



Australian Government  
Department of Resources, Energy and Tourism

**Energy Efficiency**  
Opportunities



**LION**

**ENERGY EFFICIENCY OPPORTUNITIES PROGRAM**

**PUBLIC REPORT No. 4**

**DECEMBER 2011**

## Part 1 - Corporation Details

### Controlling Corporation

Lion Nathan Limited

### Period to which this report relates

From

1 July 2006

To

30 June 2011

### Table 1.1 - Major Changes to Corporate Group Structure or Operations

#### Table 1.1 – Major Changes to Corporate Group Structure or Operations

In October 2009, Lion Nathan Limited and National Foods Limited merged to become Lion Nathan National Foods. We continued our assessments to the end of the first cycle of the EEO in line with the separate assessment & reporting schedules we had in place for these entities. In May 2011, a company name change from Lion Nathan National Foods to Lion Pty Limited was announced. The roll out of the new name occurred in August 2011 through to November 2011. The name change did not affect any of our sites being assessed. In the second cycle, we will prepare one assessment & reporting schedule and submit one report under the new corporation name Lion Pty Limited.

### Table 1.2 – Aggregate energy assessed covered in this report

Total energy use covered by all assessments in this report	978,803	GJ
Total energy assessed as percentage of total energy use of the corporate group*#	87.4	%

### 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*.

**James Brindley**  
Managing Director  
Lion – Beer, Spirits & Wine Australia

Date: 14/12/2011

## Part 2 - Assessment Outcomes

**Table 2.1 – Assessment Details**

It is compulsory to complete a separate table for each group member, business unit, or key activity that has been assessed

**Name of group member or business unit or key activity**

South Australian Brewing Company, Thebarton, SA

**Total energy use in the last financial year**

187,632

GJ

**Energy use assessed in this entity as a percentage of total entity energy use\***

100

%

**Energy use assessed in this entity as a percentage of total corporate energy use**

16.8

%

**Accuracy of above estimates related to energy use assessed - only required if not  $\pm 5\%$  or better**

<  $\pm 5$

%

**Period over which assessment was undertaken**

01/07/2010

30/06/2011

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

The energy assessment of this was performed as part of Lion's commitment to the Commonwealth's Energy Efficiency Opportunities (EEO) program. The assessment followed the EEO guidelines to identify cost effective energy efficiency improvements, and develop mechanisms that will aid the implementation of the identified opportunities, thereby improving the energy efficiency of plant operations in the long term.

The EEO assessment engaged a range of skilled personnel at the site and and an external consultant from Energetics. It included the following :

1. Project planning and communications planning
2. Development of a baseline of the site's energy use and metering & monitoring systems
3. Identification and assessment of energy efficiency opportunities

Specifically the assessment involved a number of stages:

1. Review of baseline energy use. The data used for analysis range from October 2008 to April 2011
2. Interviews with key management, operating and maintenance personnel
3. Site energy audit and understanding of energy usage at different areas of site
4. Assessment of energy saving opportunities



5. EEO Workshop: Energy management practices on site was reviewed using Energetics proprietary tool One2Five® Energy
6. EEO Workshop was held on 11<sup>th</sup> August 2011: Presentation of baseline energy use, discussion on identified energy saving projects, opportunities raising and screening of opportunities
7. Decision making process conducted where opportunities were reviewed & discussed and decisions made as to what opportunities will be implemented , further investigated and those not to be implemented
8. Communication of outcomes of the process to relevant people in the Lion Organisation

The involvement of leaders & people are an integral part of the EEO process. At Lion, Energy management teams have been formed at each site and an Energy Champion nominated at each site. These teams meet regularly to ensure that energy efficiency objectives and the EEO program are achieved and identified opportunities are implemented. Progress is communicated to Lion's Senior Management

At the conclusion of the first EEO cycle, Lion has assessed 87% of its total energy use.

Lion Nathan remains committed to proactively demonstrating leadership in energy efficiency and meeting the obligations of the EEO program. In 2011/12, Lion plans to assess James Boag & Son Brewery in Launceston Tasmania

The information obtained during the EEO process has been collated and reported to the Department (DRET). Following approval by the DRET, this public report will be published on our website.

\* 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**

It is compulsory to complete a separate table for each group member, business unit, or key activity that has been assessed

<b>Table 2.2 – Energy efficiency opportunities identified in the assessment</b>									
Status of opportunities identified to an accuracy of better than or equal to $\pm 30\%$		Total Number of opportunities	Estimated energy savings per annum by payback period (GJ)						Total estimated energy savings per annum (GJ)
			0 – < 2 years		2 – $\leq$ 4 years		> 4 years		
			No of Opps	GJ	No of Opps	GJ	No of Opps	GJ	
Business Response	Implemented								
	Implementation Commenced								
	To be Implemented								
	Under Investigation								
	Not to be Implemented								
Outcomes of assessment	Total Identified								
<b>Status of opportunities identified to an accuracy of worse than <math>\pm 30\%</math></b>									
Business Response	Implemented	0	0	0	0	0	0	0	0
	Implementation Commenced	0	0	0	0	0	0	0	0
	To be Implemented	1	1	641	0	0	0	0	641
	Under Investigation	9	3	5,968	3	617	3	2,402	8,987
	Not to be Implemented	6	0	0	1	3,687	5	12,451	16,138
Outcomes of assessment	Total Identified	16	4	6,609	4	4,304	8	14,853	25,766

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	Voluntary Information	
<p>Air compressors - Install Isolation Valves to Kegging &amp; Canning plants: Compressed air to the kegging and canning plants is supplied from main compressors. The two plants operate for about 3 days in a week. Currently the supplied air to the plants during non-operation of the plants meets only for leakage. A potential solution to the problem is to Install interlocking to the main header to each of the plants and interlock with the main machinery such that during operation of the main equipment, the air is supplied. In order for compressed air requirement during non operation of the main equipment, an over-ride button can be provided with two to three hour timer control.</p>	Business Response	Under Investigation
	Energy saved (GJ)	1,478 GJ
	Greenhouse gas abated (CO2-e)	410 tonne
	\$s saved	\$44,000
	Payback period	0.5 yr

Description of Opportunity	Voluntary Information	
<p>Lighting upgrade and turning off after operating hours: The energy assessment identified an opportunity to review current lighting fixtures (twin T8's and metal halides) , procedures and timers to evaluate payback for upgrading to more efficient fixtures (i.e. T5's/ LED's and controls)</p>	Business Response	Under Investigation
	Energy saved (GJ)	1,922 GJ
	Greenhouse gas abated (CO2-e)	530 tonne
	\$s saved	\$60,000 p.a.
	Payback period	5.8 yr

Description of Opportunity	Voluntary Information	
<p>Kegging Cold Room: The kegging cold room is currently partially loaded (20%). Options are to either completely remove the cold room or provide partitioning to save on refrigeration energy &amp; costs.</p>	Business Response	To be implemented
	Energy saved (GJ)	641 GJ
	Greenhouse gas abated (CO2-e)	178 tonne
	\$s saved	\$15,000 p.a.
	Payback period	0.1 yr