

Core Theme 2

Cooperation Mechanisms



Table of Contents

| | |
|---|-----------|
| 1 CT2 in a Nutshell | 3 |
| 2 In the Spotlight: Partial Opening of Support Schemes | 4 |
| 2.1 Cooperation in Renewable Energies Gains Momentum | 4 |
| 2.2 In Theory: Case Studies on Cooperation Mechanisms Developed within an EU Commission's Project | 6 |
| 2.3 In Practice: Emerging Concrete Cooperation Initiatives and Projects | 9 |
| 3 Further Cooperation Areas | 12 |
| 3.1 Cooperation on Wind Offshore | 12 |
| 3.2 Cooperation with Third Countries (Art. 9) | 13 |
| 4 The Way Ahead: Perspectives of Regional Cooperation | 15 |
| 5 Main Findings and Achievements | 16 |
| 6 Abbreviations | 18 |

Authors:

André Poschmann, Anne-Maria Ide, Karin Franzen, Federal Ministry for Economic Affairs and Energy, Germany
Sofía Martínez, Institute for the Diversification and Saving of Energy, Ministry of Industry, Energy and Tourism, Spain
Natalia Caldés, CIEMAT, Spain

1 CT2 in a Nutshell

Core Theme 2 (CT2) provides a platform for discussing the current level of implementation and the role of Cooperation Mechanisms in participating countries, enabling participants to conceive solutions to concrete cooperation opportunities. Based on the discussions of Working Group 1 on “Cooperation Mechanisms and NREAPs” in the first phase of the CA-RES, which focused more on general aspects and design options for Cooperation Mechanisms, CT2 covered current initiatives and theoretical case studies with a particular focus on cross-border access to support schemes throughout CA-RES II.

Cooperation Mechanisms were introduced with the Renewable Energy Sources Directive 2009/28/EC to give EU Member States flexibility to achieve their national renewable energy targets and to meet the 20% EU target in a cost-effective manner until 2020. These instruments shall enable Member States to also reach their national targets cost-efficiently by complementing their national RES deployment with foreign renewable energy. Although Cooperation Mechanisms have thus far only been implemented to a limited extent, consideration and implementation of specific joint projects is gaining momentum recently. It became clear that participating countries see great opportunities in jointly deploying renewable energy potentials across borders and making use of Cooperation Mechanisms. Cost-efficient target achievement is only one of the aspects to consider in the complex decision on cross-border cooperation. Other aspects such as energy diversity and security and regional cooperation in the overall energy sector also play a major role. CT2 further discussed a potential blueprint for cross-border renewables auctions, which should set out important principles for cooperation and could serve to facilitate their implementation. A number of participating countries are currently planning to partially open their national support schemes to foreign RES production. Final cooperation agreements are under way.

The state aid framework for RES puts specific emphasis on cross-border access to support schemes. A number of participating countries are planning to or have already partially opened their national support schemes to foreign RES production. CT2 participants highlighted that cross-border access to support schemes can be beneficial, but that participating countries need to be able to decide on whether to support foreign RES production and to limit and control it. This was also confirmed by the judgement of the European Court of Justice in the cases of Ålands Vindkraft¹ as well as Essent Belgium². The ability to control support for foreign renewable energy installations is vital to ensure a balanced approach and win-win situation. Many aspects and implications need further analysis and discussion. Participants agreed that an opening of support schemes needs to be thoughtfully analysed and addressed when entering into cooperation. A fair sharing of costs and benefits between the cooperating parties is crucial for a mutually beneficial agreement. Physical import or export of RES electricity are main requirements for cooperation for many countries.

1 ECJ 2014, Ålands Vindkraft, 01.07.2014, C-573/12.

2 ECJ 2014, Essent Belgium, 11.09.2014, C-204/12 to C-208/12

In the future wind-offshore deployment could be a suitable area for cooperation. Studies and discussions have shown that enhanced regional cooperation and coordination can exploit cost reduction potentials, but that a stronger coordination of regulatory regimes will be needed to overcome existing barriers. Main barriers for regional cooperation in the field of wind offshore include regulatory arrangements to incentivise investments in the grid infrastructure or the electricity trade across borders. Moreover, planning and authorisation procedures as well as the allocation of costs and benefits are seen as demanding. Further work on these issues could be done in the framework of the “Energy Cooperation between the North Seas Countries” initiated in 2016 by the Dutch Presidency.

CT2 participants agreed that the role and potential of the Cooperation Mechanisms will be strengthened as the EU moves towards 2020. As the trajectory of the national renewables target set out in the RES Directive becomes steeper, the necessity to cooperate is likely to increase. At the same time more clarity on the post 2020 framework is needed. In this context the Council Conclusions on the EU climate and energy framework 2030 agreed on in October 2014 as well as the EU Energy Union put a particular focus on regional cooperation. In general, participating countries currently focus more on cooperation within the European Union as with third countries. Cooperation with third countries is therefore not expected before 2020.

2 In the Spotlight: Partial Opening of Support Schemes

2.1 Cooperation in Renewable Energies Gains Momentum

The EU Commission advocates for enhanced cooperation in renewable energies and encourages Member States to implement the Cooperation Mechanisms under the RES Directive. In its Communication “Delivering the internal electricity market and making the most of public intervention” published on 5 November 2013 the Commission stated that “The Renewables Directive does not prohibit Member States from limiting their support schemes to nationally generated renewables production.” But, on the other hand, it highlighted that “The Commission strongly encourages Member States to use these opportunities and progressively open up their nationally oriented support schemes to producers from other Member States“. To further facilitate the use of Cooperation Mechanisms, the Communication also included Guidance on the use of renewable energy cooperation mechanisms, and a template for agreements. In order to identify existing barriers and to develop beneficial solutions, a research project on Cooperation Mechanisms (<http://res-cooperation.eu/>) was launched (see Section 2.2).



CT2 participants welcomed this initiative and agreed that Cooperation Mechanisms entail great opportunities for cooperation in the field of renewable energy. Nevertheless, cooperation is still at an initial stage with the joint certificate scheme between Norway and Sweden being the only fully implemented Cooperation Mechanism. Many aspects still need to be considered and challenges overcome before opening up national support schemes, particularly with regard to a fair and balanced sharing of direct and indirect costs and benefits, avoiding over-subsidization and ensuring public acceptance. For many participants, physical import or export of electricity is a key precondition to open national support schemes and engage in cooperation. More certainty about the post-2020 EU target achievement and governance framework is expected to have an enhancing effect on the implementation of Cooperation Mechanisms as well.

The use of the Cooperation Mechanisms is gaining momentum: Participating countries increasingly consider getting involved in possible cooperation projects and apply or plan an opening of their national support schemes (see Section 2.3).

A particular background of participating countries' plans for a partial opening of support schemes are the revised Guidelines on State aid for environmental protection and energy 2014-2020 (EEAG), adopted in April 2014. They state that "the Commission will consider positively [support] schemes that are open to other EEA or Energy Community countries" (margin 122). While the EEAG do not require Member States to open their support schemes, the Commission has raised legal concerns on national support schemes in several state aid cases based on Article 30 and 110 of the Treaty on the Functioning of the European Union (TFEU). Even though Member States have disagreed with the legal assessment of applicability of the articles, the EU Commission approved the perceived potential discrimination when compensated by partially opening support to installations in other Member States.

The Commission highlighted the benefits of regional cooperation with specific reference to renewable energy in its Communication on the Energy Union published in February 2015 and announced it will facilitate cooperation and cross-border opening of support schemes.

2.2 In Theory: Case Studies on Cooperation Mechanisms Developed within an EU Commission's Project

In 2013 the European Commission commissioned a project to analyse the potentials and barriers for implementing Cooperation Mechanisms. The project consortium explored the practical implementation of Statistical Transfers (Art. 6), Joint Projects (Art. 7), and Joint Support Schemes (Art. 11) of Directive 2009/28/EC.

Five theoretical case studies³ were elaborated in the project, and the potential set-up, challenges and possible solutions for renewable energy cooperation between EU Member States were discussed. The case studies were based on concrete cooperation opportunities between two or more EU Member States. Following a presentation of the project outline, CT2 participants actively engaged in concrete case studies and provided important feedback and input. The case study results showed that cooperation can bear great potential and benefits for the parties involved.

CT2 took a particular look at two case studies:

- a Joint Project between the Netherlands and Portugal
- a Statistical Transfer between Luxemburg and Estonia

Besides reflecting on the specific case studies, CT2 participants identified several main drivers and challenges for Cooperation Mechanisms, varying in importance according to national circumstances:

| Main Drivers for Cooperation Mechanisms | Main Challenges for Using Cooperation Mechanisms |
|---|---|
| <ul style="list-style-type: none"> – Cost-efficiency <ul style="list-style-type: none"> – Access to more cost-efficient RES potentials – 2020 target compliance in most cost-effective way – Energy security/security of supply <ul style="list-style-type: none"> – Reduction of energy dependence – Diversification of energy sources – Proper integration of variable RES into the electricity grid/market – Joint learning through cooperation – Local benefits <ul style="list-style-type: none"> – Local added value, e.g. job creation, industry development – Positive health effects – Innovation | <ul style="list-style-type: none"> – Technical complexity, in particular: <ul style="list-style-type: none"> – Cost and benefit calculation – Allocation of costs – Risk sharing – Etc. – Public acceptance – Interference with domestic support schemes – Grid infrastructure bottlenecks – Uncertainty about 2030 Framework – First mover risk – Compatibility with state aid regulations |

³ The case studies have been elaborated with the kind support of the respective Member States. However, the views expressed in the case studies do not necessarily reflect the opinion of the European Commission or the Member States.

Case Study 1: Joint Project between the Netherlands and Portugal

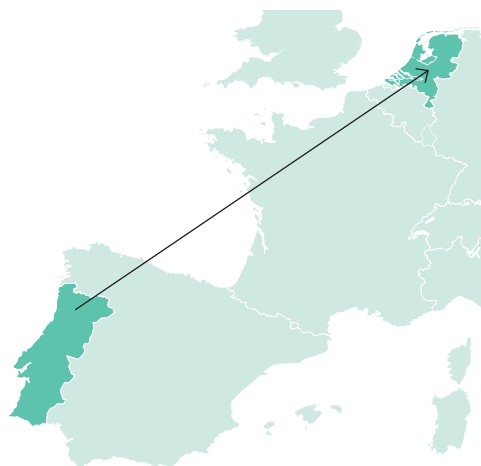
The Dutch-Portuguese case study considers an opening of the Dutch tender scheme (SDE+) to Portuguese renewable projects.

Since Portugal has more cost-efficient renewable resources, support costs in the Netherlands could be lowered by supporting Portuguese renewable projects. These amounts would be counted towards the Dutch national RES target.

The Netherlands would have to introduce new categories for renewable energy projects from Portugal within its SDE+ scheme to allow their participation. If Portuguese projects are competitive with local projects, they would receive a sliding feed-in premium (“SDE+ contribution”) in addition to the average annual electricity value (“correction amount”) over a time period defined in the SDE+ scheme (5, 12 or 15 years, depending on the technology).

Physical import of electricity was not required by the Netherlands, but physical export was a main precondition for Portugal to engage in the joint project. The reference price for calculating the premium payment was seen as a crucial aspect. The Portuguese electricity price was selected for the case study.

FIGURE 1: Host and off-taking countries
Portugal and Netherlands



SOURCE: Ecofys et al. (2014). Case Study:
Joint Projects between the Netherlands and Portugal

Case Study 2: Statistical Transfer between Estonia and Luxembourg

The statistical transfer case between Luxembourg as the off-taking and Estonia as the host country involves the sale of surplus electricity from Estonia to Luxembourg. It analyses how costs and benefits can be identified and how a fair transfer price could be determined. The different support costs and the grid-related costs in both countries were identified as the most important costs. A price corridor for the statistical transfer was discussed as a starting point for negotiations e.g.:

- Possible floor price: Estonian support level (uniform feed-in premium for new renewable energy installations) or lower (partial recovery of support costs in the past), or LCOE of biomass for heat generation.
- Possible ceiling price: Alternative cost of domestic renewable energy deployment in Luxembourg or cost of potential penalties from infringement payments in case the target is not fully met domestically.

Discussion Results and Main Insights

Participating countries perceived both case studies as valuable approaches and implementation examples of concrete Cooperation Mechanisms.

– Insights from Case Study 1: Joint Projects

The analysis of case study 1 showed that joint projects can bear various benefits in terms of cost-efficiency, energy security, grid integration and innovation, amongst others. One of the main challenges included a fair sharing of costs and benefits among the cooperation countries.

CT2 discussions disclosed that for some participants physical transfer of electricity is an important precondition and element of justification for entering into cross-border cooperation. For PT, it was important to avoid grid constraints and to reduce the impact of variable renewable electricity on its own network. For other Member States (e.g. DE) physical import of RES electricity is a prerequisite to assure a real impact on its national electricity system. Therefore, even though a “tracking” of individual electron flows is technically not feasible, a suitable option for a reliable proof of physical renewable electricity transfer is needed. Grid infrastructure bottlenecks remain a major challenge. It will be necessary to strengthen the capacity of interconnectors between participating countries in order to tap the potential of cross-border cooperation on a larger scale.

It was also highlighted that uncertainties regarding the post-2020 framework might hinder the implementation of joint projects, as participating countries and project developers need investment certainty beyond 2020 to engage in a Cooperation Mechanism.

– Insights from Case Study 2: Statistical Transfers

Discussions in CT2 showed that the determination of the transfer price is the main challenge for statistical transfers. The case study outlined possible approaches for setting the price and illustrated a potential corridor as a starting point for discussions, which was welcomed by participants. The discussion emphasized that in the end the price will be fixed through a bilateral agreement. A fair balance of costs and benefits of the parties involved needs to be found to yield a win-win-cooperation case. Public acceptance is one of the main challenges when implementing a statistical transfer. The selling country needs to justify the selling of surpluses to the consumer/ taxpayer that has initially supported the RES production on its territory. Similarly, the buying country will have to justify the import of target amounts, which needs to be reflected in the negotiations of the transfer price. With regard to the question if a statistical transfer can be made before the transferring Member State has fully reached its binding 2020-RES-target, the European Commission clarified that Art. 6 paragraph 1 of Directive 2009/28/EC does not impede Member States from engaging in statistical transfers before 2020. This underlines that a transferring Member State making use of a Cooperation Mechanism continues to be responsible for ensuring its own national renewable energy target.

2.3 In Practice: Emerging Concrete Cooperation Initiatives and Projects

Participants of CT2 discussed emerging initiatives for implementing Cooperation Mechanisms, which showed that an increasing number of cooperation initiatives or specific joint projects are being considered and planned throughout Europe.

Several participating countries are engaging in concrete Cooperation Mechanisms, partly as a result of the notification process of their national support scheme by the European Commission.

In Germany, the new Renewable Sources Act (EEG) 2014 introduces the option of partially opening the support scheme in order to enhance regional cooperation. Although it is well on track to achieve its 2020 target of 18%, Germany is interested in engaging in Cooperation Mechanisms, as these offer opportunities to jointly tap cost-effective RES potentials, and to enhance coordination and alignment of RES support schemes. A pilot tender on ground mounted photovoltaic has been introduced in January 2015. During a test phase of 2015 and 2016, Germany will partially open this pilot tender to renewable energy installations from other Member States. From 2017 onwards, renewable support for all technologies should in principle be determined by tendering procedures, and at least 5% of the newly installed renewable capacity should be open to other Member States.

The EEG 2014 defines three requirements for the opening:

- An international cooperation agreement has to be in place.
- The principle of reciprocity needs to be applied.
- Physical electricity import is needed to show a real impact on the German power system.

In March 2016, the Federal Ministry for Economic Affairs and Energy published the key features of the partial opening of the pilot tender for ground mounted PV installations. Two options are foreseen for this partial opening:

1. Mutually opened tender: Cooperation partners agree on the key features of their cooperation. Every partner conducts a separate but opened tendering procedure and determines the tender design (pricing rule, max. amount of bid (ct/kWh) and lot size (MW), tendering of kW or kWh, etc.).
2. Joint tender: In this case, cooperation partners jointly conduct a tender process with joint tender design, which is open for installations in both countries. Installations winning the bid will be assigned to the support scheme of one or the other cooperation partner in accordance with a mutually agreed allocation method. This means that the bidder knows the funding conditions when submitting the bid, but not the disbursing agent/financing mechanism.

In case of doubt about which regime to apply for site-related conditions like regulatory approval, area, grid connection etc., the conditions of the country of location of the installation generally apply for both options. This partial opening will be implemented by an ordinance, which will determine the design options and possible derogations. This ordinance shall take effect in 2016. Based on the findings from these pilot tenders, the partial opening of the support scheme shall be implemented from 2017 onwards for other technologies as well.

Denmark has also committed to open up its support scheme in 2015 and 2016 within the framework of a pilot tender on PV. Denmark intends to open up a part of that tender for installations from other Member States. Denmark has similarly introduced the requirement to conclude a reciprocal cooperation agreement with another Member State and to prove physical import.

Likewise, Luxembourg agreed to open a share of tenders for RES electricity. The opening is also subject to reciprocal cooperation agreements and physical electricity import.

CT2 discussed the cooperation case between Denmark and Germany that establishes mutually opened ground mounted PV auctions. Details of the cooperation agreement, which is expected to be signed in summer 2016, as well as insights and lessons learned from the process of reaching a cooperation agreement were shared and discussed with CT2 participants. The Danish-German cooperation is based on separate but mutually opened auctions with individual tender designs. A major topic in the negotiations was the question for which auction elements national rules would have to be adapted, and for which these could remain unaltered. While the cooperating countries agree on some basic parameters of the tender design (e.g. support via market premiums), each country set out support conditions for its own tender. As regards location-specific rules (e.g. eligible areas and sites, planning and construction rules, licensing and tax law, conditions and costs for grid connection) in principle, the rules of the country where the installation is to be built should apply. Furthermore, Germany and Luxembourg are in discussions on cooperation in the framework of the opening of the pilot tender.

Estonia introduced the option to open up its renewable and cogeneration bidding processes as of 1 January 2015 for producers in other Member States. The opening of the support scheme can be based upon cooperation agreements as specified in Art. 6-11 of the EU Directive 2009/28/EU to enable the accounting of imported renewable electricity towards the Estonian renewable energy target.

The Netherlands already changed their legislation of the current support scheme to have the possibility to include renewable energy projects in other EU Member States. Nevertheless, due to a lack of public acceptance and political support, the Netherlands will first try to reach its renewable energy target by national means.

In 2014, the UK published its position⁴ on opening its Contract for Difference (CFD) scheme to non-UK projects. UK will continue to consider how to develop non-UK CFDs that align with affordability, security and decarbonisation objectives. Challenges of opening include negotiation of international agreements, institutional and regulatory arrangements in different jurisdictions and allocation within a competitive framework. UK and Ireland signed a Memorandum of Understanding on Cooperation in

⁴ www.gov.uk/government/uploads/system/uploads/attachment_data/file/340932/DECC_Non-UK_CFD_August_2014.pdf

the Energy Sector in January 2013 and undertook joint work on how Irish renewable energy resources might be developed to the mutual benefit of both. This included cost-benefit analysis and options for support mechanisms and regulation of connection assets. Mutual benefits highlighted in the analysis included lower costs to deliver generated RES-E to the importing Member State and the greater savings potential, and the expected return on investment. Discussions were deferred in 2014 since there was no prospect of projects being commissioned by 2020.

In general, tenders have been regarded as suitable for an opening of support schemes. CT2 discussions on cross-border access to RES tenders revealed that an opening can involve complex adjustments in tender designs which need to be carefully addressed.

These include for instance setting the electricity reference price, prequalification criteria as well pricing rules. CT2 participants showed great interest in further discussion and experience exchange.

Discussions showed that a potential blueprint for cooperation could serve to facilitate countries' implementation of voluntary cross-border renewables auctions. Such a blueprint should set out important principles for cooperation and provide basic models for cross-border access to support schemes. Linking the current obstacles of cooperation to solutions, CT2 participants underlined the following principles for cooperation:

| Obstacles | Possible solutions or principles |
|---|--|
| Public acceptance | Reciprocity |
| Fair sharing of costs and benefits | Reciprocity/cooperation agreement |
| Infrastructure requirements/physical export or import | Interconnection and proof of import/export |

As regards an opening of auctions, the discussed models include unilateral opening, mutual opening, joint auction with separate support schemes or joint auction with joint support scheme. The models vary in their intensity of cooperation and level of alignment of support schemes.

Preferences for cooperation will differ between Member States, as they have different interests and operate in different economic and political contexts. This might involve considerations like short-term cost efficiency vs. long-term strategic energy cooperation, or energy security vs. a diversification of energy supply sources. Public acceptance of an opening of RES auctions is another important aspect for cooperation. Moreover, most participants agreed that as few changes as possible should have to be made to their national support schemes and framework conditions when establishing cross-border support schemes. An alignment of location-specific conditions (such as eligible areas and sites, taxes and levies, grid connection regimes, etc.) might not be possible and also not necessary in cross-border auctions for RES-E. Here, in principle the rules of the country where the installation is to be built should apply. With regard to the auction design in terms of auction size, materials, financial prequalification or other elements, mutually opened auctions might require an alignment in terms of certain basic elements. In the case of joint auctions, a stronger alignment of auction design elements appears to be necessary as the cooperating countries need to agree on a design for the joint auction.

Overall, the discussion highlighted that the implementation of the Cooperation Mechanisms is gaining momentum. Several participating countries discuss or plan an opening of support schemes to foreign renewable energy production. Many aspects of an opening need detailed analysis in order to meet the particular circumstances in the respective countries. These challenges need tailor-made solutions. A balanced sharing of direct and indirect costs and benefits, as well as avoiding over-subsidisation are crucial aspects in this context. Furthermore, a viable solution for the requirement of physical import needs to be found. Public acceptance remains a sensitive issue for the opening of support schemes. The emerging cooperation projects show that reciprocity plays a crucial role for the opening of support schemes. CT2 participants stressed that controllability of support to foreign renewable energy installations is vital to ensure a balanced approach and win-win situation. As highlighted by the judgement of the European court of justice in the cases of Ålands Vindkraft⁵ and Essent Belgium⁶, participating countries need to be able to decide on supporting renewables in other countries. Support for national and foreign renewable energy production have to complement each other in line with the participating countries' energy policy goals.

3 Further Cooperation Areas

3.1 Cooperation on Wind Offshore

CT2 took a closer look at cooperation opportunities in the field of wind offshore. Analysis of the North Sea Countries' Offshore Grid Initiative (NSCOGI) and the NorthSeaGrid Project showed that enhanced regional coordination and cooperation bear cost reduction potentials of wind offshore deployment. CT2 discussions revealed that again a major challenge is a fair sharing of direct and indirect costs and benefits when jointly supporting wind offshore. Physical electricity import was underlined to be crucial in order to contribute to energy security of the receiving countries. It is also an important aspect as regards social acceptance of offshore cooperation. Main barriers for regional offshore cooperation include regulatory arrangements to incentivise investments in the grid infrastructure or the electricity trade across borders. Existing regulatory barriers relate, for instance, to differences in grid connection regimes and rules on system responsibility (i.e. provisions on system services, curtailment, etc.). Differently designed support measures might as well hinder a cross-border perspective of support schemes. Here, a stronger coordination of these regulatory regimes can facilitate cooperation. In addition, the complexity and number of necessary agreements between the involved parties as well as planning and authorisation procedures are regarded to be demanding fields of cooperation. Another important question is which cross-border allocation system will apply, i.e. what the capacity implicitly allocated in the market coupling process will be.

In general, most participants agreed that wind offshore cooperation can bear great opportunities for participating countries. Nevertheless, it has to be carefully examined and tailored to the specific conditions in each country to yield win-win results for the cooperation partners. Participating countries further agreed that the analytical and theoretical level of the current investigations needs to be translated into practice.

⁵ ECJ 2014, Ålands Vindkraft, 01.07.2014, C-573/12.

⁶ ECJ 2014, Essent Belgium, 11.09.2014, C-204/12 to C-208/12

3.2 Cooperation with Third Countries (Art. 9)

CA-RES II participants also discussed cooperation with third countries as foreseen in Art. 9 and 10 of the RES Directive 2009/28/EC. In the context of these discussions, the IEE funded project BETTER⁷, was presented to CT2 participants. This project addressed RES cooperation between EU and neighbouring countries in several dimensions. Through case studies (in North Africa, Western Balkans and Turkey), stakeholder involvement and integrated analysis, the project assessed to what extent cooperation with neighbouring countries could help the EU achieve its RES targets in 2020 and beyond, trigger the deployment of RES electricity projects in third countries and create synergies between involved parties.

Results of the IEE project BETTER indicate that compared to the EU, some neighbouring countries have a relative advantage in terms of RES-E potential (mostly wind, solar and hydro) and/or costs. This fact provides a clear indication that there might be a case for EU Member States to be interested in developing new renewable energy projects in neighbouring countries as a way to partially fulfil their RES targets in a more cost-effective manner. Additionally, besides a purely economic driver, enhanced RES-E cooperation can lead to other benefits for both Europe and neighbouring countries.

Potential Drivers for RES-E Cooperation for Europe

- Achieve RES and climate change targets more cost-efficiently
- Foster stabilizing economic relations with neighbouring countries
- Open new market opportunities
- Diversify energy portfolio & supply regions - increasing security of supply.
- Technology transfer and capacity building
- Get flexible renewable power supply to complement own variable RES-E (e.g. CSP)

Potential Drivers for RES-E Cooperation for Neighbouring Countries

- Create new jobs and industrial opportunities
- Foster technology development and domestic know how
- Create income from domestic resources
- Reinforce the existing economic and political relationships with the EU
- Contribute to the decarbonisation of the domestic energy mix
- Create economies of scale in RES-E deployment

⁷ www.better-project.net

The BETTER project identified the following challenges for enhanced cooperation between EU and neighbouring countries.

BOX 1: Challenges for Enhanced Cooperation between EU and NC

| Challenges for RES-Expansion in Neighbouring Countries | Challenges for RES-E Trade |
|--|---|
| <ul style="list-style-type: none"> – Need for further development of the legal and regulatory frameworks to attract private investors, and for more ambitious implementation of RES targets – Persisting technical barriers associated to fragile electricity systems (e.g. weak grid infrastructures), particularly in the Western Balkans. – The actual socio-economic benefits from RES deployment do not always match the expectations and require appropriate policies (R&D, industrial, etc.) – High upfront costs and lack of financing mechanisms. – Politically defined electricity prices and high fossil fuel subsidies. – Lack of clear political commitment to RES-E. – Social acceptance issues (path dependencies and lack of visibility of the socio-economic and environmental benefits) | <ul style="list-style-type: none"> – Current energy policy priorities in the EU and in NCs are not yet fully aligned. – Limited supply (i.e. electricity surplus in neighbouring countries) and limited demand (i.e. Member States that are willing to buy). – Limited existing interconnections within the EU as well as to NCs. – Export projects are unattractive for investors (reasons include financing, lack of a specific export regime clarifying grid access, capacity allocation rules, congestion management, traceability of green electricity etc.). – Mutual benefits (and costs) of RES-E cooperation are not yet fully understood e from various perspectives (i.e. importer, exporter and transit country perspective). – Transit countries' interests must be accounted for. |

Despite the potential benefits, no cooperation project under Art. 9 has been implemented so far and the prospects until 2020 are quite limited. Key reasons for this are the mismatch between demand and supply, the limited interconnection capacity between Europe and neighbouring countries as well as limited interconnection capacity within Europe.

CT2 participants indicated that their interest in cooperation with third countries is rather limited at the moment. The focus seems to be more on cooperation with EU countries.

4 The Way Ahead: Perspectives of Regional Cooperation

While the use of the Cooperation Mechanisms has been rather limited in the last years, their implementation is now under way in several participating countries (in section 2.3). As a partial opening of tenders has been part of the agreement with the EU Commission within state aid approval procedures in a number of participating countries over the past two years. It can therefore be assumed that an opening will remain a key aspect of state aid decisions. In addition, the 2015 progress report on RES deployment in participating countries suggests that regional cooperation is likely to increase as the RES trajectory becomes steeper towards 2020.

Participants stressed the importance of regional cooperation as a key instrument for enhancing the Internal Energy Market and increasing energy security, which will also require increased inter-connections and a strengthening of existing infrastructure. It was emphasized that an EU incentive for cooperation, e.g. a dedicated EU fund, can be a helpful means to kick-start cooperation activities. For instance, top-up grants for cross-border projects or financial instruments reducing investment risks and thus the cost of capital could be suitable means for accelerating the use of Cooperation Mechanisms. Testing cooperation early on can ease cooperation at a later stage and will provide advantages for target achievement to “early movers”, as competition will rise when the EU moves towards 2020 and trajectories become steeper.

The European Council of March 2015 highlighted the important role of “regional cooperation that should go together with developing a more effective, flexible market design” for the materialisation of the Energy Union. Also, the European Commission gave a key role to a more regional approach in the field of energy in its Communications on the Energy Union of 25 February 2015. The Communication foresees actions on a regional level across all five dimensions of the Energy Union, namely energy security, internal energy market, energy efficiency, decarbonisation of the economy, research and innovation. Enhanced coordination and cooperation of participating countries to improve electricity market integration and to better use renewable energy and energy efficiency potentials is particularly considered. In its conclusions of November 2015 the Council of Energy Ministers has specified that enhanced regional cooperation will become a cross-cutting issue and important aspect of the future governance system of the Energy Union and needs to be facilitated or incentivised.

CT2 participants agreed that these developments can strengthen the role of Cooperation Mechanisms with regards to the implementation of the RES Directive on the way towards 2020 target achievement. In particular, regional cooperation is likely to play a major role in the new RES framework. Discussions on this topic within the CA RES will continue and are key in order to share experience and best practices across participating countries allowing for a wider and successful implementation of the Cooperation Mechanisms.

5 Main Findings and Achievements

The implementation of the Cooperation Mechanisms gains momentum

Although the implementation of the Cooperation Mechanisms is still at an initial stage, in the past years, several participating countries announced to partially open their support schemes. Different cooperation projects are now underway and will be implemented shortly. The Cooperation Mechanisms prove to be suitable instruments to jointly agree on mutually beneficial cooperation cases. Furthermore, “early movers” may have advantages in achieving their national target, as target fulfilment will be more challenging when the EU moves towards 2020 and trajectories become steeper. Moreover, a partial opening of support schemes can help to ensure compatibility with state aid requirements.

Although renewable energy cooperation opportunities with neighbouring countries exist, Article 9 is not likely to play an important role in the short term. Besides the existing barriers (described in section 3.2), most MS and EU policy makers seem to focus their efforts on fostering cooperation within Europe. Whether RES cooperation with neighbouring countries regains momentum in the future as a way to help the EU meet its RES targets in a cost effective manner is yet to be seen.

Cross-border access to support schemes requires thorough design – the proper functioning of national support schemes needs to be ensured

Many aspects need to be considered and challenges overcome before opening up of national support schemes. A fair and balanced sharing of direct and indirect costs and benefits, avoiding over-subsidization and ensuring public acceptance are key aspects that need particularly thorough consideration. The judgement of ECJ in the cases of Ålands Vindkraft and Essent Belgium underlined that a general obligation to open support schemes is not the right way forward. It would jeopardize the proper functioning of national support schemes.

RES tenders appear to be a suitable form for a partial opening

The recent developments in several participating countries (i.e. DK, DE, LU, EE) reveal that tenders appear as a suitable instrument for allowing cross-border access to support schemes. Via tenders participating countries can define and control cross-border access to support schemes. Nevertheless, many design elements need to be carefully assessed in case of an opening and often require adjustments. The cooperating parties need to find consensual solutions to these aspects. A potential blueprint for cross-border renewable auctions, that sets out key principles of cooperation and provides basic models for cross-border access to support schemes, could facilitate their implementation. Preferences for cooperation will differ between Member States due to different interests and contexts. Participants agreed that as few changes as possible should be made to national support schemes and framework conditions. Depending on the intensity of cooperation and the model chosen, auction design elements might require different degrees of alignment, whereas location-specific conditions could remain unaltered. Although considerable effort is needed in developing cooperation projects, these have the potential for replication and scaling up in the future.

Physical electricity and the principle of reciprocity are key requirements in several participating countries

The emerging cooperation projects as well as the case studies show that physical import/export of renewable electricity is a key precondition for entering into cooperation mechanisms for many participating countries. Here, suitable solutions need to be further assessed. From a long-term perspective the extension of grid infrastructure is a precondition to allow for regional cooperation on a larger scale and to reach a fully integrated internal energy market. Furthermore, several countries require a cooperation agreement on the basis of reciprocity. Thereby, direct and indirect cost and benefits can be shared in a more balanced way. This is also key to public acceptance of regional cooperation. Here, a reciprocal opening of support schemes or joint support schemes can be suitable options. They depend on the cooperating parties' policy preferences and circumstances.

Wind offshore bears great potential for cooperation

Enhanced regional cooperation and coordination in the field of wind offshore can tap cost reduction potentials. A stronger coordination of regulatory regimes can help to overcome existing barriers like differences in grid connection and support regimes as well as authorisation procedures. Overall, participants agreed that by increasing regional cooperation, participating countries could make use of synergies, reduce costs and benefit from mutual learning. This could hold a number of advantages with respect to the internal energy market, the deployment of RES, the enhancement of energy security and to decreasing the costs of energy supply in general.

Besides wind offshore, other renewable energies may play an important role in future energy cooperation initiatives in Europe. MS preferences for one technology or another depend on a wide range of factors such as available RES potentials, cost advantages, industrial strategic interests, system management arguments (such as storage capacity), public acceptance issues (related to potential environmental and socio-economic impacts), regulatory schemes, R&D, industrial and trade policies in place, etc.

Regional cooperation is a cornerstone of the Energy Union and the future 2030 RES framework

The discussion on the EU Energy Union stresses the importance of regional cooperation in the energy sector. Similarly does the debate on setting up the post-2020 framework for renewable energy. Joint efforts on deploying renewable energy sources are needed. Overall, CT2 participants agreed that stronger cooperation bears great potential for jointly reaching the EU RES targets and provides flexibility for Member States to contribute to these targets. It was, however, also generally agreed that cooperation should continue to take place on a voluntary basis. It was highlighted that a more regional approach - not only with regard to support schemes, but also on issues like grid development and market design - entails great benefits in terms of energy security and achieving the internal energy market. In particular energy infrastructure development remains a key challenge and precondition.

6 Abbreviations

Participating countries are referred to according to their two-letter country codes as defined by ISO 3166-1 alpha-2 standard (AT – Austria, BE – Belgium, etc.).

| Abbreviation | Meaning |
|---------------|---|
| BETTER | Bringing Europe and Third countries closer together through renewable Energies - Project supported by the Intelligent Energy Europe (IEE) programme |
| CA-RES | Concerted Action on the Renewable Energy Sources Directive |
| CFD | Contract for Difference |
| CSP | Concentrated Solar Power |
| CT | Core Theme |
| EC | European Commission |
| EEAG | Guidelines on state aid for environmental protection and energy 2014-2020 |
| EEG | German Renewable Sources Act |
| EIB | European Investment Bank |
| EU | European Union |
| GHG | Greenhouse Gas Emissions |
| IEE | Intelligent Energy Europe Programme |
| LCOE | Levelized Cost of Electricity |
| NC | Neighbouring Countries |
| NSCOGI | North Sea Countries' Offshore Grid Initiative |
| RES | Renewable Energy Sources |
| SDE+ | Stimuleren Duurzame Energieproductie/Encouraging Sustainable Energy Production |
| TFEU | Treaty on the Functioning of the European Union |

This is a public CA-RES report

For more information please send an email to:
Leonardo.Barreto-Gomez@energyagency.at,
Cornelia.Schenk@energyagency.at,
Shruti.Athavale@energyagency.at

greenprint*
klimapositiv gedruckt



The Concerted Action to support the implementation of the RES Directive 2009/28/EC (CA-RES) was launched with the participation of the responsible authorities from 30 EU countries and supported by Intelligent Energy Europe (IEE) in July 2010 to provide a structured and confidential dialogue on how to address the cost-effective implementation of the RES Directive 2009/28/EC.

For further information please visit www.ca-res.eu

Disclaimer: The sole responsibility for the content lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.
Copyright © Concerted Action - Renewable Energy Sources Directive. All rights reserved.

