



Centre for Energy and
Environmental Markets

UNSW
THE UNIVERSITY OF NEW SOUTH WALES
SYDNEY • AUSTRALIA



Transition and linkage issues

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Aim of the presentation

- General transition issues
 - Baseline & credit and cap & trade: Examples from the EU Emissions Trading Scheme (EU ETS)
- Transition issues for Australia
 - Future of NSW Benchmark scheme
- Linkage issues for Australia
 - Potential gains from linking with EU ETS
 - Key harmonisation issues
- Interaction with other policies



General transition issues

- Starting position: two systems
e.g. baseline & credit and cap & trade
- Main questions:
 - Replace old system with new system?
 - Both systems in parallel? -> Compatibility?
 - Long term and mid term options?
- Assessment:
 - Overlaps – double counting
 - How to account for early action?
 - Trading between different systems?



Transition Examples - EU

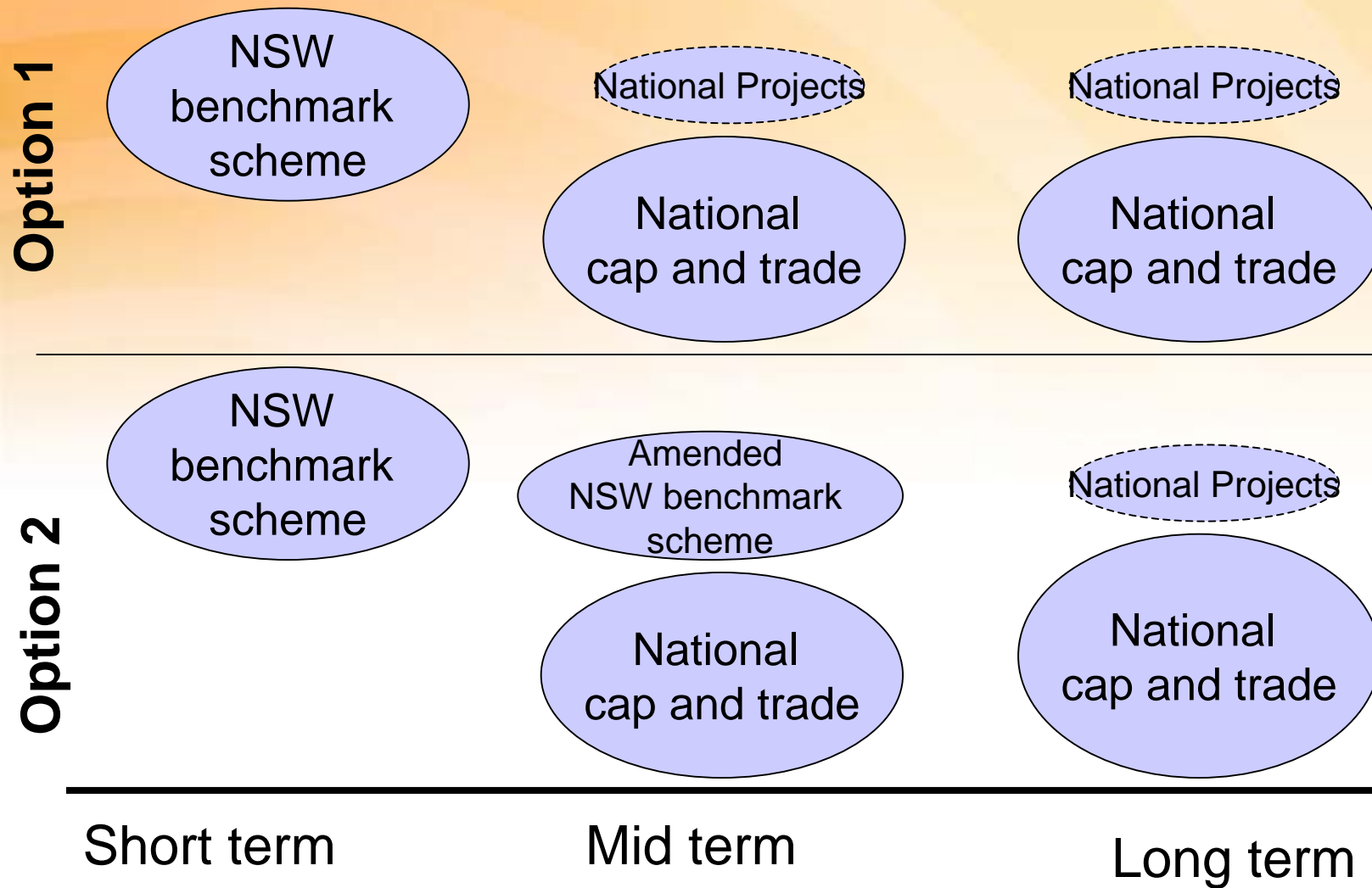
- United Kingdom – UK ETS:
 - Voluntary opt-out
 - 11 participants / 63 installations applied for opt-out until end 2006

UK: No trade across systems!
- Countries in transition – Joint implementation:
 - Opt-out (Czech Republic) -> no application/approval so far
 - Direct emissions: (1) ERUs will only be allocated if allowances are cancelled by operator of installation under EU ETS
(2) No ERUs and allocation includes emission reduction
 - Indirect emissions: Allocation of ERUs if cancellation of EU allowances from the registry takes place -> which sector will bear the reduction?

Trade across systems!



Transition issues for Australia





First-best option: Replacement

- Mid term cap and trade system replaces most of NGAS
 - + lower administrative costs
 - + no overlaps – double counting
 - + no assessment of additionality necessary for cap and trade
 - + Linking more likely
- Option to include National Projects (direct emission reductions in non-covered sectors, with strict additionality requirements)
- How to account for early action?
 - + auctioning will automatically account for early action
 - + use of historic base periods has difficulties because of data quality
 - + allocate early action bonus difficult to agree on



Second-best option: In parallel mid term

Overlapping problem:

- Direct and indirect emissions -> electricity industry
- Demand and supply -> trade between systems

Example: Electricity industry

NGAS:

- Electricity retailers have target and demand certificates (NGACs)
- Electricity producers may create certificates (NGACs)

Cap and trade:

- Retailers will face higher prices from electricity producers
- Electricity producers have target and demand allowances

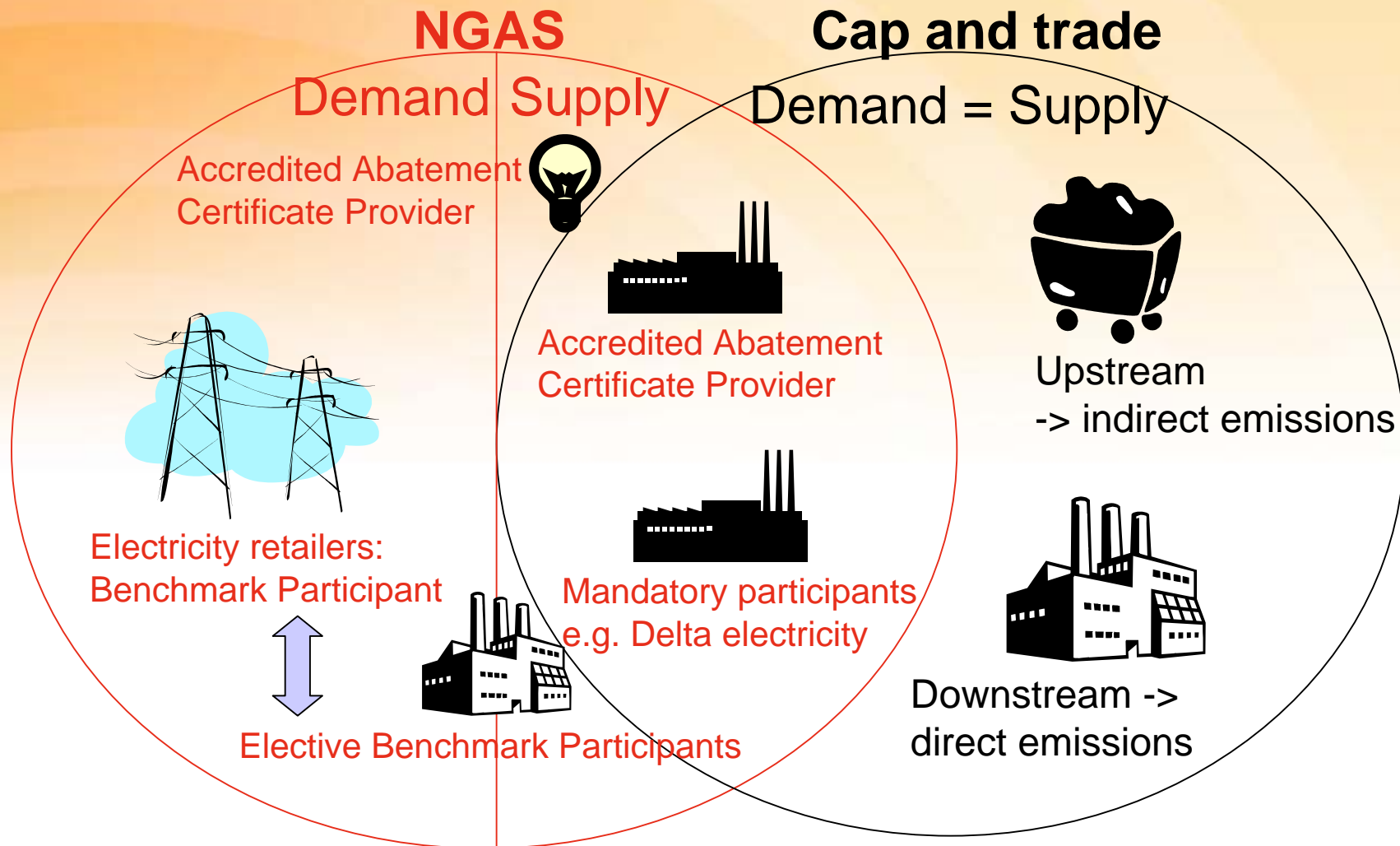
Possible approach for **transition**: -> Treat electricity industry similar to elective benchmark participants

Accounting for early action

- **Auctioning**: no exemptions for Accredited Abatement Certificate Provider necessary since early action is accounted automatically
- **Allocation for free - Downstream: Allocation** according to standard rules but e.g. take baseline emissions into account -> more complicated



Overlapping problem





Linking

- Linking will lead to **efficiency gains** under a set of assumptions -> win-win situation
 - More variety in reduction options and cost differences
 - No trades take place if no gains
 - Reduces market power problems since more participants
- **Risk** to environmental integrity of the systems
 - Ensure quality of both systems
 - Meet minimum requirements
- **Linking gains** for Australia – Preliminary GTAP-modeling:
Suggests significant savings to Australia from linking with EU ETS



Main linking options for Australia

- **With** Kyoto Protocol ratification through
 - Project based mechanism (JI)
 - Article 17 KP trading (government level)
- **Without** Kyoto Protocol ratification
 - Unilateral link (Australian companies buy EU allowances)
 - Bilateral link (fully link EU ETS with Australian scheme) depends on political willingness of European Union and flexibility of directive



Potential linking issues: Australia (A under multi-state principle) – EU ETS

- **Sink-projects:** inclusion (A) – today not included (EU)
- **Non-CO₂-gases:** inclusion (A) – today not included (EU)
 - Risk to import uncertainty of accounting
- **Verification:** equal stringency
- **Traded units:**
 - long term and short term (A) – periodical approach (EU)
- **Sanctions:** price cap (A) – non-price cap (EU)



Policy interactions

- In theory, accepting a large number of assumptions:
 - A universal ETS is the only policy required
 - Any additional policy will only increase compliance costs and not improve environmental effectiveness
- In reality there is still a vital role for other policies and measures, for example:
 - Renewable energy policy (such as Mandatory Renewable Energy Target) to improve dynamic efficiency
 - Standards to improve static efficiency in field of energy efficiency and infrastructure provisions
 - Other objectives: energy security, equity concerns
- However, analysing their interaction is crucial to ensure effectiveness of any combination!



Conclusions

- Different transition options exist but replacement of existing NGAS scheme favored to minimise administration costs, reduce complexity and eliminate additionality assessment
- Additional option: Keeping a kind of NGAS (National Projects) for non-covered sectors
- Linking Australian scheme with EU ETS
 - Reduce compliance costs and market power problems
 - Design choice might be reduced since harmonisation is required: Sink and non-CO₂-gases inclusion, sanctions, difference of lifetime of units
- Interaction: Other policies are necessary - ET will not solve all problems, but interaction should be carefully assessed!

Thank you!



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