



## EEO PUBLIC REPORT – Sims Metal Management

### Part 1 - Corporation details

#### Period to which the report relates

Start Period

1 July 2012

End Period

30 June 2013

#### Controlling corporation

Insert the name of the controlling corporation exactly as it is registered with the EEO Program.

Sims Metal Management Limited

#### 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

Sims Metal Management's aluminium division, based at Laverton, Victoria, is to cease operations from the 31st December 2013, due to continued declining demand from the automotive sector in Australia and weak export demand. This will have the effect of eliminating one of the two business divisions of Sims MM from the planned EEO assessment schedule.

Accordingly this division is excluded from EEO reporting, which will focus solely on the scrap metal business.

#### 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.

Managing Director – Sims Group Australia Holdings Ltd

Date 23.12.17



## Part 2 - Assessment outcomes

**Table 2.1 – Assessment details**

<b>Name of entity</b>	Sims Metal Management Limited	
<b>A. Total corporate energy use in the last financial year</b>	628,458	GJ
<b>B. Total energy use covered by assessments</b>	48,788	GJ
<b>C. Total percentage of energy use assessed (B ÷ A) x 100</b>	7.8%	%

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

An assessment of energy use and savings opportunities was made at Sims MM metal shredder plant in Rocklea, Brisbane. Electricity use and diesel use in mobile plant were assessed. Electricity use at the company's Northgate (Brisbane) shear site was also assessed. The assessment covered energy use in FY13 of 48,788 GJ, representing 7.8% of Sims MM total energy use of 628,458 GJ (and 8.7% of Sims MM scrap metal operations' energy use in 2012-13 of 557,823 GJ).

For this assessment of energy use and opportunities a range of site-based and corporate stakeholders were involved, together with an external consultant. Sims MM personnel included General Manager Aust & NZ, General Manager – Qld and PNG, Operations Manager – Qld and PNG, OLRP Manager – Rocklea, and a Graduate Engineer at Rocklea. Key stages and activities included:

- Kick off meeting with key stakeholders, and initial site inspection covering Shredder, Offline Recovery Plant (OLRP), Shredder Auxiliaries, Baler, Mobile Plant, Workshops and Administration / Training facilities, as well as the Northgate shear operations.
- Data collection and analysis by Sims MM staff and external consultant. Data included electricity & diesel trends, load profiles, tariff and retail rates, mobile plant hours, energy targets and performance trends, SCADA trends, shredder benchmarking / best practice data, production reports across the Australian sites, downtime reports. A range of relevant analyses were performed on the data aimed at identifying potential energy efficiency opportunities.
- Opportunities identification in all areas of sites operations, involving interviews / discussions with a range of staff, analysis of data, review of site processes and evaluation of benchmarking information.
- Workshop to review and prioritise opportunities, take decisions, and allocate resources to further investigate opportunities.

The review identified and assessed opportunities covering energy reporting systems, maintenance and operational improvements, controls, employee training and awareness, retrofit opportunities and plant upgrade or replacement. Saving opportunities within a 4-year payback are reported here. A range of opportunities are currently assessed to have paybacks in excess of 4 years. Some of these may be cost effective in future and will remain under investigation by Sims Metal Management.



**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		
	Implementation commenced		
	To be implemented	1	1,414
	Under investigation	1	1,440
	Not to be implemented		
Outcomes of assessment	Total identified	2	2,854



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

**Description of opportunity No. 1**

An opportunity was identified at the Northgate shear site to use an electric-powered crane to feed metal into the site's 1,250 tonne shear. This is feasible at the site since the crane can remain in one position and is not required to be mobile. Energy use and maintenance savings are the primary drivers for the business case. The project will be implemented in 2014.

The project is expected to have a net annual financial saving of around \$30,000, and the incremental cost to lease an electric crane compared with a diesel model will be recovered within the 0-2 year payback period.

Annual energy savings of 1,414 GJ are estimated based on expected utilisation and comparison of energy demand for the two options. Greenhouse gas emissions are lower for the electric model comparing Scope 1 + 2 emissions for diesel and electricity, however including Scope 3 GHG emissions shows that GHG emissions for the two options are similar.

**Description of opportunity No. 2 - voluntary**

An analysis of electricity use at the site indicates a high level of energy losses through three on-site transformers, each approximately 1,000 kVA. The transformers are old and may have high core losses as well as high load losses.

An investigation is ongoing to establish the loss level at each transformer so that the exact losses and potential savings from transformer replacement can be established. Initial analysis suggests that annual net financial savings of \$50,000 may be possible, from energy savings of 1,440 GJ per year and a payback of 2-4 years. These electricity savings equate to 328 t.CO<sub>2</sub>-e of Scope 2 GHG savings.