



## PUBLIC REPORT TEMPLATE 2011

Please note that this template has been updated based on feedback from a number of Corporations during the recent review of regulations. It is not compulsory for you to use this Public Report template. You may wish to continue to use the previous template, or you may report in another format of your choice. Either is acceptable provided you report all the information required by the EEO Act and Regulations.

There is an explanatory document at pages 5-14 of this template that fully explains how to complete it. There is also some targeted guidance on the template itself.

### Part 1 - Corporation Details

#### Controlling Corporation

#### Period to which this report relates

Insert the name of the Controlling Corporation exactly as it is registered with the EEO Program. The period to which the report relates is the total period of participation up to 30 June prior to when the report is due.

Regional Express Holdings Limited

From

1 July 2007

To

30 June 2011

#### Table 1.1 - Major Changes to Corporate Group Structure or Operations

##### Table 1.1 – Major Changes to Corporate Group Structure or Operations

There were no major changes to corporate group structure or operations in the period.

#### Table 1.2 – Aggregate energy assessed covered in this report

Total energy use covered by all assessments in this report	1,386,805	GJ
Total energy assessed as percentage of total energy use of the corporate group**	100	%

\* If this report covers only part of the corporate group, than the percentage should be computed on the total energy use for that part of the group covered in this report

# Please note that corporations are required to assess 80% or more of their energy use in the first five-year assessment cycle and 90% or more in subsequent five-year assessment cycles. Accordingly, for those corporations with a 2005-06 trigger year (i.e. those corporations at the end of their first-five year assessment cycle), the value in "Percentage of corporation's energy use assessed" above, must be more than 80%.



## Declaration

### Declaration of accuracy and compliance

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 *Energy Efficiency Opportunities Act 2006* and *Energy Efficiency Opportunities Regulations 2006*.

Chris Hine

Chief Operating Officer / Director

Date 2<sup>ND</sup> DECEMBER 2011

## Part 2 - Assessment Outcomes

**Table 2.1 – Assessment Details**

It is compulsory to complete a separate table for each group member, business unit, or key activity that has been assessed

**Name of group member or business unit or key activity**

Regional Express Holdings Limited

**Total energy use in the last financial year**

1,386,805

GJ

**Energy use assessed in this entity as a percentage of total entity energy use\***

100%

%

**Energy use assessed in this entity as a percentage of total corporate energy use**

100%

%

**Accuracy of above estimates related to energy use assessed - only required if not  $\pm 5\%$  or better**

%

**Period over which assessment was undertaken**

1 July 2010

30 June 2011

**Description of the way in which the entity carried out its assessment**

The energy committee's focus was again on Rex (the airline) as this was the biggest energy user in the Rex group.

Ground service equipment and aircraft performance were two areas that the committee specifically focused on this year. The flight operations performance engineering department were tasked with the technical aspects such as assessing flight profiles, cruise altitudes and shortened track distances etc. Aircraft performance at different cruise levels was projected based upon manufacturer's data sourced from the AFM (aircraft flight manual) and AOM (aircraft operations manual).

The engineering department was assigned items involving fuel usage of ground service equipment and aircraft weight reduction initiatives.

The economic feasibility of each opportunity identified was assessed and communicated. The EEO team leader coordinated the energy committee's findings and reporting.

As we have removed quite a number of "fixed" and "non fixed" items from the aircraft to reduce weight in previous years, there were no further aircraft weight reduction initiatives identified this year.



The group identified 4 opportunities in the third reporting period (1<sup>st</sup> July 2009 - 30<sup>th</sup> June 2010). These 4 opportunities are in various stages of completion:

- (a) Radar Standard Instrument Departure (SID) for Rex aircraft departing Sydney – In the third reporting period, we had reported that this initiative if implemented had calculated savings of 47,000 litres of fuel per annum. The benefit of a radar SID is that it may provide REX the benefit of track miles shortening. In consultation with Air Services Australia, it was discovered that the western radar SID cannot be achieved due to operational difficulties associated with western international departures. With the western SID ruled out, Rex was hopeful that Air Services Australia would approve the Northern and Southern radar SID. This would entail a structural and procedural change that Air services would have to implement nationwide and would involve extensive risk based analysis. Stemming from our latest discussions, Air Services Australia has agreed to design a southern radar SID. As there will be environmental impact studies that need to be carried out, this initiative is expected to take a considerable amount of time to implement. Hence, no savings have been achieved in this reporting period and savings are not expected in the near future.
- (b) Increasing cruise altitude: Due to the success of the Sydney-Lismore and Sydney-Ballina sectors, we mentioned in the third reporting period that with effect December 2010, flight level planning changes to 16,000 and 17,000 feet will begin to be implemented to multiple sectors in the Regional Express Network. Anticipated savings from 7,965 sectors would be around 199,000 litres. We have had to undertake analysis to ensure that there are no operational impediments and that an increased cruise altitude would not incur additional engineering costs. As a result implementation of the flight level change was delayed. However, a more aggressive approach has been taken where the altitude push up commenced on 17th Nov 2011 with an average altitude increase of 2,800 feet across 41 sectors. Fuel savings based on FY1112 budgeted sectors to the end of the financial year is estimated to be 342,888 litres.
- (c) Reduction of aircraft weight – The initiative to replace Hydralock seat reclining mechanisms with a fixed support was abandoned after careful consideration of costs and savings potential. The initiative of replacing leather seat covers with E leather seat covers was an initiative within the aircraft weight reduction category that was implemented.
- (d) Use of bio-fuel in CT7 engines: Following consultation with General Electric (our engine care maintenance vendor and engine manufacturer) and the oil majors regarding the feasibility of introducing biofuel into the Saab engine, it was discovered that certification of this could take 1 -2 yrs. Furthermore, the oil majors mentioned that they do not have any biojet to offer in Australia and it is unlikely there will be any available in commercial volumes for the foreseeable future. Hence, the energy committee was unable to implement this opportunity.
- (e) Raising height restrictions for aircraft arriving and departing from Sydney – The group had reported in the second public report that departing aircraft from Sydney are 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 burn unnecessary fuel as a result. If these height restrictions could be raised, there would be significant savings in fuel burn. 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 potential of 166,666 litres across the fleet was identified. Increasing arrival and departure altitudes was an industry initiative which due to air traffic control complexity has not been actioned. Therefore, this initiative has been moved from “under investigation” to “not implemented”.

\* Please note that, for individual sites that use more than 0.5PJ of energy, all energy use must be assessed (less a small proportion for non integral energy use).

**Table 2.2 - Energy efficiency opportunities identified in the assessment**

It is compulsory to complete a separate table for each group member, business unit, or key activity that has been assessed

**Table 2.2 – Energy efficiency opportunities identified in the assessment**

Status of opportunities identified to an accuracy of better than or equal to ±30%		Total 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		
			No of Opps	GJ	No of Opps	GJ	No of Opps	GJ	
Business Response	Implemented	4	2	362+2,020=2,382			2	3+80=83	2,465
	Implementation Commenced								
	To be Implemented	3	3	12,616+182+189=12,987					12,987
	Under Investigation	3	2	325+1,729=2,054	1	68,766			70,820
	Not to be Implemented	4	1	6,127	2	73,242	1	185	79,554
Outcomes of assessment	Total Identified	14	6	23,550	3	142,008	3	268	165,826
<b>Status of opportunities identified to an accuracy of worse than ±30%</b>									
Business Response	Implemented								
	Implementation Commenced								
	To be Implemented								
	Under Investigation								
	Not to be Implemented								
Outcomes of assessment	Total Identified								

Please note that Corporate Groups **are not required** to report opportunities with a payback greater than 4 years. Reporting this data is voluntary.



**Table 2.3 - Details of significant opportunities identified in the assessment**

Corporate Groups are required to provide at least 3 examples of significant opportunities for improving the energy efficiency of the group that have been identified in assessments.

Description of Opportunity	Voluntary Information	
<p><b><u>Increasing cruise altitude</u></b></p> <p>Altitude push up will occur on 17 Nov 2011 with an average increase of 2,800 feet across 41 sectors. Fuel savings based on FY1112 budgeted sectors to the end of the financial year is estimated to be 342,888 litres</p>	Business Response	Will be implemented
	Energy saved (GJ)	12,616
	Greenhouse gas abated (CO2-e)	994
	(\$s saved	313,000
	Payback period	Not applicable

Description of Opportunity	Voluntary Information	
<p><b><u>Diesel Air conditioning carts</u></b></p> <p>The management committee has approved the building of 3 air conditioning carts that use diesel instead of petrol. The fuel consumption for a petrol based air con cart is 2.3 litres per hr whilst that of a diesel based air con cart is 1.2 litres per hr. The 3 air con carts which are expected to cost \$4,000 each are to be built and put to use by Nov 2011. Each cart is expected to run 1,500hrs per year which translates to 4,950 litres of fuel savings per year</p>	Business Response	Will be implemented
	Energy saved (GJ)	182
	Greenhouse gas abated (CO2-e)	14.3
	(\$s saved	4,425
	Payback period	1.6 years

Description of Opportunity	Voluntary Information	
<p><b><u>Removing manuals from aircraft cockpit</u></b></p> <p>CASA (Civil Aviation Safety Authority) has approved the removal the AOM2 (aircraft operations manual) from the cockpit of the Saab aircraft. The weight of an AOM2 is 2.86kg (inclusive of folder). The average weight savings across the fleet of 51 Saab aircraft is 2.86kg. Based on the budgeted flight</p>	Business Response	Will be implemented
	Energy saved (GJ)	189
	Greenhouse gas abated (CO2-e)	14.9
	(\$s saved	4,821
	Payback period	Not applicable



hours for FY1112 of 60,022 hrs and a saving of 0.03 litres per kg per hr, this translates to 189 GJ of energy saved which comes at no cost.

An exposition for the removal of the AFM (Aircraft flight manual) has been sent to CASA to approval. This, If approved, will result in similar savings.

Please note that the "Description of the Opportunity" above should include information on the specific nature and type of opportunity, as well as information on the type of equipment and/or process involved.