Overview of the Energy Savings Scheme

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Jim Cox, PSM
CEO, IPART
Energy Savings Scheme

- ESS commenced on 1 July 2009 – in NSW only
- Mandatory scheme – established by legislation. Electricity retailers are the liable parties
- Market based mechanism that involves the creation and trading of Energy Savings Certificates (ESCs)
- Each ESC equals 1 tonne of CO₂ equivalent
- IPART is both Scheme Administrator and Regulator
  - we accredit companies to create certificates
  - we monitor compliance by obligated parties
Administrative Structure of ESS

Legislation:
- Electricity Supply Act 1995 (the Act)
- Electricity Supply Regulation 2001 (the Regulation)
- Energy Savings Scheme Rule (ESS Rule) – define eligible activities
How the Scheme works

- Obligation placed on electricity retailers to acquire energy savings. Can do this by:
  - carrying out energy savings activities themselves (for example street lighting upgrades) and have these recognised by IPART to create ESCs, or
  - buying ESCs from other accredited providers

- ESCs are created from activities in the residential, commercial and industrial sectors
  - must apply to IPART to be accredited to create ESCs
  - ESCs trade for around $31 per certificate on spot market

- Retailers surrender ESCs against their individual target (based on their share of total electricity sales in NSW), or pay a penalty
What obligations do Accredited parties face?

- Annual Reporting – pro forma
  - Report future creation, any changes to project
  - Not required for small projects with one-off creation of ESCs

- Audits - based on risk assessment
  - Nature of project, ESC volume, compliance history

- Record Keeping requirements
  - Location where energy savings occurred
  - Calculated savings, data & assumptions used

- Additional conditions can be imposed

- Penalties enforced for contraventions
Independent audits used for validation and verification

- Audits conducted by auditors on ESS Audit Panel
- Audits check ESC creation & record keeping
- Audit regimes based on risk matrix

<table>
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<tr>
<th>Consequence – quantum of invalidly created ESCs</th>
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<td>Minor</td>
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<td>High</td>
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Targets for Scheme Participants (electricity retailers)

- 2011 target was 2.5% of annual liable electricity sales or approximately 1,400 GWh
  - surrender of ~1.4 million ESCs to avoid paying penalties

- By 2014, target will be 5% of annual liable electricity sales or about 3,000 GWh per annum in energy savings
  - surrender of ~3.0 million ESCs to avoid paying penalties
IPART regularly publishes projections of ESC supply and demand

Demand projections take account of:
- Annual Scheme targets
- AEMO data for electricity purchases, any unregistered generator sales (includes PV loads), less any exempt loads
- Future electricity demand published by TransGrid (mid range)

Supply projections take account of:
- Information from accredited parties about their business plans and forecast activity
- Applications where we have certainty the projects will go ahead
ESC Supply & Demand for CY2010 & 11

ESC registered as % of Annual Target. CY2011 includes unsurrendered prior vintage ESCs.
Is participation in ESS worthwhile?

Databuild Research & Solutions prepared report “Cost Effectiveness Analysis of ESS”

- Covered first 18 months of scheme
- Investigated how scheme participants and project providers (ACPs) were delivering the scheme
- Quantified costs associated with delivery of projects
- Showed that business costs of ACPs for 2009 and 2010 was significantly lower than the selling price for ESCs
- Concluded ESS makes both financial and environmental sense

- Demonstrated a total net benefit of ~$26/MWh saved
Recommendations from Databuild study

- Improve communications between participants – especially regarding sourcing certificates
- Provide greater market certainty over the future of the ESS
- Encourage new entrants – seek opportunities to facilitate the process
- Provide guidance to small businesses regarding audit requirements
- Expand the number of measures – especially where recognised in other schemes
New measures to help Scheme Participants

- New simpler Annual Energy Savings Statement
- Broadened audit exemption criteria – where statements are straightforward
- Revised and updated guidance on accounting for small scale PV generation
- Extended date for any penalty payments to allow purchase and surrender of ESCs post 18 March
- New page on website listing all ACPs currently holding ESCs
New measures to assist ACPs

1) New ESS Website

- Easier to navigate
- Clear language
- More information
- Better presentation
- Designed for all users
2) ESS Pre - Application Workshops

- Regularly scheduled workshops to assist applicants
- Opportunity to road test proposed business plan
3) New application forms

- Clearer instructions for completing application
- Information submitted as Attachments
- Incomplete applications not accepted
- Once accepted, applicant invoiced the application fee ($500)
Accreditation time frame – how long does it take?

Required Rule change to proceed
Accreditations in ESS – by year

100 accreditations; 156 projects in total. Showerhead programs no longer eligible

*As of 24 January 2012
Distribution of Projects by Sector, by Year

Accredited

2009 2010 2011

Commercial
Industrial
Residential
<table>
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<tr>
<th>Vintage</th>
<th>Total created</th>
<th>Total forfeited*</th>
<th>Forfeit rate</th>
</tr>
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<tr>
<td>2009</td>
<td>278,179</td>
<td>22</td>
<td>0.01%</td>
</tr>
<tr>
<td>2010</td>
<td>916,972</td>
<td>112,748**</td>
<td>12.30%**</td>
</tr>
<tr>
<td>2011</td>
<td>685,527</td>
<td>3,385</td>
<td>0.49%</td>
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<tr>
<td>2012</td>
<td>16,619 (to date)</td>
<td>0</td>
<td>0.00%</td>
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*Note: total forfeits include incorrectly registered ESC creation

**2010 total forfeits largely due to showerhead over-creation
Lessons learned

- Balance between upfront assessment & ongoing compliance audits
- Encouraging applications from long-term / sustainable businesses – target industrial sector
- Tailoring audit regime to project risk e.g. phone surveys for 3rd party business models
- Importance of clear Scheme documentation – new website, new application documents
- Improving efficiency of application assessment process - pre-application workshops
- Being responsive to changes in market (ie growth in commercial lighting)