

V/Line Pty. Ltd.

Energy Efficiency Opportunity – Public Report 2013

V/Line is committed to identifying and delivering cost-effective energy efficiency solutions across our business. Across V/Line's operations, approximately 1.31 PJ of energy was consumed in 2012/13. Overall this equated to a 3% reduction in total energy use from the previous year, but an increase per passenger kilometre of approximately 1%. This was primarily due to a drop in passenger numbers associated with the transfer of the Sunbury network to metropolitan services.

Over 90% (1.2 PJ) of V/Line's energy use in 2012/13 was associated with diesel use in trains (rail services). A full assessment of train energy use was concluded in December 2012. The assessment involved trialling technology on board trains aimed at modifying driver behaviour to generate more fuel efficient driving. Based on the results, V/Line estimates that fuel savings of 7% are achievable.

Based on the results V/Line is now working to implement this *Driver Performance Optimisation System* (DPOS) – a computer system within the train driver's cabin that advises the driver on when to accelerate, brake and coast to achieve optimal fuel efficiency and meet the train timetable. This project is expected to:

- Reduce the amount of energy used in V/Line trains by approximately 84,000
 GJ/year (approximately two million litres of diesel)
- Reduce greenhouse gas emissions by approximately 5,900 tonnes
- Have net annual savings of approximately \$2.1 million, and
- A payback period of less than two years.

In addition to an assessment of energy used in rail services, V/Line assessed eight sites for energy efficiency opportunities as part of the Victorian government's *Greener Government Buildings* (GGB) program. These sites accounted for approximately 55% of energy use by train and infrastructure maintenance depots, stations and fuel points. A range of energy efficiency opportunities were identified with a combined payback period of approximately 6.4 years. These opportunities are being investigated further prior to a decision being made on implementation.

V/Line has performed the energy assessments outlined above in accordance with the federal government's *Energy Efficiency Opportunities Act*, with the results detailed above being true and accurate at the time of publication.

Theo Taifalos

Chief Executive