

European

RESPONSES **POLICY BRIEF N° 8**

to climate change

April 2013

**Enhancing synergies between European renewables and regional development policies**Susanne Hanger<sup>1,2</sup>, Simone Steinhilbner<sup>3</sup>, Benjamin Pfluger<sup>3</sup>**Summary**

Renewable energy is key to decarbonising the European economy and mitigating climate change. For national and European Union policies to be successful, they need to be coherent and work together. We investigated whether EU regional development policies supported the deployment of renewable energy sources in a number of EU Member States. We find that regional policy is not well-aligned with the objective to extend renewables in the Czech Republic, Lithuania and Poland. There are inconsistencies between the two policies including: mismatches in renewables targets and respective cohesion policy allocations; mismatches in operationalization across energy and cohesion policies; insufficiently clear description of the relevance of EU Structural and Cohesion Funds in the National Renewable Energy Action Plans (NREAP); and a mismatch between the existing rhetorical commitment for integrating markets and grids, and substantial allocations in EU regional funds. These mismatches may impede the effective use of regional funding to support renewable energy sources.

**Introduction**

Energy policy, and renewable energy sources (RES) in particular, will play a major role in securing increasing energy security and mitigating climate change. For the EU, Schellekens et al. (2010) argue that 100% renewable electricity is possible by 2050, although linked to a set of pan-European policy challenges related to investment incentives, integrating electricity markets, transformation of transmission infrastructure, and coherence of related regulations and policies enabling trans-national investments.

The Renewables Directive (2009/28/EC) defines binding national targets for renewable energy source (RES) deployment in line with the Europe 2020 Strategy. EU Member States have been obliged to draw up National Renewable Energy Action Plans (NREAPs). Implementing these policies requires time and investment, both of which are critical for less-developed Member States. These are still catching up, not only on RES, but also on efficiency standards for energy production and in the built environment. The European policy instrument to address such developmental disparities are the Structural and

<sup>1</sup>International Institute for Applied Systems Analysis

<sup>2</sup>Institute for Environmental Studies, Amsterdam, Netherlands

<sup>3</sup>Fraunhofer Institute for Systems and Innovation Research, Karlsruhe, Germany

*This publication reflects only the authors' views and the European Union is not liable for any use that may be made of the information contained therein*

Available for downloading at [www.responsesproject.eu](http://www.responsesproject.eu) ©RESPONSES project



Cohesion Funds (SCF). In the current programming period (2007-2013), 70% of the funds are earmarked to support the priorities of the Lisbon Agenda. One of these priorities is the promotion of energy efficiency (EE) and RES. We therefore investigated the following important questions:

**(1) Do cohesion policies contribute, conflict with, or miss opportunities for supporting the EU 2020 renewable energy targets?**

**(2) Do existing climate and energy policies (e.g. NREAPs) support cohesion policy goals in general, and more specifically the kinds of cohesion that may be necessary to achieve deep emissions cuts?**

### Policy coherence

Based on the literature, we argue that policy coherence is related to, but different from policy mainstreaming. While variables explaining either may overlap, policy coherence refers to the need for **a streamlined and harmonious development and implementation of two or more policies**; whereas mainstreaming refers to taking into account or giving principled priority (Jordan and Schout 2006) to one specific issue or policy problem. Policy coherence is important both as a process in the sense of **policy coordination** and as an outcome in the sense of **policy consistency**. This involves both normative and substantive commitments in policymaking.

#### Normative commitment:

- Quantitative targets
- Operationalization of RES priorities
- Competing or conflicting objectives and measures

- Reference to other relevant policies
- Institutional context

#### Substantial Commitment:

- Financial allocations to RES-relevant projects

## Findings

**Cohesion policies support 2020 RES targets to some extent** as they are an explicit priority, included as part of the earmarking of funds in the context of the Lisbon Agenda. Cohesion funds are therefore allocated to fund climate-relevant infrastructure projects. Indeed, SCF funding covers a significant proportion of total investment in RES in some countries. In Poland almost 40% of onshore wind development has been financed with EU help (cf. Table 1).

**Cohesion policies conflict with 2020 RES targets to some extent** because cohesion policy is guided by the objective to achieve economic growth and a set of related, but diverse priorities. We find trade-offs with the aim to increase energy-efficiency, which competes with resources to employ RES more widely. Evidence of these trade-offs was particularly apparent in the Czech case.

**Opportunities for cohesion policies to support 2020 renewable energy targets are not always taken**, since available funds may be used flexibly and adapted to national and regional priorities. These may not include the diffusion of renewable. However, there is room for improvement. Better targeted and more coherent support could be achieved through clearer and 'harder' earmarking provisions. This

	Lithuania			Poland			Czech Republic		
	NREAP planned capacities 2010-2013 [MW]	estimated investments required [million €] between 2010-2013 to fulfill NREAP	SCF allocated [million € and % of required investments] by December 2012	NREAP planned capacities 2010-2013 [MW]	estimated investments required [million €] between 2010-2013 to fulfill NREAP	SCF allocated [million € and % of required investments] by October 2011**	NREAP planned capacities 2010-2013 [MW]	estimated investments required [million €] between 2010-2013 to fulfill NREAP	SCF allocated [million € and % of required investments] by June 2011
Biogas	14	38.50	28.06* (18.3)	60	165.00	13.55* (1.0)	94	258.50	64.80* (25.1)
Solid biomass	46	115.00		500	1,250.00		0	-	
Geothermal	0	-	-	0	-	-	4.4	10.12	-
Hydropower 1 - 10 MW	3	6.00	-	18	36.00	-	5	10.00	-
Hydropower <1 MW	0	-	-	12	28.80	10.84(16.7)	25	60.00	36.40 (45.4)
Onshore wind	121	169.40	-	1350	1,890.00	741.70 (39.2)	150	210.00	-
PV	4	8.40	-	1	2.10	171.10 (✓)	20	42.00	2.05 (4.9)

NREAP planned increase in installed capacities from 2010-2013 and estimated required investments. Estimated investment calculations based on Pfluger and Schleich (2013). \*SCF figures for approved support for biomass electricity may be overestimated, as a distinction between RES-E, RES-H, and CHP was not always possible given the available data; \*\* includes only OPIE funds, not the funds provided under the regional operational programs

however, will likely encounter opposition in some Member States.

**Existing climate and energy policies in the case study countries do include objectives and measures to foster cohesion**, in the sense of promoting an integrated energy grid and markets for renewable energy. Regional policies consider this kind of cohesion in individual cases and then marginally. Overall the rhetorical commitment to using energy policy to foster cohesion is not matched with adequate operationalization and financial allocations.

Across the board, we find that case study countries demonstrate a low level of coherence, as we find inconsistencies to varying extents, such as

- a mismatch in the RES targets and cohesion policy allocations
- mismatched operationalization measures across energy and cohesion policies
- insufficiently clear description of the

relevance of the SCF in the NREAPs

- a mismatch between the existing rhetorical commitment for integrating markets and grids, and substantial allocations.

## Outlook

**Improvements can be achieved at both EU and national levels.** Conflicting priorities in cohesion policy are an important aspect for EU public debate, while conflicting energy objectives related to fossil fuels are primarily a matter for national policy competence. Development of an integrated grid and EU energy market transcends national policy spheres. Some shortcomings might be addressed and improved on in the next programming period for cohesion policy, from 2014 until 2020. The equivalents of NSRFs and Operational Programmes will be set up with the 2020 Strategy and the EU Energy Package in place, both of which emphasize RES much more than the policies that existed in 2007. Still, much depends on the willingness of the Member States, whose priorities in times of

financial and economic crisis will be even more focused on growth and employment.

The three countries studied for this project are front-runners among the EU 12 in terms of RES support through cohesion policy, it is thus likely that in other EU 12 countries policy coherence could also be improved.

## References

- European Parliament, 2009. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources.
- Jordan, A. & Schout, A., 2006. *The coordination of the European Union: exploring the capacities of networked governance*, Oxford University Press.
- Schellekens, G. et al., 2010. *100% renewable electricity. A roadmap to 2050 for Europe and North Africa*, London: PricewaterhouseCoopers.

This policy brief is based on Deliverable 6.5a of the RESPONSES project.

About the

# RESPONSES

Project:

The RESPONSES project addresses EU policy challenges by: developing new global low emissions scenarios, placing EU efforts in a global context; building an approach for assessing EU policies against mitigation and adaptation objectives and for developing alternative policy options; applying this framework in five EU policy sectors (water and agriculture, biodiversity, regional development/ infrastructure, health and energy), linked by a set of cross-sectoral integrative activities; and synthesizing the results to new policy strategies.

Partner Institutes:



IVM, Institut for Environmental Studies



UEA, University of East Anglia



IIASA, International Institute for Applied Systems Analysis



PBL, Planbureau voor de Leefomgeving



ISI, Fraunhofer Institute for Systems and Innovation Research



CSIC, Consejo Superior de Investigaciones Cientificas



CAS-IPM, Institute of Policy and Management, Chinese Academy of Sciences



TERI, The Energy and Resources Institute



JRC, Joint Research Centre - European Commission



UH, University of Helsinki



[www.responsesproject.eu](http://www.responsesproject.eu)  
email: [responses@ivm.vu.nl](mailto:responses@ivm.vu.nl)

[www.responsesproject.eu](http://www.responsesproject.eu)