

SECOND PUBLIC REPORT

Controlling Corporation

Queensland Alumina Limited.

Period to which this report relates

Start

1st July 2008

End

30th June 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

Potential opportunities were identified during a series of cost focus meetings with wide employee involvement. Other meetings were held using expert and specialist engineering support to identify potential opportunities. These potential opportunities were subsequently developed and assessed by QAL's engineering team.

New assessments completed and progressed during the period include tighter control over Calcination combustion conditions, and reduced oil use for steam generation.

Opportunities identified in the previous reporting period were subjected to detailed assessment, including improvements to recycling heat from process streams, and reducing water ingress into process.

A monthly 1-page internal report reviewing progress on identified opportunities was commenced during the period.



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 undertaken¹	Energy use per annum in GJ² in the current reporting year
QAL Site	2008/2009 financial year.	45,185,000
QAL Bauxite Shipping	2008/2009 financial year.	4,855,000
Total energy assessed		50,040,000
Total energy use of the group in the current reporting year		50,040,000
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 $\pm 5\%$
QAL Site	5%	
QAL Bauxite Shipping	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: _____ **QAL Site** _____

Amount of energy assessed which generated the results below (and is reported in Table 1.2)

50,040,000	GJ
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Table 2.1 – Opportunities assessed to an accuracy of ±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	7	6	1		
Business Response*	Under Investigation	2	1,980			1,980
	To be Implemented	1		130,000		130,000
	Implementation Commenced	0				
	Implemented	4	373,200			373,200
	Not to be Implemented	0				



Name of Group member or business unit or key activity or site: _____ **QAL Site** _____

Amount of energy assessed which generated the results below (and is reported in Table 1.2)

50,040,000	GJ
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Table 2.2 - Opportunities assessed to an accuracy of worse than ±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	nil	nil	nil	nil	
Business Response	Under Investigation	nil	nil	nil	nil	
	To be Implemented	nil	nil	nil	nil	
	Implementation Commenced	nil	nil	nil	nil	
	Implemented	nil	nil	nil	nil	
	Not to be Implemented	nil	nil	nil	nil	

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: _____ **QAL Site** _____

Amount of energy assessed which generated the results below (and is reported in Table 1.2)

50,040,000	GJ
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Table 2.3 - Opportunities assessed to an accuracy of ±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	7		912,000 (1,280,000)		
Business Response*	Under Investigation	2		300,000		300,000
	To be Implemented					
	Implementation Commenced	3		44,000 (424,000)		44,000 (424,000)
	Implemented	2		418,000 (556,000)		418,000 (556,000)
	Not to be Implemented					

NoteS ; Figures in **Bold** indicate updated evaluations of actual payback.

Figures in (brackets) indicate original savings estimates.

Three projects classified as “implementation commenced” were delayed and / or suffered extended commissioning, and hence the full savings were not realised during the reporting period.



Name of Group member or business unit or key activity or site: _____ **QAL Site** _____

Amount of energy assessed which generated the results below (and is reported in Table 1.2)

50,040,000	GJ
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Table 2.4 - Opportunities assessed to an accuracy of worse than ±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	nil	nil	nil	nil	
Business Response*	Under Investigation	nil	nil	nil	nil	
	To be Implemented	nil	nil	nil	nil	
	Implementation Commenced	nil	nil	nil	nil	
	Implemented	nil	nil	nil	nil	
	Not to be Implemented	nil	nil	nil	nil	



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

Boiler Oil Reduction.

Plant testing has shown that the oil needed to maintain operational stability can be reduced by careful modifications to burner configuration.

Opportunity 2

Calcination Combustion Control.

Refinements to the control system have been designed with the aim of reduced excess air whilst maintaining stability.

Opportunity 3

Precipitation Yield Stressing Program.

Process adjustments optimizing productivity throughout the Bayer circuit has allowed improved yield and consequently improved energy efficiency.



Part 3 - Voluntary Contextual Information

Table 3.1 – Contextual Information

Despite tough market conditions experienced over the period, QAL sustained its efforts to improve energy efficiency with encouraging results. Energy use is subjected to detailed scrutiny, from the annual planning cycle through to monthly, weekly & daily reviews to identify ways to reduce energy consumption.

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

Period of energy use 1st June 2008 to 30th June 2009

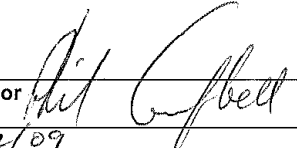
Name of group member/ business unit/ key activity/site	Energy use pa (GJ)	Energy use pa (t-CO ₂ -e)	Energy use as an indicator*
QAL Site	45,185,000	4,109,000	11.69 GJ / tonne product
QAL Bauxite Shipping	4,855,000	429,000	
Total	50,040,000	4,538,000	



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
QAL Site	11.69 GJ / tonne product (FY 2008/9)	11.92 GJ / tonne product (FY 2007/8)	Steadier production rate, improved raw materials, greater focus on costs and efficiency, improvement project results.
QAL Bauxite Shipping	4,854,000 GJ (FY 2008/9)	4,387,000 GJ (FY 2008/9)	Increased tonnage.

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>Managing Director </p>
	<p>Date 31/12/09</p>