Australian Government
Department of Resources, Energy and Tourism

Energy Efficiency Opportunities

PUBLIC REPORT TEMPLATE 2011

Please note that this template has been updated based on feedback from a number of Corporations during the recent review of regulations. It is not compulsory for you to use this Public Report template. You may wish to continue to use the previous template, or you may report in another format of your choice. Either is acceptable provided you report all the information required by the EEO Act and Regulations.

There is an explanatory document at pages 5-14 of this template that fully explains how to complete it. There is also some targeted guidance on the template itself.

Part 1 - Corporation Details

Controlling Corporation

Period to which this report relates

Insert the name of the Controlling Corporation exactly as it is registered with the EEO Program. The period to which the report relates is the total period of participation up to 30 June prior to when the report is due.

V/Line Pty Ltd	From	1 July 2006	To	30 June 2011

Table 1 - Major Changes to Corporate Group Structure or Operations

Table 1.1 – Major Changes to Corporate Group Structure or Operations
V/Line's rail patronage grew by 7% in 2010-11, continuing to place pressure on the capacity of the network. In response to demand V/Line has increased supply where possible including the deployment of a further 23 new VLocity cars in 2010-11 with 6 more new cars delivered in the first half of 2011-12. The increase in supply generally involved increasing the length of trains as well as a new peak service in each direction to and from Geelong introduced in May 2011. A limited service was also reintroduced to and from Maryborough with those services commencing in July 2010. The combination of a slightly increased number of services and an increase in capacity on existing services has led to V/Line's diesel use being almost 6% higher in 2010-11 than 2009-10. Initiatives have been identified for investigation in V/Line's 2011-12 Sustainability Action Plan to improve the efficiency of its diesel use.

Declaration

Declaration of accuracy and compliance	
The information included in this report is, to the best of my knowledge, correct and in accordance with the *Energy Efficiency Opportunities Act 2006* and *Energy Efficiency Opportunities Regulations 2006*.	Rob Barnett Chief Executive Officer **Date** 19/12/11

Part 2 - Assessment Outcomes

Table 2.1a – 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	V/Line (Above Rail)

Total energy use in the last financial year	1,175,383			GJ
Period over which assessment was undertaken	From	March 2008	to	June 2008
Percentage of entity energy use assessed*	100			%
Percentage of corporation's energy use assessed	100			%
Accuracy of energy use assessed - only required if not ±5% or better				%

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

V/Line has collected emissions and energy use data for a number of years. This data formed the basis of the assessment which was undertaken for the 'Above Rail' division of the business under the Energy Efficiency Opportunities legislation. A cross functional Business Improvement Project team was formed to analyse the data and identify opportunities to improve V/Line's energy efficiency. This assessment looked at data for 2005-06 and 2006-07, with energy use increasing across those two years because of an increase in the number of services being run. The assessment itself took place between March and June 2008. A number of potential opportunities were identified and evaluated. The outcome of the assessment was documented in an information paper which was reviewed and noted by the Board. The intent and key requirements of the Energy Efficiency Opportunities legislation were met.

* Please note that corporations are required to assess 80% or more of their energy use in the first five-year assessment cycle and 90% or more in subsequent five-year assessment cycles. Accordingly, for those corporations with a 2005-06 trigger year (i.e. those corporations at the end of their first-five year assessment cycle), the value in "Percentage of corporation's energy use assessed" above, must be more than 80%.

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 2.2a - 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

Table 2.2a – Energy efficiency opportunities identified in the assessment									
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	1	1	0.3					0.3
	Implementation Commenced								
	To be Implemented								
	Under Investigation	1			1	1,770			1,770
	Not to be Implemented								
Outcomes of assessment	Total Identified	2	1	0.3	1	1,770			1,770.3
Status of opportunities identified to an accuracy of better than or equal to (<=) ±30%									
Business Response	Implemented								
	Implementation Commenced								
	To be Implemented								
	Under Investigation								
	Not to be Implemented								
Outcomes of assessment	Total Identified								

Please note that Corporate Groups **are not required** to report opportunities with a payback greater than 4 years. Reporting this data is voluntary.

Table 2.1b – 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	V/Line (Regional Network and Access)

Total energy use in the last financial year	73,874			GJ
Period over which assessment was undertaken	From	April 2010	to	May 2010
Percentage of entity energy use assessed*	100			%
Percentage of corporation's energy use assessed	100			%
Accuracy of energy use assessed - only required if not ±5% or better				%

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

In accordance with V/Line's revised Assessment and Reporting Schedule, an assessment of the Regional Network and Access (RNA) division of the business was undertaken during April and May 2010. A cross functional team was formed to analyse data and identify any opportunities for improved energy efficiency. The assessment reviewed data from May 2007 when control of the RNA division of the business was passed to V/Line after the State Government bought back the lease of the intrastate regional rail network from Pacific National. The assessment found that most of the energy use in this division of the business is to power vehicles used for maintenance. These are generally specialised vehicles to which there is no alternative. The next most significant use of energy is electricity for power at depots. A trial of LED style tubes is being undertaken at a limited number of locations to reduce consumption as described further in table 2.3.

* Please note that corporations are required to assess 80% or more of their energy use in the first five-year assessment cycle and 90% or more in subsequent five-year assessment cycles. Accordingly, for those corporations with a 2005-06 trigger year (i.e. those corporations at the end of their first-five year assessment cycle), the value in "Percentage of corporation's energy use assessed" above, must be more than 80%.

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 2.2b - 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

Table 2.2b – Energy efficiency opportunities identified in the assessment									
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								
	Implementation Commenced								
	To be Implemented								
	Under Investigation	1	1	1,770					1,770
	Not to be Implemented								
Outcomes of assessment	Total Identified	1	1	1,770					1,770
Status of opportunities identified to an accuracy of better than or equal to (<=) ±30%									
Business Response	Implemented								
	Implementation Commenced								
	To be Implemented								
	Under Investigation								
	Not to be Implemented								
Outcomes of assessment	Total Identified								

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	
A review was undertaken of lighting at the West Melbourne (fleet maintenance) Depot. The review found that energy could be saved in two ways. The first improvement was through the refurbishment of light fittings. This involved among other things the replacement of fluorescent tubes with more efficient types and the installation of high performance reflectors. The second improvement identified was through the installation of voltage reduction units for fluorescent lights. These units would reduce the voltage of the lights when full power is not required (i.e. after a warm-up period). The annual savings generated through these improvements, inclusive of energy savings and maintenance savings, was calculated to be approximately $60,000 p.a. The investment required to implement these improvements is approximately $208,000. This represents a payback period of 3.4 years. These improvements would also generate a greenhouse gas emission reduction of approximately 650 tonnes per annum. There are currently no funds available to implement these improvements.	Business Response	Under Investigation
	Energy saved (GJ)	
	Greenhouse gas abated (CO2-e)	
	$s saved	
	Payback period	

Description of Opportunity	Voluntary Information	
A review was undertaken of the pool of V/Line road vehicles. The light motor vehicle fleet consists of several different types of sedans and station wagons as well as 2WD and 4WD utility vehicles. Research was undertaken to determine the greenhouse gas emissions of vehicles in our current fleet and those of alternative vehicles which would also meet the requirement of the business. The research determined that the current 2WD and 4WD fleet vehicles had the lowest emissions when compared with other vehicles in their respective classes. The research also determined that an alternative make of sedan had greenhouse gas emissions that were on average 10% lower than existing sedans in the fleet and 12% lower than station wagons in the fleet. A reduction in greenhouse gas emissions would therefore be achieved if the company standardized on the alternative when replacing existing sedans or acquiring new sedans. There would be a corresponding reduction in energy use estimated to be 5% of total road vehicle energy use. A revised Motor Vehicle Policy incorporating these changes has been approved by the Board. The change in vehicles has occurred such that all head office pool cars of a sedan type are now the identified alternative.	Business Response	Implemented
	Energy saved (GJ)	
	Greenhouse gas abated (CO2-e)	
	$s saved	
	Payback period	

Description of Opportunity	Voluntary Information	
A review was undertaken of lighting at various depots, offices and stations across the state. The review focused on the fluorescent tubes that are used in many locations. It was determined that there are approximately 8,000 fluorescent tubes in use across the network. Each of these tubes draws 36 watts of power. During the assessment it was discovered that there is an LED style tube now available that only draws 15 watts of power. It is also claimed that the LED tubes have a longer life so maintenance costs can be reduced and they do not suffer from deterioration in performance as a fluorescent tube does. The LED tubes are more expensive but based on the savings from less energy use and less frequent maintenance the payback period is approximately 2 years. The LED style tubes are currently being trialed at a limited number of locations.	Business Response	Under Investigation
	Energy saved (GJ)	
	Greenhouse gas abated (CO2-e)	
	$s saved	
	Payback period	

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.