

WP 4 : Regulatory and Market Framework of Energy Markets

State of affairs & WP evolution Summary

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- 4.1 Analysis of the current legislation and regulation of the liberalised market, the directives on renewables and CHP, and on emission trading
- 4.2 Specification of “boundary conditions” and “guidelines” for proper functioning of future energy markets

- Liberalised market
 - Current legislation & regulation
- RES, CHP & emission trading
 - Current legislation & regulation
 - Reality show: Belgium
 - Future
- Conclusion & future of WP4

- Directives 96/92/EC and 2003/54/EC
- Directorate-Generals involved in energy
 - DG Energy and Transport (DGTREN)
 - DG Competition and DG Environment
- Florence meeting
 - 2/year in Rome, started in 1998 in Florence
 - Member states, Eurelectric, CEER, ETSO &co
 - Discussing the creation of internal electricity market

- Initially too much freedom and long term deadlines
 - 1st Directive 96/92/EC
- Recently less freedom and shorter term deadlines
 - 2nd Directive 2003/54/EC

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RES, CHP & emission trading

EC policy framework

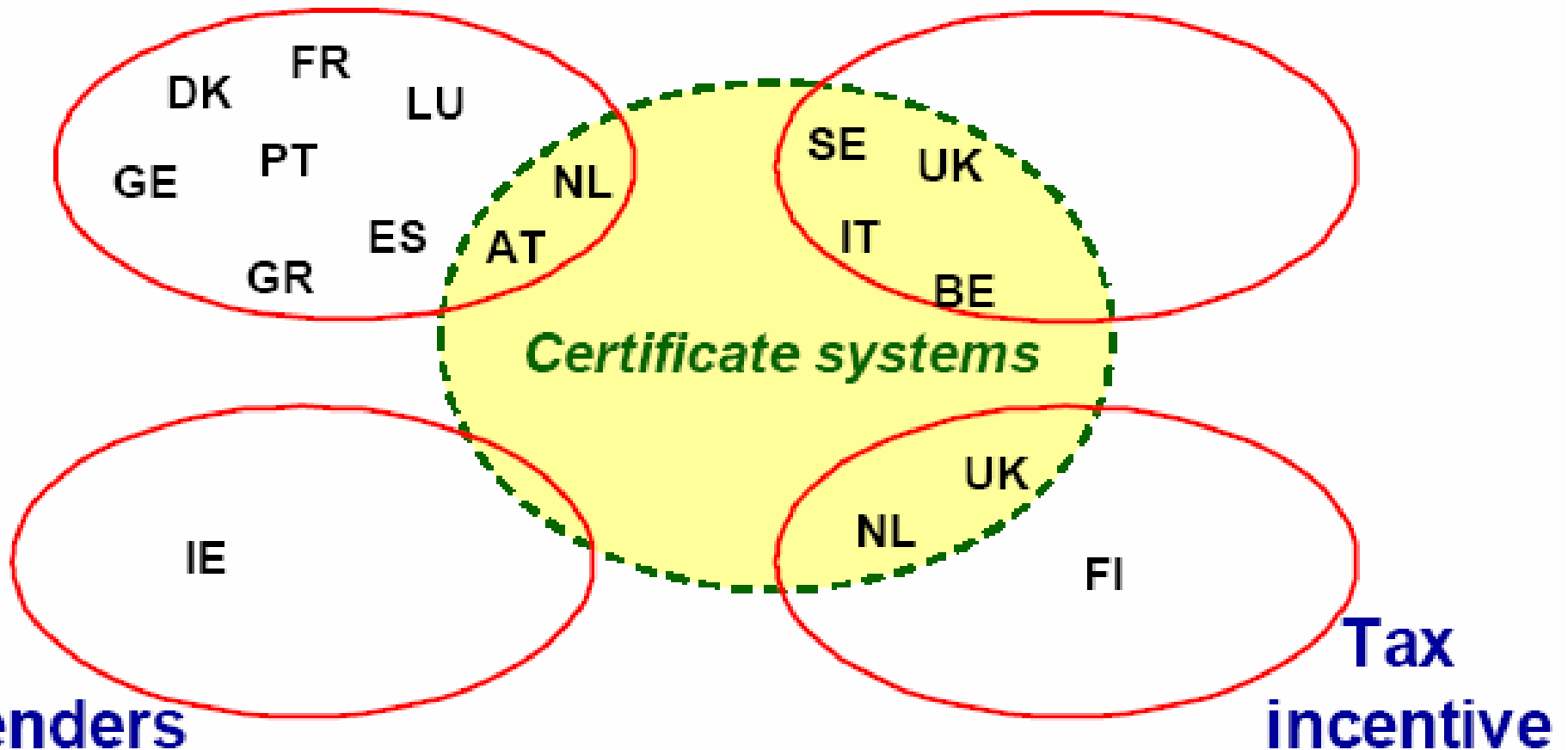
- 1997 White paper: Energy for the future – renewable sources of energy
- 2000 Green paper: Towards a European strategy for security of energy supply
- 2001 Directive 2001/77/EC (green policy)
- 2003 Directive 2003/87/EC (Kyoto)
- 2004 Directive 2004/8/EC (CHP)
- 2004 Directive 2004/101/EC (Linking)

- No European-wide support scheme enforced
 - Directive 2001/77/EC by 27 October 2005:
 - Report on experience with different mechanisms
 - **cost-effectiveness**
 - Proposal for a Community framework?
 - Min. 7 years transitional period
- ⇒ **no harmonization before 2012**

2003: Tendency towards certificates and feed-in tariffs

Feed-in tariffs

RES-E obligation



Source: EC, DGTREN

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Table 8.2 Environmental Policy Framework: Electricity generation

	main RES support mechanism	Net addition to generation 2003 (MW)			
		net new coal/oil	net new gas	net new RES/CHP	other
Austria	feed in tariff	0	0	+340	0
Belgium	green certs. and fiscal incentives	0	0	+80	0
Denmark	feed in tariff	0	0	+350	0
Finland	fiscal investment subsidies	0	0	+20	+55
France	obligation (tender)	-500	-10	+285	0
Germany	feed in tariff	0	0	+2900	0
Greece	feed in tariff plus subsidies	+380	0	+110	0
Ireland	obligation (tender)	-	-	-	-
Italy	green certificates	-350	+1740	+450	+240
Lux	feed in tariff	-	-	-	-
Neth	obligation (green certs)	+800	0	-	0
Portugal	feed in tariff	0	+392	-	0
Spain	feed in tariff	0	+1600	+1300	+117
Sweden	obligation (green certs)	0	0	+250	+
UK	obligation (green certs)	0	-250	+750	0

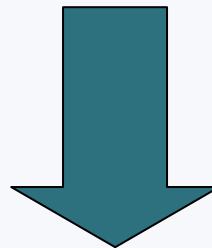
Source: EC Fourth Benchmarking Report, 2005

- Different RES certificates per region
- + Federal certificates for offshore wind
- ⇒ **4 different RES certificate systems**
- **+**
- **separate CHP certificates in Flanders !!!**
 - Walloon, Brussels: same certificate for CHP&RES

- Very different in characteristics
 - Quota, penalties, guaranteed minimum prices
- Difference feed-in not always clear
 - Federal offshore certificates
 - **Guaranteed minimum price Elia: €107**
 - Solar energy certificates
 - **From 2006: minimum price Flemish DSO's of €450**
 - **Penalty of €125 limits market price**

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- Harmonization of RES support
- Mandatory targets
- International trade in harmonized market



- **International certificate trading system**
“Produce the product where it is most efficient to do so”

International certificate trade

Considerations

- Mutual acceptance of certificates for quota
- Technical equality
 - Certificates/electrical energy
 - Calculation electrical energy
- Unilateral interventions $><$ multilateral market
 - Changes in quota or penalties distort the market
- Financial equality
 - Equal penalties

- Include information on environmental performance of RES type in certificates
 - Emissions of CO₂, SO_x, dust, ...
- Eventually fit in with CO₂-emission trading system

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- EU-wide information on regulation & legislation
 - Liberalization
 - RES & CHP
 - Emission trading?
 - **Linking Directive 13 Nov 2005**
- Reality can be different due to implementation
- ⇒ Reality checks necessary!!!
 - Input of partners is required

- Country reports finalized in coming weeks
 - Send out to perform reality checks
- Other views on future energy market?

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