European Commission

COHESION POLICY: STRATEGIC REPORT 2013

Factsheet: Energy

Cohesion Policy

EN

Strategic Report 2013 – Programme implementation 2007-2013

Factsheet: Energy

This factsheet has been produced in support of the Commission 2013 Strategic report on cohesion policy programme implementation (2007-2013). It should be read in conjunction with that report (COM(2013) 210) and the accompanying Staff Working Document (SEC(2013) 129) available on this website:
http://ec.europa.eu/regional_policy/how/policy/strategic_report_en.cfm

1. Overview

Investments in energy of EUR 11.8 billion have been planned over 2007-2013, of which the main part, EUR 9.5 billion, is to be delivered in Convergence Member States and regions and funded by the ERDF and Cohesion Fund. The following 11 headings are reported:

- Electricity
- Electricity (TEN-E)
- Natural gas
- Natural gas (TEN-E)
- Petroleum products
- Petroleum products (TEN-E)
- Renewable energy: wind
- Renewable energy: solar
- Renewable energy: biomass
- Renewable energy: hydroelectric, geothermal and other
- Energy efficiency, co-generation, energy management

Under these headings the bulk of the investment is made in different types of renewable energy sources (EUR 4.6 billion) and in measures linked to energy efficiency (EUR 5.5 billion) while some investments are being made in traditional energy sources, including TEN-E infrastructure, (EUR 1.8 billion) – see **TABLE 1.1**.

The Communication "*Regional Policy contributing to sustainable growth in Europe 2020*"[1] of January 2011 underlines the need to invest in this area and provides a number of good practices. Research and innovation in sustainable energy is key to achieving the EU climate and energy targets for 2020 and also the target for 2050 of a 85- 90% reduction in carbon

[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0017:EN:NOT

emissions. The guide on "Connecting Smart and Sustainable Growth through Smart Specialisation"[2] provides practical guidance for managing authorities in this area.

2. Project examples

These examples have been taken from the relevant National Strategic reports.

CY	OP: Sustainable development and competitiveness	Fund: CF	EU: €5m
Title: Photovoltaic systems in public buildings, schools and military camps			
The project involved the supply and installation of photovoltaic systems ceilings on six public buildings, 54 schools and five military camps between 2009 and 2010. Fifty training models on photovoltaic systems were also introduced in the schools. The total capacity of the systems is 1100 kw. The project contributes to the respect of the EU energy legislation, the reduction of the energy cost and the environmental protection.			

EE	OP: Development of Living Environment	Fund: ERDF	EU: €17m
Title: Renovation loan for apartment buildings			
This scheme of renovation loans supported the renovation of apartment buildings with at least three apartments, with the aim to improve energy efficiency by at least 20% in buildings of up to 2,000 m² and by at least 30% in buildings of over 3,000 m². 391 loans were concluded leading to 939,000 m² renovated and 14,680 apartments and the lives of 33,700 inhabitants improved in 2009-2012. ***Source: Synthesis report of Expert evaluation network (2012), country report EE***[3]			

HU	OP: Environment and Energy	Fund: ERDF	EU: €2.9m
Title: Biomass-based steam generating system			
The purpose of the project was to reduce the dependence on energy imports through the annual use of 309,000 MWh of renewable energy sources, and to replace 332,400 MWh per year of natural gas use with renewable energy sources. The results and outputs of the project include the reduction in CO_2 emissions of about 70 000 t / year; five new jobs created and a reduction of operating costs.			

LU	OP: Competitiveness and regional employment	Fund: ERDF	EU: €0.8m
Title: Construction of a solar energy sludge drying facility - Bettembourg			
The waste water treatment at Bettembourg serves a population equivalent of 70,000. The purpose of the project was to exploit renewable energy to establish a facility for drying sewage sludge. Completed in 2010 the project resulted in a 60% (65 000 tonnes per year) reduction of sewage sludge, a decrease in road transport and a reduction of greenhouse gas emissions (1 100 tonnes CO_2 per year). Five permanent jobs were created.			

[2] http://s3platform.jrc.ec.europa.eu/guides

[3] http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/eval2007/expert_innovation/2012_synt_rep_ee.pdf

3 Assessment of Implementation

3.1 Tracking EU financial input (ref. **Tables 1.1 and 1.2**).

In the energy theme, the level of project selection 2007-2011 was lower than the general average for cohesion policy as a whole, with the overall volume of selected projects standing at 56%. Further disaggregation reveals that project selection for **energy efficiency** is progressing well at 74%. **Renewable energy** is progressing more slowly, at 39% (for all four categories taken together), but in particular the category encompassing both hydroelectric and geothermal energy, at 30%. The **traditional energy** categories also progresses slowly, at an average of 49%.

Overall, the energy priorities are progressing better in the Regional Competitiveness and Employment (RCE) regions (65%) than in the convergence ones (53%). There are also some allocations to energy investment under European Territorial Cooperation progressing very well in terms of project selection, at 85%.

Looking at Member State level, for all energy categories taken together, a group of Member States are in a situation of apparent substantial delays, with project selection rates below 40% (BG, IT, MT, RO, SE, FI). On the other hand, there are also many positive examples with a high level of selected projects, with rates over 75% (EE, GR, LV, LT, IE, CY, AT, SK, UK). In some of these cases, this reflects the setting up of revolving funds and the allocation of the ERDF resources to the fund (See box below).

The data was reported by Member States reflecting the situation as of 31 December 2011 and can be expected to have evolved since, with the on-going selection processes.

Overall, these data reflect reasonable progress since the last Strategic Report, with the overall project selection rate in the area of energy having evolved from 13% by end 2009 to 56% by end 2011. The slow start can partly be explained by the fact that investment in the energy theme was a new priority for many managing authorities in the current programming period. However there is a clear risk that benefits and objectives of planned investments may not be realised in several Member States. With the increased focus on sustainable energy in the next period learning from the current experiences will be essential for the next generation of programmes.

Financial instruments[4]

At the end of 2011 there were 12 funds for energy efficiency and renewable energies supported by Operational Programmes in five Member States: DE, EE, ES, IT and UK. Cohesion policy support for those funds constituted at the end of 2011, EUR 345 million of which EUR 250 million Structural Funds. The bulk of support - EUR 218 million of ERDF - is allocated to holding funds set up in DE, ES and IT.

[4] Following amendment Article 44 (c) of the SF General Regulation, foresees also the possibility for financing investments in energy efficiency and use of renewable energy in buildings (including in existing housing), through funds or other incentive schemes providing loans, guarantees for repayable investments or equivalent instruments.

Nearly all the 12 funds were operational by the end of 2011 and had disbursed more than 7 000 loans[5]. Payments from the funds ranged from 1.4% to 80% of their allocated capital.

3.2 Outputs and results

The relevant core indicators for analysis are 'Number of renewable energy projects', 'Additional capacity of renewable energy projects (in MW)' and 'Reduction greenhouse emissions (CO_2 and equivalents, kt)'.

***ERDF/Cohesion Fund core indicators**:*

For the ERDF/CF the Commission recommends the use of "core indicators" in addition to the programme specific indicators (that vary according to national and regional practice and the specific objectives of the programmes). Use of core indicators has the advantage of allowing the possibility of aggregation but is not obligatory in this period.

The global aggregate achievements presented below are based on 2011 annual reports or, where possible, on updated values for 2011 and 2012 from the Strategic reports.

Achievements against targets are also analysed. Where no targets were set in the programmes in question, the related achievements were excluded from the analysis reducing the data available in that analysis (including in some case excluding reported achievements). From the available data it is clear that some targets were set too low or too high.

Number of renewable energy projects

- Up to end 2011 23,185 renewable energy projects were reported to have been supported by 21 MS (BG did not report any achievements). 18 MS set targets (CY, EE, LT and LV did not).
- Of those MS which allocated significant funding, MT and NL did not report against the relevant core indicators. BG reports targets for all core indicators but no achievements so far.
- The majority of projects were in the EU15: ES, DE and FR.
- For MS where programmes had set targets, the average achievement ratio at the end of 2011 for number or projects supported was 32%. The highest achievement ratios were reported in: DK (88%), LU (167%) and SK (84%). The high achievement ratio of LU seems to be due to low target setting.
- The lowest achievement ratios were reported by: CZ (8%), GR (6%) and PL (19%).
- There are question marks for AT, GR, IE, LT, LV and PL with relatively low achievement rates while the rate of project selection is higher above 50%

[5] According to the "Summary report on the progress made in financing and implementing financial engineering instruments co-financed by Structural Funds (programming period 2007-2013, situation as at 31 December 2011)".

Additional capacity of renewable energy projects (in MW)

- Overall the additional capacity in MW by renewable energy projects amounts to 1,222 MW for the whole EU, reported by 11 MS. This figure excludes data which use measurement units that cannot be counted in MW. The measurement of additional capacity of renewable energy production has caused some confusion. Unfortunately some Member States reported on MW/h or KW instead of using the recommended measurement unit of MW. Some reported figures had to be excluded from the analysis in order to get consistent and meaningful figures. According to the IEA, the total capacity of the EU27 for renewable energy generation is 246,300 MW.

- The majority of projects were carried out in the EU15 with UK producing the bggest share (410 MW), followed by IT (181 MW) and SI (106 MW).

- BG, LT and PT set targets but did not report any achievements. Out of the 19 countries which reported against the indicator, 11 reported plausible figures which are used for analysis[6].

- On average the achievement ratio was very low, at 0.16%. The highest ratios were reported by AT (83%) and SK (53%). The following MS reported the lowest achievement ratios: DE (6%), IT (0%), PL (0%) and UK (0%).

Reduction greenhouse emissions (CO_2 and equivalents, kt)

- Total achievements reported by 11 MS amount to a reduction in greenhouse emissions of 33,389 kt (BG, PL, RO and SK did not report any achievements). 13 MS set target values.

- More than 80% was achieved in Italy (19,000 kt) and SE (10,700).

- Overall the achievements for reductions of greenhouse emissions are lagging behind; so far only 7% of the targets have been achieved. The highest achievement ratios were reported by AT (34%), DE (24%) and IT (219%).

- The following MS reported the lowest achievement ratios: GR (0%), HU (1%), PT (0%) and SK (1%).

In 2011 the DG REGIO expert network prepared a synthesis report on 'renewable energies and energy efficiency of housing'. The report synthesised the findings of the national studies on the support provided by the ERDF and CF on the development of renewable energy and the energy efficiency of housing in the programming period 2007- 2013. The report concluded that there is a clear role for the Structural Funds to support measures to assist and stimulate investment in energy efficiency in housing (and buildings generally), especially in Cohesion countries where funding is likely to become increasingly constrained and for social housing in the rest of the EU. In 2012, the European Court of Auditors published a special report on cost-effectiveness of Cohesion Policy investments in energy efficiency , looking

[6] The achievements from CZ and DE were corrected; the achievements reported by EE, FR, GR, LU and SE were excluded from the analysis.

into the cases of Czech Republic, Italy and Lithuania. The report concluded that more care was required to ensure that projects in energy efficiency are cost-effective.

Table 1.1 2007-2011 – Project selection overview

Code	Category	Decided Ops - Million € (a)	% Decided OPs of Total Decided (b)	Allocated to selected projects AIR 2011 - million € ©	% (d=c/a)
33	Electricity	248.7	0.1%	90.4	36.4%
34	Electricity (TEN-E)	321.1	0.1%	111.6	34.7%
35	Natural gas	614.8	0.2%	420.4	68.4%
36	Natural gas (TEN-E)	353.7	0.1%	235.2	66.5%
37	Petroleum products	164.7	0.0%	0.5	0.3%
38	Petroleum products (TEN-E)	2.2	0.0%	0.0	0.0%
39	Renewable energy: wind	666.2	0.2%	416.3	62.5%
40	Renewable energy: solar	1,330.5	0.4%	574.5	43.2%
41	Renewable energy: biomass	1,659.2	0.5%	651.4	39.3%
42	Renewable energy: hydro-electric, geothermal and other	943.5	0.3%	280.5	29.7%
43	Energy efficiency, co-generation, energy management	5,504.8	1.6%	3,785.4	68.8%
	Total Energy	**11,809.4**	**3.4%**	**6,566.3**	**55.6%**
	Total all themes	**346,717.2**		**246,983.9**	**71.2%**

Table 1.2: 2007-2011 – Project selection reported by MS.

Energy				
Country	**Decided OPs (a) - in M.€**	**% of National SF/CF**	**Allocated to selected projects AIR 2011 (b) - in M.€**	**% (c=b/a)**
PL	2,311.5	3.44 %	1,375.1	59.5%
IT	1,826.4	6.53 %	615.8	33.7%
CZ	1,332.8	5.02 %	563.5	42.3%
GR	757.3	3.75 %	766.8	101.2%
RO	753.8	3.92 %	119.5	15.9%
HU	677.8	2.72 %	289.6	42.7%
FR	652.3	4.85 %	448.5	68.8%
DE	639.1	2.51 %	450.5	70.5%
LT	499.7	7.38 %	535.6	107.2%
ES	426.3	1.23 %	207.9	48.8%
CB	335.7	4.25 %	285.8	85.1%
BG	317.8	4.76 %	80.0	25.2%
UK	306.4	3.10 %	241.8	78.9%
SK	168.8	1.47 %	131.3	77.8%
SI	159.9	3.90 %	84.9	53.1%
PT	141.1	0.66 %	61.9	43.8%
LV	127.4	2.81 %	106.1	83.3%
MT	90.9	10.81 %	30.4	33.4%
NL	63.4	3.82 %	42.7	67.3%
SE	61.5	3.78 %	9.0	14.7%
FI	44.9	2.81 %	13.2	29.4%
AT	31.2	2.59 %	29.1	93.3%
BE	30.8	1.49 %	15.2	49.3%
EE	28.8	0.85 %	27.8	96.8%
IE	15.5	2.06 %	22.3	144.2%
CY	6.0	0.97 %	5.2	87.8%
LU	2.3	4.50 %	6.6	291.4%
EU	**11,809.4**		**6,566.3**	**55.6%**

Graph 1: Rate of Project selection reported by MS - ENERGY

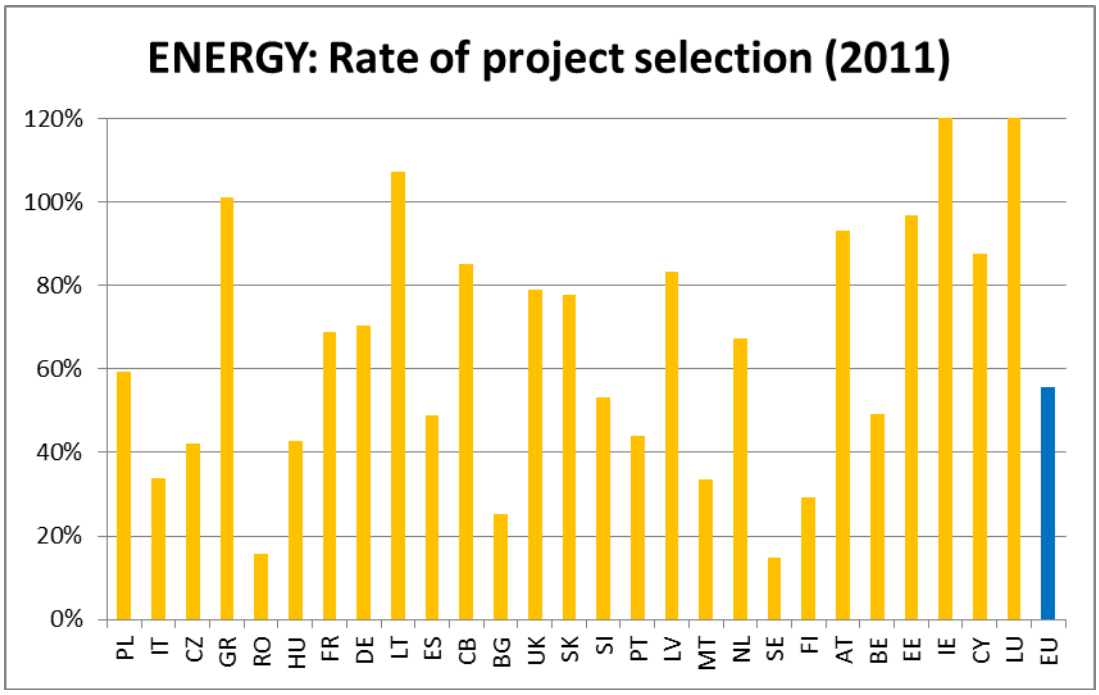

Table 2: 2007-2012 – Total achievements reported by MS[7]

	Amount of achievements		
Country	**Number of renewable energy projects**	**Additional capacity of renewable energy production (MW)**	**Reduction greenhouse emissions (CO2 and equivalents, kt)**
AT	5	87	102
BG	0	0	0
CY	2		
CZ	115	63	
DE	5,500	44	846
DK	88		
EE	15	18	
ES	13,810		
FR	1,895	0	2,320
GR	40	0	12
HU	482	0	21
IE	7		
IT	786	181	19,339
LT	15	39	
LU	10	0	6
LV	10	0	
PL	40	45	0
PT	104	0	1
RO	22	177	0
SE	29	0	10,700
SI		106	27
SK	173	53	0
UK	37	410	15
EU	**23,185**	**1,222**	**33,389**

[7] Blank – MS did not report against the indicator at all, 0 – MS reported against the indicator but the achievement was 0.

Table 3: 2007-2011 – Targets set and reported against by MS based on 2011 AIRs

Table 3.1: Number of renewable energy projects

Country	Targets	Achievements against targets	Achievement ratio (%)
AT	25	5	20
BG	310	0	0
CZ	1,511	118	8
DE	7,034	5,268	75
DK	100	88	88
ES	53,313	13,810	26
FR	2,067	1,421	69
GR	684	40	6
HU	600	482	80
IE	8	3	38
IT	3,307	786	24
LU	6	10	167
PL	402	76	19
PT	271	104	38
RO	30	14	47
SE	75	27	36
SK	206	173	84
UK	25	4	16
EU	**69,974**	**22,429**	**32**

Table 3.2: Additional capacity of renewable energy production (in MW)

Country	Targets	Achievements against targets	Achievement ratio (%)
AT	105	87	83
BG	36	0	0
CZ[8]	506	43	n.a
DE	308	18	6
HU	41	0.4	1
IT[9]	173,860	181	n.a
LT	100	39	39
LU	5,000	0	0
LV	77	0	0
PL	18,000	46	0
RO	200	99	50
SI	355	106	30
SK	98	53	53
UK	412,000	410	0
EU	**610,078**	**959.4**	**0.16**

Table 3.3: Reduction greenhouse emissions (CO_2 and equivalents, kt)

Country	Targets	Achievements against targets	Achievement ratio (%)
AT	296	102	34
BG	95	0	0
DE	1,023	241	24
FR	321,700	29,091	9
GR	297,638	12	0
HU	3,047	21	1
IT	8,841	19,339	219
LU	100	6	6
PL	50,014	0	0
PT	518	1	0
SI	349	27	8
SK	110	1	1
UK	107	15	14
EU	**683,838**	**48,856**	**7**

[8] CZ updated figures for 2011 in strategic report at national level. This figure cannot be matched with the AIR data on targets which is submitted by OP. Hence the achievement ratio cannot be calculated.

[9] IT updated figured for 2011 in strategic report at national level. This figure cannot be matched with the AIR data on targets which is submitted by OP. Hence the achievement ratio cannot be calculated.