



PUBLIC REPORT 2011

Part 1 - Corporation Details

Controlling Corporation

Lafarge Australia Pty Ltd

Period to which this report relates

From

1 July 2009

To

30 June 2011

Table 1.1 - Major Changes to Corporate Group Structure or Operations

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In August 2011, Knauf Group purchased Lafarge's plasterboard business in Australia. Until that time the controlling corporation was Lafarge Australia and traded as Lafarge Plasterboard Pty Ltd. The new company name is Knauf Plasterboard Pty Ltd and the ABN (61 003 621 010) and ACN (003 621 010) numbers remain the same.

For this reporting period, the organisation was trading as Lafarge Plasterboard and the company will be referred to as Lafarge Plasterboard within this report. The organisation is now trading as Knauf Plasterboard and all external communications reflect this change.

Table 1.2 – Aggregate energy assessed covered in this report

Total energy use covered by all assessments in this report	795,439 – 966,501	GJ
Total energy assessed as percentage of total energy use of the corporate group	99%	%

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*.

Stuart Jacquet
Managing Director

Date

21/12/11

Part 2 - Assessment Outcomes

Table 2.1 – Assessment Details

Name of group member or business unit or key activity	Lafarge Plasterboard Pty Ltd		
Total energy use in the last financial year	795,439 – 966,501		GJ
Energy use assessed in this entity as a percentage of total entity energy use*	99%		%
Energy use assessed in this entity as a percentage of total corporate energy use	99%		%
Accuracy of above estimates related to energy use assessed - <u>only required if not ±5% or better</u>			%
Period over which assessment was undertaken		1/07/2010	30/06/2011 (ongoing)
Description of the way in which the entity carried out its assessment	<p>Knauf Plasterboard (Lafarge Plasterboard) has a commitment to continual improvement in our processes, and we aim to use energy and all resources more efficiently. Assessments for improvement opportunities are carried out as part of ongoing sustainability and performance programs which are embedded within our organisation's operational activities. Regular monitoring, measurement and reporting of key indicators for energy use and efficiency are also part of these activities.</p> <p>Assessments are performed by consultants for each major manufacturing site to identify opportunities. In addition, the manufacturing function performed detailed assessments and operational reviews of each plant, through direct measurements and detailed data analysis. Opportunities identified during these processes are evaluated and implemented via our project review processes.</p> <p>Previous opportunities which have been assessed and implemented in the major facilities include a heat recovery system from the dryer, and improvements to calcination process equipment. As appropriate, these outcomes are communicated internally to senior management and the board via reports, to employees via company newsletters and intranet, and externally via our corporate website.</p>		

* Please note that, for individual sites that use more than 0.5PJ of energy, all energy use must be assessed (less a small proportion for non integral energy use).



Table 2.2 - Energy efficiency opportunities identified in the assessment

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Status of opportunities identified to an accuracy of better than or equal to ±30%		Total 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		
			No of Opps	GJ	No of Opps	GJ	No of Opps	GJ	
Business Response	Implemented	2	1	4,900	1	50			4,950
	Implementation Commenced	2	1	6,489	1	50			6,539
	To be Implemented	5	5	76,704					76,704
	Under Investigation								
	Not to be Implemented								
Outcomes of assessment	Total Identified	9	7	88,093	2	100			88,193
Status of opportunities identified to an accuracy of worse than ±30%									
Business Response	Implemented								
	Implementation Commenced								
	To be Implemented								
	Under Investigation								
	Not to be Implemented								
Outcomes of assessment	Total Identified								

Please note that Corporate Groups **are not required** to report opportunities with a payback greater than 4 years. Reporting this data is voluntary.



Table 2.3 - Details of significant opportunities identified in the assessment

Description of Opportunity
<p>Part of the manufacturing process for plasterboard involves transforming gypsum into plaster using extreme heat (up to 350 degrees Celsius) in a kettle. This process, called calcining, causes the gypsum to lose 75% of its water and transforms it into stucco or Plaster of Paris. Plaster is then finely ground in a mill.</p> <p>Mass flow balances and data analysis for the plaster mill have identified opportunities to improve thermal energy efficiency and throughput by optimising this operation of the calcination process. The improvements will come via changes to the process as well as the installation of new equipment.</p>
<p>Description of Opportunity</p> <p>An opportunity has been identified to recover waste heat gases within the calcination area to reduce the energy usage. By recycling the hot gases back into the production process, the overall natural gas demand for the particular workstation will reduce significantly as well as improving overall energy efficiency in the calcination area.</p>
<p>Description of Opportunity</p> <p>Opportunities via modification of plant equipment have been identified and implemented, minimising both electrical and thermal energy consumption. This is primarily through the introduction of variable speed drives and fans and burners of a higher efficiency.</p>