



## Government assistance to alternative transport fuels

The Australian Government encourages the use of fuels other than petrol and diesel. This paper describes the forms of assistance the Government provides to the production and consumption of alternative transport fuels and, where possible, the cost of assistance.

### Definition

The term ‘alternative fuels’ refers to fuels—other than petrol and diesel—used in internal combustion engines. The following fuels fall within this definition: biodiesel, compressed natural gas (CNG), dimethyl ether, ethanol, liquefied natural gas (LNG), liquefied petroleum gas (LPG), and methanol.

### Forms of assistance

Government assistance to alternative fuels takes the following forms:

- consumption subsidies in the form of excise exemptions for LPG, LNG and CNG
- from 1 July 2015, a 50 per cent ‘discount’ for excise on all alternative fuels
- production subsidies
- capital grants to:
  - biofuel producers to increase production capacity
  - encourage petrol stations to sell fuel ethanol, and
  - encourage users to convert to alternative fuels, and
- assistance under the Government’s response to the Biofuels Taskforce.

### Excise exemptions

LPG, LNG and CNG are exempt from excise. Treasury estimates the revenue forgone through the exemption is \$630 million in 2005–06 (see Table 3). However, the Government proposes to impose excise on these fuels. The rates will rise in five steps, beginning on 1 July 2011, to ‘final’ rates of 12.5 cents per litre for LPG and 19 cents per cubic meter for CNG, effective from 1 July 2015 (see Table 2). As noted, these final rates will be concessional.

### Discount

In the energy white paper, [Securing Australia’s Energy Future](#), the Government proposed basing fuel excise rates on each fuel’s energy content. Each fuel will fall within one of three energy-content bands (with a fourth band for CNG). In the case of alternative fuels, a discount of 50 per cent will apply to the full excise rate from 1 July 2015 as shown in Table 1.

### Production subsidies

The production of ethanol and biofuels is subsidised.

#### Ethanol

Ethanol blended with petrol to make fuel ethanol was excise-exempt. However, on 12 September 2002, the Government [announced](#) that it would impose excise on the ethanol in fuel ethanol at the same rate as the excise on petrol—38.143 cents per litre—and also provide a production grant (subsidy) of the same amount, giving an ‘effective’ excise rate of zero.<sup>1</sup> This decision took effect from 18 September 2002. On 25 March 2004, the Government [extended](#) these arrangements to 30 June 2011.<sup>2</sup> The estimated cost of the subsidy in 2006–07 is \$51 million.<sup>3</sup>

The Government proposes to wind back assistance by increasing the effective rate of excise on ethanol over five years (see Table 2). From 1 July 2015, assistance will continue, but in the form of a concessional excise rate of 12.5 cents per litre.

#### Biodiesel

The arrangements for biodiesel are similar to those for ethanol. Biodiesel became subject to excise of 38.143 cents per litre on 18 September 2003. From then until 30 June 2011, biodiesel that meets the biodiesel fuel standard is eligible to receive a production grant of 38.143 cents per litre thus bringing the effective excise rate to zero. Effective excise will progressively increase from 1 July 2011. Biodiesel will be subject to a final concessional excise rate of 19.1 cents per litre from 1 July 2015. The biodiesel grant is payable under the [cleaner fuels grants scheme](#), which the *Energy Grants (Cleaner Fuels) Scheme Act 2003* and the *Energy Grants (Cleaner Fuels) Scheme (Consequential Amendments) Act 2003*

established. Data on the cost of the biofuel production grants are not available.<sup>4</sup>

In the 2006–07 budget, the Government announced that it would provide \$100.1 million over four years, beginning in 2006–07, to allow renewable diesel made from tallow (or animal fats) using new technology, to receive the same tax treatment as biodiesel.<sup>5</sup>

## Capital grants

### Biofuels Capital Grants Programs

On 25 July 2003, the Government [announced](#) the [Biofuels Capital Grants Program](#) to subsidise the construction of new or additional biofuels production plant.<sup>6</sup> The grant rate was 16 cents per litre and grants were limited to a maximum of \$10 million a project. The program was capped at \$37.6 million. The program is now closed and all funds are committed.

### Ethanol Distribution Program

On 14 August 2006, the Government [announced](#) the [Ethanol Distribution Program](#).<sup>7</sup> Under this program, the Government will provide up to \$20 000 to the cost of converting retail petrol stations to provide petrol with 10 per cent ethanol. Up to \$10 000 will be provided after the conversion is complete, and an additional \$10 000 after a sales target for fuel ethanol is reached. The cost of the program is estimated to be \$17.2 million over three years.

## Conversion programs

### Alternative Fuel Conversion Programme

The [Alternative Fuels Conversion Programme](#) (AFCP), which was [announced](#) on 15 December 1999, is a component of the *Measures for a Better Environment* package.<sup>8</sup> The AFCP is designed to encourage the use of LPG or natural gas (instead of diesel) in heavy commercial vehicles and buses, by providing grants to help offset conversion costs. The AFCP provides grants of up to 50 per cent of the eligible costs of conversion or upgrading of vehicles. The programme has been allocated \$33.6 million to the end of 2007–08.<sup>9</sup>

### LPG conversion grants

On 14 August 2006, the Government also announced that it would bring forward a program to provide \$1000 towards the purchase price of a new factory-fitted LPG vehicle, and \$2000 towards the cost of converting vehicles to LPG for private use. The cost of the program is estimated to be \$766.1 million over eight years (\$1.3 billion over eight years if forgone revenue is taken into account).<sup>10</sup>

## Biofuels task force response

On 30 May 2005, the Prime Minister [announced](#) the appointment of a taskforce to examine:

... the latest scientific evidence on the impacts of ethanol and other biofuel use on human health, environmental outcomes and automotive operations.<sup>11</sup>

On 22 September 2005, the Prime Minister released the taskforce's [report](#) and the Government's [response](#) to the taskforce's findings.<sup>12</sup> The response included [measures](#) to:

- ensure that the production target of 350 megalitres of biofuels by 2010 is met
- restore consumer confidence in the use of biofuels, and
- assess and promote the benefits of biofuels.<sup>13</sup>

Funding is directed towards increasing fuel quality compliance inspections to ensure ethanol blends meet fuel quality standards; undertake testing of vehicles using ethanol blended fuel, and commissioning a study into the health effects of ethanol use.

## Conclusion

The largest component of assistance is the excise revenue forgone. This will fall if the Government's proposals to make excise-exempt fuels subject to excise are implemented.

**Table 1: Proposed excise rates**

Fuel type	Energy content (megajoules/litre)	Excise rate (cents per litre)	Discounted rate (cents per litre)
High-energy content: petrol, diesel, gas to liquids, biodiesel	Above 30	38.143	19.1 (biodiesel)
Mid-energy content: LPG, LNG, ethanol, dimethyl ether	Between 20 and 30	25.0	12.5 (all)
Low-energy content: methanol	Below 20	17.0	8.5 (methanol)
Other: CNG	Between 38 and 41 (megajoules per cubic metre)	38.0 (cents per cubic metre)	19.0 (cents per cubic metre)

Source: Australian Government, *Securing Australia's Energy Future*, Canberra, 2004, p. 96.

**Table 2: Proposed effective excise rate on alternative fuels (cents per litre)**

Fuel type	1 July 2011	1 July 2012	1 July 2013	1 July 2014	1 July 2015
Biodiesel	3.8	7.6	11.4	15.3	19.1
LPG, LNG, ethanol	2.5	5.0	7.5	10.0	12.5
Methanol	1.7	3.4	5.1	6.8	8.5
CNG	3.8	7.6	11.4	15.2	19.0

Source: Fuel Tax Bill 2006, *Explanatory Memorandum*, p.15.

**Table 3: Cost of assistance (\$ million)**

Program	2002-03	2003-04	2004-05	2005-06 (est.)	2006-07 (est.)
Excise exemption LPG, LNG and CNG	620.0	570.0	600.0	630.0	660.0
Ethanol production grant	21.7	10.8	8.6	16.9	50.9
Biodiesel production grant	na	0.4	1.5	na	na
Tallow grant					20.0
Biodiesel capital grants			2.1	11.5	19.6
Ethanol distribution					na
Alternative fuel conversion	5.7	8.2	2.8	0.9	3.7
LPG conversion					na
Biofuels Taskforce response				0.4	3.7

Sources: Treasury, *Tax Expenditures Statement*, December 2005; Productivity Commission, *Trade & Assistance Review 2004-05*; Department of Industry, Tourism and Resources, Portfolio Budget Statements 2006-07; Department of the Environment and Heritage Portfolio Budget Statements; Budget Paper No. 2 2006-07.

Notes: est.: estimated; na: not available.

- Hon John Anderson (Minister for Transport and Regional Services), *Ethanol Decision*, media release, 12 September 2002.

- Department of Industry, Tourism and Resources website at <http://www.ausindustry.gov.au/content/level3index.cfm?ObjectID=B1EF3084-DB7A-4B56-AE6978EBAB8AB3F0&L2Parent=AEB901E5-7CB8-4143-A3BF33B2423F9DA6>.
- Department of Industry, Tourism and Resources, Portfolio Budget Statements 2006-07, p. 39.
- Premium unleaded petrol is also eligible under the cleaner fuels scheme but the data do not distinguish between payments for the different fuels.
- Budget Paper No. 2, 2006-07, p. 329 at <http://www.budget.gov.au/2006-07/bp2/download/bp2.pdf>
- Hon Joe Hockey, (acting Minister for Industry, Tourism and Resources), *Biofuels initiatives to create regional jobs*, media release, 25 July 2003.
- Hon John Howard, (Prime Minister), 'Energy initiatives', House of Representatives, *Ministerial Statement*, 14 August 2006, p. 40.
- Senator the Hon. Robert Hill (Minister for the Environment and Heritage), *Major boost for clean, green and solar energy*, media release, 15 December 1999.
- Australian Greenhouse Office, *Annual Report 2003-04*, p. 44.
- Hon John Howard, (Prime Minister), 'Energy Initiatives', House of Representatives, *Questions without notice: additional answers*, 14 September 2006, p. 56.
- Hon John Howard (Prime Minister), *Taskforce on biofuels*, media release, 30 May 2005.
- Hon John Howard (Prime Minister), *Government support for the biofuels industry*, media release, 22 September 2005.
- ibid.

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