

**International and EU Climate Change Policies
after COP 12 / MOP 2:**

Challenges and Opportunities for
the New Member States and Candidate Countries

**Climate Change Policies
and EU Structural Funds:
Challenges for the new
Member States**

Prague 12 April 2007

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Presentation Overview

- ❑ **Structural funds – overview**
- ❑ **Structural funds, environment and climate change**
- ❑ **Some examples**
- ❑ **Summary and Conclusions**

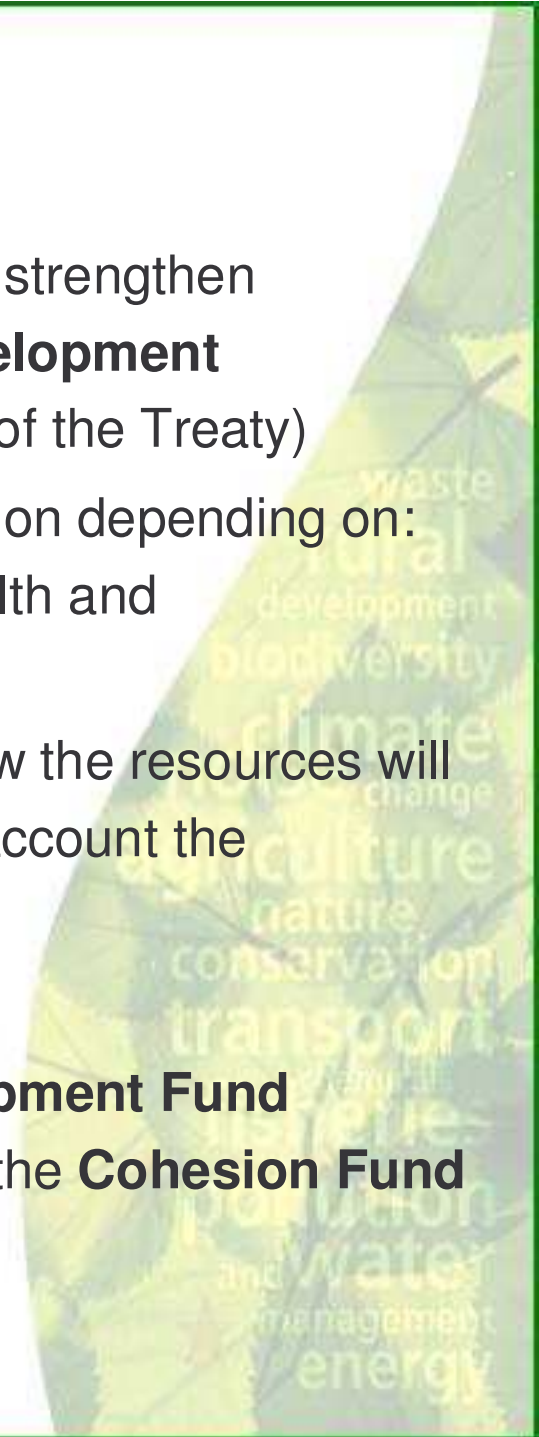


Structural funds - overview



Structural Funds

- ❑ The EU promotes harmonious development and strengthen economic and social cohesion by **reducing development disparities between the regions** (Art. 158-162 of the Treaty)
- ❑ **Annual sums allocated to MS** by the Commission depending on: eligible population, national wealth, regional wealth and unemployment rate.
- ❑ Each **MS decides on the specific details** of how the resources will be divided up among the regions by taking into account the geographical eligibility
- ❑ Total EU 27: about **€ 308 billion** for 2007-2013
- ❑ **Instruments:** the **European Regional Development Fund (ERDF)**, the **European Social Fund (ESF)** and the **Cohesion Fund**



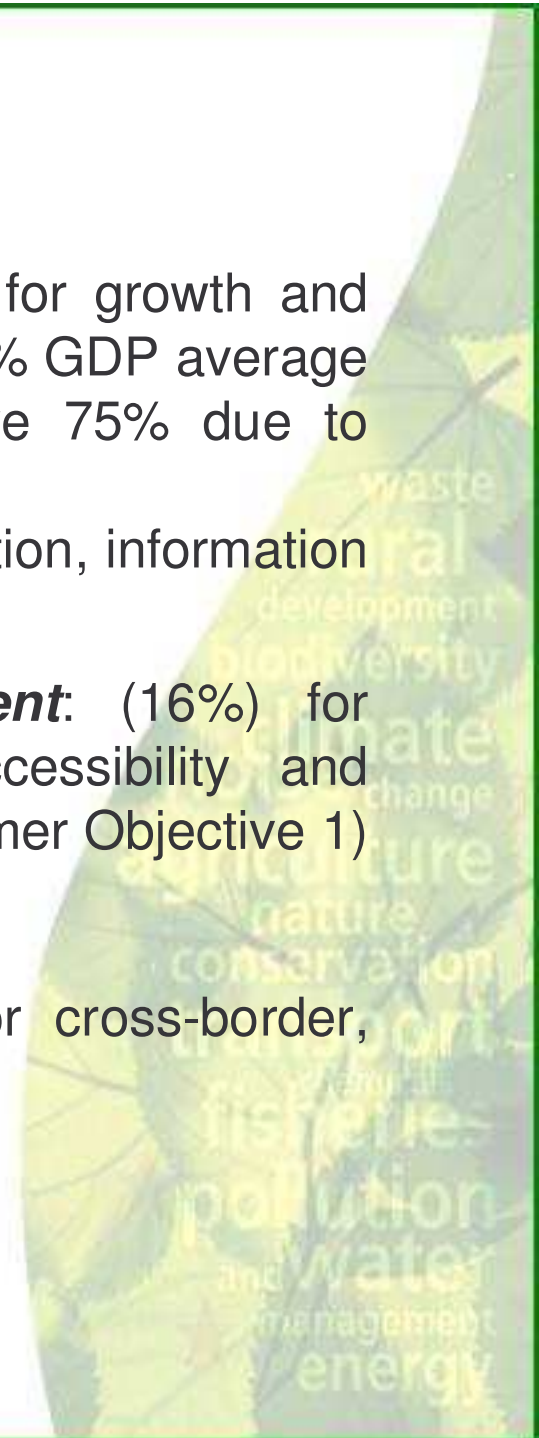
SF Objectives

❑ **Convergence:** (81.5% of total SF allocation) for growth and employment in least developed MS –ie regions <75% GDP average (84 in 17 MS) + 16 '*phasing out*': slightly above 75% due to statistical reasons.

60% for Lisbon objectives (eg research and innovation, information society and sustainable development).

❑ **Regional Competitiveness and Employment:** (16%) for innovation, sustainable development, better accessibility and training projects .. 155 regions + 13 '*phasing in*' (former Objective 1) 75% for Lisbon.

❑ **European Territorial Cooperation:** (2.5%) for cross-border, transnational and interregional cooperation



The Cohesion Policy Architecture



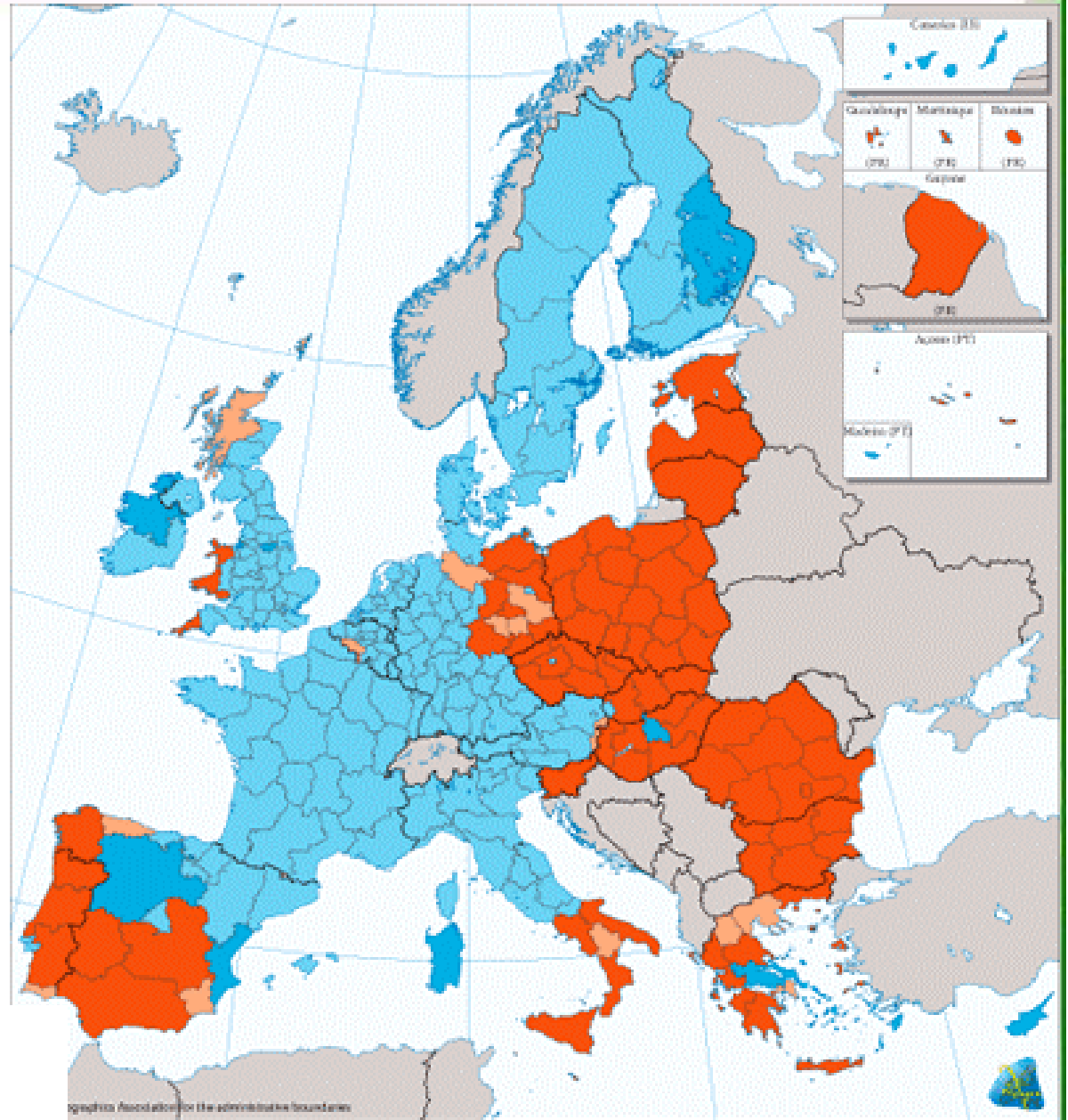
2000-06			2007-13	
Objectives Community Initiatives Cohesion Fund	Financial Instruments		Objectives	Financial instruments
Objective 1 Regions lagging behind in development terms	ERDF ESF EAGGF-Guarantee EAGGF-Guidance FIFG		Convergence	ERDF ESF Cohesion Fund
Cohesion Fund	Cohesion Fund			
Objective 2 Economic and social conversion zones	ERDF ESF		Regional competitiveness and employment	ERDF ESF
Objective 3 Training systems and employment policies	ESF			
Interreg III	ERDF		European territorial cooperation	ERDF
URBAN II(*)	ERDF			
EQUAL (*)	ESF			
Leader +	EAGGF-Guidance			
Rural development and restructuring of the fishing sector beyond Objective 1	EAGGF-Guarantee FIFG			
4 objectives 4 Community initiatives Cohesion Fund	6 instruments		3 objectives	3 instruments

Source: DG Regio (2007): Cohesion policy 2007-13 - Commentaries and official texts

energy

Structural funds map

- Convergence Regions
- Phasing-out Regions
- Phasing-in Regions
- Competitiveness and Employment Regions



Source:

http://ec.europa.eu/regional_policy/atlas2007/fiche_index_en.htm

management
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Structural funds, environment and climate change

Insights building on:

A study for DG Regio: '*Strategic Evaluation on Environment and Risk Prevention under Structural and Cohesion Funds for the period 2007-2013*'
(GHK, IEEP, Ecolas and CE, November 2006)



waste
rural
development
biodiversity
climate
noise change
agriculture
nature
conservation
transport
fisheries
pollution
and water
management
energy

Insights from DG Regio Study

Aim: advice to DG Regio on SF allocation for negotiations with 15 MS

Among key policy issues: **climate change**

Fields analysed:

- Water supply
- Waste water treatment
- Municipal solid waste
- Renewable energy** (climate mitigation)
- Natural risk management** (links to climate change adaptation)

The method:

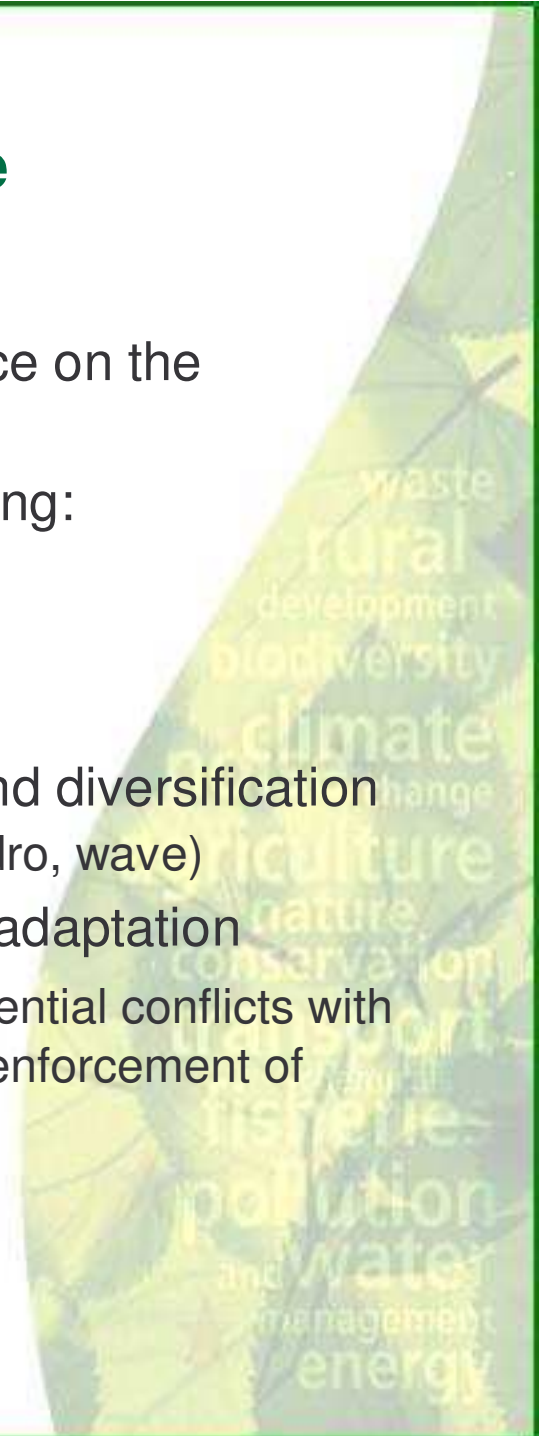
- **Current situation** – state of the environment, compliance with Acquis, previous EU funds, economic instruments, institution capacity
- **Needs** – necessary environmental infrastructures and services, needs to meet targets, potential for PPP and flanking measures

Priorities for EU funding – on the basis of multi criteria analysis



Combating climate change

- ❑ Climate change likely to have significant influence on the probability and hazard of natural risks in MS15
- ❑ Regional funding for RES contributes to achieving:
 - Kyoto commitments
 - Targets for RES in share of electricity generation
 - Targets for biofuels
- ❑ Funding to achieve accelerated programmes and diversification into less commercialised RES (e.g. PV, small hydro, wave)
- ❑ Programme support for energy efficiency / grid adaptation
- ❑ Also address a series of ancillary problems (potential conflicts with nature protection, lack of clarity of responsibility, for enforcement of national policies)



Funding measures for RES

Support policies/measures/Instruments to meet investment needs through the market or through national programmes, mainly in support of RES and risk management.

- Direct Subsidies
- Feed-in tariffs
- Certificates/Obligations
- Tax deductions and fiscal measures etc
- Subsidy reforms to ensure level playing field for RES / energy efficiency

The last three are sometimes called '**Flanking Measures**'



What can the Structural Funds do ?

- ❑ Secure the Integration of RES support mechanisms to avoid gaps, eg
 - between fuel supply and (biomass) power plant :
 - between permit and siting processes and the construction of plant (eg windmills) (Administrative and legal 'joined up thinking)
 - between introducing newer technologies on the one hand and supporting more mature markets on the other
- ❑ Establish new or broader RES markets through pilot projects
 - to explore the market feasibility (eg wind in Malta) or technical feasibility (eg wave power, geothermal etc)
- ❑ Enhance less commercially attractive RES to make competitive
 - eg some small hydro, PV, biogas/liquid biofuels
- ❑ Address technical limits (eg grid connection and grid extension)
- ❑ Address capacity needs – education and training (eg PV – architects, roofers)
- ❑ Invest in energy savings measures

Structural Funds money for plant, saving measures, management systems, capacity development, information and education campaigns, training + use of political pressure for country own efforts (policies, objectives, instruments (eg feed-in tariffs), subsidy reform, administrative processes)

Potential SF contribution to adaptation

Potential effects of climate change: Floods in Central-Eastern Europe, and agrarian economies exposed to shifts in rainfall and temperature.

Required investments:

- Infrastructures (protection or rehabilitation of natural floodplains and wetlands, new flood barriers etc)
- Information and communication (monitoring, warning systems, advice etc)
- Planning (water management, response planning, risk assessment)
- Training / capacity building and awareness raising.



Prague, 2002 flood



risks
pollution
and water
management
energy

Potential SF contribution to mitigation

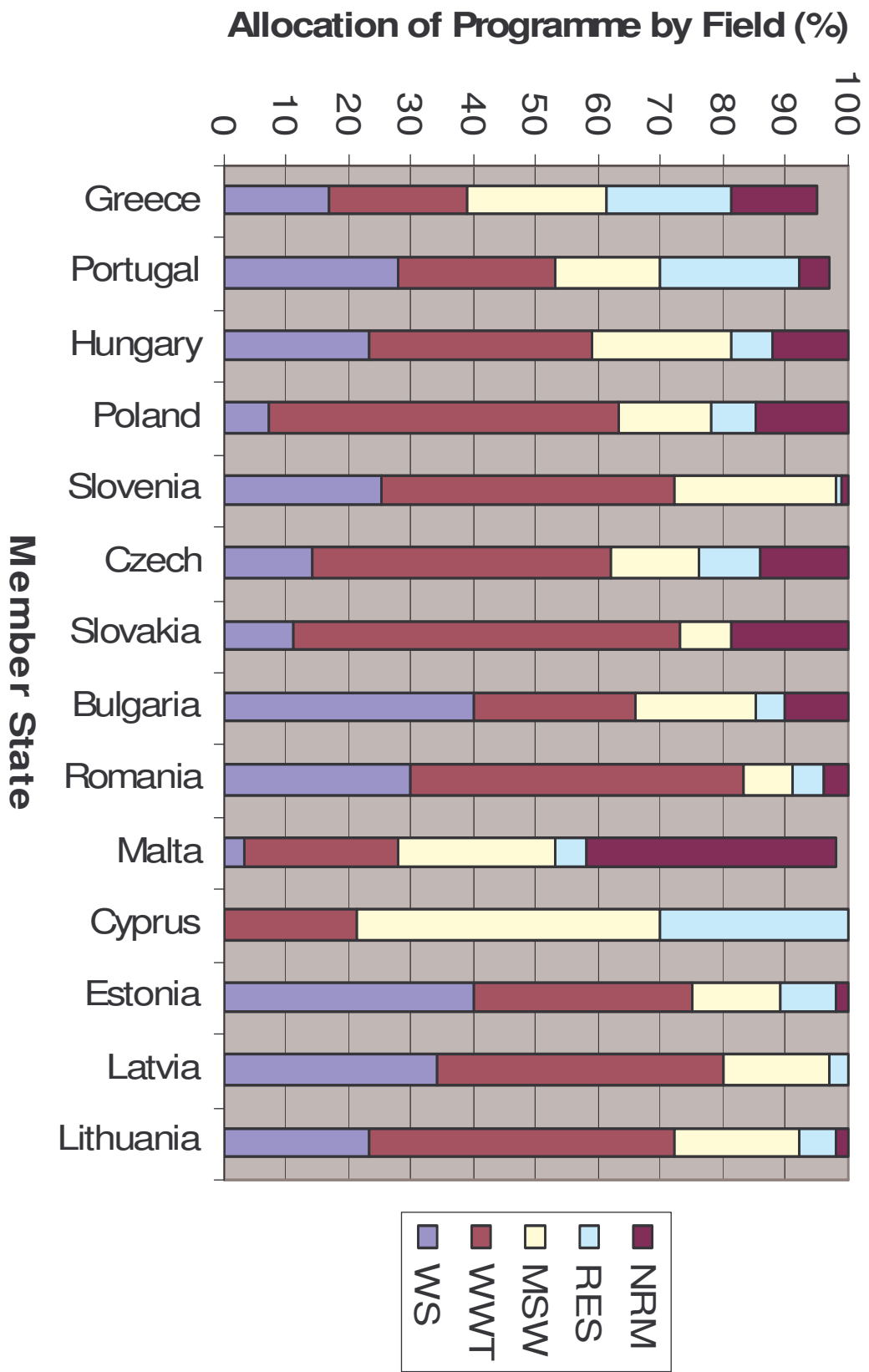
Carbon emissions: Falling in Central and Eastern Europe at aggregate level – but quickly rising from homes, commercial activity and transport.

SF goals for renewable energy:

- Climate targets: reduce GHG (Kyoto)
- Renewable electricity: 2010 targets (Directive 2037/2000 or accession agreements) – [2020 target: 20%]
- Biofuels: indicative 2010 target 5.75% - [2020 target: 10%]

RES Type	First Priority (within RES)	Second Priority	Third Priority
Wind	CYP, CZ, EE, GR, LT, MT, PL, PT, SI	ROM	MT
Solid Biomass	BUL, ES, HU, LV, ROM, SK	CZ, PL, MT, CYP	PT, SI, GR, LT
Biogas	LV	SI, HU	CZ
PV	CYP		PL, ES, MT
Solar Thermal Heat		ES, MT, PL	CYP
Hydro (>15 MW)		PL, GR	
Hydro (<15 MW)	ROM, SI	CZ, PT, SK, LT	
Liquid Biofuels	HU	BUL, MT	CYP
Geothermal		SK	BUL, PL, ROM, HU

RES priorities in Context



energy

Estimated Annual CO2 (Kt) Savings Following RES Funding

	Wind	Solid Biomass	Biogas	PV	Hydro (>15 MW)	Hydro (<15 MW)	Geothermal	Total
Bulgaria	-	163	-	-	-	-	118	281
Cyprus	2	3	-	-	-	-	-	5
CZ	128	209	25	-	-	78	-	440
Estonia	63	-	-	-	-	-	-	63
Spain	-	917	-	17	-	-	-	934
Greece	736	600	-	-	892	-	-	2,228
Hungary	-	494	79	-	-	-	356	929
Latvia	41	34	-	-	-	25	-	100
Lithuania	-	98	24	-	-	-	-	122
Malta	11	-	-	1	-	-	-	12
Poland	195	319	-	27	237	-	346	1,123
Portugal	1,534	1,251	-	-	-	930	-	3,715
Romania	49	179	-	-	-	67	130	425
Slovenia	1	8	1	-	-	1	-	11
Slovakia	-	7	-	-	-	5	30	43
EU15	2,760	4,282	129	45	1,129	1,106	980	10,431

Source: *Based on National Evaluation Reports*

**Investment of 6,543 MEUR ? saving of 10,430 KtCO₂/annum
 (~ €44/t CO₂ avoided) □ -7% current emissions**

Some examples



Slovakia

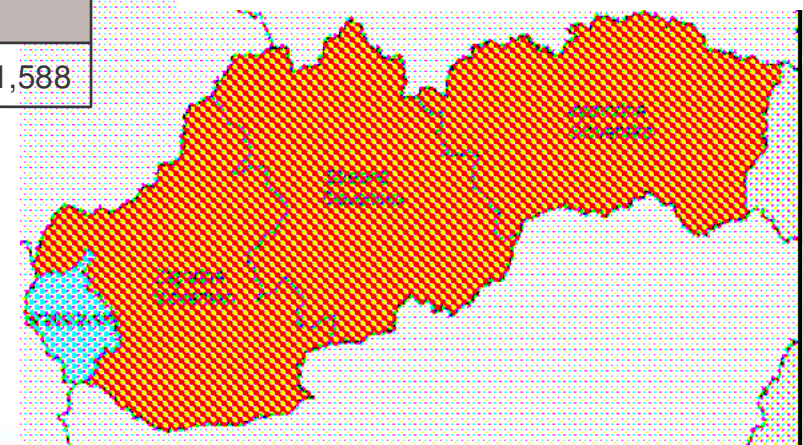
- **Mitigation:** main RES is hydro, some biomass (significant potential). No economic instrument in place. Lack of info on physical and financial requirements. **Priority:** Investment (4-6%) in small scale hydropower, solid biomass and geothermal. Development of the RES policy framework.
- **Adaptation:** Increasing flooding. **Priority:** investment (12-20%) in flood prevention

Overall SF funding allocation for 2007-2003 (MEUR)

Convergence		Regional Competitiveness and Employment		European Territorial Cooperation	Total
Cohesion Fund	Convergence	Competitiveness			
3,899	7,013	449		227	11,588

Objective

- Convergence Regions
- Phasing-out Regions
- Phasing-in Regions
- Competitiveness and Employment Regions



Source:

http://ec.europa.eu/regional_policy/atlas2007/fiche_index_en.htm



Poland

- **Mitigation:** potential for wind- but often opposed by public and NGOs – and biomass. **Priority:** Investment (5-8%) in RES complemented by flanking measures. RES strategy/planning needs clarity. Institutional capacity building required.
- **Adaptation: Priority:** flood protection and drought prevention. Investment (11-19%) for natural hazards

Overall SF funding allocation for 2007-2003 (MEUR)

Convergence		Regional Competitiveness and Employment	European Territorial Cooperation	Total
Cohesion Fund	Convergence	Competitiveness		
22,176	44,377	0	731	67,284

Source:
http://ec.europa.eu/regional_policy/atlas2007/fiche_index_en.htm



Czech Republic

- **Mitigation:** biomass (in particular), small hydro, solar thermal and partly wind energy most promising. Investments can be partially covered by feed-in tariffs
Priority: Investment (7-13%) mainly biomass and energy saving.
- **Adaptation:** Flooding main issue (at least once/year). **Priority:** investment (10-17%) in flood prevention

Overall SF funding allocation for 2007-2003 (MEUR)

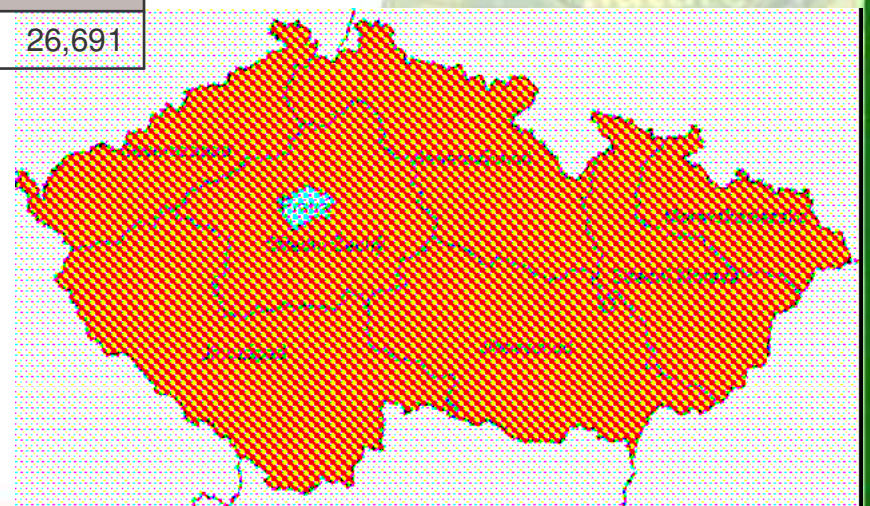
Convergence		Regional Competitiveness and Employment	European Territorial Cooperation	Total
Cohesion Fund	Convergence	Competitiveness		
8,819	17,064	419	389	26,691

Objective

- Convergence Regions
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- Phasing-in Regions
- Competitiveness and Employment Regions

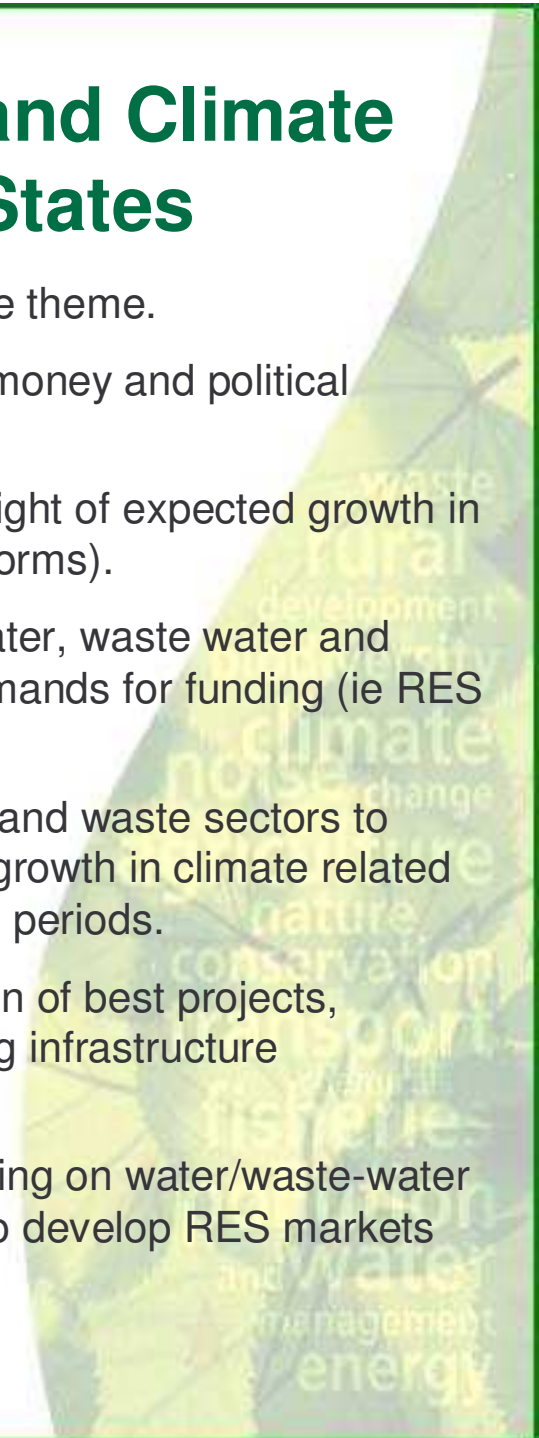
Source:

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Summary and Conclusions on SF and Climate change for the new Member States

- ❑ SF for 2007-2013 have explicitly adopted climate change as a core theme.
- ❑ Support for renewable energies is a core field for SF focus – real money and political support for mitigation. Real potential CO2 savings possible.
- ❑ Support for natural hazards management – ie adaptation (key in light of expected growth in risk due to climate change – increased likelihood of flooding, fires, storms).
- ❑ There is still a ‘tradition’ of looking at SF funding as sources for water, waste water and waste infrastructures investments - this covers 80% of expected demands for funding (ie RES not that high on the country agendas)
- ❑ However, already clear that DGRegio expects water, waste water and waste sectors to become less important as the infrastructures become complete and growth in climate related investments – mitigation and adaptation – can be expected for future periods.
- ❑ Challenges for new Member States – as with existing MS, selection of best projects, development of suitable pipelines of projects for the future, combining infrastructure investment with capacity developments.
- ❑ Particular MS challenge – not to take a sequential approach focusing on water/waste-water and waste only now, but rather taking advantage of the opportunity to develop RES markets now.



Thank You!

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