

# A TOOLBOX FOR REGIONAL ENERGY COOPERATION

REGIONAL STEPS TOWARDS  
AN ENERGY UNION



SECRETARIAAT-GENERAAL  
SECRETARIAT GÉNÉRAL

### **Publisher**

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### **Layout**

Fuel. - Brussels - [www.fueldesign.be](http://www.fueldesign.be)

### **Date**

October 2016

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# THE BENELUX, WHERE REGIONAL COOPERATION STARTS

The Benelux cooperation is sometimes called the cradle of European integration. It actually was but also still is. Today, its vocation remains more than ever to trigger that integration.

The Benelux is one of the oldest international collaborations in Europe and in terms of energy the General Secretariat hosts leading regional cooperation like the Pentilateral Energy Forum, the Gas Platform, BEN!EX and the North Seas Cooperation (previously NSCOGI). The Benelux Union plays a pioneering role in the Energy Union. Since the EU's transition to a sustainable energy system runs through regional cooperation, we want to share with this paper some experience and analysis on regional energy cooperation of the past 15 years.

Regional cooperation is striking a balance between a clear framework and flexibility, between structuring top down and nurturing bottom up the energy policy debate.

The Benelux cooperation is structural, laid down in the Benelux Treaty, and offering a clear framework. It focuses on the continuous strengthening of an economic, sustainable and safe union between Belgium, the Netherlands and Luxembourg. For more than half a century, the Benelux Secretariat is the pivot of this cross-border cooperation. With about 50 employees, the General Secretariat of the Benelux in general and the Market Team more specifically, works daily on concrete cross-border projects for citizens and companies respectively on energy. Recently, BEN!EX (Benelux Energy Expertise Network, where energy knowledge institutions from the Benelux come together and if necessary are brought together with policymakers) was launched.

In contrast to the clear framework, the content is not set top down. Priorities are set at the same pace as support can be created. Consensus is needed, not to agree on everything, but to deal pragmatically with problems across the borders of the Benelux and beyond. That this proves to be successful also in a Pentilateral and North Seas setting, is purely a win-win. We have learnt and are still learning from other regions and wish that this papers can energise more regional cooperation, both existing or in development.

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The paper below was written between March and July 2016 by the lawyer Nicolas Lefèvre, in close cooperation with the Market Team. With the kind support of Frederik Deloof, Mr Lefèvre completed a study on regional cooperation. On the basis of academic research and conversations within and outside of the Benelux, this paper wants to answer the following questions. Why collaborate at a regional level in the area of energy? Which joint ventures already exist? What are the preconditions for successful cooperation? How can this be translated into practical governance regulations?

Finally, we will continue to trigger energy cooperation. We hope that this work can contribute to that endeavour, inside and outside the Benelux, and look forward to further discussing it with you.

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Head of the Team Internal Market

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# IN ESSENCE

As it stands, climate and energy policy is ultimately a national responsibility, entrenched in a regional reality, and in need of a pathway to reach its European destination. Successful regional cooperation can be the trailblazer.

The toolbox concept allows for the differentiated approach desperately needed, without abandoning the ambition to lead the different regional approaches towards common and converging European objectives.

# INTRODUCTION

In the last ten years the European level has become predominant in climate and energy discussions. The Energy Union project seeks to further integrate the internal market, to develop a more common approach to security of supply and to create genuine solidarity. A multinational regional level has emerged as a bridge between the national level, that still holds key competences in this area, and the European level. Regional cooperation is now recognised as the stepping stone needed to deliver the Energy Union and to make sure EU-wide climate and energy targets are achieved.

The articulation of the roles of the European, regional and national levels represents a major challenge of governance. It requires an in-depth dialogue to develop appropriate solutions to the numerous problems facing a fast changing energy sector.

This paper will propose that regional cooperation cannot be approached with a top-down, one-size-fits-all mind set. Rather, flexibility is essential to ensure successful cooperation that is effective and not burdensome for the parties involved. At the same time, a clear framework can stimulate regional initiatives to fulfil their enormous potential and mitigate possible risks involved. The metaphor of a toolbox can reconcile these two conflicting realities: it implies flexibility as well as predictability and continuity. Having a range of well-defined tools available enables regions to create tailor-made solutions, while simultaneously streamlining the current proliferation of regional cooperation.

# 1. REGIONAL ENERGY COOPERATION: WHY?

**European destination.** In the previous two decades, EU objectives have been agreed to reduce Greenhouse gas emissions (by 20% by 2020, and by 40% by 2030), increase the share of energy coming from renewable sources (to 20% by 2020 and to 27% by 2030) and improve energy efficiency (by 20% by 2020, by 27% by 2030). EU legislation then sets out how those targets should be achieved, but the implementation is mostly left to the Member States.

**National responsibility.** On Energy, the Treaty on the Functioning of the European Union foresees a shared competence between the EU and member states. There are, however, two exceptions to this rule. National sovereignty is explicitly acknowledged for the deployment of a state's natural resources and for determining the national energy mix. The national level thus remains very important, also because of the freedom Member States enjoy to translate into practice details of the EU policy objectives set in directives and regulations.

The rationale behind this constitutional set-up can mainly be found in the strategic nature of energy as perceived by each European country, and the consequent need to maintain a certain degree of national sovereignty over such a critical sector. The content of Article 194 TFEU reflects this. An unfortunate consequence is that it has sometimes led to incoherence between various national policies and between national policies and EU policy. This heterogeneity has been reinforced by the extended nature of energy policy itself, with its broad spectrum of different areas in terms of policy objectives, industrial sectors, and activities (regulation, investments, policy development, R&D). Whether or not the objective of an Energy Union requires a different distribution of competences, it is hard to foresee a major treaty revision within the near future. Successful regional cooperation can be a more than suitable alternative, pushing Europe forward from the bottom up. Hence the conclusions of the European Council of 23 and 24 October 2014 and the Council conclusions of 26 November 2015, which make clear that regions are seen as stepping stones in the process of creating the Energy Union.

**Regional reality.** The revitalization of the regional approaches to energy policies presents a way to renew the energy governance at the EU level. Regional energy cooperation could bridge the gap between the reality of the market and the division of competences in the Treaty. Indeed, interconnection implies that changes in one area have an impact on interconnected neighbouring systems. Neighbours have to rely on and coordinate with each other following rules agreed on in a stable political framework, in order to ensure security of supply and well-functioning markets. Actors involved can coordinate more efficiently which reduces the administrative burden. Finally, pioneering states have the possibility to move forward more quickly.

There are, however, a number of risks and challenges associated with promoting regional cooperation. Fragmentation is an evident example. If different regional energy initiatives blindly follow their own course, it might lead to diverging paths and levels of integration and the current heterogeneity would simply be scaled up to the regional level. Another risk is that regional energy approaches can create different poles of competence and responsibility with overlapping and duplications at institutional levels, thus complicating energy governance rather than facilitating it.

Therefore, a condition for using regional approaches would be to allow their development in a clear, coherent and consistent set of principles. The key issue would then be how to establish a governance structure that ensures a sufficient degree of flexibility while maintaining a certain level of guidance to lead the different regional approaches towards the common and converging European objectives. For that reason, it is important to note that the Commission is currently working on guidance for regional cooperation.

To allow regional cooperation to reach its full potential, while at the same time neutralizing as much as possible the risks and challenges described above, it is essential to analyse what already exists today. How do countries work together on energy?

## 2. REGIONAL ENERGY COOPERATION: HOW?

Regional energy cooperation is becoming increasingly popular. Consequently, it is not surprising that numerous regional initiatives exist. When thinking about the role of regions in the Energy Union, it is indispensable to look at the existing examples. That way, we can learn about what works and what doesn't, but also reflect on the future of those forms of cooperation. It is outside the scope of this paper to discuss and compare all initiatives. However, in order to obtain a broad understanding of what the concept of regional cooperation entails, it seems valuable to categorize forms of energy cooperation. Doing this will help structure the discussion, as well as enable us to infer some general rules for success.

Several classifications of types of regional energy cooperation have been developed by academics. For example, K. Umpfenbach et al. (2015) have mapped them onto the main objectives of EU energy policy that relate to electricity. L. Meulman et al. (2012) by contrast classified regional initiatives according to the levels of cooperation intensity, from mere information sharing to joint energy policy making for the whole region. C. Egenhofer and J. de Jong (2014) opted for a very basic way to differentiate existing initiatives, that is to say between bottom-up and top-down processes. Methods of classification are further expanded upon in the Annex to this paper. The work on this topic carried out by numerous researchers is extremely useful. They provide some rough guidelines on what's necessary for successful cooperation. Nonetheless, their academic analysis usually doesn't provide countries wanting to get involved in regional energy cooperation with the necessary tools. The next chapter will try to outline how we can take their work one step further.

## 3. TOOLS FOR REGIONAL COOPERATION

The classifications discussed above make it abundantly clear that there are countless ways to cooperate regionally on energy matters. While it is difficult to objectively assess the respective success of each form of cooperation, one thing is beyond doubt: there is no one-size-fits-all approach that works everywhere. Depending – among other things - on the purpose of the cooperation, the region concerned and the number of countries involved, different types of cooperation are desirable. However, 7 overarching principles for successful cooperation can be inferred from past experiences:

- 1. Clear political vision guiding the process**, i.e. a shared understanding between the involved member states' governments on what the exact objectives of the cooperation are
- 2. Participation of all relevant stakeholders**, particularly market participants, to ensure pragmatic and practical solutions
- 3. A step-by-step approach**, in which MS can develop concrete solutions to challenges they commonly face
- 4. Continuity**, provided by permanent staff with a clear mandate, who can facilitate the cooperation and follow-up the progress made
- 5. Communicate potential gains and achieved results** to political leaders and the public in the involved countries to facilitate political and public acceptance
- 6. Appropriate geographic composition**, dependent on the scope and intensity of the cooperation as well as the existence of other regional initiatives
- 7. European orientation**, namely working towards a greater European market integration and complementarity to EU legislation

Most of these conditions can be incorporated into a regional cooperation governance system in several ways. This gives Member States a theoretically endless amount of options for regional cooperation, enabling them to craft a tailor-made regional structure. At the same time, the abundance of choice could lead to dysfunctional or superfluous formats. A clear framework is required to maximise the potential for success of regional cooperation. In other words, we need a toolbox containing a set of well-defined tools giving tangible meaning to the general factors for success. That way, existing and future regional initiatives can be streamlined and remain flexible. The Member States, with help from the Commission, should be able to create such a toolbox.

Member states currently participating in regional cooperation should bring forward how they implemented the factors for success. As an example, three case studies can be found in the next chapter. Following the collection of tools for successful cooperation, the Commission will have to organise them and present to the Member States a well-structured, coherent toolbox.

An idea would be to create ‘minimal’ and ‘maximal’ tools for each factor for success depending on the level of formalisation of the cooperation, possibly supplemented by one or more ‘medium’ options. For example:

- Clear political vision could be assured by having Director General meetings every two years (minimal tool) or by convening a High Level group of Ministers every two years, preceded by a Director General meeting (maximal tool)
- European orientation can be provided for by explicitly referring to the EU target the initiative is trying to achieve or to the EU legislative act it is implementing regionally (minimal tool). Another option would be to invite the Commission in the governance structure of the regional cooperation (medium tool) or even give it the presidency of the cooperation (maximal tool).
- Communication can happen through release of conclusions after each political meeting (minimum tool) or through regular publication of progress reports (maximum tool).
- Geographic composition of regions should be left to the Member States, but it would be useful to have some tools available on the types of membership available. One could think of full membership (maximal tool), participant (middle tool), and observer (minimal tool) status.

Some factors might require another approach. For example, the guidance concerning continuity lends itself more to a review of best practices than to a set of minimum and maximum options.

Member States willing to engage in regional cooperation should pick the tools necessary to create a fitting structure or adapt an existing one. A broad interpretation of the principle of subsidiarity<sup>1</sup> should be guiding every crafting process: decisions should be made and competences attributed where it is appropriate to do so. This approach is fully compatible with the current EU-framework, as proved by this paragraph from the Mission letters to Maroš Šefčovič, Vice-President for Energy Union, and Miguel Arias Cañete, Commissioner for Climate Action and Energy (1 November 2014).

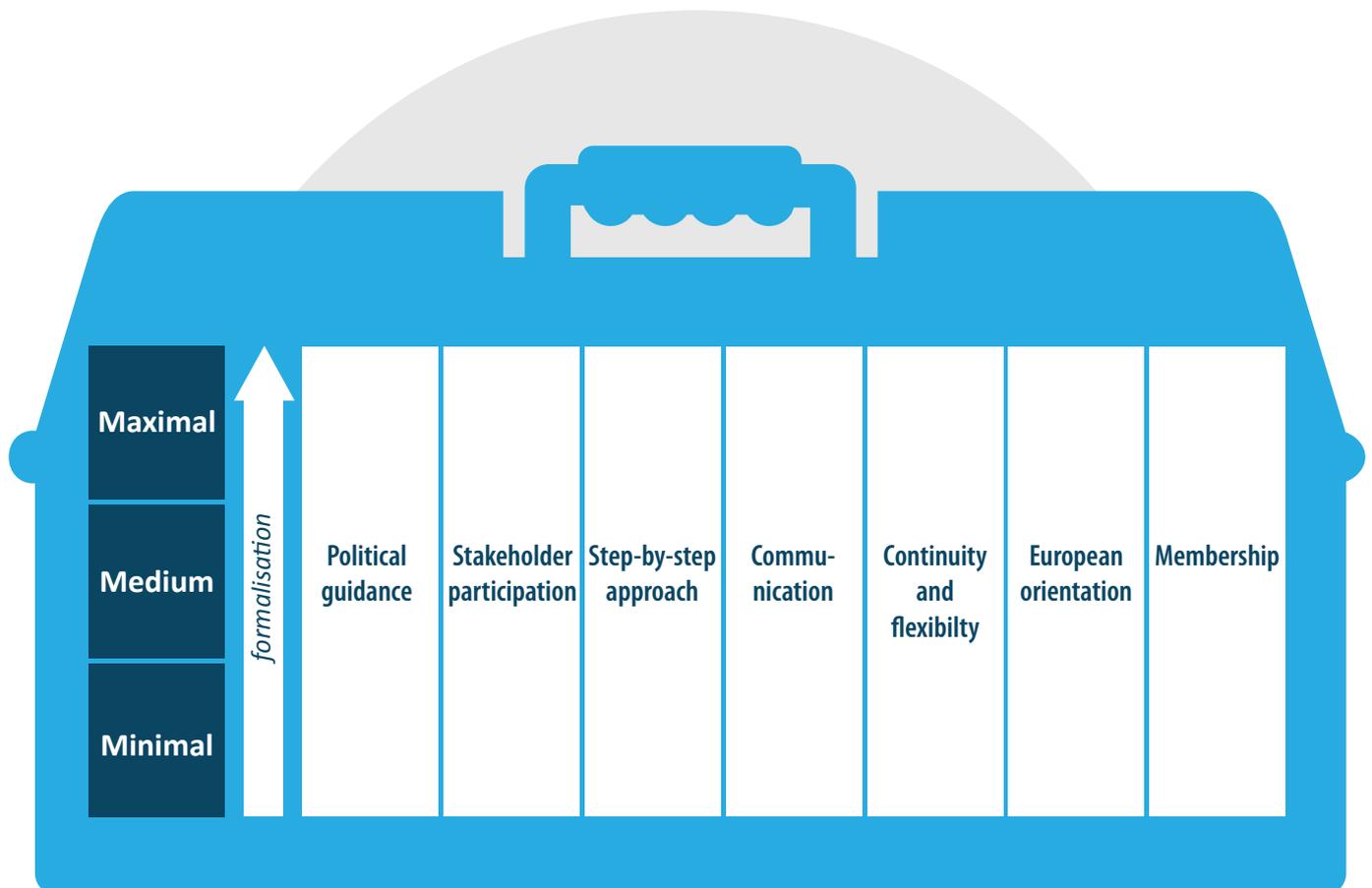
<sup>1</sup> In EU law, subsidiarity has a specific meaning. Art. 5(3) TEU: Under the principle of subsidiarity, in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level.

*“Respect for the principles of subsidiarity, proportionality and better regulation will be at the core of the work of the new Commission. We will concentrate our efforts on those areas where only joint action at European level can deliver the desired results. When we act, we will always look for the most efficient and least burdensome approach. Beyond these areas, we should leave action to the member states where they are more legitimate and better equipped to give effective policy responses at national, regional or local level.”*

Those comments tie in nicely with the observation above that a one-size-fits-all approach doesn't exist. Some regions will need sufficient flexibility from the EU-level to expand existing bottom-up cooperation, while others might require a more active stance from the Commission. The toolbox concept allows for the differentiated approach desperately needed, without abandoning the ambition to lead the different regional approaches towards the common and converging European objectives.

To conclude, any guidance on regional cooperation should be based on the following elements:

- The seven factors for success – overarching principles that are indispensable for successful cooperation
- A toolbox that offers concrete, ready-to-use governance instruments to implement the factors for success
- Respect for the subsidiarity principle



## 4. CASE-STUDIES

Filling the toolbox will need considerable input from Member States currently active in regional initiatives. What do they consider good implementations of the seven factors for success? What are the governance structures they would like to keep on using in the future? Below, a first analysis of three forms of regional cooperation is made, which can be further build upon.

### A. PENTALATERAL ENERGY FORUM



Source: Jaques Delors Institute

The Pentalateral Energy Forum (Penta) is the framework for regional cooperation in Central Western Europe (BENELUX-DE-FR-AT-CH; CWE) towards improved electricity market integration and security of supply. This cooperation was formalized through the Memorandum of Understanding of the Pentalateral Energy Forum, signed on the 6th of June 2007 in Luxembourg. Penta is a well-known regional cooperation: it is an example of a bottom-up forum with a high level of cooperation intensity.

- **Clear political vision guiding the process**

The Ministers for Energy of the pentilateral countries meet regularly in order to discuss energy policy matters and give guidance to this regional cooperation. The initiative aims to give political backing to a process of regional integration towards a European energy market. The priorities of the Pentalateral cooperation have been defined in the Memorandum of Understanding of the Pentalateral Energy Forum in 2007. Both on market integration and security of supply, an Annex of the MoU details the action plan. In 2013, ministers renewed the mandate, putting more emphasis on a regional approach to security of supply and short term market integration. At the signing ceremony, German Secretary of State, Stefan Kapferer, stated: “We in Germany believe that if we want to organize all these processes of transforming our energy systems cost-efficiently, we will not be able to organize this alone.” Finally, in 2015, the Ministers of Energy of the PENTA countries signed a Second Political Declaration, containing a new action plan. For the first time the main concern is with flexibility in the electricity market. Market integration of sustainable energy is another high priority.

- **Participation of all relevant stakeholders**

The added value of this regional cooperation between Ministries, Transmission System Operators (TSOs), the European Commission, Regulatory authorities and the Market Parties Platform. The European Commission has supported Penta from the beginning and is present at the meetings of the Support Groups.

- **A step-by-step approach**

The most important achievement of Penta has been the gradual coupling of the electricity market. CWE TSOs and Power Exchanges have been working on delivering this project since June 2007 when the MoU was signed. Market Coupling in CWE then started in November 2010 by using ATC-based grid capacity calculation. The ATC-based method was relying on the so called “Available Transmission Capacities” which were defined by the TSOs for each border of the CWE zone. Since then, developing and implementing the Flow-Based method has required harmonisation of TSOs’ processes, organisation and systems.

- **Continuity**

The Benelux General Secretariat facilitates the Penta cooperation by offering a neutral platform and managing the daily functioning of this regional cooperation. This provides the necessary continuity and certainty. At the same time, Penta cooperation remains flexible: it is based on a MoU that does not create any legal obligations.

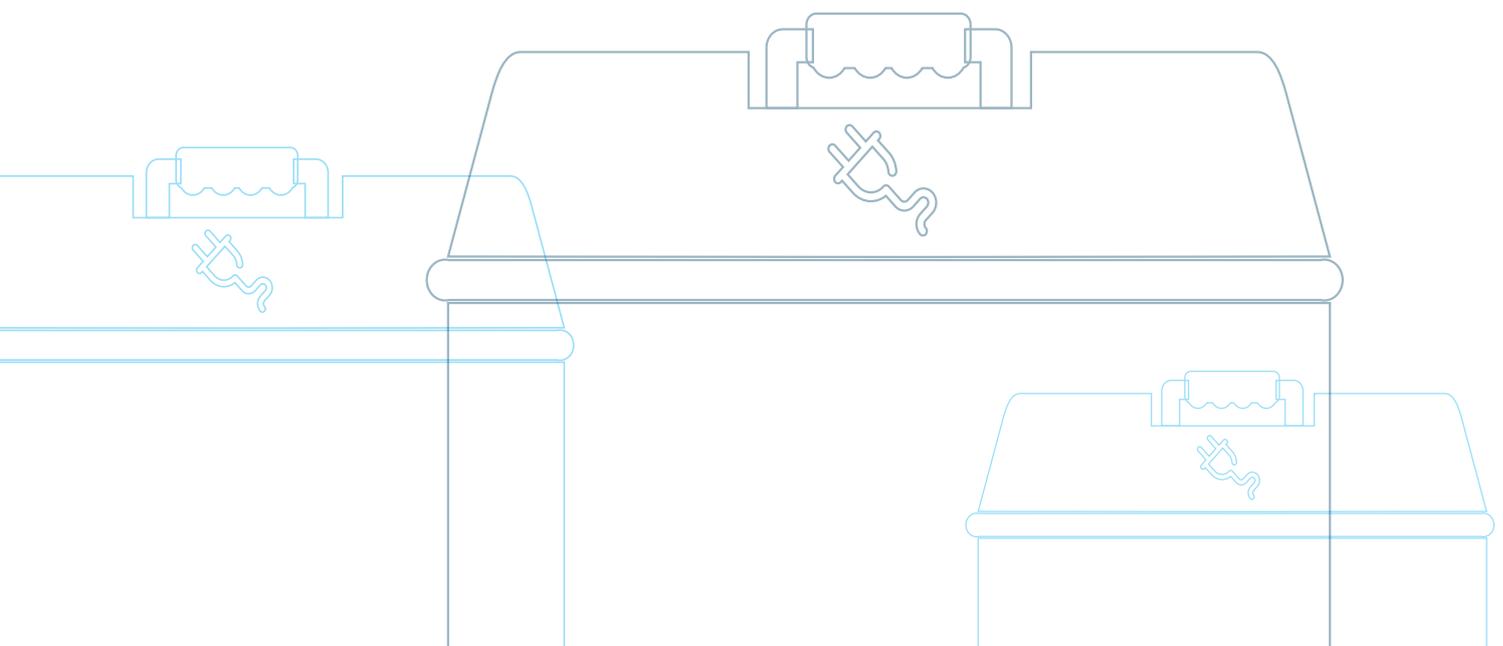
- **Making potential gains of cooperation evident to political leaders and the public**

The frequent and regularly held meetings between ministers and director generals ensures both clear political guidance and coverage of the work being done within Penta. The Penta ministers declared their intention “to communicate interim results regularly and thereby provide a basis for an open and transparent regional dialogue” (Second Political Declaration 2015, para. 19). Moreover, publication of studies carried out on behalf of Penta further helps making gains of cooperation evident.

- **European orientation**

Two elements the Penta model demonstrate its European orientation. First of all, the Commission is present at the meetings of the Support Groups, making sure that the Commission’s view is heard and taken into account. Secondly, the European level is often referred to in the founding instruments of Penta. Some examples:

- [MoU 2007, para. 3](#): This initiative aims to give political backing to a process of regional integration of electricity markets towards a European energy market (...)
- [MoU 2007, para. 7](#) in fine: The achievements should support wider European integration
- [Political Declaration 2015, para. 18](#): [The signatories declare their intention] to review at least every two years whether the regional work is on track as an intermediate step towards an integrated European electricity market



## B. BENELUX UNION



The Benelux Union is an intergovernmental organisation consisting of three countries: Belgium, the Netherlands and Luxembourg. The Economic Union between the countries was created in 1958, and in 2008, a new Benelux Treaty that establishes the guidelines for cooperation in the 21st century was signed. The new Benelux Union has two main objectives: a continuation of the Benelux cooperation as a testing ground for Europe, and a strengthening of the cross-border cooperation. Energy cooperation is an important topic within the Benelux. On the one hand, the Benelux tries to increase the competitiveness of the energy sector by deepening the market. On the other hand, the Benelux aims to increase security of supply by investing in strategic infrastructure. Those objectives are picked up in the Pentalateral Forum, the North Sea Cooperation and the Gas platform. Energy transition is also discussed within the Benelux, the ambition being to achieve a carbon neutral economy.

- **Clear political vision guiding the process**

The Benelux Union structures ensure that the Benelux governments have a shared understanding on what the exact objectives of the cooperation are. Political guidance comes from the Committee of Ministers, the Benelux Council, and – to a lesser extend - the Benelux Parliament. The Benelux Council is composed of high ranking civil servants who mainly prepare the meetings of the Committee of Ministers. The Committee is the highest decision-making institution of the Benelux Union, and is responsible for determining the priorities for cooperation. It is made up of at least one representative at the ministerial level, depending on the agenda that is being discussed. The presidency of the Committee is based on a yearly rotation (BE-LUX-NL). The Benelux Parliament has 49 MP's, coming from the national parliaments, who inform and advise their respective governments of all Benelux-related matters.

- **Participation of all relevant stakeholders**

While the Benelux Union is an intergovernmental organisation, it tries to engage with relevant stakeholders. For example, the working group on alternative fuels has invited operators of charging stations and alternative energy consultants to their meetings. Another recent development has been the launch of the Benelux Energy Expertise Network which aims to bring together knowledge institutions and allow relevant actors and associations in the Benelux countries to get in touch and create synergies.

- **A step-by-step approach**

Alternative fuels is again a good example here. The broad mandate of the Benelux Union makes it possible to act when and where necessary. Article 3 (4) of Directive 2014/94/EU on the deployment of alternative fuels infrastructure states that where necessary, Member States shall cooperate, by means of consultations or joint policy frameworks, to ensure that the measures required to achieve the objectives of this Directive are coherent and coordinated. The Benelux Committee of Ministers adopted Recommendation M(2015)10 to create a framework for such cooperation.

- **Continuity & Sufficient flexibility**

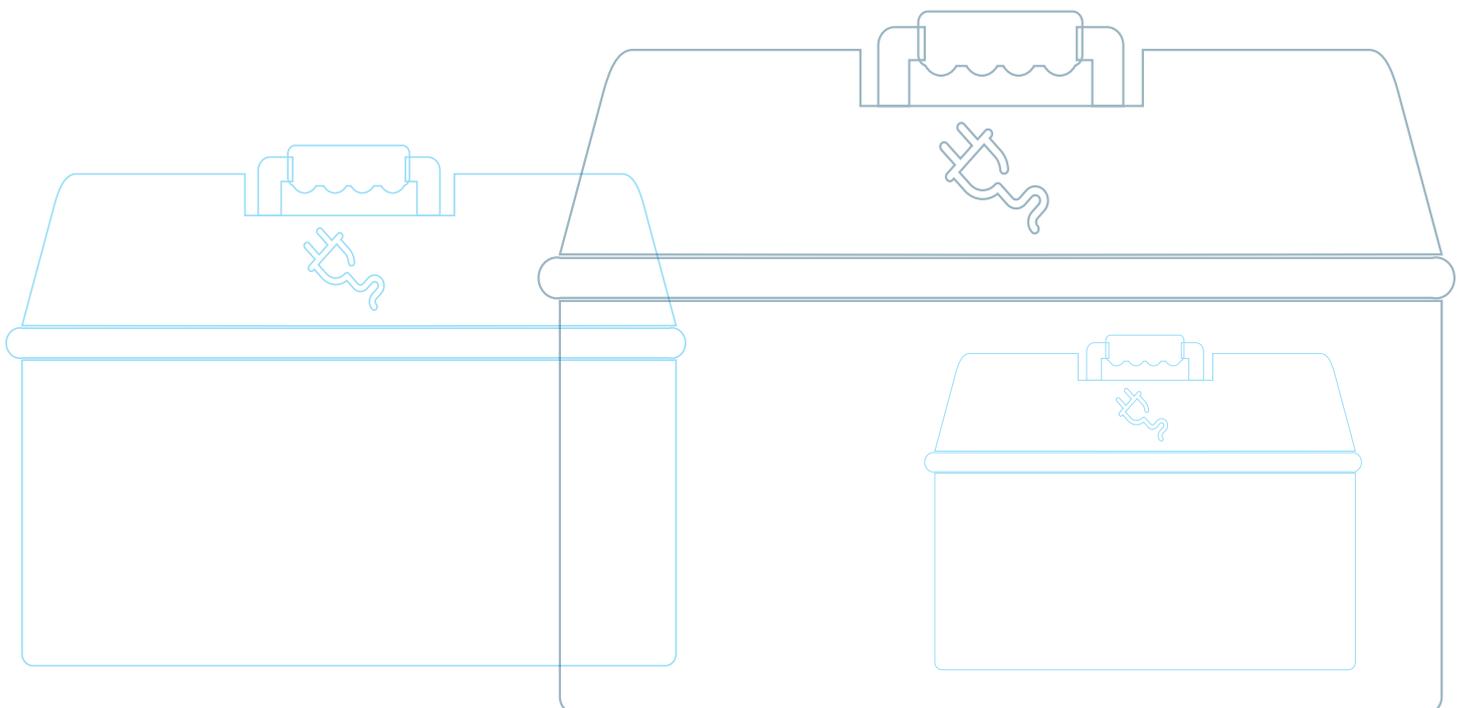
The Benelux Union institutions are based on a treaty, so they know a high level of formalisation, which guarantees continuity. For example, the permanent Secretariat plays an important role in ensuring that results are achieved. At the same time, the Benelux cooperation allows for a flexible approach towards other regions and other forms of cooperation. Indeed, the Pentalateral and North Sea cooperation are supported by the Benelux Secretariat.

- **Making potential gains of cooperation evident to political leaders and the public**

Multiannual working programmes, annual reports and other publications made public on the Benelux website give visibility to the work being done. Projects like the Benelux Energy Expertise Network attract political and public attention.

- **European orientation**

Article 2 of the Benelux Treaty states that the goal of the Benelux Union is to play a leading role in the EU. Recommendation M (2015) 10 mentioned above is an example of this. Article 350 TFEU makes it possible for the Benelux cooperation and integration to go even further than the EU, which enables it to push Europe forward.



## C. NORDICS



It is of course extremely interesting to look at other regional initiatives, in search of best practices to fill our toolbox. The Nordics are a well-known regional cooperation, amongst others in the field of energy. However, this is only an onset of a case study, since we do not possess the necessary knowledge.

The Nordic energy cooperation dates back to the creation of the Nordic Council of Ministers in 1971. Over the years, it became an important area of cooperation, with high political ambitions to develop a well-functioning, sustainable, environmentally friendly and secure energy system within and across the borders.

One of the remarkable successes is the Nordic electricity market, formed by the electricity markets in Norway, Sweden, Finland and Denmark together. In 1991, the Norwegian Parliament decided to deregulate the market for power trading and, as early as 1996, Norway and Sweden created the common electricity market, Nord Pool Spot. Finland and Denmark joined shortly after. The common electricity market combines the wholesale markets in the Nordic countries, and electricity is produced where the price is lowest.

- **Clear political vision guiding the process**

The energy systems of the Nordic countries rely heavily on each other, and the high level of trust between the countries ensures smooth operation of the common system. Moreover, they complement each other in terms of energy resources, and over the years there has been a strong political will to expand and integrate energy cooperation in the region.

Evidence of the shared understanding between the Nordic countries on what the exact objectives of the cooperation are can be found in the Action Plan for Nordic Energy Cooperation 2006-2009, which defined key priority areas for energy cooperation and the decision by Nordic energy ministers to create a common Nordic end-user electricity market (action plan 2014-2017).

- **Participation of all relevant stakeholders**

Nordic Energy Research, sometimes regarded as a European role model for aligning national research programmes and operating a true common pot for Nordic projects. It coordinated and participated in several EU ERA-net projects together with other EU partners, commissioned policy studies on energy technology aspects, and provided secretariat support to several of the work groups of the committee of senior energy officials, eg the Nordic Electricity Market group. The ambition was to develop a Nordic knowledge area in energy technologies and systems, and at the same time position Nordic initiatives in the wider European and international context.

- **A step-by-step approach**

Taking the electricity market integration as an example, the Nordic cooperation is characterized by a step-by-step development of the necessary frameworks, pragmatically furthering cooperation between those countries who are willing. From the bilateral agreement between Norway and Sweden creating a common electricity market (Nord Pool) in 1996, to the inclusion of Finland (1996), Denmark (1999-2000), to the decision to create a common Nordic end-user electricity market.

- **Continuity & Sufficient flexibility**

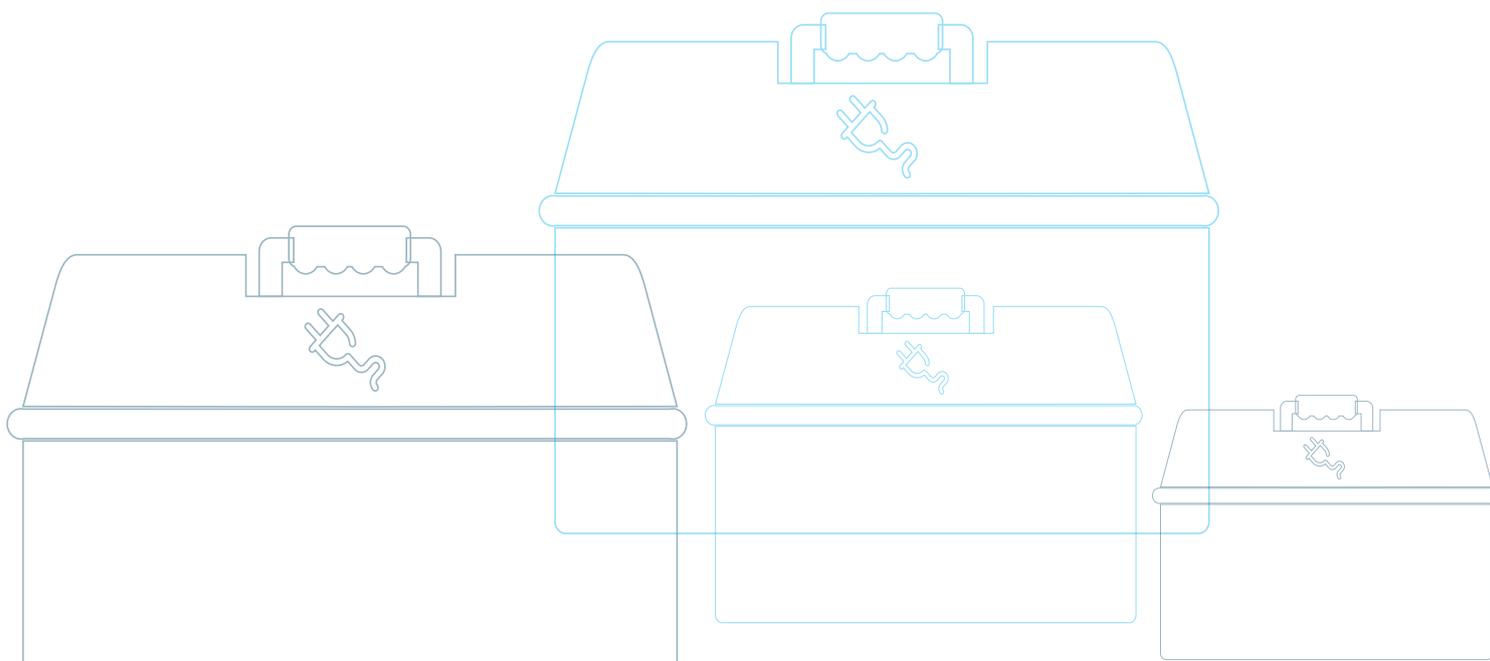
When the Nordic Council of Ministers was established in 1972, a separate Nordic Council of Ministers and Committee of Senior Officials for industry and energy were set up, supported by ministries in several member states. The Nordic Investment Bank supplied important financial instruments to facilitate the cooperation.

- **Making potential gains of cooperation evident to political leaders and the public**
- **European orientation**

The Nordic energy policy cooperation has always strived to be at the forefront of EU energy policy. Viewpoint are aligned and preparations are made before Energy Council meetings. Cooperation is oriented towards further regional cooperation with adjacent areas, e.g. Baltic Sea region.

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N. LEFEVRE



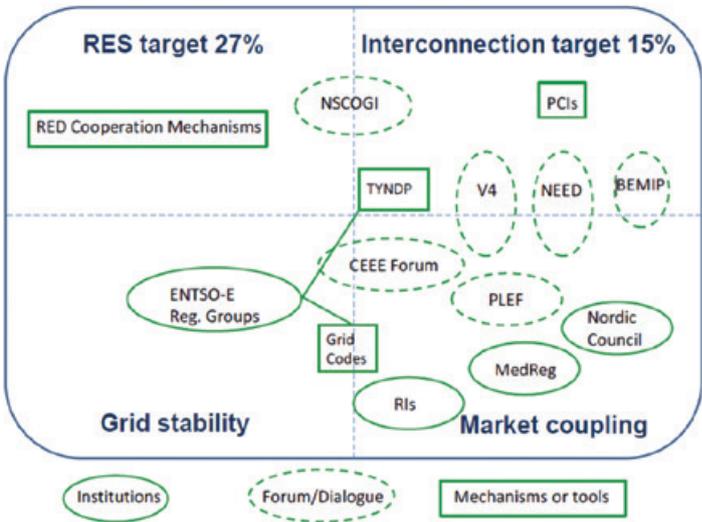
# ANNEX

## CLASSIFYING REGIONAL COOPERATION

### A. 2030 ENERGY POLICY OBJECTIVES & LEVEL OF INSTITUTIONALIZATION - K. UMPFENBACH ET AL. (2015)<sup>2</sup>

In order to better understand what role existing initiatives of regional cooperation could potentially play within the 2030 framework, K. Umpfenbach et al. (2015) mapped them onto the main objectives of EU energy policy that relate to electricity. The graph's upper quarters show the 2030 framework's headline targets of increasing the share of energy from renewable energy sources (RES) in final energy consumption to 27 % and of securing that cross-border interconnections amount to 15 % of national installed capacity by 2030.<sup>3</sup> Both targets are closely related because rising levels of variable renewable energy generation can be integrated at lower costs where interconnected grids provide more flexibility.<sup>4</sup> The interconnection target's main purpose is to enable a fully integrated internal electricity market in the EU. Physical interconnections allow for coupling of electricity markets through common trading mechanisms and rules. At the same time, cross-border lines increase the need for connected countries to jointly secure the stability of the electricity grid, a task that increases in complexity as the build-up of renewable energy plants progresses. These two objectives are represented in the graph's lower quarters.

Figure 1: Existing institutional landscape in relation to 2030 energy policy objectives



Source: Umpfenbach et al. (2015)

The graph also differentiate cooperation initiatives in respect to the level of institutionalization: intergovernmental dialogues and fora which represent a more loose form of cooperation vs. institutions that are characterized by formal mandates, a significant number of permanent staff and often a complex organizational structure. Tools and mechanisms are a separate category referring to functional projects or processes with very specific, but restricted objectives focusing on implementation rather than discussion.

<sup>2</sup> K. Umpfenbach, A. Graf and C. Bausch, Regional cooperation in the context of the new 2030 energy governance, Ecologic Report 2015.

<sup>3</sup> European Council 2014, para 3-4.

<sup>4</sup> Hogan and Weston 2014, p. 16, 23-24.

## B. COOPERATION INTENSITY - L. MEULMAN ET AL. (2012)<sup>5</sup>

Another way to classify regional initiatives is according to the levels of cooperation intensity. Meulman et al (2012) have explored and assessed the potential for coordinated energy policy in north-western Europe in the following way:

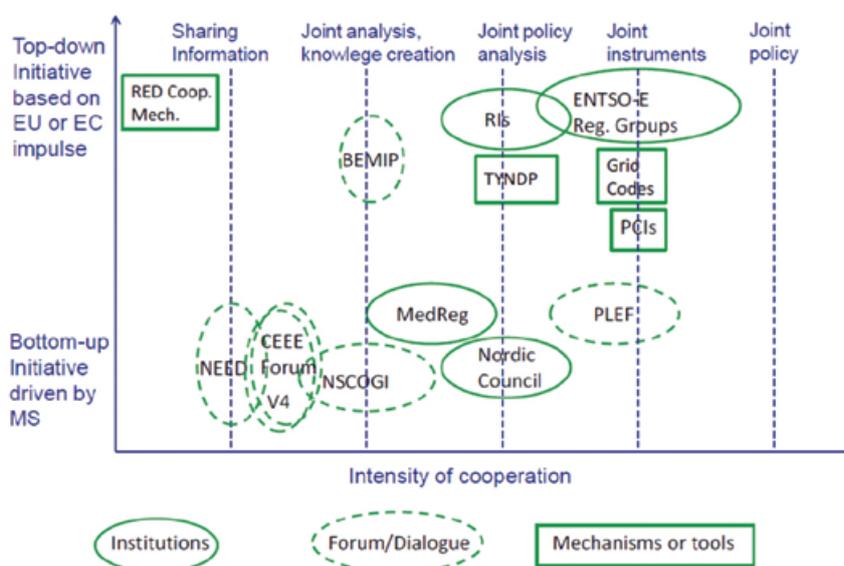
- **Information sharing** could be relevant for all fuels used in the power generation/distribution sector and for infrastructure improvements. This could be extended to sharing data on all issues having an impact on other national markets.
- The next level is “some kind of **coordination**, building further upon the existing PF and NSCOGI structures”. This means that knowledge and information could be developed jointly on issues such as energy storage facilities, and tendering processes for offshore wind could be coordinated, as could the implementation of RES support schemes. At the industry level, transmission system operator (TSO) cross-border cooperation could be strengthened to take into account regulatory impacts and mandates as well. Yet, countries would still make all decisions individually, and no joint institutions would be developed.
- Next, a “**coordination plus**” process could be instituted, encouraging neighbouring countries to search for common policy considerations. RES support is a good example, with the partners striving to formulate a scheme that incentivises RES production that is not too costly and does not create windfall profits. Sharing and comparing information about the pros and cons and the costs of RES energy could be more than useful. Such a level of coordination offers a basis for covering broader issues, such as the interactions between the power and gas grids and systems. Discussions on short- and longer-term system reliability and fuel supply security, back-up capacities, storage and demand-side management could be added as well, seeking cross-border solutions while exploring the most cost-efficient possibilities. This would require joint policy frameworks at the regional level. Wide-ranging discussions would take place, but specific policy instruments could still differ from country to country according to legal and parliamentary traditions.
- Developing “**joint instruments**” – not yet defined – could come next, if a differentiated approach were no longer effective. The joint instruments could, for instance, require a joint incentive mechanism for RES and could be expanded to the formulation of a single RES objective for the whole region. Various models for market design could be jointly introduced, paired with a harmonising of the legal instruments of system operation and balancing.
- A final ‘**maximum approach**’ would be that of a joint electricity policy across the whole region. This would not necessarily be relevant for local options such as types of heating systems or building codes but could include all aspects of the power market and the gas market.

<sup>5</sup> L. Meulman et al., “Harvesting Transition? Energy Policy Cooperation or Competition around the North Sea”, in CIEP Energy Papers, January 2012, <http://www.clingendaelenergy.com/publications/publication/harvesting-transition>.

**C. BOTTOM-UP / TOP-DOWN AND LEVEL OF INSTITUTIONALISATION - C. EGENHOFER AND J. DE JONG (2014)<sup>6</sup>**

A very basic way to differentiate existing initiatives is between bottom-up and top-down processes. Top-down processes refer to initiatives that originally derived from deliberations at the pan-European level such as the Regional Initiatives (RIs) by the Council of European Energy Regulators or devices like the Grid Code which serve to implement EU energy market directives and regulations, while bottom-up processes have emerged from multilateral cooperation between Member States. Umfенbach et al. (2015) have visualized this typology in the following graph. The categories on the horizontal axis are adapted from Meulman et al. (2012), discussed above. As in Figure 1, the level of institutionalization is also depicted.

Figure 2: Typology of existing initiatives by origin and intensity of cooperation



Source: Umfенbach et al. (2015)

<sup>6</sup> L. Meulman et al., "Harvesting Transition? Energy Policy Cooperation or Competition around the North Sea", in CIEP Energy Papers, January 2012, <http://www.clingendaelenergy.com/publications/publication/harvesting-transition>.

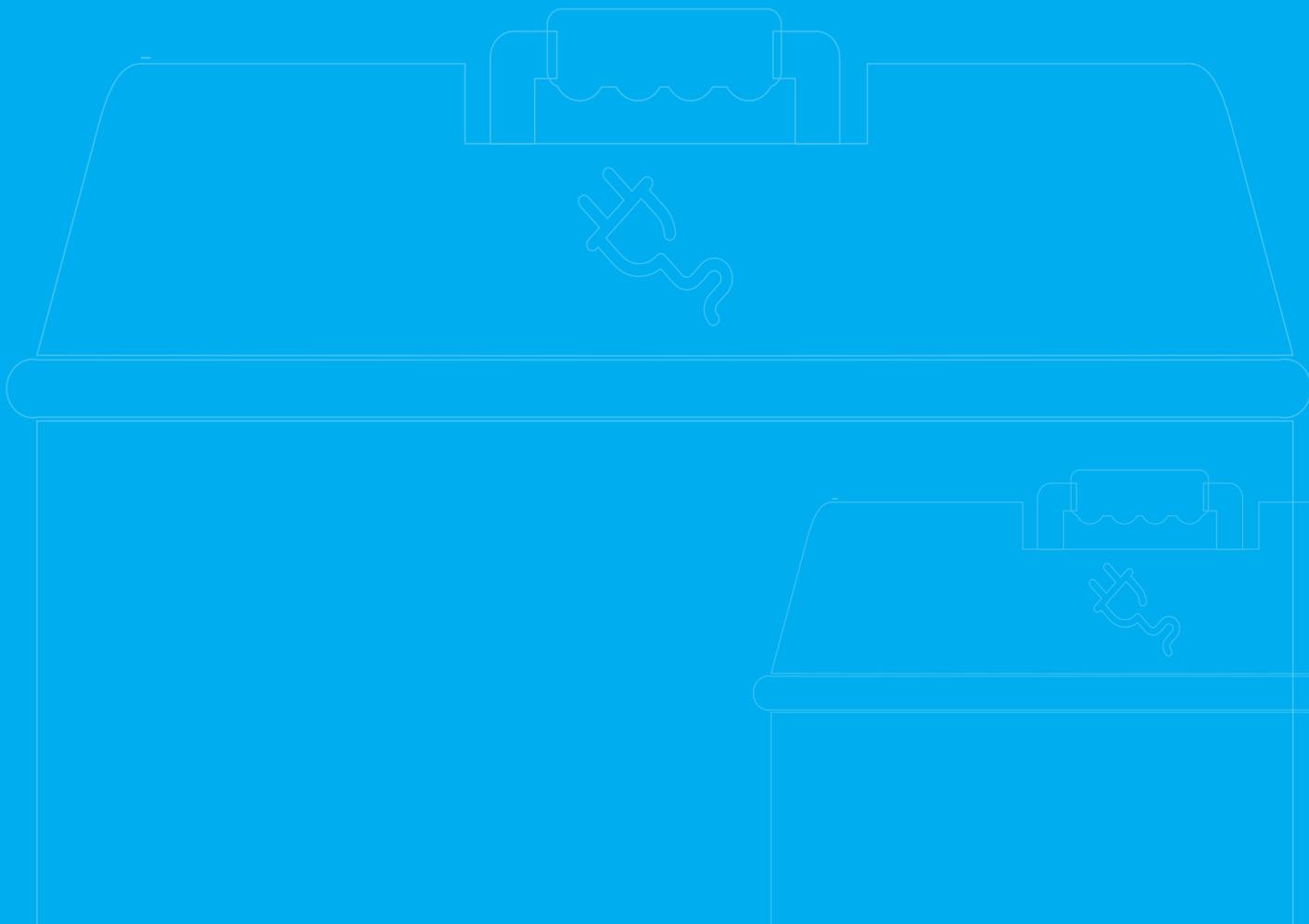
#### D. FEATURE SUMMARY - J. DE JONG ET AL. (2015)<sup>7</sup>

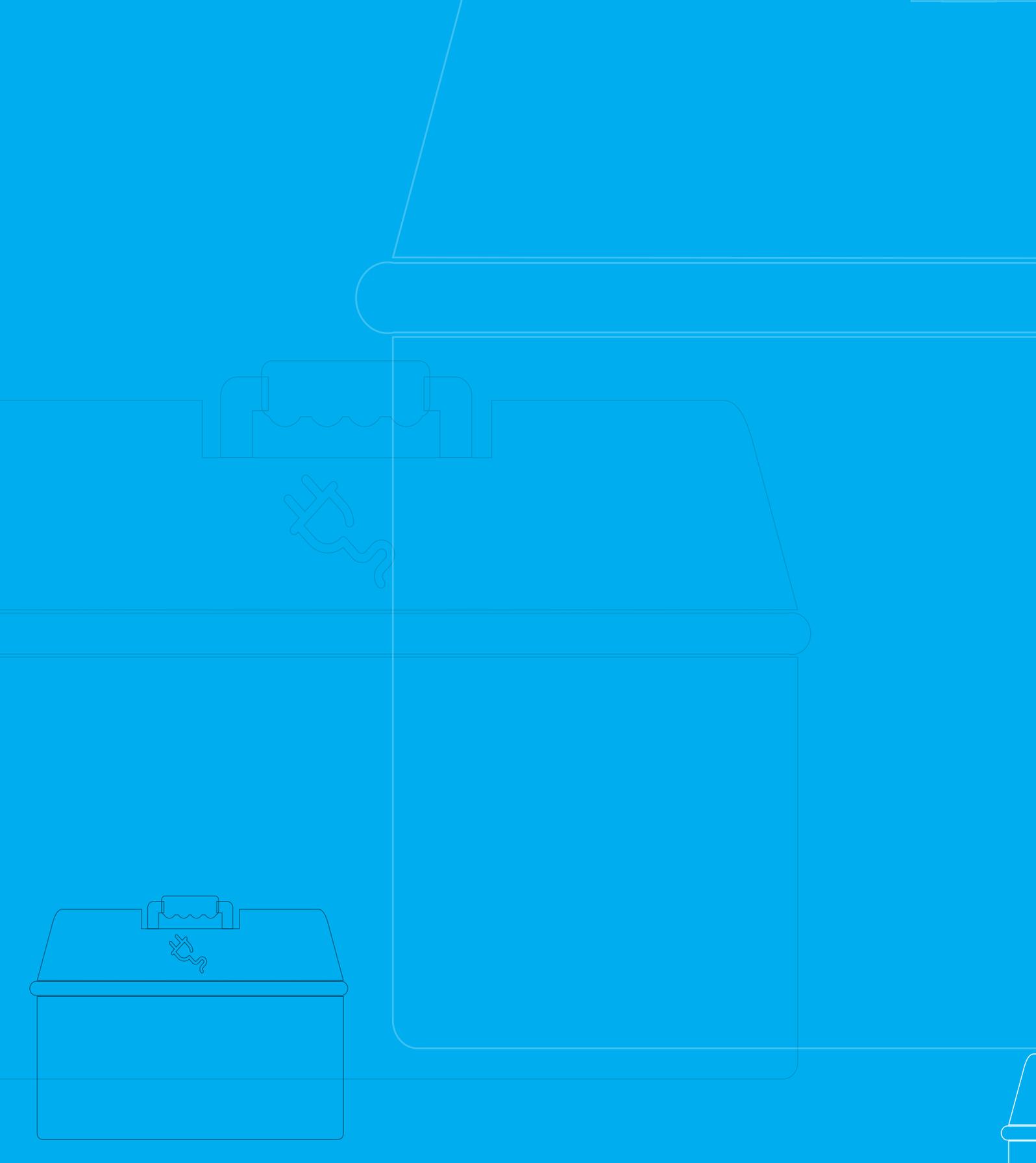
Finally, the approach used by de Jong et al. (2015) can be mentioned. Their starting point is to differentiate between regional initiatives mandated by EU legislation (e.g. the third internal electricity and gas market package of 2009); the initiatives from the Member States themselves, and the initiatives directly driven by the European Commission. Eight examples of regional cooperation falling under the latter two categories are then mapped onto the table below. Some of the interesting features used to analyse these eight initiatives are the role for the Commission, the topics concerned and the estimated population concerned.

	PENTA-LATERAL FORUM	BAAKE-GROUP	NORDIC ACTION GROUP ON CLIMATE AND ENERGY	VISEGRAD 4 GAS FORUM	NORTH SEAS COUNTRIES OFFSHORE GRID INITIATIVE	BALTIC ENERGY MARKET INTERCONNECTION PLAN	HIGH LEVEL GROUP ON INTERCONNECTIONS FOR SOUTH-WEST EUROPE	CENTRAL AND SOUTH EASTERN EUROPEAN GAS CONNECTIVITY
Date of formal creation	2007	2015	2012	2012	2010	2008	2015	2015
Initiator	Member States	Germany	Global utmaning (a Swedish Think Tank)	Member States	Member States, ENTSO-E & TSOs, European Commission	European Commission	Member States & European Commission	Member States
Role for the European Commission	Silent observer	Absent	Unknown	Absent	Co-initiator	Initiator	Co-initiator	Supporter
Member Countries	AT, BE, CH, DE, DK, FR, LU, NL	AT, BE, CH, CZ, DE, DK, FR, LU, NL, NO, PL, SE	DK, FI, NO, SE	CZ, HU, PL, SK	BE, DE, DK, FR, IE, LU, NL, NO, UK, SE	DE, DK, EE, FI, LT, LV, PL, SE	ES, FR, PT	AL, AT, BA, BG, EL, HR, HU, IT, MD, MK, RO, RS, SI, SK, UA
Topics concerned	Electricity	Electricity	Energy	Gas	Electricity	Electricity & Gas (extended to energy from July 2015)	Electricity & Gas	Gas
Estimated population concerned (millions of inhabitants of participating country)	190	259	26	64	365	155	123	192
Includes non-EU Member State	Yes (CH)	Yes (CH & NO)	Yes (NO)	No	Yes (NO)	Only as observer (NO)	No	Yes (members: AL, BA, MD, MK, RS, UA; observers: ME, XK)

Source: Jaques Delors Institute

<sup>7</sup> JDI policy paper 144.





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