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வலுசக்தி அமைச்சு
MINISTRY OF ENERGY

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முன்னேற்ற அறிக்கை
Progress Report
2024

Ministry of Energy
Progress Report 2024
(Progress of the year 2024 and Future Plans for 2025)

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Message of the Hon. Minister

As the Minister of Energy, I am pleased to submit a message to this report, which includes progress in 2024 and the future plans for 2025.

The political transformation which has been expected for decades, became a reality last year. A discussion on the energy sector revolution of the country was one of the main areas discussed among the parties who contributed to this political change. These parties stand for the ownership and authority of the energy sector which should belong to the government and they believe that it leads to the indisputable importance of the national security and the sovereignty of the country. The previous ruling parties' standard for practicing improper policies and procedures and allowing corruption led to the privatization and tried to gain advantages in it in the energy sector by endangering the national security and the sovereignty of the country. President Anura Kumara Dissanayaka led by the National People's Force and became the ruling party in 2024 by defeating those forces and ideologies was the decisive victory in the energy sector of the country.

This special achievement confirmed the ownership of the energy sector with globally recognized new methodologies consisting of new organizational frameworks and specifically new transparent advanced programs instead of the outdated methods and organization structures and it has confirmed the national security and the sovereignty of the country.

The fulfillment of this historical responsibility has been vested in me as the Minister of Energy in the National People's Power government. The first step has been taken by appointing higher official level positions for the institutes coming under the ministry with authentic and experienced officers who has real desire and enthusiasm to contribute to the national task by using my experiences in more than 30 years as the power and electronic engineer and the experiences gained through engaging the progressive politics and the experiences acknowledged by preparing of energy policy of the new government and this attempt has been initiated by considering not only next couple of years but also several decades of the future.

A quick recruitment method has been introduced to fill the vacancies created by the intellectuals and the engineers brain drained during the recent past in the energy sector. Necessary steps have been taking to retain the experts to keep the positions in the various sectors by giving them a due recognition and respect.

Renewable energy generation is going to be increased by using solar PV, wind and wave powers through the identified short term, medium term and long-term plans in order to replace the coal and thermal electricity power generation. Accordingly, an accepted transparent mechanism has been initiated to get new technology and sufficient investments through the foreign direct investment in the identified respective areas.

Finally, it is warmly welcome all of you to contribute the upliftment of the national program of the energy sector of the country.

Eng. Kumara Jayakody
Minister of Energy

Message of the Secretary

It is my great pleasure to present this message for the "Progress Report 2024," which highlights the development activities undertaken in 2024 and outlines the plans for 2025 within the Ministry of Energy. This comes at a significant time, coinciding with the enactment of the appropriation bill for Budget 2025.

Following the formation of the present government, then "Ministry of Power & Energy" was restructured into the Ministry of Energy. Under this new framework, we are dedicated to achieving the fifty key targets outlined in the government's manifesto, titled Energizing the National Renaissance – A People-Centric Energy Transition. Our focus is to transform the energy landscape over the next five years, with the ultimate aim of reducing energy costs to the lowest in the region, a goal we are determined to reach.

In line with this, we anticipate the need to amend the recently enacted Sri Lanka Electricity Act No. 36/2024, should any barriers arise that hinder our ability to meet these targets. Additionally, the restructuring of the Ceylon Electricity Board (CEB) will proceed, guided by a thorough study and necessary adjustments to the current Act.

The government's primary focus remains on expanding renewable energy sources for electricity generation. Currently, our renewable energy capacity stands at about 3,815 MW, and we aim to increase this to 6,790 MW by 2030. For 2025, the total electricity demand is projected to reach 17.5 billion units, of which 14.5 billion units will be sourced from renewable energy (including major hydropower plants), with the remaining demand met by coal and thermal power plants.

Initial steps have been taken to establish a streamlined regulatory framework for the petroleum industry and to enhance the infrastructure necessary to ensure fuel security within the country. Additionally, a cost-reflective pricing formula for fuel has been introduced, aiming to deliver fair pricing and maximize benefits for the public.

The achievements in both the power and energy sectors during 2024 have been substantial. This success is largely due to the consistent efforts to ensure the safe and reliable supply of fuel and uninterrupted electricity throughout the year.

I would like to express my sincere gratitude to the Hon. Minister, the dedicated officers at all levels of the Ministry, and the various institutions under our purview for their invaluable guidance and support in these accomplishments.

Looking ahead, I am confident that with the continued support of our stakeholders, we will successfully implement the proposed initiatives for 2025 and beyond, driving progress in the energy sector for the benefit of the nation.

Prof. K.T.M. Udayanga Hemapala
Secretary
Ministry of Energy

Introduction

This Ministry was functioned as the Ministry of Power and Energy in accordance with Gazette No. 2289/43 dated July 22, 2022 until the November 2024. The "Energy In-Charge Ministry" was further formalized under Gazette No. 2412/08 dated November 25, 2024, with the primary objective of formulating, implementing, monitoring, and evaluating national policies, programs, and projects related to electricity and petroleum sectors and bringing all related activities under one unified framework. This transition aligns with the Vision of the new government, ensuring the continuation and expansion of efforts aimed at transforming the power and energy sectors.

Currently, eight institutions supervise under the Power Section, including the Ceylon Electricity Board (CEB), Lanka Electricity Company (Pvt) Ltd. (LECO), Sri Lanka Sustainable Energy Authority (SLSEA), Sri Lanka Atomic Energy Board (SLAEB), Sri Lanka Atomic Energy Regulatory Council (SLAERC), L.T.L. Holdings (Pvt) Ltd., Lanka Coal Company (Pvt) Ltd., and Sri Lanka Energies (Pvt) Ltd. In addition, the Energy Section includes four key entities: the Ceylon Petroleum Corporation (CPC), Ceylon Petroleum Storage Terminals Ltd. (CPSTL), Petroleum Development Authority of Sri Lanka (PDASL), and Trinco Petroleum Terminal (Pvt) Ltd. (TPTL). These institutions manage the petroleum sector, with PDASL overseeing upstream activities and the others focusing on downstream operations.

In 2023, several strategic decisions were taken to address long-standing issues in the energy sector, and these efforts of solving these issues were further accelerated in 2024. The focus on ensuring the provision of reliable, sustainable, and affordable electricity while enhancing energy access and protecting the environment, in line with the mission of the Ministry.

The key achievement was the enactment of the Sri Lanka Electricity Act No. 36 of 2024 (Electricity Sector Reforms), which was the benchmark of the electricity supply sector of the country and it led the restructuring process of the power sector. Previously the restructuring process was hindered by lack of policy guidance, this reform introduces modern operational concepts such as Wholesale Markets and Open Access. The power sector is set to operate as a cluster of expert companies, supported by a regulated and interconnected structure.

The government's primary focus remains on expanding renewable energy sources for electricity generation. Currently, our renewable energy capacity stands at about 3,815 MW, and the ministry aims to increase this to 6,790 MW by 2030. Efforts to generate 70% of the nation's electricity demand through renewable energy by 2030 have been strengthened, with the development of a comprehensive framework to facilitate this transition. Key measures include:

- The establishment of a standardized power purchase agreement model to streamline renewable energy development, facilitated by the Sri Lanka Sustainable Energy Authority and Ceylon Electricity Board (CEB).
- The creation of investor-friendly feed-in tariffs and solar rooftop tariffs to drive low-cost energy solutions.

- Development of a dynamic renewable energy tendering model to ensure transparency and foster competition.
- Mitigation of risks in renewable energy investments through a well-structured investment model, supported by international development agencies such as the World Bank, USAID, and the Asian Development Bank.
- Taking initiatives to develop a competitive and transparent procurement model for renewable energy acquisition, with expert contributions from the World Bank, to ensure the implementation of high standards of integrity as mandated by the new Electricity Act.

Firm and actionable steps have been taken to connect the country's electricity network to the emerging regional grid via the sole available node in South India. This interconnection will allow Sri Lanka to access energy, power, and grid services at competitive regional prices.

Recent advancements in offshore wind energy, supported by a study funded by the World Bank, have highlighted the immense potential for Sri Lanka to emerge as a key energy exporter in Asia. In parallel, work is ongoing to develop a Green Hydrogen Roadmap, aimed at leveraging Sri Lanka's renewable energy resources for international export opportunities. Efforts are underway to establish an Export-Oriented Petroleum Refinery in the Hambantota area, with a minimum capacity of 100,000 barrels per day (bpd). Negotiations for the project agreement are progressing smoothly, with both parties having reached mutual consensus on most of the proposed terms.

The introduction of the power wheeling concept is underway, with regulations currently being developed. Efforts to implement battery energy storage systems are also in progress, aimed at improving system quality and enhancing reliability, particularly with the increased integration of variable renewable energy sources. In 2024, 630 MW of renewable energy capacity was added to the national grid.

Key developments include the completion of the 120 MW Uma Oya project in April 2024, the commissioning of the 350 MW Kerawalapitiya open-cycle LNG power plant in August 2024 and planned operation of it's combined-cycle plant by the first quarter of 2025 and inclusion of floating solar were helped to increase the installed capacity. Additionally, a MOU has been signed for Renewable Energy Development in collaboration with the Government of India.

In 2024, the Ministry took significant steps to strengthen the country's energy security, and these efforts will be detailed in the relevant chapters of this report.

The Ceylon Petroleum Corporation has successfully fulfilled its crucial role in ensuring a reliable fuel supply to support key sectors such as power generation, transportation, and industry. Authorized under the Ceylon Petroleum Corporation Act No. 28 of 1961, the Corporation is responsible for all aspects of petroleum operations, including the import, export, refining, storage, supply, distribution, and sale of petroleum products across the island. In addition, the Ceylon Petroleum Corporation (CPC) has launched a project to repair 12 tanks at the Trincomalee Oil Tank Complex, which consists of 99 tanks, and work is currently underway. Similarly, Trinco Petroleum Terminal Limited (TPTL) has initiated the first phase of developing 61 oil tanks at the same complex.

In efforts to expand petroleum distribution, three foreign companies-Sinopec, R.M. Park, and United Petroleum-have entered the Sri Lankan market, contributing to fuel imports and distribution. Furthermore, a draft bill has been prepared to establish a regulatory body for the petroleum sector and enforcement activities planned for the coming year.

the Ceylon Petroleum Storage Terminal Ltd, Established in the year 2003, in partnership with the Ceylon Indian Oil Company, plays a vital role in facilitating the storage and distribution of petroleum products throughout Sri Lanka. In the past year, the company has focused on developing essential infrastructure, including pipeline systems and fuel storage tanks, to support fuel storage and distribution. Plans are in place to continue these infrastructure developments in the coming year as well.

The Petroleum Development Authority of Sri Lanka (PDASL), established under the Petroleum Resources Act No. 21 of 2021, is the statutory body responsible for regulating and overseeing all oil and gas exploration, development, and production activities in Sri Lanka. Furthermore, the new Petroleum Resources Exploration and Development Block Map was officially released through a Gazette notification on March 14, 2024.

The Ministry's achievements in maintaining a continuous supply of electricity and energy, particularly as the economic crisis subsides, along with the progress made up to December 2024, will be detailed in the following sections.

Chapter 01

Ministry of Energy

VISION

"To make Sri Lanka the energy hub of South Asia"

MISSION

Power Section

"Provide Quality, Reliable, Sustainable and Affordable Electricity for economic prosperity of the nation"

MISSION

Energy Section

"Enhancing access to low cost energy to meet national needs by management of fuel importation and integration of domestic new energy sources into the energy mix, and ensuring an environmental friendly sustainable energy supply by regulation of energy related policy enforcement in complying with relevant laws and regulations"

1.1 Subjects and Functions of the Ministry of Energy

Subjects and Functions of the Ministry of Energy as the Gazette notification No. 2412/08 dated 25th November 2024 are as follows;

01. Exploration, planning, development and supervision of activities relating to generation of renewable energy, electricity and other energies from sources such as solar, water, thermal, coal, waste and wind
02. Meeting the electricity needs of Sri Lanka and safeguarding energy security
03. Management of demand to ensure energy efficiency
04. Implementation of a power generation plan based on long- term requirements
05. Making the power transmission and distribution processes efficient
06. Creation of a smart network to ensure maximizing efficient use of generated electricity
07. Reduction of costs for generating electricity and removal of uncertainties during generation
08. Implementation of appropriate programmes for replacing the existing high-cost sources of electricity generation with low-cost, environment-friendly, renewable sources
09. Ensuring that local companies get equal opportunities for investing in national renewable energy projects
10. Increasing energy generation using industrial waste
11. Establishing micro-grid networks as energy units based on the cooperative principles
12. Establishing strategic partnerships and investment opportunities in the energy sector
13. Encouraging re-investment in small-scale hydro power generation, specially by renewing existing agreements
14. Introduction of a fairer and transparent method for updating the electricity bill and application of price formula for petroleum and gas
15. Implementation of a power generation plan based on long term requirements
16. Taking necessary steps to reduce the losses at the institutional management level and technical damages that occur to the electricity generation and distribution system
17. Facilitating and encouraging to use electric vehicles
18. Taking measures to make Sri Lanka as an Energy Trading Hub
19. Controlling greenhouse gas emissions
20. Rural electrification
21. Coordination and implementation of import, refining, storage, distribution and sale of petroleum-based products and natural gas
22. Matters relating to petroleum production and refining
23. Exploration of petroleum and natural gases and related activities
24. Matters relating to production of gas and by-products from petroleum production sources, maintenance of stocks, production and distribution
25. Development of infrastructure facilities in relation to the supply and distribution of fuel
26. Formulation of an appropriate energy policy for the control, regulation and utilization of energy resources
27. Improving the capacity of oil refining and encouraging associate industry on petroleum by-products
28. Improving the reliability, continuity and efficiency in the supply of fuel.

1.2 Main Divisions of the Ministry of Energy

The Ministry of Energy consists of the following divisions.

- Administration Division
- Development Division
- Power and Power Reforms
- Policy, Technical and Research Division
- Planning Division
- Procurement Division
- Finance Division
- Internal Audit Division
- Power Sector Reform Secretariat

1.3 Institutions coming under the Ministry of Energy

- Ceylon Electricity Board (CEB).
- Lanka Electricity Company (Private) Limited (LECO).
- Sri Lanka Sustainable Energy Authority (SLSEA).
- Sri Lanka Atomic Energy Regulatory Council.
- Sri Lanka Atomic Energy Board.
- Lanka Coal Company (Pvt). Ltd.
- Sri Lanka Energies (Pvt) Ltd.
- LTL Holdings (Pvt) Ltd.
- Ceylon Petroleum Corporation.
- Ceylon Petroleum Storage Terminal Limited.
- Petroleum Development Authority of Sri Lanka.
- M/S Trinco Petroleum Terminal Limited.

1.4 Performance of Power section in the year 2024

Main focuses of the year 2024 was to stabilize the energy security in the country in order to supply continuous electricity and fuel to meet all kinds of demand to satisfy consumer requirements. Necessary changes for improve the energy sector management have been identified and rules and regulations formulated for implement restructuring process. In the same time expedite the ongoing projects and identified new projects specially hydrogen and nuclear power to increase installed capacity of electricity generation to avoid future energy crisis. Transmission expansions continued and distribution networks improvements continued with introduce of smart solutions.

During the year 2024, actions have been taken to increase the Renewable Energy (RE) power generation while adding major hydro, mini hydro, ground mounted-floating-rooftop solar to the system. Addition of LNG power plant made the energy mix more diverse and strengthen the national power system. The Ministry intervened further expanding of the renewable energy sector as a national and global need, in order to achieve the goals to be reached 70% RE by 2030 and Carbon Net Zero by 2050, the establishment of solar rooftops and solar parks specially in the North and East of Sri Lanka with the private sector investments. Wind parks also in the pipeline and initials studies are in progress.

In the journey towards progress in the energy sector through an integrated approach, existing National Energy Policy and strategies had been reviewed with the aim of identify achievements so far and future development needs with assistance of inter-organizational committee. In order to fulfill the objectives of a people-centered government, all information requested in accordance with the

Right to Information Act No. 12 of 2016 was provided to the general public without any delay throughout the year 2024, on public requests.

An agreement was signed Sri Lanka Atomic Energy Board in September 2024 with the investor and the Ministry of Health, under the guidance of the International Atomic Energy Agency (IAEA) to use the cyclotron facility to produce the chemical drugs (Fluorodeoxyglucose) (FDG) for cancer vaccines for the advancement of the health sector using atomic energy. Similarly, the project to generate electricity between 300-400 MW using nuclear energy was brought further and the preparation of Expression of Interest documents (EOI) and the preparation of related regulations were carried out throughout the year.

1.4.1 Electricity Sector at a Glance

- Total Number of Electricity Users in 2024 = 7,717,673

Table 1.1
No. of Users as at end of October 2024

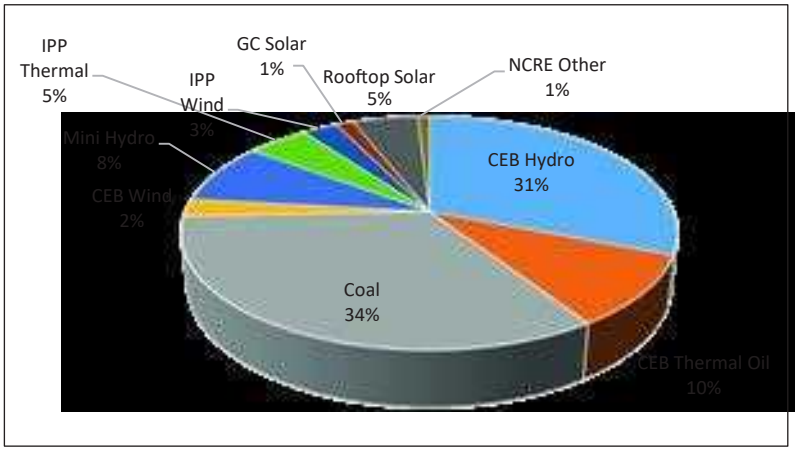
	Category	CEB	LECO	Total
1	Domestic	6,080,699	515,975	6,596,674
2	Religious Places	44,215	2,731	46,946
3	Industries	71,945	3,522	75,467
4	General Purposes	877,776	104,139	981,915
5	Hotels	776	88	864
6	Government Entities	9,285	420	9,705
7	Agriculture Purposes	4,061		4,061
8	Street Lights	-	2,041	2,041
	Total	**7,088,757**	**628,916**	**7,717,673**

Sorce: *CEB & LECO*

- Net Electricity Generation in 2024 - 15,322.814 GWh
- Electricity Generation Mix (Data is as at end of November 2024) (Units in GWh)

Coal	- 5,148.526
Hydro	- 6,021.523
Thermal	- 2,246.760
Wind	- 779.125
Solar	- 985.927
Other	- 140.953

Figure 1.1
Electricity Net Generation in 2024



Sorce: *CEB*

Table 1.2
Installed Capacity as at end of November 2024

Generation Source	CEB	Private Producers	Total
Renewable			
01. Hydro	1,413.38	423.08	1,846.46
02. Wind	103.50	163.45	266.95
03. Solar- Ground Mounted	-	153.36	153.36
04. Solar- Rooftop	-	1,346.94	1,346.94
05. Dendro	-	26.99	26.99
06. Biomass	-	17.08	17.08
07. Municipal Waste	-	10.00	10.00
Total	1,516.88	2,140.90	3,657.78
Fossil Fuel			
08. Thermal Oil	801.00	482.00	1,283.00
09. Coal	900.00	-	900.00
Total	1,701.00	482.00	2,183.00
Grand Total			**5,840.78**

Sorce: *CEB*

1.4.2 Electricity Generation Expansion

A. Renewable Energy Electricity Generation

i. Major Hydropower Projects

- **Uma Oya Hydropower Project (120 MW)**

The Uma Oya Multipurpose Development Project is being implemented by the Ministry of Irrigation and Water Resources Management. The project includes two tunnels and the tributary of Welimada River, a bypass route with a turnaround point, an underground hydropower station with an installed capacity of 120 MW, and a water diversion system for supplying water to an area of approximately 5,000 hectares for irrigation purposes. The project has received an investment of USD 530 million from both Iranian and domestic sources. The project was officially commissioned on 24th April 2024, in the presence of the President of Iran.

- **Moragolla Hydropower Project (30.5 MW)**

The Moragolla project is located in the Ulapane area of the Kandy District, utilizing the water from the Mahaweli River. The expected annual power generation from this project is 100.5 GWh. The project is nearing its final stage, having achieved 84% physical progress and 84.3% financial progress by the end of 2024. The project is expected to be completed by December 2025. The total estimated cost of this project is LKR 19,288 million. ADB financial assistance has been drawn to implement this project.

(Construction of the Power House and the Dam)

ii. Small Hydropower Projects

- **Seethawaka Hydropower Station**

This small hydropower station consists of two plants with a combined capacity of 7 MW (total 14 MW), expected to generate 40 GWh of electricity annually. The Initial Environmental Examination (IEE) report has been submitted to the Central Environmental Authority for approval. As of the end of 2024, procurement processes for electrical equipment have been completed, and site preparation and construction activities are planned to commence after having the approval from the Department of Irrigation and signing the Power Purchase Agreement (PPA) with the CEB.

iii. Mini Hydro Projects status

The commissioned cumulative Mini hydro capacity addition to the national grid is 422.4 MW by December 2024, achieving 10% of the set target for unconditional measures of NDC. Two mini hydro projects commissioned with in 2024 with the total capacity of 3.027 MW; Galabodawattha project (3 MW) in Panwila and Kirula project (0.027 MW) in Kollonna.

iv. Solar Energy Projects

- **Siyambalanduwa Ground Mounted Solar Park (100 MW)**

This solar plant with 100 MW capacity is currently in the process of acquiring lands and development activities such as access roads and fencing, have been commenced. The tender has been awarded, and the Energy License has been issued. The Power Purchase Agreement has been signed on 02.08.2024. The project is being executed in partnership with Wind Force PLC, Lakdhanavi Limited, and The Blue Circle Pvt. Ltd. of Singapore.

- **Hambantota Solar Power Plant Project (150 MW)**

The Standard Power Purchase Agreement has been signed on 13.03.2024. The Land Lease Agreement is yet to be signed with the Mahaweli Authority. The construction works of the transmission line and substation, anticipated to be completed under this project, are being carried out by a consortium company formed by 13 investors.

- **Sampur Solar Power Project (135 MW) – Phase I (50 MW)**

This two-phase project, scheduled to implement with the potential to expand up to 135MW, the works of the 50 MW first phase is being carried out by Trincomalee Power Company Limited (TPCL), the joint venture of a Ceylon Electricity Board (CEB) and National Thermal Power Corporation (NTPC) of India. Discussions are ongoing regarding the implementation agreement, and the power license was issued on July 18, 2023.

The project will utilize the land allocated for the construction of the Sampur Coal Power Plant. The Land Lease Agreement is yet to be signed with the Mahaweli Authority. The initial actions already taken to construction of the transmission line.

- **Oddamawadi Solar Power Plant Project (100 MW)**

The project is being carried out in the Oddamawadi area of the Batticaloa District in the Eastern Province. This project is planned to be constructed along with the 15 km transmission line to Valachchenai and implemented as a foreign direct investment. Environmental clearance and provisional approval have been obtained. The Standard Power Purchase Agreement is yet to be signed. The Attorney General's observations for the Project Implementation Agreement are yet to be obtained.

- **Poonakary tank Solar Power Project (700 MW)**

This project, located in Poonaryn lagoon associated with a battery energy storage system will be implemented as a foreign direct investment. An Environmental Impact Assessment report has been submitted to the Central Environmental Authority, and provisional approval has been granted for the development of 700 MW capacity.

- **Floating Solar project in Chandrika Wewa and Kiriibban Wewa (2 MW)**

Two floating solar power generation pilot projects, each with a capacity of 1 MW, constructed on the surfaces of Chandrika Wewa and Kiriibban Wewa and this is the first floating type solar plant in Sri Lanka. The Ministry of Trade, Industry, and Energy of Korea provided grant funding of approximately LKR 1,000 million for the implementation of these projects. The project was completed and commissioned on 27th November 2024.

The primary objective of this project is to introduce floating solar power technology as a cost-effective solution for Sri Lanka's power generation needs and identify the impacts of this technology. This approach addresses the challenges associated with land requirements for traditional solar power plants. This project is expected to produce 3 GWh of electricity annually. Additionally, it will save approximately 1 million liters of fossil fuel used for electricity generation each year, resulting in cost savings of around 0.3 billion rupees. Furthermore, the implementation of this solar project will contribute to a reduction in carbon emissions by 2,100 tons.

- **Implementation of solar rooftop project under Indian Line of Credit Facility**

This project aims to install rooftop solar systems for 5,000 number of religious places. The importing and distribution of the solar system kits are completed and installations are ongoing island wide. This project is expected to be completed by March 2025.

v. Wind Energy Projects

- **Mannar "Thambapawani" Wind Power Plant Project - Phase II (50MW)**

Thambapawani Phase I with 100 MW is operating successfully. EOI has been called for the Phase II and the proposal received are under evaluation by PC / CANC.

- **Verawil Wind Power Project (210 MW)**

Located in the Kilinochchi District, this project has received support for carrying out the Environmental Impact Assessment (EIA) from the United States Agency for International Development (USAID). EIA and bird studies have been completed, and reports have been submitted to the Central Environmental Authority. After receiving necessary approvals this project will be open for investment.

- **Wind Farm in Mullikulam (50 MW x 2)**

Initial project preparation works includes the development of site tracks, the clearing and demarcation of turbine footprints, and site accommodation. The Ceylon Electricity Board (CEB) developed this project and provided an opportunity for project developers to execute it. The total estimated cost for the preparatory works is Rs. 284.00 million and the expected completion date of the project preparation work is December 2025. RFP will call for implement the wind farm.

- **Mannar Wind Power Project (250 MW)**

Arrangements are being made to implement this project, with an installed capacity of 250 MW, backed by foreign direct investment. The Feasibility studies have been completed, and land acquisition is in progress. The

final Technical Evaluation Committee for the Environmental Impact Assessment has been held, and approval from the Central Environmental Authority is pending. The Sri Lanka Land Development Corporation is developing a rainwater harvesting system for Mannar Island, which will also contribute to the region's development.

- **Pooneryn Wind Power Project (234 MW, Phase I & II)**

This project designed with the capacity of 234 MW in the Pooneryn Peninsula, to be developed in two phases; 100 MW and 134 MW respectively and plan to implement with private investment. Land valuation has been completed and land acquisition is underway. The Pre-feasibility studies also completed and the energy license has been issued.

vi. Installation of Hybrid Renewable Energy Systems for Three Islands in Northern Peninsular

This project aims to supply electricity to the northern islands of Delft, Analaitivu, and Nainativu as a Hybrid Project that includes solar, wind, diesel generator, and lithium-ion battery storage systems. Electrical drawings have been approved, and civil drawings are under review. Chain link fencing has been completed in Analaitivu, while construction work is ongoing in Nainativu and Delft. Site clearing, inspection, and soil testing have been completed across all islands, and contractors identified. Material orders are in progress with equipment suppliers. This project has been financed by India as an Indian grant Project. The project will schedule to complete in the mid of 2025.

Following the Cabinet Decision dated 11 December 2023, the contract for the project has been awarded to M/S U-Solar Clean Energy Solutions (Pvt) Ltd. of India. The project is implementing by the SLSEA and steps have been taken to obtain consultancy services from the Ceylon Electricity Board (CEB), including supervision and monitoring of the project.

vii.Establishment of Battery Energy Storage System (BESS) in Hambantota

This project is the first Battery Energy Storage System in Sri Lanka and will be establish at Grid Substation Hambantota. It is a pilot project with the capacity of 5MW/10.7MWh. The total estimated cost of the proposed BESS is approximately USD 11.9 Million and implement by a grant from Ministry of Trade, Industry and Energy, Korea and the technical assistance of the Korea Institute for Advancement of Technology (KIAT).

Design works are in progress and design reviews are being carried out together with the contractor's representatives and the CEB. Civil works are in progress and to be completed by end February 2025. Materials will be delivered to the site by March/April 2025 and the project will be completed in 2025. II.

(Construction Site of the Battery Energy Storage System - Hambanthota)

B. Non-Renewable Power Generation

i. LNG projects

In accordance with the Paris agreement, Sri Lanka has submitted its Nationally Determined Contributions and committed to achieve 70% electricity generation from renewable energy sources by 2030 and to achieve carbon neutrality in electricity generation by 2050. The Public Utilities Commission of Sri Lanka approved Long Term Generation Expansion Plan 2023-2042 identifies the project of 200MW Natural Gas fired internal combustion engine power plant with duel fuel capacity as essential to complement the Variable Renewable Energy additions which will be contributed significantly for achievement of international commitments.

- **Construction of 350MW RLNG/Diesel Combined Cycle Power Plant at Kerawalapitiya**

First Phase of **Sobadhanavi** 350MW LNG Operable Combined Cycle Power Plant has been constructed in Kerawalapitiya by the Lakdhanavi and Open cycle Gas turbine was commissioned in August 2024. Steam turbine to be commissioned in 2025.

- **Construction of second 300MW LNG based Combined Cycle Power Plant at Kerawalapitiya**

350 MW **Sahasdhanavi** NG Combined Cycle Plant at Kerawalapitiya is planned to complete Open Cycle in 2026 and Combined Cycle in 2027. PPA negotiations are being held with the Lakdhanavi.

- **Implementation of the Proposal of the M/s Petronet India to Procure LNG requirement for Power Generation**

Cabinet of Ministers at its meeting held on 15.07.2024 granted approval to proceed with Joint proposal submitted by M/s Petronet India and M/s Lakdhanavi Ltd to procure LNG for running the power plants. A Memorandum of Understanding (MOU) was signed between M/s Petronet LNG Ltd, India and M/s LTL Holdings (Pvt) Ltd for mutual co-operation for LNG Infrastructure including LNG supply on 20.08.2024. Cabinet of Ministers granted its approval on 09.09.2024, considering proposals made in the Cabinet Memorandum dated 05.09.2024 to grant covering approval for the already executed MOU between M/s LTL Holdings (Pvt) Ltd and M/s Petronet LNG Ltd, India.

ii. 200MW Natural Gas Fired Internal Combustion (IC) Engine Power Plant with Duel Fuel Capacity at Kerawalapitiya

Cabinet of Ministers granted its approval on 24.06.2024, considering proposals made in the Cabinet Memorandum dated 11.06.2024 to proceed with the competitive procurement process for the 200 MW natural gas fired internal combustion engine power plant with dual fuel capability at Kerawalapitiya on IPP basis as a Build-Own-Operate-Transfer facility contracted for 20 years. Project Committee (PC) and Cabinet Appointed Negotiation Committees (CANC)

for implementation of this project have been appointed and this project will be completed in 2028.

iii. Nuclear Power Program

The main objective of this program is to assist the government in making necessary policy decisions for adopting nuclear technology to generate sustainable, reliable, stable, and environmentally friendly energy, specifically for electricity production through nuclear power. The expected outcome is the generation of electricity through a nuclear power plant initially with 300-400 MW. The total financial commitment for the intial works to be completed by the government side is Rs. 390 million.

The organizations involved in this initiative include the International Atomic Energy Agency (IAEA) and the Sri Lanka Atomic Energy Regulatory Council, which operates under the direct supervision of the Ministry of Power and Energy. Progress in this regard includes the ratification of two international conventions on nuclear liability, the preparation of an Integrated Work Plan (IWP), and the appointment of a Steering Committee for the Nuclear Power Plant Study.

1.4.3. Transmission and Distribution expansion

i. Green Power Development and Energy Efficiency Improvement Investment Program (Tranche 1)

Validity period of the ADB Loan No.3585 SRI (loan facility of USD 200 Million provided under the loan No. 3585 SRI for the implementation of 100MW Wind power plant at Mannar on 24.10.2017) has been extended up to 30.06.2026 enabling CEB to fully disbursed and utilize the saving to implement the three projects mentioned below;

- 3MW Solar PV project to demonstrate grid management services.
- Procurement of materials/equipment for distribution network development.
- Advanced Distribution Management System (ADMS) supervisory control Data Acquisition (SCADA) supported Advanced Distribution Control Centre (ADCC) for the Central Province of the CEB.

ii. Green Power Development and Energy Efficiency Improvement Investment (Tranche 2)

- The Horana-Padukka 132 kV Transmission Line Project (Package 2 Lot B2 – A), with a total cost of Rs. 599.71 million, began on April 30, 2020, and was initially scheduled to conclude on March 31, 2024. The project is funded by AFD and administered by ADB. The de-scoped work has been fully completed, achieving 100% completion.
- The Augmentation of Ambalangoda 132/33 kV Grid Substation, Pannala 132/33 kV Grid Substation & Supply of Two Spare Transformers of 132/33 kV 31.5 MVA (Package 8: Lot B), with a total cost of Rs. 1739.59 million, commenced on July 11, 2022, and is set to end on June 30, 2024, with 100% physical progress reported. The project is funded by ADB.
- The 220kV Switching Station at Kerawalapitiya (Package 9), with a total cost of Rs. 2918.7 million, began in August 2020 and is scheduled to conclude on May 21, 2024. This project is also funded by ADB and is nearing completion.

iii. Transmission line development under the transmission infrastructure for the Trincomalee Coal Power Project

- Construction of Habarana - Veyangoda 220kV Transmission Line Project Lot A - Substation

The project located in Veyangoda, New Habrana, Valachchenai, Kotmale, and Anuradhapura, has an estimated total cost of Rs. 5,847 million. It commenced in February 2018 and was funded by the Japan International Cooperation Agency (JICA). The project has been completed and successfully energized.

- Construction of Habarana - Veyangoda 220kV Transmission Line Project Lot B - Transmision Line

The project extending from Veyangoda to Habrana and its estimated cost is Rs. 10,155 million. It commenced in May 2017 with funding from the Japan International Cooperation Agency (JICA). The 126 km of 220kV line from Habrana to Dambulla has been completed and is ready to energize by the Ceylon Electricity Board.

iv. Supporting Electricity Supply Reliability Improvement Project

- This project includes the construction of 300 km of 33kV tower lines and 13 33kV switching gantries (Package 4), located across the entire island. The total estimated cost is Rs. 7,314.052 million, with an effective date of 28.10.2019. The project is funded by ADB and GOSL.

As for the progress, the profile design, tower design, and line survey have all been completed at 100%. Foundation design is at 99.5%, and gantry design is at 99%. The procurement of line materials is at 81.65%, and gantry materials procurement is at 82.7%. Tower spotting and soil investigation are both at 100%, while tower foundations are at 73%, and tower erection stands at 47%. Stringing has reached 30%, gantry foundation work is at 76%, and gantry erection is at 43%. Overall, the physical progress of the project is 73.82%. Project extension with the loan validity period granted on package 4 that could not be completed within the loan period due to unavoidable circumstances. Although 80% physical progress of the scope of works under the 4 packages is expected to be completed 31st March 2025.

- The project involves the installation of a 100 Mvar BSC at the Pannipitiya Grid Substation (Package 7: Lot A), located in Pannipitiya, with a total estimated cost of Rs. 1,103.5 million. The project started on 1st August 2019 and is scheduled for completion by 21st December 2024. It is funded by ADB, and testing and commissioning have been completed at 100%.
- Additionally, the installation of Static Var Systems (SVS) at the Biyagama Grid Substation (Package 7: Lot A2), located in Biyagama, has a total estimated cost of Rs. 1,756.34 million. The project began on 7th October 2020 and is set to be completed by 31st May 2024, also funded by ADB, with 100% completion. Furthermore, the establishment of a SCADA-supported Advanced Distribution Control Center for Western Province South 1 (Package 10), with a total estimated cost of Rs. 2,003.208 million, started in September 2023 and is expected to finish by March 2025. The project is funded by ADB, and the overall physical progress stands at 77%.

v. Power System Reliability Strengthening Project Phase II Package 2 Operational Unit 2 (PSRSP PII P2 OU2).

- Acquisition of Land for the Construction of a 2x45MVA, 132/33 kV Grid Substation and a Divisional Control Centre in Ekala Industrial Zone
  - The land acquisition process related to the acquisition of a plot of land for the construction of the proposed Grid Substation No. 132/33 in the Ekala Industrial Zone under the "Proposed Reliable Energy Empowerment" project was underway.

vi. Greater Colombo Transmission and Loss Reduction Project

This Project consists of two main projects. The first project involves the construction of the Second 220kV Underground Cable from Kerawalapitiya Substation to Colombo L, with a total cost of Rs. 9,119 million. The project is set to begin in January 2020 and is expected to be completed by September 2026. The funding for this project is provided by the Asian Infrastructure Investment Bank (AIIB). As of now, Cabinet approval has been received, the procurement process has been completed, with 11.5% of the project completed.

The Colombo City Transmission Network Development Project - Phase 2, has an estimated cost of Rs. 30,295 million. This project is scheduled to start in January 2022 and finish in December 2027, with funding from the Asian Development Bank (ADB). Currently, the project is awaiting fund commitment from ADB. The expected outputs of the project include the construction of the Colombo G (Kirulapone) 220/132kV Grid Substation, the Colombo K

(Wellawatta) 132/11kV Grid Substation, the Colombo P (Narahenpita) 132/11kV Grid Substation, and the Colombo Q (Hospital Square) 132/11kV Grid Substation. Additionally, necessary augmentations will be made at existing grid substations, and a 220kV and 132kV transmission cable network will be constructed to support the new grid substations.

vii. National Transmission & Distribution Network Development (NTDND & EIP)

- **Package 01** involves the construction of transmission lines (400 kV, 220 kV, and 132 kV) in the Gampaha, Colombo, and Kurunegala areas. The total cost is Rs. 14,623 million, with the project starting in January 2020 and scheduled to end in December 2025. It is funded by JICA and the Government of Sri Lanka (GoSL). The project is 60% physically complete, with progress on the 132 kV Kirindiwela-Kosagama TL, 220/132 and 132/33 FC TL, Biyagama-Kothmale in-out connections, and other transmission lines.

- **Package 02** focuses on the construction of transmission lines (400 kV, 220 kV, and 132 kV) in Gampaha, Colombo, Kandy, and Kegalle. The total cost is Rs. 8,531 million, with a start date in March 2019 and an end date in December 2025. It is also funded by JICA and GoSL. Commissioning is in progress for the Kirindiwela 220 SS, the new Kirindiwela 132 kV GSS, the augmentation of Kothmale GSS, and the new line bays at Kosgama GSS. The physical progress stands at 71%.

- **Package 03** involves the construction of transmission lines (220 kV, 132 kV) in Anuradhapura, Matale, Kandy, Kegalle, and Nuwara Eliya. The total cost is Rs. 11,253 million, with the project starting in August 2019 and ending in December 2026. It is funded by JICA and GoSL. The retendering process has started, and the physical progress is at 53%.

- **Package 04** covers the construction of distribution cables (33 kV, 11 kV, and 0.4 kV) in Colombo. The total cost is Rs. 7,183 million, with the project starting in September 2020 and scheduled to end in December 2026. It is funded by JICA and GoSL. The retendering process has started, with the physical progress at 42%.

viii. Power System Strengthening & Renewable Energy Integration Project

ADB loan obtained by the CEB and USD 150 Mn allocated for this project.

- **Package 1A** involves the procurement of indoor GIS grid substations on a turnkey basis, including the construction of the Mirigama 220/33 kV GSS (2×63 MVA) and Peliyagoda 132/33 kV GSS (2×45 MVA), with modifications at New Habarana, Veyangoda, Kelaniya, and Kotugoda GSs. The total cost is Rs. 16,408 million, with the project scheduled to run from September 2025 to August 2027and the TEC has been appointed.

- **Package 1B** covers the procurement of 132 kV outdoor AIS grid substations on a turnkey basis, including the construction of Homagama 132/33 kV GSS (2×45 MVA) and Negombo 132/33 kV GSS (2×63 MVA), along with modifications at Horana, Padukka, Bolawatta, New Chilaw, and Katunayake GSs. With a total cost of Rs. 10,021 million, the project runs from September 2025 to August 2027 and the TEC has been appointed.

- **Package 2** involves the procurement of overhead transmission lines on a turnkey basis, with the construction of several lines, including the Hambantota-Matara 132 kV DC transmission line (78 km), 132 kV SC LILOs to various substations, and a 220 kV DC LILO to Mirigama GSS. The total cost is Rs. 10,025 million, and the project duration is from September 2025 to August 2027 and the bidding document reviewed by the TEC for ADB's concurrence.

- **Package 3** focuses on the procurement of 132 kV grid substations on a turnkey basis, including the construction of Baddegama 132/33 kV GSS (2×45 MVA) and Kalawana 132/33 kV GSS (2×31.5 MVA), as well as the augmentation of several substations. The total cost is Rs. 10,060 million, with the project running from December 2025 to November 2027.

- **Package 4** involves the procurement of 132 kV underground cable transmission lines on a turnkey basis, including the construction of an SC underground cable LILO to Peliyagoda GSS from the Kelaniya-Kotugoda DC transmission line (2 km). The total cost is Rs. 3,567 million, with the project scheduled for completion from December 2025 to November 2027.

- **Package 4A** includes the construction of the New Habarana-New Anuradhapura 220 kV transmission line, with procurement of materials under ADB's loans 3483-SRI and 3585-SRI for "Spares & Tools for Transmission Network Requirements," with a total cost of Rs. 2,140 million, starting in October 2023. The physical progress is 97%. The civil works, tower erection, and stringing for the New Habarana-New Anuradhapura 220 kV transmission line are ongoing, with an estimated cost of Rs. 1,695 million and a timeline from November 2024 to May 2026, funded by CEB funds. The materials for the project, such as towers, conductors, insulators, and hardware accessories, are being procured and delivered to the site, with site preparation, way leave, and IEE clearances in progress. Bids for the line construction works were opened on August 21, 2024.

1.4.4. Policy Interventions

i. Expediting the implementation of the national policy of achieving 70% of the country's installed capacity from Renewable Energy Sources by 2030

The Ministry has undertaken measures to issue necessary instructions and directions to the respective institutions, with a view to preventing delays in the development of Renewable Energy projects and speeding up their processes, in order to achieve the

national policy goal set by the government in terms of the power sector. A mechanism has been established to streamline the evaluation and granting of grid connection to each RE project with a capacity of 10 MW or less, operated under Standard Power Purchase Agreements (SPPA).

This mechanism is enforced with effect from 20.04.2024. To this end, the Ceylon Electricity Board has implemented a web-based self-evaluation system to grade RE Project Developers based on their performance.

ii. Standard Power Purchase Agreement (SPPA)

As per the decision made by the government in 1999, implementation of Renewable Energy Projects under Standard Power Purchase Agreements has been limited to a 10 MW power plant capacity. Accordingly, the Standard Power Purchase Agreement, effective in 1996, has been amended per the Cabinet Decision dated 11.03.2024. After obtaining clearance from the Attorney General, the clauses included in the agreement were reviewed and amended to be compatible with both the project developer and the transmission licensee.

Also, to attract the interest of project investors, and since lenders' evaluations on project bankability aspects had been rapidly changed, the comments and suggestions submitted by the Asian Development Bank (ADB) regarding the amendments to be included to the existing Standard Power Purchase Agreement were reviewed, and the amendments were incorporated into the Standard Power Purchase Agreement.

iii. Revision of Renewable Energy Tariffs

In terms of the provisions of Section 43(4) B of the Sri Lanka Electricity Act No. 20 of 2009 and its subsequent amendments, Renewable Energy Projects with a capacity of 10 MW or less are required to enter into a Standard Power Purchase Agreement, based on a technology-specific, cost-reflective feed-in tariff methodology. Accordingly, in light of the current economic recovery, the Power Purchasing Prices given to Renewable Energy developers, based on the economic downturn that prevailed in the country in 2022, have been revised after a review by an expert committee, as per the Cabinet Decision dated 01.07.2024.

Furthermore, taking into consideration the prevailing economic situation in the market, the existing tariffs have been revised by introducing a Flat Tariff Option for purchasing power generated by Rooftop Solar Power Systems, and it became effective on 01.07.2024.

Further, the policy decision to extend the Standard Power Purchase Agreements entered into for the development of Mini Hydropower Plants by an additional 20 years from the expiration date based on the principle of avoided cost, was approved by the Cabinet of Ministers on 28.08.2018, given the fact that a mini hydropower plant can remain operational for up to 40 years after being commissioned, equipped with the necessary installations and overhauls.

In line with that decision, Mini Hydropower Plants with Standard Power Purchase Agreements, completing their 15-year period starting from 2011, were granted tariff charges based on the power plant factor, under the approval of the Cabinet of Ministers dated 04.03.2024.

iv. Electricity Price Revision

According to the Cabinet decision dated 09.01.2023 and 06.02.2023, the Cabinet of Ministers has approved the review of electricity tariffs by the cost-reflective tariff

system on a semi-annual basis (January 01 and July 01 every year) according to public policy guidelines.

Limitation of tariff revision period from 6 months to 3 months (half-yearly to quarterly basis) i.e. January, April, July, and October every year on the 01st day of January, April, July, and October every year to enable revision of tariff revision period taking into account cost of generation, transmission and distribution. To revise the policy guidelines, approval of the Cabinet of Ministers obtained by 30.10.2023. The Ministry conducted a public consultation on 12.12.2023 regarding the revision of the electricity tariff on a quarterly basis.

Sri Lanka Public Utilities Commission has approved to reduction of the total tariff by 21.93% from 05.03.2024, taking into consideration the review of the cost data submitted by the Ceylon Electricity Board and the proposals made during the public consultation. To inform the Cabinet in this regard, the Hon. Minister of Power and Energy submitted a Note to the Cabinet dated 18.02.2024 and it was taken into consideration in the Cabinet meeting held on 19.02.2024.

The Public Utilities Commission of Sri Lanka proposed after a study to pass on the benefit of reduction in cost due to an increase in hydropower generation and cost reduction due to maintenance and rehabilitation activities to electricity consumers. It was taken into consideration in the Cabinet meeting held on 19.06.2024 and the second electricity tariff revision for the year 2024 reduced the bill by 22.5% with effect from 16.07.2024.

v. Institutional Reforms of the Power Sector

Having considered the Cabinet Memorandum dated No. 24/0692/621/037-II dated 04.04.2024, the Cabinet of Ministers granted its approval to publish the Sri Lanka Electricity Bill in the Government gazette and present the bill to the Parliament for approval after publishing the bill in the gazette.

Accordingly, the Sri Lanka Electricity Bill was published in the Government gazette as a supplement on 17.04.2024, and the Sri Lanka Electricity Act, No. 36 of 2024 was approved by the Parliament on 06.06.2024 and became an Act of Parliament on 27 June 2024.

Having considered Cabinet Memorandum No. 24/1421/621/071 dated 15.07.2024, the Cabinet of Ministers granted its approval to appoint the National Electricity Advisory Council (NEAC) as per the subsection 3 (4) of the Sri Lanka Electricity Act, No. 36 of 2024 and to appoint the Board of Directors to the National System Operator as per subsection 10 (1) (b) of the Sri Lanka Electricity Act. Chairman/Members of NEAC and the Board of Directors to the National System Operator have been appointed on 01.08.2024.

Having considered Cabinet Memorandum dated No. 24/1421/621/071 dated 22.07.2024, the Cabinet of Ministers granted its approval to consider the requirement to get the Department of Valuation to complete the preliminary valuation of the Ceylon Electricity Board's assets, which is an essential step in preparing the Preliminary Transfer Plan required for the successful implementation of the proposed reforms in the Power Sector as per the provisions of the Sri Lanka Electricity Act No. 36 of 2024.

vi. Establishment of the ownership of lands occupied by Ceylon Electricity Board

A Cabinet paper titled "Establishment of ownership of lands Occupied by Ceylon Electricity Board" was submitted on 05.01.2023, and the Cabinet Decision No 23/0080/621/003 and dated 23.01.2023 directed the Secretaries of both Ministries to submit a joint Cabinet Memorandum on a

methodology for the formal transfer of land plots to the Ceylon Electricity Board (CEB).

Accordingly, the Joint Cabinet Memorandum submitted by the Hon. Minister of Power and Energy and the Hon. Minister of Tourism and Lands on 28.05.2024 has received decision No. 24/1050/621/052 and dated 11.06.2024. As stated therein, a appropriate methodology has been developed for the transfer of ownership of lands and a Joint Cabinet Memorandum has been submitted again.

1.4.5. Other achievements of the Ministry during 2024

i. Necessary arrangements have been made to obtain concurrences and consent from the Attorney General's Department and other relevant state agencies for signing and implementing the MoU between the Power Grid Cooperation of India Limited and the Ceylon Electricity Board for arranging statutory regulatory compliance and clearances for implementation of Interconnection of India - Sri Lanka Electricity Grids and subsequently, the Cabinet approval has been obtained for the same.

ii. Action taken to fulfill the functions stipulated for the membership of Sri Lanka under the programs carried out by the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) during (aforesaid period) in the year 2024, as per the directives of Ministry of Foreign Affairs.

iii. Necessary arrangements made to participate and convey concurrence for the affairs, activities, and meetings conducted by the South Asian Association for Regional Cooperation (SAARC) in the field of power and energy in line with the directives of the Ministry of Foreign Affairs. Carrying out coordination activities related to the membership of Sri Lanka, especially with the SAARC Energy Centre.

iv. Monitoring of Nationally Determined Contributions of the Power sector-

The NDC implementation plan for the electricity (power) sector has 5 main areas. They are;

- Enhance renewable energy contribution to the national electricity generation mix by increasing Solar PV, Wind, Hydro, and Sustainable Biomass-based electricity generations (Target: Develop an additional capacity of 3,867 MW renewable energy over the RE capacity considered in Business, Usual scenario, out of which approximately 950 MW are on an unconditional basis and 2,917 MW on a conditional basis) - Total capacity by the end of 30/11/2024 is 267 MW for wind power plants, 1,460 MW rooftop & ground mounted solar, 59 MW through sustainable biomass resources and 1535MW,430MW for major hydro & mini hydro respectively.
- Implement Demand Side Management (DSM) measures by promoting energy-efficient equipment, technologies, and system improvements in a national energy efficiency improvement and conservation (EEI&C) program.- 250 refrigerators tested and analysis is being carried out now, Mandatory labelling programmes for CFLs, Ceiling fans and LED lamps are in operation & The benchmark fests for the water pumps is being conducted at National Engineering Reaserch and Development Centre, Ja-Ela.
- Conversion of existing fuel oil-based combined cycle power plants to Natural Gas (NG) and establishment of new NG plants as conditional measures

(Once the necessary infrastructure is available) - 235 MW GT of the 350 MW Sobadanavi combined cycle power plant is commissioned and 115 MW ST is being commissioned by now.

- Transmission and distribution network efficiency improvements (Loss reduction of 0.5% compared with BAU by 2030) as unconditional measures (Target - Approximately 1,848 GWh energy savings between 2021 - 2030) – In progress
- Conduct R&D activities to implement pilot scale projects for NCRE sources that have not yet reached commercial maturity and develop other grid-supporting infrastructures as conditional measures – Completion of Pump storage feasibility study phase 1 and phase 2 & First 100 MW/ 100 MWh grid scale battery energy storage system project is expected to be funded by ADB. Furthermore data collection from the first floating Solar Project of 2 MW is in Progress.
- Each of the above 5 NDCS, consists of a set of activities are conducting by SLSEA & CEB and the Ministry is monitoring those targets continuesly.

1.4.6. Future Plans 2025

i. Construction of 220kV Second Underground Transmission Cable from Kerewalapitiya GSS to Colombo Port GSS of Ceylon Electricity Board (CEB) Funded by the Asian Infrastructure Investment Bank (AIIB)

The Cabinet memorandum was submitted on 31.08.2021, to obtain a loan of 52 million USD from the AIIB to the Ceylon Electricity Board (CEB) for the construction of the 220kV second underground transmission system from the Kerawalapitiya grid substation to the Colombo Port grid substation. The Cabinet approval was granted on 13.09.2021.

However, due to the prevailing economic situation in the country, and the instructions given by the ERD, the Cabinet memorandum was submitted on 20.11.2024 to obtain the loan to GOSL from the AIIB & on-lend to the CEB.

ii. Implementation of New Habarana Kappalthurai 220 kV Transmission Line Sovereign-backed financing from the Asia Infrastructure Investment Bank (AIIB). Clean Energy Absorption Transmission Project – I (CEATP - I)

This project is expected to construct 220kV transmission line from New Habarana to Kappalthurai to coincide with the commencement of commercial operations of the proposed 120 MW Sampur Solar Plant. The approval of the Cabinet of Ministers on 29.07.2024 to follow the international competitive bidding procedure to select an EPC contractor for the implementation of the New Habarana Kappalthurai Transmission Line Project and appoint a Technical Evaluation Committee and a Cabinet Appointed Procurement Committee (CAPC) to manage the procurement.

iii. Strengthening and Modernization of Electricity Transmission Network under the "Power System Reliability Strengthening Project" Funded by the Asian Development Bank (ADB).

Agreements signed to provide USD 200 Mn loan facility by Asian Development Bank (ADB) to implement several transmission and distribution development projects for strengthening and modernization of the national electricity transmission network maintained by the Ceylon Electricity Board (CEB) and distribution network maintained by Lanka Electricity Company (LECO) for Renewable Energy Integration.

Accordingly, loan of USD 150 million from the General Capital Resources (General) of the

Asian Development Bank will provide to CEB and USD 50 million to the Ceylon Electricity Company.

iv. Support and Complement Large Scale Projects Financed by the Asian Development Bank through Small Expenditure Financing Facility (SEFF)

SEFF expects to finance a series of small-value activities to support large-scale projects financed by ADB. The scope of the proposed financing facility is divided into two parts, i.e. Activity 1 - Urgent post-project completion activities to secure the sustainability of ADB-financed projects in the context of Sri Lanka's ongoing economic crisis mainly focusing Moragolla Hydropower Project (USD 15 Mn).

Activity 2 - Projects to complement the renewable energy drive of the country - Project preparatory support for developing transmission and distribution infrastructure for pipeline projects, pilot projects to demonstrate new technologies such as grid-connected energy storage, digital solutions, and renewable energy forecasting to facilitate the renewable energy integration, pilot projects on cross-sectorial interventions such as solar photovoltaic systems to support water desalination plants, capacity building and supplemental support for completed ADB projects in operation and maintenance (O&M), and asset management, and facility upgrading to meet critical needs (USD 15 Mn).

It was decided to authorize the Ceylon Electricity Board to obtain a USD 30 million loan directly under the Treasury Guarantees in two tranches from the Ordinary Capital Resources (Regular) of the Asian Development Bank under the Small Expenditure Financing Facility.

1.5 Performance of the Energy sector in the year 2024

The needs of the people are increasing day by day and since petroleum is one of the factors that help to role in meet those needs, this ministry provided the necessary policy guidance with the aim of providing an efficient service to the stakeholders including the consumers by meeting the petroleum needs of the country. This chapter provides information on the impact of global fuel price trends on fuel prices in Sri Lanka in the year 2024, the contribution made to meeting domestic fuel demand, the measures taken to regulate the Petroleum Industry & the performance related to the actions taken by the Ministry for the development of infrastructure in the Petroleum sector and the plans to be executed in the year 2025.

1.5.1. Petroleum Sector at a Glance - 2024

Total Imports of Refined Petroleum Products	- 3,229,095 MT
Total Imports of Crude Oil	- 1,518,726 MT
Production of Sapugaskanda Oil Refinery	- 1,445,529 MT
Total Import Cost of Petroleum Products	- USD 3,265.151 Mn
Total Sales of Petroleum Products	- 4,470,060 MT
Number of Fuel Filling Stations in Operation	- 1,434
Petroleum Storage Capacity of CPSTL	- 440,147 MT

1.5.2 Impact of global petroleum trends to the fuel price of Sri Lanka

i. Trends of global petroleum prices

International fuel prices have a direct impact on domestic fuel prices. In 2024, the Asia Pacific region has experienced the following trends in crude oil and refined fuel prices.

Table 1.3
Asia-Pacific Crude and refined Product Published Prices - 2024

Month	Price Per Barrel (USD)				
	Petrol 92 Octane	Petrol 95 Octane	Super Diesel	Auto Diesel	Crude Oil
January	91.195	95.978	102.832	101.162	83.32
February	95.591	100.161	106.523	104.983	77.68
March	97.142	101.440	103.859	102.875	79.06
April	102.126	106.472	104.705	103.522	80.99
May	91.130	95.498	97.318	95.753	84.52
June	87.935	93.078	98.085	97.642	89.14
July	92.134	96.541	99.303	98.994	83.93
August	84.702	88.938	92.214	90.692	82.52
September	78.448	82.858	84.329	83.358	83.80
October	79.755	85.932	87.915	87.426	77.94
November	79.088	84.509	89.230	89.098	73.41
December	81.352	84.640	88.473	88.905	74.87

Source : *S&P global commodity insights*

In consideration of the Singapore Platt prices in 2024,

- The maximum price of a crude oil barrel is recorded as USD 89.14 in June and the minimum price is recorded as USD 73.41 in November while the average price of a crude oil barrel is identified as USD 80.93.

- The maximum price of a Petrol Octane 92 barrel is recorded as USD 102.23 in April and the minimum price is recorded as USD 78.45 in September while the average price of a Petrol Octane 92 barrel is identified as USD 88.38.

- The maximum price of a Petrol Octane 95 barrel is recorded as USD 106.47 in April and the minimum price is recorded as USD 82.86 in September while the average price of a Petrol Octane 95 barrel is identified as USD 93.

- The maximum price of an Auto Diesel barrel is recorded as USD 106.52 in February and the minimum price is recorded as USD 84.33 in September while the average price of an Auto Diesel barrel is identified as USD 96.23.

- The maximum price of a Super Diesel barrel is recorded as USD 104.98 in February and the minimum price is recorded as USD 83.36 in September while the average price of a Super Diesel barrel is identified as USD 95.36.

ii. Impact of global prices on Fuel Price in Sri Lanka

Since, Sri Lanka is totally dependent on imported petroleum products, international fuel prices have a direct impact on domestic fuel prices. As there are high daily sales of Petrol Octane 92 and Auto Diesel and therefore, the fluctuations in the global fuel prices have a direct impact on domestic fuel

prices. However, since the daily sales of Petrol Octane 95 and Super Diesel is very small, the changes in the international price does not affect the local price. During the year 2024, taking in to account the average monthly landed cost paid by the Ceylon Petroleum Corporation in importing fuel, the highest landed cost of petrol 92 octane was recorded as USD 108.34 per barrel in April and the lowest landed cost was USD 83.66 in September. Also, a maximum landed cost of USD 109.51 per barrel for Auto Diesel was recorded in March and a minimum landed cost of USD 86.82 for Auto Diesel was paid in September.

Table 1.4
Average monthly landed cost for fuel imports - 2024
Ceylon Petroleum Corporation

Month	Average landed cost per barrel (USD) for fuel imports	
	Petrol Octane 92	Lanka Auto Diesel
January	94.73	106.95
February	100.28	106.95
March	105.44	109.51
April	108.34	109.32
May	102.29	101.34
June	93.17	103.23
July	-	-
August	89.93	94.99
September	83.66	86.82
October	84.97	86.82
November	84.30	91.85
December	87.27	92.30

Source : *Ceylon Petroleum Corporation*

1.5.3 Contribution to domestic petroleum supply in 2024

i. Import and Sale of Petroleum Products

With the recovery of economic activities after the economic crisis and the relief of the foreign exchange crisis, the importation of Petroleum Products was regularized in 2024. Accordingly, in order to meet the domestic petroleum requirement in the year 2024, an amount of 4,747,821 MT of 08 Petroleum Products including crude oil, was imported and supplied by five (05) main supplier organizations including Ceylon Petroleum Corporation for which USD 3,265.151 Mn has been spent.

ii. Sales of Petroleum Products

Since the functioning of all sectors of the national economy, such as transport, power supply, Industry, Agriculture, Fisheries etc., depends on energy supply, it is essential to maintain a supply that matches the demand for the smooth functioning of those sectors. Accordingly, following table shows the contribution of each fuel supplier to the sale of petroleum products in the year 2024. Total petroleum product sales in 2024 is 4,470,063 MT.

Table 1.5
Imports of Petroleum Products - 2024

Products	CPC		LIOC		SINOPEC		R.M.PARKS		UNITED PETROLEUM	
	Quantity (MT)	Import Cost (USD/Mn)	Quantity (MT)	Import Cost (USD/ Mn)	Quantity (MT)	Import Cost (USD/ Mn)	Quantity (MT)	Import Cost (USD/ Mn)	Quantity (MT)	Import Cost (USD/ Mn)
Crud Oil	1,518,726	982.729	-	-	-	-	-	-	-	-
Lanka Auto Diesel	547,378	381.099	286,197	213.325	151,884	114.96	104,270	75.577	15,137	11.334
Lanka Super Diesel	26,945	19.805	11,140	8.366	6,067	4.75	6,283	4.839	2,958	2.227
Petrol 92 Octane	585,708	470.652	269,701	216.917	149,277	124.484	100,070	77.981	15,059	12.322
Petrol 95 Octane	19,540	16.706	12,570	10.538	5,133	4.311	5,926	5.136	2,937	2.518
Jet A 1	315,811	245.417	-	-	-	-	-	-	-	-
Low Sulphur Fuel Oil (180 CST)	35,468	21.293	332,900	211.892	186,199	-	-	-	-	-
Marine Gas Oil	-	-	34,537	25.973	-	-	-	-	-	-
Total	**3,049,576**	**2,137.701**	**947,045**	**687.011**	**498,560**	**248.505**	**216,549**	**163.533**	**36,091**	**28.401**

Source: *CPC, LIOC, SINOPEC, R.M.PARK, UNITED PETROLEUM*

Table 1.6
Sales of Petroleum Products - 2024

Products	Quantity of Sales (MT)					Total (MT)
	CPC	LIOC	SINOPEC	R.M.PARKS	UNITED PETROLEUM	
Petrol 92 Octane	804,419	253,821	157,631	81,710	17,064	1,314,645
Petrol 95 Octane	20,893	14,583	4,355	2,974	632	43,437
Lanka Auto Diesel	1,025,160	279,474	170,385	82,395	14,760	1,572,174
Lanka Super Diesel	23,531	9,621	5,482	3,880	707	43,221
Lanka Kerosene	134,580	-	-	-	-	134,580
Lanka Industrial Kerosene	4,134	-	-	-	-	4,134
Lanka Chemical Naptha	101,541	-	-	-	-	101,541
Lanka Fuel Oil 800 Sec.	6	-	-	-	-	6
Lanka Fuel Oil 1500 Sec.(High Sulphur)	116,652	-	-	-	-	116,652
Lanka Fuel Oil 1500 Sec.(Low Sulphur)	155,816	306,262	-	-	-	462,078
Lanka Fuel Oil Super	155,857	-	-	-	-	155,857
Jet A 1	468,158	-	-	-	-	468,158
Lanka Solvents (SBP)	1,161	-	-	-	-	1,161
LP Gas	19,676	-	-	-	-	19,676
Lanka AV Gas	132	-	-	-	-	132
Marine Gas Oil	-	32,608	-	-	-	32,608
Total	**3,031,716**	**896,372**	**337,853**	**170,959**	**33,163**	**4,470,063**

Source: *CPC, LIOC, SINOPEC, R.M.PARK, UNITED PETROLEUM*

1.5.4 Regulatory functions performed during the year 2024

- **Introduction of a new Regulator for the Petroleum Industry**

The downstream petroleum industry in Sri Lanka has not had a comprehensive regulatory mechanism so far, and the Petroleum Industry which include import, refining, distribution and marketing of petroleum products including Petrol (Gasoline), Diesel (Gas Oil), Kerosene, Aviation Fuel Oil, Liquefied Petroleum Gas (LPG), and lubricants, operates within the existing legal framework. With the expansion of petroleum market activities and the entry of new competitive entities in to the market, the need for an independent regulator and a robust regulatory framework has arisen to maintain product quality and ensure consumer safety.

Accordingly, with the approval of the Cabinet of Ministers for Cabinet Memorandum No. 24/0691/621/038 dated 25.04.2024, an expert committee was appointed to submit recommendations to introduce an effective and efficient regulatory mechanism for the downstream petroleum industry and that committee submitted the following proposals.

- Establishing a "Sri Lanka Petroleum Industry Regulatory Commission" to regulate and supervise the downstream petroleum industry.

- Passing a regulatory bill for the petroleum industry.

The above proposals have been referred to the Legal Draftsman to draft the necessary legislations with the approval of the Cabinet of Ministers. After obtaining the policy approval of the new government regarding the regulation of the petroleum industry, a permanent regulator for the petroleum industry will be appointed.

- **Introduction of Guidelines on the Construction and Operation of Fuel Filling Stations**

In terms of the provisions of the Ceylon Petroleum Corporation Act No. 28 of 1961, the import and distribution of petroleum and related products was carried out exclusively by the Ceylon Petroleum Corporation (CPC). However, with the liberalization of the market, the import and distribution of fuel is also carried out by Lanka Indian Oil Company (LIOC), Sinopec Energy Lanka (Pvt) Ltd. (Sinopec), R.M. Park (Pvt) Ltd. and United Petroleum Lanka (Pvt) Ltd., in addition to the Ceylon Petroleum Corporation (CPC).

With the entry of new competitive entities in to the market, the Ministry of Power and Energy introduced guidelines in the following areas to safeguard the minimum standards of establishment and operation of fuel filling stations.

- Criteria for locating fuel filling stations
- Criteria for constructing fuel filling stations
- Criteria for maintaining the operations of fuel filling stations

The fuel supplying companies have been informed to follow these guidelines and the guidelines have been published on the Ministry's website for public information. Further, the Ministry will also monitor whether new fuel supplying companies are operating in accordance with these guidelines.

- **Regulating the process of supplying petroleum products directly to consumer entities**

The fuel supplying companies distribute fuel to consumer entities directly and through the fuel filling stations established island wide. Although formal approval was obtained to establish fuel filling stations from the Ministry

of Energy no approval was obtained from the Ministry for the direct supply of fuel stocks to consumer entities. The Ministry observed that approximately 3385 customer service centers were operated by fuel supply companies as of 31st October 2023.

Since a significant amount of fuel is distributed through customer service centers on a daily basis, the need to formalize the process of establishing customer service centers was identified. Accordingly, the Ministry has taken measures to introduce minimum criteria for the registration of new institutions and the centers to be maintained from among the currently registered customer service centers. The Ministry has taken steps to grant approval to customer service centers that meet the minimum criteria through fuel supplying entities. The number of customer service centers operating as of 31.12.2024 are as shown in the following table.

Table 1.7
Number of Customer Service Centers – as at 31.12.2024

Name of the Supplier	Number of customer service centers
CPC	1042
LIOC	170
Sinopec	13
Total	**1,225**

Source: *CPC, LIOC, Sinopec*

- **Implementation of fuel price formula**

The Ceylon Petroleum Corporation faced a severe financial crisis through the irregular fuel pricing mechanism prevailed for a long time, and the price revisions made from time to time caused large fluctuations in fuel price at one time. With the aim of avoiding these situations, the government has taken initial steps to determine fuel prices through a cost reflective pricing formula with effect from May, 2022.

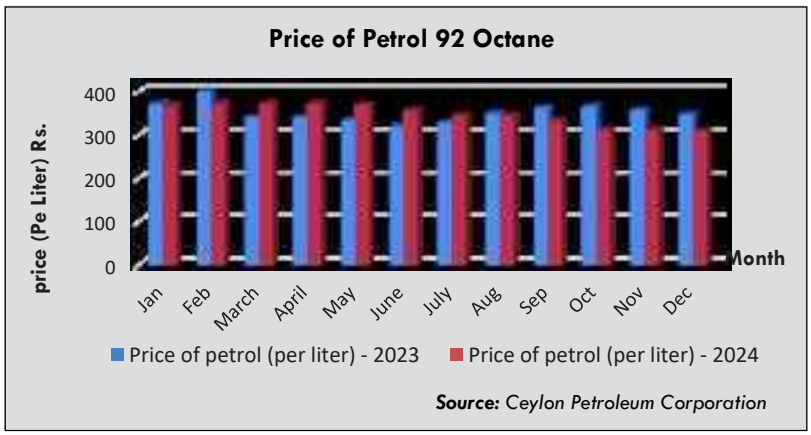
In the year 2024, fuel prices were revised on eleven (11) occasions. Considering the fuel prices in December 2024 compared to the fuel prices in December 2023, there has been a decrease in the prices of Petrol (Octane 92) by 11%, Petrol (Octane 95) by 17%, Auto Diesel by 17%, Super Diesel by 31% and Kerosene by 20%.

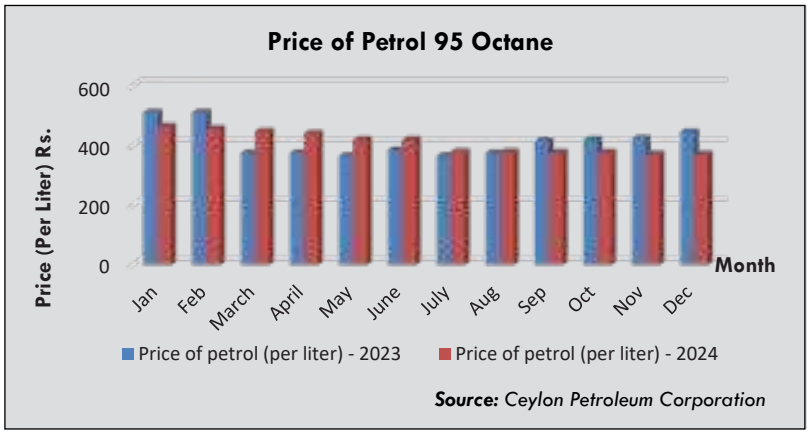
Table 1.8
The Maximum and the Minimum market prices recorded in 2024

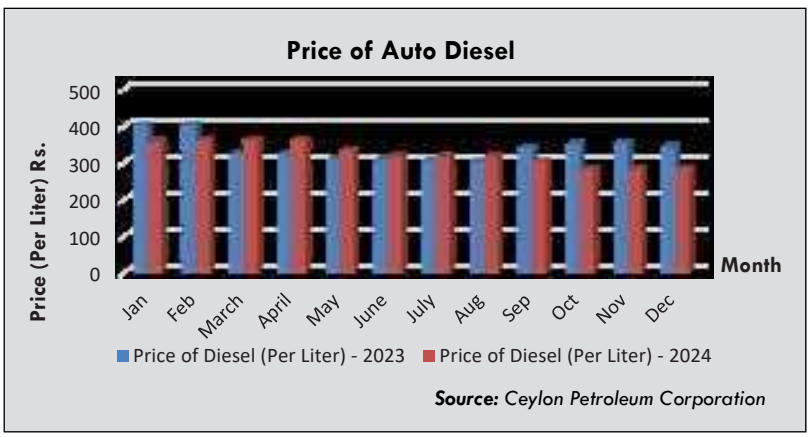
Product	Maximum Price	Minimum Price
Petrol (Octane 92)	Rs .371.00 (February/ March/April)	Rs. 309.00 (December)
Petrol (Octane 95)	Rs. 464.00 (January)	Rs. 371.00 (November/ December)
Auto Diesel	Rs. 363.00 (February/ March/April)	Rs. 283.00 (November)
Super Diesel	Rs. 475.00 (January)	Rs. 313.00 (November/ December)
Kerosene	Rs. 262.00 (February)	Rs. 183.00 (October/ November)

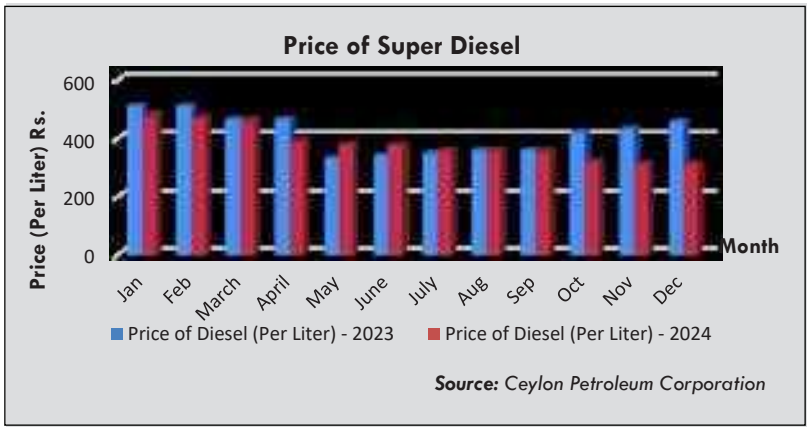
Source: *Ceylon Petroleum Corporation*

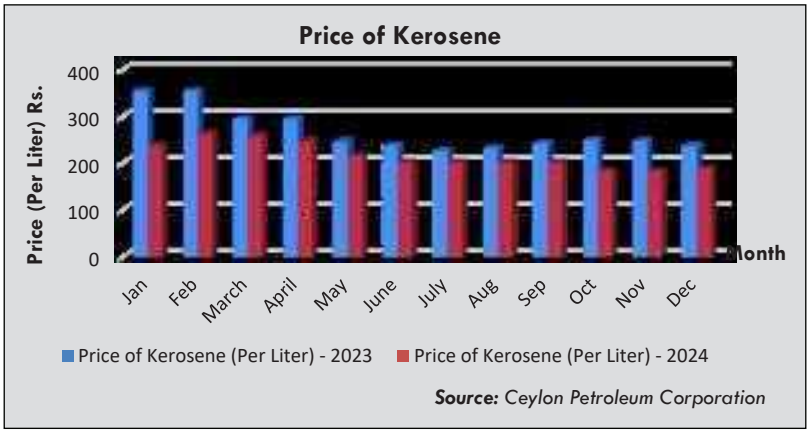
Figure 1.2
Market prices recorded in the year 2024











1.5.5 Petroleum related infrastructure facilities development projects

- **Establishment of an Export-oriented petroleum refinery and associated product processing center in Hambanthota**

The Ministry of Power and Energy called Expressions of Interest (EOI) from qualified investors on 24.02.2023 to establish an export-oriented petroleum refinery and associated product processing center in Hambantota, and seven (07) investors expressed their interests. After the evaluation of submitted proposals, two companies were eligible to submit Request for Proposals (RFPs). Among those two companies, only M/s China Petroleum and Chemical Corporation submitted the detailed proposal. After considering this detailed proposal by the Project Evaluation Committee and the Cabinet Appointed Negotiation Committee (CANC), Cabinet approval was obtained for entering in to agreements with M/s China Petroleum and Chemical Corporation to build and cooperate the refinery. Accordingly, four rounds of negotiations were held for an agreement with M/s China Petroleum and Chemical Corporation and the negotiations are in the final stage.

Key features of the project

- Expected capacity – Minimum 100,000 barrels of crude oil per day
- Expected Investment – (USD 1.5 Bn. – USD 2 Bn.)
- Expected Project completion Period – (2024 – 2028)

Through this project it is expected to ensure the fuel security in the country, create new job opportunities, and Create new industry opportunities related to the petroleum

industry as well as to gain foreign exchange benefits to this country.

- **Trinco Tank Farm Development Project**

The Upper Tank Farm at China Bay Trincomalee, was constructed by the British Government to supply fuel for colonial era ships and it is consisted of ninety nine (99) fuel storage tanks of 10,000 MT each. For the development of these fuel storage tanks, it was decided to lease out them for a period of 50 years by the Decision of the cabinet of Ministers paper No. 21/2285/325/050 dated 11.01.2022 as follows.

- Ceylon Petroleum Corporation (CPC) – 24 Fuel tanks
- Lanka Indian Oil Company (LIOC) – 14 Fuel tanks
- Trinco Petroleum Terminal Limited – 61 Fuel tanks

- **Development Progress of 24 tanks owned by Ceylon Petroleum Corporation**

20 million dollars has been estimated for the development of 24 tanks in Trincomalee owned by Ceylon Petroleum Corporation, and the project will be implemented in two phases with financing Provided by Ceylon Petroleum Corporation.

The following tasks have been completed by 31.12.2024.

- Phase-1 Mechanical Cleaning of Tank (12 Tanks)
- Phase-2 Mechanical Cleaning of Tanks (9 Tanks)
- Tank Health Inspection
- Geographical Survey of the Premises including a photogrammetry site survey
- Construction of Water Pipeline

Progress in development of tanks owned by Trinco Petroleum Terminal Limited

The following activities have already been completed as a preliminary step in the development of the 61 fuel tanks given to the Trincomalee Petroleum Terminals Limited.

- ✓ Clearing the land required to provide access for ten (10) fuel tanks
- ✓ Obtaining a quality inspection report for these ten (10) oil tanks from Bureau Veritas Lanka (Pvt) Ltd.
- ✓ A feasibility study has been conducted for the project, identifying long-term and short-term development strategies.

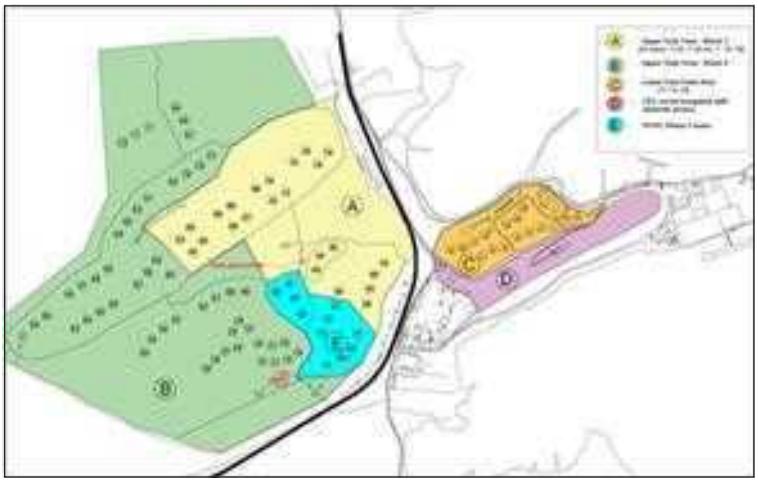
In order to select a suitable investor to implement the project, interests of proposals were invited and 05 institutions submitted their proposals. The Cabinet Appointed Project Committee (CAPC) and the Negotiation Committee (CANC) are evaluating the proposals.

1.5.6 Future Plans 2025

Fossil fuels continue to play a significant role in meeting domestic energy demand, and with the aim of ensuring domestic energy security

(A model of the proposed refinery - Hambanthota)

Map 1.1
The Map of Trinco Tank farm



and contributing to global energy supply by Sri Lanka, the following programmes are expected to be implemented in 2025.

- **Appointment of a permanent regulator for the regulation of the downstream petroleum industry**

Currently, with the expansion of petroleum market activities and the entry of new competitive entities into the market, the need for an independent regulator and a strong regulatory framework has arisen to maintain the quality of petroleum products and ensure consumer safety. Accordingly, it is planned to appoint a permanent regulator to regulate the downstream petroleum industry.

- **Modernizing the Sapugaskanda Refinery and constructing a new refinery**

Only 25% of Sri Lanka's Petroleum needs are supplied by the Sapugaskanda Refinery and the remaining 75% of the refined petroleum requirements have to be met by imports, putting more pressure on the foreign exchange. Our main objective is to produce domestic petroleum requirements through local refineries, and for that, Sapugaskanda Refinery will be upgraded or a new refinery will be constructed as per the feasibility.

- **Development of Trinomalee Tank Farm**

Taking into consideration the agreements reached regarding the Trincomalee Oil Tank Farm, steps will be taken to develop the twenty-four (24) tanks owned by the Ceylon Petroleum Corporation and the sixty-one (61) tanks owned by TPTL under business models beneficial to the national economy.

Rs. 4010 million has been approved for the year 2025 to develop twenty-four (24) tanks owned by the Ceylon Petroleum Corporation.

- **Establishing charging stations across the island to charge electric vehicles**

A study conducted by the Ceylon Petroleum Corporation revealed that there is a high potential for establishing electric vehicle charging stations at filling stations. Accordingly, it is planned to establish electric vehicle charging stations at potential filling stations across the island, and the Ceylon Petroleum Corporation has allocated Rs. 100 million for the year 2025.

- **Expansion of fuel storage capacity**

Adequate fuel storage capacity should be maintained to ensure energy security in the country. At present, the Ceylon Petroleum

Storage Terminal Limited maintains a total storage capacity of 440,147 MT. To further increase this capacity, it is planned to construct new storage tanks as follows.

Table 1.9
Proposed Storage Tank Development Project

Description	Estimated cost	Fund compilation
Construction of 06 tanks with the total capacity of 64,000m^2 in Kolonnawa Terminal	Rs.3,374 Mn	CPSTL
Construction of 02 tanks with the total capacity of 22,000m^2 in Kolonnawa Terminal	Rs.1,470.4 Mn	CPSTL
Construction of 03 tanks with the total capacity of 40,000m^2 in Muthurajawela Terminal	Rs.3,496 Mn	CPSTL

- **Development of the fuel transportation pipeline system**

The pipeline system that transports fuel from Colombo Port to Kolonnawa Terminal is very old and in a dilapidated condition. This has led to fuel leaks as well as excessive time and cost for fuel unloading. Therefore, it was planned to construct pipelines to make fuel unloading and transportation efficient.

Table 1.10
Proposed Pipeline Development Project

Description	Estimated cost	Fund compilation
Construction of a pipeline with the diameter of 18 inches from Colombo Port to Kolonawa Terminal	Rs.2,852.5 Mn	CPSTL
Construction of a pipeline with the diameter of 12 inches from Kolonawa Terminal to Kelanithissa Power Station	Rs.1,444 Mn	CPSTL
Construction of a pipeline to transport aviation fuel from Muthurajawela to Katunayake Airport	Rs.18,000 Mn	CPC

1.6 Financial Progress 2024

Table 1.11
Financial Progress of the Capital Budget 2024 Ministry of Energy - Head 119

	Expenditure Item		Allocation (Rs Mn)	Expenditure	
				As at 31.12.2024 (Rs Mn)	As %
	Operational Activities				
	Minister Office				
1	Rehabilitation And Improvement of Capital Assets	Buildings	1.5	-	-
		Plant & Machinery	1.5	-	
		Vehicles	6	3.67	61
2	Acquisition Of Capital Assets	Furniture & Office Equipment	1.5	0.04	3
		Plant & Machinery	1.5	0.79	53
	Total		**12**	**4.50**	**37**
	Administration & Establishment Services				
1	Rehabilitation And Improvement of Capital Assets	Buildings	1	0.25	25
		Plant & Machinery	0.68	0.67	98
		Vehicles	1	0.59	59
2	Acquisition Of Capital Assets	Furniture & Office Equipment	1.2	0.88	73
		Plant & Machinery	2	1.6	80
		Software Improvement	0.5	-	-
	Total		**6.39**	**3.99**	**62**
	Development Activities				
1	Accounting for the Foreign Disbursements of CEB Loan (ADB/JICA)		30000	15437	51
2	Colombo Waste to Energy Power Plant		2110	2110	100
3	Project for Capacity Development on the Power Sector (Reform)		22	0.56	3
4	Battery Energy Storage System Under Grant of Korean Government		2379	-	-
5	Providing Rooftop Solar Power facility installation for Government Building		5840	5353	92
6	Construction of Hybrid Renewable Energy System in Small Islands		3600	328	9.1
7	Sri Lanka Energy Programme-USAID		1210	526	43
8	Implementation of 1MW Floating Solar Projects at Chandrika Wewa & Kiriibban Wewa (Korea)		1228	1143	93
9	Energy Efficiency Centralized Air Conditioning System - ADB		122	92	75
10	Appliance Energy Labeling Programme Air Conditioning Testing Lab		218	101	46
11	Expanding the Capacities & Capabilities of the SLAEB		743	662	89
12	Donation from International Atomic Energy Agency		114	99	87
13	Sri Lanka Sustainable Energy Authority		50	50	100
14	Sri Lanka Atomic Energy Board		20	16	80
15	Sri Lanka Atomic Energy Regulatory Council		2	0.025	1
	Total		**47,658**	**26,114**	**55**

Chapter 02

Ceylon Electricity Board (CEB)

1. Introduction

The Ceylon Electricity Board (CEB), a state-owned enterprise, was established under Act No. 17 of 1969 and has been amended multiple times to regulate the generation, transmission, and distribution of electricity in Sri Lanka. The Sri Lanka Electricity Act No. 20 of 2009, amended by Act No. 31 of 2013, brought CEB under the Public Utilities Commission of Sri Lanka (PUCSL). The latest reform, the Sri Lanka Electricity Act No. 36 of 2024, endorsed on June 27, 2024, aims to implement key sectoral reforms, although its effective appointment date is pending.

Electricity demand in Sri Lanka over the last 15 years has grown at an average rate of 3.6 % annually, while peak demand has increased by 1.7 % per year. In 2023, net generation was 15,576 GWh, a 2.3 % decrease from 2022. Maximum demand reached 2,415 MW in 2023, showing a 10.8 % decrease from the previous year. For the first ten months of 2024, net generation was 13,915 GWh, and maximum demand was 2,673 MW, both marking an 11 % decline compared to the same period in the previous year.

2. Challenges Faced and Strategies Adopted

Technical Challenges and Strategic Interventions in Power System Operations

During 2024, several challenges were encountered in managing the electricity sector's complex operational and strategic landscape. An unexpected breakdown of Low Voltage Power Supply (LVPS) unit 02 coincided with a scheduled maintenance period at the West Coast Power Plant, requiring careful management of demand with limited thermal generation.

Accurate inflow forecasting for hydro catchment areas was hampered by inadequate weather data, prompting plans for deploying fast-response battery storage to address fluctuations.

Intermittent renewable energy generation added complexity to demand forecasting, which was mitigated by enhancing visibility through real-time data collection and the proposed establishment of a Renewable Energy Desk at the System Control Center.

The power system currently faces stability issues, particularly in the southern region. To address these challenges, the Kothmale — New Polpitiya 220 kV transmission line is planned for commissioning next year. This new line is expected to significantly enhance the reliability and stability of the network.

Financing for power plants and infrastructure development remained a key challenge, met by ongoing negotiations with donor agencies and encouraging private sector investment to reduce state reliance. Lengthy approval processes for development projects were streamlined by improving coordination with relevant ministries, while public resistance and opposition from interest groups necessitated proactive engagement and awareness campaigns.

Frequent policy changes and professional migration have led to challenges in retaining expertise and maintaining consistent quality. To address this, the report emphasizes the importance of creating a culture of employee encouragement and engagement within the organization. This includes offering

competitive remuneration to attract and retain talent, as well as implementing a robust training program focused on new technologies. By investing in employee development and fostering a supportive work environment, the organization aims to enhance performance, ensure continuity, and align workforce capabilities with strategic objectives.

The development of Liquefied Natural Gas (LNG) projects has encountered significant challenges, primarily due to the recent VAT Act 2023, which eliminated the VAT concession for power generation projects, leading to a change in law under the Power Purchase Agreement. Additionally, the ongoing economic crisis in the country has made it increasingly difficult to secure foreign debt financing for the initiative. In response to these challenges, a strategy has been implemented that includes obtaining Cabinet approval for the CEB to reimburse the VAT costs, thereby ensuring that construction activities can proceed without disruption. Furthermore, a consortium of local banks is in the process of arranging debt financing, with due diligence currently underway.

Financial Challenges and Strategic Responses in Power Sector Management

The CEB has faced a multitude of financial challenges in recent years, driven by external factors such as economic constraints, tariff structures, and operational inefficiencies. These challenges, ranging from high finance costs and banking restrictions to legacy debt settlements and foreign exchange shortages, have significantly impacted the board's ability to sustain efficient power generation and supply. To navigate these obstacles, CEB has adopted several strategic measures aimed at optimizing resource utilization, reducing financial burdens, and ensuring compliance with regulatory directives. The table below outlines the key financial challenges faced by CEB and the strategies implemented to mitigate their effects.

Challenges Faced	Strategies Adopted
Utilization of Tariff Revenues: Ensuring maximum utilization of revenue from tariff revisions as per PUCSL directions.	Restricted spending to PUCSL's Allowed Revenue limits using zero-based budgeting; continuous monitoring of Capital Expenditure (CAPEX) and Operation Expenditure (OPEX) with quarterly adjustments.
High Finance Costs: Delay charges for non-settlement to suppliers and high working capital loan costs.	Utilized profits from hydroelectric conditions and reduced interest rates to settle legacy debts. Renegotiated loan terms to reduce interest rates.
Bulk Supply Transaction Account (BSTA): Continuing operationalization and compliance with PUCSL requirements.	Separated BSTA from regular finance functions by November 2023; streamlined operations based on PUCSL's new directions.
OPEX/CAPEX Management: Strict management of OPEX/CAPEX as mandated by PUCSL's Tariff Decision.	Enforced adherence to Allowed Revenue limits and restricted budget utilization to approved spending categories. Suspended any spending outside these parameters.
Banking Constraints: Limited financial flexibility due to restricted banking facilities with state banks.	Negotiated alternative financial facilities with other commercial banks, reducing reliance on People's Bank and state banks.
Legacy Debt Settlement: Managing debt due to lack of cost-reflective tariffs over the past decade.	Settled a portion of legacy debts through profits, subsidiary divestiture, and ongoing restructuring efforts.
Coal Loan Absence: Lack of short-term coal loans from People's Bank affecting coal procurement.	Managed payments for coal procurement using financial instruments from Bank of Ceylon and daily fund allocation for shipments to avoid payment defaults.
Credit Rating Downgrade: Impact on financing power generation infrastructure and higher premiums on finance charges.	Prioritized cash pooling and disbursements for efficient use of funds; negotiated maximum credit periods for procurements and contracts to ease cash flow constraints.

3. Progress of the Development Activities

A. Progress of Generation Projects

Table 2.1
Progress of ongoing Generation Projects

	Project/Programme	Progress	Expected Date of Completion
1	31 MW Moragolla Hydropower Plant	Construction in progress and at its final stage	2025 4th Quarter
2	350 MW Sobadhanavi LNG Combined Cycle Plant at Kerawalapitiya	Construction in progress and at its final stage	Gas turbine was commissioned in August 2024. Steam turbine to be commissioned in 2025.
3	100 MW /100 MWh Battery Storage System at Kolonnnawa	Funds committed. Request For Proposals (RFP) document preparation to be initiated.	2026
4	350 MW Sahasdhanavi LNG Combined Cycle Plant at Kerawalapitiya	Power Purchase Agreement (PPA) negotiations are being held	Open Cycle –2026 Combined Cycle –2027
5	200 MW Natural Gas Internal Combustion (IC) Engine Power Plant	Cabinet Appointed Negotiation Committee (CANC) & Project Committee (PC) appointed	2028
6	130 MW Gas Turbines at Kelanitissa	Procurement temporary halted	2030

Table 2.2
Progress of Ongoing Non-Conventional Renewable Energy (NCRE) Developments

	Project/Programme	Progress	Expected Date of Completion
1	Siyambalanduwa 100MW Solar Power Project	PPA, Transmission agreement & Implementation agreement have signed.	Last quarter of 2025
		Transmission line constructions are going on.	
2	Mannar 250MW Wind Power Project	Cabinet approval for power plant award received. PUCSL approval pending for award. Attorney Generals (AG's) clearance is pending.	Second quarter of 2027
3	Pooneryn 234MW Wind Power Project	Cabinet approval for power plant award received. PUCSL approval pending for award. AG's clearance is pending.	Second quarter of 2027
		PPA negotiations and price negotiations on Transmission facility going on.	
4	Sampoor 50MW Solar Power Project	Developer's proposal is under evaluation by PC / CANC.	Last quarter of 2026
5	Mannar 50MW Wind Power Project	Proposal received are under evaluation by PC / CANC.	Second quarter of 2026

Table 2.3
Tendered Projects

	Project/Programme	No of Plants	Total Capacity (MW)	Progress	Prospective Date of Completion		
					2024	2025	2026
1	90X 1MW Solar Photovoltaic (PV) Power Plants tender	50	50	Commissioned - 1 MW x 45 Plants Under construction – 1 MW x 5 Plants		5	
2	10MW Polonnaruwa Solar PV Power Plant tender	1	10	Commissioned	10		
3	30MW Ground mounted/ floating Solar PV Power Plants tender (1-5MW)	2	5	PPA's signed, under construction		5	
	30MW Ground mounted/ floating Solar PV Power Plants tender (1-5MW) - Retender	9	27	Letter Of Intents (LOI's) signed, pending signing PPA's			27
4	40MW Ground mounted/ floating Solar PV Power Plants tender (in 5MW scale)	8	40	LOI's signed, pending signing PPA's		30	10
5	20MW Wind Power Plants tender (in 2.5-10MW scale) in Mannar	4	20	LOI's signed, pending signing PPA's		20	
6	70MW, Alternating Current (AC) Ground Mounted Solar PV Power plants in (1-5) MW, AC	12	51	LOI's signed 6 projects PPA's signed (26MW) Balance 6 projects pending signing PPA's		51	
	70MW, AC Ground Mounted Solar PV Power plants in (1-5) MW, AC - Retender	7	19	6 projects LOI's signed & 1 pending			19
7	165MWGround Mounted solar PV power plants in (1-5) MW,AC	-	165	Tender evaluation completed, pending Cabinet Decision to award			165

Table 2.4
Projects under Feed-In Tariff

Project Technology	Year 2024		Year 2025	Year 2026
	Commissioned (MW)	To be Commissioned (MW)	To be Commissioned (MW)	To be Commissioned (MW)
Solar PV	10	15	150	150
Wind	-	-	10	10

B. Progress and Programs of Transmission Development Projects

The progress of ongoing transmission development projects is provided in Table 2.5

Table 2.5
The Progress of Ongoing Transmission Development Projects

Project/ Branch	Package	Cost (LKR million)	Physical Progress as at 2024-10-31	Date of Completion
Greater Colombo Trans & Loss reduction Project	Construction of Second 220kV Cable from Kerawalapitiya to Colombo L	13,055	11.50%	September 2026
	Battery Energy Storage System	4,419	39.00%	December 2025
Trincomalee Coal Power Project	Construction of Habarana - Veyangoda 220kV Transmission Line Project Lot A - Substation	6,958	100.00%	completed
	Construction of Habarana - Veyangoda 220kV Transmission Line Project Lot B - Transmision Line	17,770	100.00%	completed
Green Power Development and Energy Efficiency Improvement Investment (Tranch 2)	Package 2/Lot B2 A - Construction of Padukka-Horana 132kV TL	600	100.00%	completed on its de-scope work
	Power Management Unit (PMU) 2-Package 8/Lot B - Augmentation of Ambalangoda 132/33 kV Grid Substation, Augmentation of Pannala 132/33 kV Grid Substation & Supply of 2 Spare Transformers of 132/33 kV 31.5 MVA	1,740	100.00%	completed
	Package 9: 220kV Switching Station at Kerawalapitiya	2,919	100.00%	completed
	SESRIP: Package 7-Lot A1: Installation of 100Mvar BSC at Pannipitiya Grid Substations	1103.5	100.00%	December 2024
	SESRIP: Package 7-Lot A2: Installation of Static Var System (SVS) at Biyagama Grid Substation	1680.8	100.00%	May 2024
National Transmission & Distribution Network Development & Efficiency Improvement Project	Package 1: Construction of 400kV, 220kV and 132kV Transmission Lines	13,003	60.00%	December 2025
	Package 2: Construction & Augmentation of Grid Substations	7,418	71.00%	December 2025
	Package 3: Construction of Transmission Lines (220kV, 132kV)	12,000	59.00%	Contract terminated
	Package 4: Construction of Distribution Substations and Cables (33kV, 11kV, 0.4kV)	4,594	42.00%	Contract terminated

Transmission Construction Projects	Reconstruction of Madagama - Ampara 132kV Transmission Line	3,206	45%	January 2025
	Construction of Victoria - Rantembe 220kV Transmission Line	1,400	6%	December 2024
	Augmentation of Athurugiriya - Kolonnawa 132kV Transmission Line	170	20%	June 2024
	Reconstruction of Kolonnawa - Pannipitiya 132kV Transmission Line	960	10%	June 2024
	Raising Heights of Kelanitissa - Kolonnawa 132kV Transmission line	702	9%	April 2024
	Installation of 2x50MVAr Reactor at New Anuradhapura GS and 1x50MVAr Reactor at Mannar GS	1,463	100.00%	completed
	Construction of Wagawatta Grid Substation (2x45MVA T/F with DBB)	1,898	99.00%	December 2023
	Extension of Kelanitissa 132kV GIS	464	98.00%	March 2024
	Construction of Two Nos. of 220kV Double Busbars Transmission Line Bay at New Polpitiya Switching Station	291	100.00%	completed
	Kotugoda Augmantation Work	73	100.00%	completed
	Balangoda Augmantation Work	67	55.00%	Feb - 2025
	Athurugiriya Augmantation Work	15	100.00%	completed
	Construction of Two 33kV Feeder Bays at Rathmalana Grid Substation	148	100.00%	completed
	Construction of 220kV GIS at Rantambe Switch Yard	2,809	6.00%	December 2026
	Construction of one no. of 220kV 1 1/2 Breaker System at Victoria PP	229	80.00%	April 2025
	Construction of 132kV Switch Yard at Randeniya (Umaoya Hydro Power Project)	350	100.00%	completed
	Construction of 132kV single bus bar Transmission Line Bay at Ampara Grid Substation (GS)	85	8.00%	March -2025
	Replacement of old static relays in 14 Grid Substations (GSs)	212	28.00%	March -2025
	Rehabilitation of 33kV side of Mathugama Grid Substation (GS)	595	9.00%	Dec-2025
	Augmentation of Aniyakanda Grid Substation (GS)	353	14.00%	Dec-2025
	Augmentation of Chunnakam Grid Substation (GS)	610	14.00%	Dec-2025
	Augmentation of Nadukuda Grid Substation (GS)	1,526	5.00%	Sep-2025
	Augmentation of Kukuleganga Switchyard	306	3.00%	Aug-2025
	Augmentation of New Anuradhapura Grid Substation (GS)	600	3.00%	June-2025

Transmission Projects	**Procurement of Goods** Procurement of Materials/Equipment as Spares and Tools for Transmission Network Requirements- Package 4,5,6,10 &11 Under Sampur Kappalthurei Transmission Development Project	4,381	98.00%	March 2025
	Prelimany work of Construction of Poonaryn - Kilinochchi 220kV D/C Transmission Line PSRSP-Ph-02-OU2	3,400	12%	December 2025
Power System Strengthening & Renewable Energy Integration Project	Package 4A: Procurement of Materials as "Spares & Tools for Transmission Network Requirements" under Packages 4, 6, 10 and 12 of ADB's Loans 3483-SRI and 3585-SRI	3,633	Within Bidding period	2025

C. Progress and Programs of Distribution Developments

The progress and programs for distribution development activities are provided in Table 2.6

Table 2.6
The Progress and Programs for Distribution Development (DD) Activities

	Activity	Unit	DD1			DD2			DD3			DD4		
			Target 2024	Progress 2024 (January - August)	Projection 2025	Target 2024	Progress 2024 (January - August)	Projection 2025	Target 2024	Progress 2024 (January - August)	Projection 2025	Target 2024	Progress 2024 (January - August)	Projection 2025
1	Medium Voltage (MV) Tower	km	11	1	12	60	26	66	19	6	26	11	4	7
2	MV Pole (Lynx, Racoon, Elm & UG)	km	105	49	142	222	124	154	36	13	67	50	34	61
3	MV Pole (Arial Bundled Cabel) (ABC)	km	20	0	10	5	3	6	2	0	8	8	5	9
4	Low Voltage (LV) (ABC)	km	74	34	94	394	136	350	141	128	167	35	20	41
5	MV re-conducting & conversion to be completed (Tower)	km	4	0	12	10	0	3	0	0	0	0	0	0
6	MV re-conducting & conversion to be completed (Pole)	km	65	31	174	97	25	110	53	31	12	18	10	25
7	LV conversion to be completed (fly to ABC)	km	310	28	275	650	274	555	606	67	134	410	218	408
8	Distribution Substations to be constructed (Distribution/ Ring/Radial/Re-Distribution)	Nos	215	164	333	490	222	362	110	77	84	100	666	93

9	Primary Substation to be constructed	Nos	3	1	1	3	0	3	1	1	0	1	1	3
10	Primary Substation to be augmented	Nos	5	3	2	3	2	1	0	0	0	1	0	0
11	Gantries to be constructed	Nos	6	1	5	16	8	18	11	3	6	1	1	4
12	Gantries to be augmented / modified	Nos	2	0	1	11	1	6	0	0	0	1	0	0
13	Auto Reclosers to be installed (excluding for new gantries)	Nos	22	8	14	37	31	40	15	7	20	14	5	13
14	Other (Specify)	Nos	0	0	0	0	0	0	0	0	0	6	2	10

4. Financial Position of the Institution

The CEB reported a net profit of LKR 113.3 billion (excluding gains from the divestiture of subsidiaries) for the ten-month period ended 31 October 2024. The improvement in CEB's financial performance, which had been declining over the past decade, is largely attributed to the implementation of a cost-reflective tariff structure, revised and reviewed quarterly.

A significant reduction in direct generation costs, driven by increased hydroelectric output and lower coal and fuel prices, played a pivotal role in strengthening the net profit. Furthermore, the gradual recovery from the country's economic downturn positively impacted energy demand, contributing to overall revenue growth.

In the past, the absence of a cost-reflective tariff and disruptions in the collection process due to the pandemic severely strained CEB's cash flows, delaying payments to major suppliers, including the Ceylon Petroleum Corporation (CPC). This led to an increase in interest payments due to delays. However, following the implementation of the cost-reflective tariff, CEB's cash flow improved, enabling the settlement of part of its legacy debts. This, in turn, significantly reduced the costs incurred from delay charges. Additionally, the decline in interest rates further lowered finance costs on interest-bearing loans and borrowings.

5. Future Plans 2025

Table 2.7
Distribution and Generations Projects

No	Project/Program	Progress	Prospective Date of Completion
1	Renewable Energy Control & Monitoring Desk at National System Control Center	Funds committed. RFP document preparation to be initiated.	2026
2	600 MW Pump Storage Power Plant at Maha Oya	Feasibility study completed. Project is submitted to National Planning Department (NPD) approval.	2034

Table 2.8
Transmission Projects

	Project	Expected Year of Completion	Total Cost Estimate (LKR Million)	Financial Commitment Required for the Year 2025 (LKR Million)
1	DGM (Transmission Projects)	2027	12,863	1,950
	Clean Energy Absorption Transmission Project – 1 (CEATP -1)			
	Lot – A I. Construction of 77km long. 220kV double circuit transmission line from New Habarana SS to Kappalthurai GS			
	Lot – B I. Augmentation of New Habarana 220/132 kV Switching Station (2x220kV transmission line bays)			
	II. Modification of Kappalthurai 220/33 kV Grid Sub Station.			
	Clean Energy Absorption Transmission Project – 1I (CEATP-II)	2027	16,674	1,668
	Lot A - (i) Construction of 132/33 kV 2 X 31.5 MVA Walimada Grid Substation			
	(ii) Construction of 132/33 kV 2 X 31.5 MVA Keeriyankalliya Grid Substation			
	(iii) Augmentation of New Chilaw GS			
	(iv) Augmentation of Puttalam GS			
	(v) Augmentation of Badulla & Laxapana GS			
	(vi) Augmenation of Samanalawewa & Embilipitiya GS			
	Lot B - (i) Capacity Enhancement of Samanalawewa - Embilipitiya 132kV TL			
	(ii) Capacity Enhancement 74.5km of Badulla - Laxapana 132kV TrL			
	Lot C - Reconstruction of Puttalam - New Chilaw 132kV TL			
	SKTDP	2026	7,896	7,106
	Construction of Sampur - Kappalturai 220kV Double Circuit TL & Construction of 220/33kV Collector GS at Sampur			
	Power System Reliability Strengthening Project (PSRSP): Ph II P 2 – Operation Unit 1 (OU 01)	2027	7,710	771
	Construction of Wariyapola 220/132kV SS, Construction of Wariyapola - Kurunegala 132kV Double Circuit 22km TL, Construction of Double In-Out connection from Habarana Veyangoda 220kV TL to wariyapola SS (3km), Augmentation of Kurunegala 132kV GS			
	Power System Reliability Strengthening Project (PSRSP): Ph II P 2 - OU 02	2027	3,897	556
	(i) Ekala 132/33kV GS, Double In & Out connection of 4 km from Kotugoda - Kelaniya 132kV TL			
	(ii) Yakkala 132/33kV GS, 132kV Double Circuit TL approximately 10km from Kirindiwela GS to proposed Yakkala GS		3,226	479

	Power System Reliability Strengthening Project (PSRSP): Ph II P 2 - OU 03	2027	6,150	900
	Construction of 132/11kV Kandy City GS, Construction of 6 km TL for Kandy City GS and Augmentaion of Kiribathkumbura and Ukuwela GSs			
	Construction of 132/33kV,31.5MVA Weligama GS	2027	3,824	520
	Conductor Upgrading of Mannar - Vavuniya 220kV Transmission Line	2026	690 (with Taxes)	460
2	GCT & DLRP Colombo City Transmision Network Development Project - Phase 2	2027	30,295	-
3	Construction of Pannipitiya-Panadura 132kV Transmission Line with 2xZebra	2027	2,020	406
4	Construction of Panadura T- Matugama 132kV Transmission Line with 2xZebra	2027	2,766	734
5	Construction of Laxapana - Wimalasurendra 132kV Transmission Line with Zebra	2027	683	181
6	Reconstruction of Balangoda - Deniyaya -Galle 132kV Transmission Line with Zebra	2027	6,439	1,708
7	Installation of 300 Mvar STATCOM Unit at PADDUKA GSS	2027	11,290	2,994
8	Construction of Dehiwala - Ratmalana 132kV Underground Cable	2027	4,679	1,241
9	New Habarana-VAVUNIYA-N-COLLECTOR (220kV operational Stage) Transmission Line with 4xMoose	2027	36,067	9,565
10	Reconstruction of New Laxapana - Balangoda 132kV Transmission Line with Zebra	2027	2,845	2,264
11	Capacity enhancement of 132kV Lynx transmission lines to Zebra - Laxapana Complex	2027	1,444	383
12	Construction of Weligama 132/33 kV grid substation	2027	2,423	643
13	Development of New Habarana - PSPP- Kirindiwela 400kV Transmission Network	2027	35,335	9,371
14	Replacing Thulhiriya Capacitor Banks	2027	154	123

Chapter 03

Lanka Electricity Company (Private) Limited (LECO)

1. Introduction

Lanka Electricity Company (Private) Limited (LECO) is a limited liability company incorporated in 1983 under the Companies Act no. 17 of 1982 and the Companies Act No 07 of 2007. Its primary objective is to distribute electricity within its franchised area, covering the prime economic zone along the western coastal belt of Sri Lanka from Negombo to Galle. LECO serves more than 600,000 consumers. Subsequently by the Electricity Act No 20 of 2009, LECO was brought into the regulatory domain of the Public Utilities Commission with the issue of a distribution license to the company.

2. Challenges Faced & Strategies Adopted in Addressing such Challenges

I) Optimizing Operations Amidst Workforce Constraints

Due to government restrictions on filling cadre vacancies, LECO encountered a significant challenge in maintaining operations with a reduced workforce. In response, LECO revisited its processes and workflows to identify necessary changes that would enable the company to operate effectively with a smaller team. This approach not only ensured the continuation of work but also enhanced overall efficiency without the need for additional ordinary cadre recruitment.

II) Transition to Short Message System (SMS) Billing and Paperless Operations

Due to the high material and printing cost, company successfully transitioned to SMS billing, eliminating the need for printed bills. This shift has not only been well-received by customers, with over 98% of the consumer base now registered for SMS billing, but it also contributes to significant foreign currency savings and environmental sustainability. Additionally, LECO is progressing towards a paperless office concept, with the company's workflow system being successfully adopted by employees.

III) Development of Advanced Distribution Management System

One of the significant challenges faced during the integration of a diverse set of proprietary protocols into the Advanced Distribution Management System (ADMS) was ensuring seamless communication and interoperability between various systems and devices from different manufacturers. These proprietary protocols often come with unique specifications, making it difficult to create a unified platform that can efficiently manage and control all elements within the distribution network.

To overcome this challenge, employed in-house development capabilities to create custom middleware solutions that could translate and harmonize these proprietary protocols into a common language understood by the ADMS. This approach allowed to build a more scalable and versatile platform, capable of integrating new devices and systems as they are introduced into the network without requiring extensive modifications to the ADMS itself.

IV) Establishment of the Smart Data Management Center

The establishment of the Smart Data Management Center (SDMC) was a crucial advancement in managing the vast data generated by our network monitoring

devices and smart meters. One of the most significant challenges in this process was handling the sheer volume and speed of data produced by these sensor networks. This data is invaluable for enhancing operational efficiency, optimizing grid management, and improving customer service. However, the real challenge was effectively processing, storing, and analyzing this data in real-time to generate actionable insights.

To overcome this, concentrated on developing a robust data architecture within the SDMC. With its successful implementation, the SDMC now enables to efficiently manage and utilize this data, significantly enhancing operational capabilities. The center plays a vital role in automating key processes, such as smart meter installations, remote disconnections, and real-time network monitoring, thereby reducing the need for manual intervention and greatly improving the responsiveness of grid operations.

3. Progresses of the Development Projects & Activities in 2024

The Company's achievement exhibits performance and the commitment made towards the high quality of service to the stakeholders.

Projects and Progress

Operations

- Installed over 70,000 smart meters, covering more than 19.2% of the total meter population, enhancing energy and debt management through remote monitoring capabilities.
- Upgraded the Human Resource Information System (HRIS) to automate key processes, minimizing manual errors and boosting administrative efficiency.
- Continued efforts to improve electricity supply efficiency by reducing distribution losses, ensuring compliance with regulatory benchmarks.
- Optimized workforce deployment by introducing combined operations for breakdowns, thereby enhancing operational efficiency.
- Reduced processing times for customer service requests, including new connections, to improve service delivery.

Developments

- The E-Billing customer base continues to grow, now exceeding 52,165 registered users.
- All internal processes at Branch and Customer Service Centers have been re-engineered to enhance productivity, with modified workflows implemented across all locations.
- The LECO Self Payment Kiosk network has been expanded to further improve revenue collection.
- Initiated the Reliability Enhancement Project under ADB funding, aimed at strengthening the power system's reliability, including the introduction of 33kV as a distribution voltage and new 132/33 kV Grid Substation.

4. Financial Position of the Company

Table 3.1
Consumer, Employee and Financial data from 2019 to 2024

	2019	2020	2021	2022	2023	2024 Budget	2024 Actual YTD -July
Consumers (Billed)	568,250	576,279	591,888	594,000	597,546	612,757	600,719
Sales GWh	1,647	1,624	1,603	1,560	1,583	1,654	992
No. of employees	1,535	1,527	1,505	1,443	1,427	1,450	1,408
Consumers /Employee Ratio	370	377	393	412	419	423	427
Distribution Losses (11 Kv) %	1.61%	1.34%	1.94%	1.49%	4.01%	3.99%	3.43%
Revenue Rs Mn	32,461	30,709	32,201	38,587	72,510	93,994	68,363
Profit from operations Rs Mn	543	1,543	4,328	991	4,129	3,347	7,694
Profit for the year Rs Mn	2,687	1,792	3,248	1,954	4,195	3,360	4,185
Total equity Rs Mn	33,537	34,792	38,419	40,687	45,435	48,795	47,693
Total Liabilities Rs Mn	13,960	12,630	14,202	12,015	21,708	21,705	28,182
Total assets Rs Mn	47,497	47,422	52,621	52,702	67,143	70,500	75,875

5. Future Plans 2025

- **Network Development**

Reliability Enhancement Project under ADB Funding to Improve Grid Reliability will be launched with the focus on significant upgrades to the grid infrastructure, including the introduction of 33kV as a distribution voltage and the establishment of new 132/33 kV Grid Substations. These improvements are aimed at enhancing grid reliability, reducing the frequency and duration of outages, and ensuring a more stable and resilient power supply. The project, supported by ADB funding, will be crucial in meeting the growing demand for reliable electricity, particularly in areas experiencing rapid development. LECO plans to deploy a 33kV network voltage to enhance the availability and reliability of power for high-capacity loads, particularly in industrial and commercial sectors. This upgrade is expected to significantly reduce losses, increase power delivery capacity and efficiency, and establish a more robust infrastructure that can support future growth. By boosting the network's capacity, LECO will be better equipped to meet the demands of high-energy users, ensuring a more consistent and reliable power supply across its service areas.

- **Network Digitalization**

LECO expects to pilot a Transformer-Based Micro grid with Power Markets. The initiative will involve the deployment of transformer-based micro grids that integrate with local power markets, enhancing grid resilience and reliability. These microgrids will allow for localized energy generation and consumption, reducing strain on the main grid and enabling better management of renewable energy sources. By integrating with power markets, the micro grids will also provide opportunities for energy trading, offering consumers and producers more flexibility and contributing to a more dynamic and efficient energy ecosystem.

LECO expects to pilot a Demand Response Pilot Project to Support Network Digitalization, Demand Management, and Renewable Energy Absorption. The Demand

Response Pilot Project aims to enhance the digitalization of the network by implementing advanced demand management strategies that align energy consumption with supply conditions, particularly during peak periods. This project will support the integration of renewable energy by allowing for more flexible and responsive load management, thereby improving grid stability and efficiency. By engaging consumers in demand response activities, the project will help to reduce the need for costly infrastructure investments, and promote the adoption of renewable energy sources.

- **Infrastructure Development**

LECO will prioritize the infrastructure development including head office building and other developments for operational requirements in 2025. These infrastructure development projects will include the completion of the new Head Office building and the construction of additional facilities such as Customer Service Centers and Branch offices. These developments are designed to support LECO's operational requirements, improving the efficiency and effectiveness of customer service delivery. LECO will enhance its ability to serve customers more effectively, providing quicker response times and more convenient access to services by developing this infrastructure.

- **Customer Services**

LECO aims to enhance its digital presence by upgrading customer services through the integration of digital platforms and chatbots. This initiative will improve customer engagement and accessibility by offering user-friendly digital interfaces that allow customers to easily access services, resolve issues, and receive support around the clock. By leveraging these digital technologies, LECO intends to deliver a more responsive, efficient, and customer-centric service experience, aligning with modern expectations and minimizing the need for in-person interactions.

- **Process Costing**

Process costing will be implemented throughout the company to ensure cost transparency down to the level of individual process. All ongoing cost centers will be costed based on process instances.

- **Performance Management**

A Performance Management System will be implemented and further developed to enhance the level of efficiency in the LECO.

Chapter 04

Sri Lanka Sustainable Energy Authority

1. Introduction

The Sri Lanka Sustainable Energy Authority (SLSEA) was established as the nodal national agency for sustainable energy development on October 1, 2007, with four primary objectives: Renewable Energy Development, Energy Management, Policy Development, and Fund Management. This authority was incorporated by the Sri Lanka Sustainable Energy Authority Act, No. 35 of 2007. Sri Lanka has launched an initiative to achieve carbon neutrality by 2050, with the ambitious aim of accomplishing 70% renewable energy generation of this target by 2030. As of 2020, significant progress has been made, with 30% of the target already attained.

2. Performance Highlights Overview

In 2024, SLSEA continued its commitment to renewable energy development, facilitating the installation of a cumulative capacity of 2,114 MW of new renewable energy. This achievement represents a significant 52 % share of the country's total installed capacity, marking a notable increase from the previous year's recorded share of 39% in electricity generation. The growth of the renewable energy sector is illustrated in Figure 4.1.

A total of 27.027 MW was commissioned in renewable projects, along with the signing of SPPA agreements for 330.1 MW. Additionally, a 233 MW energy permit was issued, and provisional approval was granted for 2,717.43 MW in projects, as detailed in Table 4.1.

Figure 4.1
Cumulative Capacity Additions for New Renewable Energy (NRE)

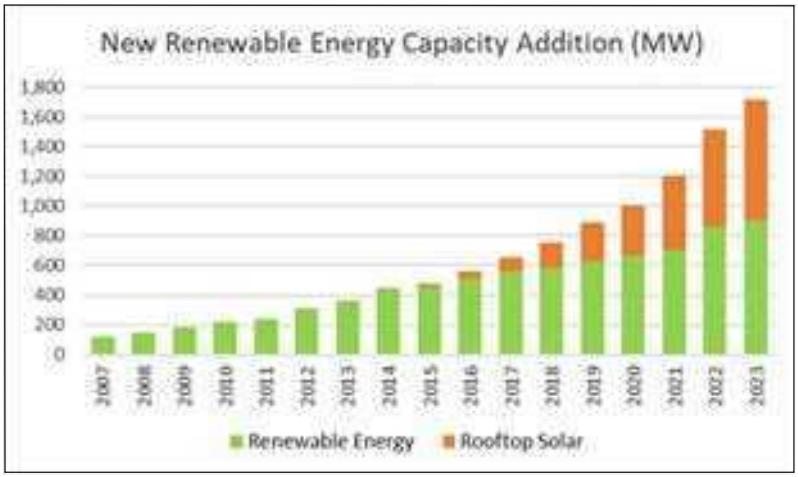


Table 4.1
Details of Pipeline Projects as of August 2024

Renewable Energy Source	Provisional Approval Issued Projects		Energy Permit Issued Projects		PPA Signed Projects		Commissioned Projects	
	No. of projects	Capacity (MW)	No. of projects	Capacity (MW)	No. of projects	Capacity (MW)	No. of projects	Capacity (MW)
Mini Hydro	9	6.63	1	0.70	3	2.7	2	3.027
Wind	15	512.50	-	-	1	10.0	-	-
Solar (Grid Connected)	157	2,177.80	50	222.79	49	310.9	6	24.00
Biomass (Dendro)	4	20.50	3	9.50	1	5.0	-	-
Agricultural & Industrial Waste			-	-	1	1.5	-	-
Total RE (MW)	**185**	**2,717.43**	**54**	**232.99**	**55**	**330.1**	**8**	**27.027**

3. Strategies in meeting key challenges

3.1 Enforcement of Regulations

Enforcement of regulations is crucial in renewable energy development and energy management. For instance, complying with energy efficient building codes and complying with energy benchmarks directly reduces energy use. However, the implementation of such tasks should be made mandatory by regulations, for effective results.

The methodology for implementing projects, particularly donor-funded initiatives such as establishing an air conditioner test lab in Sri Lanka, faces several challenges. Lengthy procedures, such as the signing of Memoranda of Understanding (MoUs), can significantly impede progress. Additionally, insufficient funding often leads to delays in launching new projects and acquiring necessary equipment for appliance labeling. To address these issues, it is essential to revise government policies to enhance flexibility and ensure adequate budgetary allocation within each calendar year. By streamlining procedures and securing consistent funding, we can facilitate the successful implementation of vital projects that support energy efficiency and sustainability.

3.2 Development of Renewable Energy

Land acquisition delays significantly increase project costs for renewable energy initiatives. Inconsistent policies can deter investors from pursuing RE developments, while integrating renewable energy sources—particularly solar and wind—into the existing power grid poses complex challenges. Furthermore, a lack of awareness and understanding among the general public regarding renewable energy and energy conservation impedes progress in this sector. To address these issues, several strategic measures should be implemented. First, a thorough review of land acquisition processes for renewable projects is necessary to streamline approvals. Establishing a high-level project approval committee can facilitate faster decision-making and coordination among stakeholders. Additionally, appointing a presidential task force to oversee issues and barriers can ensure accountability and progress. It is also essential to identify and amend legal gaps and review existing guidelines to promote a more favorable investment climate. Upgrading the power grid to accommodate renewable sources will enhance integration capabilities, while promoting public awareness campaigns on renewable energy and energy conservation

will foster greater understanding and support within the community. These comprehensive strategies will help mitigate existing challenges and drive the growth of renewable energy initiatives.

3.3 Financial Support

Limited funding and the ongoing economic crisis present significant challenges to achieving the target of 70% renewable energy and implementing effective energy management initiatives. The Central Excise and Services (CESS) and royalty, when imposed will provide independent funding for the Sri Lanka Sustainable Energy Authority (SLSEA). To address these challenges, a comprehensive policy is needed to establish incentives and funding programmes specifically designed for renewable energy projects.

3.4 Resource Management

The implementation of renewable energy and energy management programs faces significant challenges, primarily due to a lack of skilled human resources and essential facilities. To effectively address these issues, it is crucial to expand the renewable energy sector by diversifying into various resource types, such as solar, wind, and rooftop solar. Additionally, improving the capacity and qualifications of personnel in this field is essential. By developing the human resources and facilities, support the growth of the renewable energy sector and ensure the successful implementation of energy management initiatives.

4. Progress of Development Projects

SLSEA implements its programmes through two primary strategies: Supply Side Management (SSM) and Demand Side Management (DSM). SSM activities are directed towards resource allocation and advancing the national renewable energy development programs. Conversely, DSM activities concentrate on improving energy efficiency across end-use sectors.

4.1 Supply Side Management Activities

4.1.1 Sooryabala Sangramaya

This programme aims to encourage the installation of small solar power systems on the rooftops of homes, places of worship, hotels, commercial establishments, and industrial buildings. Under this programme, customers have the opportunity to generate and utilize electricity directly from their own rooftops. This project is expected to save approximately 184 billion rupees by reducing the consumption of about 4.5 billion liters of fossil fuels used for electricity generation annually. The programme achieved a cumulative capacity addition of 1200 MW, utilizing over 75,000 roofs, meeting nearly 12% of the country's total annual electricity demand. In 2024, the programme added 393 MW, exceeding the set target of 180 MW. It was anticipated that 1,000 MW would be added to the national grid by the year 2025; however, this target was achieved by June 2024. To date, approximately 555 solar energy providers have been registered, resulting in significant job creation within the solar energy sector.

4.1.2 Pooneryn Wind-Solar Hybrid Energy Park

In the Kilinochchi district, the Pooneryn area benefits from exposure to both the southwest and northeast monsoons, resulting in strong winds throughout most months of the year. This makes it one of the most promising locations for wind power generation on the island. The Pooneryn wind power project is expected to have a capacity of 234 MW, with an anticipated annual electricity generation of 807 GWh. Additionally, it will save approximately 202 million liters of fossil fuel

used for electricity generation each year, resulting in cost savings of around 60 billion rupees. Furthermore, the implementation of this wind-solar project will contribute to a reduction in carbon emissions by 588,948 tons. The proposed commissioning date is April 2025.

(Pooneryn Wind-Solar Hybrid Energy Park)

The Pooneryn wind-solar project has made significant progress, achieving all necessary project approvals and environmental clearances. As outlined in Gazette No. 38A, the transfer of possession of private lands has been successfully completed, and compensation activities are currently underway. The draft agreement for the acquisition of state land on a lease basis has been submitted to the Attorney General for approval, while lease valuation matters for both state and private lands have also been finalized. Additionally, the energy permit has been granted, and the SLSEA has authorized the developer to commence pre-project development activities.

4.1.3 Mannar Wind Power Project

Given the significant wind resource potential along the northwestern coast, from Kalpitiya Peninsula to Mannar Island, this region stands out as one of the most prominent locations for wind power generation on the island. The Mannar Wind Power Project is expected to have a capacity of 250 MW, comprising 52 turbines, each with a capacity of 5.2 MW, and an anticipated annual electricity generation of 876 GWh. Additionally, the project is projected to save approximately 219 million liters of fossil fuel used for electricity generation each year, resulting in cost savings of around 66 billion rupees. Furthermore, the implementation of this wind power project will contribute to a reduction in carbon emissions by 639,305 tons.

(Mannar Wind Power Project)

The Mannar wind power project is progressing well. Possession of 27 land plots and access roads has been acquired. addressed 582 public comments received from the Central Environment Authority regarding the Environmental Impact Assessment (EIA) Report. The final Technical Evaluation Committee (TEC) report has been submitted after incorporating all the public comments. The Sri Lanka Land Development Corporation (SLLDC) has scheduled a drainage study for Mannar Island at the request of the Sri

Lanka Sustainable Energy Authority (SLSEA). SLSEA has granted the developer permission to proceed with pre-project development activities. The Environmental Impact Assessment and the project have been subject to multiple petitions in the Supreme Court, and responses are currently being prepared.

4.1.4 Siyambalanduwa Solar Power Project

The project is anticipated to generate 180 GWh of clean and sustainable electricity annually, resulting in an approximate reduction of 131,364 metric tons in CO_2 emissions each year. This reduction will have a positive environmental impact. Additionally, the project is expected to save around 45 million liters of fuel annually. These figures are based on a grid factor of 0.7298 kg CO_2 /kWh and a fuel savings estimate of 4 liters of diesel per kWh.

(Siyabalanduwa Solar Power Project)

The Siyambalanduwa project is nearing completion, with site preparation currently underway and the development of alternative access roads in progress. The recommendation regarding the land lease agreement from the Attorney General's Department has been received and, in accordance with the cabinet paper, has been submitted to the Ministry of Energy.

4.1.5 Development of Large-Scale Renewable Energy Projects

The Oddamawadi Solar Project (100 MW), which has received its Energy Permit, but is still awaiting the Power Purchase Agreement (PPA), approval from the Public Utilities Commission of Sri Lanka (PUCSL), and the Transmission Line Agreement. The Poonakary Tank Solar Project (700 MW) has received Cabinet approval, although PUCSL approval is still pending; the draft Environmental Impact Assessment (EIA) report has been submitted to the Central Environmental Authority (CEA), and the project has also been registered with the SLSEA. The Sampoor Solar Power Project (50 MW) received its Energy Permit on July 18, 2023, and the Ceylon Electricity Board (CEB) issued a Request for Proposal (RfP) in October 2023, with ongoing discussions regarding the Implementation Agreement. Lastly, the Hambantota Solar Project (150 MW) signed its Standard Power Purchase Agreement (SPPA) in March 2024, with the tower survey for the transmission line underway and construction contract negotiations ongoing; the Build and Transfer Agreement is pending, while land release approval has been received and the land lease documents submitted, with completion expected by March 2025.

4.1.6 Veravil Wind Power Park

(Veravil Wind Power Park)

SLSEA plans to establish a 204 MW wind power park in Veravil, Kilinochchi District, consisting of 34 turbines and an anticipated annual electricity generation of 735 GWh. Additionally, the project is projected to save approximately 2,943 million liters of fossil fuel used for electricity generation each year, resulting in cost savings of around 30 billion rupees. Furthermore, the implementation of this wind power project will contribute to a reduction in carbon emissions by 520,900 metric tons.

Work on the Veravil Wind Power Project is progressing successfully. The Environmental Impact Assessment (EIA) report and the Bird Study Report have been submitted to the Central Environmental Authority

4.1.7 Floating Solar Projects at Kiriibban Wewa and Chandrika Wewa

Two floating solar power generation pilot projects, each with a capacity of 1 MW, will be constructed on the surfaces of Chandrika Wewa (Lake) and Kiriibban Wewa (Lake) by the Korean government as a major initiative for Sri Lanka. The Ministry of Trade, Industry, and Energy of Korea has agreed to provide grant funding of approximately LKR 1,000 million for the implementation of these projects. The primary objective of these projects is to introduce floating solar power technology as a cost-effective solution for Sri Lanka's power generation needs and identify the impacts of this technology. This approach addresses the challenges associated with land requirements for traditional solar power plants. This project is expected to produce 3 GWh of electricity annually. Additionally, it will save approximately 1 million liters of fossil fuel used for electricity generation each year, resulting in cost savings of around 0.3 billion rupees. Furthermore, the implementation of this solar project will contribute to a reduction in carbon emissions by 2,100 tons. The project was completed and commissioned on 27th November 2024.

(Floating Solar Projects at Kiriibban Lake and Chandrika Lake)

4.1.8 Development of a Hybrid Renewable Energy System for Small Islands in Jaffna

The project aims to generate electricity for the islands of Analaitivu, Delft, and Nainativu in Jaffna through the implementation of hybrid power plants that utilize photovoltaic (PV) systems, wind power, diesel generators, and lithium-ion storage batteries. The capacities of the PV, wind, and diesel sources, along with battery storage, have been optimized to create an effective generation mix. The specific capacities are outlined as follows:

Island	Diesel Generators	PV generation	Wind generation	Battery storage
Nainativu	300 kW+500 kW	700 kW	200 kW	1000 kWh (550 kW)
Analativu	150 kW +300 kW	300 kW	80 kW	550 kWh (275 kW)
Delft	300 kW +500 kW	700 kW	250 kW	800 kWh (650 kW)

The project is progressing well. Installation of wire mesh fencing is in progress on Delft and Nainativu Islands, and has been successfully completed on Analaitivu Island. Furthermore, the removal of vegetation, debris, and underground obstructions, as well as site surveys and soil testing, has been finalized on all three islands.

(Hybrid Renewable Energy System for Small Islands in Jaffna)

4.1.9 National Projects in the Preliminary Stage

Four new wind and solar projects, with a combined capacity of 464 MW, have been identified: the 114 MW Karachchi Wind Power Project, the 200 MW West Manthai Wind Power Project, the 50 MW Thunkkai Solar Power Project and the 100 MW Deduru Oya floating solar project. These projects are currently in the preliminary stages of development and are anticipated to generate a total of 1,169 GWh of electricity. Additionally, these projects are expected to save approximately 56 billion rupees by reducing the consumption of fossil fuels used for electricity generation by about 4,676 million liters annually. Furthermore, the implementation of this wind power project will contribute to a reduction in carbon emissions by 828,480 tons.

For the Karachchi Wind-Solar Hybrid Energy Park, a pre-feasibility study has been completed, and a joint site visit with the Forest Department has been conducted. Efforts are underway to resolve location-related issues, and discussions are ongoing with the Department of Forests and USAID regarding further development of the identified sites.

(Karachchi Wind-Solar Hybrid Energy Park)

In the case of the Thunukkai Solar Power Project, a joint site visit was carried out with the Forest Department, and the collection of relevant information for technical assessment is currently in progress. Additionally, new layout planning, location modifications, and negotiations with the Forest Department are ongoing.

For the Manthai West Wind Power Project, a joint site visit with the Department of Forests has been completed. Currently, the collection of relevant information for technical evaluation is underway, along with the commencement of land-related data collection.

4.2 Demand Side Management Activities

4.2.1 In accordance with the regulatory provisions outlined in clauses 35 (d) and (e) of SLSEA Act No. 35 of 2007, the Appliance Energy Labelling programme was implemented by the SLSEA. At present this programme has addressed a wide range of appliances and equipment. Revisions of the Sri Lanka standard for air conditioners are currently completed and the regulation for air conditioners are set to be published in the Gazette notification, while the draft regulation is already prepared for this purpose. Civil constructions of the test laboratory for evaluating air conditioners' energy efficiency have been completed, and the power transformer placement is now underway. The draft standard for electric motors has been finalized, and specifications for a motor testing laboratory have been developed with the assistance of the USAID. The draft regulation for LED modules is set to be published in the Gazette notification, while the draft regulation is already prepared for this purpose.

Further the voluntary energy labelling programme is currently in operation for LED modules. Additionally, the draft standard for rice cookers has been finalized. Water pump tests are currently being conducted at National Engineering Research and Development Center (NERDC) for benchmarking purposes. The draft standards for televisions, pedestal fans, wall fans, table fans, and gas stoves have also been finalized, while the preparation of draft standards for washing machines, electric heating devices, and electric cookers is ongoing. Additionally, to digitalize the appliance labelling platform using a web portal and QR codes, with the support of the USAID, the structure for the web portal has been finalized and the development of the web portal is being conducted.

(Regional Workshop on the ADB Pilot Project)

4.2.2 Improving the energy performance of buildings is an important aspect of the country's sustainable energy development strategy. The Energy Efficiency Building Code (EEBC) was published by the SLSEA in accordance with the regulatory provisions outlined in section (g) of SLSEA Act No. 35 of 2007. The EEBC provides guidance to practitioners in the construction industry on reducing energy consumption in buildings. The revised EEBC was published in 2021, and several actions have been taken to facilitate its implementation. These include conducting a training program for building sector

the country's energy sector performance. The 2021 report has been published, data collection for 2022 has been completed and is currently under compilation, and data collection for 2023 has commenced.

4.2.4 The ADB pilot project focused on implementing disease-resilient, energy-efficient centralized air conditioning systems for the Postal Headquarters of the postal department, Sri Lanka Standards Institution (SLSI), and State Pharmaceuticals Manufacturing Corporation (SPMC) has been successfully completed. To disseminate knowledge about this novel technology and showcase the newly installed systems, a regional workshop was held on April 4th and 5th, 2024. This event brought together professionals, technical experts, and government authorities from South Asia and Southeast Asia

4.2.5 The accreditation of Energy Managers, Energy Auditors, and Energy Service Providers is aimed at promoting energy efficiency in the industrial and commercial sectors. According to the Energy Benchmark Regulation No. 2339/09, published on July 4, 2023, 29 Energy Managers have been appointed for banks, financial institutions, and retail companies. In total, the SLSEA has appointed 285 Energy Managers. Additionally, a National Energy Benchmarking Portal has been developed and launched to facilitate energy data reporting and analysis. The registration of companies and submission of data through the portal is currently ongoing, with over 300 facilities already registered. One new Accredited Energy Auditor has been registered, bringing the total number of accredited Energy Auditors to 25. The renewal of energy service company registrations and the registration of new companies for 2024 have been completed, resulting in a total of 31 energy service companies (ESCos) registered for the year.

4.2.6 Energy audits were conducted at several institutions, including the Sri Lanka Standards Institution, the Disaster Management Centre, the University of Sri Jayewardenepura, the House of Armours Camp in Modara, Nalanda College, and the SLT Data Centre in Pitipana. These audits are supported by a team from the Sri Lanka Navy. An annual energy saving of approximately 300 MWh was estimated through these audits.

(Energy Audit Conducted at the University of Sri Jayewardenepura and Nalanda College)

4.2.7 As a pilot project, the implementation of an efficient street lamp system in Divulapitiya Pradeshiya Sabha is expected to replace the existing sodium vapor, mercury lamps, and incandescent lamps with efficient LED street lights of 150W, 50W, and 20W power. Currently, a total of 250 lamps of 150W and 50W LED street lights have been successfully replaced. The procurement process for the purchase of 2,500 20W bulbs is currently underway, with expected delivery by the end of September 2024 and installation planned for the end of 2024.

4.2.8 Currently, buildings across various sectors-including commercial hotels, government facilities, hospitals, and industrial

sites - consume approximately 40% to 80% of the total energy used by air conditioning systems. Consequently, it is essential to conduct a comprehensive study of chiller air conditioners and develop a long-term energy savings program. In response to this need, the SLSEA is conducting a chiller survey aimed at creating an inventory of the currently installed chiller operated air conditioners in Sri Lanka. This survey will focus on their energy use, efficiency, and other relevant data. Additionally, it seeks to assess the potential energy savings that could be realized by replacing existing units with more efficient chiller machines.

The survey identified that there are approximately 1,000 chillers currently installed throughout the country, with a significant portion being inefficient units that are more than 10 to 15 years old. The survey found that replacing these inefficient machines with more efficient units could save approximately 70 GWh of energy per year, leading to a reduction in carbon emissions by 48,400 tons CO_2.

5. Future Plans 2025

The projects in Pooneryn, Mannar, Siyambalanduwa, Karachchi, Veravil, Thunukkai, Manthai West and Deduru Oya will continue into 2025. The necessary stages of project approval, land acquisition, feasibility studies, and Environmental Impact Assessments will be conducted to meet our renewable energy targets.

The establishment of energy benchmarks will be expanded to include the tea and hospital sectors, while existing benchmarks for the financial and retail sectors will be revised. The appointment of Energy Managers, Energy Auditors, and Energy Service Providers will continue, supported by energy data reporting through the National Energy Benchmarking Portal. Additionally, plans are in place to restructure the Energy Auditor appointment scheme by introducing more qualification levels, as well as revising the regulations governing Energy Managers and Energy Auditors.

Furthermore, the continuation of energy audits and consultancy services will be prioritised to support organizations in optimizing their energy usage. Training and awareness programmes focused on energy conservation and management will also be maintained, targeting various industrial and commercial sectors. In addition, the Sri Lanka National Energy Efficiency Awards will be held to recognize the contributions of organizations, Energy Managers, and Energy Service Providers in promoting energy conservation.

SLSEA will conduct a rapid assessment of tri-generation potential in four industrial parks as part of a pre-feasibility study, utilizing a consultancy assignment. This will give details of the heating, cooling and electricity generation potential of high energy-consuming industries in the BOI-managed industrial parks. Sri Lanka Institute of Nanotechnology (SLINTEC) has agreed to conduct a Research Project on 'Development of Technology for Rechargeable Sodium-Ion Battery to Facilitate Energy Storage for Rooftop Solar PV' to produce a prototype sodium-ion battery, which will help to utilize the solar energy produced in the daytime to be used in the night peak. BoI Zones are high in their biomass consumption and the Biomass Consumption Survey planned in 2025 will give a status of these quantities and sources. A study on energy efficiency improvement in the fisheries sector would be done to realize the potential through introducing new technologies and efficient energy chains. Post-monitoring of the pilot project on implementing an efficient street lighting system at Divulapitiya Pradeshiya Sabha would be done to evaluate energy savings and other benefits of the project.

The following activities will be planned under the energy labelling programme:

- A voluntary labelling scheme for electric motors is aimed to be initiated by this authority, with emphasis on securing financial support for laboratory operations and related awareness initiatives.
- A testing laboratory will be installed for rice cookers, and the voluntary labelling programme will be launched by SLSEA.
- Supplier awareness will be raised, and the voluntary labelling scheme will be initiated for water pumps by SLSEA.
- The draft standard for televisions will be finalized, and the necessary laboratory equipment will be acquired.
- Remaining benchmark tests must be completed for pedestal fans, followed by the finalization of the draft standard and the purchase of required testing lab equipment.
- The draft standard is required to be completed for gas stoves.
- A comprehensive database will be prepared, awareness programmes and seminars will be executed, and a test run of the pre-commissioned QR code web platform for energy labels will be conducted by SLSEA.
- Necessary testing lab equipment will be purchased for computers by SLSEA.
- Draft standards for washing machines, electric water boiling devices, and electric cookers aim to be completed by SLSEA.
- These initiatives are designed to enhance energy efficiency and promote sustainable energy management across these sectors.

Chapter 05

Sri Lanka Atomic Energy Regulatory Council

1. Introduction

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 (Act). Council presently functions under the 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 violations 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.

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

2.1 It was a challenge for the Council due to lack of a sufficient number of Scientific Officers & Administration staff to execute planned activities and in a timely manner and to attend to some of the requested inspections within a reasonable timeframe. The resignations & retirements of several employees, coupled with government restrictions on recruitment, are the reason for this staff shortage. Despite having 45 approved cadre positions, currently only 32 employees are available at the Council. This leaves 13 positions vacant

The Council has taken its maximum effort to improve regulatory and administrative work of the Council meeting international standards amidst the above constraints due to dedication, commitment and unwavering support of the staff in implementing the operational activities of the Council.

2.2 Council has identified that 13 nos. of rules, policies, regulation & procedures need to be prepared in accordance with the provision given by the Sri Lanka Atomic Energy Act No.40 0f 2014. A separate officer of the Council has been appointed to prepare such document and a member of the Board of Management has also been appointed to supervise such document. This process was initiated in late 2023. Accordingly, in the year 2024, the Regulatory Council has managed to complete about 60% of the work of making the above rules, regulations, etc. The Regulatory Council expects to complete these works by the end of year 2025, and the existing shortage of employees has become a great challenge for the Regulatory Council to finish these works promptly.

3. Progress of the Development Projects and activities of the institution

Table 5.1
Regulatory activities

No	Activity	Target for 2024	Progress
01.	Issuing new & renewal licenses (which also include processing of application, issuing of modification and extensions to the existing license)	350	129
	Extensions for interim licenses	100	135
02.	Issuing regulatory certificates for food samples tested for radioactive contamination	4000	2324
03.	Regulatory Inspection of radiation facilities	500	196
04.	Import / export approvals for radioactive materials and irradiating apparatus	480	341
05.	Approval of plans of irradiation facilities	80	57

Table 5.2
National Training Courses

Programme	Achieved
National Training Course on "Radiation Protection for Operators" working in Industrial and medical facilities Diagnostic X-ray facilities (T/OPU/M/05)(Continuation)	Conducted training course for 20 participants
National Training Course National Training course on Radiation Protection for Operators /Users in Category III & IV Industrial facilities (T/OPU/I/04)	Conducted training course for 15 participants
National Training Course on "Radiation Protection for Operators /users" working Radiotherapy/Nuclear medicine facilities (T/OPU/M/04)	Conducted training course for 11 participants
National Training Course on "Radiation Protection for Operators /users" in Category I & II industrial facilities (T/OPU/I/03)	Conducted training course for 17 participants
National Training Course on "Radiation Protection for Operators /users" in Diagnostic X-ray Facilities (T/OPU/M/05) and Dental/ Veterinary Diagnostic X-ray Facilities (T/OPU/M/06)	Conducted training course for 88 participants
National workshop on Design Basis Threat (DBT) in collaboration with IAEA for SLAERC and other relevant stakeholders	Conducted training course for 30 participants

Table 5.3
Preparation of Regulations, Rules, Procedures & Codes

	Programme	Achievement/Achieved %
1	Finalization of draft Regulations on Ionizing Radiation Protection and Safety of Radiation Sources.	70%
2	Preparation of a national policy on Radioactive Waste Management	80%
3	Implementation of the Nuclear or Radiological Emergency Management Plan	80%
4	Preparation of the Atomic Energy Act for fulfilling the requirements of operation of NPP	***Preliminary drafting completed
5	Maintenance of the national sealed source registry	100%

6	Maintenance of a registry of sources in the Regulatory Authority Information System (RAIS)	100%
7	Introduction of online licensing and approval system	90%
8	Training of scientific and other staff through local, foreign trainings and trainings under IAEA TC projects	100%
9	Publication of license information and services in the official Web for information to the stakeholders and public	100%

***Preparation of the Atomic Energy Act for fulfilling the requirements of operation of NPP

4. 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 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

(c) 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.

5. Future Plans 2025

5.1 Regulatory Activities

Table 5.4
Future Regulatory activities

Programme	Activities to be performed for 2025
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. Submission of the Regulations on Security of Radioactive Sources to the Parliament for its approval and implementation of the requirements 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. Implementation of the requirement of National Policy on Radioactive Waste Management after receiving the cabinet approved. 1.6. Preparation of rule on Safe Transport of Radioactive Materials, Safety & Security Policies, Emergency Rule & Enforcement Procedure in accordance with International Guidelines as per the requirements given in the Sri Lanka Atomic Energy Act No.40 of 2014

2. Licensing & inspections of radiation sources and irradiation facilities	2.1. No. of licenses planned to be issued (new & renewal) - 560 2.2. No of inspections planned to be conducted - 500
3. National training course on radiation protection	3.1. Conducting national training courses for operators and radiation protection officers of the licensed facilities in medical and industrial fields (Radiation Protection Officers and 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 sample estimated to be tested - 4000 4.3. Granting approvals for the irradiation facility plans. No. of approvals estimated to be given - 80
5. Online licensing & approval system	Establishment of online licensing & approval System and use it for licensing for selected facilities and import and export approvals.
6. Maintenance of database & Source registry	6.1. Maintenance of database of licensees, inspections and other relevant information. 6.2. Maintenance of National Registry of Radiation Sources
7. Publication of information of licensed facilities in the WEB	Up to date information of all licensed 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

5.2. Implementation of IAEA TC Project activities

IAEA Technical Corporation Project SRL9013 "Strengthening of preparedness and response to nuclear or radiological emergencies" was conducted for 2022-2023 project cycle. Since some activities could not be completed during the project cycle, following outcomes will be extended through this project in 2025.

a. Training of several officers from the Council, first responding organizations and technical organizations through fellowships, Scientific Visits.

b. Acquire necessary equipment to conduct emergency exercises and to respond real emergencies. Measuring equipment, training equipment and decontamination equipment will be received through this project.

c. Establishment of New Early Warning Detector System. This system will be compatible with International Radiation Monitoring Information System (IRMIS) data sharing platform and will help to receive early warning during nuclear disaster.

Chapter 06

Sri Lanka Atomic Energy Board

1. Introduction

Sri Lanka Atomic Board (SLAEB) is the Government's premier Nuclear Science and Technology Organization which is operated under the Ministry of Energy. The mandate of the SLAEB flows from the powers vested by the Atomic Energy Act No. 40 of 2014 - for the promotion and encouragement of the use of Nuclear Science and Technology for national development purposes. SLAEB promotes and encourages peaceful applications of nuclear technology through related services, Research and Development (R & D) work and provides radiation protection services to meet regulatory requirements while ensuring safety, security, and quality. Nuclear Technology has a wide range of applications in many fields that can make a significant contribution to the development of medical, agricultural, industrial, energy and environmental sectors in Sri Lanka.

SLAEB receives consolidated funds from the Government for recurrent and capital expenditures. Also, the technical support is received mainly from the International Atomic Energy Agency (IAEA) to develop capacities and capabilities, through its Technical Cooperation (TC) Projects, Regional Cooperation Agreement (RCA) Projects and Coordinating Research Projects (CRPs). SLAEB has assisted relevant stakeholder organizations/institutes in the country to get the benefits of the nuclear science and technology for the socio-economic development of the country.

The SLAEB principally consists of three scientific Divisions and two Centers having laboratory facilities for its services and R&D activities. The SLAEB is governed by a Board with a Chairman. The SLAEB has unique capabilities & capacities for utilizing peaceful applications of nuclear technology in the fields of health, agriculture, environment, energy and industry etc.

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

	Challenge	Strategy adopted
1	Employee turnover due to seeking better opportunities (local or overseas) to survive in the economic crisis in the country as well as no approval received for new recruitments	-NAITA and undergraduate trainees have been recruited to cover the day today operational needs. But it was not success as expected. -In addition, acting arrangements have been done for the vacant positions
2	Technical failure in instruments/ plants and difficulties faced due to lack of spare items, accessories, support of service providers. etc.	Obtaining technical support & assistant from international donor institutes such as IAEA to purchase new instruments, spare parts and expert assistance.
3	Budgetary limitations imposed by the government	New income generating services such as Welder Qualification Facility, new nuclear analytical techniques (e.g. gem analysis) have been established.
4	Less demand for routine analytical services (Beyond the institutional control)	The quality of services has been maintained through laboratory accreditation, quality assurance etc.
5	Budgetary limitations for custom clearance of the donations from the IAEA	Submitted the requirement to consider to allocate funds from other entities under MoP

6	Disturbance to the continuous supply of the products from the main customer (Lalan Rubbers [Pvt] Ltd) of the SLGC. They have not come to an agreement with the SLAEB for monthly volume commitments, which has caused loss of income to the SLAEB	Periodic discussions with the main customer to identify the root cause (s) of the problem. Meetings, site visits etc. are being arranged regularly for the other potential customers who have shown an interest on gamma irradiation. In addition, a meeting was conducted with the Ambassador of India to seek potential business partners who are capable of providing products for gamma irradiation continuously.

3. Progress/Achievements of programms:

3.1 Sri Lanka Gamma Center (SLGC)

operated under the SLAEB, is located in the Export Processing Zone, Biyagama. It is the only Government-owned irradiation facility that has been established to provide the gamma irradiation service for the industry in the country. Currently, it is the facility where the surgical gloves used in all the Government hospitals in Sri Lanka are sterilized. In addition to that, other medical products, food items, packing materials etc. are irradiated in less quantities when compared with surgical gloves. The total income generated in the SLGC 2024 by providing irradiation service for medical and food products is Rs Mn 26.42

3.2 National Center for Non-Destructive Testing (NCNDT)

- Inspection services and providing NDT training: The leading NDT service provider for the power generation plants in Sri Lanka is NCNDT. The staff is ready to attend the inspection in any emergency situation in the power sector. 125 inspections has been carried out by Inspection division.

- Further to this, the NCNDT facilitates for the operation of the National Certification Body for Non-Destructive Testing, Sri Lanka (NCBNDT). The NCBNDT provides reliable qualification and certification services to the satisfaction of its customers in accordance with the latest versions of ISO/IEC 17024 and ISO/IEC 9712. Also, the NCBNDT is a registered Personnel Certification Body (PCB) under International Committee for Non-Destructive Testing (ICNDT) Multilateral Recognition Agreement (MRA) Schedule 2 for Personnel Certification in NDT.

- Welder Qualification Facility (WQF): WQF was established to create internationally accepted welding professionals such as Welding Technicians, Welding Supervisors, and Welding Inspectors as the full scope to build the welding community in the art of welding. The commercial operation of this WQF was initiated in January 2021 by conducting Welder Performance Qualification (WPQ) services for Sri Lankan Welding Technicians. Accordingly, the WQF of NCNDT of SLAEB serves as the leading "Gap-filling and Examination Centre" in the Government sector for WPQ as per international standard since January 2021 up to now. With the establishment of this WQF there is an opportunity to earn foreign remittance to the country to upgrade the country's economy by sending skilled Welding Technicians for foreign job opportunities while helping each other. The joint venture Agreement signed between the SLAEB and KOLEX TECH (PVT) LTD to establish a gap-filling and Examination Centre in the field of welding and the Agreement signed between the Tertiary and Vocational Education Commission (TVEC) and the SLAEB on the "Process of Recognition Prior Learning (RPL)" applications for awarding National Vocational Qualification (NVQ) for welding technicians are continued

successfully. **During 2024 the total no of qualified welders as per American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section IX is 165 and the total no of NVQ qualified welders is 29.** The WQF wishes to extend its scope as per the ISO certification scheme also. 26.7.

Total income generated by the all NDT services including WQF services is Rs M 26.68

3.3 Nuclear Analytical Testing (NAT) Service of the Life Sciences Division-Testing of imported milk powder for radioactive contamination is done at the Gamma Spectroscopy Laboratory to fulfill the regulatory requirement in the country. The samples collected by the Ministry of Health-MOH (by the Food Inspector at the harbor) from the shipments received to the country are analyzed and the reports submitted to the MOH through the Sri Lanka Atomic Energy Regulatory Council (SLAERC). If the radioactivity levels exceed the permissible level of radioactivity in the country (as per SLAERC's regulations), the shipments are returned to the countries of origin.

During the year 2024, 2389 samples of imported milk powder and 105 samples of exported tea and other products were tested for radioactivity measurements using Gamma spectrometry. 126 samples were tested for detailed radioactivity measurements. 66 of various sample matrices of soil, mineral archaeological samples, gems, alloy etc., were analyzed for multi elemental composition using X-Ray Fluorescence spectrometry, 53 wastewater samples were tested for gross Alpha and Beta measurements.

Gamma Spectrometry Laboratory has maintained Quality Management System (QMS) as per the ISO IEC 17025:2017 International Accreditation for testing laboratories, since 2006. The Gross Alpha Beta Laboratory was obtained Accreditation on 13th September 2023 as per the ISO IEC 17025:2017 International Accreditation for testing laboratories and 1st surveillance assessment was successfully completed in 26th of July 2024.

Total income generated by the NAT during 2024 is Rs 40.39 mn.

3.4 Radiation Protection, Safety and Nuclear Security Services

This service provides technical and scientific support for radiation protection and nuclear security to the country to meet regulatory requirements for the safety of the general public, radiation workers, and the environment from unwarranted exposure to ionization radiation. Personal monitoring services for the safety of radiation workers in health and industrial sectors and calibration services for radiation measuring instruments in the Secondary Standard Dosimetry Laboratory are obligatory services for the country. In terms of radiation protection and security of the radioactive sources in the country, awareness programmes are being conducted for radiation workers, security officials (Tri-Forces and Police) etc. regularly.

Total income generated by the all radiation protection and technical services during 2024 is Rs. 33.51 mn.

3.5 Nuclear Power Study & Planning Programme for Electricity Generation in Sri Lankan Context

SLAEB has taken necessary initiatives for comprehensive study to explore the potential for electricity generation using nuclear power. This initiative addresses the 19 nuclear infrastructure issues identified by the International Atomic Energy Agency (IAEA). Following the approval from the Cabinet of Ministers on 12th February 2024 and 4th March 2024, the Ministry of Energy

(MOE) is leading the establishment of the Nuclear Energy Programme Implementing Organization (NEPIO) for Sri Lanka. To ensure broad-based stakeholder involvement, various working groups have been formed, covering critical areas pertinent to the establishment of a strong nuclear energy programme. The objective of the working groups is to contribute to the successful implementation of Sri Lanka's nuclear energy programme by providing expertise, knowledge, and recommendations in their respective areas of focus.

In this Cabinet approval, the following recommendations were made:

- To provide the strategic and visionary decision of the Government of Sri Lanka on the generation of electricity from nuclear power as a policy.
- To invite Expressions of Interest (EOI) in accordance with the Standard Procurement Methodology of the Government of Sri Lanka from government institutions of suitable countries producing nuclear power plants compatible with the technical, economic, social, environmental, and legal conditions in Sri Lanka. These institutions should be able to provide an integrated solution, including nuclear fuel cycle options and radioactive waste management options.
- To prepare the legal framework by approving a new act with updated provisions related to the process of generating electricity from Nuclear Power, replacing the currently implemented Atomic Energy Act No. 40 of 2014.
- Project Committee (PC) has been appointed for the procurement of Invest and Establish Nuclear Power Reactors to prepare the document for calling Expressions of Interest (EOI). The First meeting of PC was held on 07-08-2024 to review the draft EOI. Project work is progressing satisfactorily.

3.6 Establishment of Cyclotron based radiopharmaceutical production facility in Sri Lanka on Build, Own and Operate (BOO) basis

Fluoro deoxy glucose (18F-FDG) which is a radioactive drug, is used for PET and CT tests to diagnose cancers. A special device called Cyclotron is used to produce this drug and this radioactive drug is imported from India since the required facilities are not available in Sri Lanka. Due to its radioactive decaying nature, about 97% of the strength of the drug losses when it is imported from India. As a result of the involvement by the SLAEB, it was decided that the Ministry of Energy would submit a cabinet paper. A private investor has been selected for the establishment of Cyclotron based radiopharmaceutical production facility in Sri Lanka by calling Expression of Interest process through a Cabinet Appointed Negotiating Committee (CANC).

The Cabinet approval has been obtained on 2024-04-01 to establish a joint venture company with the selected investor, Access International Pvt Ltd, Ministry of Health and SLAEB. Final agreement has been finalized and sent to the approval of Hon. Attorney General. It is expected to establish the joint venture in September 2024 and lay the foundation for the facility in September 2024. The facility will be built, own and operate by the joint venture company. It is expected to supply the locally manufactured radiopharmaceuticals to the Sri Lankan Hospitals at the last quarter of 2026. Technical assistance for the project has been obtained through International Atomic Energy Agency (IAEA).

3.7 Education Programme on Nuclear Science and Technology (NST):

- This programme primarily targets secondary and tertiary education. To support this, training-of-trainers (TOT)

programs are conducted for Science and Physics teachers, encouraging the integration of NST into the school curriculum.

- The International Nuclear Science & Technology Academy (INSTA) was introduced to government universities in 2024 through the University Grants Commission, providing access to international-level educator training in various NST fields.
- The First International Nuclear Science Olympiad (2024) was coordinated and supported by the SLAEB. Three students were participating for the First International Nuclear Science Olympiad held in Philippine in first of August 2024. They were able to win one gold medal and two silver medals
- No of Conducted awareness programs, Guest lectures, exhibitions, visits , meetings etc. – 20
- No of Published e magazines: 2

3.8 R & D achievements.

- As mandated by the Act, SLAEB engages in R&D work on Nuclear Science and Technology to uplift the current living status of the people, manage natural resources, protect the environment, Agriculture and food security, Radiation processing, Radiation protection etc. of the country while achieving national development objectives. The SLAEB consists of unique and specialized laboratory facilities and competent, qualified, and dedicated nuclear scientists to fulfill the technical requirements for the above-mentioned services and research activities through the IAEA technical cooperation programme.

a. Final reports submission of R & D projects.

- **Pilot Project on the Geochemical Verification of the Origin of 'Ceylon Tea':** This project was implemented under a tripartite agreement among the Sri Lanka Atomic Energy Board (SLAEB), Sri Lanka Tea Board (SLTB), and the Tea Research Institute of Sri Lanka (TRI), with the support from the International Atomic Energy Agency (IAEA). Conclusion in summary: The pilot project successfully demonstrated that geochemical fingerprinting can verify the origin of Ceylon Tea.

- **Development of a Screening Method to Detect Lard Adulteration in Powdered Milk Using FTIR-ATR Analysis:**

  This project was conducted at the request of Consumer Affairs Authority. This research is part of the planned activities under the IAEA CRP project SRL21090. Conclusion in summary: Those samples have not been adulterated with lard according to this FTIR-ATR spectroscopic method. Further investigations should be followed with chemical methods to detect possible lard adulteration as a verification method. Both reports were submitted to the SLAEB Board on 27th Aug 2024 and submitted to the relevant institutes for further decisions.

b. One of our research project selected for Council for Agricultural Research Policy (CARP) awards Titled, Advancing Food Safety in Sri Lanka: Integrated Approaches for Tracing Origin, Detecting Adulteration, and Ensuring Quality in Dairy and Animal-Derived Products " The research project was conducted in collaboration with the University of Peradeniya and the members were; **C.K.K.Dissanayake, M.D.Kalpage, B.R.Fernando, R.Chandrajith, R.S.Diyabalanage, N.B.Karunarathna** and **K.M.Binduhewa.** SLAEB and University of Peradeniya. Video documentary prepared and submitted.

c. One of the staff members, Dr. Sakhila Priyadarshanee Senior Scientific Officer has successfully completed her Ph.D.

in Geological Engineering, Institute of Geology and Geophysics, Chinese Academy of Sciences. The effective Date of Degree: 30th June 2024, Thesis Title: Coupled Effect of Magnesium and Fluoride in Shallow Groundwater as a Potential Cause of CKDu in Sri Lanka.

d. Isotope technique in hydrology is being applied to assess the effectiveness of the artificial recharge of groundwater resources in Monaragala District and to assess the groundwater recharge conditions in Malala Oya basin in Hambanthota. The Water Resource Board and the National Water Supply and Drainage Board are collaborating respectively in these projects.

e. Radiation Processing techniques have been applied in 2024 to develop methods for the preservation of cultural heritage in Sri Lanka, re-utilization and recycling of polymeric waste for the production of industrial goods in order to reduce the plastic waste in the country, degradation of antibiotic Amoxicillin in water systems for the safety of livelihoods

f. A research project is being conducted to derive an isotope fingerprint to the water sources used in the bottled/packaged water industry in the country.

g. Capabilities for assessing water use efficiency in agricultural crops using a combination of isotope techniques and agronomical methods are being developed. Preliminary studies have shown success in utilizing isotope data to conserve irrigation water.

h. A collaborative project was conducted on Assessing and Improving Soil and Water Quality to Minimize Land Degradation and Enhance Crop Productivity Using Nuclear Techniques

i. More than 15 students (undergraduate, internship trainees and post graduate) completed their industrial training or undergraduate research projects during this period under the supervision of our scientists.

4. Future Plans 2025

A. Nuclear Power Study and Planning Program for Electricity Generation.

- Re-establishment of the Nuclear Energy Programme Implementing Organization (NEPIO) - Steering Committee, Project Management Unit (PMU), 09 Working Groups (To address the 19 issues as per the IAEA Milestone approach. Already appointed Aug 2024. Work is in progress).
- Calling Expression of Interest (EOI) from well-established Suitable Nuclear Power Vendors.
  Project Committee appointed consisting 14 members to review EOI document to submit the same to the Cabinet Appointed Negotiating Committee (CANC) - Request for Information (RFI), Request for Qualification (RFI), Request for Proposals (RFP).
- Enacting a new Atomic Energy Act with replacing the Atomic Energy Act No.40 of 2014, which compatible to way forward the New Nuclear Power Programmes to generate Electricity (Table in Sri Lanka Parliament as a Bill and enact as an Act with Concurrence of Hon. Attorney General's and Legal Draftsmen).
- Advancing the IAEA assisted Integrated Nuclear Infrastructure Review (INIR) Mission's 26 Recommendations and 6 Suggestions (Currently, moderately developed 10 Recommendations and 03 Suggestions).
- Conducting IAEA Assisted National Workshops during 2025.
- Completing the site Survey, site selection process and site characterization for Future Nuclear Installation in Sri Lanka

- Establishment of Nuclear Power Education & Training Facility
- Establishment of Nuclear Power Planning unit under the SLAEB organizational structure with relevant Human Resources.

B. Expansion of Welder Qualification Facility at the NCNDT

The Welder Performance Qualification (WPQ) service established at the NCNDT has been recognized as a nationally significant service that supports the strengthening of foreign reserves by qualifying welders for the international job market. To expand WPQ services nationwide, an agreement was signed in May 2023 between the Tertiary and Vocational Education Commission (TVEC) and the SLAEB on the "Process of Recognition of Prior Learning (RPL) applications for awarding NVQ to welding technicians." Additionally, an agreement was reached with a private investor, Kolex Tec (Pvt) Ltd, to expand the facility with new welding plants and establish a Gap Filling and Examination Centre at the NCNDT to meet the demand for certified welding technicians in the foreign job market. The collaborative work with Kolex Tec (Pvt) Ltd will continue in 2025.

C. Expansion of routine services for income generation.

a. **Provide Nuclear Analytical Testing service while maintaining ISO IEC 17025:2017** International Accreditation for testing laboratories which is currently the main revenue generation source to the SLAEB. It is planned to improve awareness about the services to increase the customer base.

b. **Personal monitoring service** for the protection of radiation workers in health and industrial sectors

c. **Non-Destructive Testing inspection** services for industrial needs

d. **Gamma irradiation service** to sterilize the total quantity of surgical gloves needed for government hospitals. A customer awareness programme/workshops will be organized for the local manufacturers, exporters, importers, policy makers, technical parties on the application of gamma irradiation in various industries, by obtaining the expert's assistance from the International Atomic Energy Agency

e. **Education Programme on Nuclear Science and Technology (NST):** As part of the national efforts to reform the secondary curriculum in Sri Lanka, the Ministry of Education will introduce Nuclear Science and Technology (NST) as an elective module for grade 11 students. NST educators affiliated with IAEA's International Nuclear Science & Technology Academy (INSTA) member institutes will receive international training opportunities. The SLAEB will take the necessary steps to participate in IAEA Asian Network for Education in Nuclear Technology (ANENT) activities in 2025.

D. Targeted R & D Projects 2025

a. Research and development programs/ projects are conducted with the support of the IAEA. Here are the main focus areas for the year 2025: environmental management and assessments, food safety and agriculture, industrial improvements and process enhancement, material development, optimizing crop water productivity using isotope techniques, soil erosion and water pollution studies in agricultural areas. microplastic contamination in the marine environment, external dose assessment in different background radiation levels, instrument development and fabrication, radiation safety, nuclear security, and more

b. A project proposal has been submitted to the Indo-Sri Lanka Joint Bilateral S&T Programme (Call for Proposal 2024) for a comprehensive groundwater study in Monaragala District to identify the causes of depletion of groundwater resources, vulnerable zones, and potential groundwater recharge areas etc. It is planned to implement the project in 2025 in collaboration with the PG & Research Department of Geology, National College (Autonomous), Tiruchirappalli, Tamilnadu, India, if the approval is granted.

c. Implementing second phase of the 'Ceylon Tea' project: For strengthening the data base and check the model adequacy to implement commercial certification programme.

d. Also, a collaborative study with Water Resource Board will be started in Q4-2024 and continued in 2025 to find the origins of the natural springs in Anuradhapura District.

Chapter 07

Lanka Coal Company (Pvt) Ltd

1. 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). 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 seasons 2024-2025.

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

2. Performance of LCC in 2024

Secure of LVPP's coal requirements until the start of the next coal season on September 10, 2024, despite the difficult effort of managing supplies due to the country's current financial and economic challenges.

3. Programs for Season 2024- 2025

A. Coal Supply 2024-2025

The CEB coal requirement of 2,259,000.00 MT ±10% for the season 2024-2025 will be supplied by 38 shipments. A new Term Tender LCC/24/TT/1 was executed to procure 9 consignments under proposals, LCC/23/PROP/1 and remaining 29 consignments. 6 bidders submitted bids, out of which only 3 submitted bids in accordance with the relevant tender invitation. Meanwhile, POTENCIA L.L.C-FZ, the supplier of LCC/23/PROP/1, submitted a proposal for the supply of coal this season. The bid documents received by the Technical Evaluation Committee and this proposal were submitted to the Standing Cabinet Committee on Procurement and the Line Ministry. Then the Line Ministry submitted to the Cabinet and upon its approval 2,259,000.00 MT ±10% has been given to POTENCIA L.L.C-FZ on the relevant terms and conditions and in this proposal the shipping charges have been reduced by USD 3 from USD 30 to USD 27 per unit.

Table 7.1
Coal supply Schedule for Season 2024-2025

Supply Method	Quantity MT ±10%	No of Shipments
Proposal LCC/23/PROP/1	540,000	09
Proposal LCC/23/PROP/1	1,740,000	29
Lakvijaya Power Plant requested quantity for 2024-25	2,259,000	38

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

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

LCC has awarded the all three contracts by CFR basis which in include Cost of Coal and the freight only and the Insurance will be covered by LCC for the season 2024-2025.

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

The contract of Lightering and barge operation which was awarded to Ceylon Shipping cooperation to two seasons 2021-22 and 2022/23 has been extended for the season 2024-2025. Further, CSC has obtained the Cabinet approval for the same.

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). Two companies namely Peoples' Insurance PLC and Fairfirst Insurance Limited were awarded the insurance contact to prove the service for two seasons 2023/24 and 2024/25 by 40 shipment for each company, Since, the both companies have quoted same price. Accordingly, the contacts will end at the end of the season 2024/2025.

IV. The Independent Testing Agency for coal supply at discharge port.

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 contract period of the Cotecna Inspection was extended up to 31 May 2025.

C. Coal Payment Mechanism for Season 2024-2025

A particular method of payment has not been finalized for the season 2024 - 2025. The summary of the fund requirement as is follows;

Table 7.2
Summary of fund requirement for season 2024-2025

Supply Method	No of shipments	Fund Requirement	
		USD million	LKR billion
Proposal LCC/23/PROP/1	9	69	21
Proposal LCC/23/PROP/1	29	221	69
Total	38	290	90

Table 7.3
Summary of the Payment Method for Season 2024-2025

Supply Method	Payment Terms
Proposal LCC/22/PROP/1/ for 38 shipments	Telegraphic Transfer (TT) Terms per MT. The RCI, Russian weekly index price in to 1.123 multiplication factor (MF) will be the final price per each shipment by CFR terms

Chapter 08

Sri Lanka Energies (Private) Limited

1. Introduction

Sri Lanka Energies (Pvt) Ltd is a company incorporated in 2011 and operates as a 100% owned subsidiary of Ceylon Electricity Board. SLE is mainly focuses on Development of Renewable Energy, the other objectives are Associated Transmission Asset Development, Manpower Resource Provision and Procurement of CEB requirements.

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

a) Many projects or activities require compliance with numerous laws, regulations, and permits, which can be a complex and time-consuming process such as obtaining approvals from Environmental authority and other local regulatory authorities.
Eg:- Seethawaka Hydro Power Plant approval pending for Department of Irrigation for more than one year and it cascaded the laps of other approvals such as LOI too

b) Local authority laws and land use regulations are much complex and may require variances or changes of the scope of projects to accommodate it and it leads to making the approval process challenging and delaying.
Eg:- Seethawaka Hydro Power Plant / Galgamuwa Al recycling project

c) Fund arrangements are also challenging due to high interest rates and not available the concessionary rates for the loans.

d) A Lengthy Review Processes for Some approvals involve multiple stages of review, which can be time-consuming and expensive.

e) Objections made public groups who are having vested interests create definite unnecessary delays.

3. Strategies Adopted

I. To overcome these challenges, it is often necessary to work closely with relevant authorities therefore appointed the committees to accomplish the discussions.
II. Scoping the committee meetings led to effective communication and public relations efforts to build support to proceed the project or activity .
III. Arranged the Green Bond discussions with the respective parties.
IV. Adopt some Marketing methods to give the Publicity Eg Solar Project.
V. The Company believes that laws of clearances needed to be re-visited in higher levels of law making in order to facilitate the fast implementation of renewable and recycling projects.

4. Progress of the Development Projects 2024

4.1 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 (January –December 2024)		
Installed Capacity	1.3	MW
Energy Generated in (Jan-Dec) 2024	6.99	GWH
Cum Energy Generated		GWH
Cum Income (Jan-Dec) 2024	71.4	Mn LKR
Period of operation	8Yrs and 10 Months	

4.2 Managing the Manpower Required by CEB

The Company provides the services of 128 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.

4.3 Meter Enclosure Manufacturing Plant

The construction of the Poly Carbonate (PC) Single Phase Meter enclosure Manufacturing factory was started on 05th of September 2016 in order to fulfill the requirement of Poly Carbonate 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 are 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 and from January to December 2024 has dispatched 188,985 units of Meter Enclosures marking a downturn of the demand.

4.4 Deduru Oya Mini Hydro Power Plant

Successfully commissioned the 1.3 MW power plant in January 2021 at the irrigation release of Deduru Oya reservoir at Katuwannawa Area. The Generator with Kaplan Turbine is

expected to deliver an annual energy, worth Rs. 90 mn LKR.

Plant Summary (January - December 2024)		
Installed Capacity	1.3	MW
Cumulative energy Generated (January-December 2024)	4.9	GWH
Cum Income	90.3	Mn LKR
Period of operation	4 years	Yrs

4.5 Biomed Hydro Power Plant

This is the 900 KW power plant at Halgaran Oya at Walapane in Nuwara Eliya District, this plant was acquired 01st of December 2023. The Generator with Francis Turbine is expected to deliver an annual energy, worth Rs. 15 Mn LKR.

Plant Summary (January - December 2024)		
Installed Capacity	900	KW
Cumulative energy Generated (January-December 2024)	0.69	GWH
Cum Income	12.8	Mn LKR
Period of operation	1year	Yrs

4.6 SLE as Solar EPC contractor

Expanding the business horizon of the company Cabinet of Ministers approval has received to act as an EPC contractor for Solar for Government of Sri Lanka institutions from 2024 August.

SLE is in the process of Installation of Solar panels on roof tops in island wide supporting to develop green energy as a project.

Radawana - 5kW

Horana - 50kW

Galpatha 260 kW

With the result of discussions and promotions conducted, below mention customers are currently with SLE to establish rooftop Solar and the company is in the continuous process of marketing rooftop solar.

Table 8.1
Solar EPC Project

S/N	Location / Project	Capacity (kW)
1	Nattandiya Pradeshiya Sabha	130
2	Kalpitiya Pradeshiya Sabha	520
3	Kaduwela Municipal Council	355
4	Matale Pradeshiya Sabha Building	50
5	Galigamuwa Meter Enclosure Manufacturing Plant	180
6	Metal Mix (Pvt) Ltd	260
7	Galgamuwa PS	950

5. Future Plans 2025

5.1 Aluminum Recycling Project

For the first time in CEB history a decision was taken to recycle all the removed AAC of CEB and reuse as new Areal Bundle Cables (ABC). In fulfilling this target SLE was assigned to establish and operate an Aluminum Recycling Plant. At the manufacturing the process cost is paid to SLE by CEB and buyback the re produced cables through an established pricing formula.

After fulfilling all the requirements for establishment of such recycling facility SLE started the construction factory in April 2024 and present more than 80% of the total project construction has been finished including the procurement of required machinery.

offers a very high value to the environment and saves more than 4 MN USD annually. Also, as per the calculations done the output of this project serves one third of the annual Aluminum requirement of Ceylon Electricity Board.

The proposed manufacturing plant is about to be commissioned soon at Galgamuwa.

At present 3500 Tons collection of Scrap Aluminum has been collected and stored at the Galgamuwa Factory premises. And also continues the process of collecting SCRAP Aluminium from CEB branches.

5.2 Seethawaka Mini Hydro Power Plants

Seethawaka hydro project with a ponding option was changed to be constructed as two cascaded Mini Hydro Plants with the capacity of 7 MW each. The expected annual energy is about 40 GWh. Ground breaking Ceremony for Seethawaka project was held on 04th April 2024 and It is expected to start the construction soon. Basic delay happens through the approval processes as explained at the beginning of this document.

The project progress so far can be marked as;

- Electro Mechanical Equipment have been tendered and finalized.
- Surveying and construction drawings are completed.
- Procurement of two land Vehicles, JCB and a Chain 70PA expired and reapplied.
- LOI to be established
- PPA to be established.

5.3 The Projects in the Pipeline are,

1. Upper Samanalawewa: 700 KW
2. Wagantale Mini Hydro: 4.6 MW
3. Broadlands Mini Hydro: 2.0 MW
4. Victoria Mini Hydro: 1.0 MW

Chapter 09

LTL Holdings Limited

1. Introduction

LTL Holdings Limited (LTLH), formerly known as the "Lanka Transformers Limited" is a public private partnership between the Ceylon Electricity Board (CEB) and three other entities, the ownership of which rests with the employees of LTL Group, and West Coast Power (PVT) Limited (WCPL). Based on a current shareholding structure, which represents 35% to the CEB and 28% to the WCPL, whilst the balance 37% to two (02) companies representing the employees of LTL Group. The registered office of the Company is at 77 Park Street, Colombo 02. The Company had achieved robust, healthy and steady growth during its corporate journey over the past four decades and thus has become a leading Power Sector Engineering Organization in Sri Lanka. LTLH is operating with the purpose of **"We Enrich Lives by Creating Sustainable Solutions with Engineering and Science" while customer centricity, passion for innovation, passion for quality, honesty and integrity being our core values.**

The Company having commenced its business activities in early 1980 with the manufacturing of Power Distribution Transformers, had diversified its business into Power Generation, Electricity Infrastructure Development, and Hot Dip Galvanizing etc., thereby covering the entire value chain of the power sector Engineering works in Sri Lanka. The Company had also been successful in investing in Power Plants and undertaking Engineering, Procurement and Construction (EPC) contracts and Civil Engineering infrastructure activities in Sri Lanka and Overseas, such as Bangladesh, Tanzania, Uganda, Kenya, Ethiopia, Ghana, Oman, India, Nepal, Jordan, Myanmar, Maldive Islands and Australia.

LTL Holdings is the largest independent power producer in Sri Lanka providing over 520 MW of power to the national grid through its subsidiaries and associate companies. In the year 2021, Ministry of Power & the CEB awarded a Contract for the Construction of 350MW LNG operable combined cycle Power Plant to Lakdhanavi Limited, a subsidiary & Power Plants Operations wing of the company. Sobadhanavi Limited, the Special Purpose Vehicle (SPV) Company established for the Project has already signed all project related agreements, such as PPA with CEB, Flexible Spending Account (FSA) with CPC, Information Audit (IA) with government of Sri Lanka and BOI agreement with BOI. The first phase of this power plant project has successfully been completed and the Open Cycle Commercial Operation commenced in August 2024, contributing 212MW to the National Grid. The Combined Cycle Commercial Operation is scheduled to begin in early 2025, adding a total of 350MW to the National Grid of the CEB.

LTL Holdings Limited is engaged in extensive negotiations and discussions with the Ministry of Energy & the CEB with regard to PPA and other Project related agreements consequent upon the receipt of the Letter of Intent (LOI) for the Second 350 MW LNG Combined Cycle Power Plant at Kerawalapitiya on Build, Own, Operate, Transfer (BOOT) basis, in order to execute the project agreements and to proceed with the environmental, engineering, financial and other preliminary project development activities.

The Company maintains its engineering

excellence over the years for its extra ordinary performance including winning the prestigious Gold Award for best independent power producer (IPP) in the Asian Region, with others including:

Winning International Safety Award - Distinction from British Safety Council in 2021

- Winning the Country Winner Award in Bangladesh from British Safety Council in 2021
- Winning Innovative Power Technology of the Year – Bangladesh awarded by the Asian Power Awards in 2021
- Winning Engineering Excellence Award in 2018 from the Institution of Engineers, Sri Lanka.

2. Challenges faced, and strategies adopted to address/overcome such challenges:

Construction of 350MW Sobadhanavi Regasified Liquified Natural Gas (RLNG) Power Plant

a) Amidst the Force Majeure situation resulted due to financial crisis encountered by the Country, the Company continued the progress of the above power plant utilizing the available financial resources of its own with the moral support and assistance given by the Ministry of energy and the CEB, taking into consideration of the national significance of the early completion of the Project in order to avoid any resultant power shortages in the Country. The Company in good faith continued with the construction work, followed by the approval granted by the CEB for the upward Tariff revision, having considered our SLFM declaration to justify the claim to the CEB, which was regularized by incorporating required amendment to the PPA for the revision of the Tariff.

b) Consequent upon the suspension of original project loan negotiated with Asian Development Bank (ADB) and other overseas financial institutions, due to Sri Lanka's depleted macro-economic situation and its credit rating, the Company has successfully negotiated with a consortium of 9 local banks to obtain a Project Loan of LKR.44.5 Bn, and the relevant agreement has already been entered into and the drawdown of the project finance is anticipated during early December 2024.

3. Progress of the Development of Projects

- Operations and Maintenance of Power Plants

3.1. 300MW Combined Cycle Yugadhanavi Power Plant at Kerawalapitiyad

Installation	Yugadanavi Power Plant, Kerawalapitiya, Sri Lanka
Total Plant Capacity	300 MW Combined Cycle HFO fired Power Plant
Engine Model	GT – Frame 9E, ST SC5
Alternator Type	GE 9A5
Configuration	2:2:1
Machine Output	100 MW each
Number of Machines	2 GTs & 1 ST
PPA Period	25 Years starting from May 2010

The 14th contract year of the Yugadanavi 300MW Combined Cycle Power Plant was completed on 9th of May 2024 and achieved availability was 84.15 %. The Energy sales from 01st January to 31st December 2024, is 653.57 GWh, having operated the plant during the period under review for 193 days. The annual availability target for the year 2024 has been based at 70%.

Plant scheduled outage for ST Major Inspection and GT02 Hot Gas Path Inspection was carried out from17th of April to 1st of June 2024. Scheduled inspections, calibrations and PMs of motors and instrumentation on plant BOPs were conducted parallel to the outage along with various maintenance activities.

3.2. Sobadhanavi 350MW RLNG Combined Cycle Power Plant at Kerawalapitiya

The project work has been accelerated to a dizzy height and almost over 85% of the project work has been completed. The First Phase of the Project, the Open Cycle Commercial Operations commenced in August 2024, supplying 212 MW of electricity to the National Grid of the CEB. The company intends to achieve the Combined Cycle Commercial Operations during early 2025.

Depicted below are a few photographs indicating the progress levels of the constructional works of at site and major events took place.

(Commissioning of LNG Plant – Kerawalapitiya)

Installation	Sobadhanavi Power Plant, Kerawalapitiya, Sri Lanka
Total Plant Capacity	350 MW LNG Operable Combined Cycle Power Plant
Engine Model	GT – SG5 1200A; SST 3000
Alternator Type	GT – SG5 4000F; SST 100A
Configuration	1:1:1
Machine Output	GT – 220 MW + ST – 130MW = 350MW
Number of Machines	1 GTs & 1 ST
Project Agreements	Singed on 19th July 2021. Amendment to the original PPA was signed subsequently on
PPA Period	singed for 20 Years Open Cycle - Starts from June 2024 Combined Cycle – Starts from early 2025

Present Status of the Project and Special Events

At present the liquidity crisis of the country is somewhat improved, and banks are willing to accommodate USD requirements. Sobadhanavi, having signed the project loan agreement, is confident in securing LKR term loan during the course of next month, as Lakdhanavi has already exceeded its limits in terms of equity contribution and exhausted the majority of its working capital credit lines. The financial closure too has already been achieved and the CEB has duly been notified accordingly.The syndicated project loan approved by the banks listed in the schedule amounting to 44.5 Bn LKR, is indicated below.

Bank Name	Remark	Amount in Bn
Hatton National Bank, Sampath Bank, Commercial Bank, Bank of Ceylon, People's Bank & NDB Bank	6 bn each	36.0
Nation Trust Bank		5.0
Cargills Bank		2.5
National Savings Bank		1.0
Total		44.5

Detailed engineering activities are accelerated for the Combined Cycle Phase and all designs and drawings are completed, including foundations' drawings related to ST Auxiliary Module, Workshop Building, Steam Turbine (ST) SEE Transformer, ST PCC, Cooling Water Pipe Supports, ST GCB, Water Treatment Plant & Mixed Bed, which are nearing completion.

3.3. Raj Lanka Power Plant at Natore, Bangladesh (RLPP)

Installation	Raj Lanka Power Plant, Natore , Bangladesh
Total Plant Capacity	52.2 MW
Engine Model	W20V32
PPA Period	15 Years starting from , January,2014

The Energy sale of RLPP for the year 2024 is 10.122 GWh with an average plant factor of 2.65% for the period and achieved availability is 99.85%. The annual availability target for the year 2024 has been based at above 90%. This is the first Sri Lankan owned Thermal Power Plant outside Sri Lanka.

3.4. Lakdhanavi Bangla Power Plant, Comilla, Bangladesh (LBPP)

Installation	Lakdhanavi Bangla Power Plant, Comilla, Bangladesh
Total Plant Capacity	52.2 MW
Engine Model	W20V32
PPA Period	15 Years starts from December,2014

Energy sales of Lakdhanavi Bangla Power Plant for the year 2024 is 147.183 GWh with an average plant factor of 39.25% for the period and achieved availability is 88.96%. The annual availability target for the year 2024 has been based at above 90.00%.

3.5. Feni Lanka Power Plant, Feni, Bangladesh

Installation	Feni Lanka Power Plant, Feni, Bangladesh
Total Plant Capacity	114 MW
Engine Model	Six 18V50 and one W20V32
PPA Period	15 Years starts from November, 2019

Energy sales of Feni Lanka Power Plant for the year 2024 is 345.879 GWh with an average plant factor of 41.45% and achieved availability of 91.37%. The annual availability target for the year 2024 has been based at above 90%.

3.6. Pawandhanavi Wind Power Plant, Norochcholai

Installation	Pawandhanavi Wind Power Plant, Ilanthadiya, Norochchole
Total Plant Capacity	9.8 MW
Turbine Model	G58
PPA Period	20 Years starts from September,2 012

The Energy sales of Pawandhanavi for the year 2024 is 18.94 GWh and achieved Plant Factor is 26 %. The annual availability target for the year 2024 has been based at 95%. This plant was subject to periodical maintenance service during the period under review.

3.7. Nividhu Mini hydro Power Plant at Belihul Oya

Installation	Nividhu Mini Hydro Plant, Belihul Oya
Total Plant Capacity	2.2 MW
Turbine Type	Horizontal Turbo Impulse
PPA Period	15 Years starts from May, 2003 1st Extension granted was expired on 19.5.22 2nd Extension granted is valid till 31.12.2038

The Energy sales of Nividhu Power Plant for the year 2024 is 6.78 GWh and achieved Plant Factor is 43 %. The annual availability target for the year 2024 has been based at 95%. The PPA has been extended upto to 31st December 2038.

3.8. Assupini Ella Mini hydro Power Plant

Installation	Assupiniella Mini Hydro Plant, Aranayake
Total Plant Capacity	4 MW
Turbine Type	Horizontal Pelton
PPA Period	15 Years starts from November,2005 1st Extension granted is valid till 30/10/2025

The Energy Sale of Assupiniella for the year 2024 is 13.68 GWh and achieved Plant Factor is 47.5 %. The annual availability target for the year 2024 has been based at 95%. The PPA has been extended upto 30th October 2025.

3.9. 10MW Makarigad Hydro Power (PVT) Ltd, Nepal

Location	Water Source, Makari Gad, a tributary of the Chemeliya River in Khandeswari and Gujar Village of Darchula District in Far Eastern Nepal
Total Plant Capacity	10 MW
Turbine Type	Horizontal 2 Jet Pelton
Hydrology	Rain & snow fed perennial stream
PPA Period	30 Years starts from March, 2023

The commercial operation of the power plant has successfully been completed with effect from 11th March 2023. The Energy sales for the year 2024 is 47.0 GWh and achieved Plant Factor, from the COD is 65

3.10. 100MW Solar Power Park Facility at Siyambalanduwa

Rividhanavi (Private) Limited, the Special Purpose Vehicle (SPV) was established for the development of 100 MW solar Photovoltaic Park Facility at Siyambalanduwa and the 132kV Transmission Facility spanning across around 27 kms, has made substantial progress. This Solar Power facility will be established in a land to the extent of 220 hectares in and around Siyambalanduwa.

The Company entered into the Power Purchase Agreement with Ceylon Electricity Board (CEB) on 08th February 2024 for a period of 20 years. Also, the contract for Development of the Transmission Facility with the CEB was signed on 25th April 2024. The Implementation Agreement with Government

of Sri Lanka was entered into on 15th July 2024.

The execution of the Land Lease Agreement with the Sri Lanka Sustainable Energy Authority (SLSEA) is pending at present, in the light of the fact that the land must first be transferred to SLSEA through a government grant, which is being currently in progress. Preliminary works for both the solar power plant and the transmission facility are underway and construction work for both the solar park and the transmission facility are actively in progress. The project company has incurred an expenditure of Rs. 1,100 million 2024, financed equally by Lakdhanavi Limited and Wind Force Limited, the shareholders of Rividhanvi.This is the first large-scale solar power project in Sri Lanka, marking a significant milestone in the country's transition to renewable energy. We are fully committed to completing this project on schedule, contributing to a cleaner, more environmentally friendly sustainable energy for Sri Lanka to minimize the carbon footprint in future.

3.11. Development of LNG Infrastructure and Supply of LNG for Power Generation

The joint proposal for the Development of LNG Infrastructure and Supply of LNG for Power Generation as an interim solution was submitted to Ministry of Energy on May 20th, 2024, jointly by LTL Holdings Limited and Petronet LNG Limited, India, a Public Listedc Company majority owned by the Government of India.

The Cabinet of Ministers, at a meeting held on 15th July 2024, granted approval to proceed with the joint proposal. Accordingly, a Memorandum of Understanding (MoU) was signed between LTL Holdings Limited and Petronet LNG Limited (PLL) on 20th August 2024, formalizing collaborative requirements on this critical initiative.

The project involves developing LNG infrastructure and ensuring reliable and uninterrupted supply of LNG from Kochi, India using International Organization for Standardization (ISO) containers. The project timeline is set for completion within 18 months after receiving all required approvals. Preliminary works are currently underway, with active collaboration between PLL, government authorities, and other stakeholders to ensure smooth progress.

This initiative reflects LTL's commitment to delivering cost-efficient and sustainable energy solutions, reinforcing its role in supporting Sri Lanka's energy transition. The use of LNG in all three power plants (Yugadhanavi, Sobadhanavi and Sahasdhanavi), once the Sahasdhanavi (Kerawalapitiya 3rd project) is implemented, is expected to yield sizeable cost savings to the CEB in a year, which will provide a great relief to the general public, by way possible tariff reduction.

3.12. Manufacturing and Marketing of Transformers

(Transformer Plant at Angulana)

(Transformers awaiting dispatch)

(Transformer Production Stages at the facility)

The production recorded for the Period 01/01/2024 to 31/10/2024 are as follows:

		2024 (Jan to Dec.) Nos	2023 (Jan to Dec.) Nos	Variance (+)/(-)
a)	Transformers supplied to CEB/LECO	1,945	1,749	(+)196
b)	Transformers supplied Other Local customers	55	28	(+) 27
c)	Transformers exported to other countries	439	-	(+)439
TOTAL		**2,439**	**1,777**	**(+)662**

With the expansion of rural electrification and the rising demand for electricity, the supply of distribution transformers to the CEB has increased by 196 Nos, reflecting an 11.21% growth compared to the same period under review. Additionally, the supply of distribution transformers to local clients has risen by 27 Nos. compared to the corresponding period last year. Furthermore, 439 Nos. have been exported, having received an award secured through international competitive bidding.

3.12.1. Participated in Africa Energy Expo 2024 – Rwanda

LTL Transformers made a strong impression at the Africa Energy Expo 2024, held from November 4–6 at Kigali Convention Centre, Rwanda. Representing LTL Transformers and showcasing the capabilities of our Tanzania plant, we engaged with diverse customers across Africa. A key highlight was meeting Rwanda's Minister of Energy, underscoring our commitment to delivering excellence.

3.12.2. Improvements Programmed for 2025

- **ISO 17025 Scope Extension for Pressure Testing**

a) ISO 17025 Scope Extension for Pressure Testing.

- **Research & Development (R&D)**

a) Develop 6.8 MVA 800V Compact Substation for renewable applications
b) Develop Phototype Transformers for local utility to meet the CEB's new specifications.
c) Develop Furnace Transformers for European market segment

- **Process Improvements**

a) Initiation of ISO 50001 (Energy Management System) certification.
b) Develop an initial Net Zero Framework to identify the key areas for carbon reduction and establish baseline metrics.

- **People Improvements**

a) Digitization of HR Documents.

- **Construction Projects.**

a) PID Oven Installation Project
b) Security Office and Drivers' restrooms Project

3.12.3. Certification of Great Place to Work – LTL Transformers (PVT) Limited

LTL Transformers Pvt Ltd (LTLT) has been certified with Great Place to Work Certification for the second consecutive year in September 2024 for the period September 2024 to September 2025.This certification is a testament to LTLT team's dedication and hard work in building a culture of trust, respect, and excellence.

3.13. Galvanizing & Fabrication Plants at Sapugaskande

3.13.1. Production Details – Galvanizing Plant - The production recorded for the Period 01/01/2024 to 31/12/2024 are as follows:

Production Output Galvanizing Plant		
Customer	**2024 Jan- Dec**	**2023 Jan- Dec**
CEB	1,557	2,177
Export		
Local	4,811	4,343
Total	**6,369**	**6,520**

Production Output Fabrication Plant		
Customer	**2024 Jan- Dec**	**2023 Jan- Dec**
CEB	296	712
Export	93	
Local	512	299
Total	**901**	**1,011**

3.13.2. Achievements.

- Sri Lanka's tallest guy supported the MET mast project, which involved the successful completion of six MET mast towers. The project was handed over to the CEB during this period.
- The SAP implementation was successfully completed, with the go-live date on 01st September 2024
- LTL Galvanizers (Pvt) ltd was participating as the silver sponsor in "Industry Expo 2024", exhibition organized by the Ministry of Industries and the Industrial Development Board, held in Sri Lanka.
- LTL Galvanizers (Pvt) Ltd participated in the "Techno 2024" exhibition organized by the IESL as a Silver Sponsor and received a Silver Award for aligning with the event's theme, "Path to Prosperity."
- LTL Galvanizers (Pvt) Ltd was invited to present a lecture in a CPD program on "Designing Anti-Corrosive Coating for Metals" organized by IESL Mechanical Engineering chapter, which was delivered successfully.
- A visit to Ghana and Seychelles was arranged in April to find new business opportunities across the Africa region.

3.13.3. Improvements Programmed for 2025

1. **ISO 50001:2018 Energy Management System Implementation -** A structured plan to implement the ISO 50001:2018 certification will be executed, aiming to

enhance energy efficiency, reduce energy costs, and align with international energy management standards.

2. **Initiation of the Carbon Net-Zero Project**
   This project will be launched to align with global sustainability goals, focusing on reducing our carbon footprint and progressing toward achieving carbon neutrality in operations.

3. **Establishment of an Accredited Laboratory**
   Plans are in place to set up an accredited laboratory to improve quality control measures, support research and development, and provide reliable testing services that comply with recognized standards.

3.14. ASIATIC ELECTRICAL & SWITCHGEAR PTE. LTD, NEW DELHI, INDIA

3.14.1. Performance Highlights and Strategic Plans

Asiatic Electrical & Switchgear (PTE) Ltd, a wholly owned subsidiary of LTL Holdings (PVT) Ltd, has demonstrated consistent growth during the reporting period. With a solid financial standing, Asiatic achieved a commendable sales revenue of **INR 1211.73 million** from January 2024 to October 2024 (Export: **INR 634.35 million;** Local: **INR 577.38 million**). The company also maintained a stable **Net Profit Before Tax (NPBT),** showcasing sustained performance. Notably, in the 2023/24 financial year, Asiatic recorded its highest-ever turnover of **INR 1.236 billion** (approximately USD 14.5 million), a historic milestone.

3.14.2. Driving Success Through Customer Satisfaction

Customer satisfaction remains at the core of Asiatic's business philosophy. The company's success stems from its teamwork, dedication, and relentless pursuit of excellence in meeting customer needs. Asiatic has established a global footprint, earning approvals from leading utilities worldwide, including:

- **Middle East:** DEWA (Dubai), AADC/ ADEWA (Abu Dhabi), MEW (Oman & Kuwait), EWA (Bahrain), Kahramaa (Qatar).
- **Africa:** Eskom (South Africa), KPLC (Kenya), EEU (Ethiopia).
- **Asia & Europe:** EAC (Cyprus), CEB (Sri Lanka).

The company also exports products to countries like the UK, Uganda, Ghana, Nepal, Bangladesh, and others.

Asiatic supplies its products to all major electricity distribution companies in India, including **JVVNL (Jaipur), AVVNL (Ajmer), JdVVNL (Jodhpur), BEST (Mumbai), BSES (Delhi), TPDDL (Delhi), MPPVVC (Madhya Pradesh), BESCOM (Bangalore), KSEB (Kerala),** among others. Additionally, it caters to government and private projects by supplying medium-voltage (MV) panels to local contractors and direct customers.

3.14.3. Special Achievements

For the very first time, aligning with its management's focus on renewable energy, Asiatic has secured a Letter of Award (LOA)

for two solar power projects in Rajasthan. These projects involve the complete design, supply, installation, and commissioning of solar power plants with a combined capacity of **8 MW**, to be maintained for 25 years. The Power Purchase Agreement (PPA) is expected to be finalized by with a targeted project completion date of **June 2025.**

This landmark initiative marks Asiatic's entry into the solar energy sector. With this maiden project, the company is poised to establish itself as a key player in the renewable energy domain, backed by ambitious plans to incrementally expand its installed capacity over the time.

3.14.4. Proposed Plans for 2025

Asiatic is gearing up to expand and innovate through the following initiatives:

a) Product Portfolio Expansion

The company plans to develop & type test following products:

- 33 kV VCB Kiosks.
- 11 kV Floor-mounted breakers.
- Open Type LV Distribution Boards.

b) Market Penetration in India

Asiatic plans to deepen its penetration in the domestic market by strategically establishing a robust dealer network in key states. This initiative will be complemented by the appointment of regional sales managers and engineers, aimed at driving growth and significantly boosting turnover.

c) Corporate Branding

Enhance brand visibility through SEO, social media engagement, and participation in national/international exhibitions.

d) Capacity Expansion

- Creating additional floor space on vacant land in the factory.
- Leasing new factories to boost capacity.
- Optimize existing floor space.
- Implement assembly line concepts and conveyor arrangement to increase production

e) Global Market Expansion

Explore further opportunities in African/ Asian markets to strengthen international business. Asiatic Electrical & Switchgear continues to position itself as a leader in the electrical and switchgear industry, driven by innovation, customer-centric practices, and a clear focus on sustainable growth.

4. Performance under Corporate Social Responsibilities

- Job oriented industrial training facilities are being offered to university undergraduates in the Engineering Fields, comprising Electrical, Mechanical, Civil, and also Management Accountants. Currently around 72 undergraduates have been provided with required training facilities. The trainees who have successfully completed their training are being considered for job opportunities depending on the placements available.

- Lighting facilities were provided to the Buddhist Temples in the remote areas of the country. Donations have been granted to Universities & Social Welfare Societies. The Company continues to extend and share its goodwill by providing voluntary services towards Social Responsibility.

- At the request of Atamasthanadhipathi, Ven. Pallegama Hemarathana Nayaka Thero, Lakdhanavi Limited, a subsidiary of LTL Holdings, sponsored for supply and installation of a 130 kW (AC) Solar PV System for Jaya Sri Maha Bodhi Temple, Anuradhapura as an act of social responsibility for the national

energy savings and green energy concept of the nation.

- The Company, through its subsidiary, Lakdhanavi Limited, has contributed to the "Buddha Rashmi National Vesak Festival 2024" held on 23rd to 26th May 2024 at Gangaramaya Temple, for celebration organized under the directive of Presidential Secretariat.

- The Company hosted the Gold Sponsorship for Formula Bharat 2024 Racing Competition **"Team FalconE",** on behalf of a group of young engineers of the Faculty of Mechanical Engineering Department of Moratuwa University. The team of young engineers has secured 10th place out of 39 competitors at the Competition held in Coimbatore in India.

- LTL Holdings made a gracious donation of Rs.15 million to 1990 Suwa Seriya Foundation (a non-profit organization) for their, "Adopt an Ambulance" programme as an act of Social Responsibility. The funds donated will be used for the maintenance of ambulances, medical equipment maintenance, staff refresher training, and staff uniforms for three ambulances located in Ethimale, Mannar and Serunuwara. LTLH has identified these locations, by recognizing the importance and need of such a service in the respective areas.

- **Assistance provided to flood affected communities at Awarakotuwa, Wallata.** - On June 01, 2024, Lakdhanavi Limited extended its support to the flood-affected community of Awarakotuwa by donating essential medicines. This initiative is a testament to our ongoing commitment to social responsibility and community welfare. By providing these vital supplies, we aim to alleviate the hardships faced by the residents in the aftermath of the flooding.

- **Conducting Non-Communicable Disease (NCD) Medical Camp** – Lakdhanavi Limited Conducted a Non-Communicable Disease (NCD) Medical Camp held at Awardkotuwa, Wattala on 06th & 07rth April 2024 and over 200 community residents received the care they needed, which consisted vital health tests for Cholesterol, Sugar levels and other NCD related parameters, providing essential medical guidance to participants.

5. Overall Financial Position of the Institution

Performance of LTL Holdings Group of Companies during the Financial Year including Financial Highlights during January to December 2024

The gross profit generated during the period 2024 recorded an increase of 6% over the corresponding period same date last year. The depleted foreign exchange situation coupled with the restrictions enforced by the Central Bank of Sri Lanka on imports have somewhat been relaxed, which facilitated the imports to a considerable extend to improve the performance of the group of companies.

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

Date of Tender floated by the CEB- 21st June 2021
Scheduled COP for Open Cycle 220MW- In 2026

Table 9.1
Financial Performance of Major Operations

PERIOD	01 Jan '24 to 31 Dec. 24	Calen.Year Jan '21 to Dec.23	Calen.Year Jan. to Dec.'22
TURN OVER	**(Rs. Million)**	**(Rs. Million)**	**(Rs. Million)**
Manufacturing & Misc. Services	12,048.	13,906.	8,480.
Power Generations	38,396.	42,717.	48,206.
TOTAL	**50,444.**	**56,623.**	**56,686.**
GROSS PROFIT			
Manufacturing & Misc. Services	9,869.	4,678.	2,536.
Power Generations	3,277.	14,552.	13,521.
TOTAL	**13,146.**	**19,230.**	**16,057.**

Dividend Income – 2023/24

The Company had received dividend income from its investments, earning much needed funds to the Company during the year under review, amounting to a sum of SLR 877,999,997.00 as per the details tabulated below:

Dividend Income earned by LTL Holdings Group	
Names of Companies	**Amount - SLR**
LTL Galvanizers (PVT) Ltd	500,000,000.00.
LTL Transformers (PVT) Ltd	300,000,000.00.
Nividhu (PVT) Ltd	77,999,997.00.
TOTAL	**877,999,997.00.**

6. Future Plans 2025

(a) Development of Power Plant Projects - 300MW RLNG – II Combined Cycle Power Plant at Kerawalapitiya

The brief details of the aforementioned Power Plant are as follows:

Scheduled COP for Open & Closed Cycle 350MW In 2027

The CEB has issued the Letter of Intent (LoI) for the execution of the Project Agreements to enable Lakdhanavi to proceed with environmental, engineering, financial and other preliminary Project Development activities. The Company is in the process of extensive discussion with the CEB with regard to the Power Purchase Agreement (PPA).

(b) Restructuring of the Ownership of LTL Holdings Limited by issuing New Shares – Initial Public Offering (IPO) of shares

In conformity with the Cabinet decision made in December 2022, the Restructuring of the Ownership of LTL Holdings Ltd, is to be implemented shortly. The Board of Directors of LTL Holdings, on the recommendations made by the Management of LTL, issued 5.5 Mn additional shares to the Share Market to mobilize funds required for its new projects, especially 300MW LNG 2 Combined Cycle

Power Plant at Kerawalapitiya and 100MW PV Solar Power Park at Siyambalanduwa. The preliminary works related to these projects are currently in progress.

Although LTL Holdings Ltd, having obtained the regulatory approvals, submitted the Listing Application to CSE in August 2024, the IPO process had to be delayed due to legal clarification which has been dismissed by the Supreme Court in end November 2024 and Now waiting for the approval to proceed from CSE and the Ministry of Energy Having identified the attractive subscribers, it is anticipated that there will be an oversubscription by the time the official issue is opened.

(c) Expansion of Transformer Manufacturing Facility in Africa

The company has achieved a milestone in its progressive strategy, having incorporated a new company in collaboration with a Company, refines copper, in Tanzania termed as "LTL Transformers Tanzania (PVT) Limited. The Engineering and Technical staff have already been deployed for installation of machinery and equipment to enable the commencement of operation during the second quarter of 2025.

LTL Holdings is confident that the experience gained thus far, having been a strong & regular successful bidder for the tenders in east African region, would open avenues to establish its presence in Africa. Therefore, the Company, in order to penetrate into high-level competition, intends coming up with a solid pricing strategy to harness the potentials to win tenders, for which a low-cost transformer manufacturing is a must.

Chapter 10
Ceylon Petroleum Corporation

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.

2. Progress of the tasks completed during the year 2024

Ceylon Petroleum Corporation imports and supplies a greater percentage of the demand for petroleum products required domestically and in addition to the import of refined products under that, fuel is produced domestically by refining the imported crude oil in the Sapugaskanda refinery. Accordingly, this chapter presents the progress of the operation of Ceylon Petroleum Corporation in the year 2024.

2.1 Imports of the Petroleum Products of Ceylon Petroleum Corporation

Ceylon Petroleum Corporation is the main domestic importer of petroleum products and imports and distributes about 68% of the total demand. Further, crude oil is imported, refined and supplied under the sole ownership of the corporation since 1969, which refines about 32% of the total domestic petroleum demand. Accordingly, the following table shows the progress of the import and supply of the petroleum products from 01.01.2021 to 31.12.2024.

Table 10.1
Imports of Petroleum Products (2021 – 2024)

Products	Quantity MT (000)			
	2021	2022	2023	2024
1. Quantity of import of refined products				
• Auto Diesel	1,254	1,267	695	547
• Super Diesel	68	128	24	27
• Petrol 92 Octane	893	888	794	586
• Petrol 95 Octane	103	46	28	20
• Jet A 1	178	269	168	316
• Low Sulphur Fuel Oil (180 CST)	245	124	124	35
• High Sulphur Fuel Oil (180 CST)	31	-	-	-
• Naptha	-	-	16	-
Total	**2,772**	**2,723**	**1,849**	**1,531**
2. Quantity of import of Crude Oil				
• Crude Oil	1,130	743	1,666	1,519
Total Quantity of import	**3,902**	**3,466**	**3,515**	**3,050**

Source: *Ceylon Petroleum Corporation*

By considering the quantity of refined petroleum products imports of the Ceylon Petroleum Corporation from the year 2021 to 31st December of 2024, from the year 2021 to 2023, 2,772,000 MT, 2,723,000 MT, 1,849,000 MT were imported respectively and in 2024 1,531,000 MT of refined products were imported.

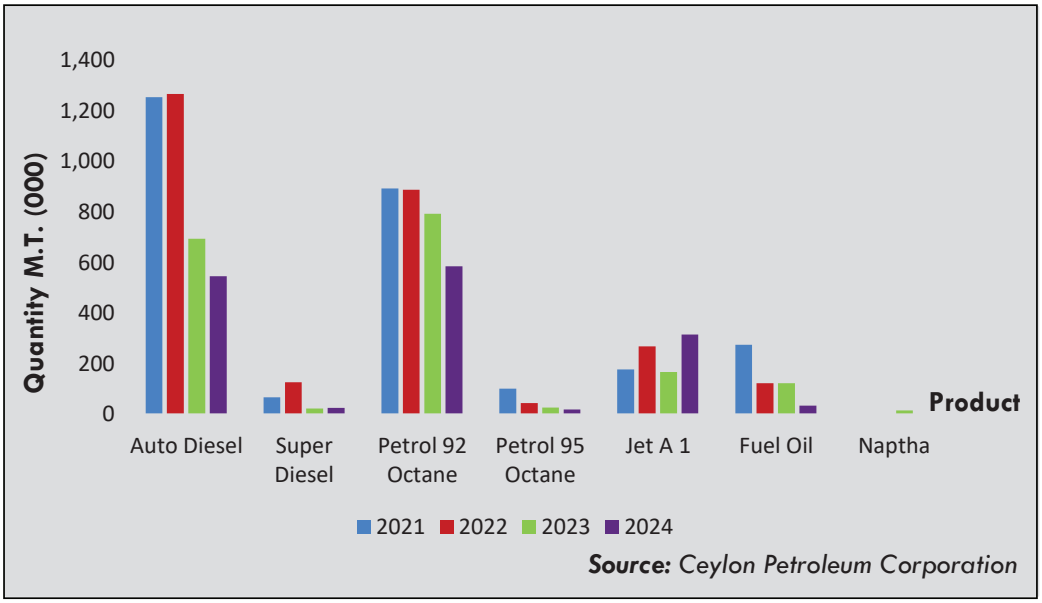
Further, considering the amount of crude oil imported in the last years, 1,130,000 MT in 2021, 743,000 MT in 2022, 1,666,000 MT in 2023 and 1,519,000 MT in 2024 were imported.

2.2 Contribution of Sapugaskanda Refinery

Sapugaskanda oil refinery has a refining capacity of 5,300 MT day and a maximum refining capacity of 1,934,500 MT per year. An amount of 1,528,719 MT of crude oil has been **refined in 2024**, which is 79% of the maximum refining capacity.

The refinery has produced 1,445,529 MT of 08 petroleum products in the year 2024 which is nearly 49% of the domestic petroleum supply of the Ceylon Petroleum Corporation. Auto Diesel, Furnace oil, Jet A-1, Petrol Octane 92 and Kerosene are the main products produced by this refinery. The composition of the petroleum products refined by Sapugaskanda refinery are given in the following Table

Figure 10.1
Imports of Refined Petroleum Products (2021 - 2024)



Source: *Ceylon Petroleum Corporation*

Table 10.2
Quantity of products in the refinery (MT) (2021 – 2024)

Year	2021	2022	2023	2024
Quantity of Crud Oil Inputs	**1,272,207**	**529,773**	**1,677,033**	**1,528,719**
Product				
• Petrol 92 Octane	124,092	38,666	171,186	150,566
• Lanka Auto Diesel	370,594	128,165	505,675	443,933
• Kerosene	98,284	25,289	49,484	72,618
• Jet A 1	130,572	57,346	233,652	207,434
• Fuel Oil 800 Super	359,021	87,196	379,015	345,447
• Fuel Oil 1500 Super	-	107,001	103,111	-
• Fuel Oil 800 Bunkering	-	-	-	82,000
• Naptha	106,956	30,835	129,058	121,449
• SBP	3,037	2,690	1,524	1,267
• Bitumen	6,879	-	-	-
• LP Gas	16,650	5,687	23,800	20,815
Total Output	**1,216,085**	**482,875**	**1,596,505**	**1,445,529**

Source: *Ceylon Petroleum Corporation*

Table 10.3
Imported finished products and domestically refined products - 2024

Product	Quantity of Products Imported (MT)	Quantity of Refinery Production (MT)	Total (MT)
Petrol 92 Octane	585,708	150,566	736,274
Petrol 95 Octane	19,540	-	19,540
Lanka Auto Diesel	507,378	443",933	951,311
Lanka Super Diesel	26,945	-	26,945
Kerosene	-	72,618	72,618
Jet A 1	315,811	207,434	523,245
Fuel Oil 800 Super	-	345,447	345,447
Fuel Oil 800 Bunkering	-	82,000	82,000
Low Sulphur Fuel Oil (180 CST)	35,468	-	35,468
Naptha	-	121,449	121,449
SBP	-	1,267	1,267
LP Gas	-	20,815	20,815
Total	**1,530,853**	**1,445,529**	**2,976,382**

Source: *Ceylon Petroleum Corporation*

2.3 The total sale of the petroleum products of Ceylon Petroleum Corporation

In line with the growing needs of the population, petroleum consumption has increased not only in the domestic and commercial sectors but also in the power generation, transportation, industry, fisheries and agricultural sectors. Accordingly, in order to fulfill the existing demand

In line with the growing needs of the population, petroleum consumption has increased not only in the domestic and commercial sectors but also in the power generation, transportation, industry, fisheries and agricultural sections. Accordingly, in order to fulfill the existing demand for petroleum products, the Ceylon Petroleum Corporation engages in product sales through all the sectors.

The Ceylon Petroleum Corporation has sold fifteen (15) types of petroleum products in 2024. Table shows the total fuel sales of Ceylon Petroleum Corporation during 2022 - 2024. According, to these details the fuel sales in the year 2024 has decreased by 18% for Petrol 92 Octane, 28% Petrol 95 Octane, 18% Auto Diesel, 21% for Super Diesel and fuel sales has included 62% for Lanka Kerosene and 24% for Jet A-1 Further It has recorded a total fuel sale of 3,031,716 MT in 2024 showing a decrease of 12% compared to the previous year

Table 10.4
Total Sales of Fuel (2022 - 2024)

Type of Product	Total Sale (MT)		
	2022	2023	2024
Petrol 92 Octane	964,844.219	982,939.25	804,419
Petrol 95 Octane	55,697.245	29,042.01	20,893
Lanka Auto Diesel	1,475,577.154	1,257,303.75	1,025,160
Lanka Super Diesel	72,474.383	29,809.39	23,531
Lanka Kerosene	98,367.966	82,724.80	134,580
Lanka Industrial Kerosene	5,647.035	1,828.13	4,134
Lanka Chemical Naptha	32,262.861	120,093.96	101,541
Lanka Fuel Oil 800	-	12.51	6
Lanka Fuel Oil 1500 Sec.(High Sulphur)	198,891.936	168,800.54	116,652
Lanka Fuel Oil 1500 Sec.(Low Sulphur)	103,379.876	237,192.23	155,816
Lanka Fuel Oil Super	54,978.319	117,198.22	155,857
Jet A 1	245,796.923	377,456.72	468,158
Lanka Solvents (SBP)	2,701.635	1,362.94	1,161
LP Gas	5,556.054	23,877.74	19,676
Lanka AV Gas	83.871	120.67	132
Total	**3,316,259.48**	**3,429,762.86**	**3,031,716**

Source: *Ceylon Petroleum Corporation*

2.4 Sale of fuel for power generation

The Ceylon Petroleum Corporation acts as the sole supplier of fuel for electricity generation and supplies the needed fuel to Ceylon Electricity Board and private power generators. Table 5 shows fuel sales for electricity generation from 2021 to 2024. Accordingly, in the year 2024, 579,309 liters of fuel has been provided for the generation of electricity. It depicts a decrease of 24% in 2024 compared to 2023.

Table 10.5
Sales of fuel for electricity generation (2021 - 2024)

	Ceylon Electricity Board (Ltr '000')				Independent Power Producers (Ltr '000')			Total (Ltr '000')
Year	Lanka Auto Diesel	Naptha	Fuel Oil	Lanka Super Diesel	Lanka Auto Diesel	Fuel Oil	Lanka Super Diesel	
2021	50,259	15,407	217,481	-	69,782	256,860	-	609,789
2022	86,769	46,781	181,103	12,147	115,205	123,369	5,678	571,051
2023	102,877	174,136	228,885	-	3,175	256,580	-	765,653
2024	44,647	147,251	206,467	-	16,609	164,335	-	579,309

Source: *Ceylon Petroleum Corporation*

2.5 Sale of aviation fuel (Jet A-1)

As the sole supplier of aviation fuel in Sri Lanka, Ceylon Petroleum Corporation has become a major participant of the national economy. The aviation fuel division of Ceylon Petroleum Corporation provides its services to the four airports Bandaranaike International Airport (BIA), Maththala Rajapaksha International Airport (MIA), Rathmalana Airport and Palali Airport.

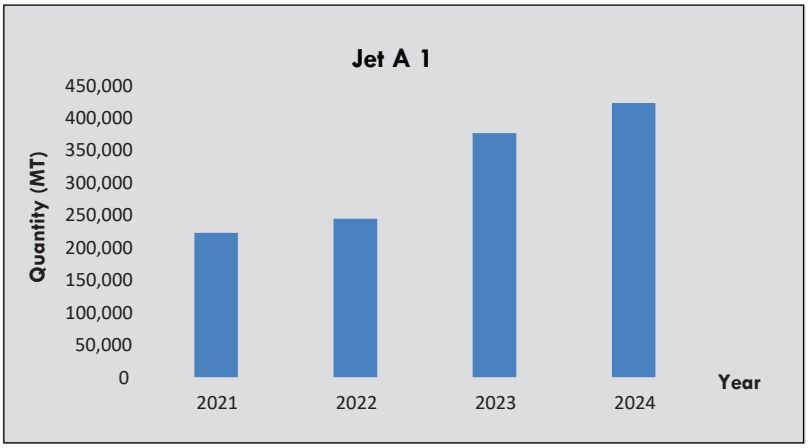
In 2024, a total aviation fuel sale of 468,158 MT is recorded and there is an average demand of about 1,283 MT per day. Compared to 2023, 24% increase is shown in 2024. The table provides details on aviation fuel sales during 2021-2024.

Table 10.6
Sales of Jet A 1 - (2021 - 2024)

Year	Quantity (MT)
2021	223,854
2022	245,838
2023	377,608
2024	468,158

Source: *Ceylon Petroleum Corporation*

Figure 10.2
Sales of Jet A 1 - (2021 - 2024)



2.6 Sale of lubricants

Lubricant industry is one of the most competitive and strategic business in the industrial field. Ceylon Petroleum Corporation sells its products under the brand name Ceypetco and their products are presented with international standards.

The Table shows the amount of the sale of lubricants by Ceylon Petroleum Corporation from 2021 to 2024. According to the data, a significant decline in the lubricant sector is obvious in the previous years, however, we can see that there is a recovery of the business in the market in 2024.

Table 10.7
Sales of Lubricant - (2021 - 2024)

Year	Quantity (KL)
2021	3,809
2022	901
2023	1,310
2024	1,532

Source: *Ceylon Petroleum Corporation*

2.7 Agro-chemicals sales

Ceylon Petroleum Corporation has engaged in agrochemical business for more than five decades. CPC stays in the market as a government agent who is involved as a price determining party, protecting farmers from exploitation by competing agencies and providing excellent agrochemicals at a fair price. Ceylon Petroleum Corporation has sold Rs. 795 Mn worth agrochemicals in 2024.

The agriculture division of Ceylon Petroleum Corporation won the Managers Best Management Practices award presented by the Institute of Chartered Professional Managers for the year 2024.

(Best Management Practices Award)

2.8 Progress of infrastructure development activities

- **Establishment of electric vehicle Charging Facilities at filling stations**

As the use of electric vehicles currently increasing, the need to increase charging stations for electric vehicles has been identified. Accordingly, as an initial step, the measures were taken to establish electric vehicle charging centers at ten filling stations owned by Ceylon Petroleum Corporation. The estimated cost for this is Rs. 50 million and the progress of constructing charging centers is as follows. Further, Rs. 100 million is allocated to establish new charging centers near filling stations in 2025.

(Electricity Vehicle charging Points)

- **Renovation (maintenance) of Sapugaskanda oil Refinery**

Refinery major turnarounds are planned to be carried out once in every two to three years period of time to ensure safe, efficient and reliable operation of the

plant while meeting statutory requirements. Previous major turnaround was carried out in February/March 2021 and the refinery has been operated for more than 3 years by July 2024. Therefore, the Refinery major turnaround was commenced on 15th July 2024 and completed on 23rd August 2024 at a total cost of Rs. 1640 million.

The typical major shutdown period of the refinery is 35 days. However, major repair activities in Crude distiller charge heater 01F1 and coil replacements (cell 2 and cell 3) of the Platformer furnace 03F1 have been carried out during this shutdown as per previous shutdown inspection recommendations. These activities required considerable period of time leading to extend the shutdown period to 40 days due to technical complexity associated with above activities.

The major maintenance work was undertaken by in-house staff except for some services which was outsourced where resources are not available within the Refinery. Nearly 860 permanent staff of CPC participated the maintenance activities along with around 264 number of hired semi-skilled and un-skilled laborers. After successful completion of major maintenance activities refinery is being operated at it's optimum capacity of 5300 MT/D and will ensure reliable supply of fuel to the nation continuously for the next 3 years.

(Renovations at Refinery)

3. Future Plans 2025

- Initiating the construction of Jet A-1 pipeline and tank project
- Initiating the second step of the first phase of the project on developing 24 tanks in Trincomalee
- Promoting the electric vehicles' charging centers in the island wide filling stations
- Study and capacity building on alternative energy fuel technologies such as green hydrogen, green ammonia, biofuels, solar Power etc. that can replace fossil fuels to achieve net zero carbon goals in the future
- Improvement of sanitation facilities at all fuel stations owned by Ceylon Petroleum Corporation under Clean Sri Lanka Programme

Chapter 11

Ceylon Petroleum Storage Terminal Limited

1. Introduction

Ceylon Petroleum Storage Terminals Ltd. is a company duly incorporate under the Companies Act No. 17 of 1982 in terms of Section 2(1) of the conversion of Public Corporation or Government owned business undertaking into Public Companies Act as Common User Facility (CUF) consisting of Oil Terminals, Storage Facilities, Pipeline and the Bowser Fleet, more fully described in the Government Gazette Extraordinary bearing No. 1310/8 dated 13th October 2003. The company is a subsidiary of Ceylon Petroleum Corporation (CPC) owning 2/3 of share capital and the balance owing by Lanka IOC PLC.

CPSTL has engaged in bulk Petroleum Storage and Distribution activities with state-of-the-art infrastructure facilities for management of downstream petroleum product handling in Sri Lanka and continued to consistently enhance our stakeholder value propositions, demonstrating our commitment to support Sri Lanka's development journey through building healthy and competitive fuel storage & distribution.

2. Progress of the tasks completed in 2024

Ceylon Petroleum Storage Terminals Limited stores and distributes petroleum products and it fulfills a major role in providing continuous fuel supply safeguarding the high quality of fuel. This chapter presents the progress of storing and distribution of fuel by Ceylon Petroleum Storage Terminals Limited.

2.1 Storing Fuel

Ceylon Petroleum Storage Terminals Limited is carried out in the two main terminals Kolonnawa and Muthurajawela and in 11 regional bulk depots. Accordingly 440,147 MT of total fuel storage capacity is maintained within the country by 224,649 MT of fuel capacity in Kolonnawa terminal and 202,358 MT in Muthurajawela terminal with 13,140 MT from the 11 regional bulk depots. Accordingly, those two main terminals and 11 regional bulk depots provided active contribution in storing fuel for 2024 and Table shows the total fuel storage capacity.

Table 11.1
Total Fuel Storage Capacity

Product	Storage Capacity (MT)			Total
	Kolonnawa Terminal	Muthurajawela Terminal	Regional Bulk Depots	
Naptha	11,996	-	-	11,996
Petrol 95 Octane	23,197	-	-	23,197
Petrol 92 Octane	59,321	83,857	3,346	146,524
Kerosene	9,813	-	680	10,493
Jet A 1	9,484	-	-	9,484
Auto Diesel	46,074	118,501	9,114	173,689
Super Diesel	18,319	-	-	18,319
Fuel Oil	44,575	-	-	44,575
Solvents	341	-	-	341
Industrial Kerosene	1,529	-	-	1,529
Total	**224,649**	**202,358**	**13,140**	**440,147**

Source: *Ceylon Petroleum Storage Terminal Limited*

2.2 Fuel distribution

Five fuel-supplying agents engaged in fuel distribution by 2024 and Ceylon Petroleum Storage Terminals Limited distributes fuel to those five agents as per their requirements. Two major terminals Kolonnawa and Muthurajawela of Ceylon Petroleum Storage Terminals Limited including the regional bulk depots issue fuel to the fuel-supplying agents, Ceylon Petroleum Corporation, Lanka Indian Oil Company, Sinopec Energy Lanka (Pvt) Ltd., R.M. Park (Pvt) Ltd. and United Petroleum (Pvt) Ltd. and the Table shows the progress of fuel distribution to these companies until September 2024.

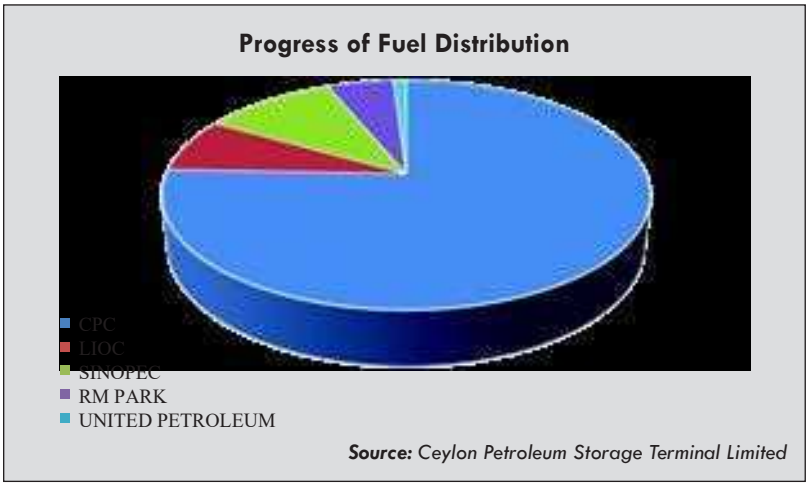
Accordingly, the total distribution amount recorded in 2024 is 4,178,575 KL and this distribution consisted of 3,159,547 KL of fuel from Ceylon Petroleum Corporation, 318,331 KL of fuel from Lanka Indian Oil Company, 439,422 KL of fuel from Sinopec Energy Lanka (Pvt) Ltd., 218,493 KL of fuel from R.M. Park (Pvt) Ltd. and 42,781 KL of fuel from United Petroleum (Pvt) Ltd. Accordingly, 76% of total fuel distribution is owned by Ceylon Petroleum Corporation and the remaining 24% is consisted of the fuel owned by Lanka Indian Oil Company, Sinopec Energy Lanka (Pvt) Ltd., R.M. Park (Pvt) Ltd. and United Petroleum (Pvt) Ltd.

Table 11.2
Progress of Fuel Distribution - 2024

Product	Quantity (KL)					
	CPC	LIOC	SINOPEC	R.M.PARK	UNITED PETROLEUM	Total
Fuel Oil	339,256	-	-	-	-	339,256
Jet A 1	557,515	-	-	-	-	557,515
Lanka Auto Diesel	1,074,364	142,085	208,401	98,630	17,371	1,540,852
Lanka Super Diesel	27,813	3,887	6,966	4,679	832	44,178
Naptha	197,241	-	-	-	-	197,241
Petrol 92 Octane	935,908	160,109	218,092	111,137	23,701	1,448,947
Petrol 95 Octane	27,449	12,250	5,963	4,046	878	50,586
Total	**3,159,547**	**318,331**	**439,422**	**218,493**	**42,781**	**4,178,575**

Source: *Ceylon Petroleum Storage Terminal Limited*

Figure 11.1
Fuel Distribution Composition - 2024



Source: *Ceylon Petroleum Storage Terminal Limited*

2.3 Developing the facilities related to fuel distribution

Ceylon Petroleum Storage Terminals Limited has identified that the requirement to develop and upgrade the associated facilities used for fuel storage and distribution to keep them up to date with new standards and technology to ensure a continuous supply of fuel. Accordingly, the existing infrastructure facilities will be continuously updated and new facilities will be created. The progress of the development projects carried out by Ceylon Petroleum Storage Terminals Limited are as follows.

- **Construction and Commissioning of Six Tank (6) at Kolonnawa**

The project to construct 06 tanks with the total capacity of 64,000 m3 was awarded to a contract amount of Rs. 2286.8 million without tax on 24.10.2019. Due to the poor performance of the contractor, the contract was terminated on 19.01.2022. At that time the overall performance of the project was 18%. It was estimated that a sum of Rs. 3374 million (without tax) was needed to re-implement the project and bids were invited to select a suitable contractor with the approval of Cabinet of Ministers. The bids submitted are at the stage of evaluation and it is planned to award the contract by February 2025. The expected project duration is 24 months.

- **Constructions of a 18" diameter pipeline from Colombo port to Kolonnawa Terminal**

The pipeline system which transports fuel from Colombo Port to Kolonnawa terminal is very old and dilapidated, and so it was planned to construct a pipeline with 18 inches diameter in order to make efficient the unloading of fuel. For that, the procurement activities were started with the approval of the Department of National Planning and with the approval of Cabinet of Ministers. The estimated cost for this is Rs. 2853 million (without tax) and the expected project duration is 18 months.

- **Enhancement of Fire Water Storage Capacity and Construction of Generator Room at LBD Magalle.**

Actions were taken to construct water storage tanks with a capacity of 110,000 m3 for fire fighting at Magalle regional depot. This increased water storage capacity from 90,000 m3 to 200,000 m3 and the estimated cost for that was Rs. 12 million.

- **Construction of a pipeline support system in Kolonnawa 6 zones**

Ceylon Petroleum Storage Terminals Limited has planned to enhance the petrol filling capacity of gantries while enhancing petrol filling gantry of 07 zones by installing pumps with new high capacity. For that purpose, needed supporting system and the related facility system were constructed to connect the pipelines built at the innovative pumping station in Kolonnawa 06 zones. The estimated cost is Rs. 76 million (without tax).

- **Relocation of the existing LBD at KKS**

The regional depot located in Kankasanthurai is strategically important for fuel distribution to Northern Province. This warehouse was maintained in a land belonging to the cement factory, and currently, it is not in use. This regional depot was re-established in a land belonging to Ceylon Petroleum Storage Terminals Limited. The total installation capacity is about 540,000 liters. For this, Rs. 170 million (without tax) is estimated and the construction activities are carried out in three phases. It is expected to end up construction activities in January, 2025.

2.4 Awards of Chartered Institute Professional Mangers of Sri Lanka - CPM

- Merit Award for Best Management Practices Company Awards 2024
  Category: Power and Energy
- Category Winner in Best Management Practices Company Awards 2024
  (Transport, Shipping and Logistics)
- Certificate of Recognition in Best Management Practices Company Awards 2024
  (Government and Semi Government)

3. Future Plans 2025

- Implementation of Occupational, Health, Safety and Environment Management System (OHSEMS)

  Obtain ISO 14000 Environmental Management Systems accreditation and the internationally recognized Occupational Health and Safety Management System standard-OHSAS

- Minimize Distribution cost & improve product transportation
  - Follow Public tender Procedure to select transport vendors for Bulk Transportation of Petroleum Products
  - Implement wagon transportation to KKS
  - Maximize Wagon transport of Bulk Petroleum product transportation

- Improve product filling facility
  - Construction of Gantry filling facility at Zone -07
  - Zone-3 Aviation Gantry Development

Chapter 12

Petroleum Development Authority of Sri Lanka

1. Introduction

The evolution of the Petroleum Resources Development Secretariat (PRDS) into the Petroleum Development Authority of Sri Lanka (PDASL) stands as a notable milestone, realized with the enactment of the new Petroleum Resources Act No: 21 of 2021 on 8th October 2021 by the Parliament of the Democratic Socialist Republic of Sri Lanka. In its newfound capacity as an independent government regulatory body, the PDASL assumes a crucial role in the regulation and management of all facets of oil and gas exploration, development, and production operations in Sri Lanka.

The oil and gas exploration has been carrying out in three identified prospective offshore basins namely Mannar, Cauvery and Lanka since 1960s. In particular, the PDASL stands responsible for ensuring that both the exploration and exploitation of the petroleum resource are carried out using good oil field practices, while also adhering to good health, safety and environmental practices to protect lives and capital.

Objectives

- Increase upstream petroleum activities, encompassing both exploration and production, to stimulate growth and efficiency.
- Augment the volume of data and enhance the quality within the national petroleum data repository, ensuring a comprehensive and reliable information database.
- Establish a systematic framework to regularize upstream petroleum activities, promoting consistency, transparency and adherence to industry standards.
- Enhance national socio-economic benefits across successive phases of petroleum operations, fostering positive impact on the economy at each stage of development.
- Implement proactive measures to prevent environmental pollution and mitigate Health, Safety, and Environmental (HSE) risks, associated with petroleum operations, prioritizing the well-being of both ecosystems and individuals involved in the process.

2. Operational performance during the year 2024.

2.1 Project Progress

- **Taking forward the Multi-Client Seismic Data Acquisition, Processing, Marketing and Licensing Contract entered into by the GoSL through four service agreements with the Contractor Eastern Eco DMCC, a subsidiary of Schlumberger Holdings II Limited.**

  This task has been initiated primarily to gather, market and license petroleum data on a "multi-client" basis, enabling the launch of several data acquisition projects, including 2D and 3D seismic projects, to be carried out in selected off-shore areas around Sri Lanka, at no cost to the government. The agreement signed in 2018 also includes provisions for conducting petroleum systems modeling, interpretation of the new data, reprocessing of legacy data and further updating and upgrading the existing geotechnical database. To date, USD 18 million has been invested by them in four service agreements,

resulting in 13,080 line kilometers of processed and reprocessed 2D seismic data.

Based on their 2024 progress statement reporting, it can be observed that, they have been able to continue marketing and promoting Sri Lanka processed and reprocessed data at the below mentioned international events.

- India Energy Week February 2024
- Offshore Technology Conference (OTC) Asia 2024 – February / March 2024
- EAGE 2024, Norway – June 2024
- IMAGE Houston 2024 – Aug 2024
- APGCE KL 2024 – Nov 2024
- SEAPEX Singapore-Dec 2024

Beyond these efforts, Schlumberger's technical and marketing teams effectively engaged with numerous potential investors globally in 2024, particularly at international conferences like APGCE in Malaysia and SEAPEX in Singapore. They are awaiting Sri Lanka exploration plans to license the data to interested investors.

- **Multi-client Airborne Gravity & Magnetic data acquisition, processing, marketing and licensing program with Bellgeo Enterprises Limited**

  In 2019, Bellgeo Enterprises Limited entered into a 10-year multi-client agreement with the Sri Lankan government for airborne gravity and magnetic data acquisition, processing, marketing, and licensing. In 2021, they successfully completed the acquisition and processing of 14,000 line kilometers of data covering selected offshore blocks in the Mannar and Cauvery basins. Bellgeo invested nearly USD 927,000 in the survey, with no cost to the Sri Lankan government. They are currently marketing the processed data and awaiting Sri Lanka's exploration plans to license the data to interested investors.

2.2 Operational Performance

- **Completing the Regulations and published**

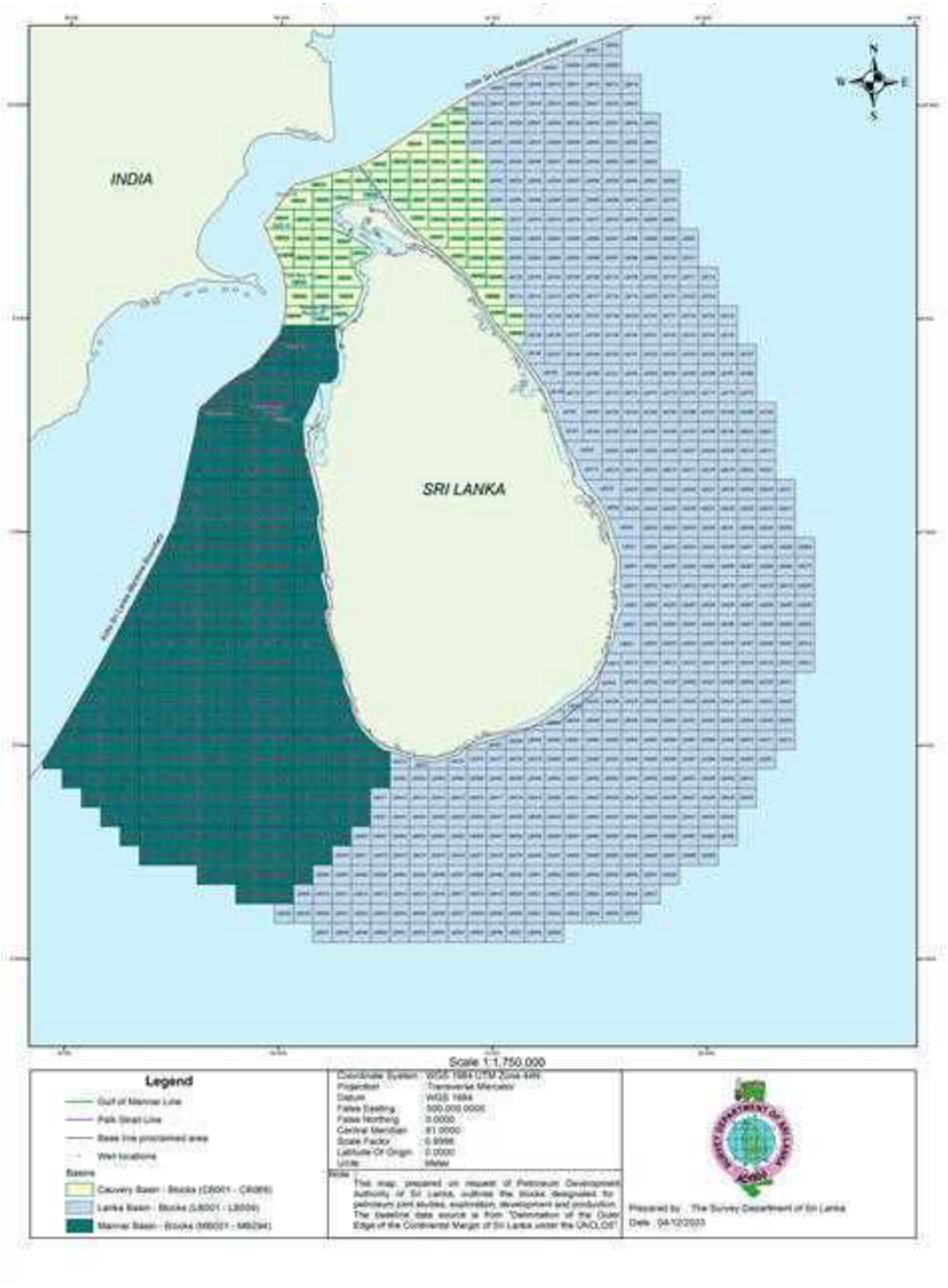
Having completed a rigorous series of reform work since 2023, PDASL finalized and published the following three key regulations in early 2024 to establish a stable regulatory framework for offshore oil and gas exploration through gazette notifications.

- Petroleum Resources (Exploration and Development Block Map) Regulations No. 1 of 2024 was published on 05th March 2024
- Petroleum Resources (Data Licensing) Regulations No. 2 of 2024 was published on 05th March 2024
- Petroleum Resources (Joint Study Agreements) Regulations No. 3 of 2024 was published on 15th July 2024

- **Publication of the new Petroleum Resources Exploration and Development Block Map of Sri Lanka**

  Having completed the revisions in accordance with the Petroleum Resources (Exploration and Development Block Map) Regulations No. 1, the updated Petroleum Resources Exploration and Development Block Map consisting of 918 blocks of 15 X 15 km grid, was prepared by the Survey Department of Sri Lanka in consultation with the PDASL. It was officially published through a gazette notification on 14th March, 2024.

Map 12.1
Petroleum Resources Exploration and Development Block Map of Sri Lanka



- **Explore offshore acreage through Joint Study programs**

  In accordance with the cabinet decision (Cabinet Paper No. 24/1242/621/065 dated) dated 10.07.2024, PDASL continued amending the documents required to call interest proposals for joint studies.

- **Staffing and functioning of PDASL - Expanding the PDASL human resource base**

  Since May 1st, 2024, PDASL has operated with limited staff: six permanent employees (three executives, two assistants and one driver),, two development officers from the Ministry of Power and Energy, and two acting officials (Director General and Director Finance). This limited staff severely affected the institution's operations. To address this, PDASL is working to obtain approvals to recruiting urgent positions, for which applications were invited and candidates were short-listed in 2023. The speedy recruitment of relevant officials for several MSD and PED approved cadre positions was considered mandatory, to ensure the continued functioning of the institution.

3. Future Plans 2025

- Enter into at least two joint study agreements for selected offshore blocks to identify new potentials of petroleum and natural gas and to evaluate the existing findings.
- Finding a suitable investor targeting the primary production activities for the currently discovered natural deposit, especially for the Dorado deposit and additionally, for the production of Hydrogen gas which can be used as an alternative in downstream petroleum industry.
- Conduct programs to obtain 2D and 3D multi-server seismic data based on the future exploration activities and investor needs.
- Formulation of a national policy for upstream petroleum industry with the support of industrial experts.
- Implementation of at least local and international investor promotion programs to sell offshore exploration blocks.
- Updating the website of Petroleum Development Authority of Sri Lanka along with international social media standards and trends and converting it into a trusted hub for the investors search for information regarding upstream petroleum investment opportunities in Sri Lanka.