For information
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# Legislative Council Panel on Economic Services

## RETAIL/WHOLESALE PRICES OF MAJOR FUELS

### INTRODUCTION

This paper informs Members of findings from analysis of the 1999 costs and profitability data of oil companies on the retail of unleaded petrol, automotive diesel and wholesale of cylinder Liquefied Petroleum Gas (LPG).

### BACKGROUND

2. In 1999, in view of pubic concerns about insufficient data being available for assessing whether the retail prices of oil products were fair, we conducted an analysis of the operation costs and profits of the oil companies on supplying three major fuels, namely, unleaded petrol, automotive diesel and cylinder LPG. We informed Members of the results of our analysis on 26 April 1999.

3. The Consumer Council has also recommended that Government should monitor the industry by collecting data from oil companies to enable the Government to make trend observations on profitability levels in the industry.

4. For the current analysis, we have requested the five oil companies to provide cost and profit data for 1999, in particular data on their returns for 1999 and 1998.

5. Four oil companies have provided the data and stressed that the data are proprietary and commercially sensitive. As for the analysis in 1999, to preserve the confidentiality of the data whilst letting the general public have a better understanding of their cost structures, pricing practices and profitability levels, the oil companies have agreed to our presenting their data on an aggregated and non-attributable basis, and in relative terms.

### ANALYSIS

6. The 1999 average price (retail/wholesale)/cost/profit per unit of the major fuels (i.e. a litre of unleaded petrol or automotive diesel or a kilogram of cylinder LPG) as described in the following paragraphs represented the weighted average figures of the four companies and those relating to 1998 represented those of three companies. Comparison of the unit values between these two years should be considered in this context. Despite this difference, our analysis of the data has indicated that the overall direction of changes in the relevant unit values of major components in 1999 over 1998 as observed by us has not been affected by the inclusion of the data of an additional company for 1999. Indeed the 1999 database should be more representative of the general situation of the industry than the 1998 one. For consistency purposes, some minor reclassification of the values for 1998 has been made to conform with the basis of presenting the data for 1999.

***UNLEADED PETROL AND AUTOMOTIVE DIESEL***

**Components making up the retail price**

7. The components making up the average retail price (or pump price) at the filling stations could be broadly classified into three categories
1 - Government duty, costs and profit before tax. The components in more detail are set out at Annex 1.

*Government duty*

8. Duty for unleaded petrol has essentially remained at \$6.06/litre since March 1997 and that for automotive diesel had fallen from \$2.89/litre since March 1996 by 30% to \$2.00/litre in June 1998 and has remained at that level since then.

*Costs*

9. Costs could be classified as variable or fixed costs. Variable costs could be directly attributable to each litre of the oil product, e.g. imported product, dealers' margin, fleet/card/coupon/discounts (discounts), promotional give-aways. Fixed costs could not be so directly attributable and they are generally required irrespective of the quantity of sales, e.g. land premium and rent, other operating costs. Given that a relatively high proportion are fixed costs, there should be incentive for the oil companies to seek growth in sales quantity to keep overall unit cost down and to

maximise profits. Fixed costs represented about 76% and 57% of the average retail price of unleaded petrol and automotive diesel in 1999 compared with 79% and 67% in 1998 respectively.

10. Individual major cost items for both unleaded petrol and automotive diesel are imported product, dealers' margin, discounts, land premium and rent for the filling stations. The cost of imported product and discounts tend to fluctuate more than other cost items.

*Profit*

11. The residual balance of the average retail price after meeting Government duty and the costs represents the profit.

**Breakdown of the components**

2, 3 12. At Annexes 2 and 3 are two tables showing a breakdown at the broad level of the components of the average retail price per litre of unleaded petrol and automotive diesel respectively in 1999 and 1998, the differentials between the highest and lowest value of the unit cost of the major components reported among the oil companies, and changes in the weighted average unit cost of the major components in 1999 over 1998.

**Changes in costs and their implications for the retail price and profit**

*Imported product cost*

13. In 1999, there was a substantial rise in the import price of unleaded petrol and automotive diesel due to rises in world oil prices. According to the import statistics, in 1999 the monthly average import price of unleaded petrol and light diesel began the year at $0.85/litre and $0.73/litre and ended the year at $1.44/litre and $1.27/litre respectively. During the year the import prices for unleaded petrol ranged between $0.83/lire and $1.47/litre compared with the range of between $0.85/litre and $1.21/litre in 1998. The import prices for automotive diesel ranged between $0.69/litre and $1.27/litre in 1999 compared with the range of between $0.66/litre and $0.99/litre in 1998. In late September, the oil companies increased the retail price by $0.50/litre for unleaded petrol and by $0.40/litre for automotive diesel.

14. For 1999 as a whole the average imported product cost of the oil companies increased by $0.13/litre to $1.19/litre for unleaded petrol

and by $0.18/litre to $1.03/litre for automotive diesel. The average retail price (excluding duty) for unleaded petrol increased by $0.07/litre to $4.07/litre and that for automotive diesel remained at about the same level as in 1998.

15. In the first quarter of 2000, the import prices of unleaded petrol and automotive diesel continued to rise and reached a high of $1.82/litre and $1.65/litre respectively in March. In late January 2000 the oil companies further increased the retail price by $0.16/litre for unleaded petrol and by $0.30/litre for automotive diesel.

*Other costs and profit*

16. In 1999, increases in other costs were mainly due to an increase in the discounts by $0.20/litre for unleaded petrol and $0.27/litre for automotive diesel. There were some reductions in land premium and rent, other operating costs on petrol filling stations and advertising and other costs. The average profit decreased by $0.03/litre for unleaded petrol and $0.13/litre for automotive diesel.

**Cost structure and profits among the oil companies**

17. As indicated by the differentials between the highest and lowest values of the unit costs reported (see Annexes 2 and 3), there were inherent differences in cost structures among the oil companies. For example, unit cost on land premium and rent for the filling stations differed due to the different ages of the petrol filling sites among the oil companies. Differences existed on dealers’ margin though the magnitude remained stable between 1999 and 1998, while differences in discounts widened probably because individual oil companies increased their discounts.

18. Differences in the profit between the oil companies were the result of changes in the differences in the various cost elements. Profit **before tax** on average represented around 3% and 2% of the average retail price including duty for unleaded petrol and automotive diesel respectively in 1999 compared with around 3% and 4% respectively in 1998. It represented around *8% and 3%* of the average retail price *excluding duty* for unleaded petrol and automotive diesel respectively in 1999 compared with around *9% and 7%* respectively in 1998.

19. Profit **after tax** on average represented around 3% and 2% of the average retail price including duty for unleaded petrol and automotive diesel respectively for both products in 1999 compared with around 3% of

the average retail price in 1998. It represented around *6% and 3%* respectively of the average retail price *excluding duty* for unleaded petrol and automotive diesel respectively in 1999 compared with around *7% and 4%* respectively in 1998.

***CYLINDER LIQUEFIED PETROLEUM GAS (LPG)***

**Wholesale price**

20. The oil companies sell cylinder LPG on a wholesale basis to their dealers who then on-sell it to end-users on a retail basis. At present there are over 300 such dealers. Each oil company fixes its own wholesale prices. For example, at present one oil company's wholesale price is over $8.50/kg compared with another's $6.15/kg. Wholesale prices are subject to discounts/incentives. Therefore, in effect the oil companies only charge their dealers at the net wholesale price, i.e. the price after discounts/incentives. The net wholesale price is therefore more meaningful than the wholesale price in providing an understanding of the level of competition among the oil companies and its relationship with the cost of the imported product and profit. It is therefore used as the base for this analysis.

**Retail price**

21. Retail prices of cylinder LPG are determined by the dealers. In setting their own retail prices, the retailers take into account the local operating environment and running costs such as wages, shop rentals, insurance, transportation and storage. Details of retail prices of cylinder LPG are beyond the scope of this study.

**Introduction of a mechanism for pricing cylinder LPG**

22. In January 1999, Shell Hong Kong Limited (Shell) increased transparency of its wholesale pricing of LPG by adopting a mechanism for adjusting their LPG prices at half-yearly intervals. Essentially the purpose of Shell is to demonstrate that the Company will not make any gain/loss from any change in import price of LPG and will pass on any such changes to consumers through making an adjustment to their wholesale price.

23. On announcing its pricing adjustment mechanism, Shell also reduced the wholesale price of cylinder LPG by $0.40/kg. The reduction was immediately followed by other oil companies though none has

followed Shell's move to increase transparency of their wholesale pricing of cylinder LPG. Other companies have generally retained their list prices as their wholesale prices.

**Components making up the average net wholesale price**

24. The components could be broadly classified into two categories - costs and profit before tax. Costs are made up of fixed costs (e.g. storage, rent on cylinder wagon parking sites) and variable costs (e.g.
4 imported product). The components in more detail are set out at Annex 4.

25. Fixed costs represented about 52% and 50% of the average net wholesale price per kg in 1999 and 1998 respectively, whereas imported product, the major variable cost item, represented about 40% and 28% of the average net wholesale price in 1999 and 1998 respectively.

**Breakdown of components**

5 26. At Annex 5 is a table showing a breakdown at the broad level of the components of the average net wholesale price per kilogram of cylinder LPG in 1999 and 1998, the differentials between the highest and lowest value of the unit cost of major components reported among the oil companies, and changes in the weighted average unit cost of major components in 1999 over 1998.

**Changes in costs and their implications for the net wholesale price and profit**

27. The major change in costs in 1999 was an increase in the average imported product cost by $0.50/kg. This was due to a significant rise in world LPG prices in 1999 over 1998. According to the import statistics, the monthly average import price ranged between $1.32/kg and $2.46/kg in 1999 compared with between $1.12/kg and $1.90/kg in 1998.

28. In July 1999, Shell conducted the half-yearly review of its wholesale price in accordance with its pricing adjustment mechanism. Shell raised its wholesale price but offered a special discount of $0.95/kg for their domestic customers on the revised rate at the same time, effectively freezing its wholesale price at the January 1999 level. This freeze was followed by other oil companies. For 1999 as a whole, the average net wholesale price of the oil companies decreased by $0.38/kg.

29. In January 2000, Shell conducted the twelve-month review of its wholesale price, reduced its wholesale price by $0.3/kg. It also removed the special discount for their domestic customers at the same time, effectively raising the wholesale price by $0.65/kg. The adjustment was also followed by other oil companies.

**Cost structure and profits among the oil companies**

30. Similar to unleaded petrol and automotive diesel, there were differences in the cost structures and profit levels among the oil companies for cylinder LPG. The difference in the net average wholesale price, $0.36/kg in 1999 and $0.49/kg in 1998, indicated competitive pricing among the oil companies.

31. Profit **before tax** on average represented around 8% of average net wholesale price in 1999 and 22% in 1998. Profit **after tax** represented around *6%* of average net wholesale price in 1999 and *19%* in 1998. The drop in profit was apparently due to the reduction in the wholesale price in early 1999 and the rise in the cost of imported product during the remainder of the year.

***PROFITABILITY LEVELS***

32. In response to our request, one oil company has provided the rates of return (profit after tax and interest) on the average capital employed for 1999. The data, calculated on a historical cost basis, related to the returns of its two business lines, i.e. supply of retail fuel (unleaded petrol and automotive diesel combined) and cylinder LPG respectively, instead of by three separate products as requested by us. Another company has provided rates of return (profit after tax and before interest) on similar basis also on two business lines, i.e. supply of retail fuel (unleaded petrol and automotive diesel combined) and LPG (cylinder and piped LPG combined), calculated on a replacement cost basis, for 1999 and 1998. The rates of return of both companies on these business lines were in single digit for 1999 and 1998 except the one on LPG which slightly exceeded single digit in 1998.

33. The first company mentioned above has also provided the taxable profits (after interest) for its whole Hong Kong operations for 1999 and 1998.

34. The second company mentioned above and two other

companies have separately provided the return (i.e. profit after tax and before interest) both in value and as a rate of return on the average capital employed on a historical cost basis in respect of their whole Hong Kong operations for 1999 and 1998. These operations include other oil products and business activities of the companies. The weighted average rates of return of the three companies were 6% in 1999 and 11% in 1998 respectively. In value term, the aggregated return of these three companies plus the taxable profits of the first company mentioned above amounted to \$620M in 1999 compared with \$1,157M in 1998.

35. Some companies have pointed out that their company's capital has been secured and employed on the basis of the whole company's operations rather than by individual products and that it would be more appropriate to look at their profitability levels in the context of the whole Hong Kong operations.

36. The data provided by the oil companies were not derived exactly on the basis we requested. Nevertheless, they would give an indication of the profitability levels and trend for 1999 and 1998, and would set a reference point for subsequent profitability information to be sought from the oil companies for analysis in future.

**OBSERVATIONS**

37. The cost and profit data provided by the oil companies have given a better idea of the cost structure and profitability levels of oil companies in relation to their Hong Kong operations. Our observations regarding 1999 are as follows:

(a) The data show that oil companies had different cost structures. Given the relatively high proportion of their fixed costs and the relatively modest growth of the market, there should be a strong incentive for oil companies to compete for market share, apart from controlling their operating costs. It is noted that growth in sales volume for the market as a whole in 1999 was about 7%, 1% and 3% for unleaded petrol, automotive diesel and cylinder LPG respectively.

(b) It would appear that the oil companies mainly competed through varying their discounts and promotional costs whilst tracking each other closely on the retail price for unleaded petrol and automotive diesel. Discounts varied considerably among the oil companies.

(c) Changes in retail prices (excluding duty) of unleaded petrol and automotive diesel tended to be led by changes in the cost of the imported product though the changes might not be of the same magnitude since other costs also had a role to play. On the other hand, unit profit seemed to be affected by the changes in the level of discounts. For 1999 as a whole, the average imported product cost increased by $0.13/litre for unleaded petrol and $0.18/litre for automotive diesel whilst the average retail price (excluding duty) increased by $0.07/litre for unleaded petrol and remained at about the same level for automotive diesel.

(d) Profit after tax on average represented around 3% and 2% of the average retail price including duty for unleaded petrol and automotive diesel respectively in 1999, as compared with around 3% for both products in 1998. It represented about 6% and 3% of the average retail price excluding duty for unleaded petrol and automotive diesel in 1999 compared with around 7% and 4% respectively in 1998.

(e) Changes in wholesale price of cylinder LPG are also generally led by changes in the imported product cost. This was also the case in 1999 although the increase in wholesale price was offset by a special discount resulting in a freeze for domestic consumers. For 1999 as a whole, the average imported product cost increased by $0.50/kg, whilst the average net wholesale price decreased by $0.38/kg.

(f) Profit after tax for cylinder LPG on average represented around *6%* of the average net wholesale price in 1999 as compared with *19*% in 1998.

(g) The move by one of the oil companies to increase transparency of wholesale pricing for cylinder LPG through adoption of a pricing adjustment formula has not been followed by others. It appeared that other oil companies rather followed that company in adjusting their own wholesale price. In practice, competitive pricing for cylinder LPG existed through discounts/incentives which were reflected in different net wholesale prices charged by the oil companies.

(h) It would appear that profitability of the oil companies on supplying the three major fuels in terms of rates of return on the capital employed fell to a single digit in 1999 from slightly above single digit in 1998. This observation is based on the assumption that the profitability levels for the whole Hong Kong operations of three of the oil companies were also a good indication of the profitability levels of the oil companies in supplying the three major fuels. The weighted average rates of return (i.e. profit after tax and before interest) on the average capital employed of the latter three companies were 6% in 1999 and 11% in 1998 respectively.

38. As regards profitability levels, the data have provided a better indication of the picture of the industry's situation and would enable us to continue the trend observation in the future. Whilst the Consumer Council was not provided with the commercial in confidence information provided by the oil companies, the Consumer Council generally shares this view.

Economic Services Bureau
3 June 2000

Annex 1

**Unleaded Petrol and Automotive Diesel**
**Components of the average retail price**

| |
|---|
| **Imported product** |
| |
| **Storage/distribution** |
| Land premium & Rent* |
| Infrastructure and equipment* |
| Distribution* |
| Other operating costs* |
| |
| **Filling stations** |
| Land premium & Rent |
| Infrastructure and equipment* |
| Other operating costs* |
| Dealers' margin |
| |
| **Promotional costs** |
| Fleet/card/coupon/discounts |
| Promotional giveaways |
| Advertising and other costs |
| |
| **Profit (before tax)** |
| |
| **Government duty** |

* Grouped under "other costs" in Annex 2 and Annex 3.

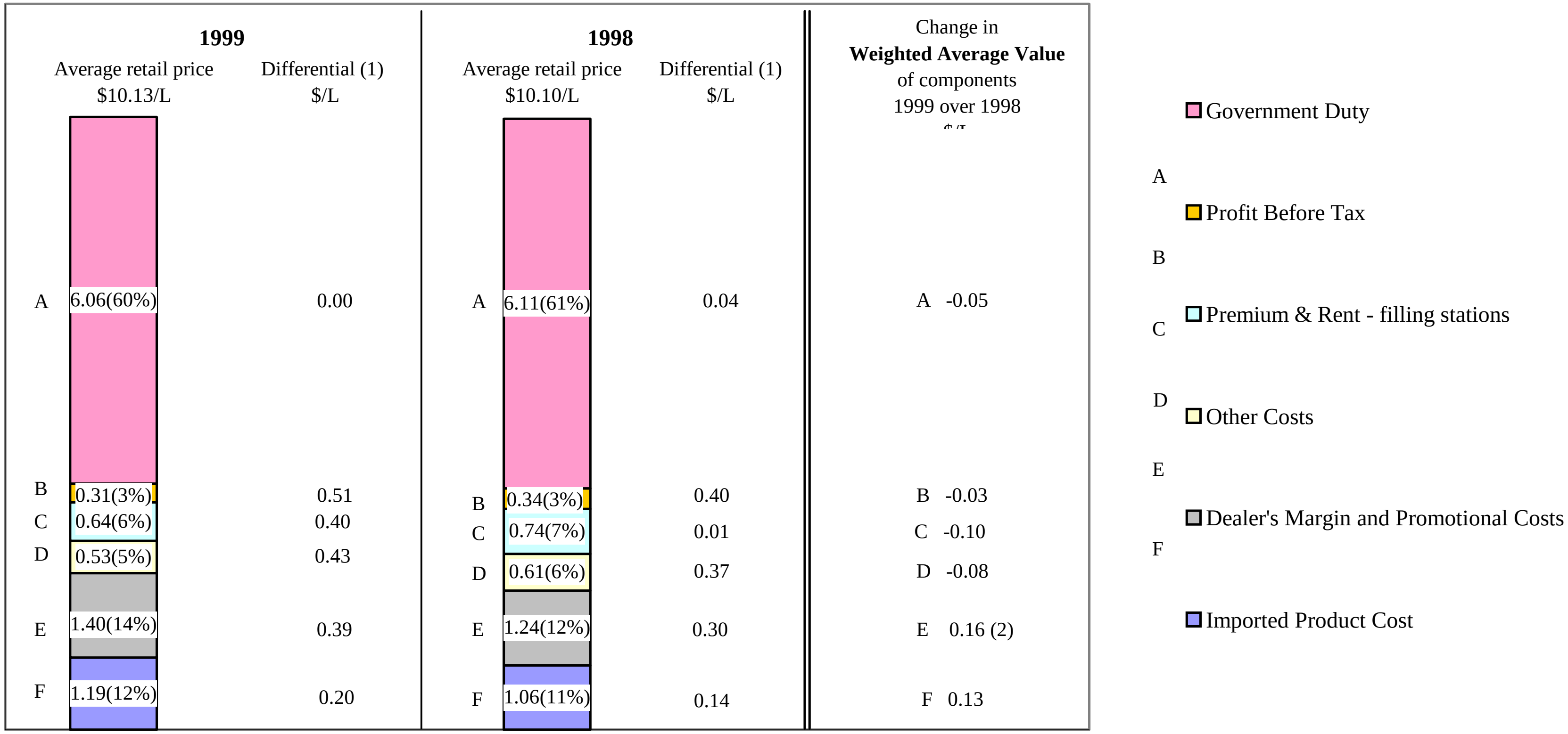
Annex 4

**Cylinder LPG**
**Components of average net wholesale price**

| |
|---|
| *Imported product* |
| |
| **Storage/distribution** |
| Land premium & Rent* |
| Infrastructure and equipment |
| Distribution* |
| Other operating costs* |
| |
| **Cylinder wagon parking sites***|
| |
| **Promotional costs** |
| Advertising and other costs* |
| |
| **Profit (before tax)** |

* Grouped under other costs in Annex 5.

**Components making up the average retail price of unleaded petrol in 1999 and 1998**

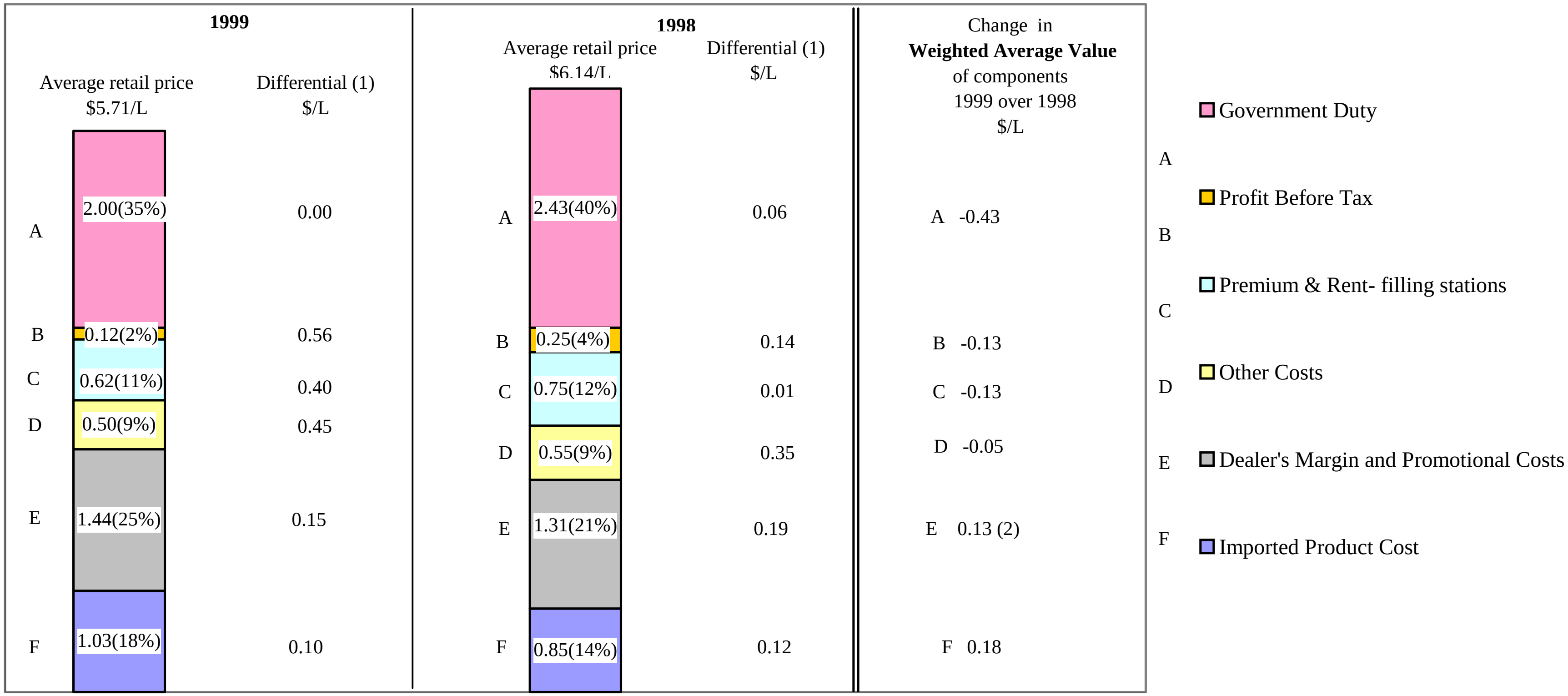



<u>Note</u> :

(1) Representing the differential between the highest and lowest value reported.

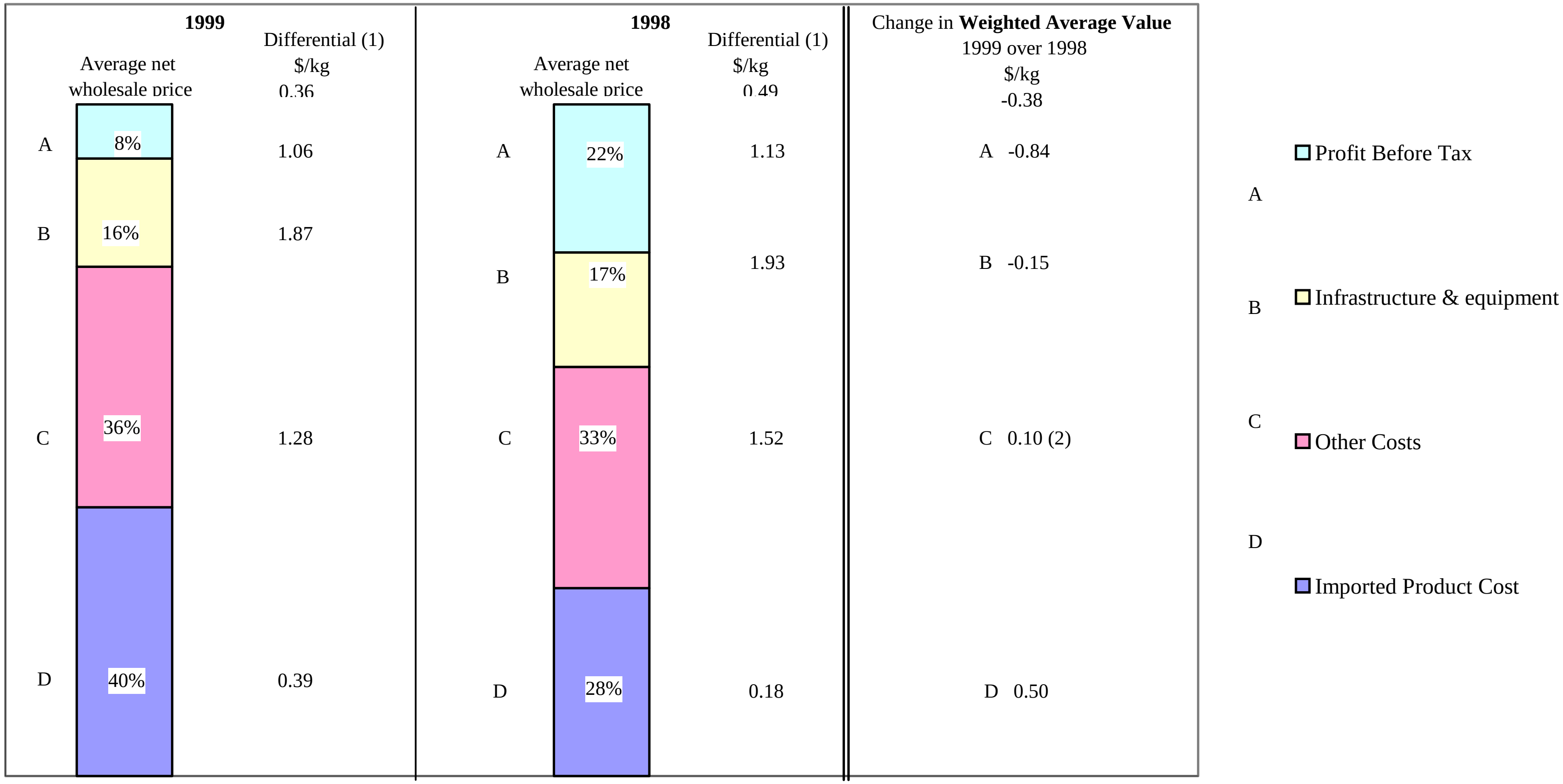
(2) The increase was mainly due to the increase in discounts by $0.20/L, partly offset by the decrease in advertising and other costs.

**Components making up the average retail price of automotive diesel in 1999 and 1998**




Note :
(1) Representing the differential between the highest and lowest value reported.
(2) The increase was mainly due to the increase in discounts by $0.27/L, partly offset by the decrease in advertising and other costs.

**Components making up the average net wholesale price of cylinder LPG in 1999 and 1998**




Note :
(1) Representing the differential between the highest and lowest value reported.
(2) The increase was mainly due to the increase in other operating costs, partly offset by the decrease in advertising and other costs.