PUBLIC REPORT TEMPLATE 2013

Part 1 - Corporation Details

Controlling Corporation

Insert the name of the Controlling Corporation exactly as it is registered with the EEO Program.

Hanson Australia (Holdings) Pty Ltd (Hanson)

Table 1.1 - Major Changes to Corporate Group Structure or Operations

Table 1.1 – Major Changes to Corporate Group Structure or Operations in the last 12 months
Nil

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*.	X 
	Kevin Gluskie CEO
	Date 19/12/13

Part 2 - Assessment Outcomes

Table 2.1 – Assessment Details

It is compulsory to complete a separate table for each entity* that has been assessed

Name of entity	Wolffdene Quarry

Total energy use in the last financial year	60,119	GJ
Total percentage of energy use assessed	100	%

Description of the way in which the entity carried out its assessment

Using our internal "CLIMB" (Continuous Improvement, Leadership Development, Innovative Operations, Margin Optimization, Best In Class Aggregates) review process, a full five day audit was carried out at Wolffdene Quarry. All aspects of Quarry operations are considered including, crushing, screening, conveyors, transfer points, dust control, heavy machinery, and haul road design. A full flow chart of the plant is developed and allows to identify process inefficiencies in utilisation and process co-efficient. Where these figures are low, is where attention is given to process improvement and energy savings. Follow a pre review data review times and dates are set for the full week review with the following agenda.

Day 1 – Site Introduction, discuss objectives and scope, discussion of pre-visit data (kpi's and P&L) and overview of the weeks activities.

Day 2 – Conduct site walkaround and drive around, observe every process step, identify best practices, document observations, Prioritize opportunities and define deep dive analyses for the remainder of the week.
Day 3 – Review opportunities, conduct "deep dive analysis" maintenance, yellow machines, process coefficient, energy efficiency
Day 4 – Describe improvement ideas, provide estimate of financial impact and calculation logic, describe risks, define implementation steps and milestones.
Day 5 – Agree on overall measures, Site manager and continuous improvement team present to area and operations managers, align everyone on key implementation steps, timing and scope of follow up work.

* Entity is group member, business unit, or key activity. Please note that, for individual sites that use more that 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

It is compulsory to complete a separate table for each entity that has been assessed

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	6	5	1267			1	32	1299
	Implementation Commenced								
	To be Implemented								
	Under Investigation	3					3	509	509
	Not to be Implemented	1						5	5
Outcomes of assessment	Total Identified	10	5	1267	0	0	4	546	1813

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

Corporate Groups are required to provide at least 3 examples of significant opportunities for improving the energy efficiency of the group that have been identified in assessments.

Description of Opportunity No 1	Voluntary Information	
Manganese is the cone shaped section of "cone" crushers. This cone wears as it's life extends and the more stone it crushes. It is common that the manganese wears unevenly and allows oversize stone to make it through the crusher, this also couses the motor for the crusher to work overtime to keep up with the through put of stone. By regularly monitoring manganese size and shape and having modular sections to the fittings on the maganese, the cone can be quickly changed out for a replacement while the original can be reshaped in the workshop. This has many flow on effects by providing consistent size and shape to the screens, less blockages, less unplanned shutdowns. This project is one of our best in terms of payback and energy savings. With a payback of less than a year and 60,000 KWH saved per annum, this project has been quickly implemented.	Equipment Type	Crusher parts
	Business Response	Completed
	Energy saved (GJ)	216
	Greenhouse gas abated (CO2-e)	54
	$s saved	12,600
	Payback period	1 year

Description of Opportunity No 2	Voluntary Information	
Multiple locations around the plant where conveyors, crushers and screens transfer material to another section of the plant have been identified where chutes can be modified to reduce the need for vibrators to move material build up. By simple configuration changes and widening of some transfer points, we can eliminate vibrator use and material build up.	Equipment Type	Crushing equipment
	Business Response	Complete
	Energy saved (GJ)	162
	Greenhouse gas abated (CO2-e)	41
	$s saved	9,450
	Payback period	1 year

Description of Opportunity No 3	Voluntary Information	
It was estimated that many "yellow" machines are unecessarily idling during the day for up to 1 hour in total. For Dump trucks an average of 8L/HR was calculated as the fuel burn while the machine is idle,	Equipment Type	Heavy Machinery
	Business Response	Complete and Ongoing
	Energy saved (GJ)	652

and for Front End Loaders 4.2L/HR. This was a simple process of showing and explaing to machine operators the impact of leaving machines on while not in use.	Greenhouse gas abated (CO2-e)	45
	$s saved	14,118
	Payback period	1 year

Please note that the "Description of the Opportunity" above should include information on the specific nature and type of opportunity as well as information on the type of equipment and/or process involved.

Part 3 – Transition to Second Cycle

This table should only be completed by 2005-06 trigger-year corporations transitioning to the second cycle.

In December 2011 many corporations reported energy efficiency opportunities that were still under investigation as at 30 June 2011. This report should advise what your business response to these opportunities has been – implemented or not to be implemented. If you intend to further investigate these opportunities, they should be reported in the future Public Reports as opportunities identified in the second cycle.

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	
As reported in December 2011	Under Investigation	11	11	965					965
Business Response as at 30 June 2012	Implemented								
	Not to be Implemented	11	11	965					965
	To be evaluated/reported in the second cycle								