
POLICY ISSUES AND INITIATIVES IN USA AND CANADA

Brian Morris

Department of Trade and Industry

ITINERARY

USA - DEPARTMENT OF ENERGY - OFFICE OF FOSSIL FUELS

- Not part of Kyoto but has vigorous Climate Change Targets

CANADA - NATURAL RESOURCES CANADA

ENVIRONMENT CANADA

CANMET Energy Technology Centre (CETC)

- Ratified Kyoto in December 2002

OTHER ORGANISATIONS

- CO₂ Capture Project
- Canadian Clean Power Coalition
- ZECA Corporation

US Cleaner Fossil Fuels Policy and “Vision 21”

- Coal key source of power
- Reliance on coal for electricity generation into the long term
- Policy Strategy Objectives:
 - low cost environmental control technologies
 - low cost fuels (especially hydrogen)
 - zero emissions through:
 - high efficiency
 - fuel flexibility
 - multi-product outs (e.g. hydrogen)
 - roadmap:
 - retrofitting existing plant
 - gasification technologies
 - next generation power plant with zero emissions
 - clean affordable fuels for transport

US National Energy Policy and Initiatives

- Clear Skies Initiative
- Global Climate Change Initiative
- Clean Coal Initiative
 - funding for R&D Programmes and demonstration plant
 - two sub-programmes:
 - Power Plant Improvement Initiative (PPI)
 - Clean Coal Power Initiative (CCPI)
 - \$2bn over 10 years
 - 4 stages of development up to 2015
- VISION 21
 - collection of technologies
 - outcome of current and future programmes
 - sequestration ready power plant
 - 2015 target for commercially available plant
 - efficiency >60%
 - zero emissions with CO₂ sequestration
 - energy costs 10 to 20 lower than now

US DoE Carbon Sequestration Programme

- Complements Vision 21
- Combination of R&D and regional partnerships
- Currently supports some 60 projects with \$100m funding
- Expects to receive over \$40m for 2003.
- Aims:
 - Safe and environmentally acceptable technologies
 - Less than 10% increase in energy prices
 - CO₂ emissions reduced by 19% by 2112
 - Technology available by 2012
- Main work streams:
 - Separation and Capture (40% funding)
 - Geological sequestration and EOR (40%)
 - Terrestrial/Ocean storage and novel concepts (20%)

Canada

- Cleaner Fossil Fuels Policy focused around Kyoto
- Three steps to meet 240Mt of CO₂ savings target:
 - Existing Programmes (80Mt)
 - CO₂ Capture and Sequestration (100Mt) by 2010
 - Community programmes (efficiency) (60Mt)
- Instruments to achieve these:
 - Innovation and Technology
 - Partnerships
 - Infrastructure
 - Emissions Trading
 - Tax incentives
 - Smart Regulation

Canadian CO₂ Capture and Storage Initiatives

- CANMET Energy Technology Centre (CETC)
- Initiative plays a major role in meeting Kyoto
- At Federal and Provincial level
- Federal actions focuses on:
 - Regulatory and fiscal incentives
 - Favourable public policy environment
 - Technology demonstration and information dissemination
 - Partnerships with industry
 - Information gathering
 - Environmental issues

- CO₂ reduction Strategy focuses on:
 - Sources
 - Sinks and uses

Key US/Canadian Involvement in Private Sector Initiatives

- CO₂ Capture Project
- Canadian Clean Power Coalition
- ZECA Corporation

As well as a prominent role in:

- IEA Working Party on Fossil Fuels
- IEA Zero Emissions Technologies Strategy
- IEA Greenhouse Gases & Clean Coal Centre Implementing Agreements

UK Comparisons

- Different situation
- Energy White Paper
- DTI Feasibility Study on CO₂ capture and storage
- Lessons:
 - Importance of Regulations and fiscal incentives
 - Strong Partnerships with Industry
 - Government funding
 - Co-operation at international level
 - Clear Strategy with goals
- Public education and awareness