



**Australian Government**

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**Department of Industry  
Tourism and Resources**

# **Australia's Experience in Alternative Transport Fuels**

**An Overview**



## Main alternative transport fuels in use in Australia

- **Automotive LPG (Autogas)**
  - 6% of transport need requirements by volume
  - 5% by energy content
- **Plus <1 % in total comprised of:**
  - Natural Gas**
- **Biofuels: Ethanol, Biodiesel**
- **Hydrogen**
- **di-methyl ether**
- **Methanol**



# Government Policy Framework to Support Use and Production of Alternative Fuels

## AIMS

- **350 million litre biofuels objective by 2010**
- **Ethanol & Biodiesel the 2 biofuels with commercial prospects in Australia**
- **the alternative fuels sector to develop and promote their products in the commercial marketplace**
- **ultimately to compete on commercial merits**
- **no government mandate on use of alternative transport fuels**



## Government Policy Framework (continued)

### ZERO EXCISE ON ALTERNATIVE FUELS

- **Effective zero rate of excise to 2011 via production grants offsets**
- **Phase in over 5 even annual steps from July 2011**
- **Excise rates to be based on energy content**
  - high-energy (biodiesel)
  - mid-energy (LPG, LNG, Ethanol, di-methyl ether)
  - low-energy (methanol)
- **50% discount to apply to energy content excise rate**



## Government Policy Framework (continued)

### ETHANOL PRODUCTION GRANT

- **Extended until 30 June 2011**
- **For production in Australia from biomass feedstock blended into or used as transport fuel**
- **As of January 2005, AUD37.3 million paid to Australia's 3 fuel grade ethanol producers**



## **Government Policy Framework (continued)**

### **BIODIESEL PRODUCTION GRANT**

- **For production and importation of eligible biodiesel**
- **Administered under Energy Grants Cleaner Fuels Scheme**
- **To be progressively phased out from July 2011-July 2015**



## **Government Policy Framework (continued)**

### **BIOFUELS CAPITAL GRANT PROGRAM**

- **AUD 37.6 million fund for one-off capital subsidies (16 cpl) for projects providing new or expanded biofuels capacity**
  - to date, grants to 3 ethanol and 4 biodiesel plants
- **Key criteria:**
  - minimum production levels (eg, 5 million litres)
  - long-term commercial viability
  - use of renewable feedstock
  - regulatory compliance
  - evidence of firm contracts with domestic transport market



## **Government Policy Framework (continued)**

### **ALTERNATIVE FUELS CONVERSION PROGRAM**

- **Grants up to 50% to operators and manufacturers to convert heavy commercial vehicles and buses to natural gas or LPG (or combination of either with conventional fuel)**
  - **offset cost of fuel conversions & upgrades**
  - **purchase of new vehicles**
- **Grants to help manufacturers to develop and test engine technologies that demonstrate greenhouse gas benefits and maintain air quality emissions performance**





## **Government Policy Framework (continued)**

### **LPG CAPITAL GRANT**

- **Introduction of AUD1,000 capital subsidy to consumers for purchase of new dedicated or dual-fuel LPG vehicle**
- **Available for 3 year period, July 2011-Jul;y 2014**

### **SUGAR ASSISTANCE PACKAGE**

- **AUD75 million for diversification into value-adding and alternative products such as ethanol**



## Challenges to Uptake of Alternative Fuels

- **Lack of competitively-priced alternatives**
- **LPG, CNG, LNG, Hydrogen**
  - require engine modifications or specific engine technologies
- **Biofuels**
  - difficult to supply enough
  - would require transfer of land use from other productive purpose (eg, converting total national oilseed crop to biodiesel would yield only 6% of current diesel needs)



## Challenges to Uptake of Alternative Fuels (continued)

- **Long-life expectancy of existing fuel production and distribution infrastructure**
- **Existing stock of vehicles, with no significant change with next generation of vehicles which will include some hybrids**
- **Availability/Storage**
- **Public perception (eg, ‘ethanol blends damage engines’)**
- **Cost**



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## Research & Development

**Reducing production costs of alternative transport fuels**