

## **Renewable Energy & Regional Australia.**

Session Summary for:

### **Biodiesel in Australia: Benefits, Issues and Opportunities for Local Government Uptake.**

#### **1. Title of the presentation.**

Biodiesel in Australia: Benefits, Issues and Opportunities for Local Government Uptake.

#### **2. A brief summary of the project.**

The conference presentation discusses the outcomes of a recently completed one-year research project funded by the Victorian Department of Sustainability and Environment. The aim of this project was to investigate current activities of the biodiesel industry in Australia and its interaction with local government, with specific attention given to council fleet. Findings emerging from this investigation were analysed and communicated to all CCP local governments and participating stakeholders.

#### **3. Where did the idea come from?**

Local governments are showing increasing interest in alternative fuels and a need was identified to gauge what actions councils had already taken on biodiesel uptake and provide up-to-date and reliable information for other councils to assist decision-making around their fuel choices.

#### **4. Who is involved (scientists, developers, community supporters, financiers etc)**

The research process attracted the participation of 50 local governments from 5 states and over 20 industry stakeholders, including biodiesel producers and suppliers, industry consumers, consultants, associations and academic institutions (CSIRO and RMIT).

#### **5. What are the stages the project has gone through (initial idea, planning and design, implementation and construction, monitoring etc etc)?**

### **Research Process**

In order to determine the current situation as regards biodiesel uptake in Australian local governments, two surveys were developed – one for all Australian councils known to have experience of biodiesel uptake and another for Victorian councils with no practical experience. The latter survey was designed to capture existing knowledge and understanding of biodiesel and its uptake among councils that either had considered or were in the process of considering its uptake. A total of 50 completed surveys were received from Australian local governments, of which 30 were from Victorian councils. Of the 50 councils, 23 had experience of biodiesel uptake while 27 had either considered or were in the process of considering its uptake.

A further two surveys were developed for biodiesel producers/suppliers and also industry users of biodiesel. The intention of these surveys was to gather

information concerning production processes, capacity, markets and application, and also gain an industry perspective on the future of this fuel in Australia. Of the biodiesel producers/ suppliers that were contacted, seven completed the survey and two were available for extensive interviews, site visits and follow-up correspondence. No industry users completed the survey, however three were contacted and participated in the research via phone interviews.

Additional industry stakeholders, such as associations, research institutions, government departments, consultants and user groups, also assisted considerably in the research process via formal meetings, email and phone correspondence.

In addition to this primary research, extensive secondary research was conducted using a range of Australian and international sources including media articles and press releases, state and commonwealth government reports, council reports, scientific papers and reports, journal articles, and industry and association websites.

#### **6. What have been the obvious economic benefits (direct investment, spin offs, government grants, employment etc etc)?**

(Taken as Project outcomes)

#### **Findings**

The research findings were collated and analysed with the result that benefits and issues associated with biodiesel uptake were identified, as well as opportunities for the future of the industry in Australia, in relation to local government.

The primary motivations for biodiesel uptake amongst local governments were, in order of significance, reducing greenhouse gas emissions, reducing pollution, reducing fossil fuel reliance and improving community health. Local economic development and financial savings were the least significant motivations.

These and other findings form the basis of the report.

The identified target audience for this report falls into two groups:

- Mayors, elected members, CEOs and upper management
- Environment and Fleet teams and officers.

#### **Project Outcomes**

For Mayors, elected members, CEOs and upper management, the final report provides:

- A comprehensive biodiesel information resource and overview of the associated risks and benefits
- The ability to determine its appropriateness for council uptake;
- The opportunity to learn from other councils, adapt current processes and/or implement best-practice strategies based on their experiences and testimonials

- An opportunity to assess council's position on biodiesel within a national context - the implications of current/future council policies and strategies and the role council can play in determining the future of the industry in Australia
- An opportunity to create user networks and initiate collaboration on plans and strategies for future local government interaction with biodiesel.

For environment and fleet teams and officers, the final report also provides:

- An understanding of project implementation - potential issues, how to overcome them and factors for success
- Council contacts for support and assistance
- Resources that will assist in preparing a project proposal.

### **7. What are the future challenges, next steps?**

Future challenges for the biodiesel industry are focused on ensuring that it develops sustainably and does not result in more harm to the environment than fossil diesel. There is a need for regulation and control of the methods of production, including the types and sources of feedstocks.

### **8. What advice and recommendations would you make to others wishing to develop the same/similar renewable energy strategy?**

Refer to the final report "Biodiesel in Australia: Benefits, Issues and Opportunities for Local Government Uptake". This document provides comprehensive information on the technological properties of biodiesel as well as:

- An insight into local government experiences of biodiesel uptake including benefits and issues
- Local government snapshots and testimonials regarding biodiesel use at council
- An overview of future opportunities for biodiesel uptake by local governments
- A list of useful links for further information and materials on specific aspects of biodiesel and its use
- A summary reference list of the benefits and issues associated with biodiesel uptake
- A checklist for local government uptake of biodiesel to assist with the planning and implementation of a successful biodiesel project
- A state-categorised reference list of local governments in Australia with biodiesel projects, including information on the application, biodiesel blend and date of implementation
- A sample fuel specification that led to the successful negotiation of a fuel contract, supplied by a Victorian council
- Five detailed case studies from local government in three states (2 in Victoria, 2 in NSW and 1 in SA), highlighting the background, aim, implementation process, obstacles, success factors, benefits and other outcomes of their projects
- Contact details for further follow-up with case study councils and the opportunity to contact other councils that participated in the research process.

### **9. In summary; observations, reflections, learnings and insights.**

Biodiesel offers some potential environmental, economic and technological advantages over fossil diesel, and certain other alternative fuels. However, the GHG benefits are highly dependent on feedstock types and methods of production. There is as yet no comprehensive and reliable way of either measuring or regulating these and so there is the potential, under the current situation, for the uptake of biodiesel to have negative environmental, social and economic impacts that outweigh those of conventional fossil diesel.

Local governments in Australia have an opportunity to address the challenges, and also frame the opportunities that biodiesel presents through being pro-active in setting conditions or parameters around local government uptake and thereby influencing the way the industry unfolds from this point onwards.

Biodiesel has potential, however, measures to increase fuel efficiency and reduce transport demand should always take priority.

To access the report “Biodiesel in Australia”, visit the CCP Australia website at: <http://www.iclei.org/index.php?id=2291>

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