



THIRD PUBLIC REPORT
Report Period – 1 July 2006 to 30 June 2010

Controlling Corporation

Norske Skog Paper Mills Australia Limited

Period to which this report relates

Start 1 July 2006

End

30 June 2010

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

Norske Skog Paper Mills (Australia) Limited is the only manufacturer of newsprint grades of paper in Australia, operating the Boyer Mill in Tasmania and the Albany Mill in NSW. The company is part of Norske Skogindustrier ASA, a Norwegian based company, which is one of the largest newsprint manufacturers in the world. The Australian mills employ 600 people directly, create an estimated 1670 indirect jobs and contribute over \$250 million per annum to the regional economies around Albany in NSW and the Derwent Valley in Tasmania. Total energy use for our operations in Australia is 8.6 PJ.

Norske Skog acknowledges the reality of climate change and supports the need for action to mitigate the associated risks. The company recognises the important role industry must play in meeting this challenge and has committed to a global target of a 25% reduction in absolute emissions by 2020, compared to 2006 emissions (see <http://www.norskeskog.com>).

The intent and key requirements of the Energy Efficiency Opportunities legislation have been met with energy assessments having been carried out in 2007/2008 at each of the two operating sites. Both manufacturing plants use greater than 0.5 PJ and both were assessed. The two sites account for virtually all of Norske Skog's energy use in Australia.

Whilst no new assessments were carried out, significant capital improvements as well as normal continuous improvement activities at the sites highlighted Energy Efficiency Opportunities and these have been included in the 2009/2010 report. Further, this report includes significant updates of the assessments reported in the previous two public reports comprising actual savings achieved following implementation of a number of opportunities.

Part 1 – Information on assessments completed to date

Table 1.2 – Energy use assessed

Group member and/or business unit and/or key activity and/or site (or part thereof) that has had an assessment completed by 30 June 2010 (Include all assessments completed to date for the current 5 year cycle).	Period over which assessment was undertaken ¹	Energy use for the period 1.7.2009 to 30 June 2010 of the assessed entity (or part thereof) expressed in GJ ²
Norske Skog Albury Mill	January 2008 – June 2008	4170425
Norske Skog Boyer Mill	January 2008 – June 2008	4393277
Total energy use of assessed entities (or part thereof)		
		8563702
Total energy use of the whole corporate group in the period 1.7.2009 to 30 June 2010		
		8564510
Total energy use of assessed entities (or part thereof) for the period 1.7.2009 to 30.6.2010 expressed as a percentage of total energy use for the period 1.7.2009 to 30.6.2010		
		>99%

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.

Table 1.3 – Accuracy of energy use assessed data

Entity	% achieved	Reasons for not achieving data accuracy to within $\pm 5\%$

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

Part 2A - New assessments completed or not reported since your last Public Report

Name of Group member or business unit or key activity or site: **Norske Skog Boyer Mill***

**Following a major capital upgrade at the Boyer Mill additional energy efficiency opportunities presented themselves involving the re-use of steam from our original pulping plant. These have been included in this report.*

Total energy use for the period 1.7.2009 to 30.6.2010 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

	4393277
	GJ

Table 2.1 – Opportunities assessed to an accuracy of better than or equal to (\leq) $\pm 30\%$

Status of opportunities identified	Total Number of opportunities	Estimated energy savings per annum by payback period (GJ)						Total estimated energy savings per annum (GJ)
		0 – < 2 years		2 – \leq 4 years		> 4 years		
		No of Opps	GJ	No of Opps	GJ	No of Opps	GJ	
Business Response	1	1	76339					76339
Outcomes of assessment	1	1	76339					76339

Table 2.2 – Opportunities assessed to an accuracy of worse than ($>$) $\pm 30\%$

Status of opportunities identified	Total Number of opportunities	Estimated energy savings per annum by payback period (GJ)						Total estimated energy savings per annum (GJ)
		0 – < 2 years		2 – \leq 4 years		> 4 years		
		No of Opps	GJ	No of Opps	GJ	No of Opps	GJ	
Business Response								
	1	1	47700					47700
Outcomes of assessment	1	1	47700					47700

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

Part 2B - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: **Norske Skog Albury Mill***

* Detailed investigation and implementation activities have resulted in significant changes in reported savings. An actual increase in real and projected savings has been therefore been reported compared to our second report and implementation of two identified opportunities (detailed in Table 2.5).

Total energy use for the period 1.7.2009 to 30.6.2010 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

4170425	GJ
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Table 2.3 – Opportunities assessed to an accuracy of better than or equal to (<=) ±30%

Status of opportunities identified	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	1			1	120,300			120,301
	2			2	75,700			75,702
	4	2	223,000	2	51,000			274,002
	3	3	16,500					16,500
Outcomes of assessment	10	5	239,400	5	247,000			486,400

Table 2.4 – Opportunities assessed to an accuracy of worse than (>) ±30%

Status of opportunities identified	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	1			1	7,200			7,201
	1			1	10,700			10,701
	1	1	21,200					21,200
Outcomes of assessment	3	1	21,200	2	17,900			125800

Name of Group member or business unit or key activity or site: Norske Skog Boyer Mill

	4393277
	GJ

Total energy use for the period 1.7.2009 to 30.6.2010 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

Table 2.3 – Opportunities assessed to an accuracy of better than or equal to (<=) ±30%

Status of opportunities identified	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	3	1	27600	2	525,300		552900	
Under Investigation								
To be Implemented								
Implementation Commenced	1	1	52500				52500	
Implemented								
Not to be Implemented								
Outcomes of assessment	4	2	80100	2	525300		605400	

Table 2.4 – Opportunities assessed to an accuracy of worse than (>) ±30%

Status of opportunities identified	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								
Under Investigation								
To be Implemented	1	1	10,700				10,700	
Implementation Commenced	2	2	52,500				52,500	
Implemented								
Not to be Implemented								
Outcomes of assessment	3	3	63200				63200	

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

Advanced process control of thermo mechanical pulping (Albury Mill)

This project involved the installation of advanced process control technology to improve process stability and product quality with lower energy consumption. Two potential suppliers were evaluated during a 12 month trial conducted in 2009. To date this project has reduced our energy usage by 40TJ per annum.

This opportunity has now been fully implemented.

Waste steam recovery re-boiler (Boyer Mill)

An opportunity has been identified to install a steam recovery re-boiler on a new thermo mechanical pulping plant. This will have an upfront cost of around four million dollars and provide energy savings of around 500TJ per annum, through a reduction in steam load on the existing boiler.

Update:

Following commissioning of the new plant there has already been a significant thermal saving of some 10%. The installation of a steam re-boiler will further recover heat from this process and this opportunity is under detailed investigation and is included in forward capital planning.

Optimisation of heat recovery systems to reduce steam demand (Albury Mill)

This project involved reviewing operation and maintenance of process heat recovery equipment to increase waste recovery and thereby reduce steam demand. Some engineering changes were required, as well as improved monitoring and cleaning of equipment. The upfront investment cost to enable optimisation was around \$100,000. To date heat recovery has improved by 56TJ per annum. The goal is to continue to increase the amount of heat recovered through refinement of operating practices and cleaning frequency.

This opportunity is being implemented.

Part 3 - Voluntary Contextual Information

Table 3.1 – Contextual Information

Energy Management and efficiency is included in Norske Skog's global optimisation program and in addition to these continuous improvement practices, technological advances in pulp and paper processing technologies are also being pursued to achieve our global emissions reduction target.


Finding alternative sources of energy for power and heat generation as well as reducing energy consumption are our main areas of focus. Investigations typically involve step-changes in technology or processes with an aim to achieve both emission reductions and energy efficiency improvements and these often require significant capital investment.

Norske Skog is a foundation signatory of the 3C Initiative (Combat Climate Change). The 3C Initiative consists of a group of companies showing leadership by promoting a global solution for climate change issues and urging a worldwide policy framework that should come in 2013, to replace the Kyoto protocol. See <http://www.combatclimatechange.org> for more information

Part 4 - Declaration

Table 4.1 - Declaration of accuracy and compliance (mandatory information)

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.



Andrew Leighton - Regional President,
Norske Skog Paper Mills Australia Ltd

Date 1/3/2011