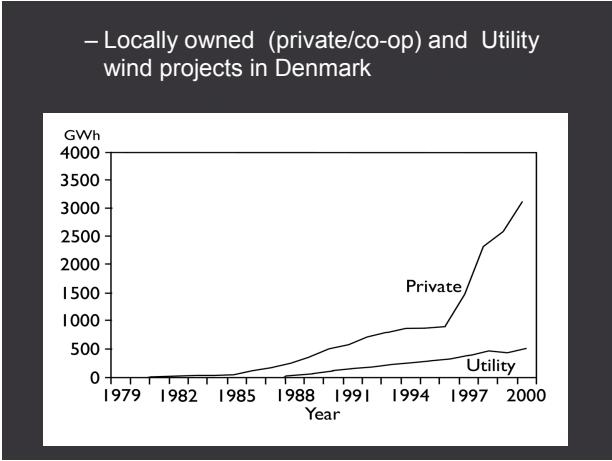
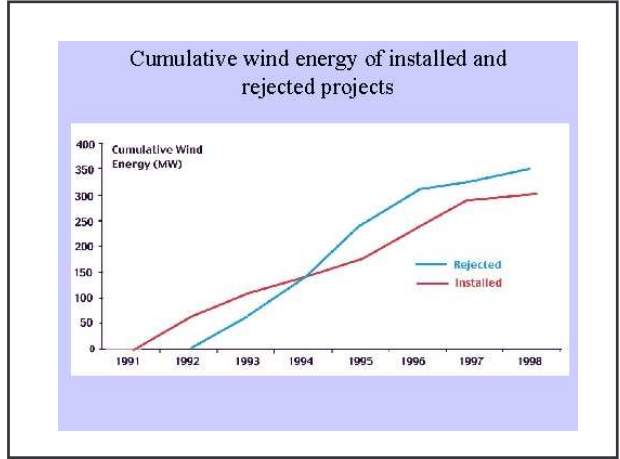
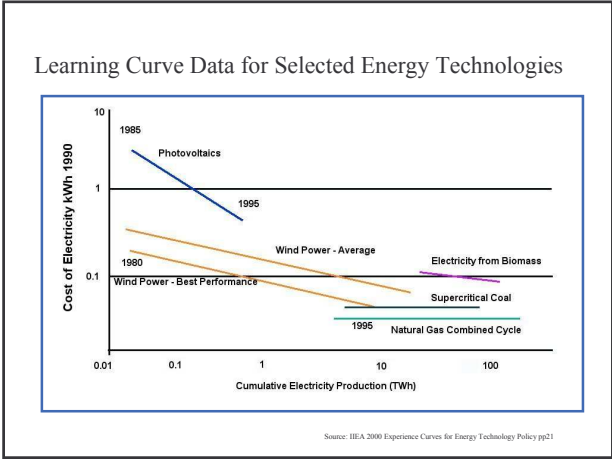
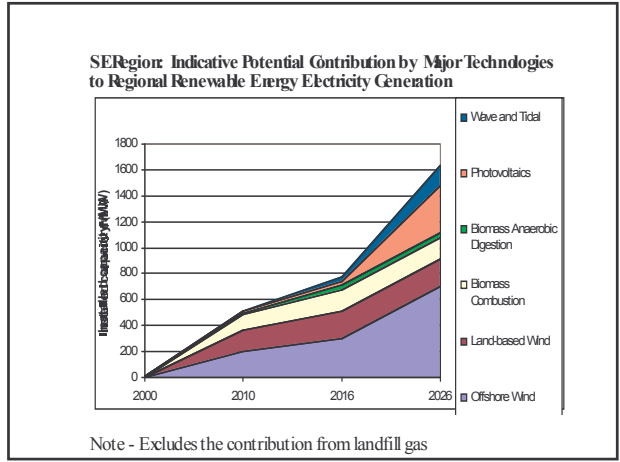
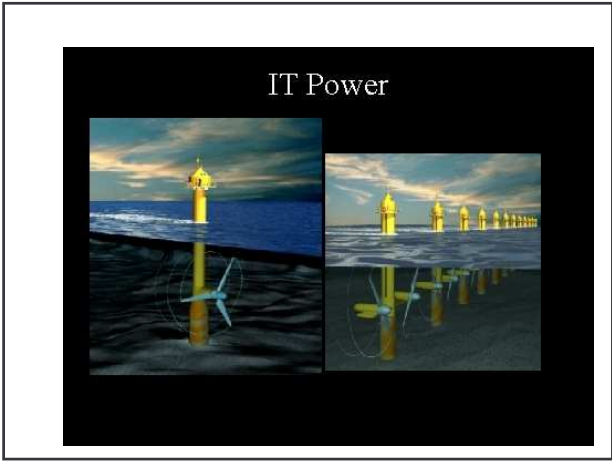
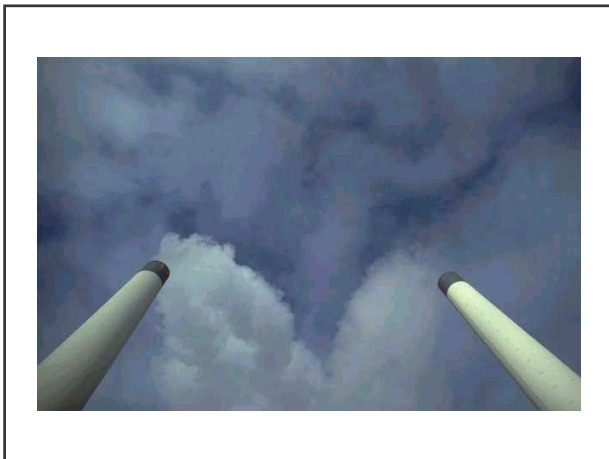
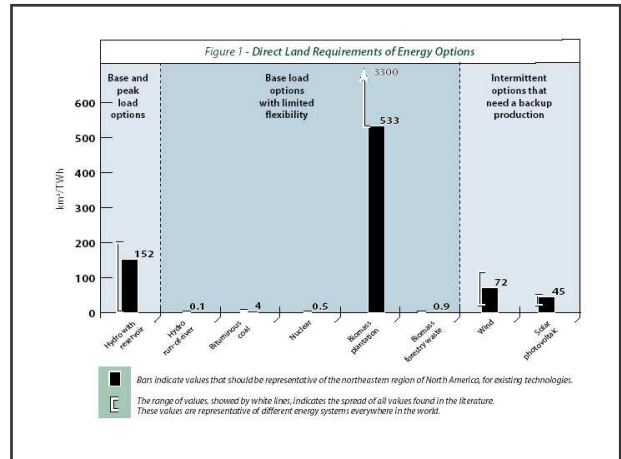


Supplying Sustainable Energy







SE Region: Regional potential for generation of electricity from renewable energy sources by 2010 Targets: 5.5% of electricity from renewables by 2010, 8% by 2016, 16% by 2026

Renewable Energy Type/ Indicative Size	Existing Situation			Prospective Total by 2010		
	No. Schemes	Capacity (MW)	Output (GWh)	No. Schemes	Capacity (MW)	Output (GWh)
Large CHP/ Electricity Plants Fuelled By Biomass Waste/Residues And Energy Crops (15+ MW)	0	0	0	5	75	562.5
Small CHP Plants Fuelled By Biomass Waste/Residues And Energy Crops (5-10 Mw)	0	0	0	7	35	262.5
Anaerobic Digestion Fuelled By Farm Waste, Sewage And/Or Biomass Waste (0.5MW)	7	4.4	37.4	36	12	102
Offshore Wind Farms (50-75MW; 20-30 Turbines)	0	0	0	3-4	200	640

Total capacity: 322 MW
Annual output: 1567 GWh

SE Regional Assembly "Harnessing the Elements", Proposed Alterations to Regional Planning Guidance 200

SW Regen Renewable Energy Strategy 2003 Target 11-15% of electricity from renewables by 2010

Technology	Number	Capacity (MW)
Offshore wind (50MW, 20-30 turbines)	1	50
Onshore wind		
Medium scale wind farms (25MW, 10-20 turbines)	6	150
Small wind clusters (6MW, 4-10 turbines)	13	78
Single large Turbines (1.5MW)	15	22.5
Single small turbines (0.03MW)	50	2.5
Biomass		
Combustion energy crops (straw, chicken litter) and/or agricultural & forestry wastes	5	105
Medium CHP (5MW wood)	7	35
Farm biogas	5	2.5
anaerobic digestion		
Sewage gas	2	1
Municipal or Industrial Waste	2	20
CHP or electricity (10MW)		
Green Waste or Industrial (1-2MW)	6	7.5
CHP or electricity (1-2MW)		
Landfill Gas	8	11.2
CHP or electricity (1-2MW)		
Small Hydro (0.1MW)	30	3
Solar PV		
Domestic and commercial	2,929	12.25
Tidal Current (7.5MW)	3	15.3
Tidal Barrage	1	28
Shoreline wave	1	0.5
Total Capacity:		544.25MW
Total annual output:		2275 GWh

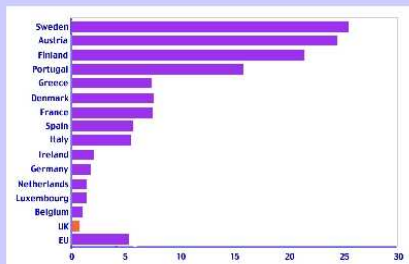


Costs of electricity by 2020

	pence/kWh
On Land wind	1.5 - 2.5
Offshore wind	2 - 3
Energy crops	2.5- 4
Wave and tidal power	3 - 6
PV Solar	10 - 16
Gas CCGT	2 - 2.3
Large CHP/cogeneration	under 2p
Micro CHP	2.3 - 3.5
Coal (IGCC)	3 - 3.5
Nuclear	3 - 4

Source: PII Energy Review

Renewable energy production % of gross inland energy consumption



EU Directive: 2010 Targets

Electricity from Renewables (%) (excluding large hydro)

Denmark	29.0
Finland	21.7
Portugal	21.5
Austria	21.1
Spain	17.5
Sweden	15.7
Greece	14.5
Italy	14.9
Netherlands	12.0
Ireland	11.7
Germany	10.3
UK	9.3
France	8.9
Belgium	5.8
Luxembourg	5.7
EU 15	12.5 %

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