

# DOWNSTREAM PETROLEUM INDUSTRY IN SRI LANKA\*

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## Introduction

The downstream petroleum industry is a complex and often misunderstood business. The term downstream refers to all aspects of refining and marketing of petroleum products. It includes petroleum refining, product distribution systems, and the marketing and retailing of petroleum products to businesses and individual consumers. This paper will discuss the supply chain for petroleum products, from the sources of the crude oil to the delivery of the products to the final user. It will also look at the evolution of the downstream petroleum industry in Sri Lanka from early use of petroleum fuels to the present time.

## Evolution of Downstream Petroleum Industry

The evolution of downstream petroleum industry in Sri Lanka can be divided into three distinct periods.

### *Early Period up to 1962*

Import and marketing of petroleum products by international oil companies

### *Mid Period 1962 – 1992*

- Formation of state oil company Ceylon Petroleum Corporation
- CPC in competition with International Oil Companies
- CPC monopoly

### *Present Period 1992 onwards*

- Liberalization of Some Sectors (LPG, Lubricants Bunkering)
- Restructuring of the Retail Marketing Sector

## Early Period

The import of petroleum products to the country has started in the latter part of the 19<sup>th</sup> century. Main product that has been imported was kerosene. First record of import of kerosene is noted in the Blue Book (Administrative Reports) of 1886, where it is stated that kerosene to the value of Rs. 208,170/- was imported. Petrol has been imported from 1903 with the import of the first motor car. Records show that 62,075 gallons (279,337 liters) of benzene (petrol) was imported in 1907. Consumption of both products has increased at a moderate rate and it is recorded that in 1920, nearly five million gallons of kerosene and one million gallons of petrol has been imported.

Other petroleum products that have been imported are Patent Fuel, Liquid Fuel and Bitumen. Patent fuel was for use in industrial machines and appears to be a type of industrial diesel. Liquid fuel is furnace oil for boilers. Whilst, furnace oil has been imported initially as ships' bunkers, later on an inland demand developed especially in the estate sector. It is estimated that 7,000,000 gallons (31,500,000 liters) of furnace oil was used internally in 1922.

Initially, kerosene in packaged form has been imported by various trading houses. As the market developed, three companies, namely Asiatic Petroleum Co Ltd of London, Anglo Saxon Petroleum Co. of London and Shell Transport and Trading Co of London supplied all the products. Petroleum products were distributed and marketed by their local agent through a bulk installation in Colombo and Depots spread island wide.

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Bulk of the petroleum products imported up to 1910 came from Russia. After 1910, due to unrest in Russia, the supply shifted to Dutch East Indies (Sumatra, Borneo), Persia (Iran) and USA.

With increase in consumption of petroleum products, infrastructure development for import, storage and distribution took place. Kolonnawa Oil Installation and associated pipelines from Port were commissioned in June 1921. By this period, three International Oil Majors, Shell, Caltex and Esso were handling the import and distribution of petroleum products in the country. Imported products were stored at the main installation at Kolonnawa and distributed island wide by railway and bowser fleet, and sold through the chain of retail outlets owned by the three companies.

### **Mid Period Formation of CPC**

Before the establishment of Ceylon Petroleum Corporation, three Oil Majors, Shell, Caltex and Esso were handling the import and distribution of petroleum products in Sri Lanka. Although the three companies appear to be competing with each other they have formed into a virtual cartel by fixing the retail prices of products by mutual agreement. Although the oil companies obtained large discounts from oil refineries based on so called benchmark prices, their imports were priced at benchmark price.

Government has realized that oil companies were draining a large chunk of scarce foreign exchange by invoicing the imported oil at the higher prices based on the benchmark prices. With the view to saving valuable foreign exchange and to give a fair deal to the consumers, the Government has requested the three Oil Majors to import petroleum products at discounted benchmark prices. This request was turned down by the oil companies. At this stage, with a view to minimize the outflow of foreign exchange and also to pass on the benefit of discounted prices to the consumer, the Government decided to enter into the oil business. As a result, Ceylon Petroleum Corporation was established under the CPC Act No.28 of 1961.

CPC commenced business in April 1962, in competition with the three Oil Majors. As the first step, CPC took over some of the distribution facilities of the oil companies – about 175 retail outlets throughout the country and some of the bulk storage depots and some of the storage facilities at the main installation in Kolonnawa. In order to safeguard CPC from unfair competition by the oil companies, the minimum sales price of petroleum products were decreed by the Government by Gazette notification on 20<sup>th</sup> March 1962. The minimum prices were fixed such that the new prices were the same or lower than the prices at which the oil companies were marketing the products at the time. CPC was able to import products at lower cif prices than the three Oil Majors and pass on the benefits to the consumers.

First imports of products, namely petrol, kerosene, auto-diesel and heavy diesel by CPC was made from Soviet Union while lubricating oils were imported from ICPA of USA. CPC gradually managed to increase its share of the petroleum market and at the time of complete take over of oil companies business in 1964, enjoyed a market share of about 40%.

### **Nationalization of Oil Companies**

With the increase in volume of CPC sales, it was pointed out by the Central Bank, if the entire requirements of petroleum products are imported at cif prices at which the CPC imported products, the country would save valuable foreign exchange. Pursuant to this, the Government requested oil companies to reduce the cif price of products, which was turned down. Having failed all avenues to persuade oil companies to reduce prices, the Government decided that oil companies would be allowed to import products on the basis of a fixed maximum price with a 5% premium above the cif prices of the CPC. The oil companies took the stand that they could not import products with those ceiling prices. After discussions with the oil companies, the Govt. decided to allocate to the oil companies a foreign exchange quota equivalent to the cost of their share of the sales but at the cif prices of the CPC. Oil companies were not willing to work within this quota system and hinted of a possible disruption to the supply if the Government pursued such a policy.

In these circumstances, the Government decided to fully nationalize the distribution of petroleum products in the country. Petroleum Corporation (Amendment) Act No.5 of 1963 was enacted in August 1963, empowering the CPC as the sole importer and distributor of petroleum products in the country. CPC took over the entire distribution network from 1<sup>st</sup> January 1964.

While importing and inland distribution of petroleum products was nationalized and became a monopoly of the CPC in 1964, Bunkering and Aviation business continued to be handled by the oil companies. In 1972, CPC took over the Bunkering and Aviation facilities as well, thus completing the nationalization of the entire petroleum business in Sri Lanka.

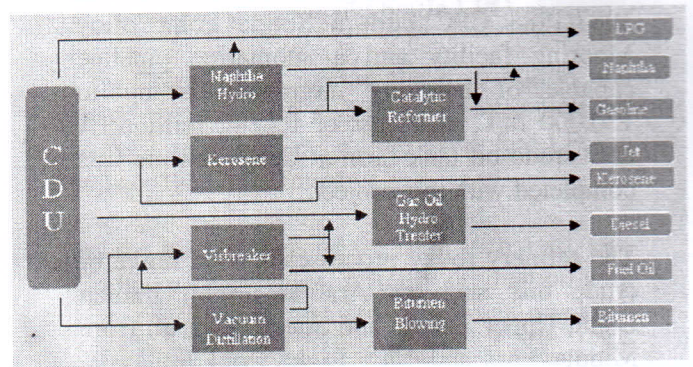
Following the nationalization, CPC embarked on the task of supplying petroleum products to meet the country's total requirement. Until the construction of the Refinery, bulk of the CPC's imports came from Soviet Union, Rumania, Egypt and Iraq. All these supplies were under the terms of Government to Government bilateral trade agreements. Lubricating oils were imported from ICPA of USA.

## Refining

The downstream petroleum industry which was confined to importing and marketing of petroleum products expanded to refining of petroleum with the setting up of Sapugaskanda refinery in 1969.

From the very start of partial take over of import and distribution of petroleum products, it became clear that rather than import refined products, it is more economical to import crude oil and refine by setting up a refinery. It was estimated that by establishing a refinery, 25% of the foreign exchange spent on import of refined petroleum products could be saved. In the light of this, CPC Management decided to construct a refinery and International Tenders were called in 1965. After evaluation of the tenders by both French Petroleum Institute and Egyptian General Petroleum Corporation, the contract was awarded to SNAM Progetti of Italy.

## Sapugaskande Refinery Configuration



Sri Lanka being a mainly middle distillate (kerosene, diesel) oriented market, refinery configuration and the types of crude oil selection was made to suit this condition. The refinery was originally designed to process Iranian Light crude which has a high middle distillates yield. Hydro-skimming type configuration was found to be the best suited to match the product slate. The original capacity was 38,000 BPD<sup>1</sup>, capable of meeting total inland requirements of refined products.

Refinery construction commenced in May 1967 at the 165 acre site at Sapugaskanda, and it was started up on the 6<sup>th</sup> of August 1969. The total cost of the project was 175 million rupees.

The refinery was revamped subsequently to increase the capacity to the present value of 50,000 BPD. The crude distillation unit, which was originally designed to process Iranian Light crude oil, had limited flexibility to process crude oils of different compositions which were more suited to the changing market conditions in the country. The crude unit was redesigned to handle lighter crude rich in middle distillates as well as heavier high sulphur crude oils which had to be processed at times. The catalytic reformer which produces blending components for gasoline was revamped to increase the capacity to enable CPC to produce unleaded gasoline. The basic configuration of the refinery, though, remained as before, a hydro-skimming type.

Crude oil for the refinery could be imported only using small tankers of 30,000 MT<sup>2</sup>

<sup>1</sup> Barrels per day

<sup>2</sup> Metric Ton

capacity due to restrictions at Colombo Port, and this made the freight rates very high. In 1987/1988 CPC built a Single Point Buoy Mooring facility and a submarine pipeline capable of handling large tankers up to 120,000 MT, at a cost of Rs.842 million. A new crude oil tank farm at Orugodawatte was completed with this project.

The refinery today processes a wide range of crude oils such as Arabian Light, Iranian Light, Upper Zakum and Suez Blend, all from Middle East and Miri Light from Malaysia. Due to the increase in domestic consumption of petroleum products, the refinery can only supply about 45% of the country's product requirement.

The pressures to produce more environmentally friendly fuels and to maintain a positive refining margin are the main challenges faced by the refinery today. Phasing out of lead from gasoline has been already achieved by increasing the reformer capacity and producing higher octane blending component. However, meeting the targets for producing low sulphur diesel is not achievable in the time frame given for this. Originally, the refinery was producing diesel at 1% sulphur. Reduction of diesel sulphur to current level of 0.3% was done by hydro-treating the bulk of diesel production. By 2008, auto diesel sulphur has to be below 0.05%. In order to bring down sulphur to this level, major modification/modernization has to be carried out in the refinery. Even if the implementation of these modernisation work commences now, it would not be possible to meet the time targets.

The other major problem faced by CPC refinery is the maintaining of a positive refining margin. Gross refining margin of hydro-skimming refineries are very low even under stable market conditions. Under volatile market conditions such as those experienced in the latter half of 2006, most of the hydro-treating refineries operated at a negative margin. Sapugaskanda refinery being of hydro-skimming type, with nearly 40% of the products coming out as fuel oil, is very vulnerable to this kind of market conditions. Cracking refineries enjoy much higher margins. For its survival in the future, the CPC refinery needs to consider major process

configuration change, to upgrade the residue make to higher value lighter products.

## **Downstream Marketing Sector Reforms in 2002**

The Government in 2002 decided to liberalise the downstream petroleum marketing sector. The basis of liberalisation was to remove the CPC monopoly in marketing and to limit the number of marketing companies to three for the initial five years. All available downstream infrastructure such as the Kolonnawa Installation, islandwide bulk depot network and the new import and distribution terminal at Muthurajawela was formed into a common user company, Ceylon Petroleum Storage Terminals Ltd (CPSTL) to be equally owned and shared by the three marketing companies. CPC was to retain the refinery and about 130 retail outlets while the balance retail outlets owned by CPC (about 210) to be divested to the other two new market players. All market players are to be allowed to negotiate for the 600 franchise retail outlets to market their products.

The Government through the Government of India invited Indian Oil Corporation to enter into the downstream retail marketing of petroleum products. IOC was offered the China Bay tank farm on a long-term lease and they were allowed to choose and purchase 100 retail outlets belonging to CPC. IOC also purchased 1/3 rd share in the common user company CPSTL. IOC registered a subsidiary company Lanka Indian Oil Corporation and commenced business in 2003.

Due to subsequent policy changes by the Government, entry of the third player to the market has been suspended.

The monthly price adjustment formula was revised with the inclusion of profit margins to the common user facility handling storage and distribution, and the marketing company. Due to this revised formula, the retail price of every product increased by about Rs.3/- to Rs. 4/- per liter.

As per agreements, 95% of the country's throughput of petroleum products must be handled through the CPSTL. This has forced

the virtual shutdown of CPC's mini distribution terminal at Sapugaskanda, while LIOC was allowed to distribute the balance 5% volume from the China Bay terminal. This anomaly has been corrected to a certain extent by the recent decision to allow both China Bay and Sapugaskanda mini-terminal to handle 5% each of the total country's throughput.

It should be noted that importing refined products through China Bay is more advantageous, as some of the pass-through cost items in the pricing formula are not applicable when importing and distributing through China Bay.

The primary intention of restructuring of the petroleum market was to give the benefit of competitive marketing to the consumer. It is seen that the opposite has happened with the increase in cost to the consumer. Quality of service appears to have improved with the modernising of the retail outlets, which would not have happened if marketing remained a monopoly of the CPC.

Under the restructuring scheme, the initial period of 5 years has been defined as a regulated market. Unfortunately a proper regulatory mechanism is yet to be introduced. Although PUCSL has been designated as the sector regulator, legal framework required for PUCSL to take over regulatory functions is still not put in place.

### **Downstream Gas Sector**

With no natural gas resources, the downstream gas sector in Sri Lanka is confined to distribution and marketing of Liquefied Petroleum Gas.

LPG was first produced and bottled for domestic consumption at the refinery in 1971 on a limited scale. Marketing and distribution was done by CPC.

Colombo Gas and Water Company was supplying coal gas by a network of pipelines to domestic and industrial consumers in the city of Colombo starting as far back as 1872. By 1975, Gas Co was no longer producing coal gas, but kept the city gas supply going with the LPG supplied by CPC. In 1975, the distribution and marketing of LPG was handed

over to the Gas Company. The refinery continued to produce and bottle LPG.

Gas Company expanded the distribution and marketing network and took over the bottling as well in 1984. CPC refinery supplied LPG in bulk to the Gas Company.

As the market demand for LPG increased, Gas Co had to supplement refinery production with imports. The infrastructure facilities available for import and storage of LPG were inadequate. There were frequent market shortages especially during refinery shutdowns. Due to lack of storage, import parcel sizes were small, causing imports to be very costly due to high freight rates.

In 1996, under the public sector reform program, the Government decided to privatise the Colombo Gas Company. The rationale was that a private entrepreneur would give a better service to the consumers by developing the infrastructure. Bids were called from international companies and following evaluation, the bid offered by the Shell Company was accepted and all assets of the Gas Company were transferred to the new company Shell Gas Lanka Limited.

Under the privatisation agreement, Shell was granted monopoly rights to import and market LPG for a period of five years. Shell constructed a storage terminal at Muthurajawela for LPG storage with a Single-point Buoy Mooring system with associated pipelines for discharging tankers. The Gas Company storage facility at Orugodawatte as well as the original equipment at Pettah site was dismantled by Shell and all operations were moved to Muthurajawela and Mabima sites.

As the demand for LPG rose rapidly, the refinery could produce only a fraction of the market demand. Bulk of the LPG had to be imported. Initially Shell too continued to import LPG through Colombo Port and used road tankers to transfer LPG from tankers to filling plants. When the construction of Muthurajawela storage complex was completed along with the SBM, this practice was discontinued and LPG is now discharged directly from tankers to storage via the SBM.

With the privatisation the service to the consumers improved as the supply shortages that were frequent were eliminated with added infrastructure for storage. However, the consumer had to pay a much higher price for the LPG. LPG price was strictly controlled by the Government when the business was handled by Gas Co. LPG produced at the CPC refinery was sold to Gas Co. at a discounted price. The privatisation agreement forced CPC to sell LPG produced at the refinery to Shell Gas at a much higher discount. This was based on the argument that Shell could import LPG at a lower freight rate by importing larger parcels of LPG at a time, and hence, the import parity price of LPG would be lower than that charged by CPC. In spite of this, almost immediately after privatisation, the market price of LPG doubled. Shell has claimed that the company has invested a substantial capital in developing the storage terminal and the SBM, justifying the increase of LPG price. In the absence of a proper regulatory mechanism, there is no way to ascertain whether the operator is making undue profits at the expense of the consumer.

The privatisation agreements did not require Shell Gas to take off the LPG produced at the refinery. On several occasions, CPC refinery was forced to flare LPG to the atmosphere for extended periods as Shell Gas declined to lift LPG from the refinery.

When the five-year monopoly period granted to Shell Gas expired, a second operator Laugfs Gas entered the LPG market. Laugfs Gas started by marketing LPG for automotive use and later expanded their business to supply bottled gas to domestic consumers. Laugfs Gas purchased the entire production of LPG from CPC refinery and imported a small quantity of gas to supplement its sales when the refinery was shutdown for maintenance. Entry of the second operator did not appear to create a workable competition beneficial to the consumer as the retail price of LPG marketed by both companies moved in tandem. Attempts made by a third company Mundo Gas to enter the LPG market were not successful, due to the lack of infrastructure facilities for the import of gas.

## Lubricants Market

Before the CPC monopoly in marketing, branded lubricants were imported and marketed by the oil companies. After nationalisation of the oil companies, CPC imported lubricants from ICPA and marketed under the "Lanka" brand. In 1969, CPC constructed a lubricating oil blending facility at Kolonnawa, and commenced blending of lubricants from imported base stock. Approximately 95% of the lubricants sold in the country were blended at the lubricating oil blending plant and the balance was imported by CPC or others who obtained authorisation to import from CPC.

In 1992, the Lubricant Section and the Blending Plant was separated from CPC and converted into a Public Company with GOSL owning 100% of the issued share capital of the Company. Lanka Lubricants Ltd as the company was named acquired the exclusivity to conduct the lubricants business in Sri Lanka.

In July 1994, GOSL divested 90% of share in Lanka Lubricants Ltd to Caltex Trading and Transport Company of Dubai, with 10% of the shares gifted to the employees. The company now known as Caltex Lubricants Lanka Ltd was given the exclusive rights to import, manufacture and distribute lubricants in Sri Lanka for a period of 10 years till July 2004. However, the privatisation agreement allowed the GOSL to permit other companies in addition to Caltex to import and distribute finished lubricants prior to 2004 under certain agreed conditions.

Besides being granted the exclusive rights to manufacture lubricants, Caltex was granted other concessions under the privatisation agreement. Caltex was given the exclusive rights to distribute and market its lubricants through the filling stations operated by CPC. Also no importation of lubricants was to be allowed at prices lower than ex-factory price of Caltex.

As it was felt that partial liberalisation of lubricants market would be beneficial to the consumers, in 1998 GOSL called for expressions of interest from reputed international companies with experience in

lubricant industry interested in commencing business in Sri Lanka. After evaluation of tenders six companies, namely BP Middle East, Castrol Asia Pacific, Indian Oil Corporation, Mobil Asia Pacific, Shell Trading Middle East and Valvoline International were granted permission to enter the market, valid for a period of five years until 2004.

It is worthwhile examining whether liberalisation of the lubricants market has achieved its objective of benefiting the consumer. During the period of monopoly by CPC, the customers had no choice but to use CPC branded lubricants blended locally. CPC being a public sector venture, the prices of lubricants blended and marketed by CPC remained reasonably stable. With the monopoly rights granted to Caltex for manufacturing lubricants, the status quo remained virtually unchanged, where only the brand name of lubricant changed from Lanka to Caltex. Although the market was partially liberalised allowing 6 other companies to import and distribute lubricants, very favorable concessions granted to Caltex by privatising agreements (preferential tariff on locally blended lubricants against imported, exclusive rights to market Caltex lubricants through CPC service station network) made it virtually impossible for others to effectively compete with Caltex. Caltex presently enjoys 70 % market share of the lubricants market. Consumers only benefited by having a limited choice of brands to select from, but at a much higher price than when the sector was publicly owned.

In 2006, the Government decided to further liberalise the lubricants market by granting licenses to import finished lubricants as well as setting up blending plants. This is currently in process and several companies have already obtained the required licenses to import and market finished lubricants. Lanka IOC was given a license to set up a Blending Plant and they are in the process of constructing a facility at China Bay.

### **Bunkering Operations**

Supply of bunker fuels to ships, which was handled originally by CPC, was taken over by Lanka Marine Services Ltd in 1993. Lanka

Marine Services which was 100% owned by GOSL, continued to operate under CPC management as a profitable business venture.

Fuels supplied to ships are fuel oil, marine diesel and marine gas oil. The tank farm installation at Bloemendhal, which had interconnecting pipelines to Colombo Port, Kolonnawa Installation and the refinery stored the marine fuels. There are two modes of refueling the ships. Products could be supplied to ships berthed at South Jetty of Port directly from shore tanks at Bloemendhal by pipeline transfer. Ships that are anchored in mid harbor are refueled by barges, which were loaded with fuel at South Jetty.

Bunker fuel sales of CPC and subsequently by Lanka Marine Services were relatively small mainly due lack of facilities to improve the business. Virtually all bunker sales were so called inner harbor sales supplied to ships anchored inside the port. Very little outer harbor refueling was done due to lack of ocean going barges. Due to small volume of fuels handled and the monopoly nature of the business, the price of bunker fuels at Colombo harbor was relatively high compared to Singapore and other ports in the region. Colombo being situated on the main sea lane to far east, it was felt that potentially large market could be created by supplying fuel to ships passing Colombo, besides the ships that call over at the Port. It was also noted that if bunker fuels could be provided at prices competitive to those at other regional ports, more ships would call over at Colombo bringing additional revenue to the Port. With these objectives GOSL in 2002 decided to liberalise the bunker industry.

As the first step, it was decided to privatise Lanka Marine Services Ltd and tenders were called for this purpose. After evaluation and negotiations, the bid submitted by John Keels Holdings was accepted, and 90% of the shares of Lanka Marine Services Ltd were transferred to John Keels Group.

During the privatisation, ownership of the tank farm at Bloemendhal and other assets such as barges remained with LMSL/John Keels, while the common facilities used for bunkering were grouped together as Common User Facility with the ownership remaining

with SLPA and CPC, who were to jointly maintain this system. Common User Facility consisted of The Dolphin Berth, The South Jetty in Colombo Port and the pipelines between Dolphin Berth and Bloemendhal tanks including interconnecting lines to South Jetty. Along with the privatisation, LMSL entered into an agreement with GOSL/SLPA/CPC relating to the use of Common User Facility.

As the Bunkering business was liberalised, additional licenses were issued to 4 other companies to engage in bunker operations, by the Minister of Power and Energy, on the recommendation of the ESC which was the interim regulator for the petroleum sector. These operators unlike LMSL did not have shore based storage for fuels, but used floating storage to stock their supplies. They refueled ships mid sea using barges both inside and outside harbor.

Shortly after other operators entered bunker business, LMSL and John Keels observed that mode of bunker supply by other operators is in violation of certain provisions of the Common User Facility agreement, and requested revocation of their licenses. LMSL was referring to a clause in the CUF agreement which state that " GOSL/SLPA/CPC shall ensure that all bunker/marine fuels handled and transported within Port of Colombo would be handled and transported using CUF". If this is implemented bunkering becomes a monopoly of LMSL/John Keels as they are the only party that has shore storage tanks connected to the CUF system. LMSL filed action in courts to get other licenses annulled. However, courts ruled that licenses issued to other parties as legally valid and can continue bunkering operations.

Even under private entrepreneurs, the bunker market remains under developed. As Sri Lanka is located on the sea route to Far East, there is a vast potential for supplying bunkers to the ships passing close to Sri Lanka. No attempt so far has been made to tap this market.

### **Pricing of Petroleum Products**

Up to the year 2002, there was no laid down pricing policy with respect to petroleum products. CPC as the sole marketer arbitrarily

fixed prices in consultation with the Government. Revisions were always upward and any reductions in international market prices were never passed on to the consumer.

A study on the pricing of petroleum products was conducted by the Asian Development Bank in the year 2001. ADB proposed a formula based on the average Singapore "Platts" posted prices and average exchange rate for the calculation of retail price of petroleum product on a monthly basis. This formula was implemented from 2002 February. The formula is weighed in favour of the marketing company and has hidden profits over and above the net margin indicated.

FOB Singapore price used in the formula is given at the standard temperature, while the products are marketed at the average ambient temperature of about 28°C. From 15°C to 28°C there is a volume gain, which varies from 1% to 1.5% depending on the product. On the volume gain, marketing companies get an extra profit which remains hidden. Price of 90 RON petrol is calculated based on Singapore price for RON 92 petrol which is priced higher. The values used for ocean loss and insurance also are higher than the actual costs.

The formula was revised after the restructuring to include separate profit margins for the storage terminal company CPSTL and the marketing company.

In this current formula, there is storage terminal cost (item 14), which includes the operational cost of the terminal. There is no transparent mechanism how this cost is calculated. By allowing the total operating cost to be passed on to the consumer without proper monitoring, all the inefficiencies in the system are passed on to the consumer. In this format, there is no incentive for the operator to improve efficiency.

Fixing product prices based on a formula is a positive step. The shortcomings in the present formula should be looked into and this highlights once again the need for a sector regulator.

In 1971/1972 Ceylon Petroleum Corporation entered Bunker supply and Aviation refueling

business with facilities taken over from oil companies. Both these activities generated large foreign exchange earnings.

## APPENDIX I

### Pricing Formula For Petroleum Products (prior to restructuring)

Singapore FOB Price in US \$/bbl

- + Freight/loss/insurance in US \$/bbl
- = CIF Price in US \$/bbl
- x Currency Exchange Rate (Rupees per US Dollar)/litres per bbl (158.99)
- = CIF Price in Rupees/litre (rs/litre)
- + Jetty Pipeline (US\$ 3/ton)
- + Stamp Duty (1.2% of CIF incl. bank commission)
- = Landed Cost (a surrogate ex-refinery price) in Rs/litre
- + Customs Duty if appropriate
- + GST (12.5% of CIF +CD + Excise)
- + NSL (6.5% of (CIF+CD) x1.25
- + Excise Duty (where applicable)
- = Tax paid landed cost
- + CPC Finance Charges (fixed amount of 1.75 Rs/l on gasoline and diesel)
- + CPC wholesale costs
- + CPC margin
- = Whole price
- + Marketing/ distribution
- + Dealer Discounts
- = Consumer retail price (Rs/litre)\*

\* Subject to:

- 1) minimum increment of 0.25 Rs/l,
- 2) maximum monthly increment possibly of 2.0 Rs/l,
- 3) possible stipulated ceiling prices for kerosene, in particular and heavy fuel oils

**Pricing Formula For Petroleum Products**  
(After Restructuring)

No	Component	Basis
1	FOB Price	A) The FOB price will be determined as the average of the mean of daily quotes for the different products as published by PLATTS under heading "MOP Singapore" during the previous month on Singapore Market. This will be adjusted for premiums/discount published by PLATTS.  B) Prices shall be calculated to fourth decimal place i.e. by ignoring the fifth decimal place less than 5 and rounding up the fifth decimal place equal to or more than 5  C) Product Specifications * see notes i. Petrol 90 Ron – "Mogas 92 unl" ii Auto Diesel – "Gas oil 0.5% S" now and "Gas Oil 2.55 S" iii. Kerosene – "Kero"
2	Freight	Freight will be assessed over world scale based on average of All India as published by The London Tanker Brokers' Panel Ltd. For MR vessel for the available latest month for round trip voyage from port Singapore to Colombo.
3	Insurance	US\$ 0.06/MT – to be reviewed regularly
4	Losses due to evaporation & contamination of products	0.5% of CIF value – to be reviewed regularly.
5	Exchange Rate	At average selling exchange rate of commercial banks as published
6	<b>CIF VALUE = (1+2+3+4) x 5</b>	
7	Jetty and pipeline charges	Actual as charged by SLPA
9	LC Charges	0.2% of CIF value
10	Landed Cost	(6+7+8+9)
11	Customs Duty	As per actual (statutory)
12	Excise Duty	As per actual (statutory)
13	Finance cost of working capital	Value of 50/365 days of (10+11+12) at average month and F Lending Rate (PLR) of commercial banks
14	Storage Terminal Cost	Operational cost (inclusive of depreciation) and interest cost on lo
15	<b>Wholesale Cost = 10+11+12+13+14</b>	
16	Margin at CUF	Refer Note 5 below
17	Terminal Gate Price	15+16
18	Marketing and Distribution Cost	Rs. 0.40 per litre
19	<b>Base Retail Price = 17+18</b>	
20	Profit Margin	5% OF 19
21	Delivered Dealer Price (before TT & VAT)	19=20
22	Provisional Council Tax on Imported Refined Products	As per actual (statutory)
23	Provisional Council Turnover Tax on Dealer	As per actual (statutory)
24	<b>Retail Price before VAT</b>	<b>21+22+23</b>
25	VAT	As per actual (statutory)
26	Retail Price after VAT	24+25
27	Dealer Margin	1.75% on 26
28	<b>Maximum Retail Price to Consumer (MRP)</b>	<b>26+27</b>

\* **Notes**

1. Petrol 95 RON – for premium grade 95 RON as defined in Sri Lanka specifications a minimum quality premium of SLR 2/- litre over MRP will be applicable to arrive at the Retail Price.

Auto Diesel – “Gas Oil Reg. 0.5% S”, PLATTS quoted FOB Singapore Prices will be applicable until the effective date of implementation of the proposed emission related standards in respect of Auto Diesel and thereafter. “Gas Oil 0.25% S” Price will be applicable. For premium grade as defined in Sri Lanka Specifications “Super Diesel” – Quality Premium of SLR 3/- litre over MRP will be applicable to arrive at the Retail Price.

2. Prices of the products at different regional slabs will be adjusted upward from Colombo price as per the prevailing formula, and the slab income will accrue to the relevant storage Company.

3. Prices will be revised on a monthly basis to reflect changes of Singapore Platts average FOB prices, exchange rates and other variations, subject to a maximum revision (up or down) of Rs. 2/lt.

4. The conversion factor for conversion of barrels to KL shall be 6.2898 barrels/KL. The conversion factor converting barrels to MT (for converting freight) shall be as per PLATTS guide to petroleum specifications.

5. The following fixed margins (approximately 2% of wholesale cost based on June 2003 MOP Singapore prices) will accrue to the CUF.

	<b>Rs. Per Litre</b>
Fuel for power generation (Auto diesel, Naphtha etc)	0.35
Jet A1 and Aviation Gas	0.40
Kerosene	0.45
Diesel for industrial and automotive use	0.55
Furnace oil for industrial use and power generation	0.55
Petrol	0.85

6. If and when there is an abnormal change of any parameter all players all players to jointly review in consultation with the Government.

7. No player shall sell products at prices less than 05% of the MRP. However, price differential between RPPs and PPPs as per 1. above will be maintained when providing so as to ensure the Premium Petroleum Products will not be priced below formula process for non premium products.

8. Marketing and distribution cost (listed under 18 of the pricing formula) includes cost of delivery from the depot to the retail dealer.

9. Landed Cost shall be determined as per the definition in items 10 of the formula.

10. MRP shall be determined as per the definition in item 28 of the formula.