



Setting up a regional biodiesel supply – a consortium approach

Many businesses and organisations around the country are looking at ways to implement more sustainable practices, reduce greenhouse gas emissions and lessen their impact on the environment. One response to these concerns is to use biodiesel blends in vehicles.



New Zealand's first biodiesel consortium group is launched in Queenstown by EECA Chief Executive Mike Underhill.

In New Zealand, a 5% blend of biodiesel with 95% ordinary diesel (B5) is the maximum blend ratio of biodiesel with ordinary diesel allowed for retail sale such as at service stations and truck stops. Higher blends such as B20, however, can be sold directly to commercial users where there is a written contract for supply (non-retail sale).

Setting up a regional consortium, where businesses come together to pool demand, resources and funding, can establish the supply of biodiesel for businesses in a location where it may not have otherwise been possible.

What are the benefits of biodiesel?

Biodiesel has a range of benefits that appeal to many sectors, including tourism, agriculture, aquaculture, fishing, forestry, transport, and central and local government.

Biodiesel burns more cleanly than ordinary diesel, which improves air quality. It also has good combustion and lubrication properties which makes it easier on engines.

Using biodiesel reduces greenhouse gas emissions. Consumers are increasingly aware of the carbon footprint of the goods and services they use, and are more willing to support businesses that are working to reduce their environmental impact.

EECA has established a framework which allows biofuel producers and retailers to report on the environmental credentials of their fuels. This reporting shows what feedstock has been used to make the biofuel, where that feedstock comes from, and the reduction in greenhouse gas emissions that is achieved compared with using fossil fuels, after taking into account emissions from the production, processing and transportation of the biofuel.

How does the price compare?

The Government's Biodiesel Grants Scheme offers a grant of up to 42.5 cents per litre to biodiesel producers who sell more than 10,000 litres of biodiesel per month for use in blends up to and including B100. The grant means that biodiesel producers are able to deliver biodiesel blends at a price that is on par with ordinary diesel.

Forming a buyers' consortium of businesses interested in using biodiesel enables a critical mass to be established, which allows biodiesel producers to supply to areas that otherwise might not have received supply.

The grant scheme is managed by the Energy Efficiency and Conservation Authority (EECA). There are (as of May 2010) six biodiesel producers registered in the scheme.

During the first year of the Biodiesel Grant Scheme, the grant was only available for fuel sold for use in blends of B20 or less. This criteria was been amended so that the grant is now available to blend levels up to and including B100 as long as the quality of the fuel meets the Engine Fuel Specification Regulations 2008.

Establishing a consortium

The purpose of this resource is to provide guidance to a person or organisation interested in simplifying the set up of a biodiesel consortium.

Blend level

To determine the appropriate blend level(s) for the biodiesel consortium, potential members need to check the compatibility of their vehicles to use biodiesel blends and then come to a consensus on which blend level(s) will be available to consortium members.

EECA recommends that businesses check with their vehicle or engine manufacturer, and with a specialist with particular expertise in the field, about the blend level that is suitable for the vehicles that are likely to receive fuel from the consortium.

Virtually all diesel vehicles can use a 5% biodiesel blend without any engine or fuel system modifications. Higher blends, such as B20, are able to be used in many vehicles, provided a few simple checks and steps are followed.

Higher blend levels, may also provide some businesses with additional environmental and branding advantages. Other businesses may prefer to use a lower level blend such as B5. These factors need to be weighed up in coming to a consensus, or it may be possible to have two different tanks to enable members to use their preferred blend.

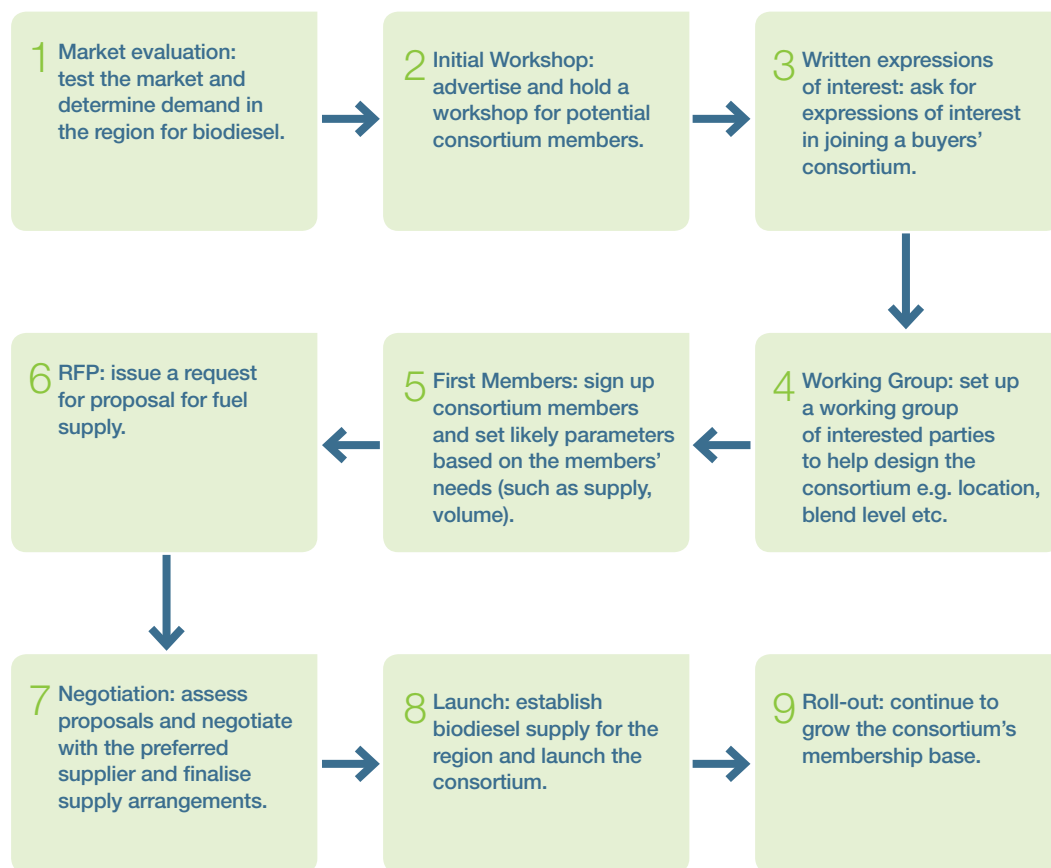


Consortium workshop.

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Suggested steps

To set up a consortium, the following steps are suggested:



Technical and practical considerations

At the time of planning a consortium there are a number of technical and practical matters that should be considered. These include, but are not limited to the following:

Fuel specifications: The quality of fuels supplied by retail or non-retail sale is governed by the Engine Fuel Specification Regulations 2008. See www.legislation.govt.nz and search under 'engine'.

Any diesel sold by retail sale may contain up to 5% biodiesel as specified in Schedule 2 of the Engine Fuel Specification Regulations 2008.

Biofuel blends can also be sold through a contract between buyer and seller i.e. non-retail sale (including B5). If the chosen blend is above B5, a contract is required. The biodiesel component of the fuel must meet the requirements of Schedule 3 of the Engine Fuel Specification Regulations 2008 with two exceptions (see Regulation 17 (2)). The diesel component of the fuel to be supplied must meet the requirements of Regulation 15 (see Regulation 17 (1)) while the blended fuel supplied should meet the requirements of Regulation 17 (3) of the Engine Fuel Specification Regulations 2008.

Site location(s): Where will the fuel tank(s) be located? Ideally the site should be both convenient as well as practical for future members. Who could provide a site? What consents are necessary?



Fuel supply and refuelling: What infrastructure will be needed on the site? Will it be supplied via a mini-tanker? What is the needed or expected frequency of delivery? Who is available for fuel distribution? Who will supply the tank?

Fuel storage: Will the tank and location options be able to store enough fuel? What kind of fuel metering will be needed? What are the safety and security issues?

Possible buyers' consortium members: The consortium should be promoted to a broad group of users to help gauge interest. There are likely to be different sectors and groups (such as tourism, agriculture, fishing, viticulture, pipfruit etc), related associations, business collectives or iwi that could be interested. Each would have different reasons for being interested, such as the environmental benefits of biodiesel, an opportunity to build community collaboration, supporting a local industry or perhaps an interest in reducing reliance on oil.

Consortium workshop: The workshop should be used as an opportunity to present the idea to interested parties. These parties would include potential distributors, owners of storage facilities, vehicle service industry (diesel mechanics and trainers) and of course potential users of biodiesel blends. It should be used to gain an understanding of how much demand there is, what blend level is desirable and where an appropriate location might be. It would also act as a forum to educate attendees about biodiesel and its benefits, the Biodiesel Grants Scheme, and about the compatibility of biodiesel blends with vehicles.

EECA can provide a workshop agenda template to assist with this (refer below to 'Who can help me?').

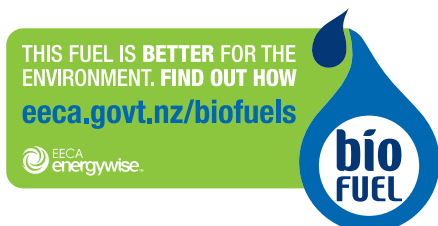
Tender process: A tender process is recommended to engage a fuel supplier. At a minimum, the following should be addressed: fuel specifications, storage and refuelling specifications, location and site; timing, expected fuel volume, and a timeline.

EECA can provide a tender document template to assist with this process.

Who can help me?

EECA is a government agency that encourages, supports, and promotes the use of renewable sources of energy in New Zealand, such as biodiesel. It administers the Biodiesel Grants Scheme and has an interest in facilitating the introduction of biofuels to the market.

EECA has a range of template documents and resources available which can help you in establishing a consortium. EECA can also provide information on existing buyer consortiums in New Zealand and can put you in contact with organisations that have first hand experience in managing projects such as this.



THIS FUEL IS BETTER FOR THE ENVIRONMENT. FIND OUT HOW
eeca.govt.nz/biofuels

You can contact EECA's Biodiesel Account Manager on (03) 353 9283, 0800 358 676 or email biofuels@eeca.govt.nz

More information about biofuels and biodiesel is available at www.eeca.govt.nz/biofuels