

PUBLIC REPORT

Controlling Corporation

Metal Manufactures Limited (MM Kembla)

Period to which this report relates

Start 01/07/2008

End 30/06/2009

Part 1 – Information on assessments completed to date

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

MM Kembla reports monthly to the board of directors, providing the key details and trends concerning energy usage. Energy Efficiency key performance indicators are included in MM Kembla's balanced scorecard, with energy used per tonne of product produced used as the key indicator. The energy indicator for the current reporting period was 3.06 GJ/tonne, which has decreased compared to the value last year of 3.15 GJ/Tonne.

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 ¹	Energy use per annum in GJ ² in the current reporting year
MM Kembla	July 2008 – June 2009	403592
Total energy assessed		403592
Total energy use of the group in the current reporting year		403592
Total energy assessed expressed as a percentage of total current energy use		100

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 $\pm 5\%$
MM Kembla	± 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: MM Kembla

Energy use of the entity during the current reporting period

403592	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 – = 4 years	> 4 years	
Outcomes of assessment*	Total Identified	1	2490			2490
Business Response*	Under Investigation					
	To be Implemented					
	Implementation Commenced					
	Implemented	1	2490			2490
	Not to be Implemented					

Name of Group member or business unit or key activity or site: MM Kembla

Energy use of the entity during the current reporting period

403592	GJ
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Table 2.2 - Opportunities assessed to an accuracy of worse 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	2		7200		7200
Business Response	Under Investigation	1		3600		3600
	To be Implemented					
	Implementation Commenced					
	Implemented					
	Not to be Implemented	1		3600		3600

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: MM Kembla

Energy use of the entity during the current reporting period

403592

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	5	10900	22170		33070
Business Response*	Under Investigation	2		20282		20282
	To be Implemented					
	Implementation Commenced					
	Implemented	1	10900			10900
	Not to be Implemented	2		1888		1888

Name of Group member or business unit or key activity or site: MM Kembla

Energy use of the entity during the current reporting period

403592	GJ
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Table 2.4 - Opportunities assessed to an accuracy of worse 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

Opportunity 1
A completed energy efficiency project was to upgrade the flame detection technology on the preheat furnace at the extruder. The improvement resulted in greater operational control of the heating system, providing a gas saving of 15%. Although the project was initially assessed in terms of energy efficiency opportunities, other benefits to the business, such as a reduction in downtime and maintenance costs, lead to a project payback of 1.1 years.
Opportunity 2
The use of Vortex burners in shaft furnaces is aimed at creating a vortex (spiral) gas flow in the furnace allowing greater surface contact time and increasing the heat transfer rate. These burners require changes to the furnace shell and are installed at a furnace reline. Initial savings were quoted at up to 5% improved heating efficiency. Reports from furnace designers and users indicated that the quoted efficiencies were grossly exaggerated. This project will not be progressed.
Opportunity 3
Increasing the height of the Shaft Furnace at the KCR would allow longer residence time in the furnace and improved heating. With the furnace shell potentially requiring replacement at the end of 2011, this would be the ideal time to implement this improvement. Investigations have commenced into the feasibility and costs involved. There is the potential for up to 5% improved heating efficiency.

Part 4 - Declaration

Table 4.1 - Declaration of accuracy and compliance (mandatory information)

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> .	
	C. Lamond - CEO
	17th December 2009