

## 2013 PUBLIC REPORT

### Part 1 - Corporation details

#### Period to which the report relates

Start Period 1 July 2012

End Period 30 June 2013

#### Controlling corporation

Automotive Holdings Group (AHG)

#### Table 1.1 - Major changes to corporate group structure or operations

##### Table 1.1 – Major changes to corporate group structure or operations in the last 12 months

In the financial year 2012/13, AHG acquired several facilities, which was not foreshadowed in the Assessment & Reporting Schedule. This will be taken into account in future assessments on a facility level. Due to the acquisition of additional entities, the overall energy consumption has more than doubled which decreases the amount of total energy reported during FY 12/13.

No major structural changes have occurred during the last financial year.

#### 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. All opportunities have been assessed to a level of accuracy that is commensurate with the financial investment required for implementation.



Mr David Griffiths (Chairman)

Date: 06.12.13

## Part 2 - Assessment outcomes

**Table 2.1 – Assessment details**

<b>Name of entity</b>	Rand Transport, Derrimut, Victoria	
<b>A. Total corporate energy use in the last financial year</b>	1,366,053	GJ
<b>B. Total energy use covered by assessments</b>	105,960	GJ
<b>C. Total percentage of energy use assessed <math>(B \div A) \times 100</math></b>	8	%

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

The methodologies used for the analysis of energy use at AHG are:

**Preliminary data investigation**

- Analysis and/or verification of site electricity usage to obtain a general estimate of the site base loads.
- Analysis of current electricity bills and reconciliation of the consumption charges with actual site consumption.
- Overview of general site plans to identify early energy savings opportunities.
- Early investigation of site services drawings (e.g. HVAC and Refrigeration Plant Operations and Maintenance Manuals).

**Kick Off meeting**

- Presentation of preliminary data analysis to Rand Transport for discussion
- Discussions of outstanding data and questions required to complete audit
- Energy Management Review
- Agreement of project timelines and milestone submission dates.

**Site Inspection**

- Inspection of HVAC systems and Refrigeration Plant



#### **Interim Report**

- Detailed investigation of site energy consumption and energy costs.
- Recommendations of all feasible energy saving opportunities on site, with projected savings (in energy and in financial cost). Accuracy will be dependent on the availability of key site data, but should be within an accuracy range of +/- 40% as per AS 3598 for a Level 2 energy audit.

#### **Workshop**

- Presentation and discussion of all energy savings opportunities as identified in the Interim Report.
- Selection of key energy savings opportunities from the Interim Report that present the most attractive business cases for Rand Transport.

#### **Final Report**

- Further refining and detail with the analysis of current site energy consumption from the Interim Report.
- Detailed investigation into energy-saving opportunities that have been identified in the Interim Meeting as business cases. Accuracy in costing and energy saving potential for these business cases will be further refined to +/-20%, as per AS 3598 and OEH agreement.

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

Status of opportunities identified		Total Number of opportunities	Total estimated energy savings per annum (GJ)
Business response	Implemented	0	0
	Implementation commenced	0	0
	To be implemented	2	847.2
	Under investigation	6	773.1
	Not to be implemented	0	0
Outcomes of assessment	Total identified	8	1620.3

Please note that corporate groups **are not required** to report opportunities with a payback greater than four years. Reporting this data is voluntary.

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

Description of opportunity No. 1	Type of information to be covered
<p>Although lighting is a relatively small load and is not a major component of energy use at this site:</p> <ul style="list-style-type: none"> <li>• light contributes to the site peak demand</li> <li>• contributes heat into the cold storage areas</li> <li>• increases maintenance costs (require scissor lift or similar, poor lamp life)</li> <li>• light costs approximately \$84,000 per year to run (internal storage plant only)</li> <li>• electricity use of approximately 760,182 kWh per year</li> </ul> <p>The current lighting in the plant, high bay only, contributes to approximately 67.7 kW. Lighting has the potential to reduce the peak demand by 28.20 kW. In addition the plant lighting contributes significant heat to the plant and hence the site load during peak times.</p> <p>The Victorian state government is currently offering rebates to upgrade lighting. This reduces the upfront cost and can help reduce the payback period in some instances. Therefore, magnetic induction or LED lamps should be looked at as means to reduce peak demand during days of high load at minimal cost while also saving energy.</p>	<p><b>Equipment type</b> Magnetic induction lamps</p>
	<p><b>Business response</b> Implemented</p>
	<p><b>Energy saved (GJ)</b> 1372.5</p>
	<p><b>Greenhouse gas abated (CO2-e)</b> 0.5 tonnes</p>
	<p><b>\$ saved</b> \$69,866</p>
	<p><b>Payback period</b> 2.1 years</p>

**Table 3.1 – Assessment details**

<b>Name of entity</b>	Rand Transport, Kewdale, Western Australia	
<b>D. Total corporate energy use in the last financial year</b>	1,366,053	GJ
<b>E. Total energy use covered by assessments</b>	121,319	GJ
<b>F. Total percentage of energy use assessed <math>(B \div A) \times 100</math></b>	9	%

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

The methodologies used for the analysis of energy use at AHG are:

**Preliminary data investigation**

- Analysis and/or verification of site electricity usage to obtain a general estimate of the site base loads.
- Analysis of current electricity bills and reconciliation of the consumption charges with actual site consumption.
- Overview of general site plans to identify early energy savings opportunities.
- Early investigation of site services drawings (e.g. HVAC and Refrigeration Plant Operations and Maintenance Manuals).

**Kick Off meeting**

- Presentation of preliminary data analysis to Rand Transport for discussion
- Discussions of outstanding data and questions required to complete audit
- Energy Management Review
- Agreement of project timelines and milestone submission dates.

**Site Inspection**

- Inspection of HVAC systems and Refrigeration Plant

**Interim Report**

- Detailed investigation of site energy consumption and energy costs.
- Recommendations of all feasible energy saving opportunities on site, with projected savings (in energy and in financial cost). Accuracy will be dependent on the availability of key site data, but should be within an accuracy range of +/- 40% as per AS 3598 for a Level 2 energy audit.



**Workshop**

- Presentation and discussion of all energy savings opportunities as identified in the Interim Report.
- Selection of key energy savings opportunities from the Interim Report that present the most attractive business cases for Rand Transport.

**Final Report**

- Further refining and detail with the analysis of current site energy consumption from the Interim Report.
- Detailed investigation into energy-saving opportunities that have been identified in the Interim Meeting as business cases. Accuracy in costing and energy saving potential for these business cases will be further refined to +/-20%, as per AS 3598 and OEH agreement.

**Table 3.2 - Energy efficiency opportunities identified in the assessment**

Status of opportunities identified		Total Number of opportunities	Total estimated energy savings per annum (GJ)
Business response	Implemented	0	0
	Implementation commenced	0	0
	To be implemented	2	847.2
	Under investigation	6	773.1
	Not to be implemented	0	0
Outcomes of assessment	Total identified	8	1620.3

Please note that corporate groups **are not required** to report opportunities with a payback greater than four years. Reporting this data is voluntary.

**Table 3.3 - Details of significant opportunities identified in the assessment**

Description of opportunity No. 1	Type of information to be covered
<p>Although lighting is a relatively small load and is not a major component of energy use at this site:</p> <ul style="list-style-type: none"> <li>• light contributes to the site peak demand</li> <li>• contributes heat into the cold storage areas</li> <li>• increases maintenance costs (require scissor lift or similar, poor lamp life)</li> <li>• light costs approximately \$84,000 per year to run (internal storage plant only)</li> <li>• electricity use of approximately 760,182 kWh per year</li> </ul> <p>The current lighting in the plant, high bay only, contributes to approximately 67.7 kW. Lighting has the potential to reduce the peak demand by 28.20 kW. In addition the plant lighting contributes significant heat to the plant and hence the site load during peak times.</p> <p>The Victorian state government is currently offering rebates to upgrade lighting. This reduces the upfront cost and can help reduce the payback period in some instances. Therefore, lighting should be looked at as a method to reduce peak demand during days of high load at minimal cost while also saving energy.</p>	<p><b>Equipment type</b> Magnetic induction lamps</p>
	<p><b>Business response</b> Implemented</p>
	<p><b>Energy saved (GJ)</b> 1372.5</p>
	<p><b>Greenhouse gas abated (CO<sub>2</sub>-e)</b> 0.32 tonnes</p>
	<p><b>\$ saved</b> \$76,603</p>
	<p><b>Payback period</b> 1.9 years</p>

**Table 4.1 – Assessment details**

<b>Name of entity</b>	AMCAP/COVS, Welshpool, Western Australia	
<b>G. Total corporate energy use in the last financial year</b>	1,366,053	GJ
<b>H. Total energy use covered by assessments</b>	21,761	GJ
<b>I. Total percentage of energy use assessed <math>(B \div A) \times 100</math></b>	1.6	%

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

The methodologies used for the analysis of energy use at AHG are:

**Preliminary data investigation**

- Analysis and/or verification of site electricity usage to obtain a general estimate of the site base loads.
- Analysis of current electricity bills and reconciliation of the consumption charges with actual site consumption.
- Overview of general site plans to identify early energy savings opportunities.
- Early investigation of site services drawings (e.g. HVAC).

**Kick Off meeting**

- Presentation of preliminary data analysis to AMCAP for discussion
- Discussions of outstanding data and questions required to complete audit
- Energy Management Review
- Agreement of project timelines and milestone submission dates.

**Site Inspection**

- Inspection of HVAC systems and warehouse

**Interim Report**

- Detailed investigation of site energy consumption and energy costs.
- Recommendations of all feasible energy saving opportunities on site, with projected savings (in energy and in financial cost). Accuracy will be dependent on the availability of key site data, but should be within an accuracy range of +/- 40% as per AS 3598 for a Level 2 energy audit.



**Workshop**

- Presentation and discussion of all energy savings opportunities as identified in the Interim Report.
- Selection of key energy savings opportunities from the Interim Report that present the most attractive business cases for AMCAP.

**Final Report**

- Further refining and detail with the analysis of current site energy consumption from the Interim Report.
- Detailed investigation into energy-saving opportunities that have been identified in the Interim Meeting as business cases. Accuracy in costing and energy saving potential for these business cases will be further refined to +/-20%, as per AS 3598 and OEH agreement.

**Table 4.2 - Energy efficiency opportunities identified in the assessment**

Status of opportunities identified		Total Number of opportunities	Total estimated energy savings per annum (GJ)
Business response	Implemented	0	0
	Implementation commenced	0	0
	To be implemented	0	0
	Under investigation	11	2,219
	Not to be implemented	0	0
Outcomes of assessment	Total identified	11	2,219

Please note that corporate groups **are not required** to report opportunities with a payback greater than four years. Reporting this data is voluntary.

**Table 4.3 - Details of significant opportunities identified in the assessment**

Description of opportunity No. 1	Type of information to be covered
We are looking into changing our fleet to more fuel efficient vehicles at next lease/purchase renewal.	<b>Equipment type</b> Fleet
	<b>Business response</b> Under investigation
	<b>Energy saved (GJ)</b> 756
	<b>Greenhouse gas abated (CO2-e)</b> 53
	<b>\$ saved</b> \$35,000 (potential)
	<b>Payback period</b> <4 years
Description of opportunity No. 2 - voluntary	Type of information to be covered
We are looking into selecting delivery routes and times to minimise fuel consumption.	<b>Equipment type</b> Fleet
	<b>Business response</b> Under investigation
	<b>Energy saved (GJ)</b> 151
	<b>Greenhouse gas abated (CO2-e)</b> 11
	<b>\$ saved</b> \$6,500 (potential)
	<b>Payback period</b> <4 years
Description of opportunity No 3 - voluntary	Type of information to be covered
Potential installation of ecoLED tubes to replace fluorescent tubes	<b>Equipment type</b> Lighting
	<b>Business response</b> Under investigation
	<b>Energy saved (GJ)</b> 145
	<b>Greenhouse gas abated (CO2-e)</b> 32
	<b>\$ saved</b> \$11,000 (potential)
	<b>Payback period</b> <4 years