



FIRST PUBLIC REPORT TEMPLATE

Controlling Corporation

Honan Holdings Pty Ltd (The Manildra Group)

Period to which this report relates

(See sub-section 22(2) of the Act and Regulation 7.1 of the *Energy Efficiency Opportunities Regulations (the Regulations)* 2006)

Start

1 July 2005

End

30 June 2008

Part 1 - Summary of assessments conducted thus far

Table 1.1 - Description of the way in which the corporation has carried out its assessments and over what period was each assessment taken. A statement saying that the intent and key requirements of the Energy Efficiency Opportunities legislation have been met must be made.

The Manildra Group controls seven active companies involved in various wheat and grain processing activities at many sites throughout Australia. Total annual energy consumption is in the order of 3.72PJ. Of this, 3.41PJ (92%) is consumed at one site: Bolong Rd, Bomaderry, NSW in the production of starch products, glucose products, ethanol and stillage. Accordingly, the Bomaderry site is the focus of Honan Holdings EEO energy assessment.

Energy consultants were engaged to undertake a comprehensive energy assessment of the site. The assessment involved analysis of production and energy data, site visits and discussions with key on-site personnel and the evaluation of a mass/energy balance of central processes. This led to the identification of energy efficiency opportunities. The assessment was augmented with reference to a Technical Review undertaken in 2005 as part of the NSW Energy Savings Action Plan program.

The assessment complies with the intent and key requirements of the EEO program.

Table 1.2 - Group member/business unit/key activity/site that have been assessed	Energy use per annum in the year the assessment is completed *	Energy data accuracy (if not within $\pm 5\%$) **	Reasons for not achieving data accuracy to within $\pm 5\%$ **
Bolong Rd, Bomaderry	3.407PJ	$\pm 5\%$	
Total	3.407PJ		
Total as a percentage of total energy use of the group covered by this report	92%		

* Energy Bandwidth may only be used if approved in the Assessment and Reporting Schedule

** Data accuracy not within $\pm 5\%$ can only be included if approved in the Assessment and Reporting Schedule

Part 2 - Outcomes of and business response to opportunities that have been identified and evaluated for each group member, business unit, key activity or site assessed

(See paragraphs 3-6 of Schedule 4 and Schedule 6 of the Regulations)

Group member/business unit/key activity/site >0.5 PJ name: _____

Table 1.3 Status of Opportunities		Number of Opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)	*Accuracy range (%)
			0 – < 2 years	2 – ≤ 4 years		
Outcomes of assessment	Identified (accuracy ≤ ±30%)	27	521,553	150,718	672,271	±20%
	Identified (accuracy > ±30%)	1	182,000		182,000	capex tbd
	**Total Identified	28	703,553	150,718	854,271	±25%
***Business Response	Under Investigation	16	359,228	56,022	415,250	
	To be Implemented					
	Implementation Commenced	3	198,861		198,861	
	Implemented	9	145,464	94,696	240,160	
	Not to be Implemented					

*The accuracy range for projected or actual costs, benefits and energy savings.

**You must ensure that this row is the sum of the two rows above it.

*** The data contained in each row of the business response area must total to the data contained in the 'Total Identified' row.

Note: An opportunity is any potential change to a system, activity or piece of equipment that:

- is identified during an EEO assessment;
- is consistent with legal requirements such as OHS, and
- may result in energy savings projects with payback periods of 4 years or less.

Details of at least three significant opportunities found through EEO assessments

(See paragraph 7 of Schedule 4 of the Regulations)

Details must include a brief description of the opportunity and may optionally include details of the costs of implementation, energy/dollar savings and any other benefits (such as greenhouse reductions).

Table 1.4
Opportunity 1

Combustion Control: Boiler 4 combustion control was by manual operator adjustment only. Flue gas analysis showed that the flue oxygen levels in boiler 4 were consistently some 4 percentage points higher than boiler 6 (on automatic control). This translated to energy wastage of up to 24,800 GJ per annum for boiler 4. An oxygen analyser was fitted to boiler 4 flue, linked to the SCADA system for automatic control. The capital cost was \$70,000 and the value of the energy saved indicated a pay back period of 12 months.

Opportunity 2 *

Boiler Feedwater Preheat: The boiler feed water to Boilers 5 and 6 was preheated from 16°C to 60°C using waste heat from the condensate from the stillage evaporators. The estimated steam saving is 3.5 tonnes per hour, equivalent to some 66,300 GJ per annum. At a capital cost of \$207,700, the payback period was 0.8 years.

Opportunity 3 **

Flash Steam Opportunities: Flash steam recovery has been installed on Gluten Dryer No. 5. The additional cost of installing a flash steam recovery system and heating coil was \$33,000 for a saving of 29,600 GJ, yielding a payback of only 0.4 years. The project has been so successful that any future dryers will have a flash steam recovery system fitted during manufacture. Flash steam recovery from the DDG dryers has commenced and further investigation and analysis of other opportunities is being undertaken with an indicated further saving of \$204,000 per annum in steam production.

*If there are less than three significant opportunities, provide details of those identified.

**If no significant opportunities have been identified in the assessment, a statement to this effect.

Part 3 - Voluntary Contextual Information

Reporting corporations may supply additional information that provides more context to the public report. Such information may include:

The starch and ethanol plant at Bomaderry is a complex, energy intensive plant. The Manildra Group is continually searching for energy-saving opportunities and is committed to reducing costs and improving its environmental performance in all aspects of energy use.

Part 4 - Declaration

(See paragraph 8 of Schedule 4 of the Regulations and paragraph 22(4)(c) of the Act)

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*.

Chair of the Board of Directors/CEO/Managing
Director/equivalent officer (state position) *COMPANY SECT.*

GILBERT A H BRATBY