

EU Renewable Electricity Directive

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Renewables

- 1997 EU White Paper on Renewables, set target of 12% gross CONSUMPTION of Energy from renewables, or 22.1% of electricity by 2010
- These ‘indicative’ targets translated into directive which must be transposed by October 2003.

National MS Targets

	RES-Electricity % in 1997	RES –Electricity % in 2010
Austria	70.0	78.1
Belgium	1.1	6.0
Denmark	8.7	29.0
Finland	24.7	31.5
France	15.0	21.0
Germany	4.5	12.5
Greece	4.5	12.5
Ireland	3.6	13.2
Italy	16.0	25.0
Luxembourg	2.1	5.7
Netherlands	3.5	9.0
Portugal	38.5	39.0
Spain	19.9	29.4
Sweden	49.1	60.0
UK	1.7	10.0
EU	13.9	22.1

Accession Country Targets

Country	Renewable Electricity Production- TWh – 1999	% - 1999	% - 2010
Cyprus	0.002	0.05	6.0
Czech Republic	2.36	3.8	8.0
Estonia	0.02	0.2	5.1
Hungary	0.22	0.7	3.6
Latvia	2.76	42.4	49.3
Lithuania	0.33	3.3	7.0
Malta	0.00	0.0	5.0
Poland	2.35	1.6	7.5
Slovakia	5.09	17.9	31.0
Slovenia	3.66	29.9	33.6
Total	16.8	5.4	11.1
EU 25	355.2	12.9	21.0

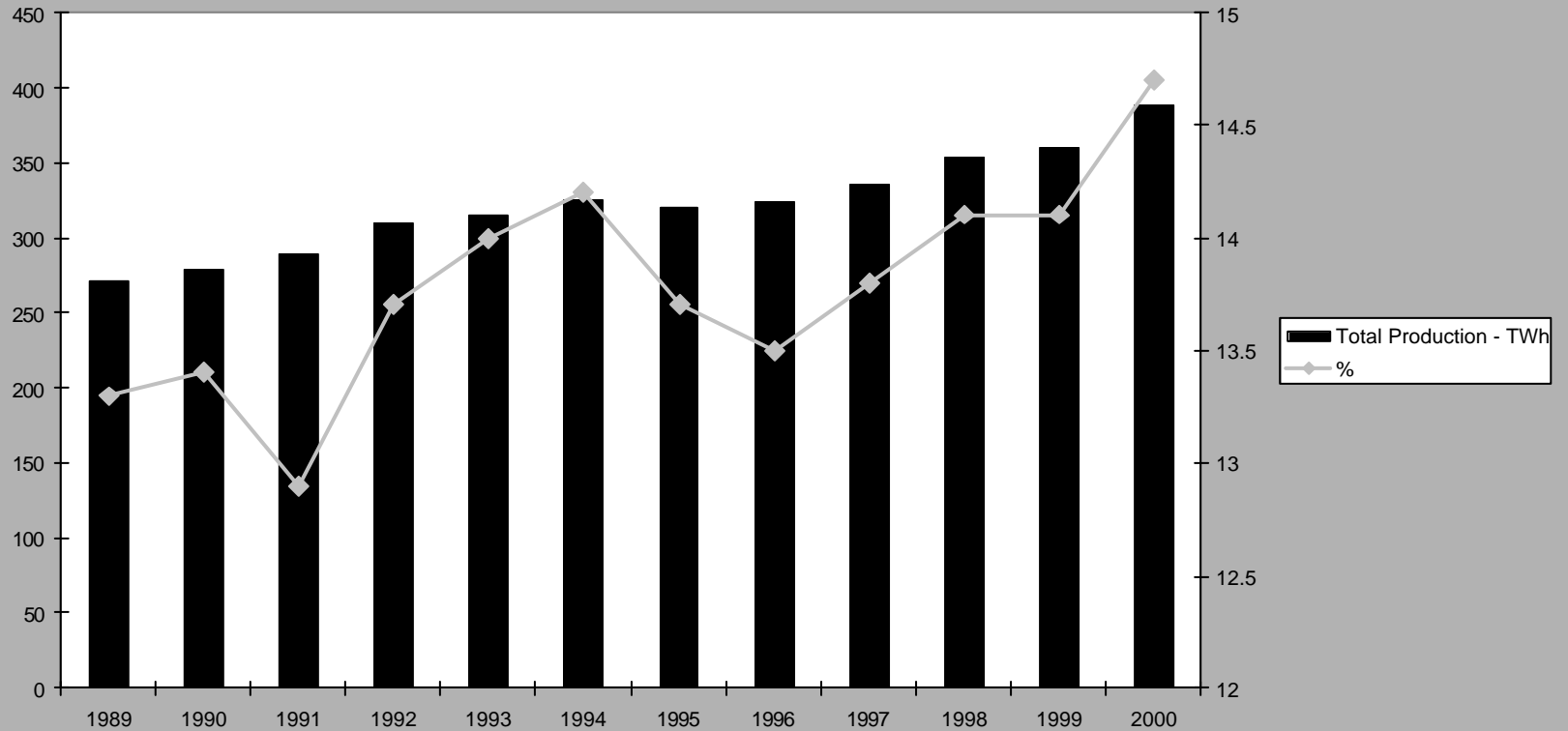
Support Mechanisms

- Feed in System
- Quota System
- Tending System

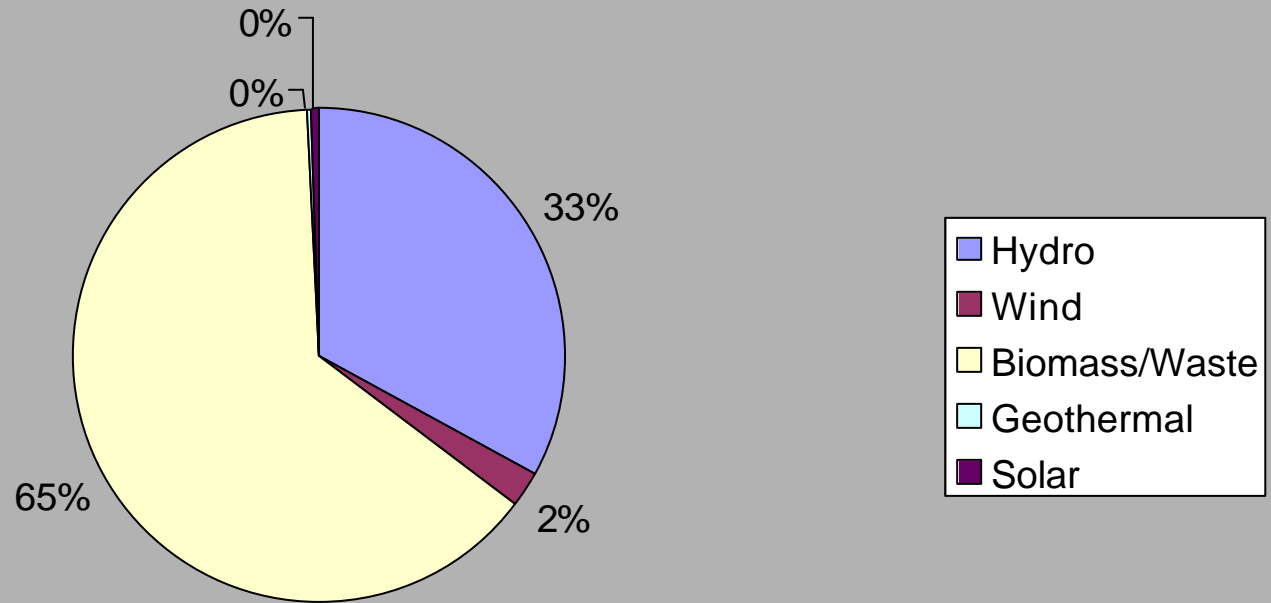
Other Issues

- The RES Directive allows a wide range of sources to be included under this description, including, waste incineration, large hydro.
- Key issue remains the mechanism for access to the grid for RES

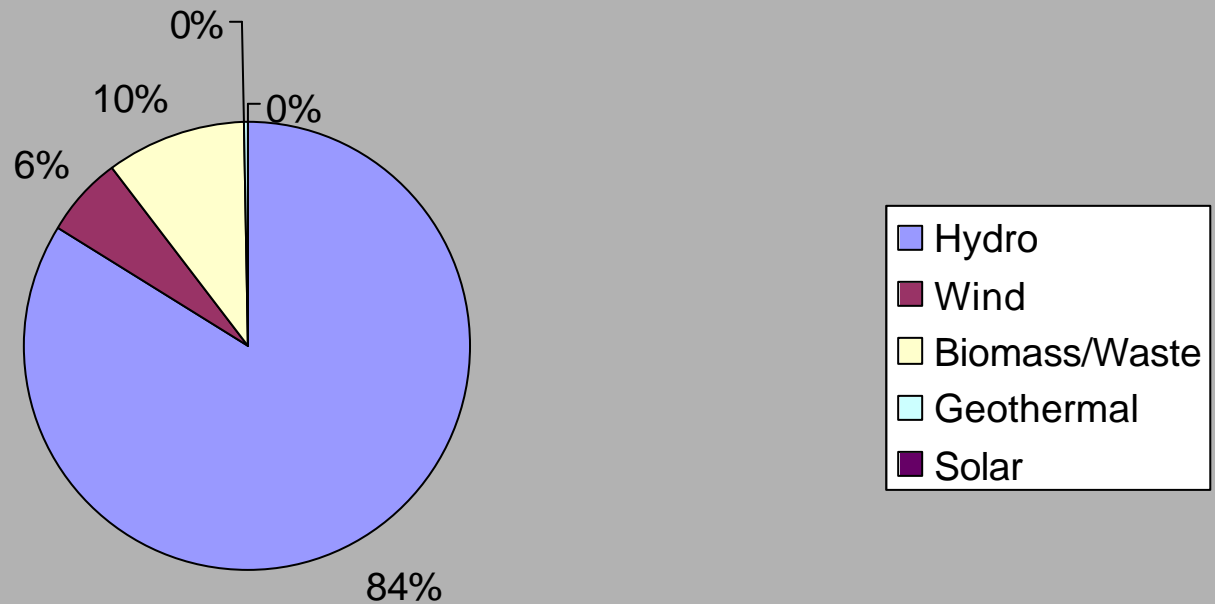
Renewable Energy Production in EU 15



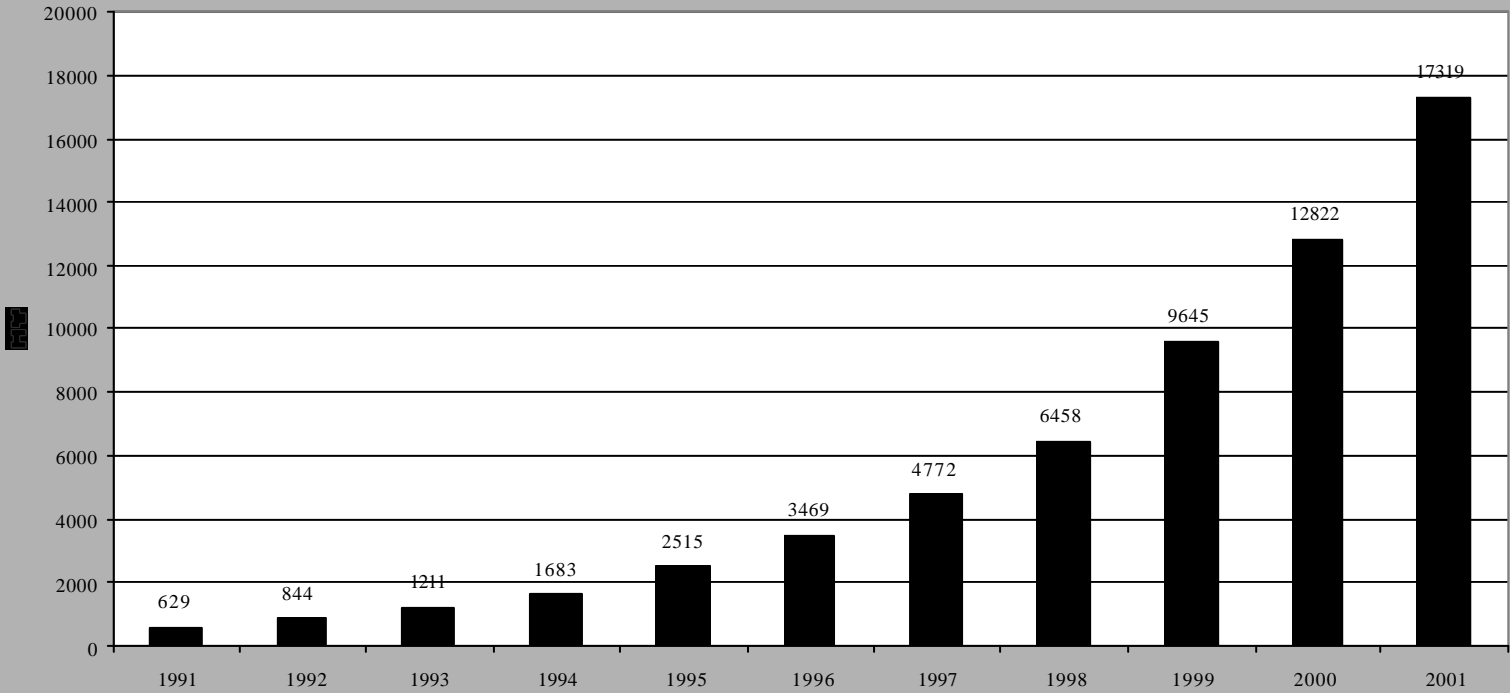
Renewable Energy Production in 2000 (ktoe)



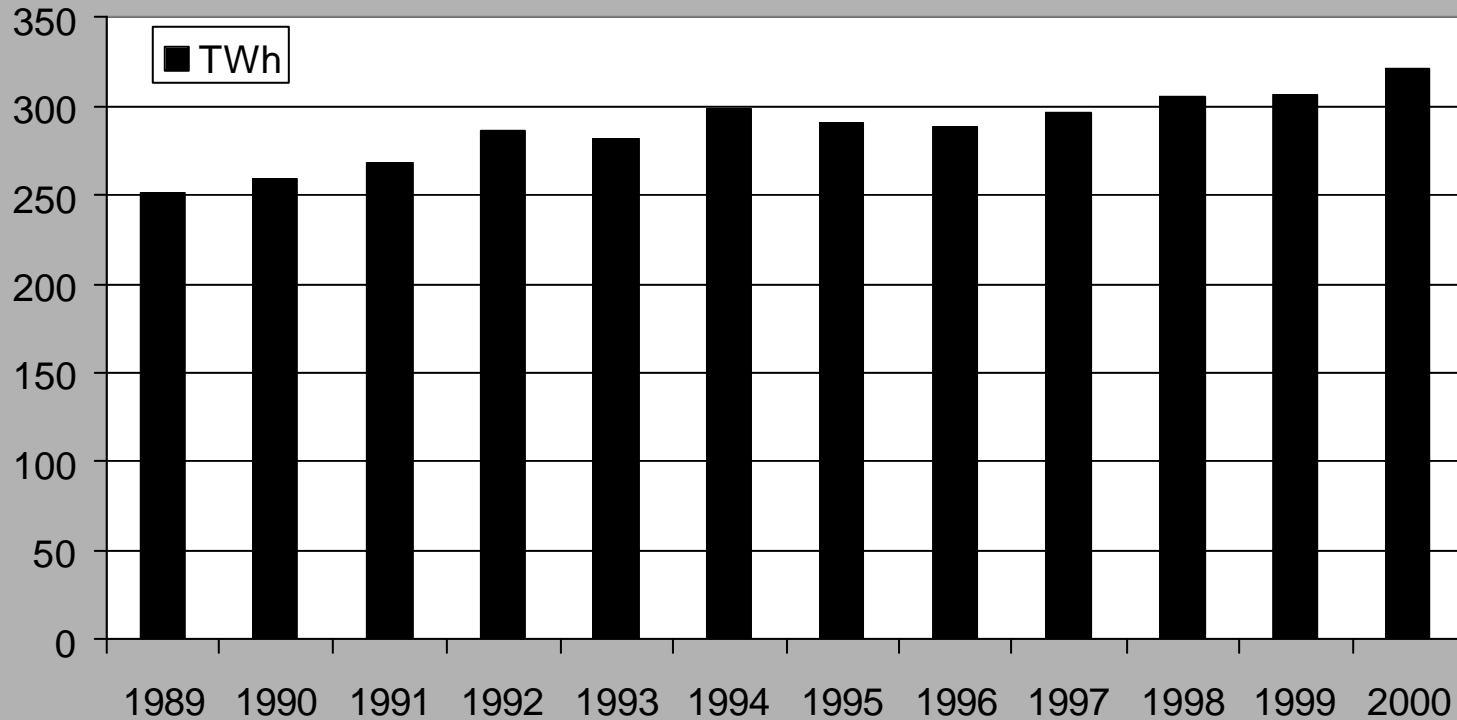
Electricity Production from Renewable Sources in 2000 (GWh)



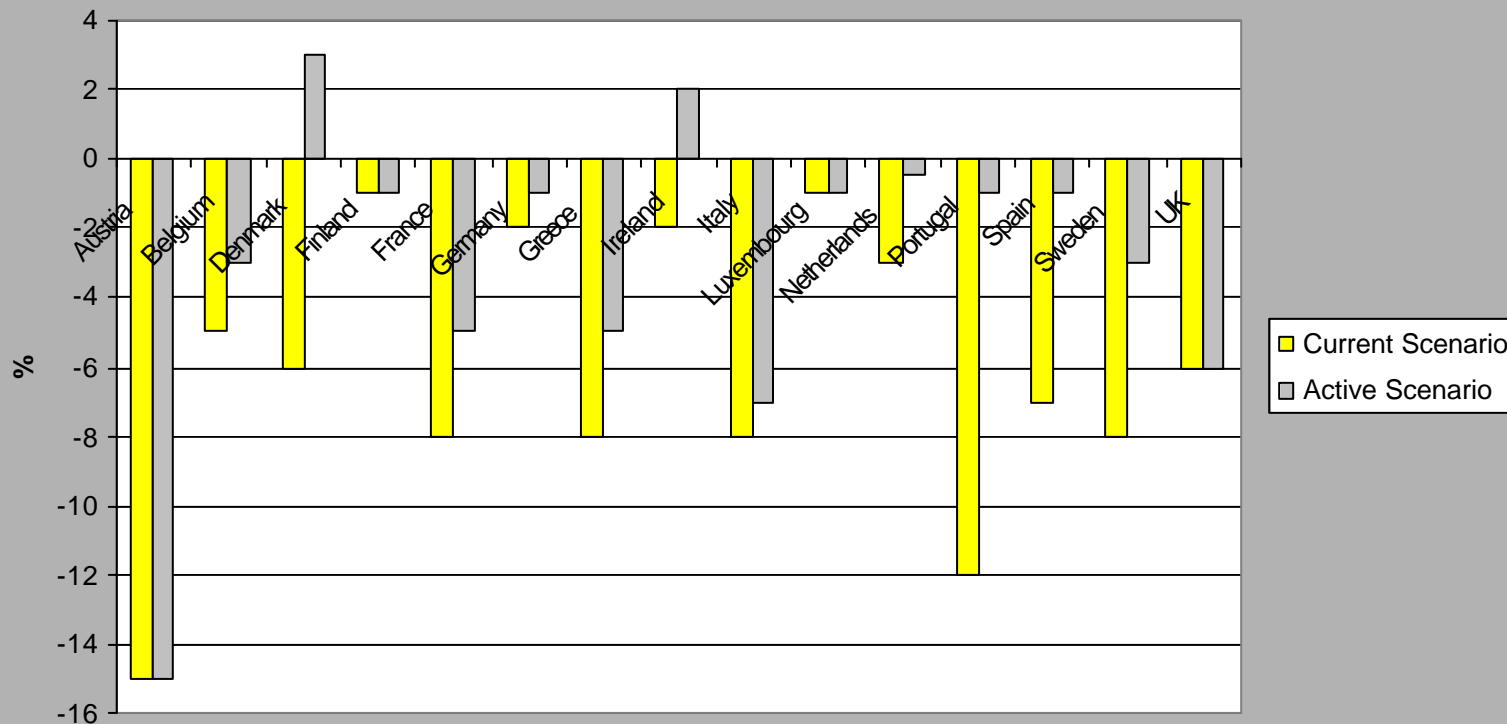
Wind Power Cumulative Capacity in EU



Electricity Production from Hydro in EU 15



Expected Shortfall in EU 2010 Renewable Energy Targets



RES and the Electricity Directive

- Authorisation: Procedure take into account advantages of distributed generation
- Tendering: For environmental protection, promotion of infant technologies, security of supply
- Balancing/DSOs: Priority may be given to renewables/CHP
- Pricing: Full account of distributed generation costs - not pay for transmission costs

Disclosure

- Give Consumer information on generation mix of company supplying individual consumer.
- Data on type of power plants
- Environmental Impact

Other Necessary EU Measures

- Revised Renewable Electricity Directive, with mandatory targets
- Directive on heat from RE Sources
- Better definition of renewables, exclude municipal waste incineration
- Better definition of sustainable energy - current includes nuclear !!