



## PUBLIC REPORT

### Controlling Corporation

Crane Group Limited

### Period to which this report relates

Start 1.7.2008

End 30.6.2009

### Part 1 – Information on assessments completed to date

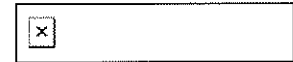
**Table 1.1 – Description of the way in which the Corporate Group (or part of it) has carried out its assessments**

The assessment for the Group's largest energy consuming site, Crane Enfield Metals Ply Limited, has been completed. The historical usage of all the major energy sources were collected and analysed at various levels for patterns and relationships with plant output. The energy use of each major plant item was also tested in order to determine its energy use patterns during normal production and on "idle". Models of the energy overall use were built up from individual item test results. Workshops involving all areas of the plant were conducted to explain the EEO project and to examine in detail the energy users in each area with the objective of determining ways in which reductions could be obtained. All potential opportunities were then examined to estimate their potential benefit and their probable implementation cost. Reviews with management were undertaken to allow classification of projects according to their payback and potential for implementation. As this methodology appeared to work successfully, it has been carried forward for use in the assessments for Iplex Pipelines Australia Limited, which have not yet been completed at the end of this reporting period.

A large number of the opportunities identified at Crane Enfield Metals have been implemented, with over 65% of the opportunities with payback of less than 4 years having been implemented. A major machine refurbishment allowed an opportunity with greater than 4 year payback to be implemented cost-effectively as part of the project. Detailed results are shown in Part 2B.

**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 <sup>1</sup>	Energy use per annum in GJ <sup>2</sup> in the current reporting year
Crane Enfield Metals Pty limited – Castlereagh Rd Penrith	1.7.07 – 30.6.08.	144289



<b>Total energy assessed</b>	<b>144289</b>
<b>Total energy use of the group in the current reporting year</b>	<b>700959</b>
<b>Total energy assessed expressed as a percentage of total current energy use</b>	<b>20.6%</b>

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)

<b>Table 1.3 – Accuracy of energy use data</b>		
<b>Entity</b>	<b>% achieved</b>	<b>Reasons for not achieving data accuracy to within ±5%</b>
Crane Enfield Metals Pty limited – Castlereagh Rd Penrith	+/- 5%	



## 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: Crane Enfield Metals Pty Limited

Energy use of the entity during the current reporting period

144289	GJ
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**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	100	18214	1327	90553	110094
Business Response*	Under Investigation	27	4915	876	447	6238
	To be Implemented	9	224	8	0	232
	Implementation Commenced	2	723	0	0	723
	Implemented	41	12352	443	851	13646
	Not to be Implemented	21	0	0	89255	89255

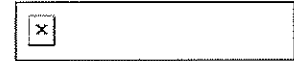


## Part 2 - Energy Efficiency Opportunities that have been identified and evaluated

### Part 2C - Details of at least three significant opportunities found through EEO assessments

**Table 2.5 – Description of 3 significant opportunities**

<b>Opportunity 1</b>
<b>Opportunity Description – Air Compressor use reduction</b> - By utilizing excess combustion air blower capacity to replace the existing compressed air cooling of two gas burner units, it allowed the complete shutdown of all air compressors during non-production times. The energy savings from this are estimated at approximately 48,000 kWhr p.a..
<b>Opportunity 2</b>
<b>Opportunity Description – Production Planning</b> - By improving the production planning processes for equipment not being used 24hrs/day , machine operation was converted from an “ad hoc” process to being run on a “campaign” basis. In doing so it allowed the equipment to be shutdown completely rather than merely “idled” awaiting the next run. The energy savings from this are estimated at approximately 150,000 kWhr p.a..
<b>Opportunity 3</b>
<b>Opportunity Description – Machine shutdowns</b> - Both the processes used to shutdown equipment when not used for production and the operator training in machine shutdown were improved so as to reduce non-production related energy demands. The energy saving from this are estimated at approximately 150,000kWhr p.a..
<b>Opportunity 4</b>
<b>Opportunity Description – Cooling water pump</b> – due to a change in process a major water cooling pump no longer needed to deliver such a high flow rate and pressure as it was designed to produce. As a result, the unit was largely choked and operated very inefficiently. The replacement of the pump set with one which is sized for the current requirement resulted in a reduction in motor size from 100kW to 22kW, with a corresponding increase in efficiency. The energy savings from this are estimated at approximately 250,000 kWhr p.a.



## Part 3 - Voluntary Contextual Information

**Table 3.1 – Contextual Information**

The Group's overall energy use during 2008-2009 reduced by approximately 4% compared to the previous year despite an expansion of the Crane Distribution branch network. The highlight was the major energy reduction (over 15%) experienced at Crane Enfield Metals which is the business unit that was first to conduct assessments and as a consequence first to implement the energy saving initiatives that have resulted from the assessments.

**Table 3.2 – Energy use expressed in Greenhouse Gas emissions and as an energy use indicator**

Period of energy use \_\_\_\_\_ to \_\_\_\_\_

Name of group member/ business unit/ key activity/site	Energy use pa (GJ)	Energy use pa (GGE)	Energy use as an indicator*
<b>Total</b>			

**Table 3.3 - Opportunities assessed to an accuracy of  $\pm 30\%$  or better (\$ value)**

Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (\$)			Total estimated energy savings per annum (\$)
			0 – < 2 years	2 – $\leq$ 4 years	> 4 years	
Outcomes of assessment*	Total Identified					
Business Response*	Under Investigation					
	To be Implemented					
	Implementation Commenced					
	Implemented					
	Not to be Implemented					



### Part 3 - Voluntary Contextual Information (continued)

Table 3.4 – Changes in energy use as an indicator			
Name of group member/ business unit/ key activity/site	Current energy use as an indicator	Previous energy use as an indicator	Reasons for change
<b>Total</b>			

### Part 4 - Declaration

Table 4.1 - Declaration of accuracy and compliance (mandatory information)	
<p>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>.</p>	
	<p>Insert Title of Signatory here <i>MANAGING DIRECTOR</i></p>
	<p>Date <i>12 FEB 2010</i></p>