



Carbon Capture &
Storage Association



International Marine Treaty Developments

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4th IEA International CCS
Regulatory Network Meeting
Paris

9 - 10 May 2012

1992 Marine Convention for NE Atlantic

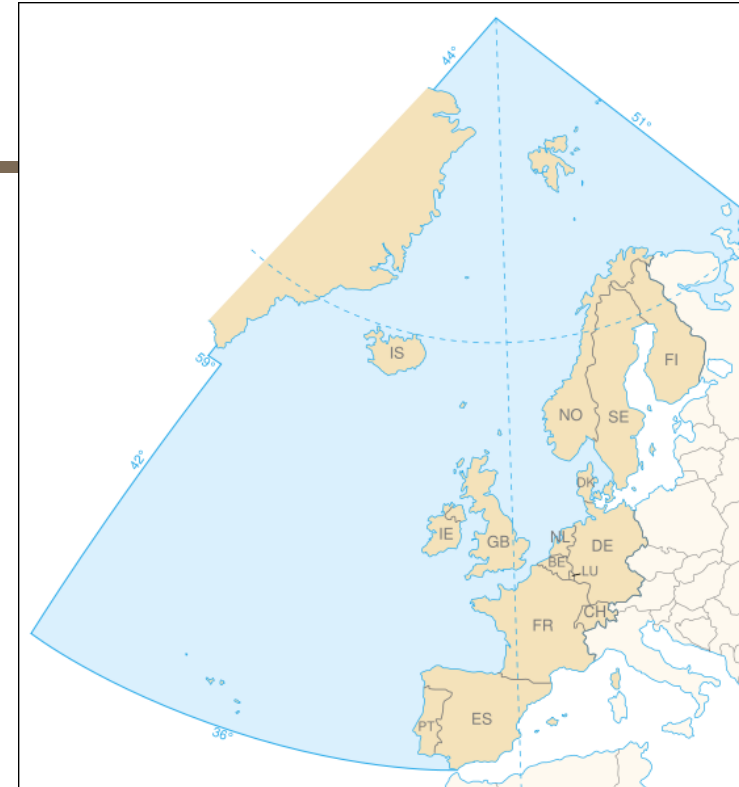
- 15 nations and EC
- Prohibited some CCS configurations

To allow prohibited CCS configurations:

- Amendments for CO₂ storage adopted 2007
- Needed ratification by 7 Parties to enter into force
- Only enters into force for those countries that have ratified

Current Status;

- 23 July 2011 ratified and entered into force for; European Union, Denmark, Germany, Luxembourg, Norway, Spain, United Kingdom.
- 28 October 2011; Netherlands
- All OSPAR countries with CCS demonstration projects ratified except France
- Amendment took four years to enter into force





Global agreement regulating disposal of wastes and other matter at sea

- Convention 1972 (86 Parties)
- Protocol 1996 – ratified March 2006 (41 Parties)
 - Dumping of all wastes prohibited unless specifically exempted
 - Prohibited some CCS project configurations

Protocol amendment adopted at Annual Meeting November 2006

- Entered into force 10 February 2007 to allow disposal in geological formations

- **Transboundary transport of CO₂ was unresolved:**

Article 6 "EXPORT OF WASTES OR OTHER MATTER: Contracting Parties shall not allow the export of wastes or other matter to other countries for dumping or incineration at sea."

Prohibited:

- Transboundary transport of CO₂ for geological storage
- Potentially the use of storage sites that cross international borders

CO₂ Transboundary Amendment to LP

Annual meeting October 2008 considered issue:

- Parties had mixed views on addressing the issue
- Agreed plenary statement "LP should not create barrier to transboundary transport of CO₂ for CCS"

Norway proposed amendment for consideration at 2009 annual meeting

- Adopted by vote. Needed 2/3 majority voting (15 for, 1 against (China), 6 abstentions)

Article 6 , new para 2. "Export of CO₂ for disposal in accordance with Annex 1 may occur, provided an agreement or arrangement has been entered into by countries concerned"

Decided transboundary migration in geological formation is not export

Amendments to Protocol need ratification by 2/3 of Parties to enter into force

Ratification of Article 6

London Protocol Parties:

DENMARK	NEW ZEALAND	CHINA
GERMANY	ANGOLA	ITALY
UNITED KINGDOM	ICELAND	SURINAME
SOUTH AFRICA	TONGA	JAPAN
VANUATU	FRANCE	KENYA
SPAIN	EGYPT	SIERRA LEONE
NORWAY	ST. KITTS & NEVIS	MARSHALL ISLANDS
TRINIDAD AND TOBAGO	LUXEMBOURG	NETHERLANDS
GEORGIA	BULGARIA	REPUBLIC OF KOREA
CANADA	SAUDI-ARABIA	GHANA
SWITZERLAND	BELGIUM	NIGERIA
SWEDEN	MEXICO	YEMEN
AUSTRALIA	SLOVENIA	CHILE
IRELAND	BARBADOS	

- 41 London Protocol Parties; need 28 ratifications
 - Ratifications required increasing at faster rate than ratifications received!
- 15 – 20 Parties; some interest in CCS, relatively few considering transboundary projects / offshore storage

State of play

London Protocol still barrier to transboundary CCS projects

- Ratification process very problematic
- Particular concern for Europe

CO₂-EOR with permanent storage appears to be permitted activity as not covered by Art. 6

Significant international effort required for Art. 6 to enter into force

- Clean Energy Ministerial: ***Recommendation 4: Acknowledge importance of marine treaty amendments.*** Promote the importance to global CCS deployment of ratifying key international marine treaty amendments.
 - IEA Paper; *Carbon Capture and Storage and the London Protocol: Options for Enabling Transboundary CO₂ Transfer*