

## Statistical Office Support for Emission Trading Schemes

### **Developments in Australia**

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> Conference on Climate Change and Official Statistics Oslo, Norway, April 2008



## **Session Outline**

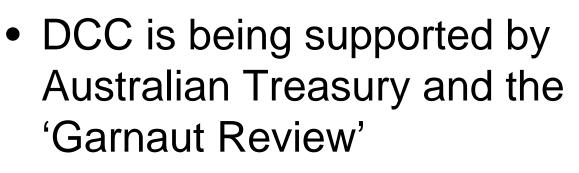
- Background to an Australian ETS
- Statistical support for the design and implementation of the ETS
- Statistical support for examining the impacts of climate change
- Capturing new economic activity in official statistics
- Measuring the economic, social and environmental impacts of the ETS
- Concluding remarks

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# Background to an Australian ETS

- Australian Government, through Department of Climate Change, is establishing an ETS
  - Scheme is expected to be implemented in 2010
- Five tests for the ETS
  - Cape and trade, with all major emitters included
  - Must effectively reduce emissions
  - Economically responsible
  - Fair
  - In place quickly





- Builds on previous work by a PM Taskforce in 2007
- ETS has significant implications for official statistics
  - ABS is working closely with DCC and other key stakeholders

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# Statistical support for ETS design and implementation

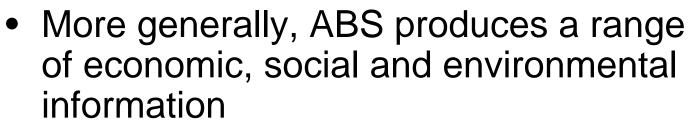
- Economic modelling (CGE) to inform on distributional impacts and assist in design of compensation schemes
- This modelling will be underpinned by I-O tables
- ABS has been funded to upgrade frequency (to annual) and quality of IO tables
  - Implications for IO compilation and collection of source data
  - Positive externality for other economic analysis!
- IO tables will need to be integrated with other information, particularly physical information on energy supply and use
  - Enhanced and higher profile energy accounts



### Statistical support for examining impacts of climate change

- Garnaut Review to examine impacts of climate change on Australian environment and economy
  - Will inform emissions 'trajectory' that will underpin ETS
  - Will involve a wide range of statistics
  - ABS has been discussing availability and relevance of statistics with Review Team
  - ABS staff member likely to be 'outposted' to Review Team





- Support analysis of impacts of climate change
- Understand adaptations required
- Understand impact of mitigation
- Notable examples include
  - Water accounts
  - Natural resource management statistics
  - Statistics on agricultural practices
  - Statistics on household environmental behaviours

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# Capturing new economic activity in official statistics

- Basis of ETS will be tradeable permits
  - Impacts on national accounts, government finance statistics and statistics on market participants themselves
- Particular issue is treatment of permits
  - Dealt with in updated SNA
  - Updated SNA will be introduced in Australia in 2009
  - All Australia's economic statistics use SNA as conceptual base
- Statistics on market activity eg issuance, price, turnover and acquittals -
  - will be required



- Emission market will need to be underpinned by high quality statistics
  - Particular need for regular, high quality statistics on emissions
- Australian Government is upgrading reporting of energy-related information for regulatory purposes by establishing NGERS
- ABS is working closely with NGERS's administration to maximise statistical benefits



### Measuring economic, social and environmental impact of ETS

- These impacts will have policy implications, so they need to be understood
- Some of these impacts may precede implementation of ETS
- ABS needs to understand potential for impacts
  - Take into account in determining statistical work program
  - Ensure appropriate methods in place
  - Enable identification of particular ETS impacts wherever possible



- Some statistics that are likely to be affected
  - CPI
  - Household expenditures
  - BOP
  - Capital expenditure
  - R&D and innovation
  - Profit statistics
  - Transport statistics
  - Household and business use of energy
  - Regional statistics
  - Statistics on renewable energies
- Essential for ABS to work closely with key stakeholders to understand statistical requirements



## Concluding remarks

- Design and implementation of ETS has significant statistical implications
  – Some are direct, others are indirect
- ABS has been able to work closely with key policy holders
  - Some additional funding has been received
  - Will need to work in partnership with others to ensure that statistical implications are properly understood and dealt with



- Tremendous opportunity to show ABS capability
- Issues are complex
  - Require highly-skilled people
  - Will affect many parts of the organisation, so important that there is good internal coordination
- A lot needs to be done in a short period of time, so excellent project management is essential