

The Irish Position on CCS - the way forward



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RIA CCS Conference, Dublin Castle, 12 March 2010



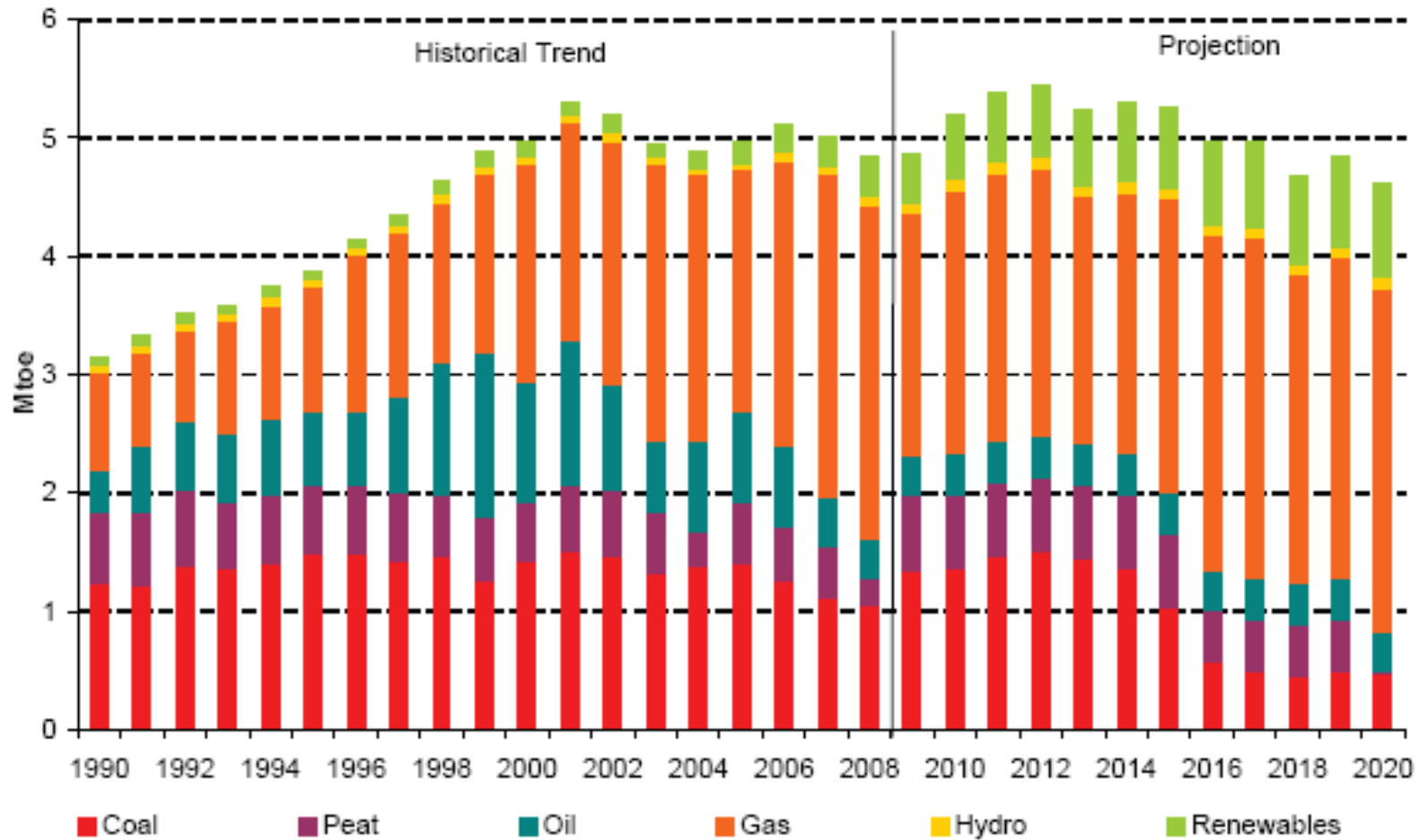
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Why Ireland will have CCS

- Generation Fuel Mix Now
- Energy Policy
 - Security of Supply in 2020
 - Choice between Nuclear and Coal
 - Transition to Green Energy Supply System
- Moneypoint Operating Life
- EU Directives



Primary Fuel Mix for Electricity Generation 1990–2020 (Baseline)



SOURCE: SEI



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Primary Electricity Generation Fuel Mix

Fuel	Elec Gen Fuel Inputs (ktoe)			Growth %	Average Annual Growth Rate %			Fuel Shares %		
	2008	2012	2020	08-20	08-20	08-12	12-20	2008	2012	2020
Coal	1,046	1,502	467	-55.4	-6.5	9.5	-13.6	21	28	10
Oil	345	345	345	0.0	0.0	0.0	0.0	7	6	8
Gas	2,811	2,270	2,890	2.8	0.2	-5.2	3.1	55	42	64
Peat	558	634	27	-88.5	-16.5	28.4	-32.6	11	12	1
Renewables	329	606	788	139.6	7.6	16.5	3.3	6	11	17
Total	5,089	5,357	4,516	-5.2	-0.4	3.0	-2.1			

SOURCE: SEI



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Energy Policy

The Energy Policy Framework 2007 – 2020
(Energy White Paper) says:

“...the Government would envisage the
commercial operation of a new clean coal
power generation plant before 2020”



The Way Forward

- Interdepartmental Committee
 - Department of Energy
 - Energy Division
 - Petroleum Affairs Division
 - Department of the Environment
 - Geological Survey of Ireland
 - Geological Survey Northern Ireland
 - EPA
 - ESB
 - CER



Planning, Regulation & Licensing

- Five Elements:
 - The Capture Bit
 - The Transportation Bit
 - The Storage Bit
 - Use of the Seabed
 - Use of the Foreshore



Planning, Regulation & Licensing

- Transportation
 - Analogous to natural gas transportation
 - Existing or similar codes and standards
 - Strategic Infrastructure?
- Storage
 - Could be an activity licensed by EPA or CER
- Capture
 - Technology dependent
 - EU not of one mind on this yet
 - Inside the box or bolt-on?
 - Strategic Infrastructure



Necessary Tasks

- Transpose EU Directives
- Other Legislation
- Geological Mapping
- Research into and Assessment of Potential Sites
- Designation of Responsible Authorities
- Establishment of Monitoring and Management Regime
- Demonstration Project
- Participation in EU and other programmes
- Public Outreach and Education



Global cost curve of GHG abatement opportunities beyond business as usual

2030

