

## 5 Ethanol blended petrol

### Key points

- Ethanol is added to petrol to produce various grades of ethanol blended petrol (EBP). The most common EBP is E10, which is regular unleaded petrol (RULP) containing up to 10 per cent ethanol.
- Total sales of EBP in Australia decreased in 2011–12, reversing the trend of previous years.
  - Sales remained broadly stable in New South Wales (NSW) but decreased significantly in Queensland and Victoria.
- Similarly the number of retail sites selling E10 across Australia decreased in 2011–12.
- The largest volume of EBP is sold in NSW, which accounts for over 80 per cent of the Australian EBP market.
- This is largely the result of the NSW ethanol mandate which, from October 2011, has required that 6 per cent of the total volume of petrol sold in NSW should be ethanol.
  - However, in 2011–12 only around 3.6 per cent of the volume of petrol sold was ethanol.
- The NSW Independent Pricing and Regulatory Tribunal assessed current and projected levels of ethanol supply and demand and concluded in March 2012 that there would not be enough demand for ethanol to meet the 6 per cent mandate.
- In January 2012 the NSW Government amended its ethanol mandate by removing the requirement for E10 to replace RULP from July 2012.
- Across all locations monitored by the ACCC in 2011–12, average RULP prices were higher than average E10 prices by around 1.8 cents per litre.
- In previous years the ACCC has expressed concern about the supply of ethanol. However, in 2011–12 there appeared to be sufficient supply to meet demand.
  - Ethanol production capacity in Australia in 2012 is estimated to be 450 megalitres (ML).
  - Ethanol demand in 2011–12 was estimated to be around 305 ML.

### 5.1 Introduction

The ACCC commenced monitoring and reporting on the price differential between regular unleaded petrol (RULP) and E10 petrol in October 2006. It first reported on the biofuels market in Australia in the 2010 ACCC petrol monitoring report. The ACCC continued to monitor developments in the biofuels market during 2011 and 2012.<sup>77</sup>

The two main types of biofuel used as transport fuels in Australia are ethanol and biodiesel.

Ethanol is sometimes also referred to as ethyl alcohol, alcohol or grain spirit. Most ethanol is produced by fermenting raw materials such as sugar cane, sugar beet, molasses, wheat, grain and forest products. It is added to petrol to produce various grades of ethanol blended petrol (EBP).

<sup>77</sup> Major characteristics of the market for ethanol and EBP in Australia were outlined in chapter 6 of the 2011 ACCC petrol monitoring report.

In Australia, up to 10 per cent ethanol is blended with RULP to produce E10, which is the most common EBP marketed in Australia. Ethanol is also present in E85 (a fuel blend consisting of 70–85 per cent ethanol with the remainder being petrol, which may only be used in vehicles specifically built or modified to use it) and in some premium unleaded petrol (PULP), such as ‘Premium 98’ from United.

Biodiesel is derived from plant or animal feedstocks containing fatty acids such as vegetable oils and tallow. It is usually blended with petroleum-based diesel to produce fuels for diesel-powered vehicles and equipment. In Australia, biodiesel is typically used as a fuel additive in 5 per cent (B5) and 20 per cent (B20) blends.

Given its greater use by consumers, this chapter focuses primarily on EBP.

## 5.2 Ethanol blended petrol and government policy

There is no Australian Government mandate covering the supply of EBP in Australia. New South Wales (NSW) is the only state government to introduce a mandate on the supply of EBP. There were a number of regulatory developments relating to EBP in 2011–12.

### 5.2.1 NSW ethanol mandate

The NSW ethanol mandate was introduced in 2007 and required that, from 1 October 2007, 2 per cent of the total volume of petrol sold in NSW should be ethanol. On 1 January 2010 the mandated level increased to 4 per cent and on 1 October 2011 it increased to 6 per cent (this increase was scheduled to occur on 1 January 2011 but was deferred twice by the NSW Government),<sup>78</sup>

The final phase of the NSW mandate (i.e. requiring all RULP to be replaced with E10) was set to be introduced on 1 July 2012. This would have effectively banned the sale of RULP in NSW. However, on 31 January 2012 the NSW Government announced that it would introduce legislation to remove this requirement and that the ethanol mandate would remain at 6 per cent of total fuel sales.<sup>79</sup> Following this announcement there was widespread debate in the media. This debate included industry participants and motoring organisations raising concerns about the current domestic supply of ethanol not being sufficient to meet the amount of ethanol required by the 6 per cent mandate.

Subsequently, the NSW Government requested the Independent Pricing and Regulatory Tribunal (IPART) to undertake ‘an assessment of current and projected levels of ethanol supply and demand in the context of the requirement under the *Biofuels Act 2007*.’ IPART’s report was provided to the Premier of NSW in March 2012 and publicly released in May 2012. A summary of the main points of the report is in section 5.3.<sup>80</sup>

<sup>78</sup> See NSW Government Office of Biofuels, *Biofuels in New South Wales*, at: <http://www.biofuels.nsw.gov.au/>, accessed 15 October 2012.

<sup>79</sup> The Hon Barry O’Farrell MP, Premier of NSW and Minister for Western Sydney, Media release, 31 January 2012, *Regular unleaded petrol to be retained in NSW*, at: [http://www.biofuels.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0011/168572/Ethanol\\_Unleaded\\_Petrol\\_31\\_1\\_12pg.pdf](http://www.biofuels.nsw.gov.au/__data/assets/pdf_file/0011/168572/Ethanol_Unleaded_Petrol_31_1_12pg.pdf), accessed 15 October 2012.

<sup>80</sup> Independent Pricing and Regulatory Tribunal, *Ethanol supply and demand in NSW—Other Industries—Final Report, March 2012*, at: [http://www.ipart.nsw.gov.au/Home/Industries/Other/Reviews/Ethanol/Review\\_of\\_Ethanol\\_Supply\\_and\\_Demand\\_in\\_NSW/23\\_May\\_2012\\_-\\_Released\\_Final\\_Report/Final\\_Report\\_-\\_Ethanol\\_supply\\_and\\_demand\\_in\\_NSW\\_-\\_March\\_2012](http://www.ipart.nsw.gov.au/Home/Industries/Other/Reviews/Ethanol/Review_of_Ethanol_Supply_and_Demand_in_NSW/23_May_2012_-_Released_Final_Report/Final_Report_-_Ethanol_supply_and_demand_in_NSW_-_March_2012), accessed 15 October 2012.

In response to the IPART report the NSW Government released a framework which set out conditions under which exemptions from the mandate may be granted under the Biofuels Act.<sup>81</sup> All applications for an exemption will be required to include a business plan that identifies future steps to increase ethanol sales, and evidence that previous business plans have been adhered to.

## 5.2.2 Queensland ethanol mandate

The Queensland Government had planned to introduce a 5 per cent ethanol mandate for petrol sold in Queensland by 31 December 2010. However, this was postponed on 28 October 2010 when the Queensland Government announced that it would suspend the implementation of the ethanol mandate.<sup>82</sup> To date, no announcement has been made regarding the future of this mandate.

## 5.2.3 Excise on EBP

Transport fuels are currently subject to a fuel excise of 38.14 cents per litre (cpl). The excise applies to fuels such as petrol, diesel and EBP. However, the Ethanol Production Grants program provides full excise reimbursement to ethanol producers for ethanol produced and supplied for transport use in Australia from locally derived feedstocks. This effectively makes the ethanol component of Australian produced EBP excise free. Imported ethanol for transport purposes is subject to the excise.

## 5.2.4 Fuel quality and labelling standards

Following extensive stakeholder consultation, a fuel quality standard and a fuel quality information (labelling) standard for E85 automotive fuel have now been established under the *Fuel Quality Standards Act 2000*.<sup>83</sup>

The fuel quality standard specifies the physical and chemical parameters for E85, and testing methods to determine compliance with the standard. The fuel quality information (labelling) standard sets out the labelling requirements for the sale of E85 fuel sold in Australia. The new standards came into force on 1 November 2012 and must be complied with from this date before E85 can be supplied for use in Australia.

# 5.3 IPART report

Key points of the IPART report are summarised below.

## 5.3.1 Ethanol supply and demand

IPART considered that there was sufficient ethanol supply to meet demand in NSW under the 6 per cent mandate, assuming ethanol sales in other states remained unchanged.

However, IPART also noted that, as there are only three ethanol suppliers in Australia (and one supplier provides two-thirds of total supply), supply may be unreliable if one of the suppliers is unable to produce. The concentrated nature of ethanol supply therefore may result in upward pressure on prices.

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81 The Hon Andrew Stoner, Deputy Premier of NSW and Minister for Regional Infrastructure and Services and the Hon Chris Hartcher, Minister for Resources and Energy, Media release, 23 May 2012, *NSW Government releases E10 exemption framework*, at: [http://www.biofuels.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0004/171085/Stoner-Hartcher\\_med\\_rel\\_-\\_E10\\_exemption\\_framework.pdf](http://www.biofuels.nsw.gov.au/__data/assets/pdf_file/0004/171085/Stoner-Hartcher_med_rel_-_E10_exemption_framework.pdf), accessed 15 October 2012.

82 The Honourable Andrew Fraser, Treasurer and Minister for Employment and Economic Development, Media release, 28 October 2010, *Ethanol mandate suspended* at: <http://statements.qld.gov.au/Statement/Id/72283>, accessed 15 October 2012.

83 Australian Government Department of Sustainability, Environment, Water, Population and Communities, *Ethanol E85 fuel quality and fuel quality information standards*, at: <http://www.environment.gov.au/atmosphere/fuelquality/standards/ethanol-e85.html>, accessed 15 October 2012.

In addition, it noted that competition from imports is unlikely because Australian Government grants effectively exempt domestic producers from excise duty.

IPART found that the market share of E10 in NSW in 2011 was 36 per cent, meaning that ethanol accounted for 3.6 per cent of petrol sales. To meet a 6 per cent mandate the E10 market share needs to be 60 per cent. However, IPART considered that there would not be enough demand for ethanol to meet the 6 per cent mandate.

Based on current market conditions, and a number of assumptions, IPART believed that the maximum possible ethanol share of petrol sales was 5.8 per cent. However, IPART considered that this was unlikely to eventuate because this estimate assumes that E10 is sold: at all petrol stations across NSW; in place of (rather than in addition to) RULP; and outside retail sites (e.g. direct to farms and mines).

The main reasons for the lack of demand for E10 identified by IPART include: the narrow price differential between E10 and RULP; community uncertainty regarding the suitability of E10; and a growing preference for PULP.

IPART noted the increasing suitability of the vehicle fleet for using E10, estimating that 73 per cent of passenger and light commercial vehicles were E10 suitable (up from 66 per cent in 2007). IPART believed that there was a lack of information about EBP in the community. It noted that a Queensland Government marketing campaign that promoted the use of EBP led to an increase in EBP sales.

### 5.3.2 Operational issues with the mandate

IPART identified a number of issues relating to the operation of the mandate.

- At least 25 per cent of retail sites are exempt from the requirements of the mandate as they are operated by a person operating 20 retail sites or less. This makes it more difficult for primary wholesalers to meet the 6 per cent mandate. It may also undermine the competitive position of retail sites subject to the mandate.
- The cost of supplying E10 to regional areas is high. Retail sites located in border areas could also be disadvantaged if forced to supply E10 at the expense of RULP as they would be competing with sites across the border that sell RULP.
- Approximately 15 per cent of petrol sales in NSW occur outside retail sites (e.g. direct to farms, mines and industry). If these sales were excluded from the petrol 'base' used to calculate the mandate, IPART estimates that EBP sales in 2011 would have increased from 36 per cent to 43 per cent.

IPART noted that exemptions have been provided to volume sellers on a case by case basis. Exemptions have been granted on the condition that volume sellers continue to take all reasonable steps to roll-out and market E10.

### 5.3.3 Options available to the NSW Government

IPART identified several options for the NSW Government to consider. These included:

- removing the exemption for retailers with 20 or fewer sites
- excluding sales of PULP from the petrol sales base
- excluding the sales of petrol that occur outside of retail sites (such as directly to farmers and mining companies) from the petrol sales base
- excluding sales of petrol in some NSW border regions from the petrol sales base

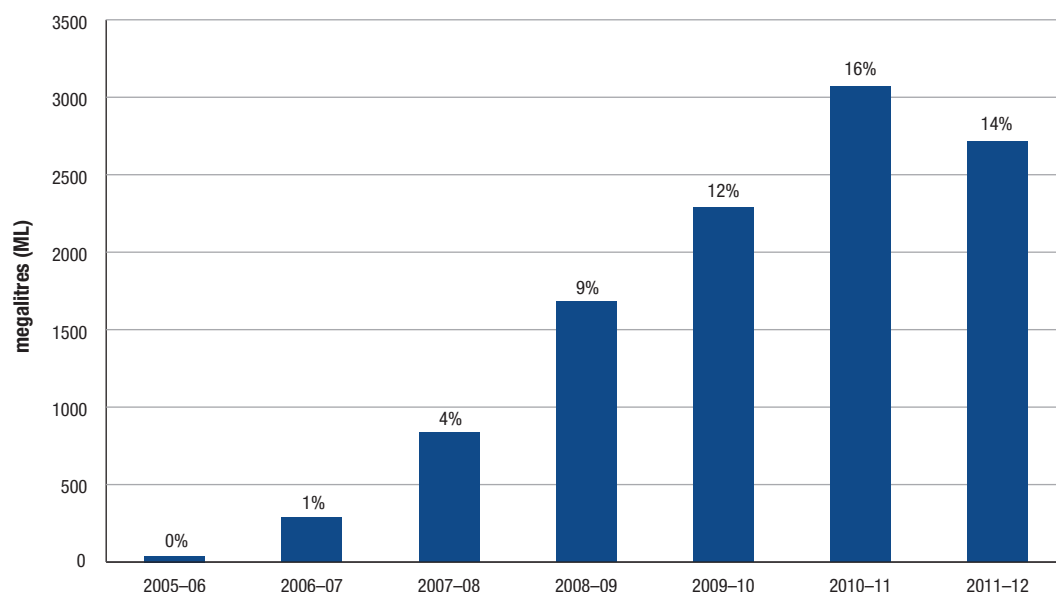
- strongly enforcing the mandate (IPART note that this would mean that oil companies would have to more seriously examine the option of extending the blending of ethanol to some premium products).

## 5.4 Sales of ethanol blended petrol

Chart 5.1 shows annual sales of EBP in Australia since 2005–06 and the proportion of total petrol sales represented by EBP. It highlights that:

- there was steady growth in sales of EBP between 2005–06 and 2010–11. During this period EBP increased from less than 1 per cent of total petrol sales in 2005–06 to 16 per cent in 2010–11
- in 2011–12 there was a decrease in sales of EBP and they accounted for 14 per cent of total petrol sales.

**Chart 5.1 Total ethanol blended petrol sales by volume and as a proportion of total petrol sales: 2005–06 to 2011–12**



Source: ACCC calculations based on the Department of Resources, Energy and Tourism (RET) and the Bureau of Resources and Energy Economics (BREE), *Australian Petroleum Statistics*, various issues

There are only three states that sell EBP in any significant quantities in Australia, these are: NSW, Queensland and Victoria. Table 5.1 shows sales of EBP, RULP and PULP in these states, and the total across Australia, in 2010–11 and 2011–12.

**Table 5.1 Sales of EBP, RULP and PULP in NSW, Queensland, Victoria, and Australia—2010–11 and 2011–12**

		NSW ML	Vic. ML	Qld ML	Aust ML
EBP	2010–11	2 150	132	787	3 069
	2011–12	2 189	63	461	2 714
PULP*	2010–11	1 849	896	828	4 267
	2011–12	2 149	952	895	4 735
RULP	2010–11	2 160	3 612	2 515	11 388
	2011–12	1 774	3 765	2 718	11 313
Total	2010–11	6 159	4 640	4 130	18 725
	2011–12	6 112	4 780	4 074	18 762

\*Includes proprietary blends.

Source: ACCC calculations based on RET and BREE, *Australian Petroleum Statistics*, various issues

In 2011–12 sales of EBP in NSW totalled 2189 megalitres (ML), an increase of only 39 ML (or around 2 per cent) on the previous year. Data from the NSW Office of Biofuels indicates that sales of EBP have been relatively stable over the last seven quarters.<sup>84</sup>

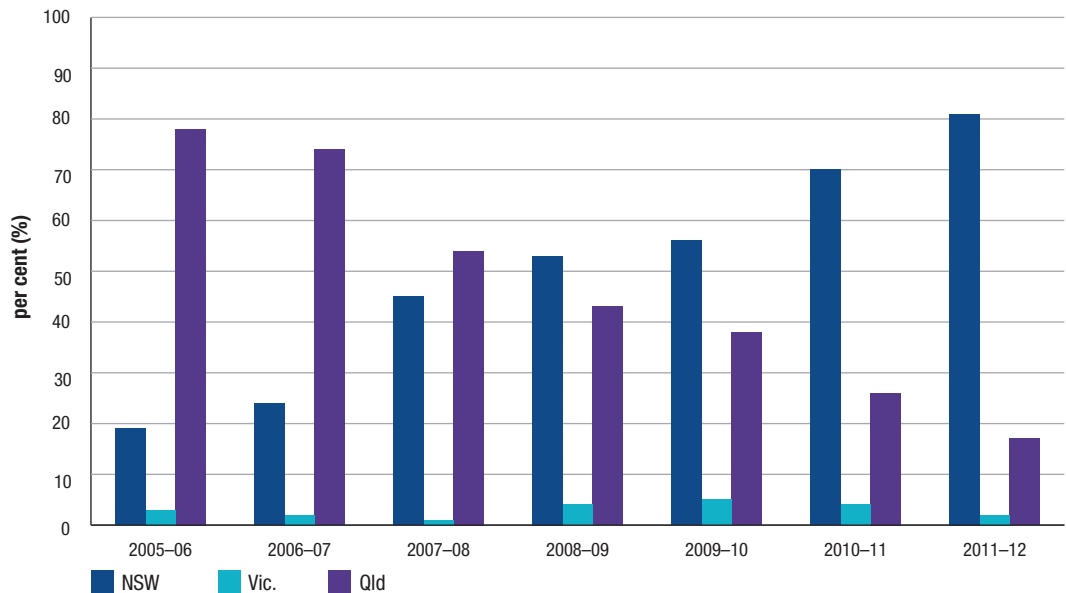
However, in Queensland, sales of EBP were 461 ML, a decrease of 326 ML (or 41 per cent) on 2010–11. In Victoria sales of EBP also decreased significantly to 63 ML in 2011–12 (a decrease of 52 per cent). The APAC biofuel consultants report *Australian Biofuels 2012–13* (APAC report) noted that the decrease in demand in Queensland and Victoria was principally due to the reduction in the number of E10 outlets in those states as a consequence of ethanol shortages (partly due to natural disasters) in 2010 and early 2011, and the suspension of the proposed Queensland 5 per cent ethanol mandate.<sup>85</sup>

Chart 5.2 shows sales of EBP in each major state as a proportion of total Australian EBP sales on an annual basis for the period 2005–06 to 2011–12. The chart indicates that since 2005–06 NSW's share of national EBP sales steadily increased (from 19 per cent in 2005–06 to 81 per cent in 2011–12). Over the same period, Queensland's share steadily decreased (from 78 per cent in 2005–06 to 17 per cent in 2011–12). Victoria's share of national EBP sales remained broadly stable over this period (ranging between 1 per cent and 5 per cent).

<sup>84</sup> NSW Government Office of Biofuels, *Ethanol results achieved - period 1 April - 30 June 2012*, at: [http://www.biofuels.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0006/172914/Results\\_Page.pdf](http://www.biofuels.nsw.gov.au/__data/assets/pdf_file/0006/172914/Results_Page.pdf), accessed on 15 October 2012.

<sup>85</sup> APAC biofuel consultants, *Australian Biofuels 2012–13*, p. 3.

**Chart 5.2 Sales of EBP in the major states as a proportion of total Australian EBP sales: 2005–06 to 2011–12**

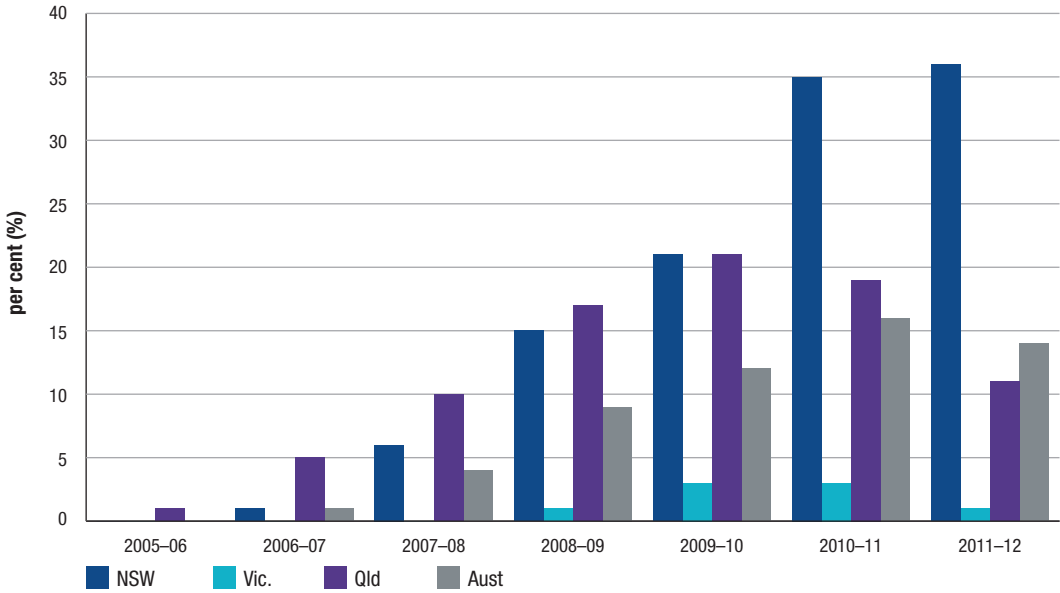


Source: ACCC calculations based on RET and BREE, *Australian Petroleum Statistics*, various issues

Chart 5.3 shows EBP sales as a proportion of total petrol sales in the major states during the period 2005–06 to 2011–12. It shows that in 2011–12:

- in NSW there was a marginal increase (by 1 percentage point to 36 per cent) in the share of EBP of total petrol sales
  - this highlights that EBP demand in NSW appears to have broadly stabilised
- in Queensland there was a significant decrease (by 8 percentage points to 11 per cent)
- in Victoria there was a decrease (by 2 percentage points to 1 per cent).

**Chart 5.3 EBP sales as a proportion of total petrol sales in the major states and Australia: 2005–06 to 2011–12**



Source: ACCC calculations based on RET and BREE, *Australian Petroleum Statistics*, various issues

## 5.5 Retail sites selling E10 petrol

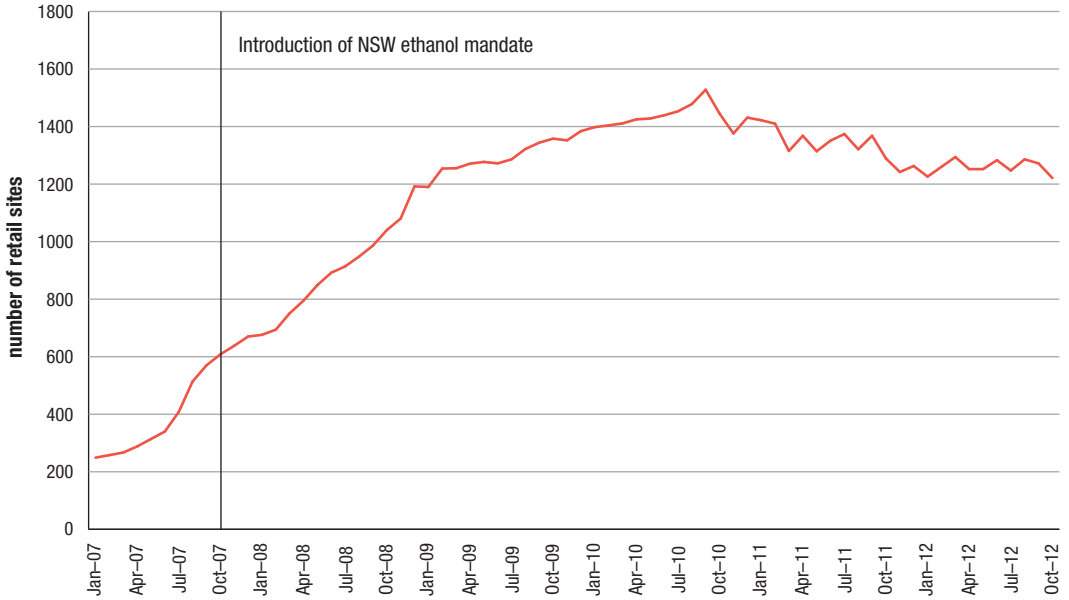
Chart 5.4 shows the average number of retail sites each month selling E10 in Australia for the period January 2007 to October 2012.<sup>86</sup> The chart shows that:

- the number of retail sites selling E10 increased steadily between January 2007 (around 250 sites) and September 2010 (around 1530 sites)
- since then the number of retail sites selling E10 has declined to around 1220 sites in October 2012 (a decrease of 310 retail sites or around 20 per cent).

<sup>86</sup> The data in charts 5.4 to 5.6 is based on the number of retail sites selling RULP, E10, and E10 only for which Informed Sources has price data.



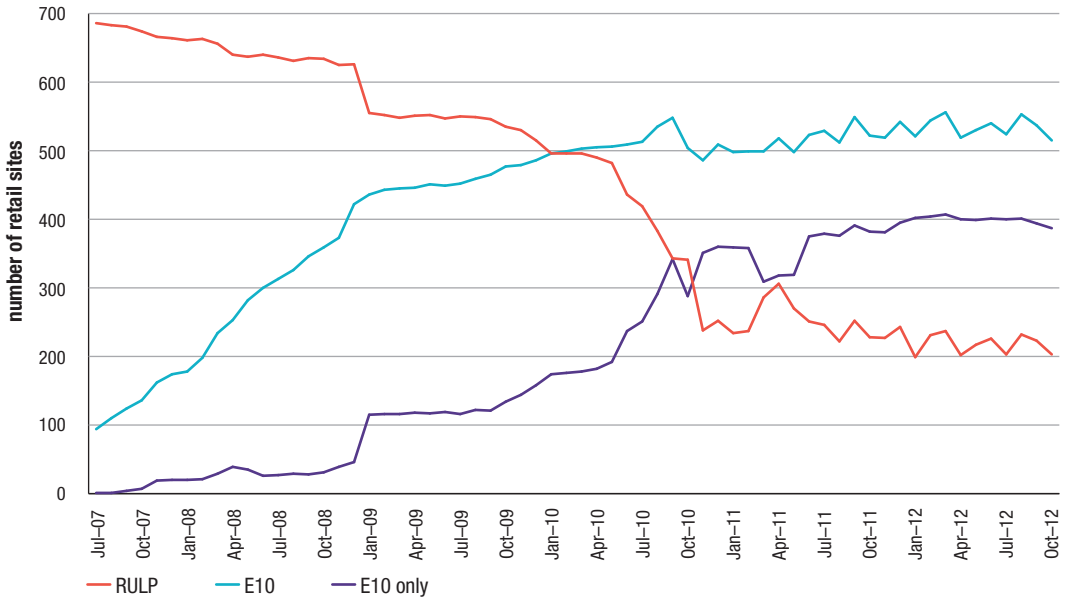
**Chart 5.4     Number of retail sites selling E10 in Australia: January 2007 to October 2012**



Source: ACCC calculations based on Informed Sources data

Charts 5.5 and 5.6 show the number of retail sites selling E10, RULP and E10 but not RULP (referred to as E10 only) in Sydney and Brisbane from July 2007 to October 2012.

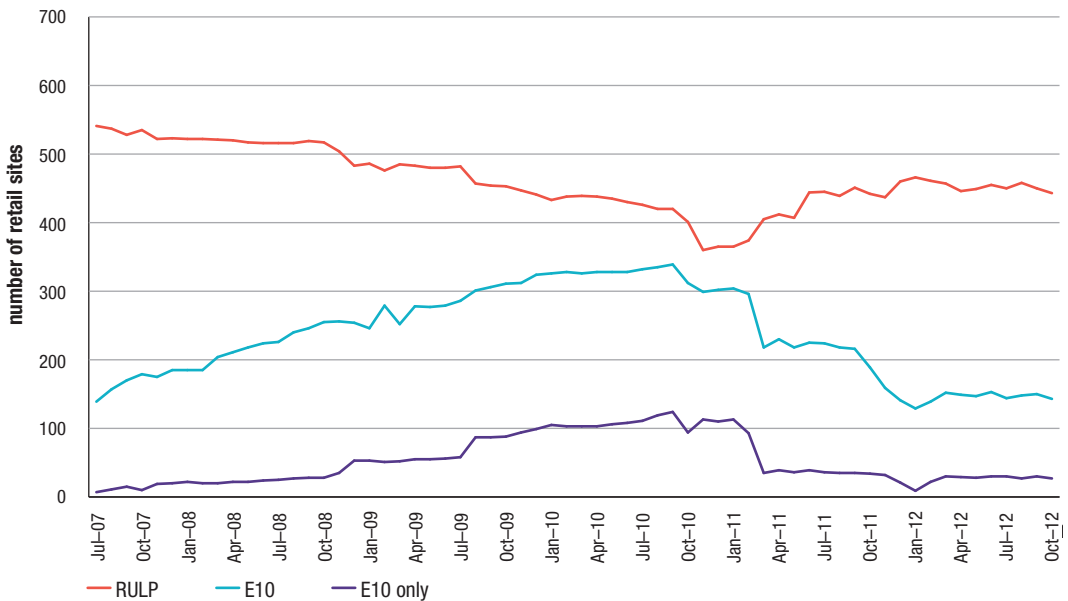
**Chart 5.5     Number of sites selling RULP, E10 and E10 only in Sydney: July 2007 to October 2012**



Source: ACCC calculations based on Informed Sources data

Over the last 12 months the number of retail sites selling E10 only in Sydney has remained broadly stable at around 400 sites. The numbers of retail sites selling RULP and E10 have been more volatile. Retail sites selling E10 in Sydney over the last 12 months have ranged between 500 and 560 retail sites and retail sites selling RULP have ranged between 200 and 235 retail sites.

**Chart 5.6      Number of sites selling RULP, E10 and E10 only in Brisbane: July 2007 to October 2012**



Source: ACCC calculations based on Informed Sources data

In Brisbane the number of retail sites selling E10 has decreased significantly since the peak of around 340 retail sites in September 2010. In October 2012 there were around 140 retail sites selling E10 in Brisbane—a decrease of around 200 retail sites (59 per cent). During that time a number of retailers—including BP and Coles Express—significantly reduced the number of retail sites selling E10.

## 5.6      Price differentials

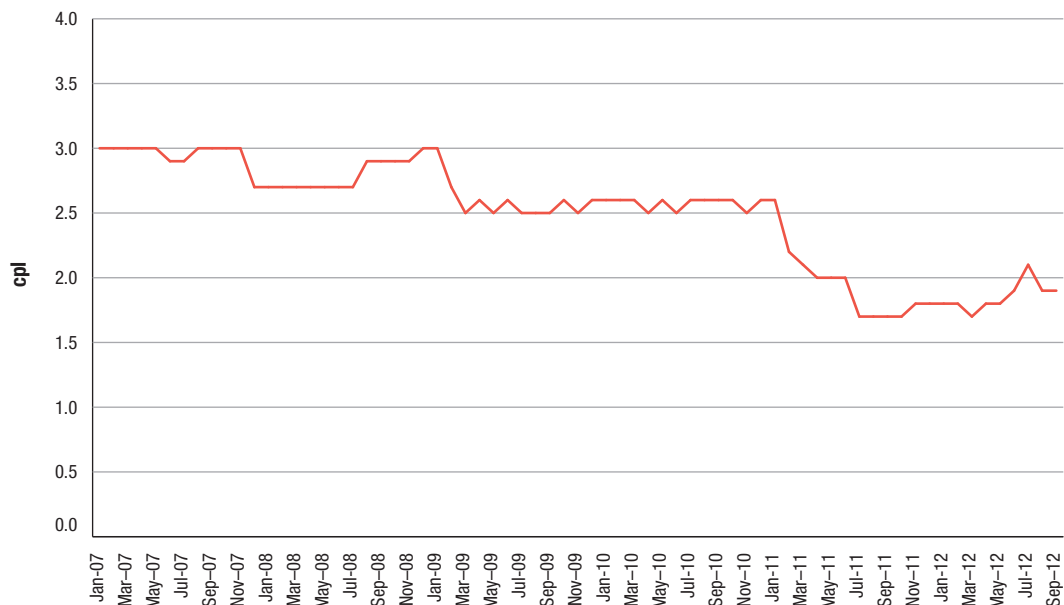
The ACCC commenced monitoring and reporting on the price differential between RULP and E10 petrol in October 2006. Under this monitoring program, E10 prices are collected from various retail sites in a particular location and compared with the RULP prices at those retail sites. To be included in the analysis retail sites must sell both E10 and RULP.

Retail RULP prices have tended to be higher than E10 prices. This primarily reflects the fact that the ethanol component of E10 is effectively excise free. It may also reflect the lower energy component of ethanol compared with petrol.

Chart 5.7 shows the monthly average differential between RULP and E10 prices across all of the locations monitored by the ACCC over the period January 2007 to September 2012. It indicates that in 2011–12 average RULP prices were higher than average E10 prices by around 1.8 cpl. In the September 2012 quarter the differential increased to 2.0 cpl.<sup>87</sup>

87 Additional information on the RULP-E10 price differential for each of the locations included in the ACCC's monitoring, and a description of the methodology used, is at appendix D.

**Chart 5.7 Monthly average RULP-E10 differential, all monitored locations: January 2007 to September 2012**



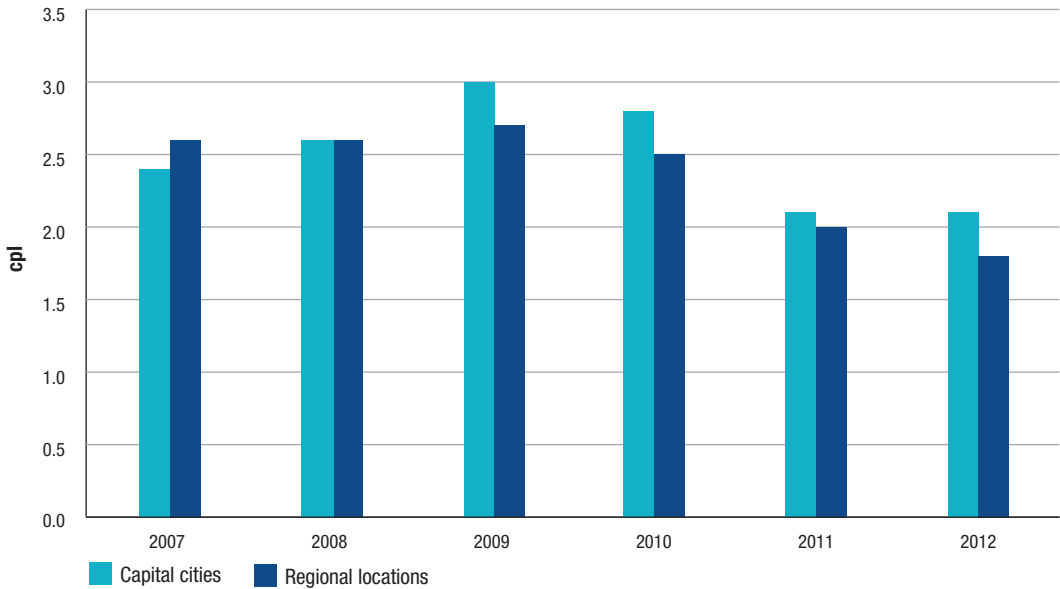
Source: ACCC calculations based on Informed Sources data

Chart 5.8 shows the annual average differential across all capital cities monitored (currently Sydney, Melbourne, Brisbane, Adelaide and Canberra) and the annual average differential across all regional locations monitored (currently comprising 16 locations in Queensland and 14 locations in NSW) for the years 2007 to 2012 (to September 2012).<sup>88</sup> It shows that, over that period:

- the differential in the capital cities has been higher than the differential in regional areas in each year since 2009
- the differential in the capital cities has been greater than 2.0 cpl in all years
- the differential in the capital cities decreased from 3.0 cpl in 2009 to 2.1 cpl in 2011. In 2012 it remained the same at 2.1 cpl.

<sup>88</sup> Note that the RULP-E10 price differentials in the 'capital cities' aggregate are the average across all retail sites selling E10 in the five capital cities. Similarly, the differentials in the 'regional locations' aggregate is the average across all retail sites selling E10 in the NSW and Queensland regional locations. This is different from the RULP-E10 differentials shown in chart 5.7 which calculates the differential for each monitored location first and then averages them across locations. In other words, the differentials in chart 5.8 are site-weighted and the differentials in chart 5.7 are location-weighted.

Chart 5.8 Annual average RULP–E10 differential, capital cities and regional locations: 2007 to 2012\*



\* to September 2012.

Source: ACCC calculations based on Informed Sources data

As noted in section 5.5, the number of retail sites selling both RULP and E10 has been decreasing over time—particularly in NSW. This raises questions about how meaningful it is to compare RULP and E10 prices. Given that the most widely used types of petrol in NSW are E10 and PULP (see section 5.4), IPART has suggested that the appropriate price comparison should be between those fuels.<sup>89</sup>

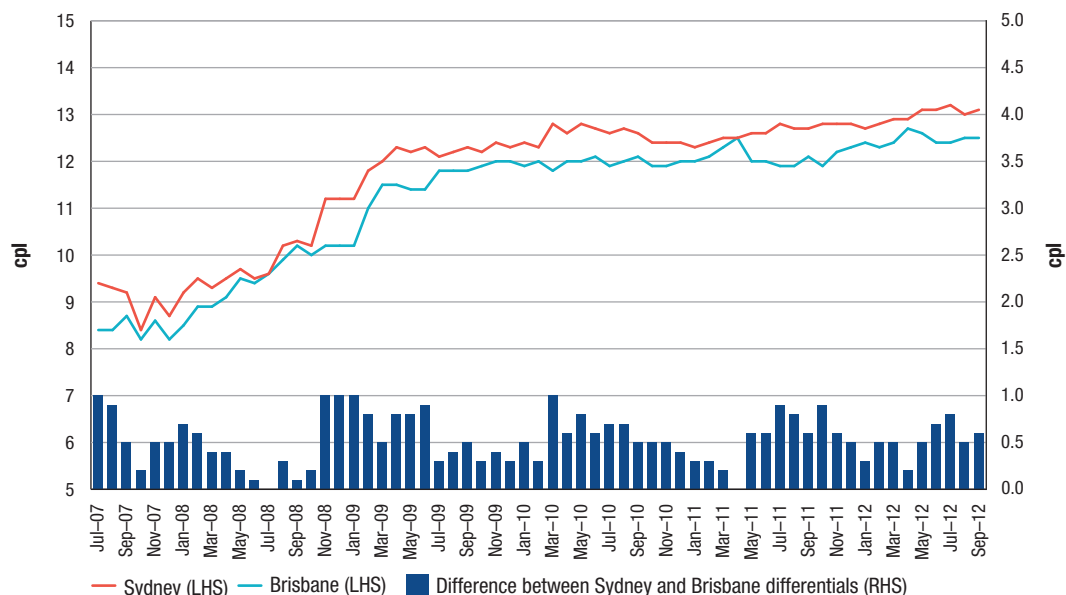
Chart 5.9 shows monthly average differentials between PULP 95 prices and E10 prices in Sydney and Brisbane over the period July 2007 to September 2012. It also shows the monthly average differences between the differential in Sydney and the differential in Brisbane.

There are a couple of methodological points to note about this chart:

- sales of EBP accounted for 36 per cent of total petrol sales in NSW in 2011–12 and sales of PULP accounted for 35 per cent, whereas in Queensland sales of EBP accounted for only 11 per cent of total petrol sales and sales of PULP accounted for 22 per cent
- the prices are for all retail sites that sell E10 and all retail sites that sell PULP 95 in each of the cities.

<sup>89</sup> IPART, *Ethanol supply and demand in NSW—Other Industries—Final Report*, March 2012, p. 50.

**Chart 5.9 Monthly average differentials between PULP 95 prices and E10 prices in Sydney and Brisbane, and the difference between the two cities, July 2007 to September 2012**



Source: ACCC calculations based on Informed Sources data

Chart 5.9 shows that:

- between July 2007 and July 2009 the PULP 95–E10 differential increased by around 3.0 to 4.0 cpl in both cities
- from mid-2009 to September 2012 the PULP 95–E10 differential has been broadly stable, increasing by less than 1.0 cpl in both cities
- the PULP 95–E10 differential in Sydney was generally higher than the PULP 95–E10 differential in Brisbane. However, the difference between the two cities was broadly stable over the entire period, with the average difference being 0.5 cpl.

There is little evidence to suggest that the introduction of the ethanol mandate in NSW has had a significant effect on the PULP 95–E10 differential in Sydney.

## 5.7 Ethanol supply and demand

In previous years the ACCC has expressed concern about the supply of ethanol. However, in 2012 there appears to be sufficient supply to meet demand. The APAC report, released in early October 2012, noted that:

*Whereas in 2010–11 there was a serious shortage of ethanol to meet demand and supply could not be assured, the market is now in surplus and has been since late 2011. One producer is currently exporting surplus production to the Asian market.*<sup>90</sup>

According to this report, ethanol production capacity in Australia in 2012 is estimated to be 450 ML, up from 390 ML in 2011. There are currently three ethanol producers in Australia: Manildra (which produces ethanol from wheat starch); Sucrogen (which produces ethanol from molasses), and Dalby (which produces ethanol from sorghum).

<sup>90</sup> APAC biofuel consultants, *Australian Biofuels 2012–13*, p. 25.

The APAC report's estimates of existing ethanol production capacity and forecast planned production capacity to 2017 are shown in table 5.2.<sup>91</sup> It forecasts four new producers coming on stream between 2014 and 2017. Furthermore, the report commented that, should the market opportunity appear positive in 2015, existing producers could increase production by another 200 ML by 2016 up to an aggregate of around 700 ML (note that this additional production is not included in table 5.2).

**Table 5.2 Australian ethanol production capacity (ML): 2011 to 2017**

Operator	2011	2012	2013	2014	2015	2016	2017
Manildra—Nowra, NSW	250	300	300	300	300	300	300
Sucrogen—Sarina, Qld	60	70	80	80	80	80	80
Dalby Biorefinery—Dalby, Qld	80	80	80	90	90	90	90
<b>Total from existing plants</b>	<b>390</b>	<b>450</b>	<b>460</b>	<b>470</b>	<b>470</b>	<b>470</b>	<b>470</b>
<b>Total from planned plants</b>				<b>215</b>	<b>510</b>	<b>590</b>	<b>590</b>
<b>Total from existing and planned plants</b>	<b>390</b>	<b>450</b>	<b>460</b>	<b>685</b>	<b>980</b>	<b>1060</b>	<b>1060</b>

Source: APAC biofuel consultants, *Australian Biofuels 2012–13*, p. 26

According to estimates in the APAC report, demand for ethanol in 2011–12 was 306 ML, a decrease of 13 ML on 2010–11.<sup>92</sup> This represents a 68 per cent plant utilisation rate. As noted in section 5.4, demand for EBP in 2011–12 has been essentially flat in NSW and decreased significantly in Queensland and Victoria.

Chart 5.10 shows a number of potential supply and demand scenarios for ethanol in the years 2012–13 to 2016–17. The various scenarios on the demand side differ according to whether NSW achieves ethanol sales of 5 per cent or 6 per cent of total petrol sales, and whether an ethanol mandate is introduced in Queensland. The scenarios on the supply side are based on the production capacity of the three existing producers and the production capacity of planned producers.

These scenarios are indicative only. However, they show that:

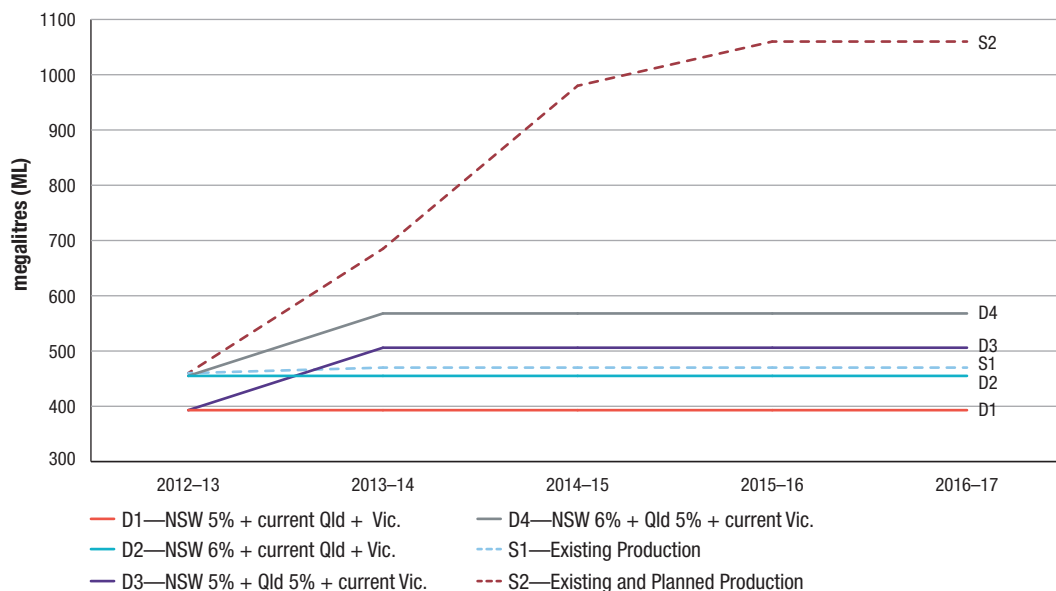
- existing supply capacity would be sufficient to meet the increased demand associated with NSW achieving ethanol sales of 5 per cent and 6 per cent of total petrol sales in NSW (assuming that demand in Queensland and Victoria remained unchanged)<sup>93</sup>
- if Queensland did introduce a 5 per cent ethanol mandate, there is likely to be sufficient planned production to meet the increased demand. Even if no new production capacity came on stream, it is likely that existing producers could increase production to fill the gap.

<sup>91</sup> Ibid, p. 26.

<sup>92</sup> Ibid, p. 35. This estimate is based on funding provided under the Ethanol Production Grant scheme in 2011–12. See Australian Government Department of Resources, Energy and Tourism, *Reporting of Grants—12 October 2012*, pp. 34–35; at: <http://www.ret.gov.au/Department/Documents/reporting-grants/reporting-grants12.10.2012.pdf>, accessed 15 October 2012. The estimate is higher than the implied volume of ethanol (272 ML) in 2011–12 in EBP data from the *Australian Petroleum Statistics* (which is shown in table 5.1).

<sup>93</sup> In section 5.3.1 it was noted that IPART considers that there would not be enough demand in NSW for ethanol to meet the 6 per cent mandate.

**Chart 5.10 Estimated potential ethanol demand and supply, 2012–13 to 2016–17**



Sources: ACCC calculations based on BREE, *Australian Petroleum Statistics*, issue 191 June 2012 and APAC biofuel consultants, *Australian Biofuels 2012–13*<sup>94</sup>

## 5.8 Ethanol blended petrol: consumers and competition

The ACCC has actively engaged with consumers and industry stakeholders throughout 2011–12. From this engagement, the ACCC has been informed of ongoing consumer concerns about EBP.

### 5.8.1 Complaints and inquiries

The ACCC continued to receive complaints about EBP in 2011–12. Around two-thirds of complaints came from NSW and around one-fifth came from Queensland.

The main issues that were brought to the ACCC's attention in respect of EBP included concerns about:

- advertising of EBP by retailers, such as prices for RULP and EBP not being sufficiently differentiated on some roadside price boards or advertising EBP on price boards when it was not available
- labelling of EBP on retail site forecourts being absent or difficult to see
- the price difference between EBP and RULP and/or PULP
- the potential damage to vehicles caused by EBP, particularly when consumers did not realise they were purchasing EBP or were unable to purchase RULP because it had been replaced by EBP.

<sup>94</sup> Estimated potential ethanol supply is based on Australian ethanol nameplate capacity reported in the APAC report for existing producers (S1) and for existing producers and planned producers (S2). Estimated potential ethanol demand is based on sales data in BREE's *Australian Petroleum Statistics*, issue 191 June 2012 and RET Ethanol Production Grant data. Ethanol demand forecasts are based on 2011–12 sales volumes for RULP, PULP and EBP.

While most consumer complaints and inquiries do not raise concerns under the Act, the ACCC will take action where appropriate. The ACCC assessed allegations of misleading and deceptive conduct relating to the sale of EBP in 2011–12 which related to ethanol being present in fuels without appropriate labelling of the ethanol content.

### 5.8.2 Engagement with key stakeholders on EBP issues

During 2011–12, the Fuel Consultative Committee (Fuel CC) continued to play a role in the ACCC's engagement with key stakeholders about ethanol and EBP.<sup>95</sup> In 2011–12 the Biofuels Association of Australia joined the Fuel CC. During the meetings of the Fuel CC, members raised concerns about the following issues:

- the impact of state-based ethanol mandates, including the cost of meeting these mandates
- the price difference between E10, RULP and PULP
- the need to inform consumers more effectively about the relative value of different fuel types, particularly in relation to engine compatibility and energy content
- the increased logistical costs of handling, transporting and storing EBP to meet mandated ethanol consumption
- addressing the negative perception of EBP among some parts of the automotive industry.

The ACCC also continued to engage with stakeholders outside the Fuel CC, including liaising directly with ethanol producers, fuel retailers, industry associations, motoring organisations and government agencies regarding EBP.

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<sup>95</sup> The Fuel CC is described in section 2.5.1.