



Politique de cohésion et énergies renouvelables

"Groupe de travail Energies Renouvelables du réseau MOT"

Paris, 27 Juin 2013

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Energies Renouvelables



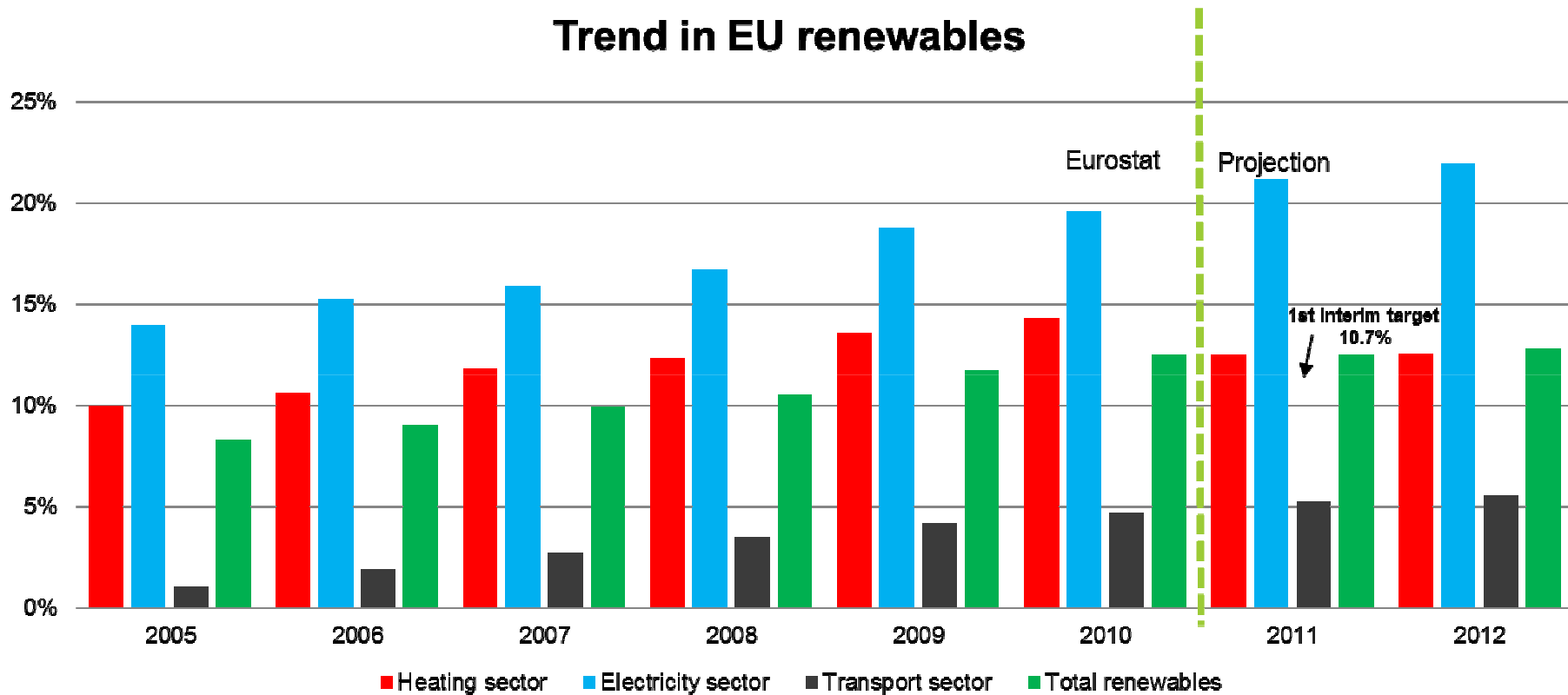
Recent developments

2013 Renewable energy progress report (COM 2013 (175))

- Sectoral developments vs 2010 NREAP and 2010 indicative targets:
 - » **Half** of Member States **behind** their **RES-E targets**
 - » **Most** Member States **behind** their **RES-T targets**
 - » **RES-H&C slow growth**

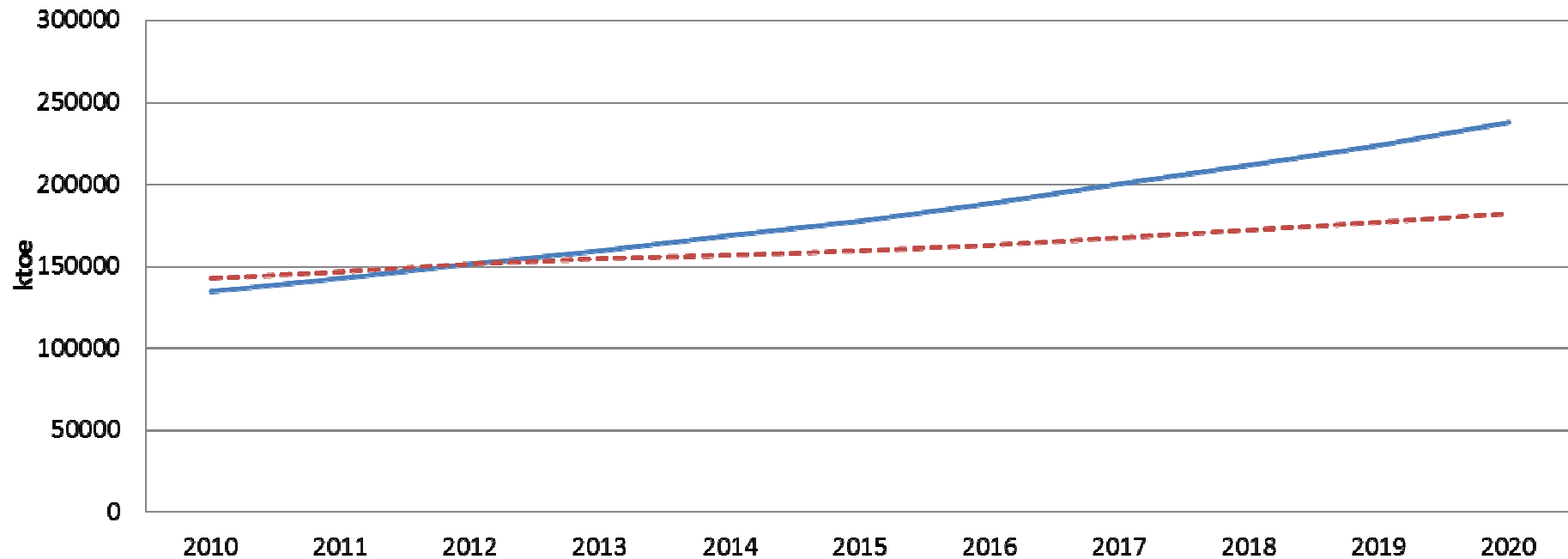
- Progress in various RES technologies:
 - » **Wind** – despite recent growth, MS behind their plans
 - » **PV** - recent strong growth, but hit by support disruptions
 - » **Biomass** - expected growth lower than planned
 - » **Biofuels** – more needs to be done to advance non-food feedstock biofuels

Trend in EU renewables



2011: total RES: 13% above 2011/2012 interim target: 10.7%
RES-E: 21.7%, RES H&C: 15.1%, RES-T: 3.8%

Planned vs estimated RES share






Urgent measures needed to reverse the impact of the economic decline, infrastructure and administrative barriers and support disruption



Overview of Member States progress

Member State	2005 RES share	2010 RES share	1 st interim target	2020 RES target
Austria	23.3%	30.1%	25.4%	34%
Belgium	2.2%	5.4%	4.4%	13%
Bulgaria	9.4%	13.8%	10.7%	16%
Cyprus	2.9%	5.7%	4.9%	13%
Czech Republic	6.1%	9.4%	7.5%	13%
Germany	5.8%	11.0%	8.2%	18%
Denmark	17%	22.2%	19.6%	30%
Estonia	18%	24.3%	19.4%	25%
Greece	6.9%	9.7%	9.1%	18%
Spain	8.7%	13.8%	10.9%	20%
Finland	28.5%	33%	30.4%	38%
France	10.3%	13.5%	12.8%	23%
Hungary	4.3%	8.8%	6.0%	13%
Ireland	3.1%	5.8%	5.7%	16%
Italy	5.2%	10.4%	7.6%	17%
Lithuania	15%	19.7%	16.6%	23%
Luxembourg	0.9%	3%	2.9%	11%
Latvia	32.6%	32.6%	34.0%	40%
Malta	0%	0.4%	2.0%	10%
Netherlands	2.4%	3.8%	4.7%	14%
Poland	7.2%	9.5%	8.8%	15%
Portugal	20.5%	24.6%	22.6%	31%
Romania	17.8%	23.6%	19.0%	24%
Sweden	39.8%	49.1%	41.6%	49%
Slovenia	16.0%	19.9%	17.8%	25%
Slovakia	6.7%	9.8%	8.2%	14%
UK	1.3%	3.3%	4.0%	15%
EU	8.5%	12.7%	10.7%	20%

Progress towards the first interim target:

-  > 2% above interim target
-  <1% from or <2% above interim target
-  >1% below interim target



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Technology deviations

2012 and 2020

Technology	2010	Expected 2012 ("CPI")	planned 2012 target	2012 deviation	Expected 2020		Expected 2020		target 2020	2020 deviation	
					(CPI)	(CPI+PPI)	Min.	Max.		Min.	Max.
	Mtoe	Mtoe	Mtoe	%	Mtoe	Mtoe	Mtoe	Mtoe		%	%
Electricity	56.2	62.5	64.3	-2.8%	77.3	77.9	87.1	87.9	104.5	-26.1%	-26.1%
Biomass (solid & liquid)	8.5	9.6	8.7	9.9%	12.0	12.1	14.2	14.5	14.4	-16.7%	-16.7%
Biogas	2.1	2.5	2.9	-13.3%	4.7	4.7	5.2	5.2	5.5	-15.0%	-15.0%
Geothermal	0.5	0.5	0.5	-6.9%	0.8	0.8	0.9	1.0	0.9	-15.5%	-15.5%
Hydro large-scale	26.9	26.1	25.9	1.1%	26.8	26.9	26.8	27	27.1	-1.2%	-1.2%
Hydro small-scale	3.8	3.9	4.1	-5.5%	4.6	4.6	4.6	4.7	4.7	-1.9%	-1.9%
Photovoltaic	1.9	3.0	3.0	0.2%	6.8	6.8	7	7	7.1	-4.9%	-4.9%
Concentrated solar	1	0.1	0.4	-79.8%	0.1	0.1	0.7	0.7	1.7	-92.9%	-92.9%
Wind onshore	12.8	15.9	17.0	-6.8%	17.5	17.9	18.3	18.5	30.4	-42.4%	-42.4%
Wind offshore	0.5	0.8	1.6	-49.8%	3.7	3.7	9.1	9.1	12.0	-69.5%	-69.5%
Tidal/Wave/Ocean	0.04	0.04	0.05	-14.2%	0.2	0.2	0.2	0.2	0.5	-64.7%	-64.7%
Heating & cooling	80.6	81.0	70.6	14.7%	84.3	84.6	88.1	89	104.7	-19.5%	-19.5%
Biomass (solid & liquid)	72.2	72.2	60.9	18.6%	74.8	75.1	77.1	77.9	81.6	-8.3%	-8.3%
Biogas	2.0	2.3	1.9	24.0%	2.7	2.7	3.0	3.0	4.4	-38.1%	-38.1%
Geothermal	0.5	0.6	0.9	-32.1%	1.1	1.1	1.3	1.3	2.5	-55.5%	-55.5%
Heat pumps	4.3	4.2	5.1	-17.2%	2.9	2.9	3.1	3.1	9.9	-70.9%	-70.9%
Solar Thermal	1.5	1.7	1.9	-12.2%	2.7	2.7	3.5	3.5	6.3	-56.6%	-56.6%
Transport-biofuels only	13.6	15.0	16.2	-7.8%	18.9	20.6	19.1	20.8	28.9	-34.8%	-34.8%
1st gen. biofuels	13.6	15.0	15.4	-2.6%	16.7	18.4	16.9	18.6	26.4	-36.8%	-36.8%
2nd gen. biofuels	0.02	0.0	0.9	-100.0%	2.2	2.2	2.1	2.2	2.5	-13.7%	-13.7%
Total	150.4	158.5	151.2	4.8%	180.4	183.1	194.2	197.6	238.2	-24.3%	-24.3%



Reference to be considered:

- 2013 RES Progress report & forthcoming 2013 MS progress reports (available from December 2013):

http://ec.europa.eu/energy/renewables/reports/reports_en.htm

- 2013 Guidance on support schemes (planned adoption July 2013)
- 2013 Guidance/Best practices of cooperation mechanisms (planned adoption July 2013)



Réseaux intelligents (smart grids)





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**Directives
2009/72/CE
2009/73/CE**

**13 July 2009
Annex I.2**



Legal basis for the roll-out

- MSs shall ensure the implementation of intelligent metering systems that shall assist the active participation of consumers in the energy supply market.
- May be subject to an economic assessment of long-term costs and benefits – by 03.09.2012.
- MSs shall prepare a timetable with a target of up to ten years for the implementation of intelligent metering systems.
- When is assessed positively, the provision for electricity states that at least 80% of consumers shall be equipped with intelligent metering systems by 2020



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EC Recommendation to prepare the roll-out

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32012H0148:EN:NOT>

13.3.2012 EN Official Journal of the European Union L 73/6

RECOMMENDATIONS

COMMISSION RECOMMENDATION of 9 March 2012 on preparations for the roll-out of smart metering systems (2012/148/EU)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 299 thereof,

Whereas:

- Smart grids mark a new development on the path towards greater consumer empowerment, greater integration of renewable energy sources into the grid and higher energy efficiency and make a considerable contribution to reducing greenhouse gas emissions and to job creation and technological development in the Union;
- In accordance with Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (*) and Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (**), Member States are required to ensure the implementation of smart metering systems that assist the active participation of consumers in the electricity supply and gas supply markets and implementation of smart metering systems may be subject to an economic assessment of all the long-term costs and benefits to the market and the individual consumer or which form of smart metering is economically reasonable and cost efficient and which conditions are feasible for their deployment;
- The Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Regions of 12 April 2011 on 'Smart metering roll-out deployment' (***) introducing key measures, including monitoring, key projects, establishing guidelines or key indicators and guidelines to define a metering system, along with cost-benefit analysis;

(*) OJ L 211, 14.8.2009, p. 65.
(**) OJ L 211, 14.8.2009, p. 91.
(***) COM(2011) 202 final.

JRC SCIENTIFIC AND TECHNICAL RESEARCH

Guidelines for Cost Benefit Analysis of Smart Metering Deployment

Vincenzo Giordano, Ijeoma Onyeji, Gianluca Fulli (JRC IET), Manuel Sánchez Jiménez, Constantina Filou (DG ENER)

2012

Joint Research Centre

JRC REFERENCE REPORTS

Guidelines for conducting a cost-benefit analysis of Smart Grid projects

Vincenzo Giordano, Ijeoma Onyeji, Gianluca Fulli (JRC IET), Manuel Sánchez Jiménez, Constantina Filou (DG ENER)

2012

Joint Research Centre

<http://ses.jrc.ec.europa.eu/>

Energy



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Soutiens de l'UE – Politique de cohésion



EU Funding for Sustainable Energy – MFF 2014-2020

- **Cohesion Policy** to allocate some 20 billion € (estimate!) to investments in energy efficiency, renewable energy, smart grids and urban mobility, including research and innovation in those areas, in complementarity with Horizon 2020
- **Horizon 2020:** some 6.5 billion € to be allocated to research and innovation in "Secure, clean and efficient energy"
- **Connecting Europe Facility:** some 5 billion € to be allocated to investments in TEN-E infrastructure of highest European added value
- Other **European Structural and Investment (ESI) Funds:** European Agricultural Fund for Rural Development and European Maritime and Fisheries Fund
- **LIFE+** and **COSME** might also be relevant for certain aspects



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Financial Instruments in MFF proposals 2014-2020

Centrally managed by COM
(Financial Regulation)

Shared Management with MS
(Common Provisions Regulation)

Research,
Development
Innovation

Horizon 2020
Equity and Risk Sharing Instruments

**Instruments under
Structural and Cohesion
Funds**

Growth, Jobs
and Social
Cohesion

**Competitiveness &
SME (COSME)**
Equity & guarantees

Creative Europe
Guarantee Facility

➔ EU level (central
management)

**Social Change
& Innovation**

Erasmus for all
Guarantee Facility

➔ National/regional
instruments (shared
management)

Infrastructure

Connecting Europe Facility (CEF)
Risk sharing (e.g. project bonds) and equity
instruments

- Off-the shelf FIs
- Tailor made FIs

*Significant higher amounts than
currently!*

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Commission proposal for Cohesion Policy 2014-2020 – Aspects related to Sustainable Energy





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Thematic Objectives

Europe 2020

smart

sustainable

inclusive

- 1. Research and innovation**
2. Information and Communication Technologies
3. Competitiveness of Small and Medium-Sized Enterprises (SME)
- 4. Shift to a low-carbon economy**
5. Climate change adaptation and risk management and prevention
6. Environmental protection and resource efficiency
7. Sustainable transport
8. Employment and support for labour mobility
9. Social inclusion and poverty reduction
10. Education, skills and lifelong learning
11. Increased institutional capacity and effectiveness of public administration

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Concentration of ERDF proposed for 2014-2020

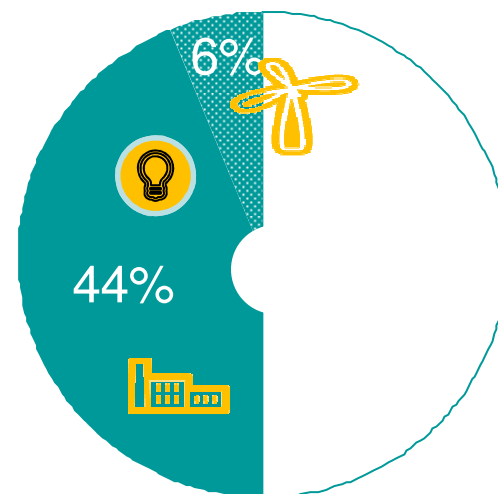
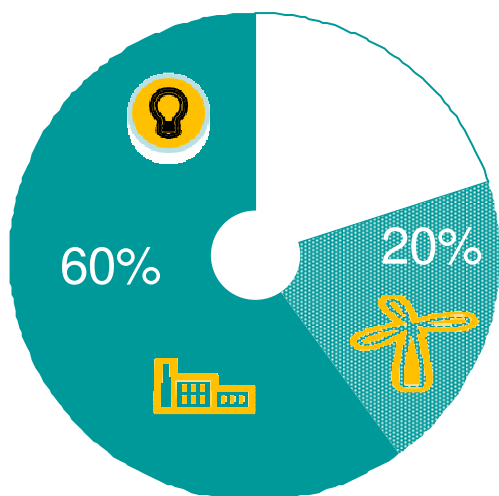
 Research and Innovation

 SMEs competitiveness

 **Low-carbon economy**
– **Energy efficiency (EE) and renewable energy (RES)**

Developed regions & transition regions

Less developed regions



**No more ceiling for investing in EE in housing
(currently maximum 4% of ERDF)**



Investments in Sustainable Energy in 2014-2020 Cohesion Policy

"Supporting the shift towards a low-carbon economy in all sectors" – 5 investment priorities proposed by the Commission for ERDF and CF:

- a) Promoting the production and distribution of RES**
- b) Promoting EE and RES use in SMEs**
- c) Supporting EE and RES use in public infrastructures and in the housing sector (housing only ERDF)**
- d) Developing smart distribution systems at low voltage levels ("smart grids")**
- e) Promoting low-carbon strategies for urban areas**



Key success factors for implementation

- Need for a strategic approach (clear strategy/programmes with objectives, target performance of investments)
- Governance & capacities = critical
 - Implement the appropriate framework (legislative, institutional, coordination mechanism)
 - Develop needed capacities in administrations, agencies, companies (Trainings, use of technical assistance)
 - 'carbon management culture': CO2MPARE instrument
- Develop demand side oriented actions/measure (awareness raising, communication, pool demand...)
- Financial approach = key (beyond subsidies, involve financial actors)



European Territorial Cooperation

MFF for ETC: € 8.948 billion:

- **(a) € 6.6 billion for cross-border cooperation (currently € 5.6 billion for 53 programmes)**
- **(b) € 1.8 billion for transnational cooperation (currently € 1.8 billion for 13 programmes)**
- **(c) € 500 million for interregional cooperation (currently € 445 million for INTERREG IVC and 3 networking programmes (Urbact II, Interact II and ESPON))**

This is equivalent to 2.75% of cohesion policy resources.

The COM had proposed a higher share for ETC (€ 11.7 billion, 3.5 % of cohesion policy resources)

Annual meeting with European Territorial Cooperation programmes: 22-23 April 2013
http://ec.europa.eu/regional_policy/conferences/etc2013/meeting_en.cfm



Innovation for sustainable energy

- R&D&I much needed in renewables
- **Smart & Sustainable = 2 sides of same coin**
- Consider inclusion of renewable energy related aspects into 2014-2020 innovation strategies under ERDF
- Seize opportunities of investments in 'green growth': turn knowledge into jobs & development opportunities
- Focus at 'multi-benefit' investments: deliver on climate, jobs, economic development



Connecting Smart and Sustainable Growth through Smart Specialisation

A practical guide for ERDF managing authorities



- How to integrate eco-innovations, resource efficiency etc in the Research & Innovation Strategies for Smart Specialisation (RIS3) ?
- Why it makes sense?
- What can authorities & stakeholders do?
- Several good practices
- <http://s3platform.jrc.ec.europa.eu/guides>

November 2012



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More information

Cohesion Policy Project Examples:

http://ec.europa.eu/regional_policy/projects/stories/index_en.cfm

Policy Learning Database:

http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/studies_en.cfm?nmenu=5

Expert Evaluation Network reports on RES and EE in housing:

http://ec.europa.eu/regional_policy/information/evaluations/index_en.cfm#1

JESSICA horizontal (thematic) studies:

http://ec.europa.eu/regional_policy/thefunds/instruments/jessica_horizontal_en.cfm

REGIO case study “Wave Hub” project, UK:

http://ec.europa.eu/regional_policy/projects/practices/details.cfm?pay=UK&the=68&sto=2458®ion=ALL&lan=7&obj=ALL&per=ALL&defL=EN

REGIO case study “ERDF – Promotion of renewable energy sources in Burgenland”, AT:

http://ec.europa.eu/regional_policy/atlas2007/austria/at11_en.htm

COCOF technical meeting on sustainable energy March 2011:

http://ec.europa.eu/regional_policy/conferences/energy2011/index_en.cfm

Regions for Economic Change Conference May 2010 Energy efficiency workshop (2A):

http://ec.europa.eu/regional_policy/conferences/sustainable-growth/programme_en.cfm?nmenu=4

Practical Guide to EU funding opportunities for Research and Innovation:

http://cordis.europa.eu/eu-funding-guide/home_en.html

Smart specialisation platform:

<http://s3platform.jrc.ec.europa.eu/home>

Intelligent Energy Europe Projects:

<http://eaci-projects.eu/iee/page/Page.jsp>

ICT-specific guide on energy efficiency:

http://ec.europa.eu/information_society/activities/sustainable_growth/ict4ee_wiki/index_en.htm



More information on financial instruments

Commission Staff Working Document - Financial Instruments in Cohesion Policy

http://ec.europa.eu/regional_policy/sources/docoffic/official/communic/financial/financial_instruments_2012_en.pdf

Factsheet: Financial Instruments in Cohesion Policy 2014-2020

http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/financial_instruments_en.pdf

Panorama Autumn 2012: Using financial instruments to leverage support for regional policy

http://ec.europa.eu/regional_policy/sources/docgener/panorama/pdf/maq43/maq43_en.pdf

Financial Instruments: A Stock-taking Exercise in Preparation for the 2014-2020 Programming Period

http://ec.europa.eu/regional_policy/thefunds/instruments/doc/fls_stocktaking_financial.pdf



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Many thanks for your attention

