

Presentation to HEI Workshop

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Energy Efficiency *Opportunities*

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Opportunities
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- EEO Program Background
- Early Results and Lessons Learnt
- Milestones
- Capacity Building Activities
- Streamlining/alignment with other programs

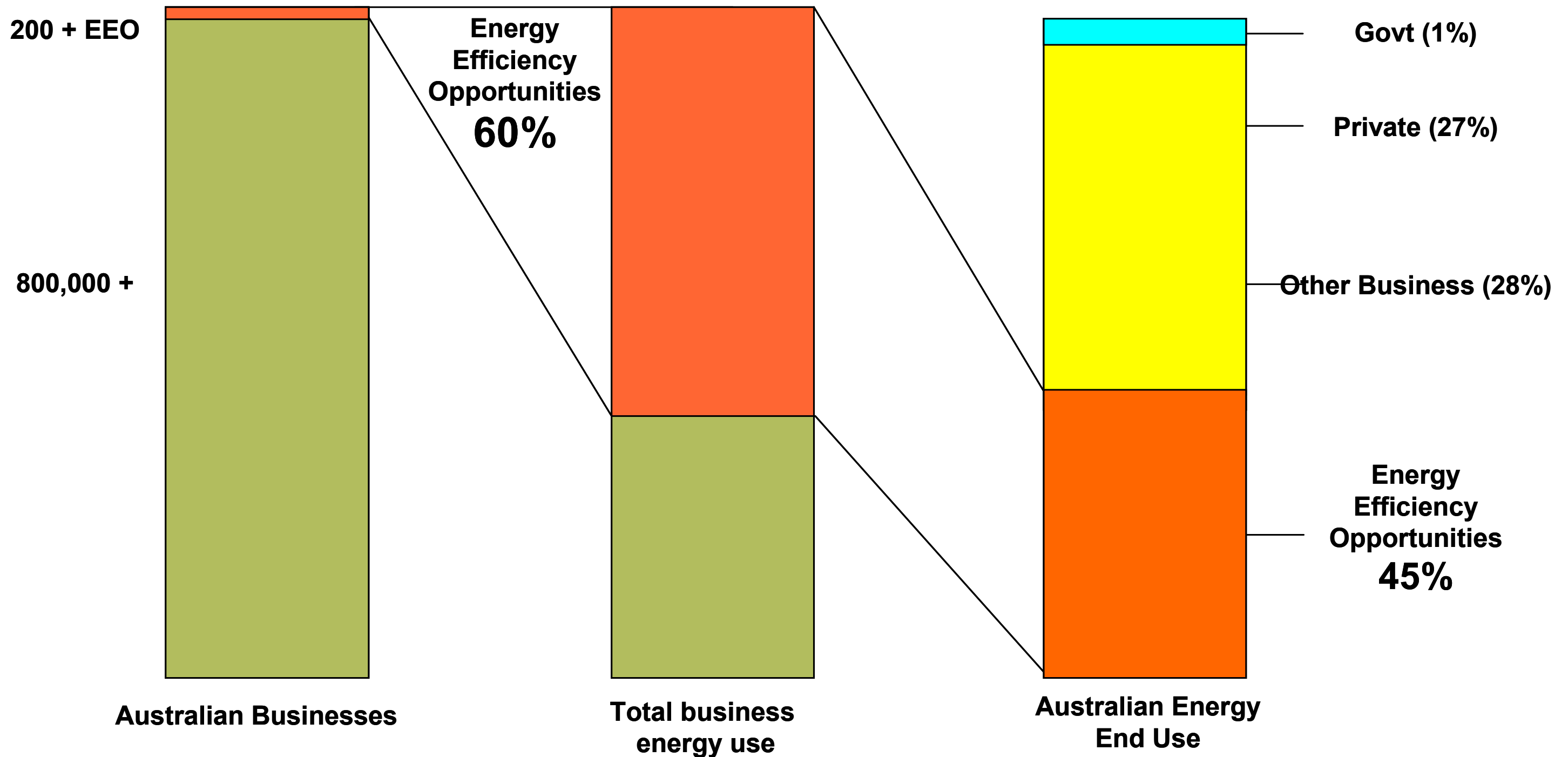
- Energy Efficiency Opportunities program commenced in July 2006
- Part of National Framework on Energy Efficiency – signed off by all state and federal energy ministers.
- Energy Efficiency Opportunities program aims to improve uptake of commercial energy efficiency opportunities by building the capacity of corporations to identify energy efficiency opportunities
- Applies to corporate groups that use over 0.5 petajoules per year
- Corporations are required to undertake:
 - Rigorous assessments
 - Public reporting of energy efficiency opportunities
 - Identified business response

Why is energy efficiency important?

- Profitability - rising energy prices, Emissions Trading, competitive edge
- Environmental - industrial energy efficiency's potential to contribute to greenhouse abatement targets
- Corporate social responsibility – interest from the public and investors in corporate response
- Compliance - energy efficiency is a key plank in the new Government's climate change policies

Who is participating and how much energy do they use?

Participating corporations use 60% of business energy use and around 45% of Australian energy end use



Sources: EEO data; Total business numbers – ABS; Total Energy Use - ABARE

Barriers to implementation of Energy Efficiency Opportunities

- Energy – Important not Urgent
- Not core business – higher hurdle rates
- Lack of data and skills to understand data – internally and externally
- Quality of audits – lack understanding of the business, ignorant of whole of business cost and benefits
- Lack of Senior Management buy in and operational buy in - left to external consultant to id
- Audits – threatening / bolt on / one off

Rigorous and Comprehensive Assessments



Leadership

People

Information, Data & Analysis

Opportunity Identification & Evaluation

Decision Making

Communicating outcomes

Six key elements

"The EEO program has made us think more laterally about how, when and where we use energy and also measuring it even more effectively and accurately".

Val Gomez, Bunker Freight Lines

"The energy efficiency perspective hasn't only been about ancillary energy savings. We've been able to identify projects with significant production benefits as well...Already we know the business benefits are significant."

Greg Smith, General Manager Operations, Midland Brick

Five trial companies: 3 manufacturing sites, 8 mining sites, 1 transport company



Orica's Kooragang Island identified and is implementing savings worth more than \$1 million per year



Midland Brick – energy savings 4-8% - equivalent to 5000 households or 19,000 tonnes CO₂



Identified opportunities which collectively will reduce energy costs by 3% and save up to \$200,000 annually



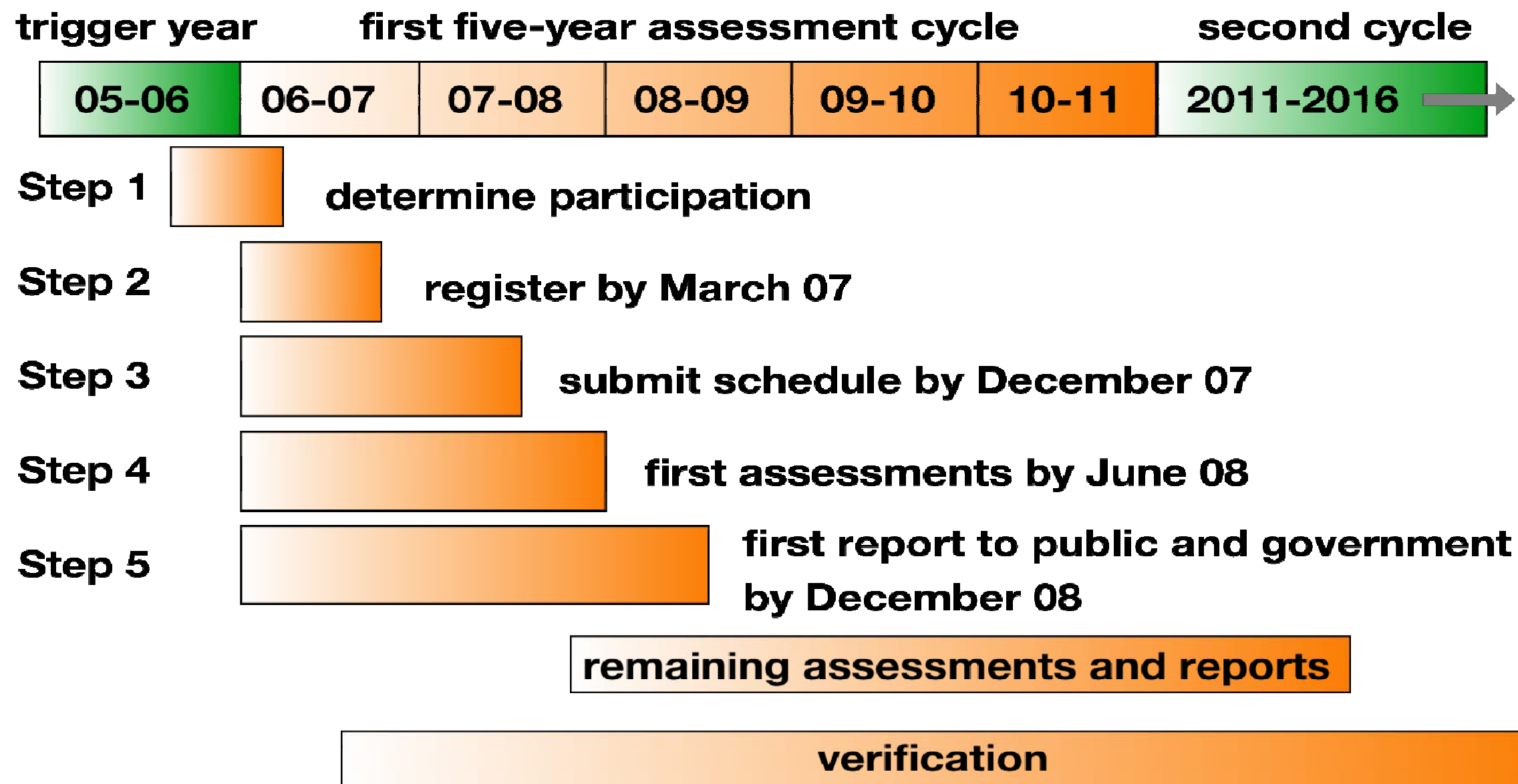
Direct benefits have been identified for 32 projects with a less than 2 year payback



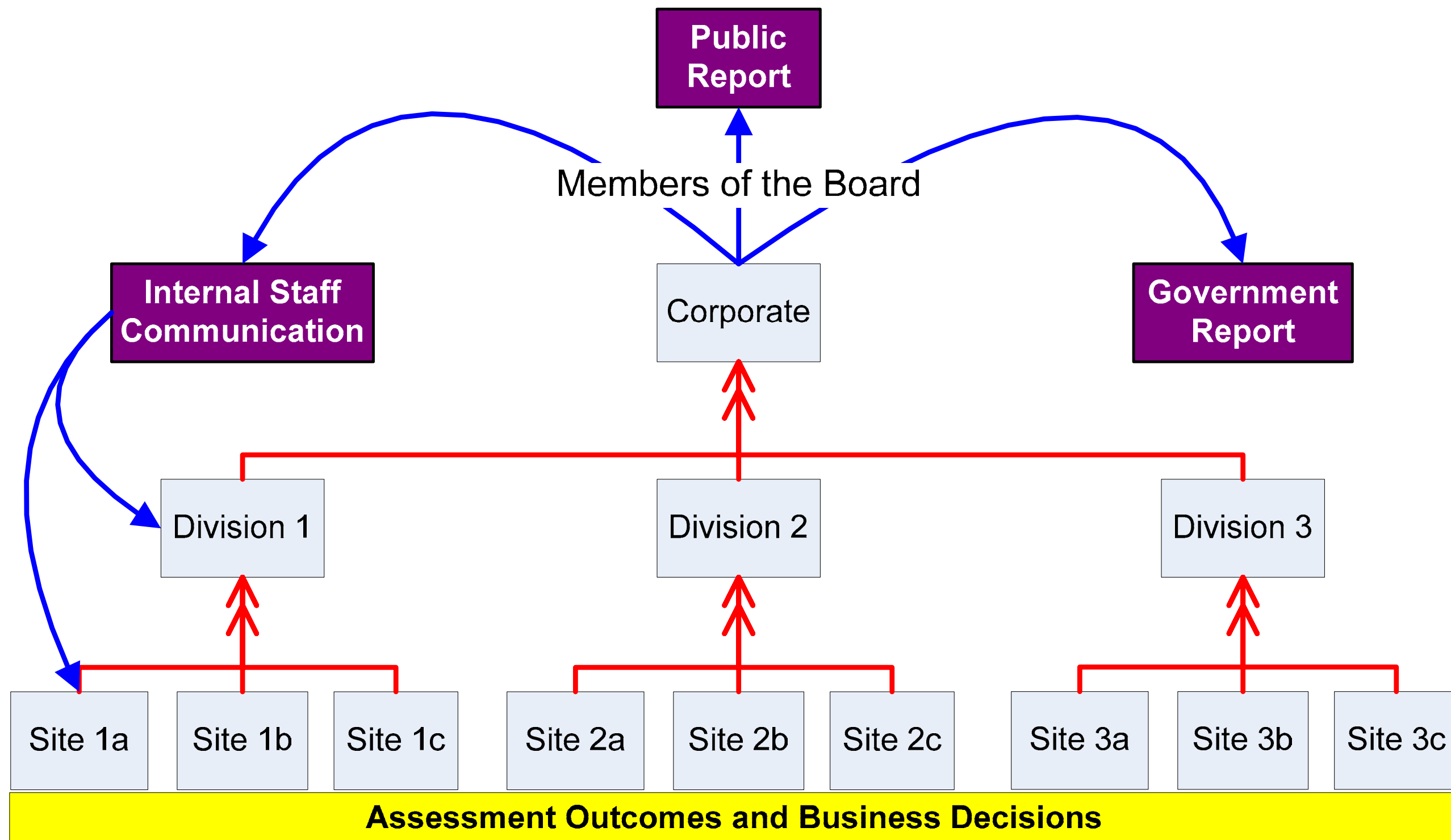
Improved data analysis techniques driving potential energy efficiencies of \$4.4 million

- Top-down and bottom up commitment critical
- Good data/data analysis essential
- Project evaluation must be from 'whole of business' perspective and credible
- Focused interventions (using skilled people with 'fresh eyes') combined with information collected through internal agents
- A variety of different 'assessments' are needed depending on situation & data– some low-key at shopfloor, others 'blue sky', external/internal etc

Energy Efficiency Opportunities program timeline



Reporting requirements



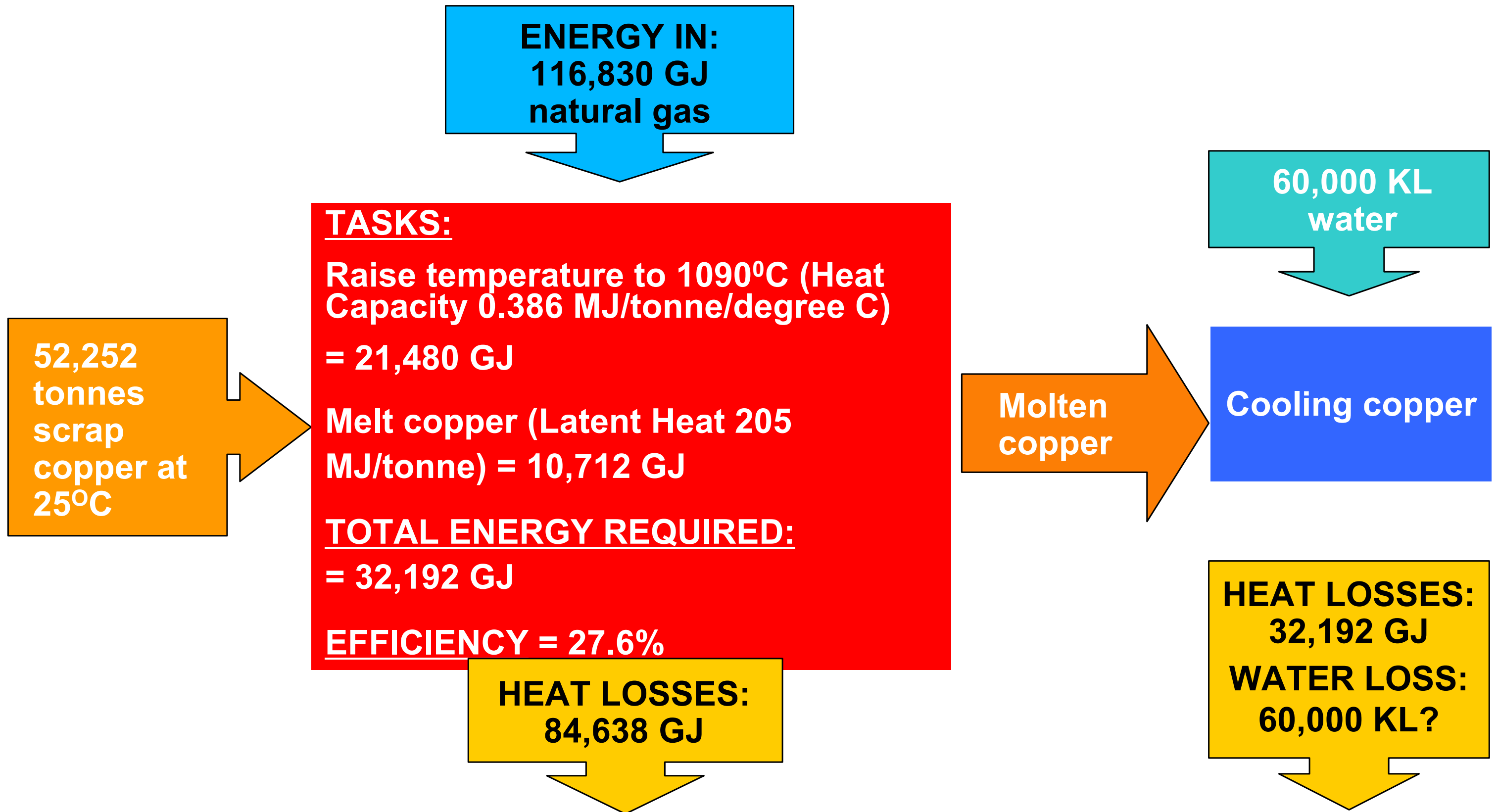
Capacity Building Activities

- 'How to' guides
- Best practice case studies
- Diagnostic energy management tools
- Reporting templates
- Regular industry workshops
- Bi-monthly newsletters
- Communities of Practice, and
- Client Liaison Officers

www.energyefficiencyopportunities.gov.au

Tel: 1300 799 186

Energy Mass Balance



How to;

- **Measure** energy and energy savings.
- **Estimate** the energy savings from a potential energy efficiency opportunity.
- **Evaluate** the full costs and benefits for each energy efficiency opportunity.
- **Track** the progress and performance of implemented opportunities.

- Whole of business costs and benefits, examples from 5 different sectors
- Draft distributed in May 2008

Draft Reporting Templates

Currently on www.energyefficiencyopportunities.gov.au for feedback

DRAFT PUBLIC REPORT TEMPLATE V.4 – 27 November 2007

Controlling Corporation

(or part of the Corporate Group authorised to report separately – see sections 22A and 22B of the *Energy Efficiency Opportunities Act (the Act) 2006*)

Period to which this report relates

(See sub-section 22(2) of the Act and Regulation 7.1 of the *Energy Efficiency Opportunities Regulations (the Regulations) 2006*)

Start

End

Summary of assessments conducted thus far

Table 1.1 - Description of the way in which the corporation has carried out its assessments

(See sub-section 22(3)(a) of the Act)

Table 1.2 - Group member/business unit/key activity/site that have been assessed	Energy Use/Bandwidth	Energy data accuracy (if not within $\pm 5\%$)	Reasons for not achieving data accuracy to within $\pm 5\%$
(see paragraph 1(a) of Schedule 4 of the Regulations)	(see paragraph 2 of Schedule 4 of the Regulations)	(see paragraph 5(a) of Schedule 4 of the Regulations)	(see paragraph 5(b) of Schedule 4 of the Regulations)
Total			
Total as a percentage of total energy use of the group covered by this report	(see paragraph 1(b) of Schedule 4 of the Regulations)		

Day 1

- Conducting effective energy assessments .
- Energy management in an emissions trading world.
- EEO reporting responsibilities & link to NGERs

Day 2

- Best practice case studies
- Energy Mass Balances
- Energy Savings Measurement Guide
- Evaluation and business case development

- Data for stationary equipment may be used for both programs, providing year 'regular and repeatable'.
 - Including transport energy within Energy Savings Action Plans (ESAP) helps to meet the requirements of EEO.
 - ESAPs Energy Management Review can feed into EEO assessments.
 - Assessment approaches can meet standards required by both programs
 - Evaluation method for measuring payback can be similar (NB 4 years compared with 10 years)
- See Orica Case Study

National Greenhouse and Energy Reporting System (NGERS)

- Single, streamlined framework for greenhouse and energy reporting
- Baseline data for future Emissions Trading Scheme

EEO

- Developing an EEO Module for OSCAR
- Working with DCC to avoid reporting duplication

Questions?

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