### YOUR COMPETITIVE ADVANTAGE Energy efficiency solutions for Australian transport and logistics SMEs





SUPPLY CHAIN & LOGISTICS ASSOCIATION OF AUSTRALIA



This road transport case study forms part of a suite of resources developed by the Supply Chain and Logistics Association of Australia (SCLAA) and project partners to help SMEs in the supply chain and logistics sector with energy efficiency improvements and energy cost reductions.

The full suite of resources is available from http://energy-efficiency.sclaa.com.au

# ► Background

Australian Worldwide Logistics Pty Ltd T/A Xtreme Freight provides customers with total transport solutions. They specialise in the local, intrastate and interstate cartage of airfreight and seafreight and provide nationwide solutions in transport, logistics and warehousing services.

The company is located in Tullamarine, in Melbourne's north-west, and has 16 administration staff and over 100 drivers. They have been servicing the freight forwarders industry for over 30 years and in early 2014 the company took on a new approach to operational and energy efficiency.

This approach was recognised in December 2014 when Xtreme Freight won the 2014 Small/Medium Business Energy Efficiency Award at the prestigious Australian ASCLA Supply Chain and Logistics Awards.

# ► Opportunities

Xtreme Freight has experienced steady growth and in 2014 the business recognised the need to expand their operations. Centralising their warehousing to one large facility allowed the company to consolidate and cater for the increased demand for their services. The larger warehouse and increased operation capacity required a new approach to management, energy efficiency and driver training.



# ► Implementation

Xtreme Freight identified three areas within the organisation to be targeted in 2014. This included the introduction and implementation of a new Warehouse Management System (WMS), a new Transport Management System (TMS) and a New Driver Training (NDT) program:

- > A new WMS saw a more efficient forklift workflow resulting in the machines requiring less charging, this then reduced the number of charging stations required from three to one, immediately reducing the company's power usage
- > A new TMS was implemented to ensure better vehicle utilisation, route planning and reporting, this resulted in Xtreme Freight operating almost completely paperless through the use of PDA's and a client dispatch order system
- > As part of the WMS a number of roofing sheets were replaced with polycarbonate roofing panels to allow natural light over racking aisles, eliminating the need for artificial lighting throughout the day, they also replaced 84 halogen lighting tubes with LED's, significantly reducing power consumption
- > An NDT program was developed for existing staff and also introduced to Xtreme Freight's driver induction program, it focuses on fuel efficient driving including topics such as speed awareness, avoiding unnecessary braking, gear and clutch use and route planning

## ► Outcomes

Implementing the new WMS and energy efficiency measures has reduced Xtreme Freight's quarterly power bill from \$2,500 to around \$1,000. This is an annual saving of \$6,000.

Converting from Halogen to LED's has resulted in a further annual saving of over \$1,590. It has also improved the company's carbon footprint by decreasing greenhouse gas emissions from 12.3 to 5.7 tonnes per year.

Most significantly, as a result of the New Driver Training Program, Xtreme Freight has seen an annual saving of \$87,500 due to reduced fuel consumption. For Heavy Rigid vehicles there has been a 25 per cent decrease in fuel consumption resulting in an annual saving of \$50,000. Medium Rigid has seen a 19 per cent decrease and \$25,000 annual saving. Vans have seen a 15 per cent decrease and \$12,500 annual saving.

The new TMS mandated reporting of fuel usage, speed analysis, peak speed, idling, engine hours and planned trip vs. actual trip has also influenced fuel reduction outcomes.

Combined, the new energy efficiency measures delivered a total cost reduction of over \$95,000 in the first 12 months alone.

# More Information

Further measures are expected to be implemented in the coming months, this includes:

- > The purchase of a selected number of hybrid small commercial vehicles
- Investigating the possibility of powering the warehouse with solar power
- Refurbishment of the administration building with energy efficient light fittings and time delay sensor lighting

Learn more on how to make your business more energy efficient at **sclaa.com.au** 

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