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Petroleum Industry in Sri Lanka
Achievements, Setbacks and Need for Rethinking

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Preamble

The Ceylon Petroleum Corporation was set up as a state enterprise by Act. No. 28 of 1961 in parliament and further amendments carried out subsequently. The main objectives of Ceylon Petroleum Corporation are the following:

"To carry on business as an importer, exporter, seller, supplier and distributor of Petroleum products. To carry on business of exploring for the exploiting, producing, and refining of Petroleum and to carry on any such business as may be incidental or conducive to the attainment of the objectives"

Prior to Nationalization of Petroleum industry, the entire petroleum business were owned by multinational companies like Shell, Mobil, Castrol, Texaco, Esso etc.

1961 Ceylon Petroleum Corporation (CPC) was established as a State - owned Enterprise under Act. No. 28 of 1961.

1962 CPC commenced fuel business except bunkering and aviation fuels which were operating in the country at that time.

1964 CPC became the monopoly business to import, sell and distribute petroleum products in the country.

1965 CPC commenced building the first refinery at Sapugaskanda.

1968 CPC completed and commence trial operation of 38,000 BPD refinery

1969 CPC commenced refinery operations. CPC added a lubricant oil blending plant at Kollonnawa. Installation and commenced Industrial products business. Also in the same year CPC entered into Agro Chemical business as a price regulator in the Agro-chemical market.

1971 Bunkering operations and aviation re-fueling activities were added to the Corporation's scope through amendments to the CPC Act.

1978 CPC built a plant for the manufacture of Nylon 6 yarn for textile, tires and finishing industries

1979 The capacity of the Refinery increased to 50,000 BPD by increasing the crude distiller capacity in 1979.

1987 A Single Point Buoy Mooring (SPBM) facility was installed 9.2 km away from the Colombo Port; commissioned together with an intermediate crude oil storage tank farm at Orugodawatta.

1994 Liberalization of import and distribution of solvents and lubricants.

1992 CPC revamped the crude distiller unit to improve refinery process flexibility and efficiency

1995 Rehabilitation of Kollonnawa and Orugodawatta Tank Farms which are damaged due to a terrorist attack.

1999 The storage facilities that were damaged due to a fire were reconstructed along with a new delivery terminal at Sapugaskanda. CPC improved the capacity of the platformer unit which produced blending stock for Petrol, in order to increase its ability to produce unleaded Petrol.

2002 Modification done for reduction of the Sulphur level in Auto Diesel. Revamping of existing Diesel Hydrotreater (04 unit) and conversion of Kerosene Hydrotreater (07 unit) into a Diesel Hydrotreater.

2003 Unbundling of CPC activities and formation of 3 marketing companies and Common User Facility. And authorizing LIOC to commence petroleum business in Sri Lanka.

In January 2003, Cabinet of Ministers has approved following recommendations to be implemented with immediate effect.

1. Form Ceylon Petroleum Storage Terminals Limited (CPSTL) by amalgamating Kolonnawa Terminal, Bulk Depots, Muthurajawela Terminal, Airport terminal and all pipelines into a single

terminal company in which CPC will have initially major shares and IOC and other new entrants to the market, brought into the company when appropriate. CPC will ultimately have only 1/3rd ownership.

2. Form CPC into a government owned corporation to operate the Refinery, 1/3rd of the retail outlets and aviation Services.
3. CPC, IOC and 3rd Player to be selected to compete in a level playing field with a strong regulatory authority in place. His Excellency the president has made a special condition that "as in all cases of such restructuring where parties other than the State comes into play, a strong and effective regulatory authority has to be established, to ensure a level playing field for all stakeholders.

In 2003 Storage and Distribution business was handed over to the newly formed Common User facility company (CPSTL) which would be equally owned by CPC, GoSL and LIOC. CPC Commissioned a state of the art aviation refueling facility and Fuel Hydrant System at the Bandaranaike International Airport.

2010 Cabinet decided to allocate the 107 filling stations and the 1/3 share of the CPSTL that was being reserved for a third competitor to CPC.

2011 CPC relocated to a new head office building in Colombo 09. Construction works on the Fuel Hydrant System under stage-1 at the Hambantota International Airport at Mattala began.

2012 Completed the rerouting/replacement of the submarine crude oil pipeline and the pipeline end manifold (PLEM) at the Colombo Port, as part of the Colombo Port expansion project. Construction works on the Aviation Terminal under stage-2 at the Hambanthota International Airport at Mattala commenced.

In 2016 CPC came to an agreement with Hyrax to operate a blending plant in Sri Lanka on a BOT basis.

2014 An aviation refueling terminal and the Fuel Hydrant System at the Hambantota International Airport at Mattala was commissioned. CPC's Aviation function managed to obtain "Good" (Above average status) status in the annual audit of Joint Inspection Group (JIG). CPC introduced 500 ppm fuel specification for imports.

2018 Commencement of development and upgradation of the Aviation Refueling Terminal and the Existing Fuel Hydrant System, and Installation of a Fuel Hydrant System at new Apron-E in par with the Phase Stage 2 Development Project of the Bandaranaike International Airport, Katunayake.

Setbacks.

1. 1978-Privatization of Nylon-06 plant.
2. 1994- Privatization of highly profitable Lubricant business to Caltex
3. Closing down Candle Factory and Cut- back Bitumen units.
4. 1995- Separation of Bunkering business and Aviation Services
5. 1995- Formation of Lanka Marine Services (Pvt) Ltd and subsequent selling Bunkering business to John Keels.
6. 2003- Unbundling of CPC and leasing of China Bay tank farm to LIOC.
7. 2006- Total Liberalization of Lubricant market.
8. Failure to form a fully powered Regulatory authority as recommended and approved by the cabinet, for all petroleum products namely; LP Gas, all grades of Petrol. Diesel, Chemical Naphtha, Kerosene and Jet A1 fuel, Aviation Gasolines, Furnace oil, Bitumen, Lubricants and Greases.
9. Unplanned PVC promotions and compensation packages to large number of sacked and interdicted employees and politically affiliated persons.
10. 10. Failure to carry out very important projects like Hydro-cracker, Expansion and Modernization of Refinery and implementation and procurement of nonproductive equipment and machinery.

Road Map For The Development Of Petroleum Industry In Order To Achieve Its Objectives, Vission And Mission

(Summary Only)

Objectives;

1. To overcome financial difficulties and fuel distribution problems.
2. Rethinking corporation in order to convert loss making CPC to a profit making entity.

Petroleum Industry should be considered under following Strategic Business Units;

1. Corporate Division, Marketing and Distribution, Commercial & International trade. (consists of Head Office, Legal, Commercial and Aviation & Bunkering)
2. Oil Refinery, SPBM, Orugodawatta Tank Farm and Sapugaskanda Distribution Terminal as a bonded facility. (Crude oil will be provided duty free but refined products will be taxed and levied to offset any tax losses.)
3. CPSTL (Kolonnawa and Muthurajawela Tank farms) will be operated as a bonded facility but the regional depots will be operated under CPSTL existing procedure.
4. China Bay Tank farm too will be operated as bonded facility, LIOC may be requested to maintain at least 75% of its storage capacity always filled leaving only 25% maximum ullage.
5. Lubricants, Agro Chemicals, Bitumen and any new business will be operated as separate SBUs.
6. Oil Exploration activities will be accelerated in order to use our own oil and Gas.
7. Refinery will be modernized to process any light crude oil from different sources and expanded its refining capacity to 100,000 BPSD.
8. LPG production will be increased to 30 MT per day.
9. Arrangements will be made to produce bio-ethanol and bio diesel in order to blend bio fuel blended Petrol and Diesel so as to save 20% of the Fossil fuel imports.

Advantageous.

1. CPC will be benefitted by allowing any Refinery to store their products in bonded facilities so as to purchase refined products at cheaper prices without any form of demurrage issues or evaporation and transfer losses. (Expected minimum savings to CPC will be US$ 24 million at $2.0 per MT).
2. Fuel shortages or long ques for fuels will be totally eliminated.
3. Fuel import bills will not be a burden to CPC. CPC can pay as they earned.
4. Government can negotiate with friendly countries and allow them to use our storage facilities for the storage of refined products on G2G terms.
5. Production of fuel ethanol and bio diesel and alternative fuel could save 20% of the oil import bill while generating employment and industry development.

General;

1. Refinery will be operated at a minimum profit of 15% at its full throughput.
2. All redundant and excess employees will be given VRS or work from home option.
3. Sri Lanka Customs will be invited to manage CPC bonded facilities.
4. CPC will operate as a profit making government entity.

Paris Agreement, Economic Challenges and Potential Responses.

Even though the first commercial oil well was dug in August,1853, in Pennsylvania, USA, large scale consumption of Fossil Fuel commenced during and after the world war II. Since then almost all energy sources except Coal have been substituted by petroleum products. 160 years of this period is known as "Industrial Era"

Excessive usage of Petroleum has ended up with massive climate change issues and all world leaders has finally decided to done away with Fossil fuels as an energy source as per singed Paris Agreement.

National oil companies (NOCs) are key players in the global oil and gas industry—they produce half of the world's oil and gas, and invest 40% of capital into the sector. But policy-makers and climate activists alike often overlook NOCs' role in global efforts to address climate

change. Omission of NOCs from climate strategies will significantly hamper governments' attempts to meet global climate goals, and NOCs—along with the countries that depend on their revenues—could be left behind.

Political will is crucial. Governments must drive the energy transition. This is valid for both producer country governments, which should direct their NOCs in line with national strategic and political priorities, and wealthy consumer country governments, which must provide climate finance to enable developing and emerging producer countries to overcome the serious challenges of transition.

Germany has already in the process of e-Mobility, Japan has fully developed motor vehicle to run on water (Hydrogen cell concept) and China has declared no more financial assistance for Coal power stations, Sri Lanka too in the process of shifting towards renewable energy.

Nevertheless, fossil fuel demand for the Petro-chemical industry will continue to grow except in the fields of poly ethylene and Agro chemicals.

Tunnel vision is deadly. NOCs can't continue on the costly assumption the oil market won't change. Climate advocates must increasingly consider the developmental challenges of producer countries and the needs, and potential roles, of NOCs.

Economic diversification is the key. Oil- and gas-producing countries have struggled with diversification for decades. Solving this is even more urgent now as producer countries must start actively investing in the long-term future. New producers should avoid making investments from the beginning that lock the country into a high-carbon pathway.

No more Petroleum business as usual;

Making incremental reductions in emissions compared to a business-as-usual baseline is no longer enough to mitigate the effects of climate change. This is because of the rapid and fundamental transformation in the way we produce and consume energy.

This change creates a challenge for companies whose core business is extraction of oil and gas, and especially for governments heavily dependent on revenues from NOCs. Sri Lanka too should seriously consider investing its resources in digging oil wells at this juncture. Oil industry was a lucrative business in 20th century but not in 21st century.

We made serious mistakes in oil exploration activities in Pesale, and offshore oil grilling. Made so many mistakes for not modernizing Refinery at right time, not installing Hydro cracker at right time. The entire world is in the process of developing 4th generation fuel. Sri Lanka should not make mistake again by embarking 3rd Gen fuel business at this bad time.

Making incremental reductions in emissions is no longer enough to mitigate the effects of climate change.

These companies and governments should consider any new oil and gas investments in light of the significant uncertainty about future demand for their products and the economic returns they will generate, as well as their impact on climate change targets. Meanwhile, the status quo approach in many countries—whereby NOCs reinvest most of their oil revenues straight back into the sector—poses a growing risk to efforts to move away from fossil fuels.

Global oil production would have to decline by 4% every year from 2020 to 2030 to be consistent with a 1.5°C pathway, according to the Production Gap Report. Yet current government plans and projections indicate an average 2% annual increase. This raises the question: what is the role for NOCs in a world of climate change adaptation and declining oil?

From a financial perspective, many investors prefer their holdings to focus on one business area: if they want more electricity or more renewables, they would make those choices themselves. This creates a key tension in NOCs' diversification efforts.

While clean energy is generally profitable, it does not create economic gains in the way oil does, which raises challenges for the countries' economic strategies and government revenues. The second part of NOCs' mandate could point to a role for NOCs in supplying renewable energy domestically. However, while NOCs can focus on reducing their costs or operational emissions, transitioning to renewable energy requires clear direction from their governments and consistent development strategies and climate policies, especially given the political consequences of lost economic gains.

The transition will affect different types of NOCs variously: high-cost versus low-cost, exporting versus importing, gas-focused versus oil-focused. Will it be easier for NOCs in new producing countries to transition than for established producers? However, these producers often lack the financial resources needed for such a transition.

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Petroleum Industry: is this necessary?
Refinery and its future: Sri Lankan Experience

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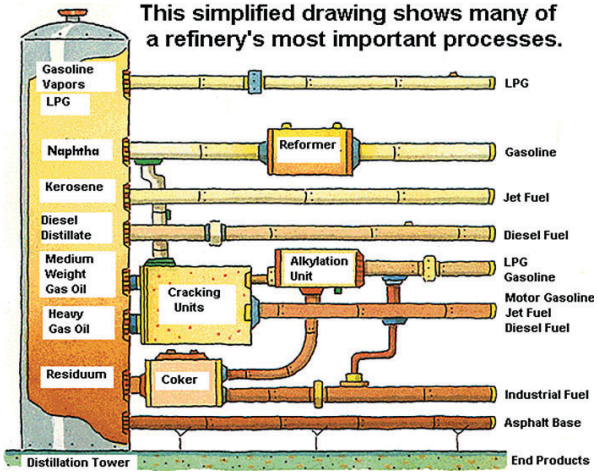
Year 2022 – Nation in Crisis

The year 2022 will go down in the Sri Lankan history as one of the most "tense" periods in the life of its citizens. Shortage of gasoline – petrol, diesel and kerosine and domestic gas (LPG) was a direct result of lack of dollars, the so called dollar crisis. The huge depreciation of the Sri Lankan Rupee (SLR) against the dollar spent most of the prices of essential goods and services sky high. The never ending queues for gas and fuel was unprecedented with several deaths being reported.

Many aspects of the operation of the refinery came into focus and attention of the nation due to the so called fuel crisis that is now part and parcel of history. When the fuel crisis was at its height, many questions were raised regarding the role of the refinery – why it was not fully functional with many workers remaining idle but drawing a salary.

It is in this backdrop that we chose the above topic to highlight some key aspects of the functions of a refinery and its importance in a national context. Unfortunately, the interest in the subject matter has now lost its momentum with some degree of normalcy prevailing as far as fuel is concerned. Hence, rather than dealing with specific details of the refinery process, we decided to highlight some general issues to rekindle the memory of the discerning reader. However, the authorities should not let complacency set in and wait for the next crisis to raise its head in order to realize the importance and significance of our refinery.

It was highlighted that a fully functional refinery could have mitigated the fuel crisis to a great or lessor extent. It remains a mystery as in many other cases of mismanagement as to why the refinery was allowed to remain idle even as the fuel shortage was increasing by the day.



Reference: www/refinery

The pictures shown here are part of a petroleum refinery; it is complex and an expensive industrial facility