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மின்சக்தி மற்றும் வலுசக்தி அமைச்சு  
Ministry of Power and Energy



**ප්‍රගති වාර්තාව - 2022**  
**முன்னேற்ற அறிக்கை - 2022**  
**Progress Report - 2022**



# **Ministry of Power and Energy**

## **Progress Report - 2022**

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## ENERGY SECTOR

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## Introduction

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In accordance with gazette no 2289/43 dated 22nd July 2022, the Ministry of Power and Energy was established with the main objectives of identification, implementation, supervision, monitoring and evaluation of policies, programmes and projects relevant to the fields of power and energy, based on national policies being implemented by the Government, and providing services coming under the purview of the Ministry of Power and Energy efficiently and in a people friendly manner. Accordingly, functions implemented under the then Ministry of Energy are being implemented by the Energy Division of the Ministry of Power and Energy, and functions implemented under the then Ministry of Power are being implemented by the Power Division of the Ministry of Power . Four institutions related to petroleum development subject are operating under the supervision of the energy section and eight institutions related to the power sector are operating under the supervision of the power sector.

The macro-economic crisis that arose after the Covid 19 epidemic after passing the enormously challenging period faced by us in the recent past throughout the year 2020, is making an impact not only on all economic affairs of this country but also on the social relationships. In this unprecedented emergency situation, the power sector and entities under its scope are continuously engaged in the special function of providing electricity being an essential service to the community island wide. Due to the extraordinary conditions that arose due to the economic crisis, a daily power cut had to be imposed during this year.

The Ceylon Electricity Board, the Lanka Electricity Company(Private) Limited, Sri Lanka Sustainable Energy Authority, Sri Lanka Atomic Energy Board, Sri Lanka Atomic Energy Regulatory Council, The LTL Holdings (PVT) Ltd, Lanka Coal Company(Pvt) Ltd and Sri Lanka Energies (Pvt) Ltd come under the power division of this Ministry. Among the major policy decisions arrived at during the year 2022, the amendments of the electricity charges with effect from 10th Aug 2022 and the commencement of the restructuring of the Ceylon Electricity Board can be emphasized.

Even in the midst of crises, being able to commence the generation of 35 megawatts power through the Broadlands Hydro Power Station and, the addition of around 261 megawatts of solar power capacity to the national power grid, through solar power houses constructed on solar platforms and ground during the beginning of this year, can be shown as specific achievements.

Several policy decisions were arrived during the year 2022 in respect of the power division of this Ministry, and the progress relevant to that division is depicted in part two of this report.

During the first two quarters of this year, this Ministry acted based on the policies introduced by the Government in accordance with the “Vistas of Prosperity” manifesto. Later, along with the commencement of the new Government, activities of the power sector were taken forward further expanding those functions with a new vision. The priority tasks of the power division of the Ministry

are the generation of electricity, fulfilling the power requirements of industries, transport and the formulation of national level policies to enable the fulfilment of the island's power requirements so as to cover both the domestic and consumer sectors. Further, out of these, the formulation of policies in respect of the institutions Ceylon Petroleum Corporation, the Ceylon Petroleum Storage Terminals Limited and the Petroleum Development Authority of Sri Lanka, and the identification, implementation, regulation and monitoring of programmes and projects, are the dominant functions.

In order to ensure the energy security of the island, out of the entities under the scope of the Ministry, the Ceylon Petroleum Corporation had been established under the Petroleum Corporation Act no 28 of 1961. Its main function is to ensure the fuel supply of the country through the import, export, refining, storage, supply, sale and distribution of petroleum products in the island wide.

The Ceylon Petroleum Storage Terminals Limited, established in the year 2003, functions as the facilitator in respect of the storage and distribution of petroleum products on behalf of the Lanka Indian Oil Co which entered the downstream petroleum industry of Sri Lanka, and the Ceylon Petroleum Corporation. The Ceylon Petroleum Corporation owns two thirds of the shares of this entity, and one third share is owned by Lanka Indian Oil Co.

The Petroleum Development Authority of Sri Lanka had been established through the Act dated 08th October 2021. Accordingly, the responsibility of implementing the activities of the upstream petroleum industry has been entrusted to the Petroleum Development Authority.

Similarly, activities of the petroleum sector in Sri Lanka are controlled also by the Petroleum Resources (Special Provisions) Act no 26 of 2003. In addition to this, the Public Utilities

Commission functions as a shadow regulator in the lubricant oil sector.

The people of Sri Lanka had to face severe hardship due to the Covid 19 epidemic situation encountered by our country during the past period, and the economic, political and social crises that cropped up subsequently. Out of these, in order to provide some relief to the people who were under pressure due to the energy crisis, this Ministry and entities under its scope made a special dedication working tirelessly. Through the intervention of the Ministry, substantial work had been done at a time when an overall remedy could not be found to the energy crisis due to various factors beyond our control. This report depicts the progress of the work so done up to 30th September of this year.

A methodology was introduced for issuing fuel to fuel consumers on a quota basis, by the introduction of a new national fuel pass, providing some relief to the crisis prevalent in the fuel supply chain. Through this, as action had been taken to issue a limited quantity of fuel required for a week to every consumer, it became possible to end the fuel queues that prevailed. Apart from this, facilities were provided to tourists to obtain the fuel necessary by introducing a tourist fuel pass.

The problem of finding foreign exchange and also the increase of fuel prices in the foreign market and financial problems such as the devaluation of the Rupee had a major impact on the breakdown of this sector. However, by now various steps are being taken to reach precise solutions regarding this, in collaboration with state as well as private institutions. Steps taken to overcome these challenging conditions and those challenges are submitted through this report.



# Chapter One

## Power Sector

### Introduction

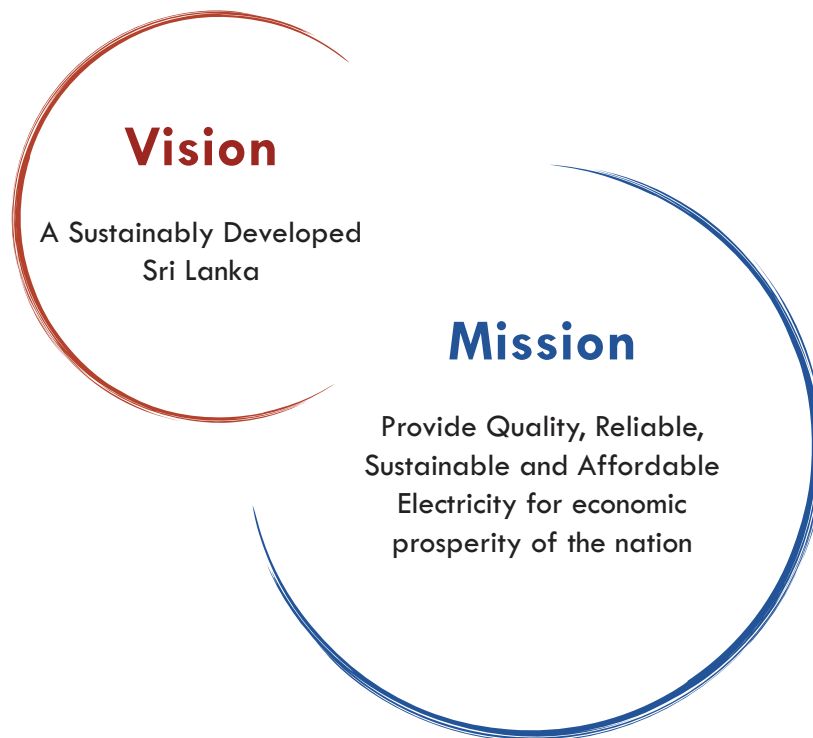
After the devastating COVID 19 Pandemic spread across the country during the period of 2020 to 2021, the power sector of the country has experienced the worst power outages in over 25 years since January 2022 which crippled the production of industries, services, education etc. The Government was compelled to impose power cuts due to combination of several factors such as depletion of hydro reservoirs, intermittent shutdown of Ceylon Petroleum Corporation refinery, breakdown of generators together with an economic crisis as Sri Lanka's foreign reserves drop to a recorded lowest level. As the crisis deepened, several thermal power plants had to be shut down due to lack of fuel and long hours of power cuts were imposed daily on a rolling basis between 8 a.m. to 11 p.m. from first week of March, 2022 onwards.

The gradual supply of fuel to the Thermal power plants and the occurrence of seasonal rains from mid-June onwards ease the burden on power generation and the duration of daily power cuts was reduced accordingly. Despite these overwhelming challenges, the Ministry and Institutions coming under its purview are playing a crucial role in implementing the development projects and all necessary arrangements have been taken to keep the development projects on track

by taking remedial measures to overcome the issues being faced by the projects due to recent economic crisis.

The Ministry is working hard on achieving the national policy targets on power sector, which are, achieving 70% electricity generated by renewable energy by 2030 and carbon neutrality in power generation by 2050. Accordingly, the Ministry has taken initiatives to double the present renewable energy capacity to meet the renewable energy requirement in 2030. Required plans such as Renewable Energy Development Master Action Plan (REDMAP), Long Term Generation Expansion Plan (LTGEP) 2023-2042, Long Term Transmission Development Plan are in the final stages to be published. National Policy towards increasing the share of renewables, the power transmission network of the country needs to be more flexible and will require higher capabilities far beyond the existing systems with monitoring, control and automation. The next biggest challenges are seeking finance and expertise to convert our transmission network into a renewable ready, state of art, smart transmission system through the introduction of digitalization and automation.

1.1 Vision, Mission



1.2 Institutions Under the Purview of the Ministry (Power Sector)



CEB: Established by Act No.17 of 1969. It is empowered to generate electrical energy, transmit it and distribute same to all categories of consumers and to collect revenue as per the tariff approved by the Public Utilities Commission of Sri Lanka (PUCSL)



Lanka Electricity Company (Private) Limited (LECO): A subsidiary of CEB with shareholding of 54.84%, and with minority shareholding of the Treasury 43.56%, Urban Development Authority 0.79% and Local Authority 0.81%



LTL: A subsidiary of CEB with shareholding of 63%, with minority shareholding of its employees (37%)



Sri Lanka Sustainable Energy Authority (SLSEA): Established by Act No.35 of 2007



Sri Lanka Atomic Energy Regulatory Council: Established under the Sri Lanka Atomic Energy Act, No. 40 of 2014

Sri Lanka Atomic Energy Board: Established under Sri Lanka Atomic Energy Act, No.40 of 2014



Lanka Coal Company (Pvt) Ltd.: A subsidiary of CEB with shareholding of 60%, with minority shareholding by the



Treasury (20%), Sri Lanka Shipping Corporation (10%) and Sri Lanka Ports Authority (10%)



Sri Lanka Energies (Pvt) Ltd: A subsidiary of CEB with 100% shareholding.

## 2 Progress of the Power Sector – Jan - Sep 2022

### 2.1 Installed Capacity

The current total installed capacity of the national power grid (September, 2022) is 5,024 MW, which consists of 58% renewable energy sources and 42% fossil fuels. Out of the fossil fuel portion, 18% consists with coal and 24% comes from thermal oils.

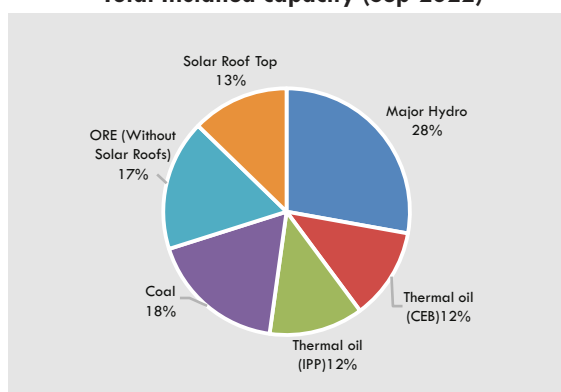
Major Hydro is the main source of renewable energy in the capacity mix, which has a share of 28%. Other renewable energy sources such as wind, Solar (Ground Mounted & Solar rooftops), Mini hydro, Biomass and municipal solid waste are also used in power generation and have 30% share of the capacity mix.

261 MW capacity was added to the national grid from January 2022 to September 2022 by renewable energy sources. 201 MW was added by Solar rooftops by 10,410 solar roof installations. 60 MW was added to the grid by the completion of 1MW solar ground mounted power plants.

Energy Source		Capacity (MW)	No. of power plants
Thermal	Fuel oil (CEB)	604	9
	Fuel Oil (IPP)	621	3
	Coal	900	1
<b>Total Thermal</b>		<b>2125</b>	<b>13</b>
Renewable	Major Hydro	1,398	17

Other Renewable Energy (ORE)	Mini Hydro	429	214
	Wind	248	18
	Solar (GM)	131	77
	Dendro & Biomass	43.5	13
	M. solid waste	10	1
	Solar roof top	640	
<b>ORE Total</b>		<b>1,501.50</b>	<b>323</b>
Renewable Total		<b>2,899.50</b>	<b>340</b>
Total Installed capacity		<b>5,024.50</b>	<b>353</b>

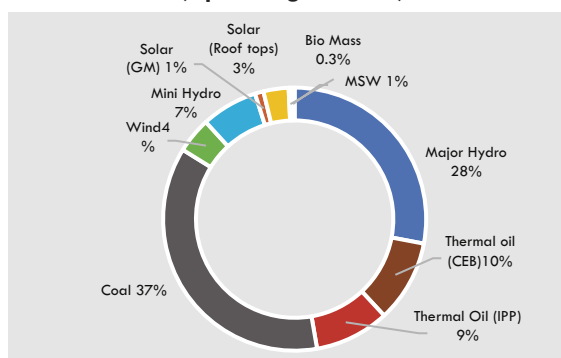
Total Installed capacity (Sep-2022)



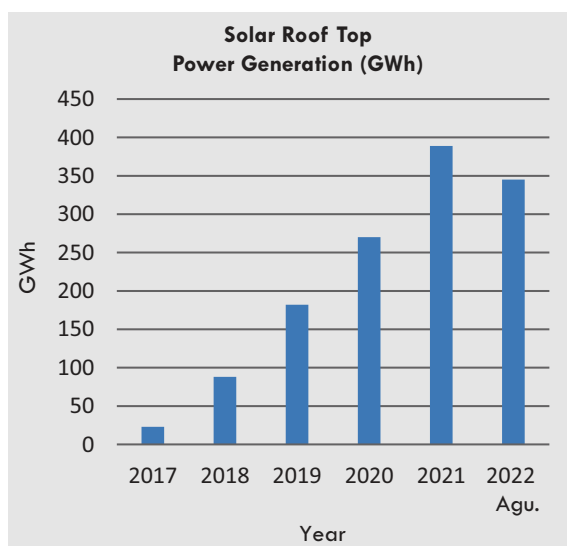
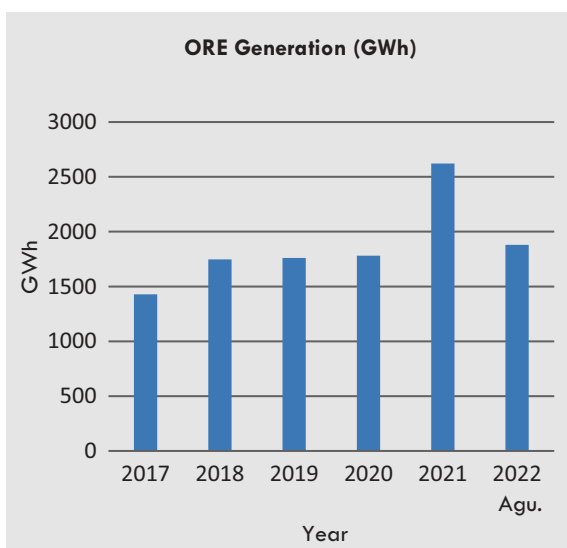
### 2.2 Power Generation

The total gross power generation from January to August 2022 was 11,199 GWh. During the period 44% of electricity share was generated by renewable energy sources. It consists of 28% major hydro, 7% mini hydro, 4% wind, 4% solar 1% municipal solid waste and 0.3% dendro/biomass. 56% of electricity in generation mix was came from fossil fuels that is coal and thermal oil.

Total Generation (Up to August 2022)



The electricity generation by Other Renewable Energy (ORE) sources have increased over past years. With the operations of 100 MW Thambapawani Wind Park, electricity generated by ORE has shown significant increase. The share of electricity generated by solar rooftops in ORE mix shows a gradual increase over the years after the introduction of solar roof top power generation programme in September 2016.



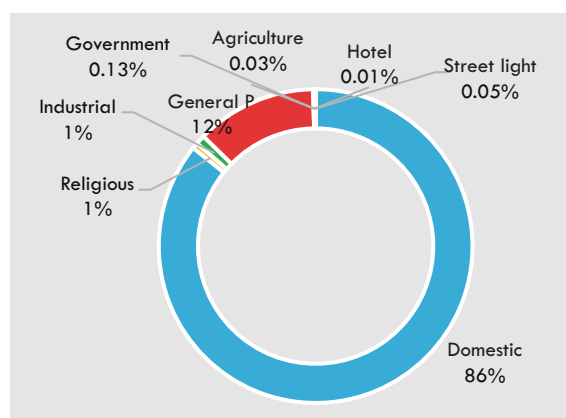
### 2.3 Electricity Demand and Consumer Growth

The electricity demand decreased by 0.1% during the first and second quarters of 2022.

The maximum recorded electricity demand during this period was 2,709 MW against 2,802 MW by 2021. The electricity demand forecast based on the Long-Term Generation Expansion Plan 2022-2041 of CEB for 2022 is 17,705 GWh and forecasted Generation for 2023 is 19,238 GWh.

The total number of electricity consumers in the country as at August 2022 is 7,514,153. Recorded electricity consumers in 2021 was 7,299,633. Accordingly, 214,520 new electricity connections were given during the period. It was observed that the number of new connections was high due to the free service connections provided under the “Deyata Eliya” programme conducted in 2021.

Tariff Category	No. of consumers
Domestic	6,444,370
Religious	45,687
Industrial	71,660
General P	936,040
Hotel	637
Government	9,752
Agriculture	2,308
Street light	3,699
	<b>7,514,153</b>



## 2.4 Electricity Generation Expansions

The demand for electricity is growing at a rate of about 5.5% per annum. In order to cater to this growing electricity demand, the ministry is implementing power generation projects as per the Government policies and Long-Term Generation Expansion Plan of CEB. The following electricity generation projects being implemented by the Ministry are in different implementation stages.

### 2.4.1 Renewable Power Generation

#### I Major Hydro

##### i. Broadland hydropower Project – 35MW

Electricity generation has been commenced by the power plant from the end of January 2022. From January to August 2022, 56 GWh of electricity units were generated by this project. The expected annual electricity generation of the project is 126 GWh. This is the first large scale hydropower plant that obtained Clean Development Mechanism (CDM) registration in Sri Lanka.

##### ii. Uma Oya Hydro Power Project – 120 MW

The Uma Oya Project is a multipurpose development implemented under the Ministry of Irrigation mainly to divert the 145 MCM of water to irrigate approximately 5,000 hectares of land in Hambanthota and Monaragala Districts and generate 290 GWh of electricity annually. The total estimated cost of the project is USD 530 Million. 98% of the project activities are completed. USD 12 Million is required for expatriate staff and equipment to make the power plant ready for test generation. As per the project plan, the power plant must be commissioned at end of 2022.

##### iii. Moragolla Hydro Power Project – 31 MW

Moragolla is the final hydropower project which is constructed on the Mahaweli river basin. This project site is located in the Ulapane area of the Kandy district. The expected annual energy generation of the project is 100 GWh. Total estimated cost of the project is USD 114 Million and financial assistance was given by the loan of Asian Development Bank (ADB). Project activities were affected by the COVID 19 impact and Ministry and CEB are working hard to complete the project within the stipulated time period. The current Physical progress of the project is 38%. It is expected to complete the project and generate electricity by November 30, 2023.

#### II Other renewable Energy (ORE)

##### I Solar Power

##### a. Solar Rooftop Programme – Soorya Bala Sangramaya

Solar rooftop programme was introduced in September 2016 to help different segments of the community to join renewable energy-based power generation with a support of a low interest loan scheme. In 2019, Asian Development Bank has funded USD 50 Million to the solar rooftop programme in order to install 5kW solar systems on rooftops of domestic and commercial establishments. This ADB Loan was fully utilized in 2021 by installing 71 MW. The Ministry has requested ADB another 80USD million to continue the programme as the second phase and it is under consideration. Currently around 640 MW has been added to the National grid by 44,022 number of solar rooftops. There are three solar rooftop programmes and the following are the progress of these three programmes as at September 2022.

Schemes	Consumers	Capacity (kW)
Net Metering	14,003	102,662
Net Accounting	26,997	236,806
Net plus	3,022	300,654
<b>Total</b>	<b>44022</b>	<b>640,122</b>

#### b. Small Scale Ground Mounted Solar Power Plants (70X1 MW)

Under this project, 20 MW was connected to the national grid by 20 power plants during the period of January to September 2022. The progress of the construction works of another 5 MW is 90% completed and expected to complete at the end of 2022.

#### c. 2X10 MW Solar Power Plants (Valachchena&Vavunatheu)

It was declared to open 10 MW Solar Power Plant in Vavunatheu on 11 October 2022. 10 MW Solar Power Plant in Valachchenais under construction and anticipated to complete the construction works at the end of 2022.

#### d. 1-10 MW Solar Power Plants (Total of 147 MW)

A total of 147 MW of solar power projects with 1-10 MW each were selected as private investments on 2nd March 2021 and tenders were awarded for projects having 109 MW. The provisional approval of SLSEA was issued for 88 MW. The 2MW project is under construction and expected to commence commercial operations at the end of 2022.

#### e. 100 MW Siyambalanduwa Solar Power Park

The Expression of Interest was called in August 2022 to select a suitable developer for the project. Upgrading works of the Madagama- Ampara Transmission line,

which is needed for power evacuation of this project, have been commenced.

In addition to the above solar power projects 10 MW of solar plant in Mahiyangana is under construction.

## II Wind Power

The following major renewable energy parks are expected to be implemented and initial activities have been commenced.

#### a. 286 MW Mannar Wind Park

The provisional approval for the development of 286 MW of wind capacity has been given to the Adani Green Energy (Pvt) Limited.

#### b. 100MW Mullikulam Wind Park

The project site of the park is located in the main land in Mannar. The CEB is in the process of implementing the project. 27 km long transmission line from the park to KalAaru and Wind collector substation at KalAaru will be constructed as associated transmission facilities. The total estimated cost of the project is USD 140 Million. An Expression of Interest was called in August 2022 to select a suitable developer for the project. The EIA with regard to this project is being conducted by the CEB and it is in the final stage.

#### c. 234 MW Wind Park in Pooneryne

The provisional approval was given to Adani Green Pvt. Limited to implement 234 MW Wind Park in Poonaryne area. The land acquisition has been started. The ESIA is being conducted as the first phase (100 MW) of this project by using ADB Grant finance and will be concluded in October 2022.

d. In addition to the above major Wind Power Parks, it is anticipated to construct 50 MW of wind power project by CEB as the additional project to 100 MW

Thambapawani Wind Power Park. The total estimated cost of the project is USD 70 million. Further, the following small-scale wind power plants with a total capacity of 60 MW (1-10 MW Each) is expected to be developed in Mannar (10 MW and 5 MW), Madampe (2X 5 MW) and Trincomalee (10 MW) by using private investment. Mannar projects are under construction and will be completed in December 2022. Trincomalee and Madampe projects are expected to complete in January 2023 and April 2023.

The Expression of Interest was called from private investors to build renewable energy projects above the capacity of 50MW under the Build Own and Operate basis (BOO). Under this programme, 17 Solar Projects and 3 Wind Power projects have been identified.

## 2.4.2 Thermal Energy Generation

### I Liquid Natural Gas (LNG)

#### a. First LNG Power Plant (350 MW) in Kerawalapitiya, "Sobadanavi" Power Plant

The construction works of the power plant is on the way. Gas turbine required for open cycle operations is being installed in the plant and expected to have commenced operations of the Gas turbine in 2023. The project activities have been delayed due to the unavailability of the USD and high cost of the project, which was created as a result of the recent economic crisis. The Project Developer has requested tariff revision and the CEB is in the process of reviewing the tariff proposal.

#### b. Second LNG Power Plant (350 MW), Kerawalapitiya

CEB has completed the evaluation of the financial proposals to select suitable developer for the second LNG power plant and awaiting the Cabinet of Ministers

Decision to award the Tender.

### c. Deployment of the Natural Gas for the Power sector

There are three components under this project.

- i. Deployment of Floating Storage Regasification Unit (FSRU) and Mooring System at offshore Kerawalapitiya (By CEB)
- ii. Deployment of Gas Pipeline Network from FSRU to the power plants at Kerawalapitiya and Kelanitissa (by CPC).
- iii. Supply of required quantities of LNG to the FSRU (by CEB)

Currently, the legal clearance is pending from the Attorney General for the Implementation Agreement of FSRU&M.

## 2.5 Electricity Transmission and Distribution Development

- The Transmission Network consisting of 799km of 220kV transmission lines and 2,361 km of 132kV lines. There are 79 Grid substations in the network and 134 primary substations. The entire operations of the transmission network are carried out by CEB.

The Distribution Network consists of 33,138.27 km of 33kV lines, 2,448 km of 11 kV lines and 150,169 km of low voltage lines and 33,476 Distribution Grid Substations.

- With an objective of absorbing more energy generated through renewable sources efficiently into the power system, a small-scale Smart Grid pilot project with solar and battery storage technologies was constructed and completed by LECO in September 2022. The total estimated cost of the Project is USD 26 Million and ADB has provided the funds as a grant.

- During the period of 2022, the following transmission projects were completed -
  1. Augmentation of Madampe and Dehiwala Grid Substations were completed and capacity was increased.
  2. Construction of Biyagama Grid substation was completed and capacity was augmented.
  3. Habarana to New Habarana grid substations were connected by constructing 3km 220 kV transmission line.
  4. Constructions of New Habarana to Valachchena 100 km length Transmission line was completed.
  5. Construction of New Habarana to Polonnaruwa 44 km length of transmission line was completed.
  6. Augmentation of Kesbewa, Kaluthara new Anuradhapura GSS were completed.
  7. Construction of Hambanthota Grid Substation was completed.
- Currently, technical and commercial losses of our power system have been reduced to 8.6% from 9%.
- The following transmission and distribution projects are being conducted during the period under evaluation.

	Name of the Project	Funding Agency	Total Estimated Cost (Rs.Mn)	Progress
1	Transmission Infrastructure Capacity enhancement			
1.1	Lot B1: Augmentation of New Anuradhapura Gs, and Construction of Kesbewa, Kluthara Old Anuradhapura GSS	French Development Agency (AFD)	2,737.97	100% Completed on 5 Feb. 2022
2	Green Power Development and Energy Efficiency Improvement Investment (Tranche 2)	ADB		
2.1	Hambantota 220 kV Development (P1) Lot A – Hambantota Grid Substation 220kV development		1,866	100% completed on 01 Feb. 2022
2.2	Lot B – New Polpitiya-Hambantota 220kV, 150km Transmission line	ADB	5,794	81% Expected completion on 18 Mar.2023
2.3	Lot B2 – A: Construction of Horana– Padukka 132 kV Transmission Line Project	AFD	592	29%
2.4	Lot B2 – B: Second Circuit Stringing of Habarana – Valachchenai 132 kV Transmission Line	AFD	502	100%
2.5	(P3) Lot A1: Construction of Colombo B GSS Single In & Out Connection from Colombo C –Kolonnawa 132kV 800mm <sup>2</sup> Cable Augmentation at Colombo C and Kolonnawa Grid Substations	AFD	1,260.8	95% Completion on 31. Dec. 2022
2.6	Augmentation of Kotugoda, Kolonnawa, Padukka, Horana, Dehiwala and Madampe Grid Substation	ADB	2,308.27	97% Completion on 31. Dec.2022



2.7	Lot B: Construction of Biyagama 220/33kV GSS Augmentation of Biyagama Grid Substation	ADB	1,563.71	100% 31.Jan 2022
2.8	220kV Switching Station at Kerawalapitiya	ADB	2,910.4	42% 31 Dec. 2022
2.9	33 kV distribution Tower Lines and Gantries			
	Construction of 33 kV distribution Tower Lines	AFD	3,068	98% 07.11.2022
	Substation and Gantries	ADB	2,119	53% 31.052023
3	Supporting Electricity Supply Reliability Improvement Project	ADB		
3.1	Package 4: Construction of 300 km long 33kV tower lines and 13 no. of 33kV switching gantries	ADB	6,782	43% 5 July 2021 (project is delayed)
3.3	Lot A1: Installation of 100 MVAR BSC at Pannipitiya Grid Substation	ADB	1,103.5	89% 30 April 2022
3.3	Lot A2: Installation of Static Var System (SVS) at Biyagama Grid Substation	ADB	1,623.86	60% October 2022
3.4	Lot A3 Installation of Braker switch capacitors in Greater Colombo Grid Substation Replacement with new breaker switch capacitors in Thulhiriya GSS	ADB	1,763.4	10% 22 Dec.2023
4	National Transmission & Distribution Network Development	JICA	3,8135	98% JICA has stopped the disbursement.
5	Habarana–Veyangoda 220 kV Transmission Line			
5.1	New HabaranaVeyangoda 220 kV Transmission Line	JICA	17,561	98% JICA has stopped the disbursement
5.2	Construction of New Habarana 220/132/33 kV Switching Station and Augmentation of Veyangoda GSS		6,950	99% New Habarana GSS completed.

## 2.6 Climate Change Mitigation Activities

### Nationally Determined Contributions (NDCs) -Power sector

Progress of the implementation of NDCs was reported and first Planning and Monitoring Committee meeting was conducted during the period. Power sector NDCs will result in a GHG emission reduction against BAU scenario of 25% in the electricity sector (5% unconditionally and 20% conditionally),

equivalent to an estimated mitigation level of 9,819,000 MT unconditionally and 39,274,000 MT conditionally (total of 49,093,000 MT) of carbon dioxide equivalent during the period of 2021-2030. NDCs.

### 2.7 Research and Development Activities

USAID has committed USD 4.23 million for CEB, USD 3.6 million for SLSEA and USD 1.9 million to LECO under their grant financing

(Sri Lanka Energy Programme) for technical assistance to conduct selected Research and Development activities. The Programme period is 2022 to 2025.

### 3. Plans/Programmes for 2023

#### 3.1 Electricity Generation

##### i. Hydro Power Generation

- Expected to commissioned 35 MW Uma Oya Hydro Power Plant.
- Expected to initiate 14MW (2X7 MW) Seethawaka Ganga Hydro Power Plant

##### ii. Solar Power generation

- 100MW Siyambalanduwa Solar Power Park
- 32 MW ground mounted Small Scale Solar Power Plants and 10 MW solar power plants are expected to be commissioned in 2023.
- Solar Power Projects under the USD 100 Million loan - Indian Line of Credit. Implementation of activities of this project will be carried out in 2023 and expected to implement 120 MW capacity by 2023.

##### iii. Wind Power Generation

- 5 MW and 10 MW Mannar Wind Power Plants – Constructions are expected to be commenced in 2023
- 10 MW Wind Power Plant – Trincomalee - Constructions works are expected to commence in 2023

#### IV The following Major Wind Projects are in the pipe line

- 286 MW Mannar Wind Park, -Provisional approval was given for the private Sector Developer (Adani Green Energy Limited)
- 100 MW Mannar-Mullikulum Wind Power Park – it is expected to complete the Environment and Social Impact Assessment in 2022.
- 234 MW Pooneryne Wind Park -First Phase – The provisional approval was given to the private Sector Developer (Adani Green Energy Limited). The land acquisition was commenced.

#### IV Liquidized Natural Gas (LNG) Generation.

- First 300 MW, LNG Power Plant-Sobadanavi, Kerawalapitiya – Expected to complete the major construction and complete the plant by mid-2023.

#### V 130 MW Gas Turbine Power Plant – Kelanithissa

#### VI Energy Storage Solution (ESS) pilot project

5 MW/8MWh Battery ESS system will be installed in the Hambantota Grid substation as a pilot project under the grant financing (approx. USD 11.9 Million)of Republic of Korea.

#### 3.2 Proposed Transmission & Distribution Developments

Following transmission and distribution development projects are expected to carry out in 2023 as per the plans.

	Project Name	Total Estimated Cost (Rs.Mn.)
1	Power System Reliability Strengthening Project (PSRSP)	
1.1	Construction of Kalawana and Negombo 132kV Grid substations Construction of Meerigama 220kV Switching station with grid substation, Augmentation of 132kV Matara grid substations	7,982
1.2	Construction of Matara-Hambantota 132kV transmission Line, Hambantota-Tissamaharama 132kV transmission line, 132kV Line Section from Homagama GSS to Horana-Padukka 132 line, 132kV Line Section from Baddegama GSS to Galle-Ambalangoda 132 line - 132kV UG Cable from Kelaniya Cable Gantry to Peliyagoda Grid substation	5,015
1.3	Construction of 132kV Thissamaharama, Baddegama, Homagama and Peliyagoda grid Substations	6,572
1.4	Construction of New Anuradhapura-New Habarana 220kV transmission line, Kukule-Kalawana 132kV line and 220kV line section from Mirigama GSS to Habarana-Veyangoda 220kV transmission line	2,991
2	Distribution System Reliability Strengthening Project (implemented by LECO)	10,000

## Chapter Two

# Ceylon Electricity Board

### Introduction

Ceylon Electricity Board (CEB) is a state owned enterprise established by the Act No. 17 of 1969 dated November 1, 1969 and as amended by Act Nos. 31 of 1969, 29 of 1979, and 32 of 1988. Sri Lanka Electricity Act No. 20 of 2009 as amended by Act No. 31 of 2013 brought CEB under the regulatory purview of the Public Utilities Commission of

Sri Lanka (PUCSL). CEB is empowered to generate, transmit and distribute electrical energy to all categories of consumers, to collect revenue as per a cost reflective end user tariff approved by the PUCSL and to perform its functions as provided under its Act and in accordance with the licenses issued by the PUCSL so to ensure that the total revenue of the Board is sufficient for all its activities.

## Vision

Enrich Life through Power

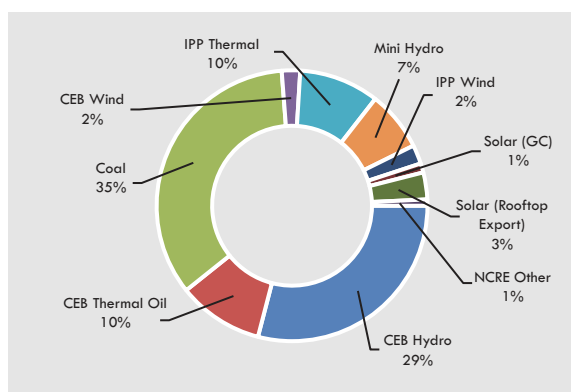
## Mission

To develop and maintain an efficient, coordinated and economical system of electricity supply to the whole of Sri Lanka, while adhering to our core values; Quality, Service to the Nation, Efficiency and Effectiveness, Commitment, Safety, Professionalism and Sustainability.

## 1. Overview of Electricity Supply

Electricity demand in the country during the last fifteen years has been growing at an average rate of about 4.8% per annum while peak demand has been growing at a rate of 3.1% per annum. The Net Generation in the year 2021 was recorded as 16,716 GWh and recorded 6.4% increase compared to that of 2020. Meanwhile the maximum demand was recorded as 2,802 MW in the year 2021 and recorded 3.1% increase compared to the previous year. The Net Generation and the Maximum Demand recorded for the last 8 months of the year 2022 was 10,745GWh and 2,709MW and this was 3.27 % and 3.31% decrease with respect to the previous year.

CEB’s annual expenditure on generation significantly varies with the amounts of electricity generated from thermal power plants of both CEB and Independent Power Producers (IPP). The generation mix reported for the first eight months of the year 2022 is depicted below.



### 1.1. Electricity Demand

During the first eight months of 2022, the demand for electricity was decreased by 2.1% while the maximum demand recorded during this period was 2,708.8 MW against 2,801.62 MW for last year. During this 8 months’ period 10,745GWh were generated and 9,854GWh were sold.

The total energy generated during this period (10,745GWh), of which 36% has come from Hydro generation (including mini hydro). Coal power generation stood at 35%. Thermal Oil had contributed to 20% of total energy generation. Other renewable sources (excluding mini hydro) had a share of 10%. In comparison, by end August 2021, contribution from Hydro generation was 37%.

### 1.2. Electricity Demand Forecast for 2023

For year 2023 the electricity demand forecast based on draft CEB Long Term Generation Expansion Plan 2022-2046 is as follows:

Year	Demand		Generation		Peak (MW)
	(GWh)	Growth Rate (%)	(GWh)	Growth Rate (%)	
2023	17,705	5.8%	19,238	5.7%	3,117

### 1.3. Power Generation

The Generation Division of Ceylon Electricity Board is responsible for the operation and maintenance of Thermal and Hydro Power Plants owned by CEB. Generation Assets consist of 18 large Hydro Power Plants totaling to an installed capacity of 1,418 MW, one (01) 900 MW Coal-fired Power Plant, Thermal Power Plants with an installed capacity of 654 MW consisting of seven large oil-fired power plants with 604 MW and 50MW oil-fired plants of 1 MW each and 104 MW Mannar wind park.

CEB also operates few power plants in the isolated networks in surrounding islands of Jaffna Peninsula. Thus the total installed Capacity of CEB-owned Power Plants as at 31st August 2022 were 3,075 MW.

Generation details of CEB and Private Power Producers as at 31st August 2022 is given below.

For the eight months ended 31st August 2022; the total generation stood at 10,745GWh, of which 29% has come from major hydro generation, while the share of Coal power generation standing at 35%. Thermal Oil had contributed to 20% of total energy generation. Other renewable sources had a share of 17%. In comparison, contribution from major hydro for the same period during 2021 was 29%.

Description	Generation (GWh)
<b>CEB</b> Hydro	3,122
Thermal - Coal	3,707
Thermal - Oil	1,098
Wind	236
<b>IPP</b> NCRE (Small Hydro)	768
Thermal	1,028
Wind	244
Solar (Grid Connected)	117
Solar (Rooftop -Export)	345
<b>Dendro, Bio Mass &amp; Municipal</b>	80
<b>TOTAL</b>	<b>10,745</b>

#### 1.4 Financial Challenges Faced

The prevailing macro-economic situation of the country has affected adversely to the power sector and CEB to the extent it never happened in the history. Under the severe difficulties, CEB able to revise the tariff from August 10, 2022. The main financial challenges faced by CEB can be summarized as below,

- Rating down grading of country has affected for financing of power generation infrastructure.
- The shortage of forex liquidity in the market has hindered mandatory overhaul and maintenance of power plants and supply of electricity connections.

- Risk of procuring coal due to shortage of forex.
- Delay in commissioning of ongoing projects due to inflation and global crisis.
- Due to default vulnerability of People's Bank difficulty to pursue foreign purchases.
- Ongoing liquidity crisis in CEB leading to the default of commitments made by CEB.
- Rising Exchange Rates and Interest Rates.
- Coal prices and other commodity price escalation.

## 2. Present Power Crisis and Counter Measures

### 2.1 Depletion of Hydro Reservoirs

The Hydro storage at the beginning of the year 2022 was 867.2 GWh. However, due to limited thermal availability and unavailability of unit 3 of LVPS, it was unable to curtail Hydro generation and hydro storage had been depleted down to 315 GWh over the period until 1st of April, 2022.

### 2.2 Major Plant Outages

Plant outages were given during the period of January 2022 to August 2022 in order to carry out Major Overhaul works, Annual maintenance works and Breakdown Maintenance works in respective power plant

### 2.3 Electricity Demand

During the above period, day peak demand was around 2,150 MW while night peak demand was around 2,500 MW. With limited generation due to the major plant outages as mentioned above, it was unable to cater the

night peak demand and with imposed manual load shedding night peak demand had been restricted to around 2,300 MW daily and energy requirement had been restricted to around 45 GWh.

## 2.4 Fuel Issue

Meanwhile following the intermittent CPC refinery shutdown, furnace oil supply for thermal plant operation has been regularly interrupted since December 2021. Following the refinery shutdown, Naphtha production for KCCP operation has been halted for the most part of the year. At the same time, diesel fired plant operation also has been severely affected due to unavailability of diesel stocks in the country. Accordingly, thermal plant

generation has been significantly restricted due to this fuel supply restriction.

## 2.5 Imposed Load Shedding

With this fuel supply restrictions and thermal plant unavailability, CEB was compelled to impose manual load shedding since January 2022. Accordingly depending on the plant availability and the demand requirement, this load shedding has been extended even up to 13 hours per day. The detailed data of unserved energy resulted with this daily load shedding is attached as Annex II.

## 3 Progress of the Development Projects & Activities

### 3.1 Hydro Power Development Projects

Name of project	Capacity	Cost (LKR Million)	Physical Progress as at 2022.08.31	Expected date of completion
Uma Oya Hydro Power Project	120 MW	105,700	98%	December 2022
Broadlands Hydro Power Project	35 MW	19,498	97%	August 2022
Moragolla Hydro Power Project	30.5 MW	18,553	37%	November 2023

### 3.2 LNG Development Projects

Name of project	Capacity	Cost (LKR Million)	Physical Progress as at 2022.08.31	Expected date of completion
"Deployment of Floating Storage and Regasification Unit (FSRU) and Mooring System"	N/A	N/A	43%	April 2025
Procurement of Liquefied Natural Gas (LNG)	N/A	N/A	TOR for the consultancy services has been prepared. Procurement of consultancy service will be initiated after awarding the FSRU and Mooring infrastructure contract.	February 2024
Development of First 300MW LNG Combined Cycle Power plant facility at Kerawalapitiya	300 MW	N/A	2%	April 2024
Development of second 300MW LNG combined cycle power plant facility at Kerawalapitiya	300 MW	N/A		December 2024

### 3.3 NCRE Developments

Name of project	Capacity	Physical Progress as at 2022.08.31	Expected date of completion
Capacity Enhancement of Mannar Wind Power Project (Phase-1) with Additional 50 MW	50 MW (Minimum expected capacity)	Separate tender initiated by Mannar PMU.	-
Name of project	Capacity	Physical Progress as at 2022.08.31	Expected date of completion
Mannar (Wind) Phase II Extension- 100MW	100 MW	Feasibility study is being done by SLSEA. Land acquisition and CEA clearance activities are coordinated BY SLSEA.	2025
Mannar (Wind) Phase III - 100 MW	100 MW	Feasibility study is being done by PMU of MWPP. Can be connected to New Silavathura Collector SS via a 16km transmission line from Mannar GSS.	2026
10MW x 2 Nos Polonnaruwa and Vavunathivu Solar Plants	20MW	PPAs signed. Currently the Plants are under construction	2022 Q4
1MW x 60 Nos Solar Power Project	35MW	Completed	-
1MW x 90 Nos Solar Power Project	33MW	Commissioned: 33 MW Under construction: 35 MW	2022 Q4
150MW Solar Power Project in (1- 10)MW capacities	147MW	LOI issued & Pending signing the PPA: 147 MW	2023
60MW Wind Power Project in (1-10) MW capacities	35MW	Trinco WP Plant -Awarded & LOI signed , pending signing of PPA	2023
		Mannar WP Plant- Awarded & LOI signed), pending signing of PPA.	2023
		Madampe WP Plant - - Awarded & LOI signed), pending signing of PPA.	2024
Exotic Energy Technology Power Plant Project (Solar PV with Agriculture/ Farming)		Pending signing of PPA: 10 MW , Initiated the forfeiting of performance security	-
Pooneryn Solar/Wind Park Project	100MW	RFP is being prepared with IFC. Land acquisition, feasibility study including bird studies have already been initiated by SEA. Transmission line design and route survey completed.	2027
Syambalanduwa Solar Power Project	100MW	Tender Advertised on 22nd August 2022	2026
30MW Ground mounted/ floating Solar PV Power Plants tender (1-5MW)	30MW	Tender Advertised on 29th August 2022	2024
60MW Ground mounted/ floating Solar PV Power Plants tender (5MW scale)	60MW	RFPs have been prepared by the respective TEC and submitted the RFPs to CANC	2025
40MW Wind Power Plants tender (1-5MW scale)	40MW		2024
90MW Mini-hydro Power Program	90MW	Submitted documents on 08/01/2020 & awaiting cabinet approval to advertise	2027



CANC-Cabinet Appointed Negotiating Committee | CEA-Central Environment Authority | LOI-Letter of Intent | PPA-Power Purchase Agreement RFP-Request for Proposal | SLSEA-Sri Lanka Sustainable Energy Authority | TEC-Tender Evaluation Committee

### 3.4 Generation Expansion Projects

In addition to the generation developments give in Sections 3 , 4.2 and 4.3 , some generation capacity enhancement projects are carried out by the Generation Division. The Progress of these projects are depicted below.

### 3.5 Transmission Development Projects

Project	Package	"Estimated Cost (LKR Million)"	"Completion % as at 2022-08-31"	Expected date of completion
Greater Colombo Transmission and Loss Reduction Project	Construction of Second 220kV Cable from Kerawalapitiya to Colombo L	9,119	8%	April 2024
	Replacement of CT and Busbar Protection Scheme at Colombo E & F	122	98%	May 2022
	Colombo City Transmission Network Development Project - Phase 2	30,295	"Awaiting for fund commitment from ADB"	December 2024
Trincomalee Coal Power Development Project	Construction of Habarana - Veyangoda 220kV Transmission Line Project: Lot A - Substation	3,200	99%	May 2022
	Construction of Habarana - Veyangoda 220kV Transmission Line Project Lot B - Transmission Line	7,100	99%	March 2022
Green Power Dev. & Energy Eff. Imp Project-PMU 1	Package 1/Lot A: Hambantota 220kV Development	1,866	100%	February 2022
	Package 1/Lot B - New Polpitiya -Hambantota TL	5,794	88%	October 2022
	Package 2/Lot A - Construction of Nadukuda & augmentation of Mannar 220/33 kV GSS	2,698	100%	October 2022
	Package 2/Lot B2 A - Construction of Padukka-Horana 132kV TL	592	29%	December 2022
	Package 2/Lot B2 B - 2nd cct. stringing of Habarana-Valachchenai 132 kV TL	501.73	100%	January 2022
Green Power Dev. & Energy Eff. Imp Project-Tranche II: PMU 2	Package 3/Lot A1 - Construction of Colombo B GSS, Single In & Out connection from Colombo C-Kolonnawa 132kV 800sqmm Cable & Augmentation of Colombo C & Kolonnawa GSS	1,261	95%	September 2022
	Package 3/Lot A2 - Augmentation of Kotugoda,Kolonnawa, Padukka, Horana, Dehiwala & Madampe GSS	2,316	97%	September 2022

	GDPEEIP: PMU 2:Package 8/Lot A - Augmentation of Nadukuda 220/33kV Grid Substation, Augmentation of Aniyakanda 132/33 kV Grid Substation and Augmentation of Chunnakam 132/33kV Grid Substation	1,466	Contract Agreement to be signed	December 2023
	GDPEEIP: PMU 2-Package 8/Lot B - Augmentation of Ambalangoda 132/33 kV Grid Substation, Augmentation of Pannala 132/33kV Grid Substation & Supply of 2 Spare Transformers of 132/33 kV 31.5 MVA	1,740	Site Surveying and Mobilization is in progress	December 2023
Green Power Dev. & Energy Eff. Imp Project-Tranche II: PMU 3	SESRIP: Package 7-Lot A2: Installation of Static Var System (SVS) at Biyagama Grid Substation	1,595	62%	October 2022
	SESRIP: Package 7-Lot A1: Installation of 100Mvar BSC at Pannipitiya Grid Substations	1,104	90%	April 2022
	Package 3/Lot B- Construction of Biyagama 220/33kV GSS and Augmentation of Biyagama Grid Substation	1,564	100%	January 2022
	SESRIP: Package 7-Lot A.3: Installation of 124Mvar Breaker Switched Capacitor Banks in Colombo City Grid Substations and Replacing the detuned Breaker Switched Capacitor Banks at Thulhiriya Grid Substation	1,763	Contract Agreement was signed on 30th March 2022.	December 2023
Green Power Dev. & Energy Eff. Imp Project-Tranche 1: Part II	Construction of Kappalturei GS and Augmentation of Kerawalapitiya, Katunayake and Trincomalee GSS	2,525	100%	January 2022
	Construction of Kesbewa and Kaluthara GSS and Augmentation of New Anuradhapura Old Anuradhapura GSS	2,738	100%	February 2022
	GDPEEIP: Tranche 2 - Package 9 : 220kV Switching Station at Kerawalapitiya	2,910	42%	August 2022
National Trans. & Dist. Net. Dev. & EI Project	Package 1 - Construction of 400kV, 220kV and 132kV Transmission Lines	13,003	60%	June 2023
	Package 2 - Construction & Augmentation of Grid Substations	7,418	68%	July 2023
	Package 3- Construction of 220kV and 132kV Transmission Lines	12,000	60%	June 2023
	Package 4 -Construction of Primary Substations, Distribution Substns and Cables in Dehiwala, Mt. Lavina and Baththaramulla	4,880	41%	September 2023
Transmission Construction Projects Branch-TL Constructions	Installation of 100 MVAR Reactor at New Anuradhapura GS and 50 MVAR Reactors at Mannar GS	1,463	98%	April 2022
	Construction of Wagawatta Grid Substation	1,898	80%	August 2022

	Reconstruction of Medagama - Ampara 132kV Transmission Line	3,276	9%	January 2025
	Construction of Victoria – Rantembe 220kV Transmission line	1,400	5%	December 2024
	Construction of Poonaryn – Kilinochchi 220kV Transmission Line	3,450	8%	December 2025
	Augmentation of Athurugiriya - Kolonnawa 132kV Transmission Line	170	35%	June 2023
	Reconstruction of Kolonnawa - Pannipitiya 132kV Transmission Line	960	8%	June 2024
	Raising Heights of Kelanitissa - Kolonnawa 132kV Transmission line	702	8%	April 2023
	Raising heights of Biyagama - Pannipitiya 220kV Transmission Line	121	Funds yet to be received from RDA to commence the project.	February 2023
Transmission Construction Projects Branch- GS Constructions	Installation of 2x50MVAr Reactor at New Anuradhapura GS and 1x50MVAr Reactor at Mannar GS	1,463	98%	November 2022
	Construction of Wagawatta Grid Substation (2x45MVA T/F with DBB)	1,898	80%	December 2022
	Extension of Kelanitissa 132kV GIS	464	66%	December 2022
	Construction of Two Nos. of 220kV Double Busbars Transmission Line Bay at New Polpitiya Switching Station	291	97%	October 2022
	Kotugoda Augmantation Work	73	68%	May 2022
	Balangoda Augmantation Work	66	64%	June 2022
	Athurugiriya Augmantation Work	15	45%	March 2023
	Construction of Two 33kV Feeder Bays at Rathmalana Grid Substation	148	99%	March 2022
	Construction of 132kV Single Bus Bar Transmission Line Bay at Ampara GS	85	17%	January 2023
	Construction of 220kV GIS at Rantambe Switch Yard	2,809	Tendering Process.	December 2023
	Construction of one nos of 220kV 1 1/2 Breaker System Transmission Line Bay at Victoria Power Station	229	Tendering Process.	December 2023
	Construction of 132kV Switch Yard at Randeniya (Umaoya Hydro Power Project)	350	78%	December 2022
Transmission Projects	Clean Energy Absorption Transmission Project - PMU1 (CEATP - PMU1) : Pre-Implementation Activities (Land Acquisition, IEE Approvals for Line Routes, Line Rout Survey, Layout Design of GSS, etc.)	405	27%	December 2025
Power System Reliability Strengthening Project	Package 1 (Lot A) - Construction of Kalawana and Negombo 132/33kV Grid substations	3,638	Tendering Process.	November 2024

Package 1 (Lot B) - Construction of Mirigama 220/33kV Grid Substation, 2 Nos. 220kV Line bays at New Anuradhapura Grid Substation, 2 Nos. 132kV Line bays at Hambantota Grid Substation and, Augmentation of Matara 132/33kV Grid Substation	4,655	Awaiting for ADB concurrence to open price bid.	July 2024
Package 2 (Lot A) - Construction of 132kV DC Matara-Hambantota Transmission Line(77km), 132kV DC Hambantota-Tissamaharana Transmission Line(23km), 132kV DC from Horana-Padukka Transmission Line to Homagama Grid Substation (8km), 132kV DC from Ambalangoda-Galle Transmission Line to Baddegama Grid Substation(0.5km), Cable Termination Tower at Kelaniya for UG cable termination of Peliyagoda GSS	4,396	Awaiting loan finalization from ADB	May 2024
Package 2 (Lot B) - Construction of 132kV XLPE Cu Underground Cable to Peliyagoda 132/22kV Grid Substation	200	Awaiting loan finalization from ADB	July 2023
Package 3 - Construction of 132/33kV Tissamaharama, Baddegama, Homagama and Peliyagoda Grid Substations	2,045	Awaiting loan finalization from ADB	March 2023
Package 4 - Construction of 220kV, DC New Anuradhapura-New Habarana Transmission Line (46km), 132kV Kukule-Kalawana Transmission Line, 220kV Transmission Line from New Habarana-Veyangoda Transmission Line to Mirigama Grid Substation (5km),	2,921	Awaiting loan finalization from ADB	April 2024

## 4 Development Programs for the Year 2023

### 4.1 Transmission Developments

In addition to the Transmission Development Projects mentioned in the Section 4.5, following ten grid substation augmentations have been identified for the year 2023 to absorb renewable energy based generation, and to improve system reliability. These projects are the process of obtaining board approvals and will be included for the transmission planning studies.

- Augmentation of Mannar 220/33kV Grid Substation by the addition of 1x45 MVA, 220/33kV Transformer with associated switchgear and civil works.
- Augmentation of Hambantota 220/132kV Grid Substation by the addition of 1x63 MVA, 220/33kV Transformer with associated switchgear and civil works.
- Augmentation of Mahiyanganaya 132/33kV GSS by the addition of 1x31.5 MVA, 132/33kV Transformer with associated switchgear and civil works.

- Augmentation of Polonnaruwa 132/33kV GSS by the addition of 1x31.5 MVA, 132/33kV Transformer with associated switchgear and civil works.
- Augmentation of Maho 132/33kV GSS by the addition of 1x31.5 MVA, 132/33kV Transformer with associated switchgear and civil works.
- Augmentation of Vavunathivu 132/33kV GSS by the addition of 1x31.5 MVA, 132/33kV Transformer with associated switchgear and civil works.
- Augmentation of Norochcholai 220/33kV Grid Substation by the addition of 1x75 MVA, 220/33kV Transformer with associated

switchgear and civil works.

- Augmentation of Embilipitiya 132/33kV GSS by the addition of 1x31.5 MVA, 132/33kV Transformer with associated switchgear and civil works.
- Augmentation of Valachchenai 132/33kV GSS by the addition of 1x31.5 MVA, 132/33kV Transformer with associated switchgear and civil works.
- Augmentation of Nadukuda 220/33kV GSS by the addition of 1x63 MVA, 220/33kV Transformer.

Further following projects have been identified as uncommitted proposals for the year 2023 and will be confirmed after ongoing transmission planning studies.

Project	Components
Southern Renewable Energy Zone Development	Construction of Sooriyawewa 220kV GSS
	Construction of Sooriyawewa GSS _Dev_2 200kV GSS
	Augmentation of Hambantota 220kV GSS
	Construction of Hambantota GS Sooriyawewa GSS - Sooriyawewa GSS 2 220 kV Transmission line
East Renewable Energy Zone Development	Construction of Sampur 220/33 GSS
	Construction of Sampur to Kappalthurei 220kV transmission line ((initially operates in 132kV)
	Construction of Vallachena 132 /33 kV existing grid substation Augmentation
	Construction of Vavunathiv 132 /33 kV existing grid substation Augmentation
Northern Renewable Energy Zone Development	Transmission Back bone 400 kV Development from New Habarana-Vavuniya- Northern NCRE Collector
	Construction of Northern NCRE Switching Station
North Western Renewable Energy Zone Development	220 kV Transmission Line from Vavuniya to Mannar conductor upgrade
	Construction of Silawatura- Mannar Transmission development
	Construction of Mannar-2 220 kV collector sub station
	Construction of second Mannar - Vavuniya 220 kV Transmission line

## 4.2 Generation Developments

In addition to the Generation Development mentioned in the Sections 3 , 4.2 and 4.3 following developments are awaiting for funding.

- Implementation of pilot scale 20 MW/50 MWh Battery Energy Storage System
- Initial work for the implementation of 200 MW IC Engine Power Plant in 2026 as per draft LTGEP 2023-2042 (This

is identified in approved LTGEP 2022-2041 as well)

- Renewable Energy Development as identified in approved LTGEP at the time. (Some projects are already committed and ongoing as depicted in the Section 4.3)
- Initiate work related to establishment of Renewable Energy Desk with Resource Forecasting System

## Chapter Three

# Lanka Electricity Company (Private) Limited

## 1 INTRODUCTION

Lanka Electricity Company (Private) Limited (LECO) was incorporated in 1983 under the Companies Act no. 17 of 1982 and the Companies Act No 07 of 2007 for the primary objective of distributing electricity in its franchised area in the prime economic zone of western coastal belt of Sri Lanka from Negombo to Galle. Subsequently by the Electricity Act No 20 of 2009, LECO was brought in to the regulatory domain of the Public Utilities Commission with the issue of a distribution license to the company.

## 2 PROGRESS OF THE DEVELOPMENT PROJECTS & ACTIVITIES IN 2022

### Projects and Progress

#### Operations

- Expansion and rehabilitation work in the distribution network based on the electricity demand of the customers and the requirement of enhancing supply reliability.
- Enhancement of the electricity supply efficiency to the continuous reduction of distribution losses
- Continues development in the reduction of electricity breakdowns and respective restoration time.
- Reduction of the processing time for customer requested services including new connections.

#### Developments

- In the plan to turn the company's electricity network into a smart network, smart devices such as

smart meters, network monitoring equipment and automatic switches are being installed and so far about 50,000 smart energy meters and devices have been added to the system.

- The company's internal operations are automated and moving towards paperless office concept. E-billing services are introduced to customers by making use of remote meter readings and payments can also be made through the internet. All customer services are also open for internet based applications.
- Advanced Distribution Management system is introduced to automate the networks controls.
- All network assets of the company's electrical system have been acquired through GIS technology and thus the ability to effectively manage operations has been achieved.
- The Micro Grid project funded by the Asian Development Bank under the Green Power Development and Energy Efficiency Improvement Investment Project has been successfully completed.
- The Pilot Underground Cabling Project of Nugegoda has been completed as planned which converted the medium voltage power grid of densely populated Nugegoda City Centre in to the underground network.
- Construction of the proposed LECO Head Office building complex at Narahenpita has been commenced.

- 24-hour cash and cheque payment collection facility has been enabled by introduction of self-payment centers with kiosk machines and the facility is being extended to all LECO Customer Service Centers.
- Establishment on Smart Meter Data Management Center to facilitate AMI and Smart Meter related products and services to enhance service quality, is nearing completion

customers. From the end of 2021, an installment basis payment settlement scheme was introduced to settle the electricity account balances that could not be paid during the pandemic period, thereby giving customers the opportunity to settle the bill balances with minimum impact. The process of disconnection has been initiated for customers who continue to avoid installment payments and arrangements have been made to carry out the work taking into account the demands and needs of each customer.

- Due to restriction of imports of goods from 2021 and due to the ongoing

### 3 FINANCIAL POSITION OF THE COMPANY

	2017	2018	2019	2020	2021	2022 Budget	2022 ACTUAL YTD - SEPT.
Consumers (Billed)	546,571	562,412	568,250	576,279	591,888	616,011	592,641
Sales GWh	1519	1,570	1,647	1,624	1,603	2,262	1,189
No. of employees	1,573	1,570	1,535	1,527	1,505	1,510	1,458
Consumers /Employee Ratio	347	358	370	377	393	408	406
Distribution Losses (11 Kv) %	2.7	2.27	1.61	1.34%	1.94%	3.99%	3.78%
Revenue Rs Mn	29,930	30,944	32,461	30,709	32,201	46,263	25,913
Profit from operations Rs Mn	946	779	543	1,543	4,360	415	1,484
Profit for the year Rs Mn	1,792	2,970	2,687	1,792	3,233	1,566	1,515
Total equity Rs Mn	29,115	31,756	33,537	34,792	38,409	39,975	40,049
Total Liabilities Rs Mn	11,476	12,348	13,960	12,630	14,059	13,025	12,518
Total assets Rs Mn	40,591	44,104	47,497	47,422	52,468	53,000	52,566

### 4 CHALLENGES FACED & STRATEGIES ADOPTED IN ADDRESSING SUCH CHALLENGES

- Due to the COVID-19 pandemic situation, the government granted payment concessions to the electricity consumers and as a result of this, LECO trade debt situation has increased significantly. Although the relevant grace periods have ended, the current economic recession has had a significant impact on the settlement of arrears of

foreign exchange crisis, the company's suppliers have been severely affected and many supplies have been disrupted. Due to the abnormal price fluctuations, some suppliers have stopped supplying goods and services and it has become a challenge to deal with it within the existing procurement framework. Due to this, some of the services provided to the customers have also been disrupted.

- Due to the electricity power cut from the first quarter of 2022, the displeasure



of customers has been directed at the company, but the company is working to alleviate this situation by explaining the facts and improving the quality of other services.

- Actual sales were declined compared to the budgeted sales forecast due to prevailing economic conditions. However, the company has been able to control current overhead costs.

## **5 PROGRAMES & PROJECTS FOR 2023**

- Recognize that the further increase the efficiency and effectiveness of the LECO's services is a major task and for that purposes, the Business Process Re-engineering process will continue to cover all sectors. Furthermore, a Performance Management System will be implemented to enhance the level of efficiency in the LECO.
- Research and development works will be continued in the implementation of the smart grid solution in enhancing the efficiency and customer services.
- Projects to strengthen the reliability of the power system will be continued. Among them, the project planned to be carried out under a loan cost of USD 50 million which expected to be financed by the Asian Development Bank is special and it is planned to complete within four years. It is anticipated to introduce 33kV as a distribution voltage of LECO and introduce direct 132/33 kV Grid Substations to source the LECO network to improve the reliability.
- The construction project works of the LECO Head Office is ongoing and it is planned to be completed in the year 2024.

## Chapter Four

# Sri Lanka Sustainable Energy Authority

### 1.0 Key objectives and activities of SLSEA

Sri Lanka Sustainable Energy Authority (SLSEA) is the government entity that implements the sustainable energy agenda of the country by developing all forms of renewable energy, improving energy efficiency across all sectors, formulating conducive policies, energy information management, and ensuring necessary investments in the sustainable energy sector. The power sector of Sri Lanka is presently facing many challenges, especially in relation to the supply of uninterrupted electricity for the entire country at affordable prices, and the severe adverse effects on the economy due to heavy dependence on imported fossil fuels for thermal power generation. In order to arrest this situation, the Government has set the following targets;

- 70% grid electricity generation using New Renewable Energy sources by 2030 as an alternative to imported fossil fuel.
- 30% reduction in total energy use in 2020 through the implementation of energy efficiency improvement and conservation (EEL&C) measures by 2030.

## 2. Progress 2022

### 2.1 Current status of energy conservation in Sri Lanka and new measures introduced in 2022

#### 2.1.1 Industrial & Service Sector Programs -ISS

#### 2.1.1 Establishment of Energy Management Systems

The registered energy managers, auditors, and companies that are involved in energy management activities mainly in the industrial and commercial sectors have been given as follows.

- 237 Energy Managers
- 24 Accredited Energy Auditors
- 29 Energy Service Companies (ESCo)

The **development of a web portal for reporting and analysis of energy consumption data** is in progress with the assistance of the USAID Sri Lanka Energy Programme (SLEP). Appointing of Energy Management Officers and **Energy data collection** from government institutions is continued as a **regular activity**.

#### 2.1.2 Energy Audits, Consultancy Services & Facilitation of Measurements

SLSEA assists industries and commercial and state sector institutes to solve their energy-related issues by providing consulting services, answering queries, and conducting energy audits. Energy audits were conducted for Sri Lanka Rupavahini Corporation and the Kurunegala hospital. Energy Audits at the postal department and the Sri DaladaMaligawa, Kandy is in progress.

### 2.2 Household, Agro& SME Sector Programs -SME

#### 2.2.1 Energy Labelling Programme

Description	Progress
Minimum Energy Performance Standard for LED lamps	<ul style="list-style-type: none"> <li>• MEPS labelling scheme is in full operation</li> <li>• Media content on MEPS label developed</li> </ul>
Minimum Energy Performance Standard for LED Panels	<ul style="list-style-type: none"> <li>• Preparation of published the standard as SLS 1740:2022.</li> </ul>
Energy Labelling program for Water Pumps	<ul style="list-style-type: none"> <li>• Energy performance standards for water pumps was completed and the initial work related to the procurement of a pump test facility was completed.</li> </ul>
Energy Labelling program for Ceiling Fans	<ul style="list-style-type: none"> <li>• Test facility established at SLSI became fully functional and the labelling scheme is in full operation</li> </ul>
Energy Labelling program for Computers	<ul style="list-style-type: none"> <li>• Voluntary program is in operation.</li> </ul>
Energy Labelling program for refrigerators	<ul style="list-style-type: none"> <li>• Voluntary labelling program is in operation. Three Companies joined the voluntary program.</li> </ul>
Energy Labelling program for LED lamps	<ul style="list-style-type: none"> <li>• Mandatory MEPS label became operational.</li> </ul>
Room air-conditioners	<ul style="list-style-type: none"> <li>• A grant for the establishment of an air-conditioner test facility was approved by the Korean Government and the establishment of the test facility for testing the performance of room AC is in progress.</li> </ul>
Televisions, rice cookers and table/pedestal fans	<ul style="list-style-type: none"> <li>• Preparation of energy performance standards for these appliances is in progress and tests have been performed to determine the respective benchmarks for the appliances.</li> <li>• Preparation of standards for pedestal and wall fans is in was completed.</li> </ul>
Electric Motors	<ul style="list-style-type: none"> <li>• Revision of the draft standards for electric motors was completed.</li> </ul>

## 2.3 System & Planning Programs - SNP

### 2.3.1 Codes and Guidelines for Built Environment

Building Code has been published by SLSEA, and it is reviewed and updated at certain intervals to be on par with technology updates and enhanced compliance requirements. A New edition of the Building Code was completed. Training of Building Services Engineers and the staff of SLSEA on building simulation software.

### 2.4 Surveys & Research Programs - SNR

Surveys and research programmes for energy efficiency improvement & conservation in the year 2022 are described below.

- Several investigations on policy gaps, barriers, and obstacles to EEI & RE Programmes in all sectors are in progress.
- Procurement of Hiring a Consultancy

Service for the Survey on Chillers in Sri Lanka to prepare inventory, get the information of chiller population and quantify the overall saving potential of replacing with efficient units is in Progress. Evaluation of Technical Proposals completed.

- Survey on Analysis on Domestic Solar Rooftop Customer Behaviour-Preliminary Questionnaire is prepared and review in progress
- Pilot scale exchange program for old inefficient refrigerators with new efficient ones in the Western Province. –Meeting with vendors was held on 30/03/2022 to comments to develop a programme. Leaflet and guidelines are in the press.
- A program is being implemented to replace inefficient street lamps in the Nugegoda Supermarket LECO area.

## 2.5 Policy & Advocacy Programs - POA

### 2.5.1 Energy Information Management

Sri Lanka Energy Balance 2019 was published and work has been initiated to compile the Sri Lanka Energy Balances of 2020 and 2021.

## 2.6 Outreach & Promotion Programs (ONP)

- Production of a cartoon on wind energy for preschool children.
- Production and launch of a video presentation on energy-efficient cooking.
- Publication of the quarterly magazine Sanraksha in four volumes.
- Production and release of a video on tacit knowledge of Sustainable Energy
- Production and release of a video documentary on Solar Energy was released to lure school leavers to the solar industry
- Successfully conducted a webinar on wind energy on March 17, 2022.
- Inaugurated a Journalist Training Programme on Energy and Environment on June 07, 2022.

## 2.7 Resource Mobilisation Programs (RMD)

The World Bank and the Green Climate Fund initiated a line of credit worth USD108 million to improve the energy efficiency of commercial and industrial cooling facilities in both the public and private sectors. It is expected that the fund flow can begin in late 2022 to benefit the country. A Cabinet Memorandum for CESS was submitted in July 2022.

New renewable energy projects implemented in 2022

## 3.1 Renewable Energy Development Programs

### 3.1.1 Resource Development & Facilitation Programs -RDF

SLSEA undertakes the issuance of Energy Permits (EP) & Provisional Approvals (PA) for on-grid renewable energy projects. A summary of the project commissioned up to the end of July 2022 is given below:

Resource	PA issued (MW)	EP issued (MW)	Commissioned (MW)
Biomass	0	5	-
Mini Hydro	10	39.3	-
Solar Rooftop	0	0	181
Solar Ground Mounted	560	79.4	19
Wind	80	10	-
Solid Waste	10	2	-
<b>Total</b>	<b>660</b>	<b>135.7</b>	<b>200</b>

## 3.2 Technology development & Research Programs (RND)

### 3.2.1 Park development projects

#### 3.2.1.1 Siyambalanduwa 100 MW Solar Power Project

The target of calling a Request for Proposals (RFP) for the Siyambalanduwa 100 MW solar power project, was accomplished in August 2022. The proposals will be evaluated for selecting a suitable developer of the project with SLSEA participation.

- The construction of access roads is in progress.
- A tree re-plantation program is in progress in collaboration with the Department of Forest Conservation
- A weather station was established and

successful one-year data has been collected for effective design of the power station.

### 3.2.1.2 Pooneryn RE Park Project

The Environmental and Social Impact Assessment is on the way. The site will realize a 233MW wind power capacity and 150MW solar power capacity development. A wind power capacity of 100 MW has been selected for the first phase of the project.

### 3.2.1.3 Mannar Phase II Wind Power Project Completed Feasibility study, drone survey, Birds and Bats study and, environmental Study and, land acquisition is going on.

## 3.3. Resource Mapping Programs - RMP

### 3.3.1 Identifying Renewable Energy Resources

Renewable Energy Park Identification

- Veravil Wind Project 200 MW Initial steps have been taken up to develop a 200MW wind power plant at Veraval and EIA studies were initiated.
- Karachchi Wind Project 100 MW Pre-feasibility report has been completed and planned to initiate the EIA process
- Following solar and wind parks were identified and initial site visits were completed.
- Karachchi Solar Project 100 MW, Ponnalei Wind Power Project 100 MW, Manthai West Wind Power Project 100 MW, Hambantota Solar Power Project 100 MW
- Verifying the identified resources with relevant stakeholders
- Identified land ownerships and Land Used status for the potential lands with

Land Use Policy Planning Department

- Renewable Energy Development Master Action Plan (REDMAP) has been developed with the Ceylon Electricity Board (CEB) and RMA.
- Considering the Renewable Energy Resource Potential identified through the REDPLAN, REDMAP and the Projects received from the EoI process Renewable Energy Resource Potential Plan was developed for achieving 70% electricity generation using renewable energy by year 2030.

## 3.4 Renewable Energy Services Programs - RES

### 3.4.1 Soorya BalaSangramaya

total installed value up to now is 640 MW of solar rooftop systems. 468 Service Providers were registered with the SEA by March 2022. The created total employment opportunities in the industry was 8050 including 1250 Engineers, 3,200 technicians, and 3,600 non-technical officers by march 2022.

## 4. New renewable energy projects implemented in 2023

### 4.1 Resource Mapping Programs

Take necessary arrangements to fulfill the requirement of onsite measurements for proposed renewable energy parks in Veravil and Karachchi. Ponnalei wind power plant and Manthai west wind power plant. Initiate to revise the development of Renewable Energy Resource Development Plan for year 2024 – 2029.

### 4.2 Renewable Energy Services Programs

Construction of 135 MW Solar Power Plants in Sri Lanka – Indian Line of Credit, the Government of India has offered a credit line facility of USD 100 million through Indian

Exim Bank for strengthening the solar power development in Sri Lanka. The program is expected to be launched in 2022 with a time span of 3 years.

Construction of Hybrid Renewable Energy System in Small Islands in Jaffna, Sri Lanka. This project is to generate electricity in three islands of Jaffna namely Analaitivu, Delft and Nainativu in Sri Lanka with hybrid power plants based on Photovoltaic, Wind Power, Diesel Generator and Lithium-Ion Storage batteries.

The Government of India (GOI) shall provide grant assistance of up to USD 11 million

1 MW Floating Solar Projects in KiriibbanWewa and Chandrika Wewa funding sources by Ministry of Trade, Industry & Energy in Korea has agreed to provide grant funding of approximately KRW 14.3 Billion and KRW 6.83 Billion for the implementation of the above projects.

## **5.0 Energy Management and conservation implemented in 2023**

### **5.1 Industrial Services Sector (ISS) Programs**

#### **5.1.1 Establishment of Energy Management Systems**

Awareness programmes will be conducted for financial and retail organizations. Regulation schedules for energy benchmarking of tea sector will be drafted. A web portal for energy benchmarking will be launched. Energy data collection and analysis will be continued for tea, financial and retail sectors. Regulation will be drafted to restructure the Energy Auditor scheme.

#### **5.1.2 Energy Audits, Consultancy Services & Facilitation of Measurements**

New measuring instruments will be purchased for SLSEA instrument bank. Instrument calibration, instrument hiring will be continued as regular activities. Energy audits and consultancy services will be conducted for government institutions as per the requests received from those institutions.

### **5.2 Surveys and Research (SNR)**

Chiller Survey will be continued.

New Technology and Energy Chains

Efficient Refrigerator Replacement Programme will be continued.

## Chapter Five

### LTL Holdings (PVT) Ltd

#### 1. Introduction:

LTL Holdings (PVT) Ltd, formerly known as the “Lanka Transformers Limited” is a public private partnership between the Ceylon Electricity Board and two entities, the ownership of which rests with the employees of LTL Holdings (PVT) Ltd.

Currently, the LTL Holdings is the largest independent power producer in Sri Lanka, providing over 300MW of power to the national grid through its subsidiaries.

#### Dividend Income from Foreign Subsidiaries – 2022

The dividend income earned from foreign investments during the year under review, amounts to a sum of almost USD 4Mnas per the details tabulated below:

1. Asiatic Electrical & Switchgear (PTE) Ltd, India. (INR 7.5 Mn)- Estd.	- USD.90,000.00
2. Bright International Power PTE Ltd, Singapore	- USD. Nil
3. Lakdhanavi Bangla Power Ltd, Bangladesh (BDT 63.5 Mn)	- USD. 667,552.22
4. Feni Lanka Power Ltd, Bangladesh (BDT 305.33 Mn)	- USD.3,207,203.90
5. Raj Lanka Power Ltd, Bangladesh	- USD. Nil.....
<b>Total</b>	<u><u>USD.3,964,756.12</u></u>

#### 2. Challenges faced and strategies adopted to address such challenges during the period

a) The post Covid 19 Pandemic global recession worldwide had disturbed

the productions/trading etc., to a considerable extent due to various restrictions enforced by the Government/ Ministry of Finance on imports & opening up of LCs owing to the depleted foreign currency situation in the country.

b) Lakdhanavi, to whom the contract for the construction of 350MW Combined Cycle Power Plant awarded, is unable to accelerate the progress of works as expected due to the lender consortium led by ADB for a debt facility of USD 130M has suspended the the process of debt financing of the Project indefinitely as the rating of the country dropped below the acceptable margin. Our attempts to arrange for a Bridge Loan of USD 95M (until ADB Loan is granted) is yet to be finalized. The orders were placed for the required machinery& equipment with the suppliers overseas, having opened the LCs against advance payments. The Machinery & Equipment Suppliers have declined accept letters of credit opened through Sri Lankan Banks, instead are demanding that such letters of credit be confirmed by foreign banks. The suppliers are also now demanding 100% upfront payment to commence manufacture of Machinery & Equipment, which conversely, is not allowed under the Import Regulations of Sri Lanka, prior to shipping.

The EPC Costs of the project, such as for Power Generating Units, Electrical & Mechanical Balance of plants/equipment, Civil construction, erection, installation, heavy equipment transport, engineering and supervision services, testing & commissioning, have increased considerably. Unprecedented increases in freight charges, transportation of

machinery/equipment, heavy bank charges on confirmed LCs and VAT local project expenses too have skyrocketed the project to a dizzy height.

In this context, several communications were addressed to the CEB, Ministry of Power, Ministry of Finance, Central Bank of Sri Lanka including issuing Force Majeure Notices to the CEB, citing the reasons for the delay in progress.

Under the present predicament, the Sobadhanavi 350MW RLNG operable Combined Cycle Power is very critical for the Power Sector as the First Phase is required to be commissioned by May 2023 adding 220MW, which would be increased to 350MW by May 2024. If this Power Plant is not commissioned as planned, the country would undoubtedly plunge into severe power shortage with extended power cut hours, resulting in severe setbacks in the development progress of the country in the offing.

Lakdhanavi Limited, being the Project Sponsor, intends to carry out financial transactions the machinery/equipment cost of the Project through UPAS (Usance LC payable at sight) LC facilities in order to reduce the IDC for the Project. Due to the continuous downgrading of the Sri Lanka's credit ratings by International Credit Rating Agencies, the Local Banks in Sri Lanka had faced severe scarcity for foreign currencies from last quarter of 2021, creating a loss of trust & confidence in Sri Lankan Banks among the International LC confirming Banks.

As explained hereabove, in the absence of the Project Financing from the ADB consortium, we are in the process of negotiating with the Local Banks to obtain a LKR based Long Term Project Loan with a tenor of 10 years, through a consortium of 5 or more banks, in concurrence with the Central Bank of Sri Lanka,

The Company has introduced various controls over the outgoings, eliminating expenses over the non-essentials. The management & staff have also volunteered to ease the wage bill, by allowing a salary reduction of 15% to 25% to be reimbursed once the liquidity crisis encountered by the company returns to normalcy.

### **3. Progress of the Development of Projects and activities of the Institution during the period (January 2022 to August 2022)**

#### **3.1 Operations and Maintenance of Power Plants**

300MW Combined Cycle Yugadhanavi Power Plant at Kerawalapitiya

Annual Energy sale for the year 2022 upto 31st August, is 711.456 GWh and achieved availability is 88.35 %. The annual availability target for the year 2023 has been based at 70%.

A major inspection of the Gas Turbine No 01 & 02 has been scheduled on a staggered-outperiod from December 2022 to September 2023, especially on Combustion and Hot Gas Path and may sometime vary depending on the plant operation.

#### **3.2 Raj Lanka Power Plant, Natore, Bangladesh (RLPP)**

Annual Energy sale of RLPP for the year 2022 upto August is 193.325 GWh and achieved availability is 95.36%. The annual availability target for the year 2023 has been based at above 95%.

#### **3.3 Lakdhanavi Bangla Power Plant, Comilla, Bangladesh (LBPP)**

Annual Energy sale of Lakdhanavi Bangla Power Plant for the year 2022 upto 31st August is 193.501 GWh and achieved availability is



87.83%. The annual availability target for the year 2023 has been based at above 90%.

### **3.4 Feni Lanka Power Plant, Feni, Bangladesh**

Annual Energy sale for the year 2022 up to 31 August is 286.564 GWh and achieved availability 91.39%. The annual availability target for the year 2023 has been based at above 92.00%.

### **3.5 Pawandhanavi Wind Power Plant, Norochholai**

Annual Energy sale for the year 2022 up to 31st August is 15.54 GWh and achieved Plant Factor is 26.4%. The annual availability target for the year 2023 has been based at 90%. This plant was subject to the periodical maintenance service, during the year under review.

### **3.6 BelihulOya Mini hydro Power Plant**

Annual Energy sale for the year 2022 up to August is 6.3 GWh and achieved Plant Factor is 46.80 %. The annual availability target for the year 2023 has been based at 95.00%. The damage caused to the penstock and Penstock Trail of the plant due to torrential rains/floods had been satisfactory repaired and the operations resumed at its full capacity.

### **3.7 Assupini Ella Mini hydro Power Plant**

Annual Energy sale for the year 2022 up to August is 8.21 GWh and achieved Plant Factor is 34.85%. The annual availability target for the year 2023 has been based at 95%.

### **3.8 10MW Makarigad Hydro Power (PVT) Ltd, Nepal**

The required land for the construction of

Power plant has been acquired from private owners and Government. 92% of the overall progress of the Project has been completed, including the Transmission lines. The final date of commissioning of this Power Plant has been scheduled for 15th December 2022. The Project carry a generating capacity of 10MW and will be able to produce saleable energy of 74 GWh annually. The shareholding structure of LTL Energy (PVT) Ltd, a fully owned subsidiary of LTL Holdings (PVT) Ltd:

### **3.9 350MW LNG Operable Combined Cycle Sobadhanavi Power Plant at Kerawalapitiya**

open cycle of the plant was scheduled to start on 15th April 2023, the date was postponed to 15th November 2023 due to various restrictions enforced by the Government owing to depleted foreign exchange reserves followed by the aftermath of Covid 19 Pandemic situation in the country. All statutory approvals required for Project execution have been obtained and the preliminary constructions works commenced in parallel. The final approval of the BOI has been obtained on 06th September 2022. Application for generation licence has been submitted to the PUCSL.

The engineering activities related to Open Cycle have been accelerated and 90% of works completed ahead of schedule. The GT has already been shipped on 05/09/2022.

### **3.10 100MW Solar Power Project in Bangladesh**

Negotiations are being carried out with several technically qualified Operating Members, who are interested in investing in the Project to explore the possibility of a joint venture partnership to undertake the project.

### **3.11 Manufacturing and Marketing of Transformers**

The production recorded for the Period 01/01/2022 to 31/08/2022 are as follows:

		2022 Jan- Augt	2021 Jan- Augt.	2021 Jan- Decr.
a)	No. of Transformers supplied to CEB/LECO	760	1,444 Nos.	2,162 Nos.
b)	No. of Transformers supplied Other Local customers	125	214 Nos.	175 Nos.
c)	No. of Transformers exported to other countries	-	801 Nos.	1,511 Nos.
<b>Total Production</b>		<b>885</b>	<b>2,459 Nos.</b>	<b>3,848 Nos.</b>

### 3.12 Galvanizing & Fabrication Plants at Sapugaskande

#### Production Details – Galvanizing Plant

PERIOD	2022 (Jan – -Augt.)	2021 (Jan – Augt)	Variance
<b>Production</b>	In M/ Tonnes	In M/ Tonnes	In M/Tonnes
<b>CEB</b>	601	1,096	495
<b>Inter Companies</b>	2,270	2,706	436
<b>Private Organizations</b>	3,395	4,709	1,314
<b>TOTAL</b>	<b>6,266</b>	<b>8,511</b>	<b>2,245</b>

The production for the current year fell short of the corresponding period of the previous year by 2,245 M/Tonnes due to infra structural development works of the CEB and Private Organization have decreased considerably owing of lack of raw materials

coupled with exorbitant prices.

### 3.13 ASIATICELECTRICAL & SWITCHGEAR PVT. LTD, NEW DELHI, INDIA

#### Asiatic Electrical & Switchgear (PVT) Ltd, India

LTL Holdings (PVT) Ltd has successfully acquired 99.06% of the stake of Asiatic Electrical & Switchgear (PVT) Ltd, a well reputed Indian Company in early 2017, which manufactures and supplies Electrical Switchgear and related power sector equipment after having made successful negotiations. This facility was much needed for company to strengthen and enhance its power sector engineering works globally. Asiatic has made steady progress during the period under review. For the Financial year 2021/22, the recorded turnover was INR 632.8 million. During current financial year, company has already recorded INR 365.5 million till August 2022 and this trend is continued successfully.

#### 4. Financial Position of the Institution

##### Performance of LTL Holdings Group of Companies during the Financial Year including Financial Highlights during January to August 2022

Tabulated below is a summary of the Financial Performance on major operations in comparison to the previous years are shown below:-

Despite the economic crisis in the country, the gross profit generated during the period January to August 2022 recorded an increase of 57% over the corresponding period same date last year.

PERIOD	01 Jan '22 to 31 Aug '22	01 Jan '21 to 31 Aug.21	F/Year April'21 to 31 March' 22	F/Year April'20 to 31 March' 21
<b>TURN OVER</b>	<b>(Rs. Million)</b>	<b>(Rs. Million)</b>	<b>(Rs. Million)</b>	<b>(Rs. Million)</b>
Manufacturing & Misc. Services	8,868	7,070.	11,312	10,091
Power Generations	31,952	16,810.	28,817	10,875
<b>TOTAL</b>	<b>40,820</b>	<b>23,880.</b>	<b>40,129</b>	<b>20,965</b>
<b>GROSS PROFIT</b>				
Manufacturing & Misc. Services	3,104	2,536.	4,057	4,686
Power Generations	5,751	3,082.	5,284	5,221
<b>TOTAL</b>	<b>8,855</b>	<b>5,618.</b>	<b>9,341</b>	<b>9,907</b>

## 5. Programmes & Projects for 2023

### Development of following Power Plant Projects

- (i) 350MW LNG -I Combined Cycle Sobadhanavi Power Plant at Kerawalapitiya
- (ii) 350MW LNG – II Combined Cycle Sobadhanavi Power Plant at Kerawalapitiya
- (iii) Restructuring of the Ownership of LTL Holdings (PVT) Ltd & Lakdhanavi Ltd, by issuing New Shares  
Restructuring of Shareholdings of Lakdhanavi Ltd  
Restructuring of Shareholdings of LTL Holdings (Pvt) Ltd
- (iv) Expansion of Manufacturing in Africa  
In order to extend its manufacturing arm to international heights, LTLT proposes a brand-new transformer

manufacturing facility in African region which can cater to the rising transformer demand in the region.

- (v) Renewable Energy – Proposed Power Plan Projects in 2023

- a) 100MW Solar Power Plant Project in Bangladesh

Lakdhanavi has identified an opportunity of a 100MW Solar Plant at Munshiganj District in Bangladesh with feasible land and interconnection facility.

- b) 100MW Solar Power Plant Project in Cambodia

Extensive feasibility studies were carried out and proposals were made for the development of 100MW Solar Power Plant Project in Cambodia. Suitable land areas were identified, and negotiations are underway to explore the possibility of acquiring the sites.

## Chapter Six

### Lanka Coal Company (Pvt) Ltd

#### INTRODUCTION

Lanka Coal Company (Pvt.) Ltd (LCC), is a fully government owned business undertaking. The Company was incorporated solely for the purpose of import and supply of coal to the Lakvijaya Power Plant (LVPP) at Norochcholai, Which operates under Ceylon Electricity Board (CEB). Our Shareholders consist of following;

- Ceylon Electricity - 60%
- Treasury Department - 20%
- Ceylon Shipping Corporation - 10%
- Sri Lanka Ports Authority - 10%

LCC procuring 2.25 million tons of coal for the Norochcholai power plant for a season as an annual requirement of CEB. Due to the southwest monsoon season on the west coast, coal supply is limited to seven months from the month of September to the month of April next year. However, the power plant is operating throughout the year for continuous supply of coal to the national grid. Therefore, Coal storage to use in off-season is must.

Due to the nature of procurement and operation of the coal supply has always been spread over two calendar years. Accordingly, the procurement and action plan has derived and projected to meet the coal requirement. However, the both of the

schedules are highly depend on the annual coal requirement, which is informed by the Power Plant Manager in June or July of each year.

Lanka Coal Company is also responsible for coal unloading / barge operation and coal insurance. Based on the cabinet decision, the coal unloading / barge operation is handling by CSC for the two seasons 2021-2022 and 2022-23.

In addition, for coal inspection, there is a triparty agreement among Lanka Coal Company, Ceylon electricity Board and the Service Provider. The service provider will be selected by the International Competitive bidding process.

#### PERFORMANCE OF LCC 2021

We were able to secure 100% of LVPP's coal requirements until the start of the next coal season on September 20, 2022, despite the difficult effort of managing supplies due to the country's current financial and economic challenges.

- a. Progress of Coal Payment for previous coal Season 2021-22

The total balance payment scheduled for the previous supply season 2021-2022 is as follows.

**Table No. 2 - Payment Summary Season 2021-22**

Supplier	Total Payment Overdue and defaulted (USD million)	Total Payment Settled (USD million)	Total Balance to settle (USD million)
Swiss Singapore	50,889,871.47	38,866,090.90	12,023,780.57
Suek AG	40,398,218.66	28,584,450.92	11,813,767.74
			<b>23,837,548.31</b>

Supplier Total Payment Overdue and defaulted (USD million) Total Payment Settled (USD million) Total Balance to settle (USD million)

## PROGRAMS FOR SEASON 2022- 2023

### A. Coal Supply 2022-2023

The CEB coal requirement of 2.42 MMT  $\pm 10\%$  for the season 2022-23 will be supplied by 40 shipments. The Term Tender LCC/21/TT/1 will be provided 19 shipments and two balance shipments will be provided from Spot Tender 28/5. The Spot Tender LCC/22- 23/ST/29/1 will invite 5 shipments to supply 300,000 MT and the rest of the 14 shipments will be supplied by either Spot Tenders or a Term Tender.

**Coal supply Schedule for Season 2022-23**

Procurement Method	Quantity MT $\pm 10\%$	No of Shipments
Spot Tender 5, LCC/21-22/ST/28/5	120,000	02
The Term Tender, LCC/21/TT/1	1,140,000	19
Spot Tender – LCC/22-23/ST/29/1	300,000	05
Spot Tenders or Term Tender	840,000	14
Lakvijaya Power Plant requested quantity for 2022-23	2,420,000	40

### A. Coal Transportation Up to the LVPP Jetty (freight + Lightering + Insurance)

#### I. Freight from the port of Loading to the Puttalam Anchorage

LCC will be called Coal Term Tender and the spot tenders on CFR basis to procure the quantity required by Ceylon Electricity Board from Mid May 2022.

### II. Lightering / barge operation from mother vessel to barges and to the Jetty CEB

Lightering and barge operation is awarded to Ceylon Shipping cooperation to two seasons 2021/2 and 2022/23. Further, they have called a tender and selected a sub-contractor Shrijee Shipping India. The contract will be over end of the coal season 2022/23.

However, LCC is planning to do a tender to select a suitable barge service provider for the next season 2023/24 by calling a fresh international competitive bidding.

### III. Marine Insurance for Coal Transportation

The insurance coverage for the cargo will be done locally by calling a tender from the companies who are listed under the Insurance Regulatory Commission of Sri Lanka (IRCSL). Peoples' Insurance PLC was awarded the insurance contract for two seasons 2021/22 and 2022/23. Accordingly, the contract will end at the end of the season 2022/23.

LCC will call a fresh tender for the next season be for starting the next coal season 2023/24.

### IV. The Independent Testing Agency for coal supply

For Draft Surveying, Sampling and Analysis of coal at the discharging Port will be done by an independent coal inspection agency who have the fully accreditation. This is a try party agreement in between LCC, CEB and Selected coal inspector. The coal inspection has awarded to COTECNA Inspection India for the three season from 2019/20, 2020/21 and 2021/2022.

## B. Coal Payment Mechanism for Season 2022-2023

A particular method of payment has not been finalized for the season 2022- 2023. The summary of the fund requirement as is follows;

### Summary of fund requirement for season 2022-2023

Tender	No of shipments	Fund Requirement	
		USD (million)	LKR (billion)
Term Tender LCC/21/TT/1	19	370	136.00
Term Tender LCC/22/TT/1- with Six Month Credit	19	406	148.00
Spot Tender- LCC/22-23/ ST/28/5	2	54.00	20.00
<b>Total Fund Requirement</b>	<b>40</b>	<b>830.00</b>	<b>304.00</b>

## Chapter Seven

# Sri Lanka Atomic Energy Board

### 1. Objective of the Institute:

Promote, encourage peaceful applications of nuclear technology and utilize its benefits for socio-economic development of the country while ensuring safety, security and quality and

Provide radiation protection services to facilitate protection of workers, general public and environment from exposure to unwarranted ionizing radiation.

### 2. Physical Performance:

#### 2.1 Radiation Protection and Technical Services Division

The main objective of this division includes providing a quality service according to internationally accepted safety standards to ensure the protection of general public, environment and radiation workers. Services are being provided by this division to ensure the radiation safety and security of nuclear applications of the Country in order to fulfil monitoring and technical requirements.

The number of services carried out during the year 2022 was 28. During the year 2022, calibration services were provided for 46 radiation monitoring equipment. In addition, the personal monitoring services were provided to protect more than 2,560 workers.

Division has generated an income of Rs. 18.05 Mn. during the year 2022. Also, the division has provided free-of-charge services of around Rs. 1.50 Mn. during the year.

#### 2.2 Sri Lanka Gamma Centre

Sri Lanka Gamma Centre (SLGC) provides

irradiation services mainly for sterilization of surgical gloves required for all the Government hospitals in Sri Lanka.

Sterilization of surgical gloves locally at the SLGC has saved a significant amount of foreign exchange to the country as the Government has stopped importation of sterilized surgical gloves to the health sector. From January to August 2022, 2530 cubic meters of products were irradiated at the SLGC and earned nearly Rs. 38 million while saving foreign exchange considerably.

#### 2.3 National Centre for Non-Destructive Testing

The main objective of the National Centre for Non - Destructive Testing (NDT) is to maintain the minimum level of damage to products and constructions made by metal and non-metal and thereby improve the quality of such products and constructions in the country by using Non-Destructive Testing and other related technologies.

115 NDT inspection services were provided with a view of sustained reduction of defects in products, civil constructions, etc and hence reduction in emergency shutdowns in industrial components / assemblies / power plants etc.

**The total generated income from NCNDT up to 31.08.2022 is Rs. 25 Mn.**

#### 2.4 Life Science Division-LSD

For the safety of consumers, the Life Science Division aims to provide an efficient and effective nuclear analysis service for regulatory purposes, through standardized laboratories in accordance with international

standards, with a special focus on testing for contamination of imported milk powder due to radioactivity.

2249 samples of imported milk powder and 99 samples of exported tea and other products 20 samples of reference and proficiency testing samples were tested for radioactivity measurements using Gamma spectrometry. 132 samples were tested for detailed radio activity measurements in the same laboratory.

130 of various sample matrices of soil, mineral archaeological samples, gems, alloy etc., were analysed for multi elemental composition using X-Ray Fluorescence spectrometry, and 250 service and R & D samples for stable isotopes were analysed using Isotope Ratio Mass Spectrometry technique during the year 2022.

Approximately Rs. 38.4 million of income was generated by analysing and report issuing for a total number of 2786 samples by the LDS laboratories up to 31-08-2022.

## 2.5 Industrial Applications Division-IAD

From January to August 2022, Isotope Hydrology program mainly focused on groundwater assessments in Colombo-Negombo coastal aquifer system to see the vulnerability to pollution of groundwater due to industrialization and urbanization. Also potential of the groundwater sources for future developments in Hambantota area is assessed. Furthermore, collection of baseline data to verify the origin of water sources in bottled water industry is being implemented. Under the Isotope Ecology programme, a variety of green chilli was planted in a greenhouse as a trial study to check the impact of controlled environment on the plant growth. This aim of the research is to find the optimum water requirement for agricultural crops.

Under the School Education Programme, Tamil translation of the SMART book; a web-based education module for secondary schools was completed. In addition to that a few school seminars on nuclear science and technology were conducted during the period from January to August 2022.

## 3. Financial Position of the Institution (up to 31.08.2022)

Division	Capital Grant	Recurrent Grant	Generated Income	Recurrent Expenses
LSD, IAD & RPTSD			57	110
SLGC	50	48	43	25.7
NCNDT			25	33.5
<b>Total</b>			125	169.2

## 4. Programmes planned to be implemented in the year 2023

### 4.1 Electricity Generation Sector:

Project on Nuclear Power Study and Planning for Electricity Generation in Sri Lanka.

- A policy decision has been taken to consider nuclear power as an option to meet the future energy demand of Sri Lanka and the Atomic Energy Authority (predecessor institution of Sri Lanka Atomic Energy Board-SLAEB) has been authorized to proceed with pre-feasibility study with technical assistance of IAEA.
- Accordingly, a Steering Committee and Nine (09) Working Groups have been appointed to study and report on key aspects on "Electricity Generation using Nuclear Power".

### 4.2 Health Sector:

Project on Establishment of Cyclotron Based



#### Radiopharmaceutical Production Facility in Sri Lanka:

Activities were commenced by the Atomic Energy Board of Sri Lanka to install a cyclotron device which is used in manufacturing of radioactive drugs in Sri Lanka.

The project will be installed at the hospital premises belonged to the Kotelawala Defense University located in Werahera as a joint venture between the Atomic Energy Board of Sri Lanka (SLAEB) and the Kotelawala Defense University (KDU). Cabinet approval has been obtained for this.

#### 4.3 Food and Agriculture Sector:

##### Pilot Project on Geochemical Approach for Verification of the Origin of 'Ceylon Tea'

- Atomic Energy Board of Sri Lanka, the Tea Board of Sri Lanka and the Tea Research Institute have signed a tripartite agreement for a pilot project on the Geochemical Approach to confirm the origin of tea.

Project on Establishment of a Multipurpose EB/X Ray Facility in Sri Lanka.

- At the moment 90% of the feasibility has been completed and concept has been accepted to present in the International Meeting on Radiation Processing Symposium in November 2022 in Thailand.

## Chapter Eight

# Sri Lanka Atomic Energy Regulatory Council

### 1. Introduction

#### 1.1 Establishment of Sri Lanka Atomic Energy Regulatory Council

Sri Lanka Atomic Energy Regulatory Council (Council) was established on the 1st of January 2015 under the Sri Lanka Atomic Energy Act No. 40 of 2014. Council presently functions under the State Ministry of Power and Energy. As per the provisions of the Act, the Sri Lanka Atomic Energy Regulatory Council is mandated for;

- (a) Regulation of practices and sources involving ionizing radiation by implementing licensing, inspection and import & export control programmes for protection of public, radiation workers, patients and the environment
- (b) Ensuring the safety & security of radiation sources
- (c) Taking enforcement actions for violation of provisions of the Act and licensing conditions

- (d) Taking actions to fulfil the obligations of Sri Lanka on agreements signed by Sri Lanka on safety, security and safeguards related to nuclear applications

#### 1.2 Objectives of the Council

The main objectives of the Council are;

- (a) Protection of persons and the environment against risks associated with exposure to ionizing radiation and for the safety and security of the sources and facilities
- (b) Ensuring the physical protection of radiation sources, nuclear materials and other radioactive material and ensuring the security of facilities that use such material
- (c) Ensuring compliance with international standards and obligations in the field of nuclear energy, in accordance with international agreements that Sri Lanka has entered into

### 2. Progress achieved from 1st January to 31st August, 2022

#### 2.1. Regulatory activities

No	Activity	Target for 2022	Target till 31st August	Progress till 31st August	Progress Percentage
01	Issuing licences including processing of applications	190	25	49	196%
	Receiving licence applications were increased after subsiding of Covid pandemic situation in the country. Renewal licences will be mainly issued from October to December each year and annual target can be achieved				
	Issuance of extension to the interim license issued	450	450	258	----
	Interim licences are issued when a licence cannot be issued in the respective year due to non-payment of licence fee. Most of the licence fee have been paid before 31st December of the respective year (2021).				

02.	Issuing regulatory certificates for food samples tested for radioactive contamination	900	600	597	99.5%
	Issuing certificates are depending on number of samples tested which also depend on the number of imports of milk food consignments				
03.	Regulatory Inspection of radiation facilities	230	170	137	80.6%
	Planned inspections were postponed due to fuel crisis prevailed in the country and only priority inspections were conducted in Hospitals. Rest of inspections are planned in Quarter 04, 2022 & 2023				
04.	Import / export approvals for radioactive materials and irradiating apparatus	520	350	423	120%
	Request for Import/ Export approvals were increased in January-February				
05	Approval of plans of irradiation facilities	100	61	66	103 %
06	Conducting National Training Course on subject specific areas on Radiation Protection in accordance with established training manual (for operators of the machines and Radiation Protection Officers)	Preparation of 5 training manuals and obtaining approvals from the Board  Training of 125 persons (Radiation Protection Officers and Operators)	Preparation of 5 training manuals and obtaining approvals from the Board  Training of 100 persons	5 training manuals were prepared and approval were obtained from the Board	100%  72%
	One training course was postponed due to travel restriction and planned in September. The 5th training will be scheduled in October				
07	Conducting training course for stakeholders identified in the national nuclear or radiological emergency management plan and training of emergency response group of the council	Conducting the training course for 30 stakeholders and training for 4 emergency response teams of the Council	Conducting the training course for 30 stakeholders  Training for 4 emergency response teams of the Council	Stakeholder training could not be done  Training for emergency group of the Council was completed.	-  100%
	Stakeholder training were postponed due to non-availability of the IAEA experts due to travel restrictions. Planning to conduct training in 04th Quarter for 30 participants				
08.	Approvals for transport of high activity radioactive material on request and Supervision of transport of high activity radioactive sources	Supervision of 3 Transport of high activity sources	Supervision of 01 transport	01 transport was supervised from Colombo port to Biyagama Export Processing Zone	100%

09.	Finalization of Regulations on Ionizing Radiation Protection and Safety of Radiation Sources incorporating amendments recommended by the IAEA	Finalization of the Ionizing Radiation Protection and Safety of Radiation Sources incorporating amendments recommended by the IAEA and obtaining approval of the Board	Finalization of the Ionizing Radiation Protection and Safety of Radiation Sources incorporating radioactive discharge levels	Radioactive discharge levels are prepared to meet Sri Lanka situation using IAEA guidance levels	75%
10	Radioactive Waste Management Policy	Finalization of the draft and Board approval. Submission to the Ministry for distribution to stakeholders for views	Finalization of the draft and Board approval.	Final draft was prepared and board approval was obtained	75%
	To be submitted to the Ministry for distribution to stakeholders for views				
11	Establishment of management system to comply with Government regulations and their implementation	(i)Preparation and implementation of Citizen Client Charter for the Council  (ii) Preparation and implementation of Human resource development plan for the Council  (iii) Preparation and implementation of plan for achieving sustainable development goals for the Council, and their implementation	(i)Preparation and implementation of Citizen Client Charter for the Council  (ii) Preparation and implementation of Human resource development plan for the Council  (iii) Preparation and implementation of plan for achieving sustainable development goals for the Council,	Prepared all 3 documents and reviewed by the DG with teams appointed for drafting and approval of the Board was obtained for implementation	75%
12.	Maintenance of the national seal source registry	Entering of data and keep update the registry	Entering of data and keep update the registry	Information available updated	100%
13.	Maintenance of a registry of sources in the Regulatory Authority Information System (RAIS)	Keep updating authority information to the RAIS	Keep updating Authority information to the RAIS	Information available updated	100%
14.	Training of newly recruited Scientific Officers on licencing of facilities and conducting safety and security inspections	On the job training	On the job training	New Scientific Officers are being given on the job training under the supervision of 4 Deputy Directors.	100%
15.	Publication of information of licenced facilities in the WEB	Keep updating the licence users	Keep updating the licence users	Information available updated	100%

## 2.2. Ongoing bi-lateral programme

- (a) The Council is engaged with the Global Material Security (GMS) programme of the Department of Energy of the United States of America (USDOE) to provide security for high activity radioactive sources used in the country and with the technical assistance of the GMS Programme, the Council is coordinating with stakeholders for installation and implementation of physical security systems at facilities which use high radioactivity sources in order to ensure security of these sources. The USDOE in August, 2022 approved a maintenance contract for maintenance of physical security systems at 12 facilities where high activity radioactive sources are used and connection of all security system at 12 high activity radioactive source sites to Central Monitoring Station located at STF training college, Katukurunda.
- (b) The Council is participating International Atomic Energy Agency Technical Cooperation project "Strengthening of preparedness and response to nuclear or radiological emergencies. Under this project the Council has taken steps to train scientific staff, obtaining necessary instruments for emergency response and preparedness and expert missions to prepare necessary emergency preparedness and response documents.

## 3. Financial position

<b>Recurrent</b>	
Government contribution for 2022	Rs. 49,000,000.00
Expected Income for 2022	Rs. 19,140,000.00
Opening balance as at 1-1-2022	Rs. 12,197,000.00
<b>Total Budget</b>	<b>Rs. 80,197,000.00</b>
<b>Income and expenditure (Based on information as at 31-08-2022)</b>	
Income as at 31-08-2022	Rs. 21,688,000.00
Opening balance	Rs. 12,197,000.00
<b>Total income</b>	<b>Rs. 33,885,000.00</b>
<b>Expenditure as at 31-08-2022</b>	
Government contribution	Rs. 12,857,000.00
Borne from the income	Rs. 27,662,000.00
<b>Total expenditure</b>	<b>Rs. 40,519,000.00</b>
<b>Capital</b>	
Revised Capital allocation	Rs. 6,370,000.00
Expenditure as at 31-08-2022	Rs. 1,022,000.00
<b>Balance as at 31-08-2022</b>	<b>Rs. 5,348,000.00</b>

## 4. Key programmes for 2023

### 4.1. Regulatory activities

Programme	Activities to be performed for 2023
1. Preparation of regulations, rules, policies & procedures	1.1. Obtaining approval of the Legal Draftsman Department for the draft Regulations on Ionizing Radiation Protection and Safety of Radiation Sources and translation to Sinhala and Tamil languages and publication in the Government Gazette. 1.2. Publication of Regulations on Security of Radioactive Sources in the Government gazette and submit to the Parliament for its approval. 1.3. Obtain approvals for Rule on the criteria for the qualifications of radiation workers from the Legal Draftsman Department and translation in to Sinhala and Tamil. 1.4. Implementation of inspection procedure by Authorized Inspectors 1.5. Submission of draft National policy for radioactive waste management to the Ministry for obtaining the approval of Cabinet of Ministers.
2. Licencing & inspections of radiation sources and irradiation facilities	2.1. No. of licences planned to be issued (new & renewal) - 400 2.2. No. of extensions for interim licences - 70 2.3. No. of inspections planned to be conducted - 220
3. National training course on radiation protection	3.1. Conducting national training courses for operators and radiation protection officers of the licenced facilities in medical and industrial fields - 40 Radiation Protection Officers and 80 operators of the machines 3.2. Conducting trainings for response teams & committees appointed as per the requirements of National Nuclear or Radiological Emergency Management Plan
4. Granting approvals & issuing certificates	4.1. Granting approvals of import/export of radioactive materials & irradiating apparatus. No. of approvals estimated to be given - 480 4.2. Issuing certificates for food testing No. of certificates estimated to be issued - 800 4.3. Granting approvals for the irradiation facility plans. No. of approvals estimated to be given - 80
5. Online licencing & approval system	Establishment of online licencing & approval System and use it for licencing of 30 selected facilities and import and export approvals.
6. Maintenance of database & Source registry	6.1. Maintenance of database of licencees, inspections and other relevant information. 6.2. Maintenance of National Registry of Radiation Sources
7. Publication of information of licenced facilities in the WEB	Up to date information of all licenced facilities in the Council's WEB for public information to identify suitable places for obtaining services.
8. Approval and supervision of transport of high activity radioactive materials	Granting approvals for transport of high activity radioactive materials on request & supervision of transportations

### 4.2. Implementation of IAEA TC Project activities

submitted to the IAEA for 2022-2023 project cycle.

Technical corporation Project SRL9013 "Strengthening of preparedness and response to nuclear or radiological emergencies" were

## Chapter Nine

### Sri Lanka Energies (Pvt) Ltd

#### Introduction

Sri Lanka Energies (Pvt) Ltd is a company incorporated in 1st quarter 2011 and operates as a 100% owned subsidiary of Ceylon Electricity Board.

SLE is with a vision of **Development of Renewable Energy**, among the other objectives of **Associated Transmission Asset Development, Manpower Resource Provision and Procurement**.

Performance 2022 and Programs for 2023

#### A. Kumbalgamuwa Mini Hydro Power Plant

Using the leakage water more than 20 years from Samanalawewa Reservoir Sri Lanka Energies (Pvt) Ltd has constructed **Kumbalgamuwa Mini Hydro Power Plant**.

The Commissioning of 1.2MW Francis Turbine in Kumbalgamuwa Mini Hydro Power Plant was completed on 2016 February 19 and connected to the national grid.

Plant Summary (upto Sep 2022)		
Installed Capacity	1.3	MW
Cumulative Energy Generated	39.12	GWH
Cum Income	693.27	mn LKR
Capital Investment by CEB	115	mn LKR
Period of operation	6.6(6Yrs and 7Months)	Yrs

#### B. Managing the Manpower Required by CEB

The Company provides the services of 126 skill and unskilled human services to CEB as requested by the mother company.

At the beginning the company handled nearly 3000 number of manpower services to CEB.

#### C. Meter Enclosure Manufacturing Plant.

The construction of the Plastic Single Phase Meter enclosure Manufacturing factory was started on 05th of September 2016 in order to fulfill the requirement of Plastic Meter Enclosures of Ceylon Electricity Board and Lanka Electricity Company (Pvt) Ltd.

Completing the construction and machine installation, the factory was declared opened on 05th of September 2017. An annual requirement of 250,000 meter enclosures will be manufactured and supplied to the Ceylon Electricity Board and Lanka Electricity Company (Pvt) Ltd by this factory.

The factory is running its capacity to fulfill the entire Meter Enclosure requirement of CEB and LECO by now.

#### D. Development of Daduruoya Mini Hydro Power Plant

Successfully commissioned the 1.3MW power plant in January 2021 at the irrigation release of Daduruoya reservoir at Katuwannawa Area. The Generator with Kaplan Turbine is expected to deliver an annual energy, worth Rs. 80mn LKR.

Plant Summary (upto Sep 2022)		
Installed Capacity	1.3	MW
Cumulative Energy Generated	9.35	GWH
Cum Income	163.05	mn LKR
Period of operation	1.6(1Yr and 7Months)	Yrs

### E. Upper Samanalawewa Mini Hydro Power Plant

According to the study done by SLE there is a water head from the point of leakage to the existing Kumbalgamuwa weir at 28m height. a 600kw plant with 4.8GWh annual energy plant can be constructed from this water head.

This energy is wasted for more than 21 years without utilizing any productive use.

SLE did a detailed feasibility study in constructing a power plant as stated above without doing any disturbance to the existing leakage point or the surrounding area with Civil Engineering experts.

Project Summary		
Plant Capacity	700	kW
Expected Energy per Year	4.8	GWH
Exp Annual Income	86	mn LKR
Annual Income in terms of Emergency Power ( Rs 35 / KWh )	171.84	mn LKR
Estimated project Cost	227	mn LKR

### F. Scrap Aluminum Recycling Project

The factory construction has been started and the procurement of machineries being done. in Sep 2023 the factory will be in operation. All Aluminum scrap Conductors (AAC) removed from CEB are going to be recycled in this factory in order to manufacture

Aluminum Rods which can be later used for manufacturing of Aerial Bundle Cables (ABC). The processed Aluminum Rods will be sent back to CEB at a negotiated price.

In the present context this recycling project offers a very high value to the environment and saves more than 4mn US \$ annually. Also as per the calculations done the output of this project serves one third of the annual Aluminum requirement of Ceylon Electricity Board.

At present collection of Scrap Aluminum from CEB depot has been started and stored temporarily at Galigamuwa Factory premises. The proposed manufacturing plant is under planning and proposed to develop it on land at Galgamuwa.

### G. Seethawaka Hydro Power Plant

Seethawaka hydro project is going to be constructed as two cascaded Mini Hydro Plants with the capacity of 7MW each. The expected annual energy is about 40GWH. Provisional approvals have been issued for two plants by SEA, Electro mechanical equipment have been tendered and it is expected to use Green Bonds as the capital investment. It is expected to commission both the plants before June 2024.



# Chapter One

## Energy Sector

### 1.1 Introduction

The Ministry of Power and Energy was established with the main objectives of identification, implementation, supervision, monitoring and evaluation of policies, programmes and projects relevant to the fields of power and energy, based on national policies being implemented by the Government, and providing services coming under the purview of the Ministry of Power and

Energy efficiently and in a people friendly manner. Accordingly, functions implemented under then Ministry of Energy are being implemented by the Energy Division of the Ministry of Power and Energy, and functions of the Ceylon Petroleum Corporation, the Ceylon Petroleum Storage Terminals Company and the Petroleum Development Authority are being implemented under the supervision of Energy Division.

### Vision

“To make Sri Lanka the Energy Hub of Asia”

### Mission

“Enhancing access to low cost energy to meet national needs by management of fuel importation and integration of local new energy sources into the energy mix and ensuring an environmentally friendly sustainable energy supply by regulation of energy related policy enforcement through appropriate laws and regulations”

## Objectives

- Ensure the quality and reliability throughout the fuel supply chain.
- Promote efficient and effective use of petroleum products.
- Ensure more efficient, effective and safe storage and distribution of fuel throughout the country.
- Be a leading contributor for making Sri Lanka a carbon neutral country by 2050.
- Upgrade quality of Diesel and Gasoline to EURO VI standards by 2023
- Be a partner in the energy self-sufficiency of Sri Lanka by optimizing production of domestic oil and natural gas by 2030.
- Implementation of the National Policy on Natural Gas.
- Meet petroleum product demand of the country through our own processing by 2026.

### 1.2 Challenges faced during the year 2022

The country has faced a large number of economic challenges due to the high public debt, collapse of the foreign exchange reserves and severe inflationary conditions currently prevailing in the country. Similarly, it is the shortage of foreign exchange that has been the main factor for issues such as the escalation of prices of food, fuel and other goods and increased import costs. Further, this situation has intensified due to political and economic instability, delay in entering into an agreement with the International Monetary Fund, restructuring of debts and falling down to a low level in international credit ratings and issues in obtaining fuel. This problem reached its peak stage during the year 2022, and due to its impact the economic development took a negative turn and the economy contracted.

The energy sector too was directly subjected to the undermentioned challenges, and the economy of the country became further aggravated.

- Increase of fuel price in the world market and the severe depreciation of the rupee were seen since the beginning of the year 2022, making the Ceylon Petroleum Corporation to bear a huge cost for the import of fuel
- Concurrent to the foreign exchange crisis that took place due to limitations to the flow of foreign exchange into the country, there had been difficulties in finding international suppliers to supply fuel, due to reasons such as Sri Lanka being ranked on a low level in credit ratings, and the non-settlement of the debtors who had so far supplied fuel on a long-term credit basis. Also, even the handful of suppliers submitting tenders with a pre-payment condition in lieu of the credit relief period generally given.

- Inability to obtain foreign exchange required for the import of fuel in the face of the severe foreign exchange crisis faced by the country.
- The high cost had to be incurred for the import of fuel due to price increase of fuel worldwide, and the Corporation had to bear a huge loss during the first half of the year since it was unable to decide a cost reflective selling price which covers the cost.
- It was difficult for the Ceylon Petroleum Corporation to find the necessary working capital to import of fuel and to implement other energy development projects.
- It was a challenging task also to ensure a continuous fuel supply due to the bad economic condition.
- The environment emerged where it became impossible to provide equal opportunities to all when distributing of the limited quantity of fuel owned by the Corporation due to the fuel shortage that prevailed in the country, and the task of distributing the limited stocks of fuel being imported among the public following a justifiable methodology became a challenging task due to being in the clutches of social segments and various groups and the creation of lengthy queues island wide.

### 1.3 Performance of functions implemented in the year 2022

In order to overcome the above challenges and escape from the energy crisis that arose due to the shortage of foreign reserves, the Energy Division coming under the Ministry of Power and Energy, implemented mainly the

under mentioned strategies during the year 2022.

- Introduction of the legal reforms necessary to upgrade the fuel industry.
- Taking steps to attract foreign investors to the country in order to rehabilitate the fuel industry.
- Introduction of a fuel price mechanism to cover fuel costs.
- Introduction of a national fuel pass using modern technology for fair distribution of petroleum products among fuel consumers.
- Introduction of a special fuel pass for foreign tourists.
- Introduction of flexible conditions for the procurement of fuel.
- As per the approval of the Cabinet of Ministers, providing guidance to the Ceylon Petroleum Corporation to evaluate unsolicited proposals received from various parties pertaining to supply of fuel
- Giving priority for the supply of fuel for specially identified sectors i.e. agriculture, industries, transport and fisheries.

Shown below is the progress of new policies, regulations and laws formulated, as well as other projects implemented during the year 2022, while giving policy advice necessary to entities under the Energy Division to ensure energy security within the country fulfilling the continuous demand for energy.

#### (a) Taking action to amend the Petroleum Products (Special Provisions) Act No 33 of 2002

With the operation of the Petroleum Corporation Act No 28 of 1961, the

Ceylon Petroleum Corporation became entitled to the monopoly of the downstream petroleum industry. Accordingly, it functioned as an importer, exporter, seller, supplier or distributor of petroleum products. However, as an initial step towards a broad reorganization of this field, the Petroleum Products (Special Provisions) Act No 33 of 2002 was enacted to grant permits for the import and distribution of petroleum to other competitors. As “Energy Supply Committee” established according to the provisions of this Act has become defunct after a period of two years, opportunity for new investors to access the downstream petroleum industry has been prevent.

As a remedy for this, without prejudice to the powers and functions of the Ceylon Petroleum Corporation, amendments, including provisions for the selection of parties for the import and distribution of petroleum products were drafted to the Petroleum Products (Special Provisions) Act no 33 of 2002 and submitted to the Parliament on Cabinet approval. Subsequently, on the recommendations of the Supreme Court, it was passed in Parliament as Petroleum Products (Special Provisions) (Amendment) Act No. 27 of 2022 on 19.10.2022.

After the adoption of this Act, opportunities are available for new investors to the petroleum product market. Thereby liberalizing the petroleum market, which would cause some relief to the Ceylon Petroleum Corporation to evade the crisis condition faced by it. Also, an opportunity would arise also for the consumers to obtain fuel without shortages.

**(b) Inviting for Expression of Interest to provide opportunities for new investors to access the petroleum market**

The import and distribution of petroleum products is mainly done by the Ceylon Petroleum Corporation and the Lanka Indian

Oil Company, and around 90% of the overall fuel supply of the country is carrying on by the Ceylon Petroleum Corporation, while the Lanka Indian Oil Company supplies the balance 10%. Also, fuel importers spend monthly an amount between USD Mn 500 - 600 for the import of fuel, and as the foreign exchanged required for this has to be provided through the local banking system, ensuring a continuous fuel supply is a major challenge in the face of the foreign exchange crisis faced by Sri Lanka at present.

As a remedy for this, without prejudice to the powers given to the Ceylon Petroleum Corporation, it was decided to provide opportunities to recognized companies engaged in that field in countries where petroleum is produced, for the import and sale of petroleum products, without utilizing the foreign exchange reserves of this country. Cabinet approval was obtained for this, and on 25.07.2022, action was taken to invite for Expression of Interest. Action will be taken to select suitable entities out of the proposals submitted by the special committee appointed by the Cabinet of Ministers, following the procurement procedure.

**Major benefits expected through this process are,**

- Minimizing the impact made on foreign exchange by in impoting of fuel, through providing an opportunity for the foreign investors to access the petroleum market
- Ensuring the continuous fuel supply for the consumers
- Passing down the advantages of competition emerging due to the arrival of new investors to the consivemers
- Providing new income generation opportunities to the Ceylon Petroleum Corporation and the Ceylon Petroleum Storage Terminals

Limited by way of facility providing charges

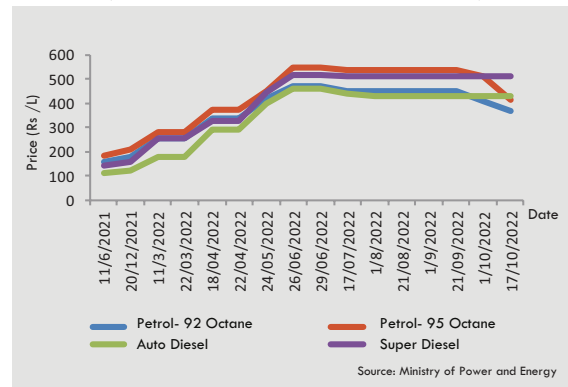
- Relieving the pressure faced by the Ceylon Petroleum Corporation at present
- Ensuring more quality service to the consumers

### (c) Introduction of a fuel price mechanism

On several occasions petroleum products were supplied locally at a price lower to the cost, with the objective of providing economic relief to the people. By acting thus, cash flows of the Ceylon Petroleum Corporation became depleted on a large scale, and its debt burden escalated. Due to this financial stress that had to be faced over a long term, there was an uncertainty about the financial sustainability of the Ceylon Petroleum Corporation, and a difficult situation arose in respect of finding the working capital required to maintain the entity. In the midst of this situation, action was taken to introduce a transparent cost reflective fuel pricing mechanism with effect from June 2022, taking into consideration the seasonal fluctuations in the market for petroleum products and foreign exchange rate fluctuations.

For this purpose, a committee has been appointed comprising representatives with a specialized knowledge about the subject, to evaluate components of the cost of petroleum products once in 15 days at the initial stage and thereafter monthly and to submit recommendations to the Minister for a minimum monthly revision of the local sale price of those products. Accordingly, in the midst of this uncertain market environment, prices are revised at least once a month, based on the evaluation of the impact of cost components fortnightly.

**Figure 1.1**  
Revisions in sales price of petroleum products  
(From June 2021 to October 2022)



After the introduction of the new fuel price mechanism, prices of fuel were increased in order to cover the cost of petroleum products according to the international fuel prices, and later fuel prices were lowered to pass down to consumers the advantages of the reduction of fuel prices. Figure 1.1 shows the variation of fuel prices before and after the introduction of the price mechanism. After the introduction of the price mechanism, the Ceylon Petroleum Corporation has become profitable from the sale of fuel. Further, consumers got the opportunity of buying fuel from both the Ceylon Petroleum Corporation and the Lanka Indian Oil Company at the same price.

### (d) Introduction of a National Fuel Pass (QR Code)

With the objective of properly distributing the limited stocks of fuel to consumers island wide in the midst of the financial crisis, the National Fuel Pass was introduced to the public in July 2022, with the contributions of the Ministry of Power and Energy and the private sector. Through this, a weekly updated fuel quota is ensured for all vehicle owners. The fuel quota allocated to each vehicle was decided based on the type of vehicle, and the necessary facility has been given through the National Fuel Pass to change these quantities according to the timely requirements.

Three leading technical entities of this country, being the Information and Communication Technical Agency (ICTA), the Millenium ITES Private Company and the Dialog Asiata Private Company made technical contributions to introduce the National Fuel Pass. Accordingly, by now, the issue of fuel to the people through all the fuel sheds of the Ceylon Petroleum Corporation and the Lanka Indian Oil Company is being carried out in a well managed manner according to the National Fuel Pass methodology.

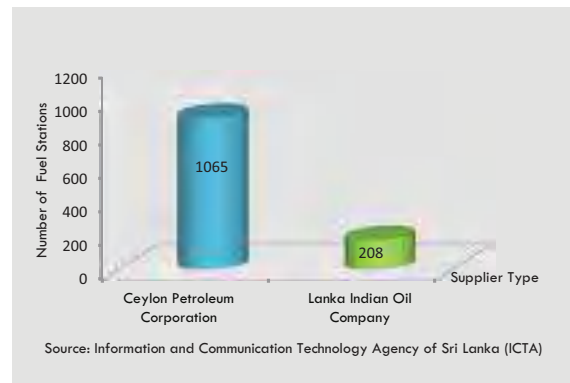
**Benefits anticipated by the introduction of the National Fuel Pass**

- Ensuring weekly an updated fuel quota to each vehicle.
- Obviating the inconvenience caused to the people by having to wait in lengthy queues to obtain fuel.
- Availability of the facility to decide the fuel quota taking into consideration the available quantity and the requirement.
- Providing an opportunity to distribute the available limited stocks of fuel to consumers through their methodology.
- It was able to control the Malpractices in the fuel distribution and sales

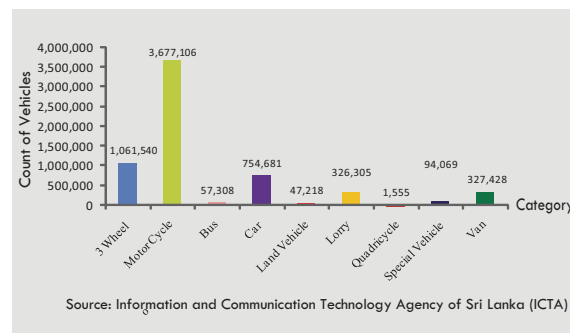
During the period from 01.08.2022 to 01.10.2022, , 323,799,120.54 liters (324 Mn) of fuel had been issued through 1,273 fuel sheds island wide, under 09 categories of vehicles using the National Fuel Pass. The highest quantity of fuel issued under the QR code had been recorded for motor cycles. Further, the fuel requirements of the agriculture, industries and passenger transport sectors had been fulfilled by Depots of the Sri Lanka Transport Board and specially identified fuel sheds, outside the QR code. Also, through the introduction of

the fuel pass, a national statistical data base was created and decisions about the supply of fuel are taken using this data. Information obtained accordingly from the relevant data base is shown below.

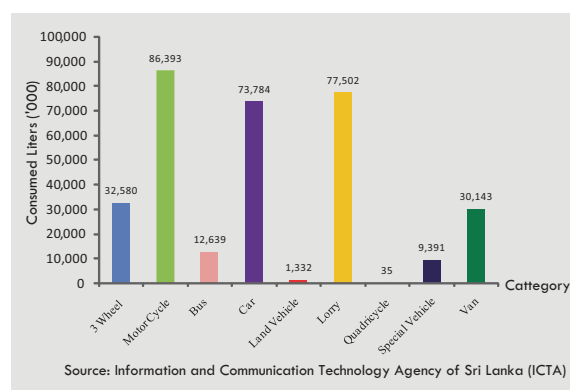
**Figure 1.2**  
**Number of Fuel filling Stations issuing fuel by under the National Fuel Pass (2022.08.01 – 2022.10.01)**



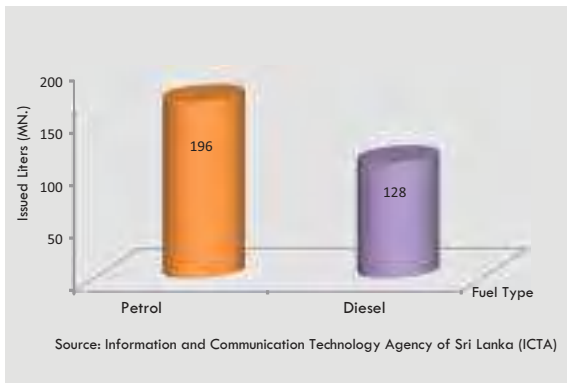
**Figure 1.3**  
**Number of vehicles registered under the National Fuel Pass (as at 01.10.2022.)**



**Figure 1.4**  
**Issued Fuel under the National Fuel Pass (Liter '000) (2022.08.01 – 2022.10.01)**



**Figur 1.5**  
**Issued Fuel Liters (Mn) under the**  
**National Fuel Pass**  
**(01.08.2022 – 01.10.2022)**



**Introduction of the National fuel Pass**



**(e) Introduction of the Tourist Fuel Pass (TFP)**

Out of the foreign exchange earning sources in Sri Lanka, the tourist industry takes a prime place, and it has also reached a crisis state due to the island wide fuel shortage. As an alternative solution to the said problem, the “Tourist Fuel Pass” was introduced ensuring a substantial supply of fuel for foreign visitors touring within the country without any hindrance. This programme was implemented under the guidance of the Ministry of Power and Energy, jointly by the Ministry in charge of tourism, Dialog Asiata Co, Sampath Bank, the Ceylon Petroleum Corporation and the Lanka Indian Oil Company.

By the introduction of the Tourist Fuel Pass, it is expected to introduce to the tourists an efficient and easy method of obtaining fuel using foreign currency and to increase the amount of foreign exchange flowing into the country through the tourists using foreign currency to purchase of fuel.

**Methodology for the implementation of the Tourist Fuel Pass**

- i. Tourists arriving in Sri Lanka producing their passports to a Sampath Bank branch and purchasing a Tourist Fuel Pass after paying USD 5.
- ii. Foreign exchange worth from USD 50 to USD 300 can be entered in a Tourist Fuel Pass and obtaining fuel by producing this card to the fuel shed.
- iii. The pass is valid for two years from the date of registration, and the money in the pass can be withdrawn any time prior to its expiry.

**(f) Performance of the petroleum and petroleum related products procurement procedure**

This Ministry facilitates the procurement functions of the Ceylon Petroleum Corporation, Ceylon Petroleum Storage Terminals Company and the Sri Lanka Petroleum Development Authority, functioning under the supervision of the Energy Division of the Ministry of Power and Energy, while giving special contribution to the procurement process of the petroleum and petroleum allied products of the Ceylon Petroleum Corporation.

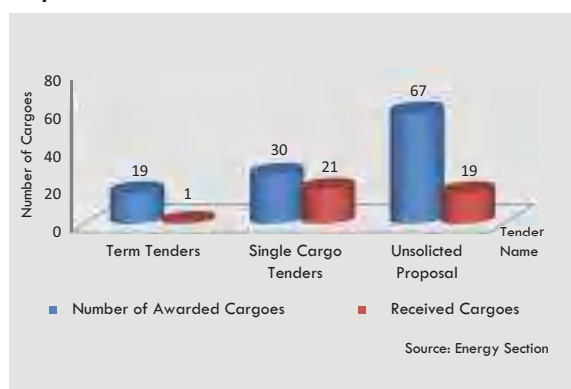
The import of petroleum products is carried out under the approval of the Special Standing Procurement Committee appointed by the Cabinet of Ministers (SSCAPC). Further, the import of petroleum takes place through long term contracts, and in the instances of unpredictable demand, unexpected situations and when long term contracts cannot be implemented in respect of certain special petroleum products, petroleum products are purchased as single cargo in order to fulfil the fuel requirements of the country in continuous manner.

Based on the receipt of a substantial number of bids for bids invited under the favourable external sector performance that prevailed in Sri Lanka, it became possible to maintain petroleum procurements free from obstacles under extended credit facilities under the alternatives of interest free 30 days or 90 days and 180 days with interest. However, suppliers were reluctant to accept letters of credit being opened by local bank for purchases so far made on long term credit basis, due to Sri Lanka dropping down to lower levels in the credit ratings, concurrent to the foreign exchange crisis that arose in the year 2022. Due to this unstable situation, conditions deteriorated to such an extent that



not even a single bidder came forward for certain bids. Further, even the limited number of suppliers who came up, submitted bids subjects to conditions outside the conditions stated in the bidding documents and conditions deviating from the procurement guidelines. This situation becomes clear when out of the 19 cargoes awarded for long term contracts, only 01 having being supplied. In this environment, in order to ensure the fuel security of the country until the crisis situation was over, even in the midst of deviations from procurement guidelines and standard bidding document conditions, Cabinet approval was obtained to consider unsolicited proposals. Further, in order to face the refusal of suppliers on Letters of Credit, action was also taken to purchase fuel on a pre-paid method. Accordingly, the local fuel requirement was fulfilled by arranging 21 single cargo contracts and 19 cargoes from unsolicited proposals. Accordingly, table 1.6 shows information about procurement of fuel in the year 2022.

**Figure 1.6**  
procurement of fuel 01.01.2022 - 30.09.2022



### (g) Fulfilling fuel requirements under the Indian Credit Line Programme.

Import of essential goods was a major challenge since the number of foreign exchange reserves of the country was gradually decreasing during the year 2021 and the beginning of year 2022. As petroleum products were entirely dependent on foreign imports, a crisis had to be faced in obtaining

foreign exchange required for it. At this stage, India came forward to assist Sri Lanka as the closest neighbour of Sri Lanka and long-term major development stake holder, and the Government of India provided USD 500 million as an Credit Facility grant to import fuel. In addition to this Credit Facility, the Government of India provided one billion US Dollars to Sri Lanka as a Credit Facility for the import of essential goods, and out of this amount USD 200 million were reserved for the import of fuel. Accordingly, a sum of USD 700 million had been provided by India to Sri Lanka for the import of fuel. With this Credit depicts facility, the Ceylon Petroleum Corporation procured 17 cargoes, and table 1.1 below its details.

Through this short-term credit line programme, action was taken to import the petroleum products to fulfill the energy requirements of the country, and this credit grant was a great relief to maintain the fuel supply.

**Table 1.1**  
Details of fuel imported under Indian Credit Line

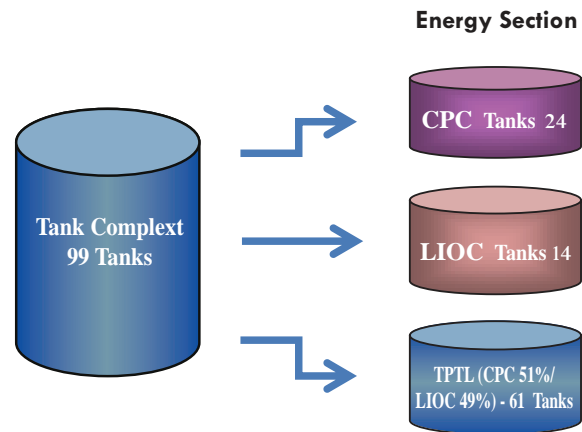
Ser. No	Name of product	No of cargoes	Quantity (MT)
1	Auto Diesel	8	301,440
2	Super Diesel	2	77,682
3	Petrol 92	6	221,053
4	Jet A -1	1	31,485
<b>Total</b>		<b>17</b>	<b>631,659</b>

Source: Ceylon Petroleum Corporation

Trincomalee Tank farm Complex



Trincomalee Tank farm Complex



#### 1.4 Progress of the Infrastructure Development Project related to the petroleum industry

##### (a) Development of Trincomalee Tank Farm Complex

The British who ruled Sri Lanka constructed a tank complex of 100 oil tanks close to the Trincomalee harbour in the year 1920, each tank having a capacity of about 10,000 metric tons, out of which one tank had been destroyed after an attack. According to the Indo Lanka Agreement, it has been agreed that this tank complex should be run as a joint venture of India and Sri Lanka. Accordingly, in the year 2003, 99 tanks were given to the Lanka Indian Oil Company on the basis of a 35-year old lease. However, it was not possible to develop the oil tank complex completely, and the Lanka Indian Oil Company utilized only 14 tanks. As such, this Ministry took necessary steps to utilize this nationally important resource fully.

Actions have been taken to develop the tank complex by giving on a 50 year lease basis 61 tanks to the Trinco Petroleum Terminal (Pvt) Limited Company, established with 49% shares to the Lanka Indian Oil Company and 51% shares to the Ceylon Petroleum Corporation. The Ceylon Petroleum Corporation was given 24 tanks and the Lanka Indian Oil Company 14 tanks on the same basis.

##### Anticipated benefits of developing the tank complex

- Utilization for storing fuel to fulfill the local petroleum demand
- Making availability for investors on a rental basis to buy and store relevant products in the instances of fuel prices are decreased.
- Taking action to unload fuel from the Trincomalee Port to lessen the existing congestion in unloading at the Colombo Port.
- Development of the bunkering oil industry by utilizing to store bunkering oil.
- Giving on rent to store other types of fuel.
- Obtaining storing facilities required to maintain a buffer fuel stock.
- Opportunity arising for transport of fuel to closer districts with in a short period of time.

Ceylon Petroleum Corporation has taken steps to develop 12 tanks out of 24 tanks leased to them and the Trinco Petroleum Terminal (Pvt) Limited Company has taken action to develop 10 out of the 61 tanks leased to it as the initial step.

**(b) Development of the Fuel Hydrant System in the Katunayake Airport.**

The Ceylon Petroleum Corporation Commenced this project concurrent to the development project of the 2nd step of stage II, in the Bandaranayake International Airport, in order to expand the Jet A-1 aviation fuel storage capacity in the Bandaranayake International Airport in order to increase fuel supply efficiency and to ensure fuel supply according to international standards.

To carry out the development work of the project, the contract was awarded for a tax free sum of USD 51.5 million, and 85% of the project financing contract value is being covered by a self financing facility assisted by the China National Chemical Engineering Construction Company. The balance 15% is covered by a credit facility from the Peoples Bank. The physical progress of the project has reached 74.1%. Its financial progress is 68.33% ( USD 35.1925 million ) and it has been planned to complete the development work of the project by 31.05.2023.

**(c ) Construction of a pipeline system for the transport of natural gas from the Regassification Unit at Kerawalapitiya to the Kelanitissa Power Plant**

The necessity arose for a substitute to generate electricity due to the escalation of the cost of producing an electrical unit in the generation of electricity using petroleum, and due to the increased addition of green house gas to the environment. Accordingly, the Ceylon Petroleum Corporation and the Ceylon Electricity Board jointly have planned a project to introduce liquified natural gas for the generation of electricity. This project, consisting of 3 parts has been approved by the Cabinet. That is, the Floating Storage Regassification Unit (FSRU), Mooring System and Pipe line. The Ceylon Electricity Board

will operate the FSRU and the Mooring System. The construction of the pipe line system for the transportation of gas from the Regassification Unit, Kerawalapitiya to the Kelanitissa power house will be implemented by the Ceylon Petroleum Corporation under the Build, Own, Operate and Transfer (BOOT) business mode, under the guidance of the Ministry. The estimated cost of the project is USD 40 million.

For the construction of the pipeline, principle consent has been obtained from the stake holders, and project proposals were called for on 18.02.2021 to select an investor for the project. Accordingly, received project proposals were evaluated technically and financially by the Project Committee, and technical discussions are ongoing with the project proponent. Even though action had been initiated for the acquisition of land required to construct the pipeline, in terms of National Budget circular No 03/2022, this case has been submitted to carry forward this project and to obtain the instructions from the Ministry of Finance.

**(d) Construction of 09 bulk fuel storage tanks with an overall capacity of 93000 cubic meters in the Kolonnawa Terminal.**

As the annual fuel demand generally shows an increase of 5%, in order to face this situation, bulk storage facilities have to be developed in respect of every petroleum product in the required quantities. As the storage and distribution of petroleum products is the basic obligation of the Ceylon Petroleum Storage Terminals Limited, steps were taken by them to construct 09 fuel storage tanks in the Kolonnawa Terminal. This is to be done in two stages, that is, 06 tanks with an overall capacity of 64,000 cubic meters and 03 tanks with an overall capacity of 29,000 cubic meters.

The project for the construction of 03 fuel tanks was awarded for a tax free contract sum of Rs 942.5 million on 12.11.2020 and the project period is 20 months. By now, the construction of tanks has been completed. The project for the construction of 06 fuel tanks was awarded for a tax free contract sum of Rs 2,286.8 million on 24.10.2019, and the project period is 40 months. Due to the poor performance of the contractor the contract could not proceed further and the contract was terminated on 19.01.2022. The contractor has obtained an interim injunction against the termination of the contract, and the overall progress of the construction of tanks is 18%.

**(e) Construction of a Jet A-1 fuel transfer pipe line from Muthurajawela to the Bandaranayake International Airport and construction of Jet A-1 storage tanks and associated facilities in that tank complex and modernizing the existing terminal at Muthurajawela.**

Jet A-1 fuel transport capacity has been limited due to transportation of Jet A-1 fuel to the Bandaranayake International Airport being done only through railway wagons and bowsers owned by the Ceylon Petroleum Corporation. In order to fulfill the anticipated future aviation fuel (Jet A-1) demand, a project was planned to construct an underground pipe line twenty two kilometers in length with a 10 inch diameter parallel to the highway to transport fuel from the Muthurajawela Fuel Depot complex to the Katunayake Airport, and as well as for a storage tank complex with an overall capacity of 92,000 cubic meters.

The estimated project cost is USD 46.3 million" and in the year 2020 bids were called to select an Engineering Procurement Construction (EPC) /Turnkey contractor to implement the project. Bids received were evaluated in mid 2021, and even though it

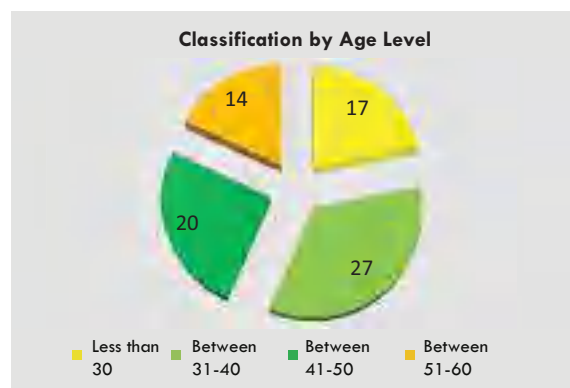
was referred for Cabinet approval to award the contract to the qualified contractor, no final decision was taken in view of the unstable macro economic situation that prevailed in the country. Discussions with the Korean Export Import (Exim) bank to obtain a loan to finance the project could not be concluded satisfactorily, and taking into consideration the economic importance of the project, on the instructions of the External Resources Department, studies are under way about the possibility of implementing it under the build, operate and transfer (BOT) methodology as a Public Private Partnership Project.

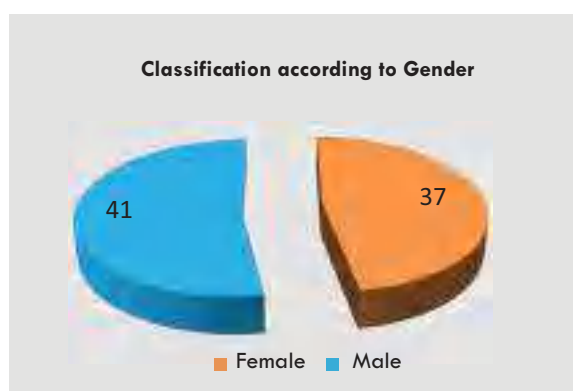
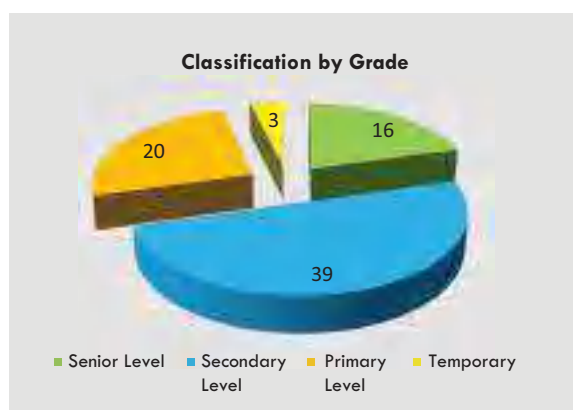
### 1.5 Human Resource Management, Parliamentary Affairs and Audit

#### (a) Human Resource Management

The necessary steps are being taken to achieve the objectives of the Ministry, whilst properly managing all establishment and administrative matters relevant to the Ministry staff. Also, establishment matters of entities functioning under the Ministry are coordinated and the Ministry make its contribution in respect of matters such as the preparation of recruiting procedures, obtaining approval for recruitments and approval of overseas leave of officers in those entities.

#### ■ Staff Structure of the Energy Division





Source: Energy Section

### (i) Recruitment of staff

Recruitment and termination of services of Ministerial and Ministry staff, preparation of recruitment procedures, maintenance of the personal files of the staff, internal postings and transfers are performed under this subject. In addition to the post of Legal Officer for this Ministry, action was taken to obtain the approval of the Department of Management Services for a new Legal Officer post. Approved cadre for the Ministry is 93. Tables 1.2 and 1.3 below show details of officers who obtained internal transfers within the Ministry and new recruits for the period 01.01.2022 to 30.09.2022.

**Table 1.2**  
Officers transferred within the Ministry  
01.01.2022 – 30.09.2022

Category of service	Transfers and arrivals	Transfer
Staff Grade Officers	06	03
Non Staff Grade Officers	04	05
Temporary Offers	01	01

Source: Energy Section

**Table 1.3**  
New appointees in the Ministry  
01.01.2022 – 30.09.2022

Position	New appointments and arrivals
Development Officers	07
Multifunction Development Assistants	03
Temporary Officers	03

Source: Energy Section

### (ii) Skills Development of Officers

Actions had been taken to provide for an efficient and productive Public service by arranging training opportunities to develop the knowledge, skills and attitudes of the Ministry officers. However, due to the spread of the Covid 19 virus within Sri Lanka, only essential duties were performed and thereby it was unable to provide the anticipated training opportunities. Table 1.4 below shows the training opportunities provided to the Ministry staff for the period from January to September, 2022.

**Table 1.4**  
**Training Programs Provided by the Ministry – January to September 30th September 2022**

No.	Course Details	Institute	Number of Officers	Duration
<b>Local Training</b>				
01	Strengthening Monitoring and Evaluation for Sustainable Development in Sri Lanka workshop	Sri Lanka Evaluation Association (SLEvA)	02	05 Days
02	Training on Gender and Social Inclusion in the Energy Sector	USAID Sri Lanka Energy Program	06	01 Day
03	Air Quality Management Awareness Program	Ministry of Environment	05	01 Day
04	Tamil Language Proficiency Course (Secondary Grade)	Department of Government Language	20	150 hours
05	Goal Setting Workshop for Sustainable Development Goals	Sustainable Development Council	03	01 Day
<b>Foreign Training (Conducted online)</b>				
01	A Workshop on the Future Regulation by Asian Productivity Organization in Japan	Japan	03	03 days
02	Knowledge Session on Target Setting for SDG Progress Assessment	India	01	02 Day

Source: Energy Section

### (b) Parliamentary Affairs

Adoption of various acts by the Parliament related to the scope of this Ministry, control of public finance and all matters that are connected with the Parliament in solving problems arising in public administration matters are performed under this subject.

- Parliamentary Questions for which oral answers are expected**

Relevant background reports are prepared after obtaining the information required from the relevant institutions and sectors regarding verbal answers provided by the Hon Minister for questions raised in Parliament by Hon Members of parliament respect of the scope of this Ministry. Accordingly, the Hon Minister has submitted answers to the 05 Parliamentary questions, 09 questions under standing orders and 11 questions submitted at the adjournment stage from 01.01.2022

to 30.09.2022. Also, 02 reports had been submitted to the Public Petitions Committee, and has participated in one occasion for verbal presentations.

### (c) Internal Audit

The Audit Division of the Ministry Performs with the objective of further Streamlining activities while well managing the affairs of energy Section. And during the year this Division has performed audit activities as shown below.

**Table 1.5**  
**Progress from 01.01.2022 to 31.09.2022**

No	Activities	Amount
1	Internal Audit Reports	12
2	Special Inquiries	06
3	Audit & Management Committee Meeting	02
4	Quarterly Report	02

Source: Energy Section

## 1.6 Financial performances (Energy Section)

### (a) Recurrent Expenditure

**Table 1.6**  
Recurrent Expenditure – Office of Hon. Ministers (Rs. Million)

Types of Expenditure	Budgetary Provisions 2021	Actual Exp. 2021	%	Budgetary Provisions 2022	Actual Exp As at end of September 2022	%
Personal Emoluments	16.163	16.141	99.87	15.250	8.805	57.74
Travelling Expenses	4.770	3.558	74.60	5.500	0.465	8.45
Supplies	6.000	5.923	98.73	6.300	3.513	55.76
Maintenance Expenditure	5.423	5.420	99.95	4.150	2.042	49.20
Services	7.075	7.022	99.26	2.700	1.198	44.37
Transfers	0.950	0.940	99.92	0.600	0.387	64.50
<b>Total</b>	<b>40.381</b>	<b>39.016</b>	<b>96.62</b>	<b>34.500</b>	<b>16.411</b>	<b>47.57</b>

Source: Energy Section

**Table 1.7**  
Recurrent Expenditure – Ministry Administration (Rs. Million)

Types of Expenditure	Budgetary Provisions 2021	Actual Exp. 2021	%	Budgetary Provisions 2022	Actual Exp As at end of September 2022	%
Personal Emoluments	50.398	50.118	90.44	58.500	44.936	76.81
Travelling Expenses	4.903	4.587	98.57	0.350	0.209	59.71
Supplies	8.185	7.780	95.05	11.750	8.819	75.05
Maintenance Expenditure	4.192	4.089	97.55	3.200	2.675	83.59
Services	30.031	29.807	99.25	40.100	24.989	62.32
Transfers	0.560	0.521	93.17	0.600	0.351	58.50
<b>Total</b>	<b>98.269</b>	<b>96.904</b>	<b>98.61</b>	<b>114.500</b>	<b>81.979</b>	<b>71.59</b>

Source: Energy Section

**Table 1.8**  
Capital Expenditure – Office of Hon. Ministers (Rs. Million)

Types of Expenditure	Budgetary Provisions 2021	Actual Exp. 2021	%	Budgetary Provisions 2022	Actual Exp As at end of September 2022	%
Rehabilitation of Capital Assets	15.084	14.425	95.63	1.250	0.317	25.35
Acquisition of Capital Assets	1.700	1.568	92.23	0.750	0.229	30.56
<b>Total</b>	<b>16.784</b>	<b>15.993</b>	<b>95.29</b>	<b>2.000</b>	<b>0.546</b>	<b>27.31</b>

Source: Energy Section

**Table 1.9**  
**Capital Expenditure – Ministry Administration (Rs. Million)**

Types of Expenditure	Budgetary Provisions 2021	Actual Exp. 2021	%	Budgetary Provisions 2022	Actual Exp As at end of September 2022	%
Rehabilitation of Capital Assets	3.011	3.011	100	2.500	0.250	10.00
Acquisition of Capital Assets	1.313	1.171	89.23	3.500	0.040	1.14
Capacity Building	0.425	0.405	95.29	0.000	0.000	0.00
Petroleum Sector Development Framework	2.400	0.00	0.00	1.500	0.000	0.00
<b>Total</b>	<b>7.149</b>	<b>4.587</b>	<b>64.16</b>	<b>7.500</b>	<b>0.290</b>	<b>11.14</b>

Source: Energy Section

**(c) Advance B Accounts**

**Table 1.10**  
**Government Officers Advance B Accounts (Rs.)**

	2021			As at 2022 Sep. 30		
	Max. limit expenditure	Min. limit receipts	Max. debit limit	Max. limit expenditure	Min. limit receipts	Max. debit limit
Limit	3,000,000.00	2,400,0000.00	20,000,000.00	2,500,000.00	4,000,000.00	15,000,000.00
Actual Expenditure	2,021,515.70	3,113,989.96	10,456,425.17	2,104,715.60	2,087,235.60	10,473,905.17

Source: Energy Section



## Chapter Two

# Ceylon Petroleum Corporation

### 2.1 Introduction.

The Ceylon Petroleum Corporation was established to carry out business activities related to the import, export, refining, sale, supply or distribution of petroleum products, and the legal provisions were given through the Ceylon Petroleum Corporation Act No 28 of 1961 to perform functions thereof. Around 90% of the current fuel demand is supplied by the Ceylon Petroleum Corporation, although competitive entities obtained the opportunity to access the petroleum market under a lawful set up created later.

Around 40% of the overall primary energy demand of the country is supplied through petroleum related products which imported

as fully refined products and crude oil, since Sri Lanka is not a petroleum producing country. The import and distribution of refined petroleum products are being mainly done by the two entities, i.e. Ceylon Petroleum Corporation and Lanka Indian Oil Company, and their refining of crude oil is carried out by the Ceylon Petroleum Corporation as a monopoly since 1969.

Amidst the economic crisis situation that prevailed in the country during the year 2022 which had an adverse impact on its operations, the Ceylon Petroleum Corporation made the maximum contribution to fulfil the fuel requirement. Accordingly, all types of petroleum products required locally were imported and supplied, and the progress of those activities is depicted through this chapter.



## Vision

To be a sustainable entity in the petroleum and related industries; pioneer new opportunities and deliver value to our stakeholders.

## Mission

- |                        |   |
|------------------------|---|
| Competitiveness        | - Strive to be a market leader by procuring and supplying petroleum and related products at competitive prices                                  |
| Sustainability         | - Be a financially, socially, and environmentally sustainable business that places emphasis in long run gains                                   |
| Continuous Improvement | - Drive growth through continuous improvement of process and people. Always monitor the Corporation's growth for potential areas of improvement |
| Integrity              | - Act in a reliable manner ensuring the Corporation's best interest at all times  |
| Public Focus           | - Aim to support the growth of the country  |

### 2.2 Import of refined petroleum products

Around 2/3 of the petroleum product requirement are imported and supply as refined petroleum products. Table 2.1 shows the quantities of refined petroleum products imported by the Ceylon Petroleum

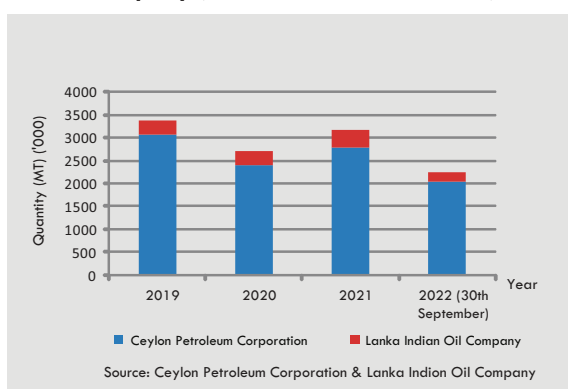
Corporation from the year 2019 to 30th September 2022. According to Table 2.1, 3,049,000 metric tons had been imported in the year 2019 and this quantity has fallen down to 2,388,000 and 2,772,000 metric tons during the years 2020 and 2021 respectively. This has further dropped down to 2,048,000 metric tons by 30.09.2022.

**Table 2.1**  
Ceylon Petroleum Corporation's Imports of Refined Petroleum Products  
01.01.2019 - 30.09.2022

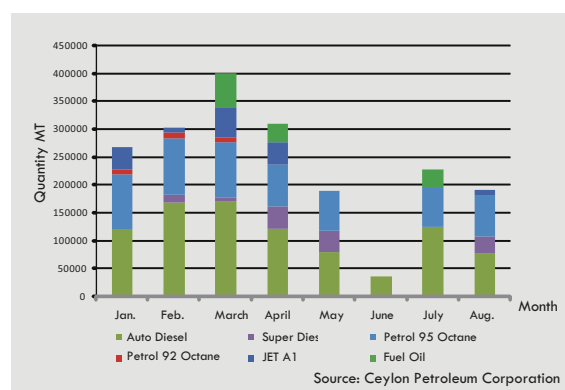
Products	Quantity MT ('000)			
	2019	2020	2021	As at 30.09.2022
Auto Diesel	1,349	951	1,254	982
Super Diesel	64	56	68	128
Petrol- 92 Octane	887	837	893	668
Petrol- 95 Octane	128	91	103	27
Jet A-1	377	101	178	123
Low Sulphur Fuel Oil (180 CST)	84	206	245	120
High Sulphur Fuel Oil (180 CST)	160	146	31	-
<b>Total</b>	<b>3,049</b>	<b>2,388</b>	<b>2,772</b>	<b>2,048</b>

Source: Ceylon Petroleum Corporation

**Figur 2.1**  
Imports of Refined Petroleum Products by Ceylon Petroleum Corporation and Lanka Indian Oil Company (01.01.2019 – 30.09.2022)



**Figure 2.2**  
Ceylon Petroleum Corporation's monthly Imports of Refined Petroleum Products  
01.01.2022 - 31.08.2022



### 2.3 Import of crude oil

Since 1969 the Sapugaskanda Refinery is in continuous operation up to now. At present, this refinery has a refining capacity of around 5,000 metric tons of crude oil per day. Thereby, it has the possibility of refining around 1,825,000 metric tons of crude oil annually. Around 30% of the current local fuel requirements is being refined by operating the refinery at its maximum capacity.

The possibility was arose to refine the maximum number of petroleum products through the Sapugaskanda Refinery during the past few years. Table 2.2 shows the quantity and the value of crude oil imported for refining. When taking into consideration the import of crude oil during the past years, a quantity of 1,843,000 metric tons of crude oil had been imported during the year 2019 and by the year 2021 this quantity has come down to 1,130,000 metric tons. The cause for this can be shown as the low demand that prevailed for fuel locally, limitation of the import of crude oil during the latter half of the year and the stoppage of refinery operations for maintenance purposes. When taking into consideration the first 09 months of the year 2022, around 458,000 metric tons of crude oil had been imported and the decrease in the import of crude oil during this

year was mainly impacted by the shortage of foreign exchange that prevailed in the country and the supplier contracted to supply crude oil to the Ceylon Petroleum Corporation failing to do so.

**Table 2.2**  
Imports of Crude Oil from 2013 – 30.09.2022

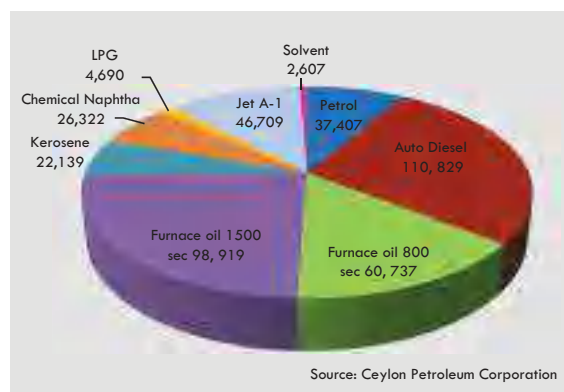
Year	Quantity (MT'000)	Value of Imports (CIF) Rs. Million
2013	1,743	182,064
2014	1,824	187,760
2015	1,773	100,578
2016	1,685	87,198
2017	1,499	100,911
2018	1,763	160,933
2019	1,843	172,542
2020	1,666	98,277
2021	1,130	101,306
as at 2022.09.30	458	127,943

Source: Ceylon Petroleum Corporation

## 2.4 Operation of the Sapugaskanda Oil Refinery

Total amount of 407,359 metric tons of petroleum associated products had been produced by utilizing 441,059 metric tons of crude oil during the first 09 months of the year 2022. Figure 2.3 shows its petroleum product mix. Taking into consideration this mix, 110,829 metric tons of diesel and 34,407 metric tons of petrol had been produced. Further, 159, 656 metric tons of various types furnace oil had been produced for the use of power generation, industries and bunkering oil and 4,690 metric tons of LPG had been produced.

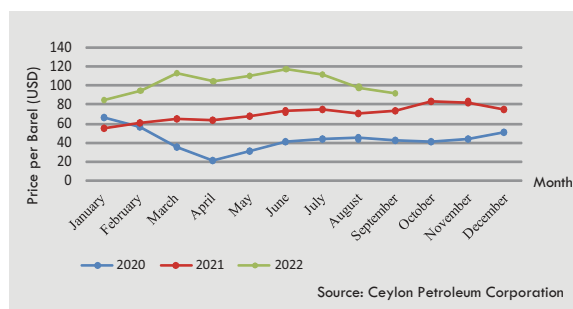
**Figure 2.3**  
Oil Production by Ceylon Petroleum Corporation's Refinery (MT) from January – 30th September 2022



## 2.5 Petroleum Product import cost

Prices of crude oil in the international market are a major factor when deciding the fuel import cost and prices were subject to fluctuations frequently during the past. Figure 2.4 shows the average monthly prices (according to Singapore Platts prices) of crude oil from the year 2020. Even though the average price of a barrel of crude oil in the year 2020 was USD 43. The average price of a barrel of crude oil had gone up to USD 70 in the year 2021 by configuring 62% increase compared to the previous year. With further stabilization of the world economy in the year 2022, the demand for crude oil increased during the first nine months of this year and it was reported that the average price of a barrel of crude oil as USD 103. Matters such as the acceleration of the process of normalization of the world economy, limitation of the fuel supply of OPEC and allied countries and the geo political clash between Russia and Ukraine led to the large-scale increases of fuel prices in the year 2022.

**Figure 2.4**  
**Monthly Crude Oil price as per Singapore**  
**Platts price**  
**(2021 September 2022)**



While a large amount of foreign exchange is spent annually to import fuel, the cost incurred for the import of the overall petroleum products in the country from the year 2019 to the year 2021 is shown in table 2.3. Accordingly, a sum of USD 3,465 million had to be spent to import petroleum products during the year 2021. The Government gave priority for the import of petroleum products even in the midst of the foreign exchange crisis faced by the country in the year 2022, and USD 2.04 billion had been spent by Ceylon Petroleum Corporation according to data of the Ceylon Petroleum Corporation for the import of fuel during the first 8 months up to 31.08.2022.

**Table 2.3**  
**Cost of Import Petroleum Product (USD) Mn from**  
**2019 - 2021**

Product Name	Year		
	2019	2020	2021
Crude Oil	971	583	625
Refined Petroleum Product	2,706	1,742	2,840
Total	3,677	2,325	3,465

Source: Central Bank Report (2021)

## 2.6 Sale of petroleum products

In accordance with escalating needs along with the increase of the population, the consumption of fuel have gone up not only in

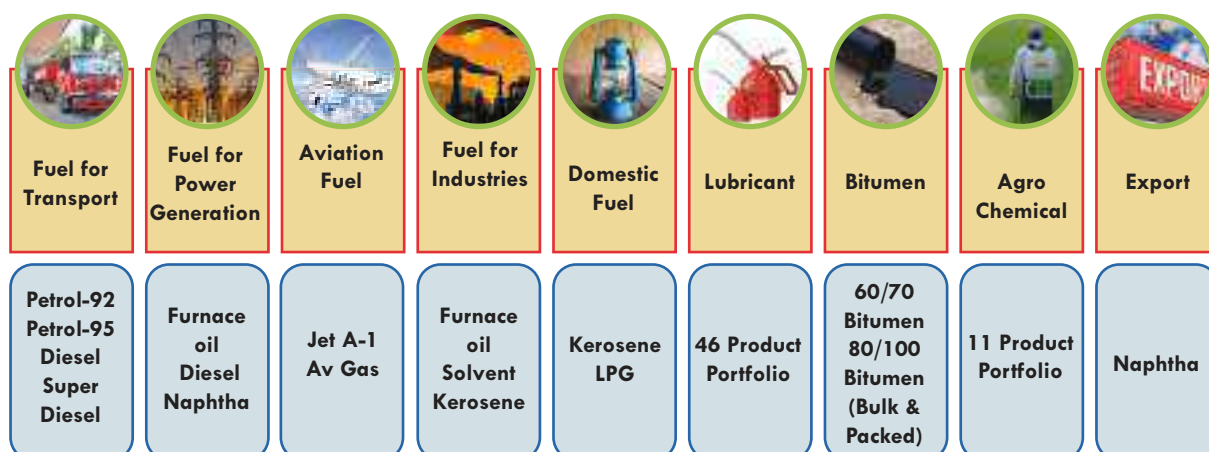
the domestic and commercial sectors, but also in the sectors of power generation, transport, industries and agriculture. Even though a certain drop in the demand for petroleum products was seen due to the Covid 19 situation that prevailed since the year 2020 the demand for petroleum products increased again with changing the situation in the year 2022. Accordingly, it was fulfilled the prevailing demand for petroleum products mainly by the Ceylon Petroleum Corporation.

### (a) Sales of overall petroleum products of the Ceylon Petroleum Corporation

The Ceylon Petroleum Corporation act as the leader in the sales of petroleum products and it covers approximately 90% of the overall market share. The Ceylon Petroleum Corporation is engaged in sales activities in all the sectors and that sales mix is shown in figure 2.5.

Details about the overall fuel sales of the Ceylon Petroleum Corporation from the year 2020 to 30th Sep 2022 are shown in table 2.4. When it is taken into consideration, 5,502,518 metric tons of fuel had been sold in the year 2020 and it had been decreased by 13% to 4,776,355 metric tons In the year 2021. The overall fuel sales had been recorded as 2,640,141 metric tons during the period up to 30th Sep 2022 in the year 2022. A drop in the sale of fuel has been caused mainly by the contraction of demand due to the recession of fuel sales and the increase of fuel prices as shown during the year 2022. When taking into consideration, the highest sales have been recorded as 1,199,218 metric tons of Lanka Auto Diesel and 732,016 metric tons of Petrol 92 octane respectively in the fuel sales mix of the year 2022.

**Figur 2.5**  
Petroleum products sales mix of Ceylon Petroleum Corporation

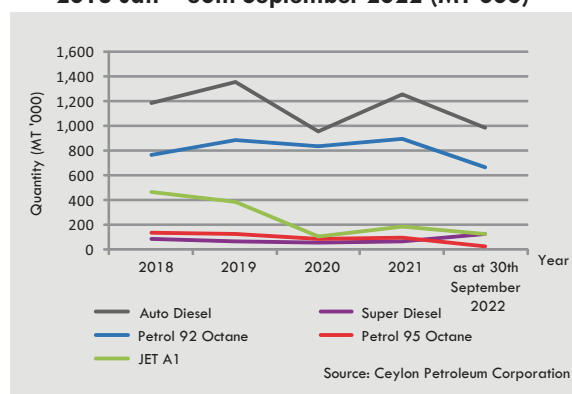


**Table 2.4**  
CPC Island-wide Sales from 2020 – 30th September 2022

Type of Product	Total Sales (MT)		
	2020	2021	As at 30th Sep 2022
Lanka Petrol -92 Octane	1,005,013	1,102,551.70	732,016.47
Lanka Petrol -95 Octane	99,950	102,809.50	52,792.68
Lanka Auto Diesel	1,562,144	1,706,041.80	1,199,218.18
Lanka Super Diesel	57,413	65,721.50	65,125.21
Lanka Kerosene	171,441	185,312.60	83,858.88
Lanka Industrial Kerosene	1,902	2,903.30	4,450.39
Lanka Chemical Naphtha	1,590,582	333,459.20	235,237.7
Lanka Fuel Oil 800 Sec.	0	99,321.80	0.00
Lanka Fuel Oil 1500 Sec (High Sulphur)	203,251	340,198.00	158,259.44
Asphalt 60/70 (1×180KG)	0	19.7	0.00
Lanka Fuel Oil 1500 Sec (Low Sulphur)	30,246	407,868.40	88,612.49
Lanka Fuel Oil Super	591,162	203,994.20	54,965.81
Jet A-1	188,618	223,666.30	175,205.11
Lanka Solvents (SBP)	796	2,486.50	2,113.08
<b>Total</b>	<b>5,502,518</b>	<b>4,776,355.20</b>	<b>2,640,141.43</b>

Source: Ceylon Petroleum Corporation

**Figure 2.6**  
CPC's Sales of Petrol, Diesel and Jet A-1  
2018 Jan – 30th September 2022 (MT'000)



Source: Ceylon Petroleum Corporation

### (b) Sales of fuel to the power sector

The Ceylon Petroleum Corporation supplies the required fuel to the Ceylon Electricity Board and private electricity producers as the sole supplier of fuel supply for the requirements of generation of electricity. Table 2.5 shows the fuel sold from the year 2015 to 30th Sep 2022.

When observing the data about fuel provided for the generation of electricity, it is seen that a substantial quantity of the electricity production is done through the use of petroleum products. Accordingly, 969 million liters of fuel had been supplied to produce electricity during the year 2020, and it had dropped down to 610 million liters, being a decrease of 37% in the year 2021. Further, 511 million liters of fuel had been supplied for the generation of electricity during the first nine months of the year 2022.

### (c) Supply of fuel to the agricultural sector

In order to avoid jeopardized food security due to failure to obtain fuel for agricultural purposes in the face of the fuel shortage that prevailed in the country by providing fuel for agricultural activities was identified as a priority need. Accordingly, a joint programme was implemented by the Ministry of Agriculture, District Secretariats and the Ceylon Petroleum Corporation under the guidance of the Ministry of Power and Energy, Under that, action was taken to issue fuel (diesel) to the farming community through fuel sheds identified by District Secretaries.

According to the data of the Ministry of Agriculture, around 511,964 hectares had been cultivated with paddy during the 2022 Yala season island wide and approximately 20 million liters of fuel had been used for the harvesting of paddy,. 1145 diesel bowsers with a capacity of 6600 liters (7,557,000 liters) were supplied with configuring around 38% of this fuel requirement under the guidance of District Secretaries.

Expanding this programme further, priority was given to provide fuel required for preparation of the land for the cultivation of paddy, maize and subsidiary crops during the Maha season 2022/23. It has been proposed to commence paddy cultivation in 860,558 hectares during the Maha season and cultivation of maize and subsidiary crops has also commenced in addition to that. Facilities were made available to provide fuel also for it under the coordination of the Ministry of Agriculture and the District Secretaries. 1265 bowsers with a capacity of 6600 liters, that is, a quantity of 8,349,000 liters had been supplied with the coordination of District Secretaries by 10.10.2022.

**Table 2.5**  
**Sale of Fuels to Power Sector (Vol. Ltr '000) 2015 – 30th September 2022**

Year	Lanka Auto Diesel	Naphtha	Fuel Oil	Lanka Super Diesel	Grand Total
2015	84,100	143,879	231,710	-	459,689
2016	364,974	174,270	415,611	-	954,855
2017	397,330	201,989	701,983	-	1,301,302
2018	206,485	100,568	559,173	-	866,226
2019	400,085	180,665	673,547	-	1,254,296
2020	188,762	-	780,080	-	968,842
2021	120,041	15,407	474,341	-	609,789
30.09.2022	200,291	34,109	259,039	17,825	511,264

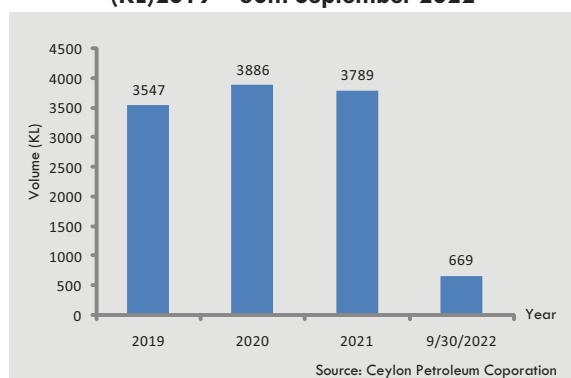
Source: Ceylon Petroleum Corporation

**(d) Sale of lubricants**

The Ceylon Petroleum Corporation held the monopoly in the lubricant oil market up to the year 1994, but later this business was privatized. Along with the liberalization of the lubricant oil business, the Ceylon Petroleum Corporation also entered the lubricant oil business again with the intention of creating a beneficial competition. Further expanding the lubricant oil market, the Ceylon Petroleum Corporation commenced the production of lubricants in collaboration with M/s Hyrax Co of Malaysia in the factory belonging to that company located at Muthurajawela under the brand CEYPETCO.

Quantities of lubricant oils sold by the Ceylon Petroleum Corporation from the year 2019 to 30th Sep 2022 are shown in figure 2.7. According to that data, it had been possible to maintain a share of the stable market during the years 2019, 2020 and 2021 exceeding 3500 kiloliters and a rapid decline down to 669 kiloliters by 30th Sep 2022 is seen. The factors which directly contributed to the sale of lubricant oils were the limits regarding obtaining foreign exchange for the import of raw materials needed for the production of lubricant oils and the conditions that prevailed around the fuel sheds of the Ceylon Petroleum Corporation.

**Figure 2.7**  
Ceylon Petroleum Corporation's Sales of Lubricants (KL) 2019 – 30th September 2022

**(e) Sale of agro chemicals of the Ceylon Petroleum Corporation**

The Ceylon Petroleum Corporation has been able to provide a majority of agro chemicals required for agriculture and the estate sector under competitive prices. Thereby, the Government was able to control the prices of agro chemicals in the local market and to provide to the consumer under control products of a high quality. Table 2.6 shows the quantities imported and distributed up to 30th Sep 2022 in order to fulfill the local need for agro chemicals. Further, the Ceylon Petroleum Corporation has commenced procurement activities to import 245,000 liters Glyphosate and distribute only to the tea and rubber sector, on special approval given by the Government.

**Table 2.6**  
Quantities imported agro chemicals  
01.01.2022 – 30.09.2022

Product	Quantity (Kg)	Value (USD)
	5,000	41,400
Tmidacloprid 20% SL	3,000	43,950
B.P.M.C. 50% EC	8,000	51,600
Captan 50% WP	3,000	21,960
<b>Total as at 30th September 2022</b>	<b>19,000</b>	<b>158,910</b>

Source: Ceylon Petroleum Corporation

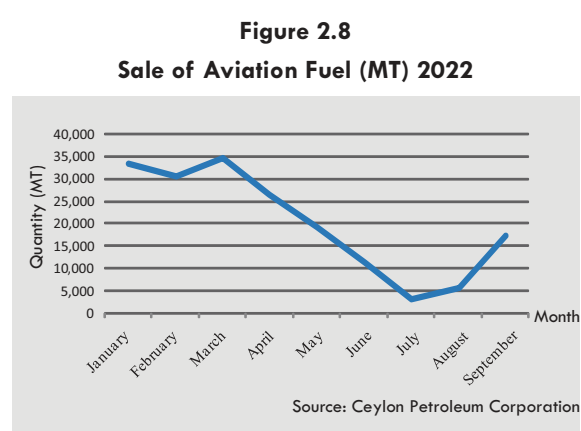
**(f) Sale of Aviation Fuel (Jet A1)**

The Ceylon Petroleum Corporation has become a major stake holder in the national economy as the sole supplier of aviation fuel in Sri Lanka. The Aviation Fuel Division of the Ceylon Petroleum Corporation provides its services to the four airports, which are the Bandaranayake International Airport, Mattala Rajapaksa International Airport, the Ratmalana Airport and the Pallaly Airport.

Figure 2.8 gives details about the sales of aviation fuel during the year 2022.



Eventhough, there was a daily demand for about 1400 metric tons, Interruption of air transport globally during the past and the limitations of fuel supply in Sri Lanka had an impact for the decrease in the sale of aviation fuel. Accordingly, there was a general fluctuation in aviation fuel sales from January to March of this year, and from March to July the monthly aviation fuel sales had dropped down to 2,992 metric tons. The monthly aviation fuel sales had again increased to 17,200 metric tons in the month of September 2022,.



## 2.7 Network of fuel sheds

The Ceylon Petroleum Corporation and the Lanka Indian Oil Co are engaged in operating fuel sheds which perform a major function in easily supplying fuel required for the consumer. 1578 fuel sheds were operating by 30th Sep 2022. Out of this number, 1364 fuel sheds are operated by the Ceylon Petroleum Corporation by configuring 86% and 214 fuel sheds are operated by the Lanka Indian Oil Co.

Action has been taken to develop the fuel shed network of the Ceylon Petroleum Corporation with modern facilities as most vehicles being used presently are running on modern fuel so that consumers could obtain Octane 95 Petrol and Super Diesel from fuel sheds. There were 1333 fuel sheds by the middle of the

year 2021 and this number was increased to 1364 by 30.09.2022. Paying attention to the convenience of the consumers, the Ceylon Petroleum Corporation has given its approval to establish 44 new fuel sheds island wide.

Details of fuel sheds owned by the Ceylon Petroleum Corporation are shown in table 2.7 below.

**Table 2.7**  
**No. of Fuel Filling Stations of Ceylon Petroleum Corporations at 30th September 2022**

No	Province	Number of Fuel Stations
01	Western Province	328
02	Northern Province	191
03	North Western Province	194
04	Eastern Province	154
05	Southern Province	156
06	Central Province	109
07	North Central Province	87
08	Uva Province	60
09	Sabaragamuwa Province	85
<b>Total</b>		<b>1364</b>

Source: Ceylon Petroleum Corporation

## 2.8 Financial Performance (Ceylon Petroleum Corporation)

**Table 2.8**  
Ceylon Petroleum Corporation's Income Statement

Description	As at 30 <sup>th</sup> September 2022 (Unaudited) Rs. Mn
Revenue	831,644.23
Cost of Sales	(834,330.80)
<b>Gross Profit/ (Loss)</b>	<b>(2,686.57)</b>
Other Operating Income	361.37
Selling & Distribution Expenses	(30,357.94)
Administrative Expenses	(3,006.48)
<b>Operating Profit/ (Loss)</b>	<b>(35,689.61)</b>
Exchange Rate Variation	(548,458.28)
Finance Income	27,333.55
Finance Expenses	(69,600.968)
Profit/ (Loss) before tax	(626,415.32)
Income tax Expense	-
<b>Profit/ (Loss) for the year</b>	<b>(626,415.32)</b>
<b>Other comprehensive income</b>	-
<b>Items that will not be reclassified to Profit or Loss:</b>	-
Re-measurement gain/(loss) on Retirement Benefit plan	-
Revaluation of Property, Plant & Equipment	-
Tax on Other Comprehensive Income	-
<b>Other comprehensive income/ (expense) for the year</b>	-
<b>Total/ comprehensive Income/ (expense) for the year, net of tax</b>	<b>(626,415.32)</b>

Source: Ceylon Petroleum Corporation

**Table 2.9**  
Ceylon Petroleum Corporation's Financial Position

Description	As at 30 <sup>th</sup> September 2022 (Unaudited) Rs. Mn
<b>ASSETS</b>	
<b>Non – Current Assets</b>	
Property, Plant & Equipment	42,777.330
Investment Property	51.792
Intangible Assets	0.656
Investment in Subsidiary	5,050.995
Non-Current Financial Assets	249.138
Trade & Other Receivables	7,634.529
	<b>55,764.439</b>
<b>Current Assets</b>	
Inventories	86,548.772
Trade & Other Receivables	418,642.064
Short Term Investment	
Cash and Cash Equivalents	32,577.014
	<b>537,767.849</b>
<b>Total Assets</b>	<b>593,532.288</b>
<b>EQUITY AND LIABILITIES</b>	
<b>Capital and Reserves</b>	
Contributed Capital	28,487.125
Capital Reserve	4,992.686
Financial Instrument fair value	(38.000)
Revaluation Reserve	28,063.101
Revaluation Earnings	(1,045,424.655)
<b>Total Equity</b>	<b>(983,919.740)</b>
<b>Non-Current Liabilities</b>	
<b>Retirement Benefit Obligation</b>	1,713.169
<b>Deferred Tax</b>	2,492.927
<b>Loan &amp; Borrowings</b>	11,951.431
	<b>16,157.527</b>
<b>Current Liabilities</b>	
Trade and Other Payables	473,731.671
Current portion of Loans & Borrowings	288,995.087
Short Term Borrowings	798,567.742
	<b>1,561,294.500</b>
<b>Total Equity and Liabilities</b>	<b>593,532.288</b>

Source: Ceylon Petroleum Corporation

## Chapter Three

# Ceylon Petroleum Storage Terminals Limited

### 3.1 Introduction

“The Ceylon Petroleum Storage Terminals Limited” was established under the Companies Act as a provider of common facilities relevant to the storage and distribution functions for the Ceylon Petroleum Corporation and the Lanka Indian Oil Company with the entry of competitors to the petroleum market. This is a subsidiary company of the Ceylon Petroleum Corporation, and it owned 2/3 of company’s shares, while the balance 1/3 is owned by the Lanka Indian Oil Company.

The Ceylon Petroleum Storage Terminals Limited plays a vital role in storage and distribution of products, since those functions are very important to ensure a continuous supply of fuel of high quality. In addition to this, the Ceylon Petroleum Corporation and the Lanka Indian Oil Company also operate the functions of storage and distribution of fuel on a minor scale. This chapter presents the progress of the fuel storage and distribution activities of the Ceylon Petroleum Storage Terminals Limited.

### Vision

To be the most efficient Petroleum Terminal Operator in South Asia

### Mission

To remain as the most efficient terminal operator in the island, meeting stakeholders expectations and committed to make perceivable and continual improvement in the level of customer satisfaction, while preserving the quality and ensuring the exact quantity of the petroleum products being delivered to the terminal facility users/customers, honouring the health, environmental and safety standards in force through dedicated participation of a loyal, contended and well trained workforce, guided by the feedback of the customers and the general public

### 3.2 Storage of fuel

The Ceylon Petroleum Storage Terminals Limited maintains fuel storage facilities with a capacity of 263,198 metric tons at the Kolonnawa Terminal, 190,476 metric tons at the Muthurajawela Terminal and 20,794 metric tons in regional 11 bulk depots. Further, the Lanka Indian Oil Company maintains fuel storage facilities with a capacity of 150,000 metric tons at the lower part of the Trincomalee Tank Farm and the Ceylon Petroleum Corporation maintains 64,000 metric tons at the Sapugaskanda Terminal. Accordingly, these three entities maintain an overall storage capacity of 688,468 metric tons within the country.



Muthurajawela  
Oil Tank Farm

Kolonnawa  
Oil Tank Farm



Trincomalee Oil Tank Farm

The Ceylon Petroleum Storage Terminals Limited made a dynamic contribution towards the storage of fuel by two main Terminals and the eleven regional bulk depots during the year 2022, and the storage capacity of the two main Terminals are shown in table 3.1.

**Table 3.1**  
Fuel storage capacity – as at 30th September 2022

Type of fuel	Kolonnawa (Capacity metric tons)	Muthurajawela (Capacity metric tons)
Naptha	13,567	-
Octane 95 petrol (euro 4)	36,727	-
Octane 92 petrol	51,461	62,046
Kerosene	11,833	-
Aviation fuel	47,493	-
Auto diesel	42,334	108,290
Super diesel (euro 4)	11,77	-
Furnace oil 800	44,582	-
Furnace oil (low sulphur)1500 sec	-	20,140
Solvent (SBP)	1,938	-
Industrial kerosene	1,786	-
<b>Total</b>	<b>263,198</b>	<b>190,476</b>

Source: Ceylon Petroleum Storage Terminals Limited

### 3.3 Distribution of fuel

The distribution division of the Ceylon Petroleum Storage Terminals Limited operates the island wide fuel distribution process based on the requirements of the Ceylon Petroleum Corporation and the Lanka Indian Oil Company. For this purpose, the island wide distribution of fuel is being properly implemented by utilizing the Kolonnawa Terminal, the Muthurajawela Terminal and regional bulk depots. Railway wagons, pipelines and bowsers are used for the fuel

distribution of the Ceylon Petroleum Storage Terminals Limited.

The Sales of the Ceylon Petroleum Storage Terminals from 01.01.2022 to 30.09.2022 is shown in Tables 3.2 and 3.3. Accordingly, the total quantity distributed is recorded

as 2,792,162 kiloliters. 72% of the total distributions i.e. 1,998,987 kiloliters, had been carried out by the Kolonnawa and Muthurajawela Terminals, while the balance were distributed through regional bulk depots.

**Table 3.2**  
Ceylon Petroleum Storage Terminal Limited's bulk products sales at Kolonnawa & Muthurajawela Terminals from 01st January 2022 to 30th September 2022

Products	Distribution Channel	Total Volume (KL)	Grand Total(KL)
Gasoline 92 Oct	Wagon	-	668,256
	CPSTL	94,933	
	Hired	470,778	
	Collection	102,544	
Lanka Auto Diesel(LAD)	Wagon	26,607	960,701
	CPSTL	96,950	
	Hired	537,913	
	Collection	119,183	
	Pipeline(Power plant)	180,047	
Lanka Kerosene& Industrial Kerosene(LK& IK)	CPSTL	12,192	75,905
	Hired	55,988	
	Collection	7,726	
Lanka Furnace Oil(LFO)	Wagon	554	155,411
	CPSTL	2,765	
	Hired	11,286	
	Collection	71,458	
	Pipeline(Power plant)	69,348	
Lanka Super Diesel(LSD)	CPSTL	6,838	65,156
	Hired	46,114	
	Collection	12,205	
Gasoline 95 Oct	CPSTL	7,708	69,504
	Hired	56,945	
	Collection	4,851	

**Energy Section**

<b>Jet A-1</b>	Wagon	1,709	<b>1,709</b>
	CPSTL	-	
	Hired	-	
	Collection	102,544	
<b>X Tra Mile</b>	Wagon	-	<b>244</b>
	CPSTL	-	
	Hired	244	
	Collection	-	
<b>Lanka Solvent (SBP)</b>	Wagon	-	<b>2,101</b>
	CPSTL	227	
	Hired	1,175	
	Collection	699	
<b>Total</b>	<b>Wagon</b>	<b>27,161</b>	<b>1,998,987</b>
	<b>CPSTL</b>	<b>223,324</b>	
	<b>Hired</b>	<b>1,180,443</b>	
	<b>Collection</b>	<b>318,665</b>	
	<b>Pipeline(Power plant)</b>	<b>249,394</b>	

Source: Ceylon Petroleum Storage Terminals Limited

**Table 3.3**  
**Ceylon Petroleum Storage Terminal's bulk products sales at Bulk Depots in Island wide from 01 st January 2022 to 30th September 2022**

Depots	Distribution Channel	Total Volume (KL)	Grand Total (KL)
Anuradhapura	CPSTL	30,146	104,983
	Hired	64,997	
	Collection	9,841	
Badulla	CPSTL	23,648	41,626
	Hired	17,965	
	Collection	13	
Batticaloa	CPSTL	68,746	69,043
	Hired	297	
	Collection	-	
Galle	CPSTL	65,119	95,357
	Hired	29,367	
	Collection	871	
Haputale	CPSTL	26,057	35,435
	Hired	9,379	
	Collection	-	
KKS	CPSTL	37,627	47,018
	Hired	9,392	
	Collection	-	
Kotagala	CPSTL	37,277	42,009
	Hired	4,732	
	Collection	-	
Kurunegala	CPSTL	37,389	123,103
	Hired	83,503	
	Collection	2,211	
Mathara	CPSTL	40,164	92,370
	Hired	50,840	
	Collection	1,366	
Peradeniya	CPSTL	75,339	102,854
	Hired	27,515	
	Collection	-	
Sarasaviyana	CPSTL	19,114	24,328
	Hired	5,214	
	Collection	-	
IRD Vavuniya	CPSTL	-	15,048
	Hired	15,048	
	Collection	-	
Total	CPSTL	460,624	793,175
	Hired	318,249	
	Collection	14,302	

Source: Ceylon Petroleum Storage Terminals Limited

### 3.4 Infrastructure development

The Ceylon Petroleum Storage Terminals Limited has identified renovations as an essential element to maintain infrastructure facilities utilized for the storage and distribution of fuel to ensure an uninterrupted supply of fuel in line with modern technology. Accordingly, renovations of the existing infrastructure facilities are being continuously carried out, and during the year 2022, the following repairs had been undertaken.

#### (a) Progress of the repair of tanks at the Kolonnawa Terminal.

Repairs had been done to maintain the existing tank complex so as to adhere to new technology and standards, and the progress as at 30th September, 2022, has been shown through table 3.4.

**Table 3.4**  
Progress of tank repairs as at 30.09.2022

Tank no	Storage capacity (cubic meters)	Estimated amount (without taxes)	Current physical progress as at 30.09.2022
03	12,500	40	100%
17	4,936	Rs. 30 Mn+USD	100%
22	2,790	35,400	85%
32	11,808	98	20%
46	11,856	133	100%

Source: Ceylon Petroleum Storage Terminals Limited

#### (a) Renovation of the 14" diameter pipeline running from the Colombo Port to Kolonnawa

As the existing pipeline system for transportation of fuel is very old and in a dilapidated condition, this pipeline system has to be repaired without delay. Accordingly, as

another step in repairing the pipe line, the repairs of this pipeline of which the length is 5,750 meters, commenced in the year 2021. The Ceylon Petroleum Storage Terminal Limited. allocated an estimated sum of Rs. Million 95 for this project and the physical progress of 70% had been achieved by 30.09.2022. The amount of the estimated cost of the project was not adequate due to increased costs of raw materials, and it has been planned to inform the Board of Directors to get Rs 39 Million further required allocated to attend to the balance work.

Pipeline system for transportation Fuel



#### (c) Renovation of the rail track in the Kolonnawa Terminal.

Due to transporting fuel by train is a low cost and efficient mode of transport, repair work of the Kolonnawa Terminal rail track commenced in order to make it more efficient. Renovation work showed a physical progress of 70% by 30.09.2022, and the balance work is expected to be completed during this year. The estimated cost is Rs. 80 Million.



Renovation of the Rail Trank In the Koloannawa Terminal



(d) Maintenance of the landing facilities of the Dolphin Jetty in the Colombo Port.

The Dolphin Jetty is used to unload imported petroleum product transport to the Kolonnawa fuel storage complex of the Ceylon Petroleum Storage Terminal Limited, thereby supplying common amenities for all companies engaged in the petroleum industry in Sri Lanka. As such, maintenance work of the unloading facilities of the Dolphin Jetty was completed by 24.07.2022 to ensure a continuous fuel supply in the country, thereby preventing the interruption of the functioning of the Dolphin Jetty, and the maintenance cost was around Rs. Million 5.

Fuel Unloading System.



### 3.5 Financial Performance (Ceylon Petroleum Storage Terminal Limited)

**Table 3.5**  
Ceylon Petroleum Storage Terminal Limited's  
Income Statement

Description	As at 30.09.2022 (Draft) Rs.
Revenue	7,461,392,033
Direct Expenses	(5,396,701,372)
<b>Gross Profit</b>	<b>2,064,690,661</b>
Other Operating Income/ Expenses	285,090,241
Administrative Expenses	(2,879,978,741)
<b>Operating Profit</b>	<b>(530,197,839)</b>
Finance Income	174,576,134
<b>Profit Before Tax</b>	<b>(355,621,705)</b>

Source: Ceylon Petroleum Storage Terminals Limited

**Table 3.6**  
Ceylon Petroleum Storage Terminal Limited's  
Financial Position

Description	As at 30.09.2022 (Draft) Rs.
<b>Non-Current Assets</b>	
Property, Plant and Equipment	16,599,771,554
Intangible Assets	46,851,364
Other Financial Assets	1,480,561,817
	<b>18,127,184,735</b>
<b>Current assets</b>	
Inventory	1,022,643,009
Trade and other receivables	12,231,431,370
Other Financial Assets	1,910,891,106
Cash and Cash Equivalents	1,526,236,526
	<b>16,691,202,011</b>
<b>Total Assets</b>	<b>34,818,386,746</b>
<b>Equity and Liabilities</b>	
<b>Capital and Reserves</b>	
Stated Capital	7,500,000,000
Capital Reserve	979,000,000
Retained Earnings	19,095,203,444
<b>Total Equity</b>	<b>27,574,203,444</b>
<b>Non-current liabilities</b>	
Defined Benefit Obligation	1,448,170,627
Deferred Tax Liabilities	1,609,811,239
	3,057,981,866
<b>Current liabilities</b>	
Trade and Other Payables	4,289,694,368
Income tax payable	(103,492,933)
	4,186,201,435
<b>Total Equity and Liabilities</b>	<b>34,818,386,746</b>

Source: Ceylon Petroleum Storage Terminals Limited

## Chapter Four

# Petroleum Development Authority of Sri Lanka (PDASL)

### 4.1 Introduction

The Petroleum Development Authority of Sri Lanka (PDASL) is entrusted with the regulation and management of all oil and gas exploration, development and production sectors in Sri Lanka. At present, while the petroleum requirements of Sri Lanka are almost totally dependent on imported petroleum products, the import of petroleum products has become a major challenge due to the foreign exchange crisis prevailing in the country. As such, there is a strong necessity to utilize petroleum and gas resources confirmed to be available in the country. The Petroleum Development Authority of Sri Lanka took necessary steps to utilize local petroleum and gas under the policy guidance of the Ministry of Power & Energy in the year 2022.

After the enactment of the Petroleum Resources Act No 21 of 2021, and the establishment of the Petroleum Development Authority of Sri Lanka as an independent regulator, fuel and gas exploration activities were expedited to attract the attention of globally recognized fuel and gas companies. For the proper functioning of Petroleum Development Authority of Sri Lanka, discussions were carried out during the first half of the year 2022 with the Ministry of Power & Energy and the Department of Management Services regarding the formulation of the organization structure, deciding the cadre requirement and preparation of the scheme of recruitment. Further, the Petroleum Development Authority of Sri Lanka continuously carried out activities for regulation and management regarding oil and gas explorations along a proper internal administrative frame work.

### Vision

“To ensure that all Sri Lankans benefit from the petroleum resources of the country by managing the industry in an equitable, safe and environmentally sustainable manner”

### Mission

“Design and monitor fiscal regimes that meet the country's evolving economic needs, matching them with a stable, efficient regulatory framework that attracts investment and encourages knowledge transfer, until the last economic reserves are produced”

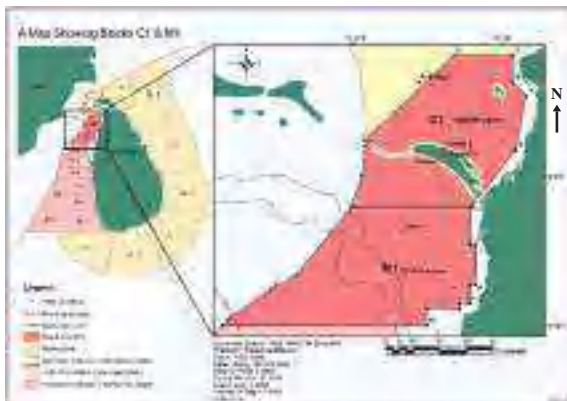
#### 4.2 The PDASL continued with the following ongoing oil & gas exploration activities during the first half of 2022.

##### a) Exploration and Development of Blocks M1 & C1

The evaluation of bids were concluded in May 2021 receiving for the licensing round held in 2019 for the exploration and production of oil and gas in Mannar Block M1 and Cauvery Block C1. Subsequently, the discussions for finalization of the Petroleum Resources Agreement performed with the selected bidder. The other requirements including documentation & necessary due diligence of the Bidder has been carried out and is currently awaiting for the review of Cabinet Appointed Negotiation Committee.

Map 4.1

Map of Mannar Block M1 and Cauvery Block C1



##### b) Accelerated development of the Dorado gas discovery, Block M2 in the Mannar Basin

A short study which was initiated in September 2021 to identify strategic options to accelerate the development of “Dorado” natural gas discovery in the Mannar Basin was completed in the first half 2022 and the final report of the study has been submitted to Petroleum Development Authority of Sri Lanka (PDASL) by the Consultant engaged in this assignment.

The PDASL continued with preparatory work required to call expression of interest from suitable investors to strategically develop the Dorado gas discovery followed by Barracuda discovery and/or additional hydrocarbon prospects in Block M2, with a viable downstream gas utilization option.

##### c) Multi-client Airborne Gravity & Magnetic data acquisition, processing, marketing and licensing program by Bell Geospace Company

The Bell Geospace company operationalized acquisition of multi-client airborne Gravity & Magnetic data over an approved survey area covering selected offshore areas of Mannar and Cauvery basins (M1, M2, C1 and C2 blocks) in the northwest of Sri Lanka in August 2021 and completed the data acquisition program in December 2021. The estimated cost of the survey USD 927,000 was borne by Bell Geospace at no cost to the Government. The Bell Geospace company completed the processing of acquired data close to 14,000 Line Km and commenced marketing of the processed data worldwide through their international marketing network during this period.

Map 4.2

Map of M1, M2, C1 and C2 exploration blocks



**d) Multi-client seismic data acquisition, processing, re-processing, marketing and licensing by the subsidiaries of Schlumberger Company**

The subsidiaries of Schlumberger have continued marketing the processed & reprocessed seismic data during the first half of 2022 in accordance with the multi-client agreements entered into with the government of Sri Lanka time to time since 2016. To date they have 13,080 Km of 2D reprocessed and new acquisition data and already shared part of this data with government of Sri Lanka (GoSL). They have completed reprocessing the West Mannar 2005 multi-client 2D seismic data of 4478 Lkm with the latest 2D technology within this period.

Thus far they have spent close to USD 18 million for the acquisition, processing & reprocessing services at no cost to the government and have further assured a partnership share of the sales proceeds to government of Sri Lanka close to USD 684,000 in 2022. GoSL has already received USD 150,000 in February 2022 with the balance due imminently. In addition to that the technical and marketing teams of Schlumberger have reached several potential investors through their international network to promote prospective offshore acreage for oil and gas upstream activities. They have initiated key engagements with five reputed oil & gas companies for possible data licensing opportunities.

**e) Publish updated offshore hydrocarbon exploration Block Map**

Published the updated “Hydrocarbon Exploration Block Map of Sri Lanka” on the 11.07.2022 through a gazette notification. This block map outlines 922 smaller blocks approximately on a 15km x 15 km grid covering all three basins Mannar Basin - Blocks (MB001 - MB294), Cauvery Basin - Blocks (CB001 - CB069), Lanka Basin - Blocks

(LB001 - LB559) on offer for Joint Studies, Exploration, Development and Productions.

**f) Draft Regulations in line with New Petroleum Resources Act and National Gas Policy**

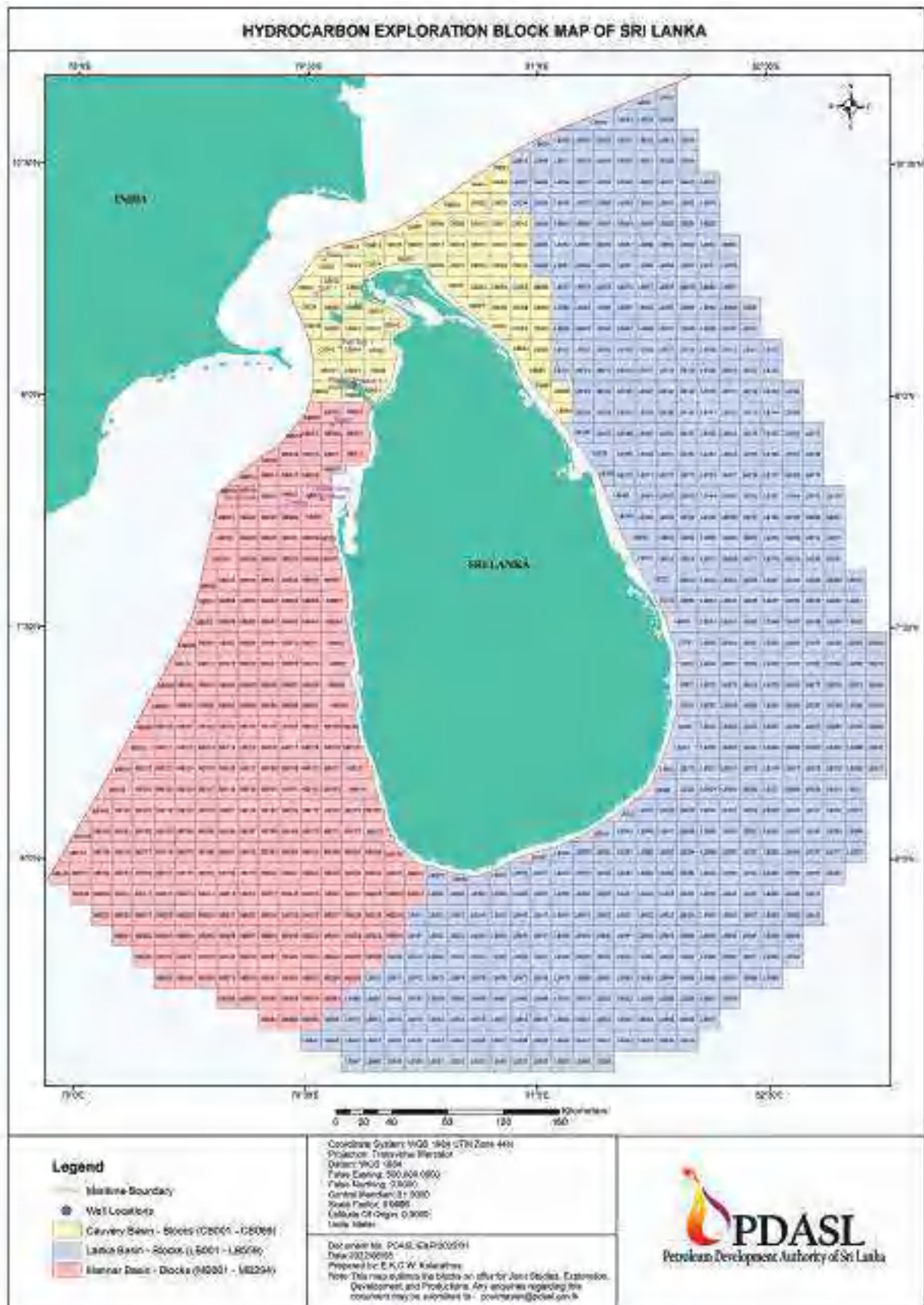
In order to carry out the objectives of the new Act and proper functioning of PDASL, steps were taken to formulate regulations to establish the procedures in areas pronounced in the Act. The PDASL team was engaged in drafting the following much needed regulations to be adopted soon for the initiation of its activities related to:

- I. Entering into Joint Study Agreements and integrated energy exploration projects
- II. Data generation for hydrocarbon exploration activities in Sri Lanka
- III. Petroleum Data Viewing, Licensing and granting Rights to Use
- IV. Service Provider Licensing

**g) Investor Relation Activities**

The recently made sweeping structural changes and policy decisions has put Sri Lanka firmly back on the global industry map. The marketing campaign launched in 2021 through the global upstream news source and the Schlumberger Multi-client international marketing arm have been successful in gaining renewed interest from genuine oil companies covering 25% of our offshore acreage. Some of them have viewed data at PDASL facility, purchased petroleum data from Schlumberger and already initiated discussions with PDASL for possible joint study partnerships and production sharing investments. The PDASL has been successful in managing this renewed investor interest throughout in the first half of 2022.

Map 4.3



### 4.3 Financial Performance

**Table 4.1**  
**Recurrent & Capital Expenditure – Public Institutions (Rs. Million)**

Types of Expenditure	Budgetary Provisions 2021	Actual Exp. 2021	%	Budgetary Provisions 2022	Actual Exp. as at end of September 2022	%
Recurrent Expenditure	71.250	71.074	99.75	60.00	28.761	47.93
Capital Expenditure	40.000	0.000	0.00	20.00	0.00	0.00
<b>Total Expenditure</b>	<b>111.250</b>	<b>71.074</b>	<b>99.750</b>	<b>80.00</b>	<b>28.761</b>	<b>47.93</b>

Source: Energy Section

#### 4.4 Proposed Summary of Actions for the year 2023

The Petroleum Development Authority of Sri Lanka (PDASL) which has evolved from Petroleum Resourced Development Secretariat (PRDS) in October 2021 intends to focus more on attracting upstream investments across all three offshore basins with the implementation of the most comprehensive changes made to legislative, fiscal and institutional framework in past two years. Whilst, putting place the proper in-house administrative framework for the regulation and management of the upstream sector, the PDASL is expected to continue with the following ongoing investment projects and initiate new investment projects during the year 2023.

**(a) Award exploration blocks for oil and gas exploration**

Suitable investors and investments is expected to enter into several Joint Study Agreements (JSA) to commence exploration activities in 2023 in awarded blocks following the procedures prescribed in the relevant regulations published.

**(b) Accelerated development of the gas discoveries**

After securing a suitable investor through

the procedures prescribed in the relevant regulations, it is expected to strategically develop the Dorado and Barracuda gas discoveries and any additional hydrocarbon prospects with a viable downstream gas utilization option.

**(c) Continue with Multi-client Airborne Gravity & Magnetic data acquisition, processing, marketing and licensing program by Bell Geospace Company**

The Bell Geospace company may carry out several more airborne gravity, gravity gradiometry and magnetic data acquisition surveys over the selected areas of Mannar and Cauvery basins within 2023 based on the pre-commitments secured from potential clients. In addition, they will continue marketing and licensing data already acquired and processed to potential investors through their international marketing network and strategy.

**(d) Continue with Multi-Client seismic data acquisition, processing/reprocessing, marketing and licensing programs by Schlumberger**

The subsidiaries of Schlumberger may acquire more seismic data covering selected areas of all three basins within 2023 based on the pre-commitments secured from

potential clients. In addition they will continue marketing and licensing all seismic data processed and reprocessed up until 2022 to potential investors through their international marketing network and strategy.

**(e) New projects to Increase the quality and quantity of National Petroleum Data Repository (NPDR)**

- It is expected to execute new data acquisition, processing, mapping and re-processing programs on a multi-client basis with reputable service providers using latest advanced as well as alternative technologies.
- It is also planned to recruit new technical staff to PDASL and carry out more in-house data interpretation and basin

analysis related work with the assistance of international experts in order to add more quality data to the NPDR.

**(f) Continue with Investor Promotion**

It is expected to recommence the investor promotion campaign internationally to market exploration blocks together with new upstream initiatives internationally. It is planned to attend annual global conferences, summits and networking sessions attended by reputed oil and gas companies in view of promoting upstream developments. It is also planned to organize virtual programs/ physical events together with multi-client contractors and use print & social media platform to promote Sri Lanka upstream opportunities.





### විදුලිබල අංශය

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අංක 80, ශ්‍රීමත් අර්නස්ට් ද සිල්වා මාවත, කොළඹ 07.  
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