



Australian Government

Department of Resources, Energy and Tourism

## CALL FOR EXPRESSIONS OF INTEREST FOR:

1. Trials Developing Assessment Plans for New Developments and Expansion Projects
2. Trials applying the EEO Assessment and Reporting Framework to New Developments and Expansion Projects





## BACKGROUND

In July 2011, as part of its Securing a Clean Energy Future package, the Australian Government announced it would extend the Energy Efficiency Opportunities (EEO) Program to include new developments and expansion projects. This decision reflected the notion that the design phases of major new developments and expansion projects is an opportune time to identify and achieve significant energy savings.

Following this decision, the Government then entered into a consultation and program development phase, in which industry stakeholder views were sought on how best to apply the EEO Program to new developments and expansion projects. These consultations highlighted the need for changes to the EEO Assessment framework, and the use of targeted energy performance indicators to assess relative energy savings outcomes across the various design gates. The need to ensure that any EEO Assessment framework was embedded within existing design process, including processes associated with State and Federal requirements, to minimise any additional schedule and cost risks, was also highlighted.

The Program was to apply to new developments and expansion projects from 1 July 2012; however, based on industry consultation and the need for data to inform the Regulator Impact Statement process, Government agreed to postpone formal commencement of the Program to July 2013. In July 2012, minor amendments of the EEO Regulations were made to establish definitions for “new development” and an “expansion project”, and to detail the energy thresholds for program participation for a new development or expansion project.

Government also agreed to undertake detailed trials of the EEO assessment framework and energy reporting requirements to ensure the best possible application to new developments and expansion projects. These industry trials, to be finalised by December 2012, will also allow for an examination of the energy savings potential of the EEO Program and how best to use existing design processes to minimise risk.

## STRATEGIC OBJECTIVE OF THE TRIALS

Government recognises that an EEO assessment and reporting framework for New Developments and Expansion projects needs to be fit for purpose and needs to deliver a value proposition to industry stakeholders.

To this end, the objective is to design and test an assessment and reporting approach for New Developments and Expansion projects that:

- Delivers additional energy savings
- Delivers business benefits
- Minimise schedule and cost risk
- Complement, and are cognisant of state and commonwealth approval processes
- Provides for reporting that enhances and drives improvement in energy performance
- Establish business processes that embeds energy use considerations as an integral aspect of design
- Facilitate behavioural change with regards to, how energy is managed across business activities
- Addresses information failures and barriers to energy performance improvement





## INTENT OF THE TRIALS

The broad objective of the trials is to optimise the energy performance and business benefits of the EEO Program and to ensure that it can be effectively applied to new developments and expansion projects.

The specific trial objectives include:

1. demonstration of best practice application of the EEO Assessment framework, based on existing design, business and approval processes. This would take the form of an EEO Assessment Plan that establishes how, when and what will be assessed to deliver what energy performance outcomes.
2. establishing an effective energy savings reporting regime that maintains commercial sensitivities while allowing for the use of energy performance indicators / metrics to drive best practice energy savings and business outcomes and to inform policy makers.
3. trial of the EEO assessment framework and reporting regime at various design stages to establish energy savings potential and associated business benefits, while minimising risk and cost impacts.

Based on the above objectives, the Department is seeking to undertake trials of a modified EEO assessment framework (attachment A) and a proposed reporting regime (Attachment B). The modified EEO assessment framework and reporting regime was prepared by the Department in consultation with industry to specifically cater for the needs of new developments and expansion projects. The trials are intended to test the framework and reporting regime on various design gates, industries and corporations to optimise their application to a range of design processes.

As part of the trials, the Department will be seeking feedback from corporations on how the modified EEO assessment framework and reporting regime aligns with established design, business and approval processes. As noted, the trials are also intended to examine energy savings and business benefits associated with the EEO assessment framework.

Corporations involved in the trials will benefit from involvement in applying an assessment framework that seeks to identify energy savings and reduce consequent energy costs over the life of the development / project. Corporations involved in the trials will also be able to influence improvements in the new framework. This may include providing the Department with specific suggestions on framework design and reporting methods.

**Additionally, Assessment Plans developed as part of the trials can be utilised to meet program requirements from 1 July 2013.**

Trial corporations will receive assistance from expert consultants provided by the Department, and from Departmental staff. The Department intends to publish non-confidential outcomes of the trials and potentially hold post-trial workshops to discuss outcomes.

Further detail on the intent of each trial stage is provided in sections 1.1 and 2.1

## TRIAL STRUCTURE

In accordance with the above objectives, the New Development and Expansion Project trials have been broken up into three trial stages:

- **Stage 1a - Developing Assessment Plans for New Developments and Expansion Projects.** This will involve developing an assessment plan by applying the modified assessment framework (Attachment A) to existing business processes. The focus of this stage will be on applying the intent of the key elements to design, business, approval and development processes.





- **Stage 1b – establishing an effective energy performance reporting regime.** As a parallel activity to the Stage 1 trial and preparation of an assessment plan, the Department is seeking to develop and trial an appropriate and effective energy savings reporting regime. This reporting regime needs to be structured to maintain commercial sensitivities while allowing for the development and use of energy performance indicators / metrics that will drive best practice energy savings / business outcomes and inform policy makers
- **Stage 2 – Trialling the application of EEO to new development or expansion projects.** This will involve applying the modified assessment framework to an actual design stage on a new development or expansion project. The intent being to establish the energy savings potential and associated business benefits associated with the assessment framework and how these can best be achieved with minimal risk and cost impacts.

The Department is seeking expressions of interest from corporations interested in undertaking Stage 1a and Stage 1b; OR Stage 1a, Stage 1b and Stage 2.

To assist with the trials the Department will provide specialist consultants whose scope of work will be defined in consultation with participating corporations.

Proponents will need to be willing to have information on the trials published, including data on the costs and benefits. This data may be released in the form of a case study or in another mutually agreeable form. The Department will consult with potential trial participants prior to the trial commencing, to agree on the data that will be publishable, and continue consulting throughout the trial process to ensure that any confidentiality concerns are addressed. A list of the broad data requirements are detailed in Sections 2.2 **Trial Process**

While Stage 2 is an important part of these trials, some corporations may not have a current project that would fit the Department's requirements and timeframes. Participating in Stage 1a and Stage 1b will still allow these corporations to participate in shaping the future EEO framework for new developments & expansions.

It is expected that proponents undertaking Stage 2 of this process will also complete Stage 1a and Stage 1b. To this end, any submission for Stage 2 will also be considered as a submission to undertake Stage 1a and Stage 1b, unless stated otherwise.







**STAGE 1 – DEVELOPING ASSESSMENT PLANS (STAGE 1A) AND  
ENERGY PERFORMANCE REPORTING REQUIREMENTS (STAGE 1B)  
FOR NEW DEVELOPMENTS AND EXPANSION PROJECTS**





## 1.1 Intent of the Development of New Development APs

In addition to the industry trials, the Department of Resources, Energy and Tourism (The Department) is seeking to test the modified EEO assessment and reporting framework, by asking a number of corporations to use this framework to develop Assessment Plans (APs). The Department is interested in testing the framework on all design gates, multiple industries and multiple corporations to optimise the application of the framework to a range of design processes.

The aim is to design and test an assessment and reporting approach that delivers the following outcomes:

- additional energy savings
- business benefits
- the most effective reporting method that enhances and drives improvement in energy performance
- business processes that embeds energy use considerations as an integral aspect of design
- embedded behavioural change in energy use management through the design stage and into operation
- addresses information failures and barriers to energy performance improvement

In support of these outcomes the Department would like to conduct a gap analysis between the established processes that corporations currently use to improve energy performance for new developments, and the processes involved in applying the modified EEO framework.

The intent is to obtain feedback from corporations on how well the modified EEO assessment and reporting framework aligns with established design processes and what changes are required to deliver the above outcomes in a cost effective and low risk manner.

Corporations involved in the development of APs will be able to influence improvements in the new framework. This may include providing the Department with specific suggestions on framework design, such as the most effective reporting method.

Participants will also receive assistance from expert consultants provided by the Department, and from Departmental staff to help develop a new development or expansion AP. It is also intended that corporations who receive approval for their new developments or expansions AP, will be able to apply this AP to any new development or expansion projects currently under way. Once approved by the delegate, these plans will be considered as valid for any new development or expansion project currently being designed.

## 1.2 Stage 1a – Trial of an Assessment Plan Process

As part of this process, corporations will be able to work with the Department and expert consultants to develop Assessment Plans by late November 2012. This process will be similar to developing a standard assessment plan, but will only apply the intent of the Key Elements, not the detailed Key Requirements. As part of this process corporations will be asked to provide some additional information which will shape the further development of the assessment framework.

The process is likely to include the following steps:

- 1.2.1 Identifying any existing processes your corporation has around improving energy productivity for new developments and expansion projects.





- 1.2.2 Identifying the level of savings achieved through the existing processes on any current projects, and identifying the technology, process or operational choices which lead to the savings.
- 1.2.3 Applying the modified EEO Assessment framework detailed in Attachment A, which may include:
- a. Identifying a method for estimating future energy use of a new development or expansion, and using this method to estimate the future energy consumption of any current new developments or expansion projects.
  - b. Identify how the intent of the Key Elements of the modified Assessment Framework in Attachment A will be applied to your existing design processes, and the likely effect on your business processes that the Key Elements will have in achieving the objectives outlined below:  
  
With respect to these strategic objectives, this would include identifying how the modified assessment framework can best be applied to:
    - i. deliver additional energy savings,
    - ii. deliver improved business benefits,
    - iii. provide for reporting that can enhance and drive improvement in energy performance over time; and
    - iv. embed behavioural change with regards to how energy is managed across business activities
  - c. Identify the point when your corporation would consider a project to have reached commercial operation. The meaning of commercial operation in this context is given in Attachment A.
- 1.2.4 Conduct a review of items 1.2.1, 1.2.2 and 1.2.3 above:
- a. Are any of these items unachievable?
  - b. When applying 1.2.3.b. was there anything missing from the Key Elements that really helps improve energy productivity in your business?
  - c. Are there aspects of your existing business processes that hinder energy productivity improvement which have not been addressed in the framework?
- 1.2.5 After applying the Revised Assessment Framework in Attachment A to your existing design processes, what additional energy productivity improvement processes were required?

Once an Assessment Plan has been submitted to the Department and has been approved by the Departmental Delegate, the Assessment Plan may be applied to any current new development and / or expansion projects, where any stage of design has commenced before 1 July 2013.

### **1.3 Stage 1b - Trial of an Energy Performance Reporting Regime**

Corporations will be able to work with the Department and expert consultants to develop an energy performance reporting regime by late November 2012.

The process is likely to include the following steps:

- 1.3.1 Identifying any existing processes your corporation has around energy savings and energy performance reporting for new developments and expansion projects.





- 1.3.2 Applying the proposed Reporting regime detailed in Attachment B, which may include:
- a. Developing a method for identifying appropriate energy productivity / energy performance indicators. This involves selecting and estimating the future value of a relevant indicator for any current projects. An example of an indicator might be GJ/ tonne processed.
  - b. Identify some leading indicators that can be monitored to predict how well the project will perform with regards to energy productivity. These are typically people, system and processes based such as training a number of people in energy efficient design or having a plan for a number of energy productivity meetings / workshops.
  - c. Identify how the energy productivity / energy performance indicators associated with the reporting regime can best be applied to:
    - i. facilitate the identification and adoption of additional energy savings,
    - ii. facilitate improved business benefits,
    - iii. facilitate behavioural change in the way energy use is managed across business activities
  - d. Identifying the most effective reporting method that is likely to drive continual improvement in energy performance over time.
- 1.3.3 Conduct a review of items 1.3.1 & 1.3.2 above, are any of these items unachievable?

## 1.4 Trial timelines

It is envisaged that Assessment Plans (Stage 1a) and Energy Performance Reporting Regime (Stage 1b) will be developed after the release of this EOI through to the end of November. The Department will be seeking to utilise a staged approach to develop the Assessment Plans in consultation with the participating corporations. This approach is intended to smooth out the process over the expected 4 months. Exact timeframes will be developed with participating corporations.

The Department envisages holding an additional workshop following the trials, to present the lessons learned, trial and assessment plan outcomes and outline the schedule for remaining capacity building activities. The timing of this workshop will be determined once trial project schedules have been finalised with the companies involved.

## 1.5 Expressions of Interest

The Department is seeking proponent corporations from all sectors to participate in trial assessment plans. The Department is interested in a broad range of Corporations and business models, to see how the extension to new developments will be applied across all EEO participants.

The Department will engage consultants to assist with the development of assessment plans. This expertise, combined with assistance from the Department, would be provided to assist participants to apply the new assessment and reporting framework to their existing processes.

Initial expressions of interest for the proposed trials should be submitted by Wednesday 22<sup>nd</sup> August 2012 to [dayne.thompson@ret.gov.au](mailto:dayne.thompson@ret.gov.au). These initial expressions of interest can be a simple email and should detail what Trial Stages you might be interested in, and what additional information you require to confirm a formal final expression of interest.







The Department is willing to meet or discuss key elements of the Trial Process and any additional information requirements corporations may have.

Final expressions of Interest should be submitted by Friday 14<sup>th</sup> September 2012 to [dayne.thompson@ret.gov.au](mailto:dayne.thompson@ret.gov.au). They should address the selection criteria below and include a company description and an idea of the number and types of new developments or expansion your corporation may be undertaking in the foreseeable future. The Department is interested a range of industry sectors and corporation sizes, corporations which meet one or more of the following corporate and project attributes will be considered:

- Have had, have or may have potential projects that meet the energy thresholds detailed in Energy Efficiency Opportunities Amendment regulation 2012 (No. 1) Section 5.3A (<http://www.comlaw.gov.au/Details/F2012L01249>) or;
- Have had, have or may have potential projects that may be voluntarily assessed under a medium energy users scheme (less than 0.5PJ), and;
- Are proposed by smaller corporation with less internal processes, or;
- By larger corporations with strict internal processes, or;
- A combination of the above two points.
- Availability and willingness to work with the Department to develop an assessment plan, following approximately the steps listed in “1.2 Stage 1a – Trial of an Assessment Plan Process”.
- Availability and willingness to work with the Department to develop energy performance reporting requirements, following approximately the steps listed in “1.3 Stage 1a – Trial of an Assessment Plan Process”.

## 1.6 Requirements for Participation

Final expressions of interest will be judged against the criteria outlined below and an interview / teleconference with the Department may be required. Successful corporations will be required to enter into agreements with the Department to define the responsibilities of the Corporation and of the Department and its contractors.

Any submission to the Trial EOI, will also be considered for this EOI (Assessment Plan EOI)

### Selection Criteria

To be considered for the trial, applicants must:

- Be able to provide the Department with the information requested in 1.2 “Stage 1a - Trail of an Assessment Plan Process and 1.3 “Stage 1b - Trial of an Energy Performance Reporting Regime”. An agreement can be made for this information to not be released to the public as required.
- Make available qualified staff familiar with internal design processes, and nominate suitable staff or position titles

## 1.7 Contacts

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## 2 STAGE 2 – TRIALLING THE APPLICATION OF EEO TO NEW DEVELOPMENT OR EXPANSION PROJECTS





## 2.1 Intent of Stage 2 of the Trials

To ensure that the EEO program can effectively accommodate the needs of corporation's new developments and expansion projects, the Department is seeking to trial the application of a modified EEO assessment and reporting framework to these activities. The trial will test the modified version of the framework which was developed in consultation with industry during 2011/12. The Department is seeking to test the framework on various design gates, industries and corporations to optimise the application of the framework to a range of design processes.

The aim is to design and test, both practically and theoretically an assessment and reporting approach that delivers the following outcomes:

- additional energy savings
- business benefits
- the most effective reporting method that enhances and drives improvement in energy performance
- business processes that embeds energy use considerations as an integral aspect of design
- embedded behavioural change in energy use management through the design stage and into operation
- addresses information failures and barriers to energy performance improvement

Aiming to effectively deliver these outcomes, the Department developed the modified EEO assessment and reporting framework in consultation with industry to specifically cater for the needs of new developments and expansion projects. This tailored approach should be more effective while resulting in lower assessment and reporting costs than the original framework, but has yet to be tested. The Department would like to test the benefit of the tailored approach through industry trials, and compare the benefits and costs of the tailored approach to the results achieved by applying the standard EEO requirements at existing sites.

As part of the trials, the Department intends to conduct a gap analysis between the processes that corporations currently have in place to improve energy performance and the intent of the modified EEO framework. The Department is also interested in gauging the whole of business savings attainable by applying the EEO assessment process at the design stage.

The Department will be seeking feedback from corporations on how well the modified EEO assessment and reporting framework aligns with established design processes and what changes are required to deliver the outcomes above in a cost effective low risk manner.

Corporations involved in the trials will be able to influence improvements in the new framework. This may include providing the Department with specific suggestions on framework design, such as effective reporting methods.

Trial corporations will also receive assistance from expert consultants provided by the Department, and from Departmental staff. The Department intends to publish non-confidential outcomes of the trials and potentially hold post-trial workshops to discuss outcomes.

While this document details the broad intent of these trials, the Department is also open to considering alternative options presented in submissions.





## 2.2 Trial Process

### Design Stages

The trial process will be broken up into three trials covering different design stages. In each of these trials the Department will work with corporations to apply the modified EEO reporting and assessment framework to new developments and/or expansion projects.

Each trial will aim to cover a design stage with the set of trials covering the whole design process, from initial concept right through to post commissioning optimisation. These trials will be based on the design stages in the Gateway Review Process used by the Victorian Department of Treasury & Finance for major design projects. While the Department recognises that corporations will have different design phases, for trial purposes, the design process has been broken up into three broad phases:

<p><b>1. Early design stages - Concept through to Front End Engineering Design (FEED).</b></p> <p>This phase may include Pre-Feasibility and Feasibility or any sub stage corporations may choose to use.</p>	<p>In the early design stages, the Department is seeking to trial any early stage of design. Ideally the Department would like to trial a project from Concept through to FEED. However, as the full early design phase might exceed the available trial period, the Department will consider any project within this broad phase.</p>
<p><b>2. Development of a Procurement Strategy through to Construction Management.</b></p> <p>This may include Development of specifications, tender selection, detailed engineering and related activities.</p>	<p>For the second phase, the Department is aware of the risks of delays associated with modifying procurement processes and strategies. To mitigate this risk the Department is open to setting up a workgroup with EEO Corporations and EPCM contractors to work on a simulated project to quantify the potential benefits. Corporations can outline their preferred approach in their submissions.</p>
<p><b>3. Commissioning, Post commissioning and Optimisation</b></p>	<p>This trial could be conducted on any plant that is soon to be commissioned or has been commissioned and operating for a short period of time. The plant should not have been fine tuned to optimise performance.</p>

The Department is willing to consider submissions that propose projects that may continue through more than one trial stage, provided that they can be completed within the trial schedule.

### Trial Steps

The exact Trial steps will be dependent on the design stage being considered, and existing design processes used by the trial corporations. The Department anticipates the following broad trial steps:

1. Develop Trial Plans in line with the Assessment Plan (AP) developed under Stage 1a & b, for approval by the Department
2. Estimate the site energy consumption before the assessment begins
3. Conduct Trial activities inline with the approved AP







4. Measure savings using the two proposed reporting methods and state which reporting method is most effective; or utilise a different reporting method again, which is more effective in achieving the reporting objectives.

#### *Data / Information from the Trials*

The Department will be seeking to obtain the following information from the trials:

1. An estimated change in project energy use resulting from the use of the modified EEO framework.
2. The additional energy productivity improvement processes included to align the modified EEO assessment framework with existing company processes
3. Estimated costs of additional energy productivity improvement processes, and the overall change in project cost due to the modified EEO framework.
4. Any other costs or benefits arising from the EEO trial, and the estimated benefit to cost ratio from the trial process
5. Effectiveness and appropriateness of the modified EEO assessment and reporting framework.
6. A list of potential changes to the modified new developments assessment and reporting framework to improve the effectiveness of the process.
7. Identification of how the trial and associated assessment and reporting framework contributed to :
  - a. Delivery of additional energy savings,
  - b. Delivery of improved business benefits,
  - c. Provision of a reporting regime that enhances and drives improvement in energy performance over time; and
  - d. Embedded behavioural change with regards to how energy is managed across business activities.
  - e. Addresses information failures and barriers to energy performance improvements

## **2.3 Trial timelines**

It is envisaged that the Trials will begin around the start of September 2012, and run through to the end of March 2013. The Department recognises that projects will have set timeframes and will endeavour to adjust to project timeframes.

The Department envisages holding an additional workshop following the trials, to present the trial outcomes, discuss lessons learned and outline the schedule for remaining capacity building activities. The timing of this workshop will be determined once trial project schedules have been agreed with the companies involved.

## **2.4 Expressions of Interest in Stage 2**

The Department is seeking expressions of interest from a range of sectors to participate in trial assessments. The trials will focus on how to apply the modified EEO Assessment Framework to carry out rigorous energy





assessments for new developments and identify cost effective opportunities to save energy. These assessments will examine whole of site energy use.

The Department will engage technical consultants, specific to the trial participant's project, to assist trial corporations in undertaking their site assessments. The Department will also assist with the trial process.

Initial expressions of interest for the proposed trials should be submitted by Wednesday 22<sup>nd</sup> August 2012 to [dayne.thompson@ret.gov.au](mailto:dayne.thompson@ret.gov.au). These initial expressions of interest can be a simple email and should detail what additional information you require to confirm a formal final expression of interest.

The Department is willing to meet or discuss key elements of the Trial Process and any additional information requirements corporations may have.

Expressions of interest for the proposed trials should be submitted by Monday 14<sup>th</sup> September 2012 to [dayne.thompson@ret.gov.au](mailto:dayne.thompson@ret.gov.au). Submissions after this date may not be considered.

Projects in any of the following stages are encouraged to apply:

- Concept,
- Pre - Feasibility,
- Feasibility,
- Front End Engineering Design,
- Procurement Strategy,
- Specification and Tender Development,
- Detailed Engineering,
- Commissioning,
- Post Commissioning / Optimisation.

The Department understands that some corporations may have different design stages compared to the stages outlines above. The design stages of proposed trial projects need to broadly align with the three phases of the trial process.

Procurement Strategy, Spec and Tender Development, and Detailed Engineering may be trailed as a simulated project to reduce the risk of project delays. Submissions should indicate if a simulated project method is preferred. Electricity Generators and other large EPCM projects are encouraged to apply.

The Department is interested in trialling corporations from a range of sectors where there is expected to be a significant amount of development in coming years, and corporations of various sizes. Some examples of desirable corporate and project attributes are:

- Coal, iron ore, oil and gas, generation, manufacturing or any other sector expected to be developed in coming years
- Smaller corporation with less internal processes
- Larger corporation with ridged internal processes





- Corporations with dynamic processes

## 2.5 Requirements for Participation

Expressions of interest will be judged against the criteria outlined below and an interview with the Department may be requested. Successful corporations will be required to enter into agreements with the Department to define the responsibilities of the Corporation and of the Department and its contractors.

### Selection Criteria

To be considered for the trial, applicants must include a brief description of the new developments or expansion projects proposed for the trial and:

- Be willing to publicly release the benefits of the trial, in the form of a percentage change in total energy use and estimated net costs and benefits to the Department for public release. (How the percentage improvement is determined will form part of the trial)
- Meet the proposed thresholds for the EEO program extension:
  - Have a proposed new development or expansion project which will use 0.5PJ or more per annum when fully operational; or
  - Have two or more projects in any design phase which when operating will use 0.25PJ or more per annum; or
  - Have multiple projects that replicate a single design and once operating will individually use 0.1PJ or more per annum and combined use 0.5PJ or more per annum.
- Make available qualified staff working on the stage of design chosen for the trial, and nominate suitable staff or position titles
- Be willing to share information related to the design of the project with the Department and trial consultants on a confidential basis.
- Be willing to allow onsite access (design offices, construction sites or otherwise) to the Department and consultants working for the Department
- Be prepared to share detailed technical information with the Department and consultants working for the Department, and to release relevant trial outputs publicly, subject to commercial confidentiality considerations.

### Prioritisation Criteria

In the event that numerous applicants meet the selection criteria, the following additional criteria would be considered in choosing final participants:

- Proposed Design Stage, as the Department will be aiming to cover all 3 phases.
- Industry Sectors will need to represent a suitable cross-section of potential participants
- Suitability of proposed timing.





## 2.6 *Contacts*

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**ATTACHMENT A**

**Proposed Assessment Framework**

The proposed new developments and expansion projects assessment framework was developed in consultation with industry over 2011/12. This is intended to be a starting point for industry trials and will be further developed based on trial outcomes. The intent of this framework will be incorporated into corporations existing processes as part of the trials. The proposed framework is seen in Table 1 below:

**Table 1 - EEO Key Elements**

<b>Key Element</b>
<p><b>Key Element 1 - Leadership</b></p> <p>Intent:</p> <p>Visible leadership and commitment from senior management provides clear direction and purpose to the assessment throughout the design stage through to commercial operation by:</p> <ul style="list-style-type: none"> <li>• setting and communicating feasible and potential stretch energy performance objectives for the development or expansion once operational</li> <li>• ensuring that assessment objectives are contributing towards business priorities.</li> <li>• setting KPI's and giving recognition; for achievement of energy performance objectives and internal processes relating to energy productivity improvements.</li> </ul> <p>Senior management support, motivate and value the efforts of staff and other stakeholders (e.g. project managers, design house, equipment suppliers, engineering procurement construction management (EPCM), operation staff etc) involved in the identification and implementation of energy efficiency opportunities.</p>
<p><b>Key Element 2 – People</b></p> <p>Intent:</p> <p>Skilled and knowledgeable people, and people with direct and indirect influence on the operational energy</p>





use of the development, are involved in the assessment to:

- utilise knowledge of existing operations;
- effectively analyse energy and process data (design or otherwise), and factors impacting on energy use;
- identify and evaluate opportunities to reduce energy use or increase productivity relative to energy consumption;
- provide fresh perspectives, and
- make the business case for identified energy efficiency options / aspects.

The process is likely to involve people from operations of similar sites or industries conducting similar processes, the design and commissioning teams, the operations teams, equipment suppliers and contractors involved in design and construction.

Responsibilities and accountabilities including KPI's are suitably allocated and team diversity is encouraged.

### **Key Element 3 – Information, data and analysis**

Intent:

Sufficient design and / or operational data (could include production data and aspects that impact on energy consumption), in suitable forms, is used to estimate / model and understand future energy use, identify and quantify energy saving options, and provisions are made to track performance and outcomes during operation, including appropriate provisions for metering to enable ongoing performance tracking and improvement.

Data accuracy should be appropriate to the stage of the design and available data sources. The accuracy should be noted and the accuracy should be considered when deciding the suitability of the model to make the right project choices.

Predicted and measured energy data is analysed from different perspectives to understand relationships between activity and consumption, and identify energy efficient design features. A site wide analysis, connecting and communicating data between different operations, systems, sections of the site and between other sites where appropriate, should be investigated.

Processes should be put in place to ensure adequate transfer of information, data and potential energy





savings initiatives between different design gates through to commercial operation.

**Key element 4 – Design aspect identification and evaluation**

Intent:

An effective process is undertaken to identify a large range of potential cost-effective energy efficient design aspects. This process should cover all stages of the design, through to commercial operation and is broad, open-minded and encourages innovation. Sufficient time should be taken for the design team to understand and review the range of perspectives provided by relevant people indicated in Key Element 2 and data from Key Element 3 to cooperatively identify and evaluate a range of ideas.

The process identifies a documented list of ideas of potential areas for energy savings and productivity improvements relative to energy use. Relevant ideas are analysed to a sufficient level appropriate to the stage of design. The process should allow design aspects that are relevant and require a more detailed investigation to transfer across design stages, be revisited as the design develops or incorporated into the assessment in differing design stages.

A whole of business / whole of site evaluation is undertaken to enable decision-makers to make informed business decisions about energy efficiency design features.

**Key element 5 – Decision making**

Intent:

Management responsible for resource allocation for the development makes informed energy efficiency decisions based on investment quality information.

Mechanisms for reviewing, monitoring and reporting on outcomes are established to learn from experience and enable public reporting.

**Key element 6 – Communicating outcomes**

Intent:





Senior management responsible for the development and the final asset are aware of the outcomes of the assessment in a strategic business context (including the corporation's risk management, corporate social responsibility, major investment decisions and energy productivity).

The board reviews and notes the content for the corporation's public report in the context of relevant business information.

Recognition and awareness within the corporation of the benefits of improved energy efficiency and the outcomes achieved by the assessment, including recognition and awareness of people who contributed to its success.

Communicate what was achieved in relation to the goals that were set to the design teams, relevant stakeholders, government and senior management responsible for the development.

**Commercial operation** is likely to be when:

- (a) minor operational issues have been finalised; and
- (b) the operation of the new development or expansion has been optimised.







## ATTACHMENT B

### Proposed Reporting Regime

The proposed new developments and expansion projects Reporting Structure was developed in consultation with industry over 2011/12. This reporting structure will be tested and optimised based on input from trial participants. The proposed reporting structure will be the starting point for further development and is detailed below:

### Public Reporting

#### Timing of a Public Report

The reporting period should:

- I. commence from the start of the financial year in which the controlling corporation first triggered an obligation to assess the new development or expansion; and
- II. end when the new development or expansion reaches **commercial operation**

The intent is that corporations would only be required to report **publicly once** for the design, from initial concept through to commercial operation for **each** new development or expansion and that this would occur only when the new development or expansion has reached commercial operation. The report could therefore communicate the outcome of the entire assessment process.

The report should be released 6 months after the financial year in which the new development or expansion reached commercial operation and should align with existing EEO or other public reports where possible.

#### **Examples**

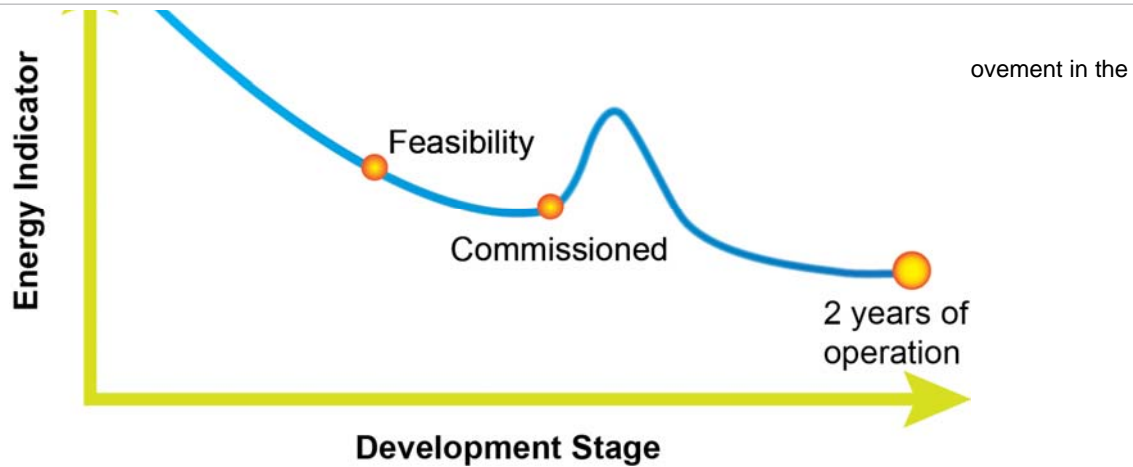
- An existing EEO corporation has a new site that was required to undertake an assessment through its design and development phase and reached commercial operation on 31 October 2015. The corporation would be required to report publicly on the outcomes of this assessment by 31 December 2016. It is anticipated that this information would be included in its normal public report.
- A corporation that was required to register for the EEO program due to a new development that reached commercial operation on 1 June 2014. It has not released an EEO public report previously but is required to do so by 31 December 2014. In this instance the public report relates only to the assessment on the new development as the company does not have any other sites to assess.

#### Information Required in a Public Report

This should include:

- I. A description of how the assessment was undertaken
- II. a) A graphical description of how anticipated and actual energy use has trended from the first design gate through to commercial operation. This graphical description should consist of a percentage change of the energy indicator where actual data is commercially sensitive, detailed under or;  
  
b) A graphical description of the savings found at each design stage. This graphical description should consist of a percentage change of the energy indicator where actual data is commercially sensitive.
- III. a description of how and why the energy use / energy efficiency indicator changed between design gates, and up to commercial operation
- IV. A description of what leading indicators were set, and what was achieved





An example of a significant opportunity at the design stage may be building a decline shaft in an underground mine that is 5m x 5m rather than 4m x 5m, which will cost more in capital expenditure but will pay back in X years due to a reduction in ventilation costs.

An example of the leading indicators might be - a goal was to train 5 members in the design team up in energy efficient design practices, the result was 3 were trained at feasibility and that 3 at detailed design which meant the indicator was exceeded.

## Secretary Reporting (Government Reports)

### Timing of the Government Reports

The intent is that corporations will be required to report to the **Department twice** for each new development or expansion, **unless** the project is being developed quickly. The first Departmental report will be due after the particular project has progressed into financial close, or after the project has reached commercial operation if the project is progressing quickly.

The report due at financial close will only be required if less than 2 years has passed between the submission of the assessment plan relating to the new development or expansion project and the project entering financial close.

The timing of the second Departmental report will be aligned with the public report and will be due once the particular new development or expansion has reached commercial operation. The details are seen below:

The stage financial close is inline with the Victorian Department of Treasury & Finance's Gateway Review Process as of 2012. Corporations should consider how this stage relates to the corporations existing design gates and identify within the assessment plan a project stage similar to financial close which aligns with the corporations existing design processes and will act as the point where a report should be developed. This stage should be noted in the Assessment Plan.

It is intended that the first Departmental report for a particular new development or expansion should be provided to the Secretary within 6 months of that new development or expansion progressing into financial close stage.





If the report is to be prepared after commercial operation then the report can be supplied with the next government report.

Information required in a Secretary's Report

It is intended that reports to the Department that relate to the assessment of a new development or expansion primarily describe how the projected and actual energy use of the new development or expansion has evolved from the design process through to start up of the process and into commercial operation where the new development or expansion has reached a steady state in terms of energy use.

Secretary reports should contain the following information:

- I. predicted future energy use and an energy efficiency indicator at each design gate;
- II. actual energy use and an energy efficiency indicator for the new development or expansion at start up through to commercial operation;
- III. the energy use described in (I) and (II) broken down by energy type;
- IV. a description of how and why the energy use / energy efficiency indicator changed between design gates, start up and commercial operation; and
- V. An outline of design features and / or technology choices which contributed to the majority of the energy savings.

