

## Fuel efficiency

By adopting a suite of solutions to cut their per-kilometre fuel use, Winstone Aggregates has improved its margins without the need for dramatic increases in cartage prices - and it has reduced emissions as well. This excerpt is taken from an EECA Case Study that can be read in full at <http://www.eecabusiness.govt.nz/node/10983> :

..."there are five key ways the company has achieved significant savings — and at a very low cost to the business.

**Reducing idling time** has had a real impact on fuel efficiency. By encouraging drivers to turn their engines off when picking up loads, and better planning journeys to avoid traffic congestion, the company has managed to reduce idling times from 12% to just 6%.

**Having covers on trucks at all times** — loaded *and* unloaded — could create energy savings of around 8% according to the fleet audit, even though Winstone Aggregates' truck and trailer units are already manufactured to high aerodynamic standards. Loaded Winstone Aggregates trucks are already covered to stop particles from blowing out, so it was an easy step for the company to introduce a policy to cover unloaded trucks too.

**Reducing vehicle speed** by around 10 kilometres per hour (kph) can reduce fuel consumption by around 0.25 litres per kilometre, which prompted the company to fit all their new electronic engines with 90 kph speed limiters. Not only do speed limiters reduce fuel consumption, they also reduce the number of traffic infringements — and that's good for the company's ambition to have a 5-star ORS (Operator Rating Scheme) rating.

**Tyre management** for its North Island fleet is outsourced to a specialist tyre company, but Winstone Aggregates operates an internal programme alongside this that checks one truck and trailer unit per day for tyre pressure and general wear and tear. While this may seem excessive, overseas research has found that operating tyres at optimal pressure can result in fuel savings of up to 3%.

The final area that Winstone Aggregates focuses on is **travel planning and management**, using GPSroute monitoring to minimise idling times and maximise back loading opportunities to reduce overall mileage. For example, a truck taking a load from the Hunua quarry into central Auckland will often pick up a load from either Three Kings or Puketutu Island on the way back.

The company also tries to send trucks on routes or destinations that eliminate the need to travel on congested highways during peak times. This can be a challenge in places like the Auckland region, but Horrobin says this is what you should strive to do if you are serious about fuel efficient dispatching. Winstone Aggregates operates two trucks at night (there is an estimated 10% efficiency gain from transporting aggregates between 6 pm and 6 am)."