

Energy Efficiency Opportunities

PUBLIC REPORT 2012 - 2013

Controlling Corporation:

Metal Manufactures Limited

Assessment Period

01/07/2012 30/06/2013

Description of the way in which MM Kembla has carried out its assessments

MM Kembla has continued to make progress with energy saving assessments.

Start:

End:

MM Kembla has been working with energy consultants to identify and verify a number of energy efficiency projects onsite, ensuring opportunities are well scoped, and measured according to industry best practice.

Despite ongoing changes to the business, MM Kembla has maintained its Energy Efficiency Committee, and continued to track, monitor and develop energy efficiency intiatives.

Then Energy Efficiency Committee meets regularly to develop the Energy Saving Plan, evaluate the potential viability and validate energy efficiency projects.

MM Kembla continues to report monthly to the board of directors. This provides key details and trends for the facility energy usage. Energy Efficiency is a key performance indicator on the balanced scorecard, with energy used per tonne of finished product used as the key indicator.

Energy efficiency remains an area of focus as the business evaluates the whole of business in terms of efficient operations.

Assessed Energy Usage

MM Kembla

276 080 GJ

This figure represents 100% of the total assessed energy usage for the current reporting period. The energy use data was collected to an accuracy of $\pm 5\%$.

MM Kembla is the only entity assessed within this public report as part of Metal Manufactures Limited.

Assessments completed during the reporting period

No new assessments were completed during the reporting period. A significant number of projects were identified during the previous reporting period, and attention was directed towards the implementation and verification of these projects. Refer to details below regarding one of these projects.

Energy Efficiency Opportunities that have been identified and implemented Billet Caster Cooling Water System

Variable Frequency Drives (VFDs) have been installed at the Horizontal Billet Caster, for improved control over the water cooling system. Ten pumps service the two cooling towers at the billet caster. Pre-installation, there was no means of controlling the output of these pumps, they were either on or off, with a minimum of two pumps running 24 hours a day, 7 days a week. The VFDs enable the pumps to run at the lowest speed required to maintain the operating temperature of the system. Aside from a reduction in energy usage, the VFDs are also linked to improved pump-life, and reduced wear and tear on the cooling system.

Table 1:Update of assessment originally reported in previous reporting periods Energy Efficiency Opportunities that have been identified and evaluated to an accuracy of ±30%

Status of Opportunities		Estimated energy savings per annum by payback period (GJ)			Number of	Total estimated energy savings
		0 – < 2 years	2 – ≤ 4 years	> 4 years	Opportunities	per annum (GJ)
Total Identified			1	2	13	13097
Business Response	Implemented	8 (5170 GJ)	1 (1344 GJ)		9	6514
	Implementation commenced	2 (4687 GJ)			2	4687
	To be Implemented					
	Under Investigation	1 (207 GJ)		1 (1688 GJ)	2	1896
	Not to be Implemented			· · ·		

Changes to the Corporate Group Structure or Operations

There have been no significant changes to the corporate group structure during the reporting period. However, there have been changes within operations regarding management of Environmental matters and Energy Efficiency.

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.*

C. Weaperstore

Colin Weatherstone Chief Executive Officer December 2013