

Energy Efficiency Opportunities

PUBLIC REPORT 2013

Part 1 - Corporation details

Controlling corporation

Insert the name of the controlling corporation exactly as it is registered with the EEO Program.

Forestry Corporation of New South Wales

Table 1.1 - Major changes to corporate group structure or operations

Table 1.1 – Major changes to corporate group structure or operations in the last 12 months

There have been no major changes to corporate group structure or operations.

In May 2012 the NSW Government announced it would make Forestry Corporation a state owned corporation (SOC). This change took effect on 1 January 2013. The new Forestry Corporation of NSW will remain publicly owned and the nature of the business and business relationships will remain largely the same but the governance structures will change to improve the organisation's commercial performance.

As a state owned corporation under the direction of a skilled commercial board, the Forestry Corporation of NSW will be able to focus sharply on its core business of growing and harvesting timber to meet the community's needs for hardwood and softwood products while still providing recreational opportunities for the people of New South Wales.

Declaration

Declaration of accuracy and compliance		
The information included in this report has been reviewed and noted by the Senior Management Team and is to the best of my knowledge, correct and in accordance with the <i>Energy Efficiency Opportunities Act 2006</i> and Energy Efficiency Opportunities Regulations 2006.		
	Nick Roberts, CEO	
	Date 19/12/2013	



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Part 2 - Assessment outcomes

Table 2.1 – Assessment details

It is compulsory to complete a separate table for each entity* that has been assessed

Name of entity	Forestry Corporation of New South Wales (FCNSW)	
Name of entity	r orestry corporation of new could wales (r onow)	

Total energy use in the last financial year	935,756	GJ
Total percentage of energy use assessed when assessments were undertaken	56	%

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

The FCNSW fleet policy, which includes fleet renewal, is based on fleet age and distance/time triggers. In reality this is principally overridden by having the Capital available at the time the fleet item is due for replacement.

Following an initial assessment it was decided that for the purposes of acquiring fleet that meet both the "Fit for Purpose" and offering short/long term gains for energy efficiencies with a resultant reduction in costs, the Corporation would concentrate its efforts on the Light Vehicle Fleet. The assessment was undertaken as a desktop study including input from affected staff to determine appropriate vehicle characteristics.

FCNSW have previously assessed a number of haulage scheduling systems to evaluate their potential effectiveness in reducing haulage costs through better use of the existing log haulage truck fleet. FCNSW assessed how an optimised log haulage transportation planning and management software system would perform and determine how it might apply to its plantation operations, and further explore its application to native forest operations, and whether any benefits in terms of reduce costs and energy consumption could be derived. Numerous simulated models of the Bombala zone of operations were completed and two other case studies were conducted, one for Hume Region and another for Macquarie Region.

The decision to implement opportunities was made by the Senior Management Team of FCNSW and where opportunities are to be implemented this is communicated to staff through changes to company policy, specifically the Fleet Management Policy.

* Entity is group member, business unit, or key activity. Please note that, for individual sites that use more than 0.5 PJ of energy, all energy use must be assessed (less a small proportion for non-integral energy use).



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Table 2.2 - Energy efficiency opportunities identified in the assessment

It is compulsory to complete a separate table for each entity that has been assessed

			Estimated energy savings per annum by payback period (GJ)					Total estimated energy	
Status of opportunities identified to an accuracy of better than or equal to ±30%		Total number of opportunities	0–2 years		2-4 years		> 4 years		savings per annum (GJ)
			No. of opps	GJ	No. of opps	GJ	No. of opps	GJ	
Business	Implemented								
response	Implementation commenced	2			2	2,992			2,992
	To be implemented								
	Under investigation								
	Not to be implemented	1		n					
Outcomes of assessment	Total identified	3			2	2,992			2,992

Please note that corporate groups are not required to report opportunities with a payback greater than four years. Reporting this data is voluntary.



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Table 2.3 - Details of significant opportunities identified in the assessment

Corporate groups are required to provide at least three examples of significant opportunities for improving the energy efficiency of the group that have been identified in assessments.

Description of opportunity No. 1	Voluntary Information		
Following the assessment and presentation, the Senior Management Team approved the move away from the 3.0 litre engines (unless vehicle requirements included continuous heavy stowage and towing capacity) to a 2.5Litre Engine for our Operational Vehicles (Commercial 4WD's) . Operational vehicles have traditionally represented over 80% of the FCNSW light fleet. Part of this assessment and presentation included a reduction in vehicle purchase costs and the added reduction in Fuel Usage by the smaller 2.5 litre engine. The process of change over should take a further 36 months to complete. i.e. 1 year in on replacements moving to a 2.5 litres engine. Fuel Usage per 2.5 litre engine is down 1.1 lts/100Kms or 9.6% from the traditional 3.0 litre model. Estimated fuel savings of 65,000 litres p.a. and \$90,000 p.a. averaged over 4 years.	Equipment type	Light Commercial	
	Business response	Implement	
	Energy saved (GJ)		
	Greenhouse gas abated (CO2-e)		
	\$ saved	\$360,000	
	Payback period Year 1 - \$36,000 Year 2 - \$72,000 Year 3 - \$108,000 Year 4 - \$144,000	Four (4) Years	

Description of opportunity No. 2	Voluntary Information		
Following the assessment and presentation, the Senior Management Team approved the move away from large 6 Cylinder passenger vehicles and	Equipment type	Large 6 Cylinder passenger vehicles and Heavy 4WD Wagons	
Heavy 400 Wagons to light continencial alternatives.	Business response	Implement	
The process of change over should take a further 24 months to complete. i.e. 1 year in on replacements moving to light commercial alternatives. Fuel Usage in the commercial vehicles offers 1.8 lts/100Km savings on the six cylinder and heavier 4WD Wagons. Estimated fuel savings of 12,500 litres p.a. and \$17,500 p.a. averaged over 3 years.	Energy saved (GJ)		
	Greenhouse gas abated (CO2-e)		
	\$ saved	\$52,000	
	Payback period Year 1 - \$8,000 Year 2 - \$18,000 Year 3 - \$26,000	Three (3) Years	

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Description of opportunity No. 3	Voluntary Information	
Assessment of the software system identified an opportunity to make haulage trucks more productive; however some significant limitations were highlighted along with a confounding issue relating to accounting methodology results in a Senior Management Team deciding not to proceed with implementation.	Equipment type	Optimised forest transport planning software
	Business response	Not to be implemented
	Energy saved (GJ)	
	Greenhouse gas abated (CO2-e)	
	\$ 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.