



Australian Government

DEPARTMENT OF RESOURCES, ENERGY AND TOURISM

Australia's CCS Policy and Implementation – An Update

CAGS Workshop: Beijing, 17 April, 2012



ENHANCING AUSTRALIA'S ECONOMIC PROSPERITY
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Securing a Clean Energy Future - the need for action



Our climate is changing

- 2001-10 was the world's warmest decade on record

The world's top scientific agencies agree

- Including CSIRO, the Bureau of Meteorology and the Academies of Science

Australia faces significant costs

- Environmental, economic and social

Securing a Clean Energy Future - the need for action



- Australia generates more pollution per person than any developed country
- Countries around the world are already taking action to cut pollution and 32 countries already have emissions trading schemes
- The Government's plan will reduce pollution by at least 5 per cent compared with 2000 levels by 2020
- New Australian target to cut pollution by 80 per cent below 2000 levels by 2050

Low emissions coal policy drivers

- Australia's emission reduction targets are a major challenge given our reliance on fossil fuels
 - Coal 77% of electricity and 32% of emissions
 - Improvements in efficiency are important
 - However, carbon capture and storage (CCS) essential to achieve major cuts in emissions
 - Responsibilities as a major international energy supplier

Australia's Clean Energy Future

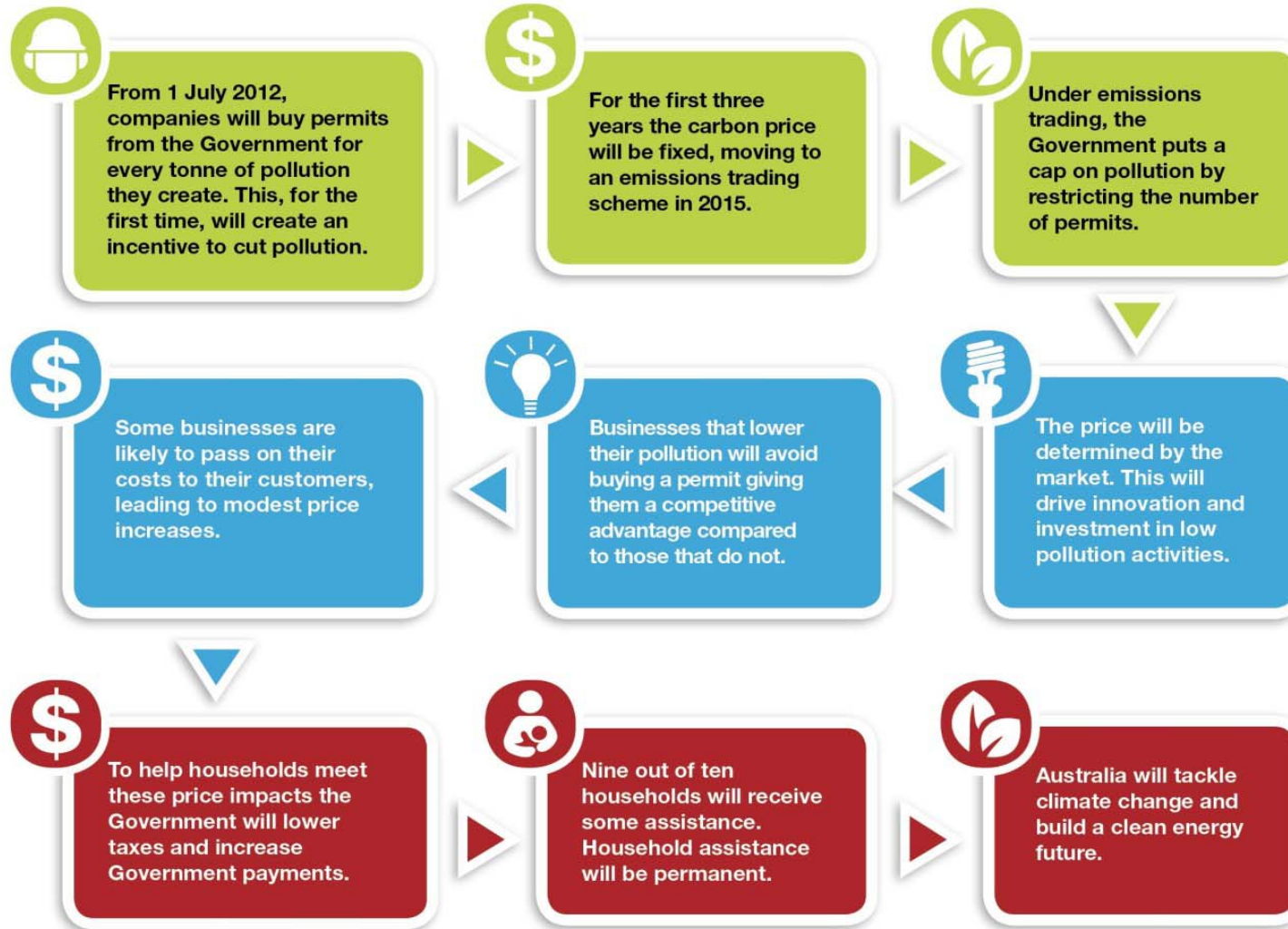


Why price carbon pollution



- The **cheapest and most effective way** to reduce carbon pollution
- With a carbon price:
 - Jobs and incomes grow
 - Carbon pollution is reduced
 - Investment in renewable energy increases
 - Incentives are created to improve energy efficiency

How the carbon price works



Support for the coal sector



- \$1.257 billion Coal Sector Jobs Package
 - To provide targeted assistance to help “gassy” coal mines transition to carbon pricing
 - Applications have closed and first year funding to be provided by 30 June 2012
- \$70 million Coal Mining Abatement Technology Support Package
 - To support industry in developing technologies to safely reduce fugitive methane emissions
 - Program to commence in July 2012

Support for the coal sector



- Energy Security Fund for electricity generators
 - Contracts for closure of 2,000MW capacity
 - Transitional assistance
 - Short-term loans

Carbon capture and storage (CCS) – Key Australian Government initiatives

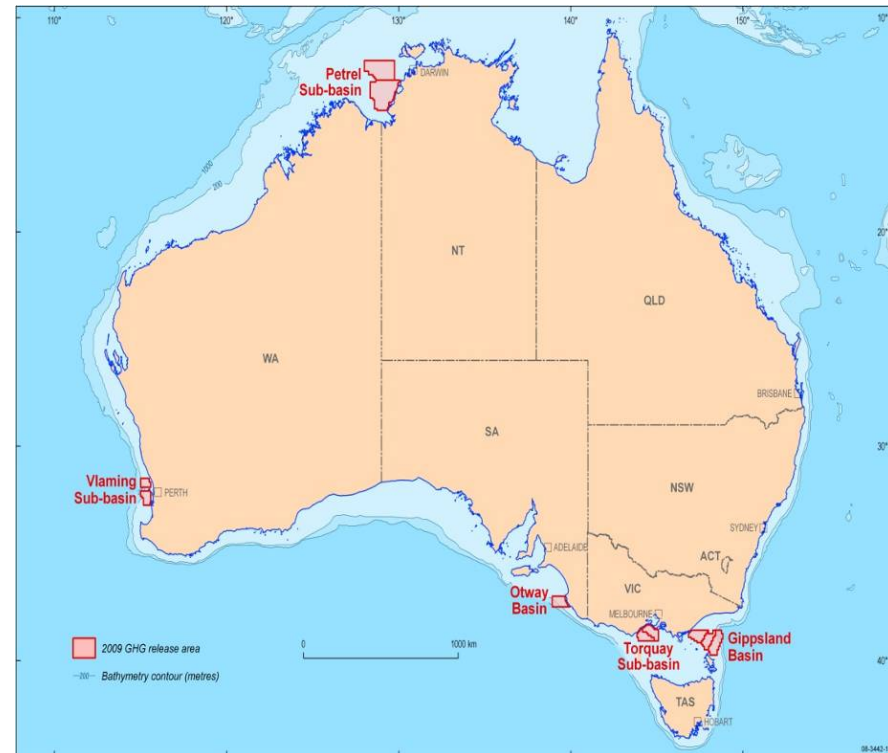


- Suitable geological storage areas
- R&D and pilot scale demonstration
- CCS Flagships and commercial scale projects
- International collaboration
 - CCS development and deployment is a global issue

Commonwealth GHG Storage Legislation

Offshore Petroleum and Greenhouse Gas Storage Act 2006

- title system similar to that used for petroleum
- safe and secure storage
- managing interactions with the petroleum industry
- site closure and treatment of long term liability
- GHG-specific regulations
- release of 10 offshore areas
- first exploration title awarded February 2012 (Gippsland Basin offshore)



CCS research, development and pilot demonstration work in Australia

Australian
Coal Association

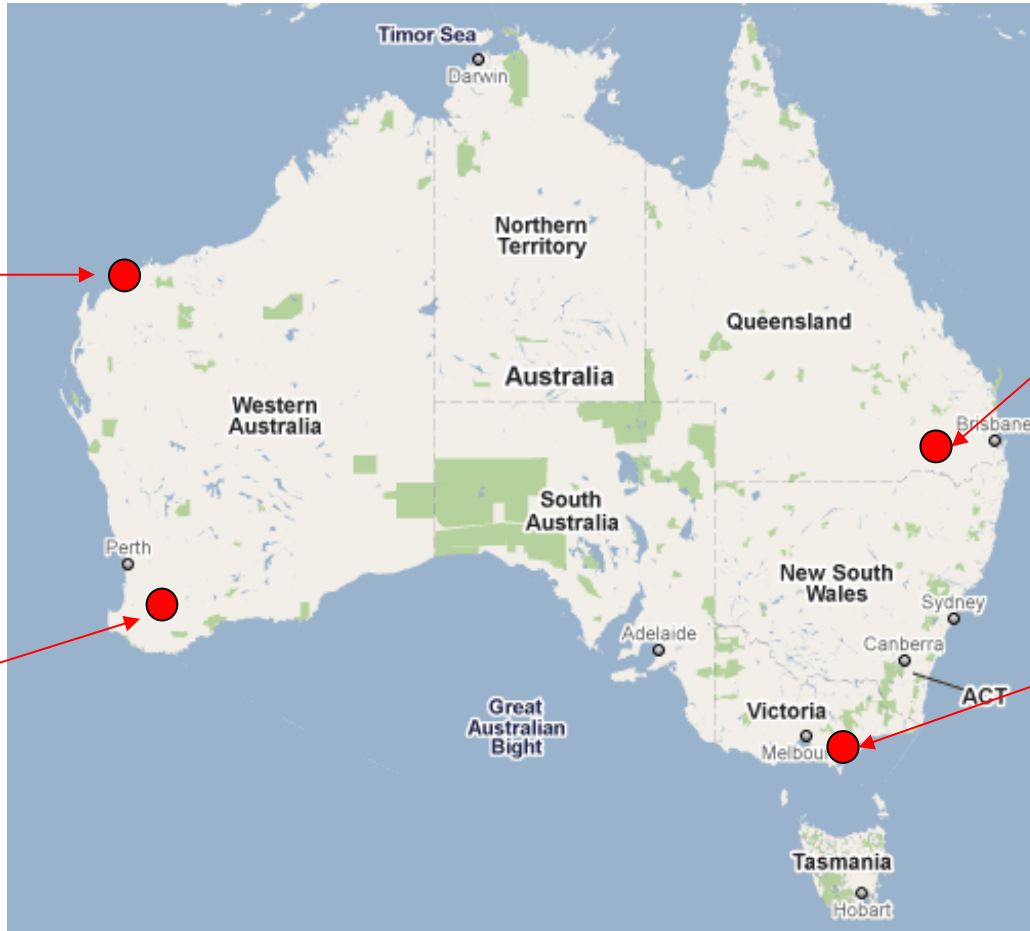


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CCS Flagships & commercial scale projects



Gorgon LNG Project

To sequester 3.5 MT per year.

South West Hub

To sequester 2.4 MT per year with potential to 7 MT per year.

Proposed Wandoan / QLD integrated CCS project

To sequester 1 MT per year. Capture project under review.

CarbonNet

To sequester 3 – 5 MT per year.

Global CCS Institute and international collaboration

- Australia established the Institute in 2008; \$315 million in funding to 2016/17:
 - MoU Signed between the Institute and DCC-NDRC in March 2012
 - Over 330 members
- Australia is also an active member of a number of multilateral forums:
 - Carbon Sequestration Leadership Forum (CSLF)
 - CCUS Action Group – through the Clean Energy Ministerial (CEM)
 - International Energy Agency (CCS Unit)
- The Department and China's National Energy Administration are cooperating under the \$20 million Australia - China Joint Coordination Group on Clean Coal Technology



CCS achievements and concluding remarks

- CCS Flagships Program - Collie South-West Hub (WA) and CarbonNET (VIC)
- A portfolio of world-class pilot and demonstration projects
- Collaborative R&D
- World-leading Gorgon CO₂ injection project
- CO₂ storage exploration
- Legislative frameworks to enable CCS development
- Active international partnerships



Thank you



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