



PUBLIC REPORT TEMPLATE

Controlling Corporation

New South Wales Sugar Milling Co-operative Limited

Period to which this report relates

Start 01/07/08

End 30/06/09

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

NSW Sugar Milling Co-Operative expanded its EEO activities to include all 3 sites.

The existing work at Harwood mill and refinery was expanded with 4 extra opportunities identified for assessment taking the total recorded to 80. Broadwater and Condong Sites commenced their opportunity identification program in 2009 with 19 and 30 opportunities identified at these sites respectively using the same consultative model involving key Technical and Production personnel.

Harwood site continued the program of EEO assessments commenced in 2008. EEOs targeted for assessment have been selected based on their potential to return energy savings, their technical feasibility and their potential to fall within the current ability of the Co-Op to fund.

12 opportunities from the rough cut have been evaluated and found not to have any energy saving potential. These are recorded as cancelled.

8 more assessments were completed by July 2009 taking the total to 13 EEOs that have been fully assessed for implementation or are dependant on considerations for capital expenditure. Potential savings from the 8 additional EEOs represent 1.9% of the energy reported for 2009. They are summarised in Table 2.5.

A further 3 EEO assessments were in progress at 30/06/09 and will be reported on as part of the 2010 return.

The process designed for consultation, data collection and analysis, and EEO identification and evaluation has fulfilled the criteria required under the relevant legislation. Likewise the systems established for communication and internal and external reporting are fully compliant. Corporate decision making processes are established and will demonstrate compliance pending consideration of any EEOs to be presented that require capital expenditure approval.

The commissioning of 2 x 30MW electric co-generation plants at our Broadwater and Condong mills is a substantial change to operations. These plants will now attempt to operate their boilers all year round instead of operating only during the sugar, crushing season (usually June to December inclusive). This is likely to be reflected in future returns as a substantial increase in energy consumption in the form of boiler fuel but somewhat offset by the export of electrical power for a net, positive commercial return.

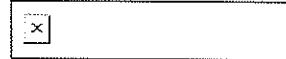


Table 1.2 – Energy use assessed

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
Harwood Mill and Refinery	July 2008 to June 2009	2499530
Total energy assessed		2499530
Total energy use of the group in the current reporting year		8035330
Total energy assessed expressed as a percentage of total current energy use		31.1%

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.

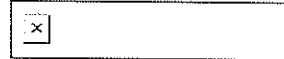
Note:- A change in the method for calculating energy use has been made for the 2009 return to reflect the NGERS reporting and the NSW Sugar Co-Op transition to the OSCAR reporting tool. EEO data for 2009 reflects the NGERS data and it is anticipated that this will facilitate the transition to OSCAR for EEO reporting as well as for NGERS



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 $\pm 5\%$
Harwood Mill and Refinery	$\pm 5\%$	
Broad water Mill	$\pm 5\%$	
Condong Mill	$\pm 5\%$	



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: Harwood Mill and Refinery

Energy use of the entity during the current reporting period

2499530

GJ

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	8	9264	38175	660	48099
Business Response*	Under Investigation	2		35510		35510
	To be Implemented	2	9264			9264
	Implementation Commenced	3		2665		2665
	Implemented	0				
	Not to be Implemented	1			660	660



Name of Group member or business unit or key activity or site: N/A

Energy use of the entity during the current reporting period

N/A	GJ
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Table 2.2 - Opportunities assessed to an accuracy of less 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	N/A	N/A	N/A	N/A	N/A
Business Response	Under Investigation	N/A	N/A	N/A	N/A	N/A
	To be Implemented	N/A	N/A	N/A	N/A	N/A
	Implementation Commenced	N/A	N/A	N/A	N/A	N/A
	Implemented	N/A	N/A	N/A	N/A	N/A
	Not to be Implemented	N/A	N/A	N/A	N/A	N/A



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: Harwood Mill and Refinery

Energy use of the entity during the current reporting period

2499530

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	914	284127	1.3	285042.3
Business Response*	Under Investigation	2		284127		284127
	To be Implemented	0				
	Implementation Commenced	1	637			637
	Implemented	1	277			277
	Not to be Implemented	1			1.3	1.3



Name of Group member or business unit or key activity or site: N/A

Energy use of the entity during the current reporting period

N/A	GJ
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Table 2.4 - Opportunities assessed to an accuracy of less 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	N/A	N/A	N/A	N/A	N/A
Business Response*	Under Investigation	N/A	N/A	N/A	N/A	N/A
	To be Implemented	N/A	N/A	N/A	N/A	N/A
	Implementation Commenced	N/A	N/A	N/A	N/A	N/A
	Implemented	N/A	N/A	N/A	N/A	N/A
	Not to be Implemented	N/A	N/A	N/A	N/A	N/A



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
EEO 002. Current arrangements for pumping juice through the process involve 2 pumps with 75 and 110kW electric motors respectively. The pumps run at a fixed speed and flow is controlled via a throttle valve above the discharge of each pump. This means that during periods of low flow the pump is subjected to high pressures making it wasteful of energy. As an interim measure the largest pump has been slowed down by 220rpm resulting in an immediate power reduction of ~20kW. The assessment has recommended that variable speed drives be fitted to both pumps to control flow against the fixed process head by adjusting pump speed instead of throttling.
Opportunity 2
EEO 018. A survey of the steam traps on site was conducted to determine how many were not discharging to systems designed to recover the condensate. 68 traps were identified in this category. The assessment recommended a program to extend the condensate return system to capture these traps and reduce make up water heating and supply costs.
Opportunity 3
EEO 028. The boiler blow down water is currently discharged to a flash vessel. None of the heat from flash steam or blow down condensate is recovered. The assessment recommended that the wasted heat be used for process heating. The optimum processes to maximize the use of this waste heat are currently under review.
Opportunity 4
EEO 029. A range of refinery processes are heated by the direct injection of steam. The condensed steam adds to the moisture load to be evaporated during crystallization and the lost condensate adds to the boiler make up water, chemical and heating requirement. The assessment recommends a range of indirect heating solution to recover the condensate and reduce the overall steam demand from the boiler.
Opportunity 5
EEO 030. A survey of the process vessels in the refinery was undertaken to assess the heat losses due to lack of lagging. 16 vessels were identified that had inadequate or no lagging. The assessment recommended that these vessels should be considered for lagging.



Opportunity 6

EEO 039. The air compressors supplying the refinery are due for replacement. As part of the EEO program the assessment criteria for suppliers, involved selection of the optimum energy efficient option for the refinery application. The assessment recommended the purchase of the most energy efficient combination of fixed speed and variable speed machines to minimize compressor pressure rise above set point at low flow demand.

Opportunity 7

EEO 076. As a follow on from EEO 036 reported in the 2008 return, an assessment was completed on the refinery, condenser, injection water system. Fixed speed pumps deliver a constant quantity of water to the condenser circuit. Vacuum control for 5 vessels is maintained via individual throttling valves responding to the vacuum set point for each vessel. Any excess water is bled off to waste. This waste costs energy to supply the unused water against a 28m head only to be discharged back to the river. The assessment recommended the installation of variable speed drives on the pumps to meet the condenser pressure and flow demand by speed control and not via a water pressure, bleed system.

Opportunity 8

As part of normal operations the mill generate reasonable quantities of waste paper and wood. These are disposed of via transport to the local recycling facility with the attendant transport and tipping fees. Since the boiler operates on biomass fuel, an assessment was undertaken to consider the feasibility of recovering this material for use as fuel in our own boiler. The assessment recommended this EEO not proceed as the return was insufficient to cover the cost of setting up and operating fractionating equipment. It may be reviewed in the event that fuel prices rise sufficiently.



Part 3 - Voluntary Contextual Information

Table 3.1 – Contextual Information

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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*
Total			

Table 3.3 - Opportunities assessed to an accuracy of ±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 – ≤ 4 years	> 4 years	
Outcomes of assessment*	Total Identified					
Business Response*	Under Investigation					
	To be Implemented					
	Implementation Commenced					
	Implemented					
	Not to be Implemented					



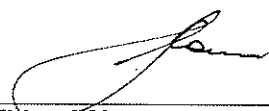
Part 3 - Voluntary Contextual Information (continued)

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
Total			

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>CONNOR</i> <i>CEO</i></p>