used in the arbitral proceedings shall be [...].

Article 27 Confidentiality

(1) The Parties to this Agreement are committed to confidentiality against third parties for all information and objects that are not to be notified to the European Commission according to Art. 11 of this Agreement or have not been otherwise published and are conveyed in confidence by any other Party. The receiving Party shall not use any such information or objects for any purpose other than in accordance with the terms of this Agreement. The disclosure of confidential information or objects requires the express written consent by the conveying Party.

(2) The confidentiality clause excludes objects or types of information that

- a) have been developed or are being developed by the receiving Party independently of the information;
- b) are part of the generally accessible state of technology or that reach this status without the fault of the receiving Party or
- c) were already in the possession of the receiving Party at the time of the announcement.

Article 28 Written Form

All additions and modifications to this Agreement, which will be numbered consecutively, shall be duly signed by both parties prior to affecting any of the changes therein contained. No addition or

modification of this Agreement shall be effective or binding on either of the parties hereto unless agreed in writing and duly signed by the parties.

Article 29 Severability Clause

If any part of this Agreement shall be or become invalid, then it shall be replaced by that valid regulation which comes closest to its meaning and intention. All other parts of this disclaimer shall remain valid in that case.

Article 30 Entry into Force

This Agreement shall enter into force on [...date...].

Article 31 Termination/Modification/Review

(1) The agreement will terminate on [...date...].

(2) By way of exception, this Agreement can be terminated [...]

(3) The agreement can be amended at any time by mutual consent of the parties documented in writing. Any such amendment shall be deposited in accordance with this Agreement and enter into force one month after the date of the deposit. The parties will review this agreement at least once every three years to determine whether it should be revised, renewed [or cancelled].

Article 32 Depositary

(1) [Member State X] shall act as the Depositary of the Agreement.

(2) The original of the Agreement, in the [...] languages, each version being equally authentic, shall be deposited with the Depositary. The Depositary shall transmit certified copies of each of these versions to the Parties which have signed the Agreement.

APPENDIX B: Proposed Template Agreement for a statistical transfer between Belgium and Luxemburg

<p style="text-align: center;">Agreement between</p> <p style="text-align: center;">Belgium, in the following referred to as “the selling Member State”</p> <p style="text-align: center;">and</p> <p style="text-align: center;">Luxemburg, in the following referred to as “the buying Member State”</p> <p style="text-align: center;">on</p> <p style="text-align: center;">THE ESTABLISHMENT OF A FRAMEWORK FOR</p> <p style="text-align: center;">THE STATISTICAL TRANSFER OF ENERGY FROM RENEWABLE SOURCES</p> <p style="text-align: center;">FOR TARGET COMPLIANCE PURPOSES UNDER DIRECTIVE 2009/28/EC GENERATED IN THE</p> <p style="text-align: center;">JOINT PROJECT OFFSHORE WINDPARK</p> <p>Preamble</p> <p>[...]</p> <p>Part 1 OBJECTIVE AND DEFINITIONS</p> <p>Article 1 Objective</p> <p>(1) The objective of this Agreement is to provide a legal framework for the implementation of statistical transfers under Articles 6 of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (hereafter: Directive 2009/28/EC).</p> <p>(2) The Parties enter into this Agreement with the purpose of</p> <p>a) contributing to the cost-efficient achievement of the EU target to increase the share of energy</p>
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from renewable sources to 20 percent by 2020;

b) optimise the balance of benefits from statistical transfers of renewable energy target amounts for both the buying and the selling Member State;

c) create broad public acceptance with regard to statistical transfers

d) [... additional points]

Article 2 Definitions

Pursuant to the Agreement the following terms are defined as

a) Selling Member State: a Member State of the European Union which, as a party to this Agreement, intends to transfer the renewable energy target amounts to the buying Member State according to this agreement;

b) Buying Member State: a Member State of the European Union which, as a party to this Agreement, intends to receive the renewable energy amounts for target compliance purposes under Directive 2009/28/EC from the selling Member State;

c) Directive 2009/28/EC: Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC;

d) Renewable energy target amount: the statistical value of energy from renewable sources as reported for the purpose of compliance with the mandatory national targets for the share of energy from renewable sources in final energy consumption as set out in the third column in part A of Annex I to the Directive 2009/28/EC;

e) Joint Project: the project identified, constructed and exploited in accordance with the Joint Project Agreement;

f) Joint Project Agreement: the Agreement of ... [here to be referred to the Agreement above – possibly also in Annex.]

g) Joint Project Operator: the developer and operator of the Joint Project identified, constructed and exploited in accordance with the Joint Project Agreement;

h) National support scheme: according to Art. 2 lit. k) of the Directive 2009/28/EC any instrument, scheme or mechanism applied by a Member State or a group of Member States, that promotes the

use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased;

g) ...

Part 2 KEY OBLIGATIONS

Article 3 Cooperation

(1) The Parties shall at all times co-operate in order to establish and maintain the necessary and favourable conditions for the implementation of the statistical transfer.

(2) National contact points are established to facilitate the implementation of this Agreement and deal with any matters arising in the course of the implementation. The contact point of the selling Member States will be [xx]. The contact point of the buying Member State will be [yy].

Article 4 Obligations of the Parties

(1) The buying Member State guarantees the selling Member to buy 10% of the production from the Joint Project for the price agreed and set out in Art. 5 of this Agreement. ¹⁹

(2) The selling Member State undertakes to notify the statistical transfer of the respective 10% of the production of the Joint Project to the European Commission within the deadline set out in Article 6 paragraph 2 of Directive 2009/28/EC.

Part 3 SPECIFICATIONS AND NOTIFICATION OF STATISTICAL TRANSFERS

Article 5 Specifications of Statistical Transfers

(1) This Agreement covers the statistical transfer of 10% of the production of the Joint Project.

(2) The concrete amount of electricity to be statistically transferred as in accordance with this agreement depends on the actual production of the Joint Project.

¹⁹ Alternatively, this could also be formulated as a call option instead of a purchase guarantee.

Article 6 Notification to the European Commission

(1) Statistical transfers as agreed between the Parties, shall be notified by the selling Member State to the European Commission according to Art. 6 paragraph 2 of the Directive 2009/28/EC, specifying the exact amount of energy from renewable sources to be statistically transferred from the selling Member State to the buying Member State for each relevant calendar year measured in ktoe, as well as the corresponding price paid by the buying Member State.

(2) A copy of this notification shall be sent to the buying Member State's contact point at least a month in advance of the deadline provided for in Article 6 paragraph 2 of Directive 2009/28/EC. The buying Member State shall notify the Commission of its agreement with the statistical transfer within the deadline of Article 6 paragraph 2 of Directive 2009/28/EC.

(3) To facilitate the European Commission's task of monitoring the overall progress of implementation of and compliance with Directive 2009/28/EC the Parties will also notify the Commission of the overall content of the agreement in particular including the amounts to be transferred during the entire time period of the Agreement, possible options for additional transfers and price adaptation arrangements within a month after the coming into force of this agreement.

Part 4 PAYMENTS AND OTHER RESPONSIBILITIES

Article 7 Payments

(1) The price per renewable target amount transferred shall be [xx] Euro per ktoe in the years 2018 to 2020. In the years thereafter the price shall be adjusted according to the development of the average costs for supporting the generation of energy from renewable energy in the selling country according to the following formula: [definition of adjustment formula]

(2) The buying Member State shall disburse the due amount onto [the account xx] at the latest by 30 April of the year following the year for which a notification according to Art. 6(1) of this Agreement has been made by the selling Member State.

Article 8 Responsibilities in case of non-compliance

(1) The Member States as project parties assume the responsibility for any failure or refusal to perform their obligations under this Agreement other than for reasons of force majeure according to Art. 9 of this Agreement.

(2) In case of non-compliance with any obligation under this Agreement a party is obliged to

compensate the injured party fully for any damages incurred due to the non-compliance.

(3) The payment of such damages shall not limit the right to seek further compensation under the Agreement or otherwise.

Part 5 GENERAL PROVISIONS

Article 8 Relationship between this Agreement and other International Obligations

Nothing in this Agreement shall derogate from the rights or obligations of any State under any relevant international treaty or rule of international law.

Article 9 Force Majeure

(1) Responsibility for non-performance or delay in performance on the part of any Party to this Agreement with respect to any obligations or any part thereof under this Agreement, other than an obligation to contribute financially, shall be suspended to the extent that such non-performance or delay in performance is caused or occasioned by Force Majeure, as defined in this Agreement.

(2) Force Majeure shall be limited to:

a) Natural disasters (earthquakes, landslides, cyclones, floods, fires, lightning, tidal waves, volcanic eruptions and other similar natural events or occurrences);

b) War between sovereign States where the relevant State has not initiated the war under the principles of international law, acts of terrorism, sabotage, rebellion or insurrection;

c) International embargoes against States other than the relevant State, provided, in every case, that the specified event or cause of the above mentioned types and any resulting effects preventing the performance by the relevant State of its obligations, or any part thereof, are beyond the relevant State's control.

(3) If a Party to this Agreement is prevented from carrying out its obligations or any part thereof under this Agreement (other than an obligation to pay money) as a result of Force Majeure, it shall notify in writing the other affected Parties to which performance is owed. The notice must:

a) Specify the obligations or part thereof that cannot be performed;

b) Fully describe the event of Force Majeure;

- c) Estimate the time during which the Force Majeure will continue; and
- d) Specify the measures proposed to be adopted to remedy or abate the Force Majeure.

Following this notice, and for so long as the Force Majeure continues, any obligations or parts thereof which cannot be performed because of the Force Majeure, other than the obligation to pay money, shall be suspended.

Article 10 Dispute Settlement

(1) Any dispute, controversy or claim arising out of or relating exclusively to this Agreement, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules.

(2) The following conditions will apply:

- a) The appointing authority shall be ... [name of institution or person];
- b) The number of arbitrators shall be ... [one or three];
- c) The place of arbitration shall be ... [town and country];
- d) The language to be used in the arbitral proceedings shall be [...].

Article 11 Confidentiality

(1) The Parties to this Agreement are committed to confidentiality against third parties for all information and objects that are not to be notified to the European Commission according to Art. 6 of the Agreement or have not been otherwise published and are conveyed in confidence by any other Party. The receiving Party shall not use any such information or objects for any purpose other than in accordance with the terms of this Agreement. The disclosure of confidential information or objects requires the express written consent by the conveying Party.

(2) The confidentiality clause excludes objects or types of information that

- a) have been developed or are being developed by the receiving Party independently of the information;
- b) are part of the generally accessible state of technology or that reach this status without the fault of the receiving Party or

c) were already in the possession of the receiving Party at the time of the announcement.

Article 12 Written Form

All additions and modifications to this Agreement, which will be numbered consecutively, shall be duly signed by both parties prior to affecting any of the changes therein contained. No addition or modification of this Agreement shall be effective or binding on either of the parties hereto unless agreed in writing and duly signed by the parties.

Article 13 Severability Clause

If any part of this Agreement shall be or become invalid, then it shall be replaced by that valid regulation which comes closest to its meaning and intention. All other parts of this disclaimer shall remain valid in that case.

Article 14 Entry into Force

This Agreement shall enter into force on [...date...].

Article 15 Termination/Modification/Review

(1) The agreement will terminate on [...date...].

(2) By way of exception, this Agreement can be terminated [...]

(3) The agreement can be amended at any time by mutual consent of the parties documented in writing. Any such amendment shall be deposited according to Art. 16 of this Agreement and enter into force one month after the date of the deposit. The parties will review this agreement at least once every three years to determine whether it should be revised, renewed [or canceled].

Article 16 Depositary

(1) [Member State X] shall act as the Depositary of the Agreement.

(2) The original of the Agreement, in the [...] languages, each version being equally authentic, shall be deposited with the Depositary. The Depositary shall transmit certified copies of each of these versions to the Parties which have signed the Agreement.

APPENDIX C: Alternative Template Agreement for a statistical transfer between Belgium and the UK (if not included in the Joint Project Agreement)

Agreement between

Belgium, in the following referred to as "the selling Member State"

and

The United Kingdom, in the following referred to as "the buying Member State"

on

THE ESTABLISHMENT OF A FRAMEWORK FOR

THE STATISTICAL TRANSFER OF ENERGY FROM RENEWABLE SOURCES

**FOR TARGET COMPLIANCE PURPOSES UNDER DIRECTIVE 2009/28/EC GENERATED IN THE
JOINT PROJECT OFFSHORE WINDPARK**

AS WELL AS THE PHYSICAL TRANSFER OF THE RESPECTIVE ENERGY

Preamble

[...]

Part 1 OBJECTIVE AND DEFINITIONS

Article 1 Objective

(1) The objective of this Agreement is to provide a legal framework for the implementation of statistical transfers under Articles 6 of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (hereafter: Directive

2009/28/EC).

(2) The Parties enter into this Agreement with the purpose of

- a) contributing to the cost-efficient achievement of the EU target to increase the share of energy from renewable sources to 20 percent by 2020;
- b) optimise the balance of benefits from statistical transfers of renewable energy target amounts for both the buying and the selling Member State;
- c) create broad public acceptance with regard to statistical transfers
- d) [... additional points]

Article 2 Definitions

Pursuant to the Agreement the following terms are defined as

- a) Selling Member State: a Member State of the European Union which, as a party to this Agreement, intends to transfer the renewable energy target amounts to the buying Member State according to this agreement;
- b) Buying Member State: a Member State of the European Union which, as a party to this Agreement, intends to receive the renewable energy amounts for target compliance purposes under Directive 2009/28/EC from the selling Member State;
- c) Directive 2009/28/EC: Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC;
- d) Renewable energy target amount: the statistical value of energy from renewable sources as reported for the purpose of compliance with the mandatory national targets for the share of energy from renewable sources in final energy consumption as set out in the third column in part A of Annex I to the Directive 2009/28/EC;
- e) Joint Project: the project identified, constructed and exploited in accordance with the Joint Project Agreement;
- f) Joint Project Agreement: the Agreement of ... [here to be referred to the Agreement above – possibly also in Annex.]

g) Joint Project Operator: the developer and operator of the Joint Project identified, constructed and exploited in accordance with the Joint Project Agreement;

h) National support scheme: according to Art. 2 lit. k) of the Directive 2009/28/EC any instrument, scheme or mechanism applied by a Member State or a group of Member States, that promotes the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased;

g) ...

Part 2 KEY OBLIGATIONS

Article 3 Cooperation

(1) The Parties shall at all times co-operate in order to establish and maintain the necessary and favourable conditions for the implementation of the statistical transfer.

(2) National contact points are established to facilitate the implementation of this Agreement and deal with any matters arising in the course of the implementation. The contact point of the selling Member States will be [xx]. The contact point of the buying Member State will be [yy].

Article 4 Obligations of the Parties

(1) The selling Member State grants the right to use 30% of the production from the Joint Project for the achievement of its target under the Directive 2009/28/EC.

(2) If the buying Member State intends to exercise this option, the selling Member State shall be notified immediately. The buying Member State takes the necessary measures to allow the participation of the Joint Project in its national support scheme.

(3) When the production from the Joint Project has won a contract, the buying Member State immediately notifies the selling Member State. The selling Member State thereupon undertakes to notify the statistical transfer of the respective 30% of the production of the Joint Project to the European Commission within the deadline set out in Article 6 paragraph 2 of Directive 2009/28/EC.

(4) The buying Member State guarantees for the operational support for the 30% of the production from the Joint Project in accordance with the terms of its own national support scheme. Those 30% of the production shall not be eligible for support in the selling Member State anymore, neither during the duration of the support by the buying Member State, nor after the end of such support. The

buying Member State pays the operational support owed in accordance with the terms of its own national support scheme directly to the Joint Project Operator. There is no obligation of the buying Member State to make any payments to the selling Member State.

(5) The selling Member State allows for the physical transfer of the production which has won a contract under the national support scheme of the buying Member State to the buying Member State over the existing interconnector between the selling Member State and the buying Member State. In this context, the following obligations apply:

a) the selling Member State shall guarantee and provide for the grid enforcement for all grids within its national territory as in accordance with its national legislation;

b) the selling Member State shall guarantee and provide for all the enforcements necessary with regard to the interconnection capacity needed for the transfer to the buying Member State;

c) the buying Member State shall guarantee and provide for the grid enforcement for all grids within its national territory;

d) the costs which are, according to the legislation of the respective Member State, to be passed on to the user of the grid shall be borne by the Joint Project Operator and shall be considered within the price for which the production from the Joint Project is offered in the procedure for awarding a contract for financial support in the national support scheme of the buying Member State.

Physical transfers shall be made in real time, as in accordance with the production from the Joint Project.

Part 3 SPECIFICATIONS AND NOTIFICATION OF STATISTICAL TRANSFERS

Article 5 Specifications of Statistical Transfers

(1) This Agreement covers the statistical transfer of 30% of the production of the Joint Project if the buying Member State has notified the selling Member State of the exercise of the option in accordance with Art. 4 of this agreement, and under the condition that such production is able to win a contract under the national support scheme of the buying Member State. It only applies if and to the extent the electricity produced in the Joint Project wins such a contract. However, in such case it applies automatically, with the buying Member State being obliged to pay for and the selling Member State being obliged to transfer the respective production.

(2) Contracts in the buying Member State are awarded periodically. The buying Member State shall allow the production from the Joint Project participation in the award procedure on equal terms as

electricity produced in the buying Member State.

(3) The concrete amount of electricity to be statistically transferred as in accordance with this agreement depends on the actual production of the Joint Project. For the production to be transferred, such transfers shall be made annually.

Article 6 Notification to the European Commission

(1) Statistical transfers as agreed between the Parties, shall be notified by the selling Member State to the European Commission according to Art. 6 paragraph 2 of the Directive 2009/28/EC, specifying the exact amount of energy from renewable sources to be statistically transferred from the selling Member State to the buying Member State for each relevant calendar year measured in ktoe, as well as the corresponding price paid by the buying Member State. As in accordance with Art. 4(3) of this Agreement, there is no compensation for the selling Member State, the notification shall state that a price of 0 Euro was paid.

(2) A copy of this notification shall be sent to the buying Member State's contact point at least a month in advance of the deadline provided for in Article 6 paragraph 2 of Directive 2009/28/EC. The buying Member State shall notify the Commission of its agreement with the statistical transfer within the deadline of Article 6 paragraph 2 of Directive 2009/28/EC.6

(3) To facilitate the European Commission's task of monitoring the overall progress of implementation of and compliance with Directive 2009/28/EC the Parties will also notify the Commission of the overall content of the agreement in particular including the amounts to be transferred during the entire time period of the Agreement, possible options for additional transfers and price adaptation arrangements within a month after the coming into force of this agreement.

Part 4 OTHER RESPONSIBILITIES

Article 7 Responsibilities in case of non-compliance

(1) The Member States as project parties assume the responsibility for any failure or refusal to perform their obligations under this Agreement other than for reasons of force majeure according to Art. 9 of this Agreement.

(2) In case of non-compliance with any obligation under this Agreement a party is obliged to compensate the injured party fully for any damages incurred due to the non-compliance.

(3) The payment of such damages shall not limit the right to seek further compensation under the

Agreement or otherwise.

Part 5 GENERAL PROVISIONS

Article 8 Relationship between this Agreement and other International Obligations

Nothing in this Agreement shall derogate from the rights or obligations of any State under any relevant international treaty or rule of international law.

Article 9 Force Majeure

(1) Responsibility for non-performance or delay in performance on the part of any Party to this Agreement with respect to any obligations or any part thereof under this Agreement, other than an obligation to contribute financially, shall be suspended to the extent that such non-performance or delay in performance is caused or occasioned by Force Majeure, as defined in this Agreement.

(2) Force Majeure shall be limited to:

- a) Natural disasters (earthquakes, landslides, cyclones, floods, fires, lightning, tidal waves, volcanic eruptions and other similar natural events or occurrences);
- b) War between sovereign States where the relevant State has not initiated the war under the principles of international law, acts of terrorism, sabotage, rebellion or insurrection;
- c) International embargoes against States other than the relevant State, provided, in every case, that the specified event or cause of the above mentioned types and any resulting effects preventing the performance by the relevant State of its obligations, or any part thereof, are beyond the relevant State's control.

(3) If a Party to this Agreement is prevented from carrying out its obligations or any part thereof under this Agreement (other than an obligation to pay money) as a result of Force Majeure, it shall notify in writing the other affected Parties to which performance is owed. The notice must:

- a) Specify the obligations or part thereof that cannot be performed;
- b) Fully describe the event of Force Majeure;
- c) Estimate the time during which the Force Majeure will continue; and
- d) Specify the measures proposed to be adopted to remedy or abate the Force Majeure.

Following this notice, and for so long as the Force Majeure continues, any obligations or parts thereof which cannot be performed because of the Force Majeure, other than the obligation to pay money, shall be suspended.

Article 10 Dispute Settlement

(1) Any dispute, controversy or claim arising out of or relating exclusively to this Agreement, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules.

(2) The following conditions will apply:

- a) The appointing authority shall be ... [name of institution or person];
- b) The number of arbitrators shall be ... [one or three];
- c) The place of arbitration shall be ... [town and country];
- d) The language to be used in the arbitral proceedings shall be [...].

Article 11 Confidentiality

(1) The Parties to this Agreement are committed to confidentiality against third parties for all information and objects that are not to be notified to the European Commission according to Art. 6 of the Agreement or have not been otherwise published and are conveyed in confidence by any other Party. The receiving Party shall not use any such information or objects for any purpose other than in accordance with the terms of this Agreement. The disclosure of confidential information or objects requires the express written consent by the conveying Party.

(2) The confidentiality clause excludes objects or types of information that

- a) have been developed or are being developed by the receiving Party independently of the information;
- b) are part of the generally accessible state of technology or that reach this status without the fault of the receiving Party or
- c) were already in the possession of the receiving Party at the time of the announcement.

Article 12 Written Form

All additions and modifications to this Agreement, which will be numbered consecutively, shall be duly signed by both parties prior to affecting any of the changes therein contained. No addition or modification of this Agreement shall be effective or binding on either of the parties hereto unless agreed in writing and duly signed by the parties.

Article 13 Severability Clause

If any part of this Agreement shall be or become invalid, then it shall be replaced by that valid regulation which comes closest to its meaning and intention. All other parts of this disclaimer shall remain valid in that case.

Article 14 Entry into Force

This Agreement shall enter into force on [...date...].

Article 15 Termination/Modification/Review

(1) The agreement will terminate on [...date...].

(2) By way of exception, this Agreement can be terminated [...]

(3) The agreement can be amended at any time by mutual consent of the parties documented in writing. Any such amendment shall be deposited according to Art. 16 of this Agreement and enter into force one month after the date of the deposit. The parties will review this agreement at least once every three years to determine whether it should be revised, renewed [or cancelled].

Article 16 Depositary

(1) [Member State X] shall act as the Depositary of the Agreement.

(2) The original of the Agreement, in the [...] languages, each version being equally authentic, shall be deposited with the Depositary. The Depositary shall transmit certified copies of each of these versions to the Parties which have signed the Agreement.

APPENDIX D: Alternative Template Agreement for a statistical transfer between Belgium and the Netherlands (if not included in the Joint Project Agreement)

Agreement between

Belgium, in the following referred to as "the selling Member State"

and

The Netherlands, in the following referred to as "the buying Member State"

on

THE ESTABLISHMENT OF A FRAMEWORK FOR

THE STATISTICAL TRANSFER OF ENERGY FROM RENEWABLE SOURCES

**FOR TARGET COMPLIANCE PURPOSES UNDER DIRECTIVE 2009/28/EC GENERATED IN THE
JOINT PROJECT OFFSHORE WINDPARK**

AS WELL AS THE PHYSICAL TRANSFER OF THE RESPECTIVE ENERGY

Preamble

[...]

Part 1 OBJECTIVE AND DEFINITIONS

Article 1 Objective

(1) The objective of this Agreement is to provide a legal framework for the implementation of statistical transfers under Art. 6 of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (hereafter: Directive

2009/28/EC).

(2) The Parties enter into this Agreement with the purpose of

- a) contributing to the cost-efficient achievement of the EU target to increase the share of energy from renewable sources to 20 percent by 2020;
- b) optimise the balance of benefits from statistical transfers of renewable energy target amounts for both the buying and the selling Member State;
- c) create broad public acceptance with regard to statistical transfers
- d) [... additional points]

Article 2 Definitions

Pursuant to the Agreement the following terms are defined as

- a) Selling Member State: a Member State of the European Union which, as a party to this Agreement, intends to transfer the renewable energy target amounts to the buying Member State according to this agreement;
- b) Buying Member State: a Member State of the European Union which, as a party to this Agreement, intends to receive the renewable energy amounts for target compliance purposes under Directive 2009/28/EC from the selling Member State;
- c) Directive 2009/28/EC: Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC;
- d) Renewable energy target amount: the statistical value of energy from renewable sources as reported for the purpose of compliance with the mandatory national targets for the share of energy from renewable sources in final energy consumption as set out in the third column in part A of Annex I to the Directive 2009/28/EC;
- e) Joint Project: the project identified, constructed and exploited in accordance with the Joint Project Agreement;
- f) Joint Project Agreement: the Agreement of ... [here to be referred to the Agreement above – possibly also in Annex.]

g) Joint Project Operator: the developer and operator of the Joint Project identified, constructed and exploited in accordance with the Joint Project Agreement;

h) National support scheme: according to Art. 2 lit. k) of the Directive 2009/28/EC any instrument, scheme or mechanism applied by a Member State or a group of Member States, that promotes the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased;

g) ...

Part 2 KEY OBLIGATIONS

Article 3 Cooperation

(1) The Parties shall at all times co-operate in order to establish and maintain the necessary and favourable conditions for the implementation of the statistical transfer.

(2) National contact points are established to facilitate the implementation of this Agreement and deal with any matters arising in the course of the implementation. The contact point of the selling Member States will be [xx]. The contact point of the buying Member State will be [yy].

Article 4 Obligations of the Parties

(1) The selling Member State grants the right to use 30% of the production from the Joint Project for the achievement of its target under the Directive 2009/28/EC.

(2) If the buying Member State intends to exercise this option, the selling Member State shall be notified immediately. The buying Member State takes the necessary measures to allow the participation of the Joint Project in its national support scheme.

(3) When the production from the Joint Project has won a contract, the buying Member State immediately notifies the selling Member State. The selling Member State thereupon undertakes to notify the statistical transfer of the respective 30% of the production of the Joint Project to the European Commission within the deadline set out in Article 6 paragraph 2 of Directive 2009/28/EC.

(4) The buying Member State guarantees for the operational support for the 30% of the production from the Joint Project in accordance with the terms of its own national support scheme. Those 30% of the production shall not be eligible for support in the selling Member State anymore, neither during the duration of the support by the buying Member State, nor after the end of such support. The

buying Member State pays the operational support owed in accordance with the terms of its own national support scheme directly to the Joint Project Operator. There is no obligation of the buying Member State to make any payments to the selling Member State.

(5) The selling Member State allows for the physical transfer of the production which has won a contract under the national support scheme of the buying Member State to the buying Member State over the existing interconnector between the selling Member State and the buying Member State. In this context, the following obligations apply:

a) the selling Member State shall guarantee and provide for the grid enforcement for all grids within its national territory as in accordance with its national legislation;

b) the selling Member State shall guarantee and provide for all the enforcements necessary with regard to the interconnection capacity needed for the transfer to the buying Member State;

c) the buying Member State shall guarantee and provide for the grid enforcement for all grids within its national territory;

d) the costs which are, according to the legislation of the respective Member State, to be passed on to the user of the grid shall be borne by the Joint Project Operator and shall be considered within the price for which the production from the Joint Project is offered in the procedure for awarding support in the national support scheme of the buying Member State.

Physical transfers shall be made in real time, as in accordance with the production from the Joint Project.

Part 3 SPECIFICATIONS AND NOTIFICATION OF STATISTICAL TRANSFERS

Article 5 Specifications of Statistical Transfers

(1) This Agreement covers the statistical transfer of 30% of the production of the Joint Project if the buying Member State has notified the selling Member State of the exercise of the option in accordance with Art. 4 of this agreement, and under the condition that such production is able to win a contract under the national support scheme of the buying Member State. It only applies if and to the extent the electricity produced in the Joint Project wins such a contract. However, in such case it applies automatically, with the buying Member State being obliged to pay for and the selling Member State being obliged to transfer the respective production.

(2) Contracts in the buying Member State are awarded periodically. The buying Member State shall allow the production from the Joint Project participation in the award procedure on equal terms as

electricity produced in the buying Member State.

(3) The concrete amount of electricity to be statistically transferred as in accordance with this agreement depends on the actual production of the Joint Project. For the production to be transferred, such transfers shall be made annually.

Article 6 Notification to the European Commission

(1) Statistical transfers as agreed between the Parties, shall be notified by the selling Member State to the European Commission according to Art. 6 paragraph 2 of the Directive 2009/28/EC, specifying the exact amount of energy from renewable sources to be statistically transferred from the selling Member State to the buying Member State for each relevant calendar year measured in ktoe, as well as the corresponding price paid by the buying Member State. As in accordance with Art. 4(3) of this Agreement, there is no compensation for the selling Member State, the notification shall state that a price of 0 Euro was paid.

(2) A copy of this notification shall be sent to the buying Member State's contact point at least a month in advance of the deadline provided for in Article 6 paragraph 2 of Directive 2009/28/EC. The buying Member State shall notify the Commission of its agreement with the statistical transfer within the deadline of Article 6 paragraph 2 of Directive 2009/28/EC.6

(3) To facilitate the European Commission's task of monitoring the overall progress of implementation of and compliance with Directive 2009/28/EC the Parties will also notify the Commission of the overall content of the agreement in particular including the amounts to be transferred during the entire time period of the Agreement, possible options for additional transfers and price adaptation arrangements within a month after the coming into force of this agreement.

Part 4 OTHER RESPONSIBILITIES

Article 7 Responsibilities in case of non-compliance

(1) The Member States as project parties assume the responsibility for any failure or refusal to perform their obligations under this Agreement other than for reasons of force majeure according to Art. 9 of this Agreement.

(2) In case of non-compliance with any obligation under this Agreement a party is obliged to compensate the injured party fully for any damages incurred due to the non-compliance.

(3) The payment of such damages shall not limit the right to seek further compensation under the

Agreement or otherwise.

Part 5 GENERAL PROVISIONS

Article 8 Relationship between this Agreement and other International Obligations

Nothing in this Agreement shall derogate from the rights or obligations of any State under any relevant international treaty or rule of international law.

Article 9 Force Majeure

(1) Responsibility for non-performance or delay in performance on the part of any Party to this Agreement with respect to any obligations or any part thereof under this Agreement, other than an obligation to contribute financially, shall be suspended to the extent that such non-performance or delay in performance is caused or occasioned by Force Majeure, as defined in this Agreement.

(2) Force Majeure shall be limited to:

- a) Natural disasters (earthquakes, landslides, cyclones, floods, fires, lightning, tidal waves, volcanic eruptions and other similar natural events or occurrences);
- b) War between sovereign States where the relevant State has not initiated the war under the principles of international law, acts of terrorism, sabotage, rebellion or insurrection;
- c) International embargoes against States other than the relevant State, provided, in every case, that the specified event or cause of the above mentioned types and any resulting effects preventing the performance by the relevant State of its obligations, or any part thereof, are beyond the relevant State's control.

(3) If a Party to this Agreement is prevented from carrying out its obligations or any part thereof under this Agreement (other than an obligation to pay money) as a result of Force Majeure, it shall notify in writing the other affected Parties to which performance is owed. The notice must:

- a) Specify the obligations or part thereof that cannot be performed;
- b) Fully describe the event of Force Majeure;
- c) Estimate the time during which the Force Majeure will continue; and
- d) Specify the measures proposed to be adopted to remedy or abate the Force Majeure.

Following this notice, and for so long as the Force Majeure continues, any obligations or parts thereof which cannot be performed because of the Force Majeure, other than the obligation to pay money, shall be suspended.

Article 10 Dispute Settlement

(1) Any dispute, controversy or claim arising out of or relating exclusively to this Agreement, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules.

(2) The following conditions will apply:

- a) The appointing authority shall be ... [name of institution or person];
- b) The number of arbitrators shall be ... [one or three];
- c) The place of arbitration shall be ... [town and country];
- d) The language to be used in the arbitral proceedings shall be [...].

Article 11 Confidentiality

(1) The Parties to this Agreement are committed to confidentiality against third parties for all information and objects that are not to be notified to the European Commission according to Art. 6 of the Agreement or have not been otherwise published and are conveyed in confidence by any other Party. The receiving Party shall not use any such information or objects for any purpose other than in accordance with the terms of this Agreement. The disclosure of confidential information or objects requires the express written consent by the conveying Party.

(2) The confidentiality clause excludes objects or types of information that

- a) have been developed or are being developed by the receiving Party independently of the information;
- b) are part of the generally accessible state of technology or that reach this status without the fault of the receiving Party or
- c) were already in the possession of the receiving Party at the time of the announcement.

Article 12 Written Form

All additions and modifications to this Agreement, which will be numbered consecutively, shall be duly signed by both parties prior to affecting any of the changes therein contained. No addition or modification of this Agreement shall be effective or binding on either of the parties hereto unless agreed in writing and duly signed by the parties.

Article 13 Severability Clause

If any part of this Agreement shall be or become invalid, then it shall be replaced by that valid regulation which comes closest to its meaning and intention. All other parts of this disclaimer shall remain valid in that case.

Article 14 Entry into Force

This Agreement shall enter into force on [...date...].

Article 15 Termination/Modification/Review

(1) The agreement will terminate on [...date...].

(2) By way of exception, this Agreement can be terminated [...]

(3) The agreement can be amended at any time by mutual consent of the parties documented in writing. Any such amendment shall be deposited according to Art. 16 of this Agreement and enter into force one month after the date of the deposit. The parties will review this agreement at least once every three years to determine whether it should be revised, renewed [or cancelled].

Article 16 Depositary

(1) [Member State X] shall act as the Depositary of the Agreement.

(2) The original of the Agreement, in the [...] languages, each version being equally authentic, shall be deposited with the Depositary. The Depositary shall transmit certified copies of each of these versions to the Parties which have signed the Agreement.



ECOFYS Germany GmbH

Am Karlsbad 11
10785 Berlin
T: +49 (0) 30 29773579-0
F: +49 (0) 30 29773579-99
E: info@ecofys.com
I: www.ecofys.com