

# **IEA Asia Pacific Conference Zero Emissions Technologies**



## ***The Role of Government***

Tania Constable

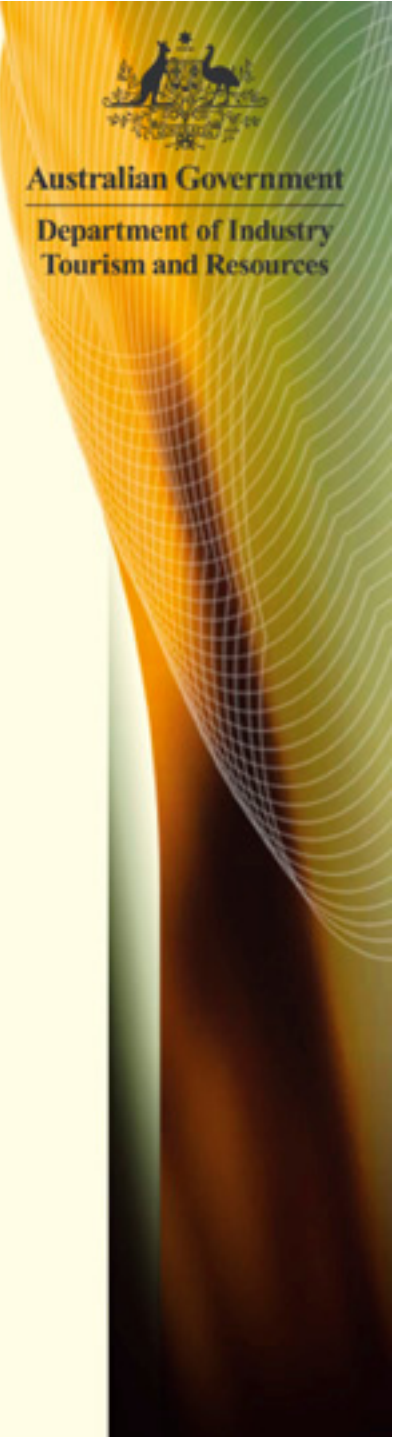
General Manager

Resources Development Branch

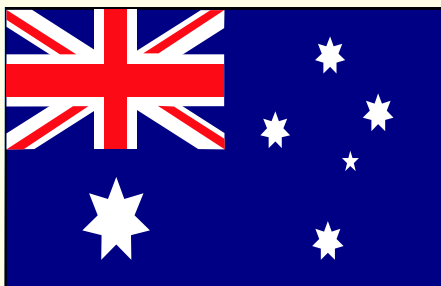
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Australia

# What is Government's role in Zero Emissions Technologies (ZETs)?



- Address economic, social and environmental objectives
- Provide a framework that facilitates R&D, the demonstration and deployment of low emissions technology
- Support a partnership approach between government, industry and researchers
- International collaboration



# The Energy Challenge

- Meet growing energy demand
- Fossil fuel dependence
- Energy Security
- High per capita level of greenhouse emissions
- Technological solutions to maintain competitiveness and reduce emissions
- Substantial new investment required

# National Research Priorities



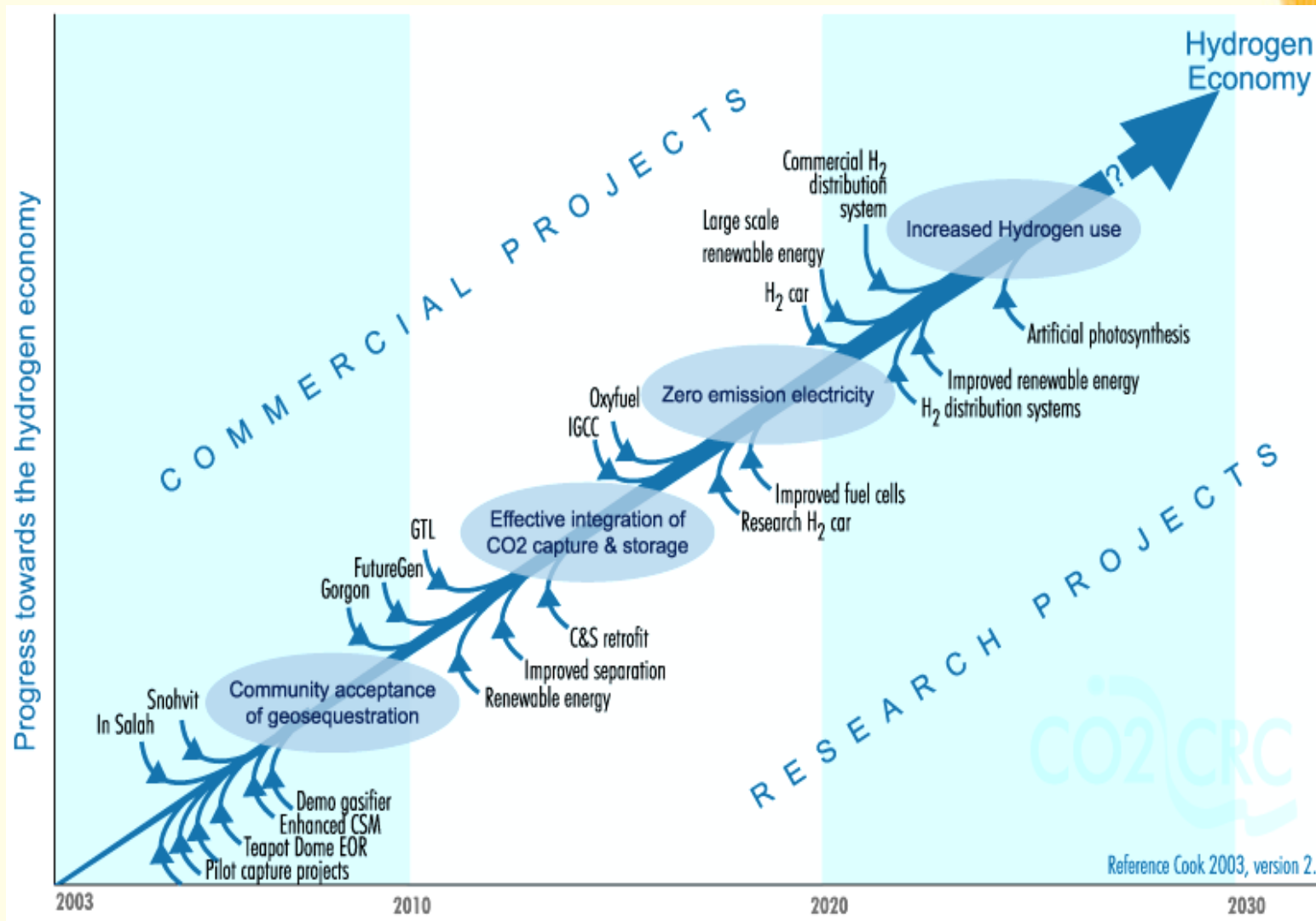
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- Clean Power from Lignite CRC
- Clean Coal for Sustainable Development CRC
- Greenhouse Gas Technologies CRC (CO<sub>2</sub>)

# Technology Pathways



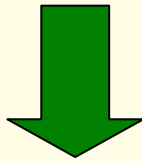
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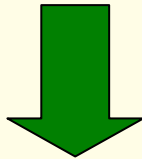
# Support the Demonstration of the Technology

- **Meet Australian Conditions**
  - Public acceptance

**Pilot Scale Projects**



**Medium Scale Semi-Commercial Projects**



**Commercial Scale Projects**



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# Public / Private Partnerships

- COAL 21
- Public / private partnerships to inform future policy settings and provide a blueprint for achieving RD&D for ZETs



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# Addressing Public Awareness



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1. Government to community strategy – engage broader community including NGOs
2. Industry- through educational programs including at regional level and other industry groups, eg Coal 21
3. Researchers- through communication experts, targeted education programs and conferences, eg CSIRO, CRC CO2
4. International arena through, CSLF, IEA, ZETs, bilateral and multilateral fora like APEC.

# International Approach



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*“We all believe technology offers great promise to significantly reduce (greenhouse gas) emissions...especially carbon capture , storage and sequestration technologies”*

*President George W Bush*

# International Collaboration

- Carbon Sequestration Leadership Forum (CSLF)
- Climate Action Partnerships (CAPs)
- Asia Pacific Economic Cooperation (APEC) & International Energy Agency (IEA)
- Intergovernmental Panel on Climate Change (IPCC)



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# Setting the Legal & Regulatory Framework

## ***June 2003***

- taskforce established by CSLF

## ***Nov 2003***

- International Regulatory Workshop in Brisbane, Australia

## ***Jan 2004***

- CSLF paper on legal, financial & regulatory issues considered by Policy Working Group in Italy

## ***July 2004***

- Taskforce meeting to agree regulatory principles and pass to lead CCS authors in IPCC for peer review
- First legal workshop CSLF/IEA to co-occur with task force meeting

## ***Sept 2004***

- regulatory principles for 2<sup>nd</sup> Ministerial CSLF in Melbourne, Australia

# Costs and Benefits of ZETS

## Non-Adoption

- Energy security reduced
- Reduced investment
- Loss of competitive advantage
- Reduced exports
- Energy intensive industries move offshore
- Market failure
  - Public good
  - Lack of information
  - No incentives to adopt technologies

***Strong regulatory role  
for government***

## Adoption

- Energy security enhanced
- Increased investment
- Address carbon constraint uncertainty
- International competitiveness
  - Maintain energy exports
  - Attract investment in fossil fuels
  - greenhouse solutions
  - International responsibility
  - Scope for technology exports

***Technology facilitation  
role for government***



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# Key Questions

1. How will global energy policies encourage and deal with ZETs
2. How do we transfer knowledge and experience to developing countries without losing competitive advantage
3. What is an appropriate spread of investment risk for zero emissions technologies between the public and private sector?
4. What are the key financial and economic issues that need to be dealt with in the short term and medium term to ensure the success of ZETS



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# The Way Forward

## A Public / Private Partnership through ACTION

