

Collaborating Councils

Conversion of Heavy Fleet to Biodiesel

Improving the way local councils buy goods and services to support their communities increases capacity and performance and provides better value for residents and ratepayers.

In 2013, Local Government Victoria began working with three councils to investigate transitioning their heavy fleet away from mineral fuel sources to biodiesel, with the aim of reducing costs and emissions.

Participating councils

- Golden Plains Shire Council
- Hepburn Shire Council (lead)
- Pyrenees Shire Council

Process

Working together, the councils compared the availability of biodiesel sources in the region such as soy, palm and vegetable oil, animal fats and used cooking fat.

A feasibility study was completed which provided recommendations on the most sustainable bio-source for heavy fleet conversion. The feasibility study examined the strength and maturity of the market to efficiently support the conversion of the councils' heavy fleet to biodiesel.

The councils identified benefits derived from a collaborative approach to the project and the potential sharing of bulk fuel supplies/arrangements. Participating councils recommended the implementation of this measure to assist in achieving emissions targets set out in their sustainability strategies.

As a result of the study, reports and evidence suggest that this project could result in reducing the three councils' heavy vehicle emissions by around 170 tonnes a year.



Hepburn Shire Council commenced converting its heavy fleet to biodiesel in 2015 through a two-phased approach:

- Phase 1 installed a biodiesel system in Daylesford to supply B20 biodiesel. Council converted 60 per cent of its heavy fleet to biodiesel in the first nine months of implementation. Council has several older vehicles (pre 2006 models) that still require a small amount of standard mineral diesel and aims to move away from the use of these vehicles with the implementation of Phase 2.
- Phase 2 is scheduled for implementation in 2017-18 with the installation of an underground biodiesel tank in Creswick. This will enable the completion of the conversion of the entire fleet to biodiesel.

Due to a significant restructure, **Golden Plains Shire** has put the biodiesel conversion of its heavy fleet on hold. Since the completion of this project, council has closed one fuel depot and employed the services of a mobile trailer to provide biodiesel and hence does not require the installation of a new biodiesel tank.

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As the **Pyrenees Shire** did not store fuel on any of its depot sites at the time, it was decided the implementation of this project would have involved a significant cost outlay to purchase and install tanks to provide storage for biodiesel. Further analysis determined that although this would be a worthwhile environmental exercise, the payback period over the long term for council would not be warranted.

Benefits

- The feasibility study and report showed the three councils could reduce heavy vehicle emissions by around 170 tonnes of carbon dioxide a year, and hence reduce impact on the environment.

- **Hepburn Shire Council** has achieved a five per cent reduction in carbon emission in the first year. Council has also commenced other environmentally-sustainable projects which are moving Hepburn Shire towards being carbon neutral.
- The project identified sources for new products and opportunities for industry development.
- Councils now have a model for collaboration on future opportunities.



Read about the success and benefits of collaborative procurement at Local Government Victoria's website www.delwp.vic.gov.au/local-government/strengthening-councils/collaborating-councils.

For more information regarding this project contact Local Government Victoria on (03) 9948 8537.

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