Grant Agreement N°: 603847

Project Acronym: POLIMP

Mobilizing and transferring knowledge on post-2012 climate policy implications

D6.1.4: 4th Briefing Note

Project Coordinator: **JIN**

Work Package **6** Leader Organization: **JIN**

Task **6.1** Leader Organization: **JIN**

Authors: **Erwin Hofman, Eise Spijker (JIN)**

July 2015

Grant Agreement N°: 603847

Project Acronym: POLIMP

Mobilizing and transferring knowledge on post-2012 climate policy implications

D6.1.4: 4th Briefing Note

July 2015

Project Coordinator: **JIN**

Work Package **6** Leader Organization: **JIN**

Task **6.1** Leader Organization: **JIN**

Authors: **Erwin Hofman, Eise Spijker (JIN)**

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under Grant Agreement No 603847.

Preface

POLIMP intends to facilitate a process to identify, for different policy and decision-making levels, knowledge gaps about implications of possible directions of international and EU climate policies. The core objective is to cover these gaps with knowledge packages derived from a broad range of existing reports, research and climate policy decisions at, e.g., EU and UNFCCC levels. With these information packages, climate policy associated stakeholders will be better able to extract key policy conclusions. Through series of workshops these packages will be communicated with stakeholders and collect feedback. In addition, POLIMP will develop a knowledge platform for EU policy makers on climate policy implications.

Knowledge gaps will be identified for a range priority issues related to climate policy making in consultation with stakeholders, but as a starting point for discussion the following three (categories of) issues are suggested by the POLIMP partners:

- What would different possible international climate policy scenarios entail for EU society, business, Member States and EU as a whole, in the terms of economic, social, and environmental impacts looking especially at likely reactions and resulting political acceptability for different groups such as those impacted by job losses and reductions in welfare as well as potential gains?
- How can EU stakeholders deliberate in an evidence-based manner about the advantages and disadvantages of these different scenarios?
- How can EU and EU stakeholders learn from design and implementation of climate policies worldwide as well as share the experience the EU has gained in designing and implementing climate friendly actions?

Project Partners

Nº	Participant name	Short Name	Country code
CO1	Joint Implementation Network	JIN	NL
CB2	Centre for European Policy Studies	CEPS	BE
CB3	University of Piraeus Research Center	UPRC	GR
CB4	Universitaet Graz	UNI GRAZ	AT
CB5	Ecologic Institut Gemeinnutzige GmbH	ECOLOGIC	DE
CB6	Climate Strategies	Climate Strategies	GB
CB7	Fundacja Naukowa Instytut Badan Strukturalnych	IBS	PL

Briefing note 4, July 2015

Climate - Policy
PÓLIMP
BRIEFING NOTES

Harmonisation of EU renewable energy policies

The case of biomethane

Knowledge need

An important knowledge need for climate stakeholders in Europe is the harmonisation of different support systems for renewable energy, both within Member States and across the EU. Harmonising the institutional framework should help to reduce the overall costs of achieving renewable energy and climate targets, as the current non-harmonised framework leads to inefficient or suboptimal investment allocations, subsidy competition, as well as an inefficient distribution of costs among end users.

At a glance

Thematic area Renewable energy

Key words Harmonisation, policy, biomethane, policy convergence, competition, feed-in support schemes

Author(s) Erwin Hofman and Eise Spijker, *JIN Climate and Sustainability*

Summary

Harmonising renewable energy policies across Europe should help to reduce the costs of achieving climate and energy targets. This note sets out the impacts of policy harmonisation processes, including improved international competition, and distributional and transitional impacts. It concludes that policy harmonisation should go beyond simple alignment of renewable energy support schemes across countries. Instead, a comprehensive harmonisation strategy is needed, that considers the entire spectrum of policy instruments.

Fragmented policy framework

Many EU Member States use different feed-in premium (FIP) and tariff (FIT) schemes to support renewable energy production, with at least 24 Member States having implemented some sort of feed-in support system, and at least 6 countries also using a quota obligation system. Maintaining this patchwork of national policy frameworks (see Figure 1) is at odds with the general principles of a competitive internal energy market, where a level playing field is needed. Given that in the current situation there is a great risk of inefficient spending of public resources (e.g. in the form of subsidy competition), 'institutional convergence', or the harmonisation of policies, such as state aid rules, direct support schemes and auxiliary regulations regarding grid connection and permitting should be considered.

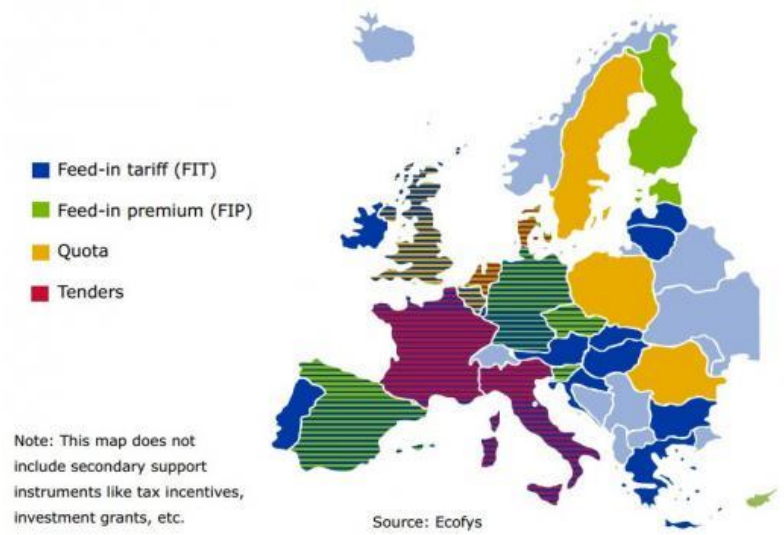

Figure 1. Support schemes for renewable energy in the European Union. See also the overview article on Renewable Energy Support Policies in Europe on ClimatePolicyInfoHub.eu.

Impacts of policy convergence

In the ambition towards a more competitive and efficient internal energy market, institutional convergence is likely to have positive impacts on market competition and efficiency. However in the process also negative side-effects can occur.

Three main impact categories are identified: improved international competition (the primary objective of institutional convergence), distributional impacts (effects of redistribution of tasks, responsibilities, receipts, costs, funds, etc.) and transitional impacts (specific effects during the shift from one regime to another).

Improved international competition

National differences in taxation and subsidy policies can result in unfair competition and inefficient public spending. In addition, there can be competition between renewables in different countries based on non-financial institutional factors, driven by (often subtle) differences in regulations, permitting, norms and standards. Such differences can eventually be a source of market distortions. As a result, there will be an increasing need to harmonise and streamline institutional frameworks.

Institutional convergence is not a simple process of each EU Member State adopting exactly the same feed-in regime for renewable energy, but also requires a minimum level of convergence of for example the grid connection regimes, and applicable norms and standards, etc. Any institutional convergence strategy should apply a holistic approach and not 'simply' pick individual instruments and consider them in isolation.

Distributional impacts

In addition to the improved market efficiency, institutional convergence will have distributional impacts, in the form of redistribution of receipts, costs, funds, tasks and responsibilities. As institutions change, also certain stakeholders are directly and indirectly affected, either positively or negatively. For instance, stakeholders are not only affected by the level of feed-in support, but also by basic scheme design features. To illustrate, the Dutch FIP scheme is financed from the national budget via an additional tax for gas and electricity users, and the German FIT is financed through a surcharge only on electricity consumption. On top of that, the levels of these 'surcharges' are different per type of energy user. Institutional convergence can result in distributional impacts in those countries which are adjusting their policies to a more harmonised EU framework. This can significantly alter the project risk profiles, investment decisions and competition.

Transitional impacts

During the transitional phase the switch from one ('old') regime to another ('new') occurs. In general, any institutional change affects the existing rights (or 'vested interests') that stakeholders have under the 'old' regime. The key question is: how would a regime change affect the different stakeholder groups, both those subject to the 'old' regime and 'new' regime?

Figure 2 below gives a visual representation of the situation during the transition phase, in which different stakeholders in one country ('country Y') are subject to different policies

From the perspective of institutional convergence, one could consider one of the following transition strategies:

- Shock transition: in a quick transition the 'losers' of the regime change could obtain a one-off compensation. A shock transition requires a fast, coordinated and comprehensive institutional reform.

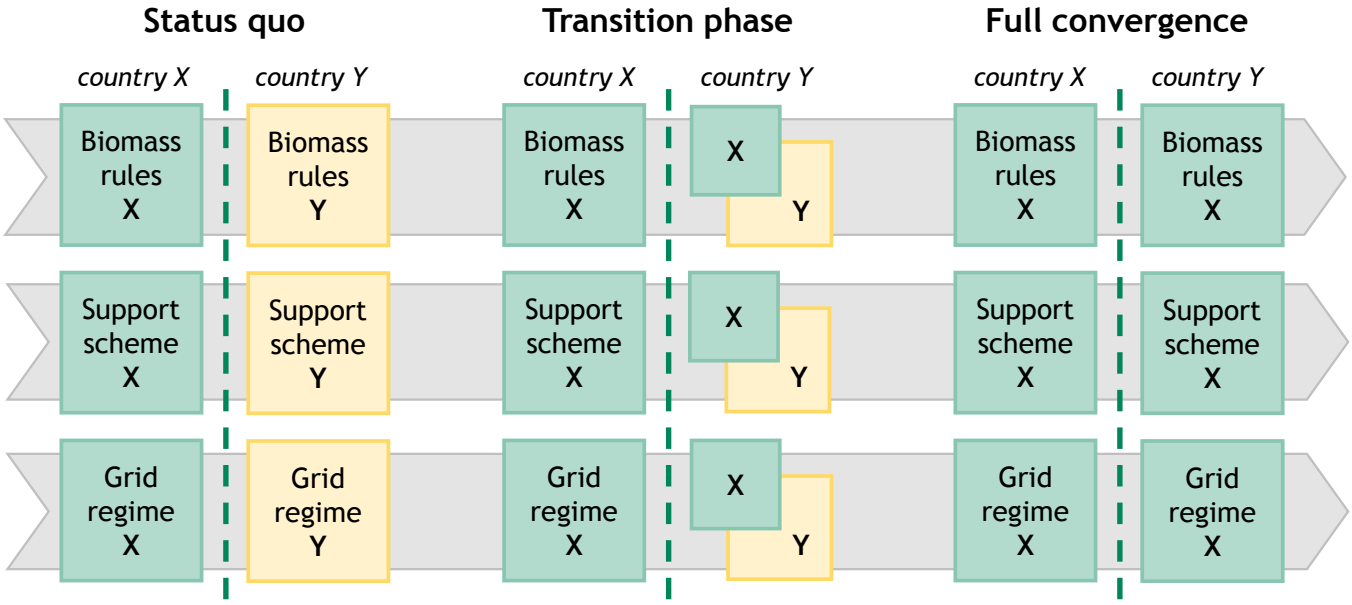

Figure 2. Convergence scenario whereby 'country Y' takes over the policy framework of 'country X'. During a transition phase, the old policies are still applicable to existing facilities, while new facilities are already subject to the new (harmonised) policies.

- Gradual transition: the 'old regime' is slowly phased out, and no compensatory measures are taken. In the case of institutional convergence, the institutional regimes of two or more countries will converge step by step following a strategy

A gradual transition takes a significant time. For example, in Germany the transition phase would last at least 20 years, as biomethane facilities under the 'old' regime receive the *EEG* FIT for this duration.

During a transition, the costs linked to monitoring and operating different policy instruments are likely to increase. However, the potential costs related to competitive distortions could be even higher, and therefore a transition may be worthwhile.

The case of biomethane

Specifically in the field of biomethane, and in this example of the Netherlands and Germany, it is clear that policy convergence is not only a matter of harmonising feed-in support schemes, as a wide range of differences exists between policy regimes.

In the Netherlands, biomethane is supported through the *SDE+* FIP scheme, while German biomethane is supported by the *EEG* FIT. The Dutch scheme directly subsidises renewable gas, while in Germany only renewable electricity is supported. Biomethane producers thus only benefit from the FIT if they supply to cogeneration plants that receive the *EEG* tariff. Other key differences between the feed-in schemes include the way of financing (through tax revenues in the Netherlands, through a surcharge on electricity consumption in Germany) and the duration of support (12 years in the Netherlands, 20 years in Germany).

With regard to the grid connection, key differences include the division of investment and maintenance costs (to be paid by the producer in the Netherlands, while to a large extent paid by network operators in Germany) and the balancing regime (1 hour in the Netherlands, versus 1 year in Germany).

In addition, there are also significantly different policies with regard to for example the gas quality requirements, lists of biomass types eligible for (co-) digestion, options for and support for use of biomethane in the transport sector, possibilities for trading of Guarantee of Origin certificates, etc.

A harmonisation of support schemes without consideration of supporting policies will lead to incoherent policy frameworks, and therefore undesirable and unexpected outcomes, rather than an EU level playing field.

Policy implications

The further integration of the EU's markets for (renewable) energy can greatly benefit from ongoing policy harmonisation or convergence. Nevertheless, policymakers at EU level and in the Member States are advised to develop a comprehensive policy convergence strategy that considers the entire relevant spectrum of policy instruments (e.g. production support, fiscal incentives, permitting standards, norms and grid access/connection regimes), rather than a 'simple' harmonisation of individual policy instruments, such as feed-in schemes. The case of biomethane gives an example of this wide range of instruments that need to be considered.

Any policy convergence strategy should ideally include an ex-ante assessment regarding the expected costs and benefits to get a better understanding of to what level and depth the various policy instruments need to be harmonised. Special attention needs to be paid to assessing the aforementioned 'distributional' and 'transitional' impacts. Such impacts can result in an increase in socio-economic costs that could offset all foreseen benefits for the internal market.

Read more

This Briefing Note is based on the project results of a report under the *'Groen Gas – Grünes Gas'* programme on biomethane, co-financed through Interreg IVa Germany-Netherlands. The final report, A level playing field for the European biogas and biomethane markets, gives a detailed overview of issues relevant for renewable energy policy harmonisation. The report focuses on biomass energy and specific policies in the Netherlands and Germany, but the issues are relevant in a broader context.

Author information

Authors
Erwin Hofman (erwin@jiqweb.org) and
Eise Spijker (eise@jiqweb.org),
JIN Climate and Sustainability

Coordinator
Vlasios Oikonomou,
JIN Climate and Sustainability

Dissemination
Charikleia Karakosta,
University of Piraeus Research Centre (UPRC)

The **POLIMP** project aims to address gaps in knowledge and to inform policy at various decision-making levels regarding the implications of international climate policies under discussion. www.polimp.eu

This project has received funding from the European Union's Seventh Framework Programme for Research, Technological Development and Demonstration under Grant Agreement No 603847