



# PUBLIC REPORT TEMPLATE

## EXPLANATORY DOCUMENT

### Introduction

This document explains how to complete the Energy Efficiency Opportunities (EEO) Public Report Template, a report on the outcomes and business response of your energy efficiency opportunities assessments. We have provided examples to illustrate what mandatory information is required, and how we would prefer you to report voluntary information. If you are still unsure, please refer to the [Energy Efficiency Opportunities Industry Guidelines](#) or contact your Client Liaison Officer for assistance.

This document also explains why the Department has redeveloped the Public Report template and what changes we have made.

Please note, that it is not compulsory for you to use the Public Report template. As long as Corporate Groups report all the information required by the [Energy Efficiency Opportunities Act 2006](#) (the Act) and [Energy Efficiency Opportunities Regulations 2006](#) (the Regulations), you can report in whatever format you choose. The Department encourages you to use this template to assist in drafting the report and obtaining feedback from the Department, and then integrating the contents with your annual, sustainability or other suitable report.

### Why have changes been made?

We changed the Public Report template for three main reasons. These are:

- because some Corporate Groups are reporting for the second time, we had to change the template to incorporate cumulative data for second and subsequent Public Reports;
- to respond to requests and feedback from Program participants; and
- experience using the previous template.

### What changes have been made?

We have added a significant amount of additional explanatory notes and examples for completing every section of the template. These notes also explain what changes we made and why.

### The new template

The new Public Report template is located on pages 16-25 of this document. Explanatory notes for completing each section are on pages 2-15.

## HOW TO COMPLETE THE PUBLIC REPORT TEMPLATE

### Controlling Corporation

Insert the name of the Controlling Corporation exactly as it is registered with the EEO Program.

Alternatively, enter the name of the part of the Corporate Group authorised to report separately from the Controlling Corporation. The Controlling Corporation was required to seek approval to do this at the time of submitting its Assessment and Reporting Schedule.

Reference: [Sections 22A and 22B of the Energy Efficiency Opportunities Act 2006 \(the Act\)](#)

### Period to which the report relates

The following explanation has been included to assist Corporate Groups to align their EEO public reporting period with their reporting period under the *National Greenhouse Energy and Reporting Act 2007* (NGER).

#### **2005-06 trigger-year participants**

For the majority of EEO participants, the period to which the second Public Report relates will be 1.7.2008 to 30.6.2009, the 12 month period following the end date of the first Public Report period. This aligns with the financial year reporting requirements of NGER.

[Transitional EEO Regulation 7.1\(3\)](#) allows corporate groups whose Public Report is for some other period to elect to have its reporting period end at the completion of the financial year. This may mean that the reporting period will be less than a 12 month period for the report in which the transition is made.

#### Example 1 – Transitioning Corporation

<b>Start</b>	<input type="text" value="1 October 2008"/>	<b>End</b>	<input type="text" value="30 June 2009"/>
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Corporate groups that transition should still report:

- energy use for the full 12 month period of the full financial year;
- details of any assessments concluded during the period; and
- updates on previous assessments.

Subsequent reporting periods would then be the 12 months of following financial years.

Aligning to the financial year will allow Corporate Groups six months from the end of the reporting period to;

- finalise data,
- draft the Public Report;
- obtain feedback from the Department of Resources, Energy and Tourism; and
- have the Board sign off the report prior to its publication no later than 31 December in the same year the reporting period ended.

### **2006-07 trigger-year participants**

In order to align with NGERs, your first Public Report should cover the first two years of participation in the Program ie 1.7.2007 to 30.6.2009.

### **All 2005-06 & 2006-07 participants**

Your EEO Public Report must be published no later than 31 December 2009 and annually thereafter. Your report to NGER must be submitted by 31 October 2009 and each year thereafter.

## **Part 1 – Information on assessments completed to date**

### **Table 1.1 – Description of the way in which Corporate Group has carried out its assessments**

*Sub-section 22(3)(a) of the Act* requires Corporate Groups to provide a description of how you have carried out the proposal in your approved Assessment and Reporting Schedule (ARS) for assessing opportunities to improve the energy efficiency of the group. This would typically include:

- a summary of the new assessments completed during the reporting period;
- how the evaluation of assessments from the previous reporting period have been progressed; and
- what actions have been taken to fulfil the Key Elements of the Assessment Framework as detailed in Schedule 7 of the Regulations.

Some Corporate Groups have also used this table to provide details of how the assessment framework and reporting requirements of the Program have integrated with the existing governance arrangements for the Group.

*Example 2 – How have we implemented our approved Assessment & Reporting Schedule?*

#### **Table 1.1 – Description of the way in which the Corporate Group (or part of it) has carried out its assessments**

Example *Corporate Group* has continued to undertake planned assessments over the reporting period. Assessments for *Entity A* and *Entity B* were completed and results are reported in Part 2 of this report. The assessment processes established and tested in the previous reporting period were revised in the light of experience. The result was an improvement to the identification and investigation of key opportunities areas to maximise the use of scarce resources.

Example *Corporate Group* have also progressed the assessment of opportunities identified at *Entity D* in the previous reporting period and the outcomes are reported in Part 2B of this report. Installation of sub-metering on key energy use processes enabled the completion of an energy mass balance for 80% of the site and this identified additional opportunities to save energy.

The assessment of the main production process conducted in the first reporting period has resulted in the optimisation of existing boiler operations, including start up and shut down, through changes to operating procedures and training. In addition, the progressing of this project has resulted in energy efficiency considerations being better integrated with the range of existing business improvement and approval processes.

Progress on the implementation of Example *Corporate Group's* assessments is now reported quarterly to Board meetings.



In addition, [Paragraph 10 of Schedule 4 of the EEO Regulations](#) requires Corporate Groups to mention changes to the Group during the reporting period caused by an event, for example;

- the sale or acquisition of entities effecting the assessments proposed to be undertaking; and/or
- significant changes in production levels; and/or
- significant changes to energy prices (leading to a review of opportunities previously evaluated); and/or
- significant changes in energy use.

This information should be included in this Table 1.1 also.

Example 3 – Changes in the Corporate Group

**Table 1.1 – Description of the way in which the Corporate Group (or part of it) has carried out its assessments**

Example *Corporate Group* has continued to undertake planned assessments over the reporting period. Assessments for *Entity A* and *Entity B* were completed and results are reported in Part 2A of this report. The assessment processes established and tested in the previous reporting period were revised in the light of experience. The result was an improvement to the identification of key opportunities areas to maximise the use of scarce resources.

Example *Corporate Group* have also progressed the assessment of opportunities identified at *Entity D* in the previous reporting period and the outcomes are reported in Part 2B of this report. Improvements in metering and the completion of an energy mass balance on key processes for 80% of the site identified additional opportunities to save energy.

The assessment of the main production process conducted in the first reporting period has resulted in the optimisation of existing boiler operations, including start up and shut down, through changes to operating procedures and training. In addition, the progressing of this project has resulted in energy efficiency considerations being better integrated with the range of existing business improvement and approval processes.

Progress on the implementation of Example *Corporate Group's* assessments is now reported quarterly to Board meetings.

**During the reporting period Example *Corporate Group* ceased production at *Entity C* in March 2009 and sold the site. This sale was foreshadowed in the Assessment & Reporting Schedule and no assessment was undertaken.**

**The world economic downturn has led to reduced demand and a 10% reduction in production levels across the Corporate Group as a result. A reassessment of the energy use and opportunities identified for Entity D led resulted in a reduction in energy use and energy savings for that entity.**

**Conversely, the increased price of electricity and natural gas in the last 12 months has resulted in the review of two opportunities formerly assessed as not to be implemented. One now has budget allocation for further investigation.**

## Table 1.2 – Energy use assessed

Changes have been made to this table. In the previous template this table directed Corporate Groups to report;

- energy use of the entity assessed;
- express that energy use as a percentage of the Corporate Group's total energy use in the current reporting period; and
- to report the accuracy of the energy use.

The period over which an assessment of the entity was undertaken was not included in the template. Table 1.2 has been amended to include this information. There was also confusion about what energy use should be entered and this has been made clear (the energy use is that in the current reporting period). The table has also been split into two tables to accommodate the reporting of all the information required.

Corporate Group's should use this table to report the energy use of all entities that have been assessed up to the end of the current reporting period. The energy use reported should be the **energy use in the current reporting period**. The total of this assessed energy use should also be expressed as a percentage of the Corporate Group's total energy use in the Current reporting period. This should be calculated as follows:

- total energy use in the current reporting period of all the entities assessed up to the end of the current reporting period, divided by the total energy of the corporate group in the current reporting period, multiplied by 100.

References: [Paragraph 1\(b\) of Schedule 4 of the EEO Regulations](#).

### *Example 4 – Energy use of assessed entities*

<b>Table 1.2 – Energy use assessed</b>		
<b>Group member and/or business unit and/or key activity and/or site that has had an assessment completed by the end of this reporting period.</b>	<b>Period over which assessment was undertaken<sup>1</sup></b>	<b>Energy use per annum in GJ<sup>2</sup> in the current reporting year</b>
Entity D	August 2007 to April 2008	250,000
Entity A	May 2008 to November 2008	400,000
Entity B	May 2008 to March 2009	125 650
<b>Total energy assessed</b>		<b>775,000</b>
<b>Total energy use of the group in the current reporting year</b>		<b>1,200,000</b>
<b>Total energy assessed expressed as a percentage of total current energy use</b>		<b>64.6%</b>

1. This should be the start and finish date (month and year) for the assessment (planned assessment dates were nominated in Table 3.1 of the approved ARS).
2. Energy Bandwidth may only be used if approved in the Assessment and Reporting Schedule.



**Table 1.3 – Accuracy of energy use data**

This is a new table that has been split off from Table 1.2 (see explanation on the previous page). If the energy use data provided in Parts 2A & 2B is not within the accuracy range  $\pm 5\%$ , the Corporate Group should use this table to indicate the level of accuracy achieved and the reasons why  $\pm 5\%$  cannot be met.

*Reference: Paragraph 5(a) & (b) of Schedule 4 of the EEO Regulations*

*Example 5 – Accuracy of energy use*

<b>Table 1.3 – Accuracy of energy use data</b>		
<b>Entity</b>	<b>% achieved</b>	<b>Reasons for not achieving data accuracy to within <math>\pm 5\%</math></b>
Entity B	$\pm 10\%$	The primary energy used in the production process at this entity is steam. Currently there is no technology available to measure energy use at the required accuracy level for this production process. The site engineer is working with the manufacturer to develop a more accurate metering system.

Note: Energy use data accuracy outside  $\pm 5\%$  requires approval from the Department. Please contact your Client Liaison Officer to discuss if prior approval was not sought or given as part of the Corporate Group's approved ARS.

## Part 2 – Energy Efficiency Opportunities that have been identified and evaluated

Part 2 of the Public Report is used to provide data on energy efficiency opportunities that have been identified and evaluated as part of the assessment process, and the Corporate Group's business responses to those opportunities. This part of the Public Report template has had significant changes made from the previous template.

Additional tables to report opportunities have been added for two reasons. The first is that Corporate Groups are required to provide an update on the evaluation and business responses to the opportunities identified during previous reporting periods (note that this is not applicable to 2006-07 trigger-year participants for the 2009 report).

The second is that many Corporate Groups made formal and informal suggestions to the EEO Program regarding the evaluation and reporting of opportunities identified in assessments. Many indicated that they;

- were not able to evaluate the large numbers of opportunities identified to an accuracy of  $\pm 30\%$  in the timeframe available to them, but that they still wanted to report on these opportunities; and/or
- have a number of opportunities that have payback periods of greater than 4-years that are going to be implemented - again corporate groups wanted to report these opportunities; and/or
- some opportunities were implemented prior to being evaluated to an accuracy of  $\pm 30\%$  or better.

For these reasons the opportunities table (Table 1.3) in the former template has been split into separate tables;

- one for new assessments completed during the reporting period;
- another for updating the evaluation and business response to assessments completed in previous reporting periods.

The table for reporting new assessments has been further split into;

- reporting opportunities assessed to an accuracy of  $\pm 30\%$  or better; and
- those with an accuracy level of less than  $\pm 30\%$ .

All tables now also provide for reporting opportunities with a payback period of greater than 4 years.

In all tables the business response categories should always add to the total opportunities identified. eg. the number of opportunities under investigation, to be implemented, implementation commenced, implemented or not to be implemented should always total to the number of opportunities identified.

The same applies for the estimated energy savings by payback period. Each estimated saving against a business response should match the total estimated savings for each payback period.

The total estimated saving for each payback period of a business response should also match the total estimated energy savings for that business response.

In addition to reporting the current energy use of an assessed entity in Table 1.2, this energy use is also to be included with the tables in Parts 2A & 2B of this template to put the opportunities identified into context.

## Part 2A - New assessments completed during the reporting period

### Table 2.1 – Opportunities assessed to an accuracy of $\pm 30\%$ or better.

It is compulsory to complete a separate table for each group member, business unit, or key activity that has had an assessment completed during the reporting period. Corporate Groups provided an assessment and reporting structure in their ARS and, where possible, reporting should be consistent with that structure. Sites over 0.5 PJ must be assessed at some point in the five-year cycle and providing opportunities data separately for sites over 0.5 PJ would be appreciated.

*Reference: paragraphs 3-6 of Schedule 4, and Schedule 6, of the Regulations.*

*Example 6 – New assessments completed during the reporting period to an accuracy of  $\pm 30\%$  or better.*

**Name of Group member or business unit or key activity or site:** Entity A

Energy use of the entity during the current reporting period

425,000	GJ
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Table 2.1 – Opportunities assessed to an accuracy of $\pm 30\%$ or better						
Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)			Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – $\leq$ 4 years	> 4 years	
Outcomes of assessment	Total Identified	10	25,000	40,000	nil	65,000
Business Response	Under Investigation	5	nil	40,000	nil	40,000
	To be Implemented	nil	nil	nil	nil	nil
	Implementation Commenced	2	8,500	nil	nil	8,500
	Implemented	2	15,000	nil	nil	15,000
	Not to be Implemented	1	1,500	nil	nil	1,500

Please note that Corporate Groups **are not required** to report opportunities with a payback greater than 4 years. As indicated on page 7, this facility has been included at the request of a number of Corporate Groups.

All opportunities entered in this table should have been assessed to an accuracy of  $\pm 30\%$  or better.



**Table 2.2 – Opportunities assessed to an accuracy of less than ±30%.**

As a general rule, it is **not** compulsory to report on savings assessed to an accuracy of less than ±30%. However, where Corporate Groups have not been able to evaluate large numbers of opportunities to an accuracy of ±30% or better in the timeframe available to them (rather than simply deciding not to proceed with the evaluation of the opportunity) they should report on these opportunities in this table.

Strictly speaking, Corporate Groups are required to evaluate all identified opportunities to an accuracy of ±30% or better. Under these circumstances, the EEO Program expects that over time Corporate Groups will transfer opportunities with an accuracy of less than ±30% into the “±30% or better” category as they continue to evaluate and implement opportunities. These changes should then be reflected in Part 2B of subsequent Public Reports.

*Example 7 – New assessments completed during the reporting period to an accuracy of less than ±30%.*

**Name of Group member or business unit or key activity or site:** Entity A

Energy use of the entity during the current reporting period 

425,000	GJ
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<b>Table 2.2 - Opportunities assessed to an accuracy of less than ±30%</b>						
<b>Status of opportunities identified</b>		<b>Number of opportunities</b>	<b>Estimated energy savings per annum by payback period (GJ)</b>			<b>Total estimated energy savings per annum (GJ)</b>
			<b>0 – &lt; 2 years</b>	<b>2 – ≤ 4 years</b>	<b>&gt; 4 years</b>	
Outcomes of assessment	Total Identified	14	nil	30,000	10,000	40,000
Business Response	Under Investigation	13	nil	30,000	nil	10,000
	To be Implemented	nil	nil	nil	nil	nil
	Implementation Commenced	nil	nil	nil	nil	nil
	Implemented	1	nil	nil	10,000	10,000
	Not to be Implemented	nil	nil	nil	nil	nil

For advice and guidance on the accuracy measurement of cogeneration and/or small opportunities that are implemented without first assessing to ±30% or better, please consult the Energy Savings Measurement Guide (version 2) and/or Frequently Asked Questions (Reporting).

## Part 2B - Update of assessments undertaken in previous reporting periods

### Table 2.3 - Update of assessments originally reported in previous reporting periods

Please note that it is compulsory to update opportunities data reported in previous reports.

Corporate Groups **are not required** however, to report opportunities with a payback greater than 4 years. As indicated on page 7, this facility has been included at the request of a number of Corporate Groups.

*Reference: Paragraph 10 of Schedule 4 of the EEO Regulations.*

Updated data may reflect changes to energy use (effecting estimates of savings) or energy prices, more detailed investigation of opportunities leading to changes to savings, progress in the business responses (eg decisions made to implement opportunities previously under investigation etc) or a decision not to implement.

In the example below, the originally reported outcomes are (in brackets) underneath the updated evaluation outcomes which are **bolded**. Please note you not required to complete the table with both sets of data – we did this here to demonstrate the changes that may occur. You may however decide to report in this way to identify where changes have occurred.

*Example 8 – Updated assessments completed in a previous reporting period to an accuracy of ±30% or better.*

**Name of Group member or business unit or key activity or site:** Entity D

Energy use of the entity during the current reporting period

225,000	GJ
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**Table 2.3 - Opportunities assessed to an accuracy of ±30% or better**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)			Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤ 4 years	> 4 years	
Outcomes of assessment*	Total Identified	<b>13</b> (10)	<b>31,000</b> (25,000)	<b>42,000</b> (40,000)	<b>nil</b> (nil)	<b>73,000</b> (65,000)
	Business Response*	Under Investigation	<b>2</b> (5)	<b>6,000</b> (nil)	<b>nil</b> (40,000)	<b>nil</b> (nil)
	To be Implemented	<b>2</b> (1)	<b>nil</b> (1,500)	<b>10,000</b> (nil)	<b>nil</b> (nil)	<b>10,000</b> (1,500)
	Implementation Commenced	<b>nil</b> (2)	<b>nil</b> (8,500)	<b>nil</b> (nil)	<b>nil</b> (nil)	<b>nil</b> (8,500)
	Implemented	<b>8</b> (2)	<b>25,000</b> (15,000)	<b>30,000</b> (nil)	<b>nil</b> (nil)	<b>55,000</b> (15,000)
	Not to be Implemented	<b>1</b> (nil)	<b>nil</b> (nil)	<b>2,000</b> (nil)	<b>nil</b> (nil)	<b>2,000</b> (nil)

**Table 2.3 (continued) - Reasons for changes to data**

Corporate Groups are encouraged to report the rationale behind changes to the originally reported opportunities. For example:

- changes in energy use relative to the year in which the assessment was completed;
- improved metering;
- completion of an energy mass balance;
- greater detail

Opportunities will tend towards the implemented or not to be implemented business responses as time passes and opportunities are progressed.

**Table 2.4 - Update of assessments originally reported in previous reporting periods**

The EEO Program expects that over time Corporate Groups will transfer opportunities with an accuracy of less than  $\pm 30\%$  into the “ $\pm 30\%$  or better” category as they continue to evaluate opportunities. However if some opportunities remain assessed to an accuracy of less than  $\pm 30\%$ , Table 2.4 should be used.

*Example 9 – Updated assessments completed in a previous reporting period to an accuracy of less than  $\pm 30\%$*

**Name of Group member or business unit or key activity or site:** Entity D

Energy use of the entity during the current reporting period

	GJ
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**Table 2.4 - Opportunities assessed to an accuracy of less than  $\pm 30\%$**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)			Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤ 4 years	> 4 years	
Outcomes of assessment	Total Identified	1 (2)	nil (6,000)	nil (nil)	4,000 (4,000)	4,000 (10,000)
	Business Response					
	Under Investigation	1 (2)	nil (6,000)	nil (nil)	4,000 (4,000)	4,000 (10,000)
	To be Implemented					
	Implementation Commenced					
	Implemented					
	Not to be Implemented					

## Part 2C - Details of at least three significant opportunities found through EEO assessments

### Table 2.5 - Three significant opportunities

Corporate Groups may wish to highlight new opportunities from assessments done during the reporting period or update significant opportunities from previous reports where substantial change has occurred.

There is no upper limit on the number of opportunities you can include in this section of the report;

- in the past, a number of Corporate Groups have reported more than three significant opportunities, and a number of the better reports have contained a significant level of detail such as providing three opportunities for each site assessed;
- this detail provides the Public with a good insight into the way in which the Corporate Group is approaching energy efficiency and deciding its business response to opportunities identified.

If there are less than three significant opportunities, details must be provided of those identified.

If no significant opportunities have been identified in the assessment(s), a statement to that effect must be made.

*Reference: Paragraph 7 of Schedule 4 of the EEO Regulations*

*Example 10 – Three significant opportunities*

**Table 2.5 – Description of 3 significant opportunities**

**Opportunity 1**

The Example plant accepts production from gas and oil fields through approximately 5,600 kilometres of pipelines and flow lines. The facility also incorporates underground storage for processed sales gas and ethane. Natural gas liquids are recovered via a refrigeration process and sent through a pipeline network to sales points.

Example plant was designed for one export compressor to service each of the two liquids recovery plant (LRP) trains. Assessment of the plant identified that compression could be met within the capacity of a single residue compressor.

Before this project began, each compressor was required to run at a minimum flow constraint, effectively doubling the throughput of the compressors by recycling gas through the units.

The project, costing about \$2 million to implement, enables sales gas from both LRP trains to be compressed in a single residue compressor, saving about 1,000,000 GJ of gas per year.

Since the implementation of the project on 21 October 2008, a noticeable improvement to the fuel gas consumption has been realised, with daily average fuel consumption reduced by about 4,000 GJ. These initial savings will be further increased by the replacement of anti-surge recycle valves, scheduled to occur late in 2008.

Additional benefits include significant maintenance savings and allowing for the mothballing of a third backup compressor.



*Example 10 – Three significant opportunities (continued)*

**Table 2.5 – Description of 3 significant opportunities**

**Opportunity 2**

This example plant produces prefabricated metal brackets and other products.

Soot blowers are efficient in removing fouling that can build up in a furnace on a daily basis. Currently the soot blowers on one of Example’s main furnaces require frequent maintenance. These reliability issues allow fouling to build up in the furnace tubes reducing furnace energy efficiency.

To increase the soot blower’s availability for operation, new soot blowers have been designed, and are currently being installed. Regular removal of tube fouling will reduce external fouling building up on the tubes, resulting in increased heat recovery, reduced fuel gas consumption in the furnace, reduced CO<sub>2</sub> emissions and increased process throughput. The annual benefits from this project are estimated at 4,450 tonnes of reduced CO<sub>2</sub> emissions, 79,366 GJ and \$776,000 of energy savings with a payback 1.96 years.

**Opportunity 3**

**Replace primary membrane based on performance monitoring**

This opportunity is identified at the Example gas processing site. Raw gas from the gas well contains a mixture of CO<sub>2</sub> and methane. The gas processing plant uses fabric membranes to strip away the CO<sub>2</sub> whilst leaving the methane, which is the primary constituent of natural gas.

The efficiency of the membranes degrades over time, progressively allowing more methane to escape with the separated CO<sub>2</sub>. This results in reduced productivity of the plant as the “escaped” methane is flared, rather than made available for sale. Improved membrane performance allows a greater percentage of the methane to be retained for sale, improving the overall efficiency of the process.

The schedule of replacing the primary membranes has historically been planned on a periodical basis rather than a performance basis. It is estimated that using a performance based replacement approach will reduce energy consumption by 18 TJ per year, increase plant output by approximately 400 TJ and result in savings of approximately 20,000 tonnes of CO<sub>2</sub>-e per year with a project payback estimated at 1.2 years.

*Please note that the above examples are based on real examples reported by Program participants. Changes may have been made.*

### Part 3 - Voluntary contextual information

We have varied this part of the template to include a set of tables to make it easier for Corporate Groups to provide voluntary information. While corporate groups are not required to provide any information in this section, providing it, in combination with Table 1.1, gives the Public with an integrated picture of what the Corporate Group has been doing in relation to energy efficiency and demonstrates a committed approach to identifying energy efficiency opportunities.

It may be appropriate to combine information in this section with relevant information provided in other parts of the Public Report.

#### Tables 3.1-3.4 – Voluntary information

Reporting corporations may supply additional information that provides more context to the public report. Such information may include:

- Contextual information about the corporation's energy use, management of energy and the impact of EEO on the Corporate Group (*use Table 3.1*);
- Energy use expressed as greenhouse gas emissions (*use Table 3.2*);
- Energy use and energy efficiency opportunities presented in dollars (*use Table 3.3*); and
- Changes in total energy use/energy use indicator broken down to include causes of increase or decrease (*use Table 3.4*).

**Table 3.1 – Contextual Information**

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**Table 3.2 – Energy use expressed in Greenhouse Gas emissions and as an energy use indicator**

Period of energy use _____ to _____			
Name of group member/ business unit/ key activity/site	Energy use pa (GJ)	Energy use pa (GGE)	Energy use as an indicator*
ABC subsidiary	200 000 GJ	tonnes CO2-e	0.065GJ per square metre of floor space
<b>Total</b>			



**Table 3.3 - Opportunities assessed to an accuracy of  $\pm 30\%$  or better (\$ value)**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (\$)			Total estimated energy savings per annum (\$)
			0 – < 2 years	2 – ≤ 4 years	> 4 years	
Outcomes of assessment*	Total Identified					
Business Response*	Under Investigation					
	To be Implemented					
	Implementation Commenced					
	Implemented					
	Not to be Implemented					

**Table 3.4 – Changes in energy use as an indicator**

Name of group member/ business unit/ key activity/site	Current energy use as an indicator	Previous energy use as an indicator	Reasons for change
<b>Total</b>			

## Part 4 - Declaration

The declaration is a **compulsory** part of the Public Report.

The actual title/position of the signatory must be stated in the declaration on the Report.

The declaration must be signed by the Chair of the Board of Directors or the Chief Executive Officer or the Managing Director or an equivalent position.

What constitutes an equivalent position?

- where a corporate group has a Chair of the Board, CEO, or Managing Director, one of these people **must** make the declaration;
- where a corporate group does not have any of these three positions, there is no set list of positions that would meet the description of "equivalent officer", as this may differ for each corporation;
- an equivalent officer would need to be:
  - a senior person in the organisation, such that their role could be considered equivalent to that of the chair of the board, CEO, or managing director;
  - the position of the signatory should demonstrate corporate engagement at the highest level and someone able to declare that the Board of Directors has reviewed and noted the report;
  - this may include, for example, a Vice-Chancellor of a university, or a Company Secretary within a corporation who has authority to sign off on documents on behalf of the Head of the Corporation.

*Reference: Paragraph 8 of Schedule 4 of the Regulations and paragraph 22(4)(c) of the Act*

*Example 11 – Person making the declaration*

**Table 4.1 – Declaration**

Table 4.1 - Declaration of accuracy and compliance	
<p>The information included in this report has been reviewed and noted by the board of directors and is to the best of my knowledge, correct and in accordance with the <i>Energy Efficiency Opportunities Act 2006</i> and <i>Energy Efficiency Opportunities Regulations 2006</i>.</p>	Signed
	<b>Chief Executive Officer</b>



## PUBLIC REPORT TEMPLATE

### Controlling Corporation

Regional Express Holdings Ltd

### Period to which this report relates

Start 1<sup>st</sup> July 2008

End 30<sup>th</sup> June 2009

### Part 1 – Information on assessments completed to date

**Table 1.1 – Description of the way in which the Corporate Group (or part of it) has carried out its assessments**

The group identified 4 opportunities in the first reporting period (1<sup>st</sup> July 2007-30<sup>th</sup> June 2008). These 4 opportunities are in various stages of completion :

- a) Reduction of aircraft weight – energy savings reported. The group identified further opportunities within this category in the second reporting period.
- b) Installing winglets to reduce drag – energy savings identified. No savings achieved to date. With an anticipated investment cost of AUD 8 million, recent fuel price drop makes this project payback greater than 4 yrs. Additionally, Saab has not been responsive to the idea.
- c) Request for reduction in track miles from Air Services Australia – energy savings identified. Discussion is on-going with Air Services. No savings achieved to date. However, initiative is still being pursued as there is no investment cost involved. New technology using satellite navigation offers potential for significant reduction in track miles needed for arriving aircraft at capital cities. Some specific track reduction procedures are being reviewed in Sydney for regional aircraft which has potential to offer significant savings.
- d) Reducing flight frequencies in winter due to higher fuel uplift in winter vs summer months – The energy committee and Rex management decided not to implement this opportunity as payback period was too long and was not commercially viable

**Table 1.2 – Energy use assessed**

Group member and/or business unit and/or key activity and/or site that has had an assessment completed by the end of this reporting period.	Period over which assessment was undertaken <sup>1</sup>	Energy use per annum in GJ <sup>2</sup> in the current reporting year
Regional Express Pty Ltd	1 July 08 – 30 <sup>th</sup> June 09	1,295,426 GJ
Air Link Pty Ltd	1 July 08 – 30 <sup>th</sup> June 09	40,068 GJ
AAPA	1 July 08 – 30 <sup>th</sup> June 09	5,248 GJ
Pel Air Aviation Pty Ltd	1 July 08 – 30 <sup>th</sup> June 09	144,871 GJ
<b>Total energy assessed</b>		<b>1,485,613</b>



<b>Total energy use of the group in the current reporting year</b>	<b>1,485,613</b>
<b>Total energy assessed expressed as a percentage of total current energy use</b>	<b>100%</b>

1. This should be the start and finish date (month and year) for the assessment (planned assessment dates were nominated in Table 3.1 of the approved ARS).
2. Energy Bandwidth may only be used if approved in the Assessment and Reporting Schedule.



## Part 1 – Information on assessments completed to date (continued)

**Table 1.3 – Accuracy of energy use data**

Entity	% achieved	Reasons for not achieving data accuracy to within $\pm 5\%$
Regional Express Pty Ltd	+5%	
Air Link Pty Ltd	+5%	
AAPA	+5%	
Pel Air Aviation Pty Ltd	+5%	

## Part 2 - Energy Efficiency Opportunities that have been identified and evaluated

### Part 2A - New Assessments completed during the reporting period

Name of Group member or business unit or key activity or site: \_Regional Express Pty Ltd

Energy use of the entity during the current reporting period

1,485,613	GJ
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**Table 2.1 – Opportunities assessed to an accuracy of ±30% or better**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)			Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤ 4 years	> 4 years	
Outcomes of assessment*	Total Identified	4	7,425		28	7,453
Business Response*	Under Investigation	3	6,738		28	6,766
	To be Implemented		325			325
	Implementation Commenced					
	Implemented	1	362			362
	Not to be Implemented					



Name of Group member or business unit or key activity or site: \_\_\_\_\_

Energy use of the entity during the current reporting period

	GJ
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**Table 2.2 - Opportunities assessed to an accuracy of less than ±30%**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)			Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤ 4 years	> 4 years	
Outcomes of assessment	Total Identified					
Business Response	Under Investigation					
	To be Implemented					
	Implementation Commenced					
	Implemented					
	Not to be Implemented					

## Part 2 - Energy Efficiency Opportunities that have been identified and evaluated

### Part 2B - Update of assessments originally reported in previous reporting periods

Name of Group member or business unit or key activity or site: \_Regional Express Pty Ltd

Energy use of the entity during the current reporting period

1,447,714

GJ

**Table 2.3 - Opportunities assessed to an accuracy of  $\pm 30\%$  or better**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)			Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤ 4 years	> 4 years	
Outcomes of assessment*	Total Identified	4		144,089		144,089
Business Response*	Under Investigation	1		68,766		68,766
	To be Implemented					
	Implementation Commenced					
	Implemented	1			2,081	2,081
	Not to be Implemented	2		73,242		73,242



Name of Group member or business unit or key activity or site: \_\_\_\_\_

Energy use of the entity during the current reporting period

	GJ
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**Table 2.4 - Opportunities assessed to an accuracy of less than  $\pm 30\%$**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)			Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤ 4 years	> 4 years	
Outcomes of assessment*	Total Identified					
Business Response*	Under Investigation					
	To be Implemented					
	Implementation Commenced					
	Implemented					
	Not to be Implemented					

## Part 2 - Energy Efficiency Opportunities that have been identified and evaluated

### Part 2C - Details of at least three significant opportunities found through EEO assessments

Table 2.5 – Description of 3 significant opportunities
<p><b>Opportunity 1</b></p> <p><b>Reduction of aircraft weight</b></p> <p>1) Ladders - removing ladders from aircraft. Removed 14 steel ladders (7.5kg each) and 26 aluminium ladders (5.5kg each). Achieving total weight savings of 248kg across the fleet.</p> <p>2) Removing Aircraft flight manuals (AFM, 1.8kg) and Aircraft Operations manuals (AOM, 3.5kg) from aircraft achieving total weight savings of 222.6kg across the fleet.</p> <p>Total impact of above 2 initiatives will result in 11.2 kg per aircraft savings</p>
<p><b>Opportunity 2</b></p> <p><b>Raising height restrictions for aircraft arriving and departing from Sydney</b></p> <p>Currently departing aircraft from Sydney is held down at low level for significant amount of track miles causing extra fuel burn. Similarly arriving aircraft are forced to descent prematurely to lower levels by air traffic control forcing them to lower off and burn unnecessary fuel as a result. If these height restrictions could be raised, there would be significant savings in fuel burn. Currently proposals have been put forward to air services Australia by all the main industry participants operating into Sydney to raise these heights by at least 2,000 feet. Savings of 166,666 litres across fleet.</p>
<p><b>Opportunity 3</b></p> <p><b>Increasing cruise altitude</b></p> <p>Current standard cruise altitudes are being reviewed by flight operations performance engineering with the view to introducing variable standard altitudes to allow for higher levels at lighter loads. The object of the review is to increase the average cruising height level across the entire network which will reduce average fuel burns and hence carbon emissions. Case study conducted on Syd – Lismore and Syd - Ballina routes projected over a year is anticipated to produce savings of approx 16,600 litres</p>
<p><b>Opportunity 4</b></p>





**Installing solar panels at our Subsidiary's (Australian airline pilot academy) newly constructed campus**

The installation of 24 solar panels in various buildings of the pilot academy which is expected to cost AUD 75,000 will reduce the requirement to purchase electricity from the grid which in turn will reduce scope 2 emissions associated with the purchase of electricity. The electricity consumption of the campus comprising the main administration and academic block, accommodation block, is expected to consume 900,000 Kwh per annum. The solar panels are expected to reduce energy consumption by 7,884Kwh per year with anticipated savings of approx 28 GJ (AUD 1,050 in electricity cost)



## Part 3 - Voluntary Contextual Information

**Table 3.1 – Contextual Information**

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**Table 3.2 – Energy use expressed in Greenhouse Gas emissions and as an energy use indicator**

Period of energy use _____ to _____			
Name of group member/ business unit/ key activity/site	Energy use pa (GJ)	Energy use pa (GGE)	Energy use as an indicator*
<b>Total</b>			

**Table 3.3 - Opportunities assessed to an accuracy of ±30% or better (\$ value)**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (\$)			Total estimated energy savings per annum (\$)
			0 – < 2 years	2 – ≤ 4 years	> 4 years	
Outcomes of assessment*	Total Identified					
Business Response*	Under Investigation					
	To be Implemented					
	Implementation Commenced					
	Implemented					
	Not to be Implemented					



### Part 3 - Voluntary Contextual Information (continued)

<b>Table 3.4 – Changes in energy use as an indicator</b>			
<b>Name of group member/ business unit/ key activity/site</b>	<b>Current energy use as an indicator</b>	<b>Previous energy use as an indicator</b>	<b>Reasons for change</b>
<b>Total</b>			

### Part 4 - Declaration

<b>Table 4.1 - Declaration of accuracy and compliance (mandatory information)</b>	
<p>The information included in this report has been reviewed and noted by the board of directors and is to the best of my knowledge, correct and in accordance with the <i>Energy Efficiency Opportunities Act 2006</i> and <i>Energy Efficiency Opportunities Regulations 2006</i>.</p>	
	<b>Managing Director</b>