For information
on 17 July 2001

Legislative Council Panel on Economic Services

RETAIL/WHOLESALE PRICES OF MAJOR FUELS

INTRODUCTION

This paper informs Members of findings from analysis of the costs and profitability data of oil companies on the retail of unleaded petrol, automotive diesel and wholesale of cylinder Liquefied Petroleum Gas (LPG) for the year 2000.

BACKGROUND

2. Last year, we analysed the operation costs and profits of the oil companies for 1999 as well as profitability of their whole Hong Kong operations for 1998 and 1999. We informed Members of the findings on 9 June 2000.

3. This year, four oil companies have provided data for our analysis[(1)]. As in the past, they have stressed that the data are proprietary and commercially sensitive. To preserve the confidentiality of the data whilst enabling the general public to have a better understanding of their cost structures, pricing practices and profitability levels, oil companies have agreed to their data being presented on an aggregated and non-attributable basis, and in relative terms.

4. The average retail/wholesale price, cost and profit per litre of unleaded petrol, automotive diesel and per kilogram of cylinder LPG for the year 2000 as described in the following paragraphs represented the weighted average figures of those companies providing the data. The 1998 and 1999 figures represented those of three and four out of the five companies respectively. Comparison of the unit values between these years should be considered in this context. For consistency, minor reclassifications of some data in individual returns have been made.

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(1) four instead of five oil companies since two have merged in late 1999. One of the companies has only provided data in respect of unleaded petrol and automotive diesel.

UNLEADED PETROL AND AUTOMOTIVE DIESEL

Components making up the average retail price

5. 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. The components in more detail are set out at **Annex 1**.

Government duty

6. Duty for unleaded petrol has essentially remained at $6.06/litre since March 1997 and that for regular motor diesel was $2.00/litre in 2000. The concessionary duty for ultra low sulphur diesel (ULSD) has been at $1.11/litre since its introduction in July 2000 (and this concession is expected to end by 1 April 2002).

7. In the case of unleaded petrol, Government duty represented 61%, 60% and 57% of the average retail price in 1998, 1999 and 2000 respectively. In the case of automotive diesel, including both regular motor diesel and ULSD, it represented 40%, 35% and 26% of the average retail price in 1998, 1999 and 2000 respectively. The lower percentage of Government duty for automotive diesel in the year 2000 was due to the concessionary duty for ULSD. Both regular motor diesel and ULSD are grouped under automotive diesel as most oil companies have advised that it would be difficult for them to segregate the data relating to regular motor diesel from those relating to ULSD for the current analysis.

Costs

8. 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) and promotional giveaways. Fixed costs could not be so attributable directly and they are generally required irrespective of the quantity of sales, e.g. land premium and rent.

9. Major cost items for both unleaded petrol and automotive diesel are imported product cost, dealers' margin and promotional costs, land premium and rent for the filling stations. The costs of imported product tend to vary more than other cost items.

Profit

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

Breakdown of the components

2, 3

11. 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 from 1998 to 2000 for unleaded petrol and automotive diesel respectively, 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 average unit cost of the major components from 1998 to 2000.

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

Imported product cost

12. In the year 2000, there was a substantial rise in the imported product cost of unleaded petrol and automotive diesel due to rises in world oil prices. According to the import statistics for the year 2000 compiled by Census and Statistics Department (C&SD), the monthly average import price of unleaded petrol and light diesel (excluding ULSD) began the year at $1.57/litre and $1.37/litre and ended the year at $1.92/litre and $1.55/litre respectively. During the year the monthly average import prices for unleaded petrol ranged between $1.57/litre and $2.21/litre compared with the range of between $0.83/litre and $1.47/litre in 1999. The monthly average import prices for light diesel (excluding ULSD) ranged between $1.37/litre and $2.05/litre in the year 2000 compared with the range of between $0.69/litre and $1.27/litre in 1999. The monthly average import prices for ULSD was $2.08/litre in July 2000 and $1.76/litre at the end of the year. Between July and end December 2000, it ranged from $1.76/litre to $2.53/litre.

13. According to data provided by the oil companies, the average imported product cost of the oil companies increased in the year 2000 by $0.62/litre to $1.81/litre for unleaded petrol and by $0.84/litre to $1.87/litre for automotive diesel as compared with that for 1999.

Operating costs

1, 2, 3

14. Operating costs mean dealers' margin and promotional costs, land premium and rent for filling stations and other costs stated in **Annexes 1, 2** and **3**.

15. The oil companies have advised that in the year 2000, cost saving programmes have been implemented. Compared with 1999, the average operating costs of the oil companies decreased by $0.48/litre for unleaded petrol and $0.15/litre for automotive diesel in 2000. For unleaded petrol, the reductions were mainly in discounts, promotional giveaways and other costs. For automotive diesel, the reductions were mainly in other costs. The overall reduction in the average operating costs may suggest an increase in operational efficiency of the oil companies.

Retail Price

16. In the same period, the average retail price (*excluding duty)* increased by $0.57/litre to $4.64/litre for unleaded petrol and by $0.86/litre to $4.57/litre for automotive diesel. The adjustments in the average retail price appear to be broadly in line with the increases in the average imported product costs for these two products (see para. 13).

Profit

17. In the year 2000, the average profit before tax increased by $0.43/litre to $0.74/litre for unleaded petrol and by $0.17/litre to $0.29/litre for automotive diesel. Since on the basis of paras. 13 and 16 above, the increase in average retail price appears to be broadly in line with the increase in average imported product cost, the increase in average profit may be attributable to lower unit fixed costs due to increase in sales (6% for unleaded petrol and 10% for automotive diesel) and reductions in average operating costs (see para. 15).

Cost structure and profits among the oil companies

2, 3

18. 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 the cost structures of the oil companies. For example, unit cost on land premium and rent for filling stations differed due to different ages of petrol filling sites among the oil companies.

Differences in dealers' margin and promotional costs may also suggest that different marketing strategies may have been launched by different oil companies to compete for market share. Differences in imported product cost and other costs may be indicative of different economies of scales and operational efficiencies among oil companies. The differences in profit among the oil companies may be attributable to differences in various cost elements.

19. Profit **before tax** represented 7% and 5% of the average retail price *including duty* for unleaded petrol and automotive diesel respectively in the year 2000 (compared with 3% and 4% respectively in 1998; 3% and 2% respectively in 1999). It represented 16% and 6% of the average retail price *excluding duty* for unleaded petrol and automotive diesel respectively in the year 2000 (compared with 9% and 7% respectively in 1998; 8% and 3% respectively in 1999).

20. Profit **after tax** represented 6% and 4% of the average retail price *including duty* for unleaded petrol and automotive diesel respectively in the year 2000 (compared with 3% for both of them in 1998; 3% and 2% respectively in 1999). It represented 14% and 5% of the average retail price *excluding duty* for unleaded petrol and automotive diesel respectively in the year 2000 (compared with 7% and 4% respectively in 1998; 6% and 3% respectively in 1999).

21. The figures in paras. 19 and 20 above serve to give an indication of the profit element in the overall price structure. In view of the capital intensive nature of the oil industry, it may be more appropriate to assess the profitability of the oil companies on the basis of return on capital employed (see para. 37 below).

CYLINDER LIQUEFIED PETROLEUM GAS (LPG)

Wholesale price

22. 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. Each oil company determines its own wholesale prices and their discounts to dealers also vary. 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 imported product cost and profit. It is therefore used as the base for this

analysis.

Retail price

23. Retail prices of cylinder LPG are determined by the 300 or so dealers in the market. In setting their own retail prices, the dealers 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.

Mechanism for pricing cylinder LPG

24. 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 that it will pass on any such changes to consumers through adjustment to their wholesale price.

Components making up the average net wholesale price

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25. The components could be broadly classified into two categories - costs and profit. The components in more detail are set out at **Annex 4**. The data for cylinder LPG in the year 2000 represented the weighted average of three companies[(1)].

Costs

26. Similar to unleaded petrol and automotive diesel, costs for cylinder LPG are made up of fixed costs (e.g. storage) and variable costs (e.g. imported product costs).

27. Individual cost items are imported product cost, infrastructure and equipment costs and other costs. The imported product costs tend to vary more than other cost items.

Profit

28. The residual balance of the average net wholesale price after deducting the costs represents the profit.

Breakdown of components

5 29. 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 from 1998 to 2000, the differentials between the highest and lowest value of the unit cost of major components reported among the oil companies, and changes in the average unit cost of major components from 1998 to 2000.

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

Imported product cost

30. The major change in cost of the oil companies in the year 2000 as compared with 1999 was the increase in the average imported product cost by $0.74/kg. This was due to the rise of the world LPG prices in the year 2000. According to the import statistics for the year 2000 compiled by C&SD, the monthly average import price ranged from $2.46/kg to $3.00/kg whereas that of 1999 ranged from $1.32/kg to $2.46/kg.

Operating costs

31. Operating costs mean infrastructure and equipment costs and
4, 5 other costs stated in **Annexes 4 and 5**. Compared with 1999, the average operating costs decreased by $0.19/kg in the year 2000 which were mainly reductions in other costs.

Wholesale price

32. Wholesale price was increased during the year to cover the rising imported product cost in accordance with the pricing mechanism. For the year 2000 as a whole, the average net wholesale price increased by $0.70/kg which was broadly in line with the increase in the average imported product cost (see para. 30).

Profit

33. The average profit before tax increased by $0.15/kg. Since on the basis of paras. 30 and 32, the increase in average net wholesale

price appears to be broadly in line with increase in average imported product cost, the increase in average profit before tax may be attributable to the reduction in the average operating costs (see para. 31).

Cost structure and profits among the oil companies

34. Similar to unleaded petrol and automotive diesel, there were inherent differences in the cost structure and profit level for cylinder LPG among the oil companies. The difference in the average net wholesale price of $0.49/kg in 1998, $0.36/kg in 1999 and $0.77/kg in 2000 indicated competitive pricing among the oil companies. In practice, competitive pricing for cylinder LPG existed through discounts/incentives which were reflected in different net wholesale prices charged by the oil companies.

35. Profit **before tax** represented 22%, 8% and 9% of average net wholesale price in 1998, 1999 and 2000 respectively. Profit **after tax** represented 19%, 6% and 8% of average net wholesale price in 1998, 1999 and 2000 respectively.

PROFITABILITY

36. 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.

37. Three oil companies have provided their return (i.e. profit after tax and before interest) for the year 2000 on the average capital employed in respect of their whole Hong Kong operations on a historical cost basis. These operations include other oil products and business activities of the companies. The weighted average rate of return in the year 2000 for the three companies was 7% (6% in 1999 and 11% in 1998). As a company included in this year's analysis was unable to provide us last year with the relevant data for 1998 and 1999, any comparison of the rate of return for the year 2000 with those for 1998 and 1999 should be considered in this context. The data for the year 2000 should be more representative of the general situation of the industry than the 1998 and 1999 ones as the data of one more company is included.

OBSERVATIONS

38. The data provided by the oil companies have given a better idea of the cost structure and profitability level of oil companies in relation to their Hong Kong operations. Our observations based on data for the year 2000 are as follows:

(a) Changes in **retail price** of unleaded petrol/ automotive diesel and **wholesale price** of cylinder LPG tended to be led mainly by changes in the imported product cost *(paras. 13, 16, 30 and 32)*;

(b) Reduction in operating costs and increase in sales of unleaded petrol and automotive diesel may have contributed to the increase in **profit element** for the individual business lines. The former may also have contributed to the increase in profit for cylinder LPG *(paras. 15, 17, 31 and 33)*;

(c) There were inherent differences in **cost structure** and **profit level** among oil companies. To reduce the overall unit cost and maximise profits, there should be strong incentive for the oil companies to improve operational efficiency and compete for market share. Differences in profit among the oil companies appear to be the result of differences in various cost elements *(paras. 18 and 34)*;

(d) Due to the close proximity of petrol filling stations in the urban areas and the general homogeneity of the product, there could be market pressure for oil companies to follow the lead of others in reducing retail prices of unleaded petrol and automotive diesel in order to maintain market share. By the same token, the fact that pump prices are observable among competitors could also mean that price increases could move uniformly. 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. Discounts varied considerably among the oil companies *(para.18)*;

(e) **Competitive pricing** for cylinder LPG existed through differential discounts/incentives which were reflected in different net wholesale prices charged by the oil companies *(para. 34)*;

(f) ***Profitability of oil companies***

(i) Profit **after tax** represented 6% and 4% of the average retail price *including duty* for unleaded petrol and automotive diesel respectively in the year 2000 (compared with 3% for both of them in 1998; 3% and 2% respectively in 1999). It represented 14% and 5% of the average retail price *excluding duty* for unleaded petrol and automotive diesel respectively in the year 2000 (compared with 7% and 4% respectively in 1998; 6% and 3% respectively in 1999) *(para. 20)*;

(ii) Profit **after tax** represented 8% of the average net wholesale price for cylinder LPG in the year 2000 as compared with 19% in 1998 and 6% in 1999 *(para. 35)*;

(iii) Analysis of the different components of the retail/wholesale price may give an indication of the profit element in the overall price structure. In view of the capital intensive nature of the oil industry, it may be more appropriate to assess the profitability of the oil companies on the basis of return on capital employed (*paras. 21 and 37)*; and

(iv) The weighted average rate of return in the year 2000 of three oil companies in respect of their whole Hong Kong operations was 7%, as against 11% and 6% in 1998 and 1999 respectively *(para. 37)*.

39. Whilst the Consumer Council was not provided with the commercial-in-confidence information provided by the oil companies, the Consumer Council generally shares our view that the cost/profit data obtained from the industry indicates that to a certain extent there is some competition in the various markets under examination. The current data, when assessed against previous years indicates that the industry is

regaining losses in profit margins from previous years, and that can be traced to current savings made in operating and other non product cost components. The extent to which these savings might be passed on to consumers depends on the competitive pressures faced by market participants. The means by which this is achieved in a free market is through ensuring that the industry is kept fully contestable, barriers to entry are kept as low as possible, and that market conditions are such as to promote rivalry between market participants.

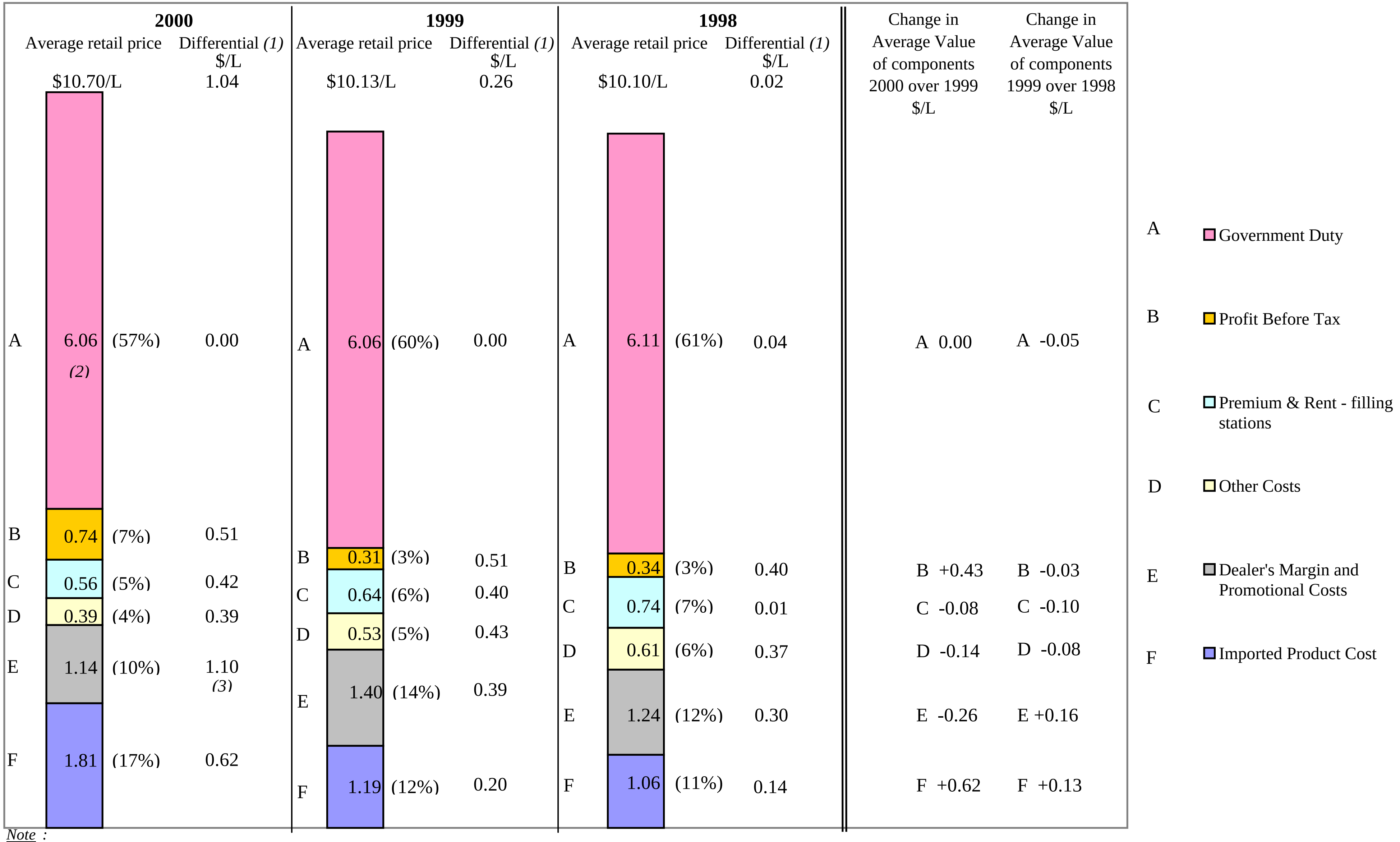
Economic Services Bureau
July 2001

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
Promotion
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.

Components making up the average retail price of unleaded petrol in 1998, 1999 and 2000



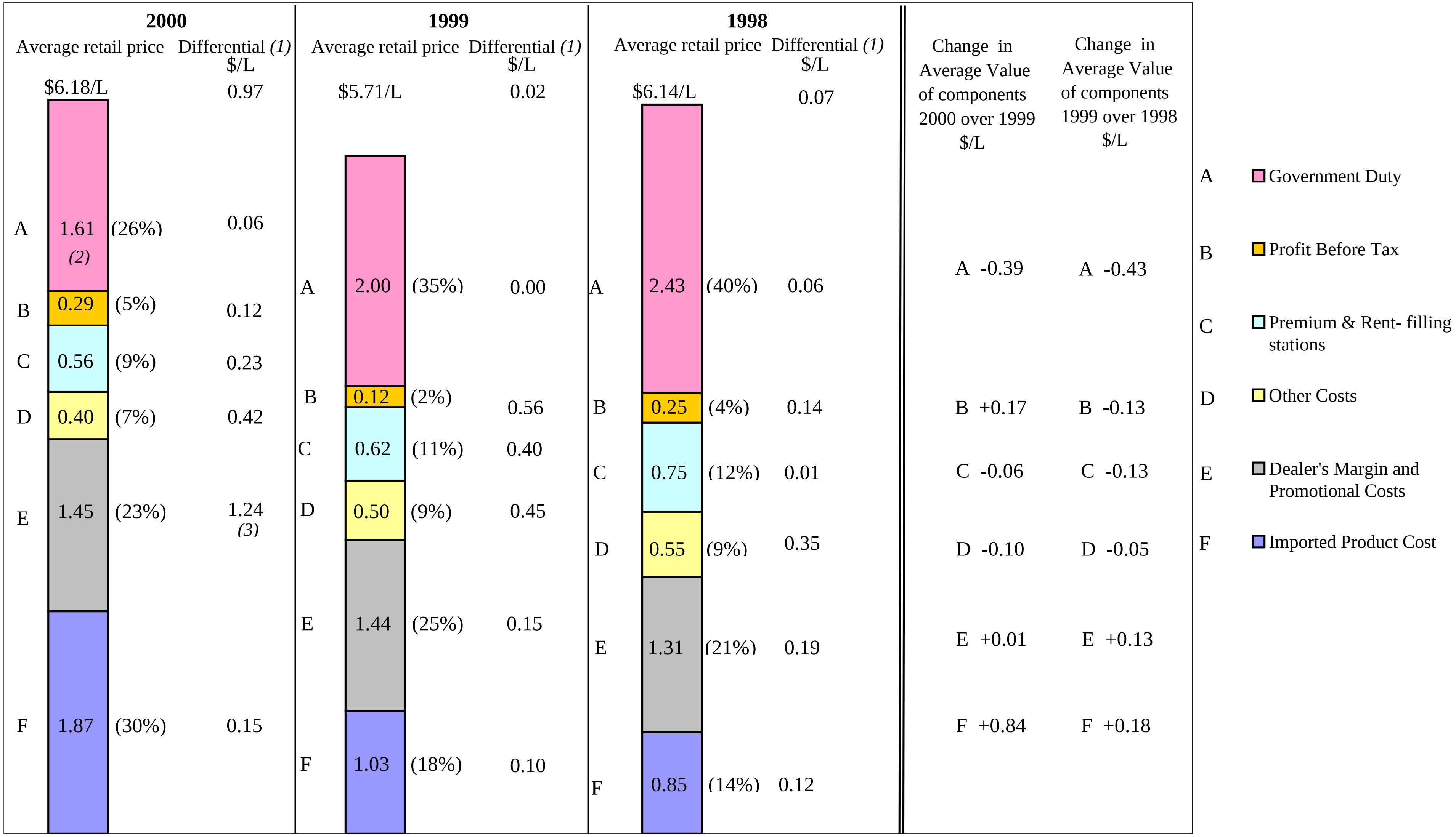
Note :

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

(2) One company has grouped the relevant government duty with the relevant imported product cost. Minor reclassifications have been made.

(3) The cost component of Dealer's Margin and Promotional Costs of an oil company is different from the others leading to this substantial differential. If the data of that oil company is excluded, the differential will become $0.34/litre.

Components making up the average retail price of automotive diesel in 1998, 1999 and 2000



<u>Note</u> :

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

(2) One company has grouped the relevant government duty with the relevant imported product cost. Minor reclassifications have been made.

(3) The cost component of Dealer's Margin and Promotional Costs of an oil company is different from the others leading to this substantial differential. If the data of that oil company is excluded, the differential will become $0.11/litre.

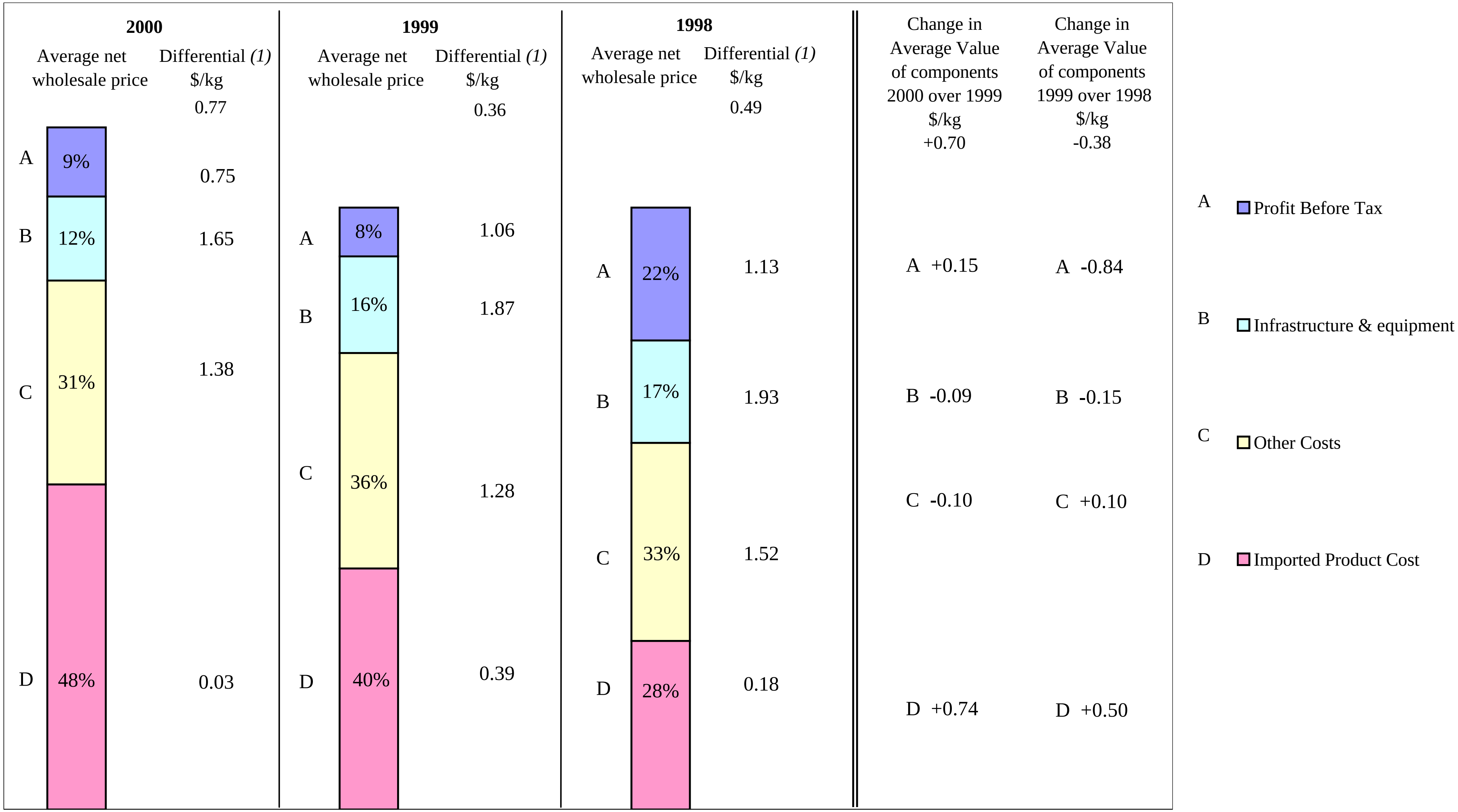
Annex 4

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*
Promotion
Advertising and other costs*
Profit (before tax)

* Grouped under "other costs" in Annex 5.

Components making up the average net wholesale price of cylinder LPG in 1998, 1999 and 2000



Note :

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

Components making up the average retail price of unleaded petrol in 1998, 1999 and 2000

	Imported Product Cost	Dealer's Margin and Promotional Costs	Other Costs	Premium & Rent - filling stations	Profit Before Tax	Government Duty
2000	1.81	1.14	0.39	0.56	0.74	6.06
1999	1.19	1.40	0.53	0.64	0.31	6.06
1998	1.06	1.24	0.61	0.74	0.34	6.11

Components making up the average retail price of automotive diesel in 1998, 1999 and 2000

	Imported Product Cost	Dealer's Margin and Promotional Costs	Other Costs	Premium & Rent- filling stations	Profit Before Tax	Government Duty
2000	1.87	1.45	0.40	0.56	0.29	1.61
1999	1.03	1.44	0.50	0.62	0.18	1.94
1998	0.85	1.31	0.55	0.75	0.25	2.43

Components making up the average net wholesale price of cylinder LPG in 1998, 1999 and 2000

	Imported Product Cost	Other Costs	Infrastructure & equipment	Profit Before Tax
2000	2.82	1.77	0.73	0.6
1999	2.09	1.87	0.84	0.42
1998	1.46	1.72	0.89	1.15