

Annual Report 2019

# CHARGED TO ADVANCE



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Sri Lanka Sustainable Energy Authority

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With a focus on sustainability touching every aspect of our lives, and being the leading authority of green energy, our work has become more important than ever. While the year under review was a significant one, it is by no means the end to our mission of being a carbon neutral nation by 2050. With much work to do and a promising future ahead, we are charged to advance.

**CHARGED TO  
ADVANCE**

## About Sustainable Energy Authority

The Sri Lanka Sustainable Energy Authority (SLSEA) was established on 1<sup>st</sup> October 2007 with executing the Sri Lanka Sustainable Energy Authority Act, No. 35 of 2007 enacted by the Parliament of the Democratic Socialist Republic of Sri Lanka.

SLSEA is the governing body responsible for pioneering the sustainable energy revolution in Sri Lanka. It was established with the objective of forming a key institution which would drive energy efficiency throughout Sri Lanka and proactively identifying sustainable energy resources which could facilitate meeting the energy needs in an effective, efficient and eco-friendly manner. As an organization handling such a critical area of Sri Lanka's future growth, we aim to facilitate the continuous development of our nation's rich energy resources that includes solar, wind, hydro and bioenergy. At SLSEA, we strive to drive strategic investments in the energy sector, which will thereby pave the way for Sri Lanka to make transition to cleaner, sustainable and indigenously sourced energy solutions in the future. While aiming to develop our energy sources, we also attempt to facilitate research & development and knowledge transfers that will enable us to develop innovative energy solutions and processes to meet the nation's requirement for sustainable energy.



## About Sustainable Energy Authority

SLSEA is entrusted with a broad scope of implementing national level sustainable energy programmes in Sri Lanka. Under this broad scope, four primary objects are prescribed in the Sri Lanka Sustainable Energy Authority Act as follows.

- (a) Renewable Energy Development: Identify, assess and develop renewable energy resources with a view to enhancing energy security and thereby derive economic and social benefits to the country
- (b) Energy Efficiency Improvement & Conservation: Identify, promote, facilitate, implement and manage energy efficiency improvement and energy conservation programmes for use of energy in domestic, commercial, agricultural, transport, industrial and any other relevant sector
- (c) Energy Policy Development & Information Management: Promote security, reliability and cost effectiveness of energy delivery to the country, by policy development and analysis and related information management
- (d) Fund Management: Ensure that adequate funds are available for the Authority to implement its objects, consistent with minimum economic cost of energy and energy security for the nation.



### Vision

# An Energy Secure Sri Lanka

### Mission

To guide the nation in all its efforts to develop indigenous energy resources and conserve energy resources through exploration, facilitation, research & development and knowledge management in the journey of national development, paving the way for Sri Lanka to gain energy security by protecting natural, human and economic wealth by embracing best sustainability practices

# Corporate Milestones

# 2014

- Published Solar Resource Atlas of Sri Lanka

# 2007

- Establishment of SLSEA
- Sustainable Energy subject was introduced to National Science Curriculum from Grade 6 to 11



01

**DEVELOPING  
CONDUCTIVE  
POLICIES**

02

**INCREASING  
THE SHARE OF  
RENEWABLE  
ENERGY**

# 2010

- Launched Vidulka Exhibition + Symposium + National Energy Efficiency Awards
- First mandatory energy labelled product – Compact Fluorescent Lamp
- Launched net-metering scheme for rooftop power generation

# 2011

- School Energy Clubs introduced
- Energised first grid connected solar power plant of 1.237 MW in Hambantota

## Corporate Milestones

# 2015

- Reached 10% share of electricity generation from new renewable energy, realising the policy goal

# 2016

- Soorya Bala Sangramaya Programme launched for solar rooftop power generation, enhancing the net-metering scheme

# 2018

- Reached the 100 MW target set for solar rooftops under the Soorya Bala Sangramaya Programme
- Completed highly satisfactory Sustainable Biomass Energy Project of the UNDP/FAO/GEF



03

**IMPROVING  
ENERGY  
EFFICIENCY**

04

**EMPOWERING  
PEOPLE**

# 2017

- Establishment of a Presidential Task Force on Operation DSM with 10 thrust programmes

# 2019

- National Energy Policy & Strategies of Sri Lanka Tabled in the Parliament
- Published the Guideline for Sustainable Energy Residences in Sri Lanka
- Completed Energy NAMA Project of UNDP/FAO/GEF



## Chairman's Message



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SLSEA set in place a series of internal and external processes and restructured existing processes to create greater transparency and accountability in our activities.

Our focus was to develop an organization that is welcoming for investors to apply, process and implement their renewable energy projects.



## Chairman's Message

### Towards an Energy Efficient Sri Lanka

I was entrusted with the position of Chairman of the Sri Lanka Sustainable Energy Authority (SLSEA) in 2019, and under my leadership we were successful in converting the SLSEA from a project approval and project management authority to a more innovative, practical and participatory organization in the development of renewable energy. Our main objectives were to bring in expertise to identify and map out the renewable energy potential of the island and attract potential foreign investors to develop renewable energy parks in Sri Lanka.

Sri Lanka, having become a signatory to the Paris Agreement in November 2016, had an obligation to meet the Nationally Determined Contributions (NDCs). As the leading organization entrusted with achieving these goals, the Board of Management under my leadership prepared a roadmap and initiated the development of some key pilot projects. The first of this was the 100 MW Solar Park in Siyambalanduwa, Monaragala and the second, Wind and Solar Energy Park in Pooneryn Peninsula, which would provide 180 MW of solar power and 240 MW of wind power.

### Overcoming Challenges

During the year, the Sri Lanka Sustainable Energy Authority overcame many challenges that had slowed its progress. Among them were legal matters, which were overcome by bringing stakeholders such as the Public Utilities Commission of Sri Lanka (PUCSL), Ceylon Electricity Board (CEB), Attorney General's Department, to resolve the legal issues before the Parliamentary Consultative Committee.

In other areas of activity, we managed to bring in professors from Moratuwa, Peradeniya, Colombo and Jaffna Universities into the advisory committee of SLSEA, and with their expertise, regular meetings and seminars were arranged in order to identify in detail potential areas for renewable energy development. This led to the drawing of comprehensive renewable energy resource maps that were submitted for approval of the Cabinet of Ministers for gazetting subsequently, a legal obligation vested with SLSEA.

We also cleared the heavy backlog on administrative fronts, as well as in the finance and accountability fronts. We addressed backlogs of annual reports, audit and other areas that the SLSEA was legally obligated to follow. The SLSEA also had to face many policy, regulatory and authoritative challenges imposed on the renewable energy sector. We have taken many initiatives and efforts to identify and resolve these obstacles at the Board of Management consisting of secretaries of all relevant ministries so that the SLSEA can work with minimum obstructions and delays.

During the year, we also focused on areas such as clearing land acquisition issues which had a big impact on developing large-scale renewable energy projects and sought remedies for renewable energy tariff disputes that stood in the way of achieving our renewable energy targets for 2030.

### Creating Opportunities

SLSEA also generated new opportunities by successfully receiving and utilizing a USD 50 million loan scheme from the Asian Development Bank, for mainly facilitating the rooftop solar energy projects of urban households at a low interest rate of 8%, and expanded existing underutilized opportunities for the growth of renewable energy sector.

Under my leadership, SLSEA engaged with the Korean Energy Authority (KEA) and through discussions and study tours managed to receive knowledge and expertise on battery storage development using solar energy as well as battery-powered vehicle development with solar/battery charging stations. KEA extended a grant of three solar battery-powered three-wheelers as well as a solar power charging station in order to introduce and develop the solar battery-powered three-wheel industry. The above charging station and three-wheelers were installed by me for display and usage at the BMICH, Colombo.

### Introducing Innovations

During the year, we studied the potential of solar powered batteries for residential rooftop solar projects that can help store excess energy. Studies were also made to introduce solar power in isolated villages and islands mainly in the north of Sri Lanka offering an alternative solution that would not require costly transmission lines connected to the main grid.

SLSEA ventured into exploring the benefits of floating solar panels over reservoirs of major hydro power plants as a means of optimizing the solar energy resource. This optimization would be using solar power from the floating panels during the day and only using hydro-power generation at night through the same transmission lines. This would help to preserve at least one-third of the water in the reservoirs, which could be saved for the drought season and/or agricultural purposes, providing energy security.

Studies were also carried out into the potential benefits of re-using the water in the major hydro-power projects by using the Reverse Pumping Technology to refill the reservoirs after power generation from the lower reservoir back to the upper reservoir. SLSEA is also looking at exploring rooftop solar energy to be used by households during power cuts by using battery storage in individual houses, which is a facility not currently utilized in Sri Lanka.

## Chairman's Message

### Accountability

SLSEA set in place a series of internal and external processes and restructured existing processes to create greater transparency and accountability in our activities. Our focus was to develop an organization that is welcoming for investors to apply, process and implement their renewable energy projects. I am pleased to share that we have successfully achieved this through streamlining and introducing staggered incentives for new projects. This has been very well received by foreign investors.

To be more specific, the solar projects that would be approved but fail to comply and complete would be penalized in the future. This was to be implemented by getting a 20% deposit of the project value held against the cost of reservation of the grid connection facility at the final approval stage with the Power Purchase Agreement (PPA). This deposit would then be released in two tranches, the first tranche being 10% of the deposit which will be released when the project reaches 50% completion. The balance deposit would be released once the project is completed. This new guideline would encourage and protect genuine investors to undertake renewable energy projects in Sri Lanka. This new guideline would also specify that investors who apply for projects would need to provide a timeline for completion. Those who do not complete within the proposed timeline would forfeit their deposit and lose their grid connection facility. At present SLSEA is working towards implementing these guidelines.

### Looking Forward

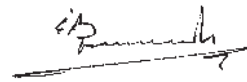
Our medium to long term goal is to achieve the Paris Convention targets that Sri Lanka has ratified, to develop at least 30-35% new renewable energy by 2030, 50% by 2050. Sri Lanka is currently behind this target with only 23% new renewable energy achievable in the medium term. We are hopeful that with the new wind, solar and biomass projects being explored, Sri Lanka will be able to get back on track to achieve the targets of the Paris Convention.

Global trends on renewable energy have also been a blessing as more residents are opting for solar power for domestic use. We want to encourage urban residents and rural public venues such as schools and temples to utilize solar battery technology for their own energy requirement.

Developing self-sufficient renewable energy is an area I am very passionate about developing in the coming years. This could be very beneficial for agriculture, education, rural industries and local economic empowerment.

### Appreciation

Finally, I would like to share my sincere thanks to the Director General, Members of the Board of Management and the Staff for their commitment and hard work towards developing a sustainable energy culture in Sri Lanka.



**T. M. R. Bangsa Jayah**  
Chairman

## Director General's Review



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During 2019 we accomplished the 200 MW energy target set for solar rooftops by 2020. Being able to achieve the 2020 targets by May 2019 was a great achievement, thanks to the Authority's initiative to expedite the projects. This has set us well ahead of our future renewable energy targets for the coming year.

## Director General's Review

### A Year of Achievements and Opportunities

2019 was a critical year for the Sri Lanka Sustainable Energy Authority as we prepared to meet the commitments of the Paris Convention coupled with the responsibility to achieve our own national renewable energy goals.

One of the key challenges for the Authority this year was the commitment towards greenhouse gas emission reduction. So, all projects and programmes had to be aligned to that. I am pleased to note that the Authority rose above expectations in achieving most of these targets thanks to the focus and dedication of the SLSEA team.

### Renewable Energy Performance

As one of our key responsibilities, the Sustainable Energy Authority has set targets to increase power generation capacity through renewable energy. The Authority is happy to note that, during 2019 we accomplished the 200 MW energy target set for solar rooftops by 2020. Being able to achieve the 2020 targets by May 2019 was a great achievement, thanks to the Authority's initiative to expedite projects. This has set us well ahead of our future renewable energy targets for the coming year.

### Energy Policy

In 2019, the Authority took it upon ourselves to address concerns on policies and regulations that support the regulation and support the industry efforts. We introduced essential policies, regulations and guidelines that would drive all efforts towards the common objectives of the Paris convention. In this effort, we were able to Gazette the 'National Energy Policy & Strategies of Sri Lanka' in August 2019. Furthermore, we were able to finalize the 'Energy Efficiency Building Code' and publish the 'Guideline for Sustainable Energy Residences in Sri Lanka' which provide energy efficiency strategies that lead to a comfortable home environment. We further were able to enforce the 'LED minimum performance standards', regulation for 'Energy Efficiency Rating for Ceiling Fans' and initiate the 'Energy Labeling programme for refrigerators', 'Energy Labeling programme for LED lamps' and 'Energy Labeling programme for TV, rice cooker and water pump'.

### Technology Infusion

The Authority took a decision to convert the SLSEA's systems and processes into an online platform and successfully completed a full-scale digital transformation process for finance activities. Thus, the online renewable energy application process and online e-flow process for mini-hydropower plants were initiated. This meant SEA's systems, processes, approval and activities were all speedy, efficient and transparent.

### Investing in Research

In the year under review, the Sustainable Energy Authority invested in several research and development activities including visibility and access to renewable energy data for the public.

With the support of UNDP, the Authority launched a website for Energy Data Management System by acquiring island-wide renewable energy and energy efficiency project data publishing it for public knowledge. The website updates the Greenhouse gas (GHG) emissions reduction, projects implemented and energy generation on a real-time basis providing reliable and current data for industry analysts and global energy sector enthusiasts and investors.

Research was completed on wave energy resource assessment, which we believe has the potential to add a significant capacity to the national grid. Although its potential is not yet estimated, we anticipate that it could be close to 50 TWh/annum of energy.

We have also initiated a project to explore the feasibility of offshore wind energy in partnership with the World Bank ESMAP program. It is believed that the northern peninsula has more than 50 GW of capacity for the national grid.

Together, these projects are sufficient to meet the energy requirements of the Paris declaration as well as for the national energy policy.

## Director General's Review

### Securing a Renewable Energy Future

With the assistance of funding agencies and foreign investors, we are certain that the Sustainable Energy Authority will achieve the Paris Convention targets Sri Lanka has endorsed.

The Authority has set in place an action plan that is designed to reduce fossil fuel dependency in Sri Lanka whilst increasing the renewable energy usage across all sectors.

We have identified and inventoried the feasible locations for large-scale renewable energy parks. We have also concluded a successful project on promoting sustainable biomass energy generation and modern bio-energy technologies.

With these projects' insights, we are confident that Sri Lanka's journey into achieving sustainable energy targets is an achievable reality.



**Dr. Asanka Rodrigo**

Director General

# Board of Management

## **Mr.T.M.R. Bangsa Jayah**

*Chairman*

30.01.2019 – 25.11.2019

## **Ms. K.M. Malini Kumarihamy**

*Additional Secretary (Admin. & proc.)*

Ministry of Power Energy and Business Development  
January - September

## **Ms. I.J.Abeyrathna**

*Director – Commerce (R&D)*

Ministry of Industry & Commerce  
January - February

## **Mr.Damminda Kumara**

*Senior Assistant Secretary (Admin)*

Ministry of Provincial Councils & Local Government  
January - February

## **Mr.K.B.Guruge**

*Chief Accountant*

Ministry of Plantation Industries  
January - February

## **Mr. G.D.P.K.Senarathna**

*Appointed Member*

30.01.2019 – August

## **Mr. D.V.Bandulasena**

*Additional Secretary*

Ministry of Agriculture  
August

## **Mr. Chinthaka Udayasantha**

*Appointed Member*

30.10.2018 - December

## **Mr. A. M. R. J. K. Jayasinghe**

*Senior Assistant Secretary*

Ministry of Transport and Civil Aviation

## **Mr. S. Tharshan**

*Assistant Director*

Department of State Accounts, Ministry of Finance

## **Mr. Damitha Kumarasinghe**

*Director General*

Public Utilities commission of Sri Lanka

## **Mr.Gunarathne Wanninayake**

*Attorney at Law*

*Appointed Member*

30.01.2019 – 24.09.2019

## **Mr.S. Upul Priyantha Fernando**

*Appointed Member*

30.10.2018 – 17.12.2019

## **Mr. Kishan Nanayakkara**

*Appointed Member*

30.10.2018– 19.12.2019

## **Ms. Ambapali Sikurajapathy**

*Appointed Member*

30.01.2019 – 17.12.2019

## **Mr. E. M. Piyasena**

*Appointed Member*

28.02.2019

## **Mr. J. A. Ranjith**

*Secretary*

Ministry of Plantation Industries  
28.02.2019 – 26.12.2019

## **Ms. Kulani H. W. Karunarathna**

*Director (Investigation)*

Ministry of Mahaweli Development and Environment  
28.02.2019 – 18.12.2019

## **Mr. G. S. K. Kannangara**

*Senior Assistant Secretary (Admin)*

Ministry of Provincial Councils & Local Government  
28.02.2019 – 16.12.2019

## **Mr. S. L. Naseer**

*Additional Secretary- Policy & Commerce*

Ministry of Industry and Commerce  
12.03.2019 – 16.12.2019

## **Mr. Chinthaka S Lokuhetti**

*Secretary*

Ministry of Science, Technology & Research  
12.03.2019 – December

## **Ms. W.M. Deepthi Fernando**

*Additional Secretary*

Ministry of Lands & Parliamentary Reforms  
14.05.2019 – 17.12.2019

## **Ms. M. K. Rajapaksha**

*Assistant Director (Development)*

Ministry of Power, Energy and Business Development  
02.10.2019 – 17.12.2019

# Audit and Management Committee

## Composition of the Audit and Management Committee 2019

### **Mr. S. Tharshan**

*Chairman*

### **Ms. Malini Kumarihamy**

*Member*

### **Mr. Gunarathne Wanninayaka**

*Member*

### **Mr. A. M. R. J. Jayasinghe**

*Member*

### **Ms. W. M. Deepthi Fernando**

*Member*

## Observers of the Audit and Management Committee

### **Ms. H. A. D. Chandani**

National Audit Office

### **Mrs. E. A. N. P. Edirisinghe**

National Audit Office

### **Mrs. B. A. D. Abeywardena**

Ministry of Power, Energy and Business Development



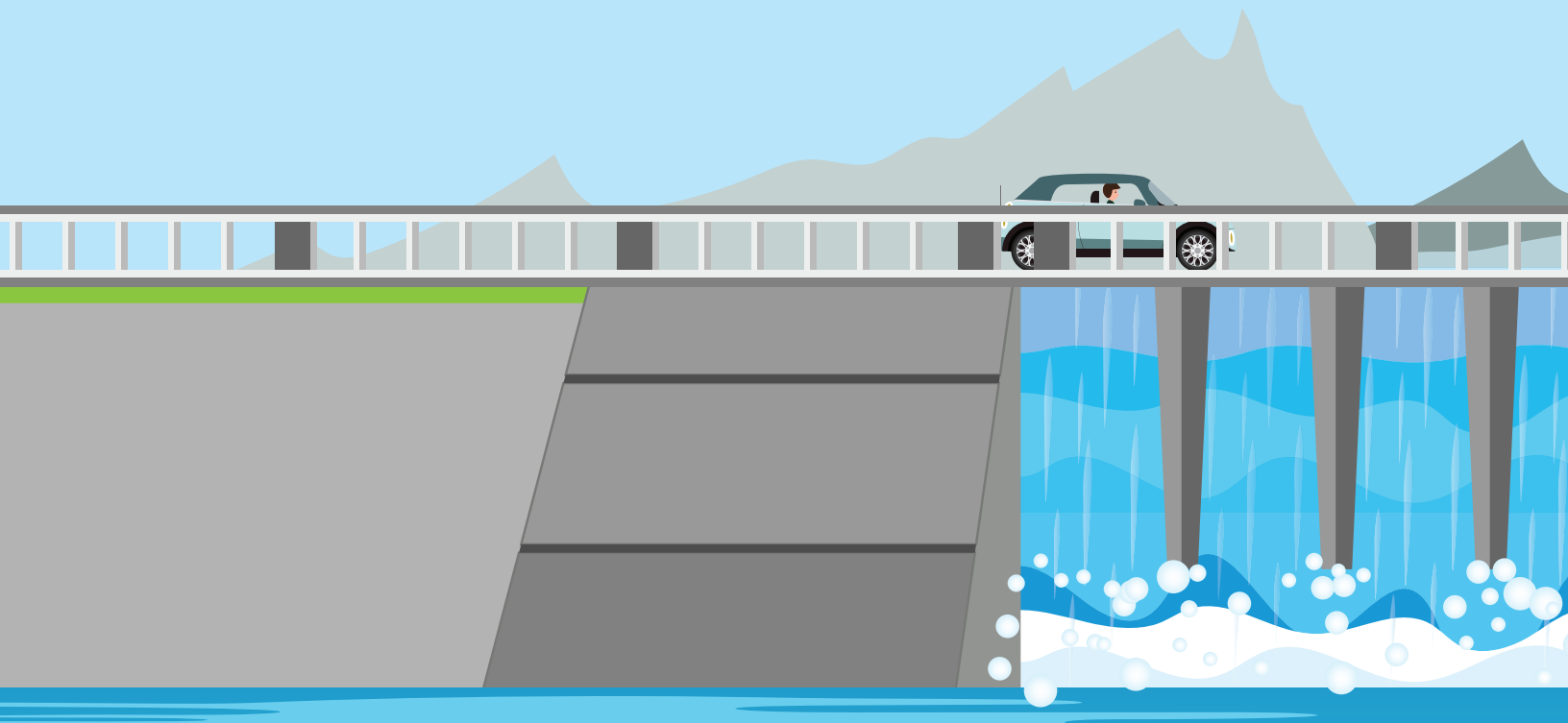
# HYDRO

# 419.5 MW

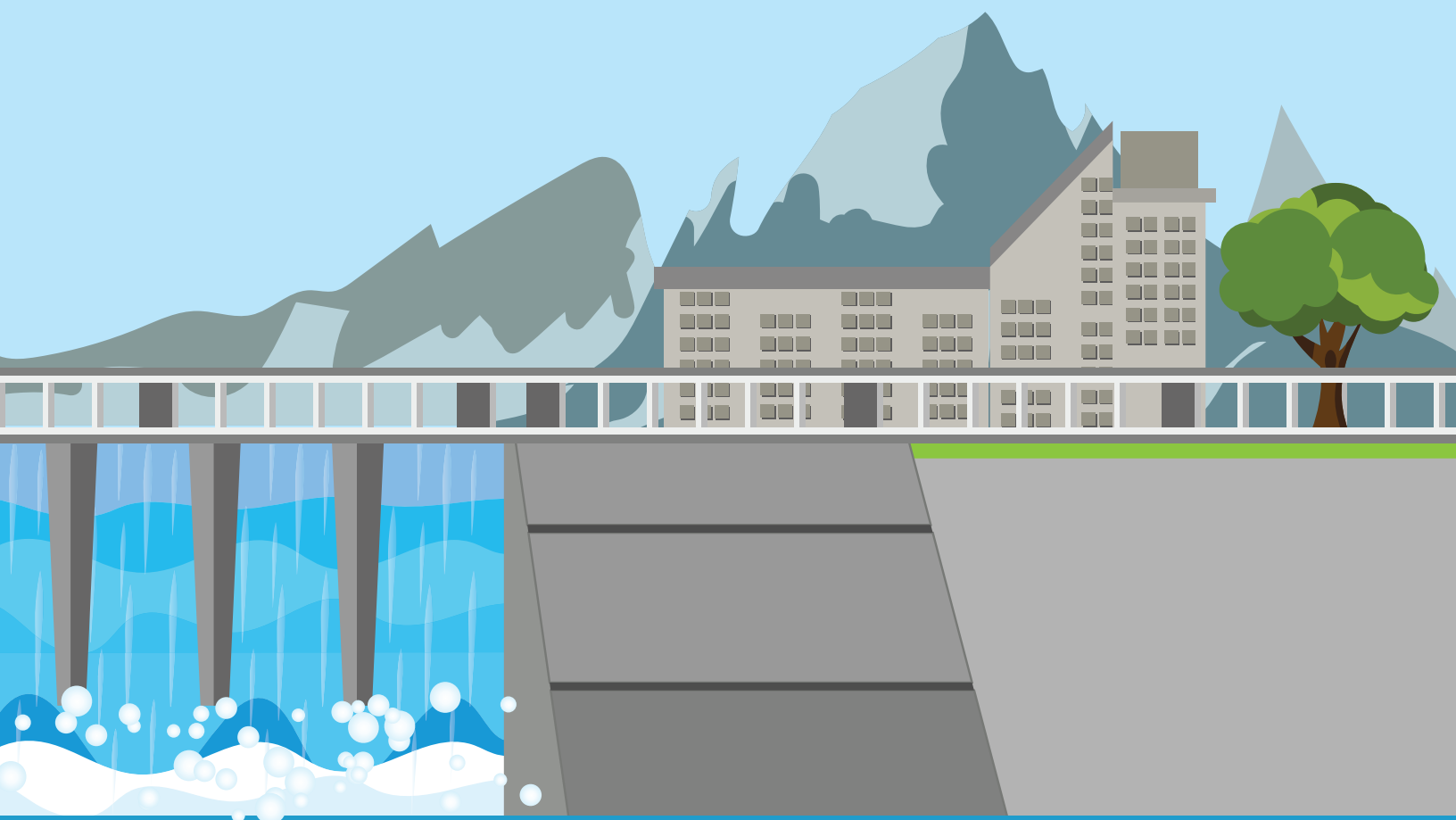
No. of projects

# 208

Hydro energy continues to be the main contributor in renewable energy generation with existing hydro power plants supplying bulk of the new renewable energy portfolio.

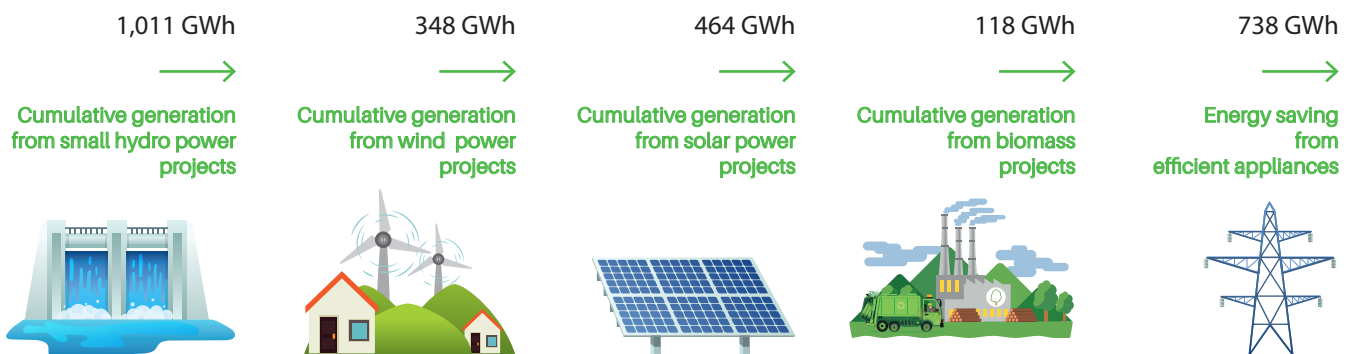


# HIGHLIGHTS OF THE YEAR



# Performance Highlights

Description	Unit	2019	2018
<b>Performance Highlights</b>			
Renewable electricity generation	GWh	1,579	1,742
Cumulative capacity from small hydropower projects	MW	419	380
Cumulative capacity from solar projects (ground mounted)	MW	57	51
Cumulative capacity from wind projects	MW	128	128
Cumulative capacity from biomass projects	MW	43	34
Cumulative no. of solar rooftops connected to national grid	No.	24,696	19,164
Cumulative capacity from solar rooftop projects	MW	261	176
Generation from solar rooftop projects	GWh	362	215
Energy saving from efficient appliances	GWh	738	721
No. of electricity units saved through SLNEEA interventions	GWh	n/a	27
Units of furnace oil saved through SLNEEA interventions	Million Litres	n/a	17
CO <sub>2</sub> avoided	Metric Tonnes	2,090,338	2,193,563
<b>Human Capital</b>			
Total staff of SLSEA	No.	104	100
No. of employees more than 10 years	No.	54	45
No. of employees more than 5 years	No.	77	71
Total payment for employee	LKRM	92	94
<b>Social and Relationship Capital</b>			
No. of energy audits conducted	No.	25	23
No. of energy managers	No.	7	3
No. of equipment hiring days	Days	1,710	1,220
No. of Energy labelling standards published	No.	2	2
No. of visitors for the Hambantota Solar Park	No.	1,100	1,364
No. of solar service companies registered by SLSEA	No.	327	251
No. of solar standards published	No.	1	2
No. of rooftop installations for the religious/government premises	No.	0	95
No. of research facilitated	No.	6	4
No. of publications	No.	8	7



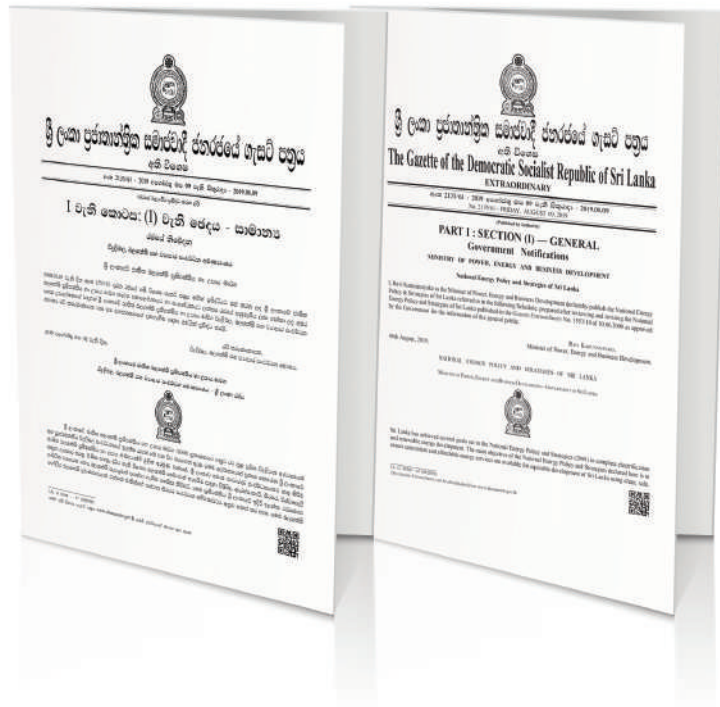
# Achievements in Sustainable Energy Activities

## Formulating the National Energy Policy Supporting a great achievement for the sector in publishing the National Energy Policy

Fulfilling one of the four primary objectives of the SLSEA, it managed to provide crucial support to the Ministry of Power Energy and Business Development to conclude the declaration of the National Energy Policy & Strategies of Sri Lanka through gazette notification 2135/61 dated 09<sup>th</sup> August 2019, realizing a successful milestone for the energy sector. Prepared by a Working Committee and further reviewed by an Expert Committee appointed by the Ministry, the policy will steer the energy sector during the first half of the ensuing decade. The main objective of the energy policy is to ensure energy security through supplies that are cleaner, secure, economical and reliable, to provide convenient, affordable energy services to support socially equitable development of Sri Lanka. This policy is designed giving due consideration to future goals of Sri Lanka, global trends and the seventh goal of the Sustainable Development Goals of the UN.

This policy will pave the way to realise the vision of Sri Lanka in achieving carbon neutrality and complete transition of all the energy value chains by 2050. The national energy policy is thus founded on ten pillars, rooted in the broad areas impacting the society, economy and the environment, in an effort to counterbalance the forces through enhanced equity, security and sustainability.

1. Assuring Energy Security
2. Providing Access to Energy Services
3. Providing Energy Services at the Optimum Cost to the National Economy
4. Improving Energy Efficiency and Conservation
5. Enhancing Self Reliance
6. Caring for the Environment
7. Enhancing the Share of Renewable Energy
8. Strengthening Good Governance in the Energy Sector
9. Securing Land for Future Energy Infrastructure
10. Providing Opportunities for Innovation and Entrepreneurship



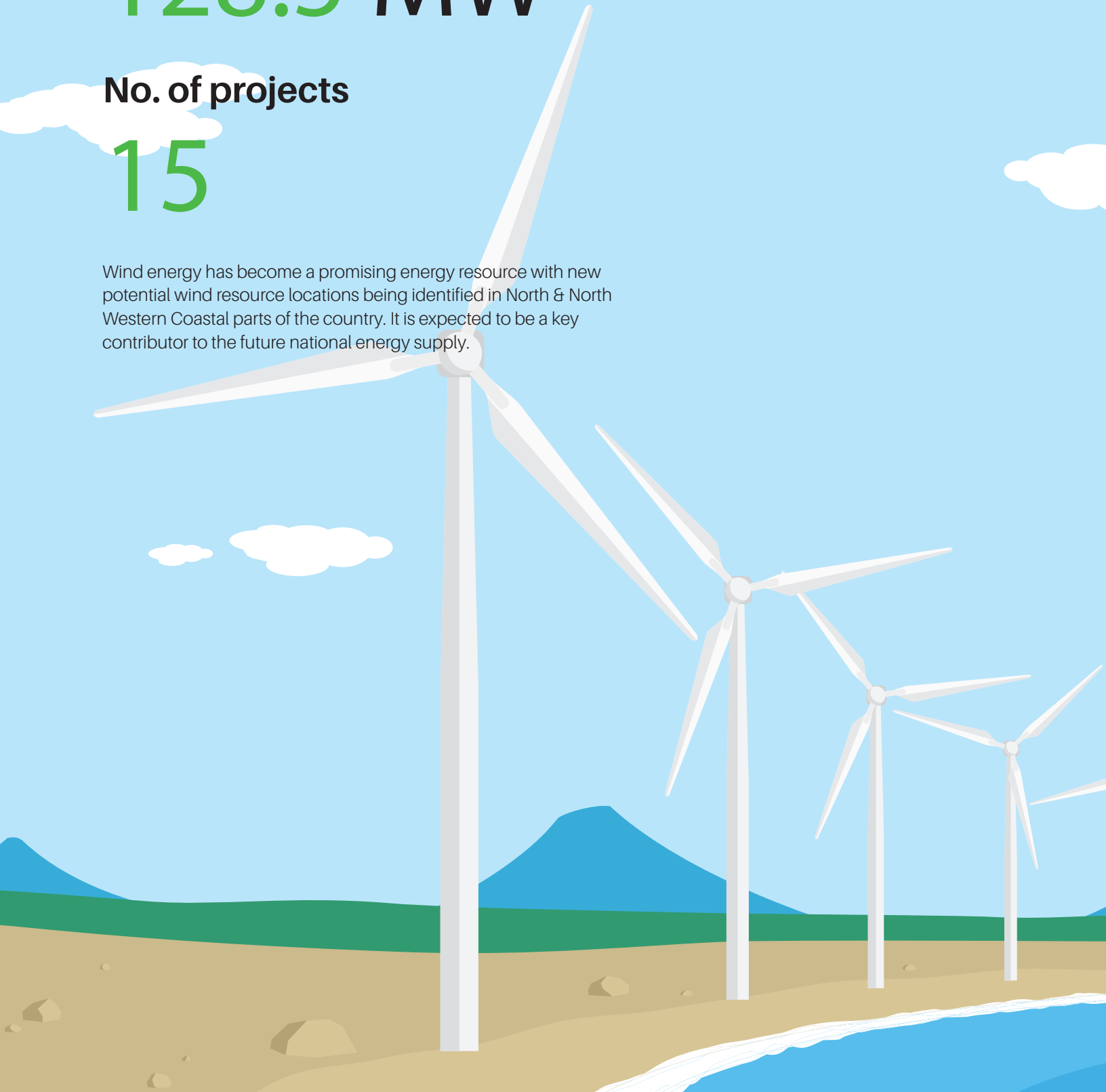
# WIND

# 128.5 MW

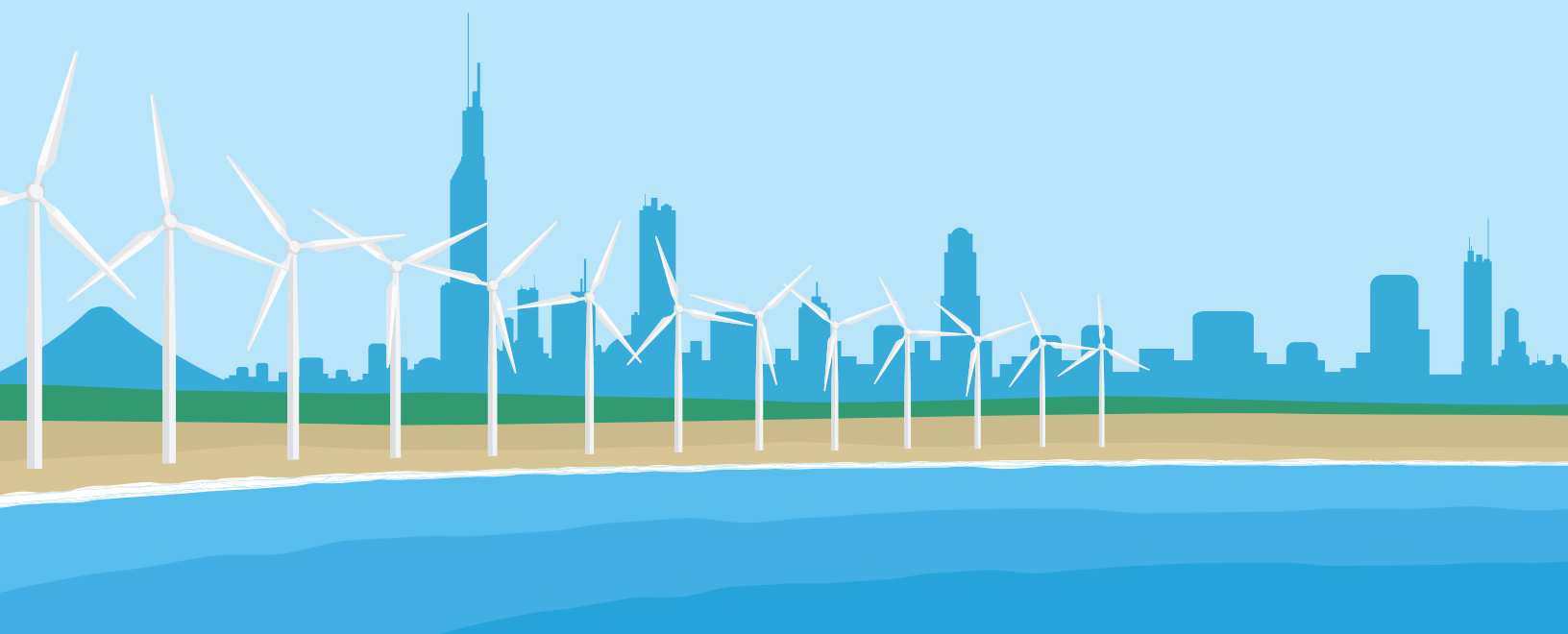
No. of projects

# 15

Wind energy has become a promising energy resource with new potential wind resource locations being identified in North & North Western Coastal parts of the country. It is expected to be a key contributor to the future national energy supply.



# CORPORATE GOVERNANCE



# Corporate Governance

The Board of Management of the Sri Lanka Sustainable Energy Authority operates on the principles of equity, fairness, impartiality, transparency and accountability. These are the pillars on which it endeavours to build a strong relationship with all its stakeholders, and foster an environment conducive for sustainable energy development. The Authority's activities are conducted in line with ethical standards and in the best interest of the state and all Sri Lankans. This commitment is supported with officials and individuals, structures, systems and processes as well as information in keeping with the Government's sustainable energy policy.

## Board of Management

The Board of Management is accountable and responsible for the duties assigned to it by the Sri Lanka Sustainable Energy Authority Act No. 35 of 2007. It is led by a Chairman appointed by the Minister in charge of the subject.

## Responsibility

The Board of Management is responsible to meet the objectives set out in the Act, exercising the powers vested in it by the Act. In addition, it must ensure the proper functioning of systems of internal controls and is responsible for the integrity of the financial information provided. The operational management of the Authority is carried out by the Director General of the Authority, who is the Chief Executive Officer, subject to the general direction and control of the Board. The Board is supported by the Audit & Management Committee, a sub-committee that oversees the financial aspects. Similarly, the Board is supported by external advisory committees when the need arises, to make decisions on matters of great technical complexity, beyond the capacity of the Board.

All procurement activities of the Authority are carried out in strict compliance with the Government Procurement Guidelines. These activities are undertaken by the officials of the Authority with the guidance of independent Technical Evaluation Committees and two Procurement Committees depending on the value of the procurement envisaged.

## Composition

The Board comprises of twenty one members with twelve ex-officio members and nine appointed members including the Chairman.

## Board Meetings

Board meetings are scheduled on a monthly basis. At these meetings the Board sets out the strategic direction of the Authority, reviews the performance and progress of all activities, the recurrent and the capital expenditure programs. These meetings also provide the forum for officials of the Authority to submit project proposals for consideration by the Board, towards achieving the objectives of the Authority. The Board members are given appropriate documentation in advance of each meeting.

Details of the Board of Management Meetings held in the year 2019 are as follows.

Meeting No.	Meeting Date	No. of Participants
01/2019	05 February 2019	15
02/2019	26 February 2019	13
03/2019	26 March 2019	15
04/2019	11 April 2019	14
05/2019	22 May 2019	16
06/2019	12 June 2019	17
07/2019	30 July 2019	14
08/2019	27 August 2019	12
09/2019	25 September 2019	7
10/2019	10 October 2019	11

## Compliance with Legal Requirements

The Board of Management takes all steps as needed to ensure that the Authority complies with the Act and other applicable rules, regulations and guidelines published by the government from time to time. The Board ensures that the financial statements of the Authority are prepared in accordance with the Sri Lanka Public Sector Accounting Standards and comply with the requirement of the Finance Act No. 38 of 1971.



# Risk Management

SLSEA recognises risk management as an integral component of good management and governance. It identifies some common risks as well as industry specific risks with regard to sustainable energy management. The specific risks are mainly in relation to energy efficiency improvement, renewable energy development and the policy environment, the subject areas in which SLSEA operates. The Board of Management together with the senior management of SLSEA place special attention on risk management to ensure sound financial and operational controls are put in place. From time to time, internal auditors and the management team review the effectiveness of the systems in place in delivering the mandate of SLSEA.

## Risk Culture

The Board of Management has set firmly in place its position and maintained it uniformly in risk assignment. The Management has also taken into consideration the concerns and positions of all stakeholders in decision making, reflecting its commitment to ethical principles. Adhering to the leadership, the staff has also recognised the importance of such ethical principles and has continued to follow the same.

## Risk Identification

SLSEA keenly monitors the external environment identifying risks where relevant. For effective control purposes, it categorises these risks as being either common to the global energy industry and/ or specific to Sri Lanka. In addition, SLSEA monitors the national renewable energy policy making process in the country to identify feasible projects that are both in conformity with state policies as well as sustainable energy requirements.

## Risk Management

SLSEA believes encouraging renewable energy resources and reducing energy wastage as its primary responsibilities. The Authority has identified low fossil fuel prices, which can be a cheaper alternative to renewable energy, as the main risk towards these objectives. This could also cause end user indifference to energy costs, which will lead to energy wastage at end user point.

Accordingly, SLSEA has undertaken a risk management strategy of transforming the sustainable energy market to a minimum possible cost status, which ensures that the demand for sustainable energy services will not diminish even with low fossil fuel prices. Procurement of renewable energy through competitive processes undertaken by the electricity utilities are thus supported by SLSEA, realising all time low prices for electricity purchases. The solar industry is nurtured by allowing start-up companies to become service providers to encourage competition in the solar rooftop industry, making solar power price competitive. Similarly, energy services companies are supported to enable them to continue to serve the industry and industry economy delivering energy efficiency services, even at lower electricity and fossil fuel prices.

## Risk of Losing Resources

Renewable energy resources of the country are threatened by a variety of factors that have either reduced the availability of the energy resource or shifted the resource availability. Deforestation, improper land use practices and other human activities have been the cause in most instances. Vast swathes of productive wind energy resource sites are lost due to expanding settlements. Similarly, good hydropower resources with excellent stream-flow characteristics have started to behave erratically due to deforestation in catchment areas, expansion of commercial plantations and changing rainfall patterns- a direct result of climate change.

In addition to natural causes, renewable energy resources are further restricted for use by increasing legal action taken by civil society organisations against renewable energy project development. The number of legal cases filed against project developers in which SLSEA was made a respondent rose to 3 in 2019, causing severe loss of productive renewable energy resources.

Both factors together have made renewable energy resources scarce and unattainable.

## Risk of Low Prices of Energy Services

Electricity prices underwent a 25% price reduction in 2014, which affected the energy services sector. The industrial sector enjoyed very low tariffs during day time, bringing down cost of production. With the lifting of this benefit to industries, interest in curtailing energy wastage diminished causing significant market shrinkage in the energy efficiency services sector. Similarly, fossil fuels used in industrial thermal applications remained low, compounding these effects. Nevertheless, a limited number of institutional users pursued their sustainability goals by engaging in large scale energy efficiency improvement projects, gaining substantial benefits in reducing carbon footprint and lowering operational costs.

## Risk Monitoring and Review

SLSEA's existing risk management processes and their implementation are continuously monitored and assessed with the purpose of identifying weaknesses in the controls, thereby undertaking the required internal and external changes. While the senior management, the audit and management committee are ultimately responsible to monitor activities and for evaluations, the internal auditor frequently carries out system based audits focusing on different service delivery arms. Annually, the efficiency and effectiveness of the risk management process are reviewed and altered as needed.

# SOLAR

# 57.4 MW

## No. of projects

# 14

With the plummeting prices, solar energy will cause all other power generation technologies to reach for all available means of cost reduction



# MANAGEMENT DISCUSSION AND ANALYSIS



## Supply Side Management Activities

The Sustainable Energy Authority implements its mandate through two key strategies. They are Demand Side Management (DSM) and Supply Side Management (SSM) activities. These two strategic areas provide both regulatory supervision to the industry as well as growth support, awareness and energy research and monitoring. The Authority ensures that all stakeholder activities and future goals of the nation and the sustainable energy industry are met and in line with global conventions.

Supply side management activities focus on increasing resource allocation, and uplifting the national renewable energy development programme in meeting the Paris Convention goals and the national renewable energy agenda of the Sustainable Energy Authority, sustaining more than 11% electricity share from New Renewable Energy (NRE) sources.

### Renewable Energy Generation

Renewable Energy Source	No. of Projects	Installed capacities (MW)	Electricity generation (GWh/annum)	CO <sub>2</sub> emission reduction (Ton/annum)
Biomass	12	43	118	92
Hydro	208	419	1,011	789
Solar	14	57	102	80
Solar Rooftop	24,696	261	362	282
Wind	15	128	348	272
<b>Total</b>	<b>24,945</b>	<b>908</b>	<b>1,941</b>	<b>1,515</b>

Project facilitation services extended by SLSEA includes

- Providing the necessary clearance for projects through Project Approving Committee and Appeal Committee
- Coordinating with other institutions in matters connected to the project approval process
- Declaration of Renewable Energy Development Areas
- Monitoring & review of progress of activities of the renewable energy development projects
- Enhancing the awareness among government officers on the renewable energy development process
- Updating information database of renewable energy projects
- Intervention in land acquisition matters related to renewable energy project development

Geographical Information System (GIS) established at SLSEA facilitates the proceedings of renewable energy projects, providing supporting information, which includes

- Solar potential map
- Wind potential map
- River & stream network, river basins & tanks, reservoirs
- Contour data & digital elevation model
- Road network
- Electricity network
- 1: 50,000 land use
- Forest reservations
- Wildlife reservations

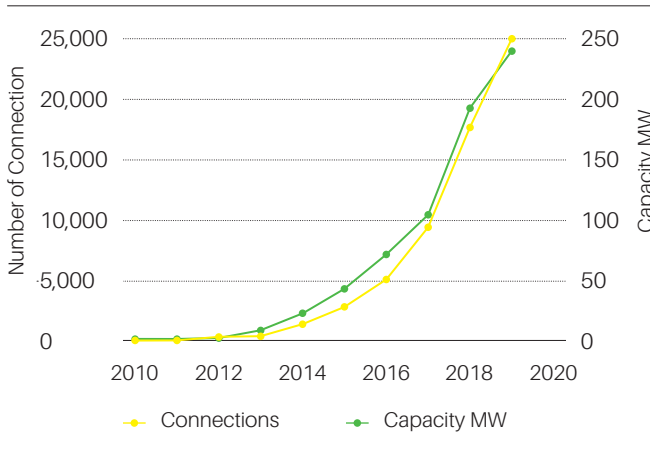
### Soorya Bala Sangramaya

The expedited rooftop solar system programme - Soorya Bala Sangramaya launched in 2016 had passed the 100 MW milestone in 2018, acquiring a national capacity for spreading up the small-scale solar PV systems in a speedy process. Within this backdrop, also along-with the Technical Assistance provided by the Asian Development Bank (ADB), a rooftop solar system capacity of 261 MW could be achieved connecting 24,000 solar PV systems in households, government buildings, religious institutions, industrial & commercial establishments to the national electricity grid through net-metering, net-accounting and net-plus, meeting 2.3% of the annual electricity demand of the country. This has paved the way to create a wide-spread solar PV industry in the country with 296 companies venturing into, providing 7,600 direct jobs and nearly 5,000 indirect jobs.



# Supply Side Management Activities

## Development of Rooftop Solar PV Systems



The technological involvement of SLSEA included training & capacity building of engineers & technocrats and publishing all the necessary technical standards for solar PV system equipment in collaboration with the Sri Lanka Standards Institution (SLSI). Providing formal technical education in solar PV technology was carried out through National Apprenticeship & Industrial Training Authority (NAITA). Direct technical assistance was extended for government institutions for going for solar power generation.



SLSEA is expanding its scope of solar rooftops as it is a valuable alternative source of electricity generation with least environmental and social consequences. One key element in this effort is the introduction of hybrid inverter technology to Sri Lanka. A technical committee has been assigned the task of specifying suitable solar storage systems for the Sri Lankan electricity grid. Issues associated with deep penetration of distribution networks by solar rooftop systems are reasonably resolved by having an on-site energy storage system, with a long life battery.

## National Energy Park - Hambantota

Solar power generation demonstration facility of the Hambantota Renewable Energy Park continually provided training to undergraduates, students and the technical staff already involved in the industry, while generating 1 GWh green energy.



## International Hydro Power Training Centre - Indurana

Passing yet another important milestone in the micro hydro power industry, which is an area producing a wealth of expertise to the world from Sri Lanka, an international training facility - Sarathchandra Rajakaruna International Centre for Hydro Power Promotion, could be established in connection to the micro hydro power demonstration plant of SLSEA at Indurana.





# Supply Side Management Activities

## Resource Exploration & Development Planning

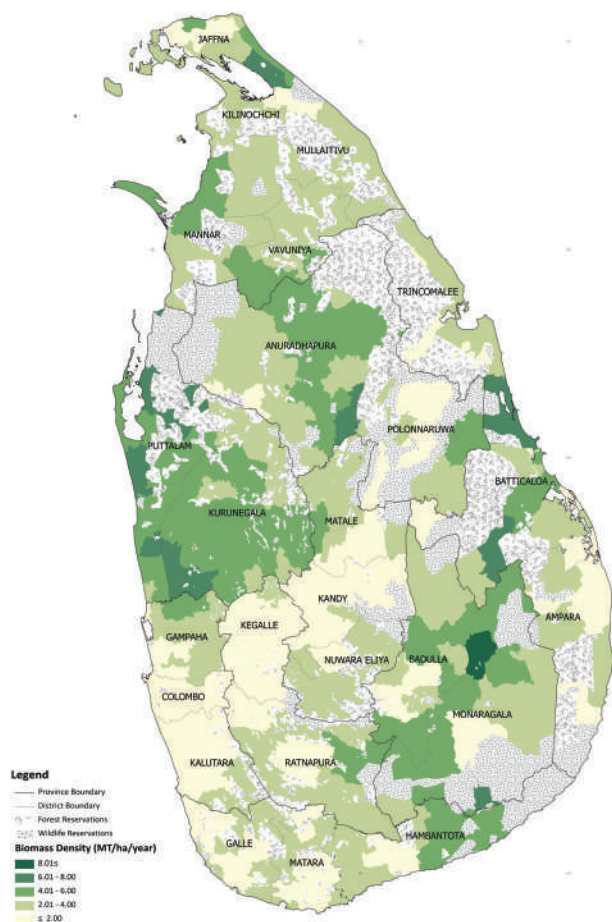
Identification of different renewable energy resources, exploration of potential sites and planning the development process is one of the key areas in the renewable energy development programme. Biomass resource assessment, wind resource assessment, wave energy resource assessment, development of renewable energy resource maps & resource inventory and compilation of renewable energy development plan were carried out under this.

### (a) Biomass Resource Assessment

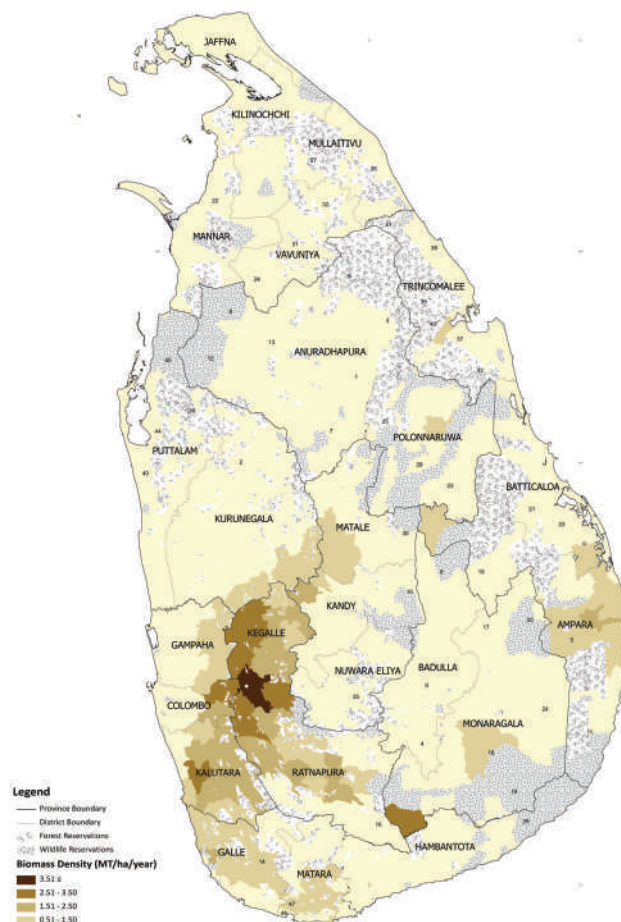
Biomass energy resource assessment studies initiated in the previous year was completed, where the necessary data and information for the compilation of energy resource maps were made available. Biomass energy resources are mainly of two types,

- dedicated energy plantations, which are referred to as 'dendro' resources
- agro-residues.

**Biomass Density - Energy Plantation**



**Biomass Density - Agro Residues**

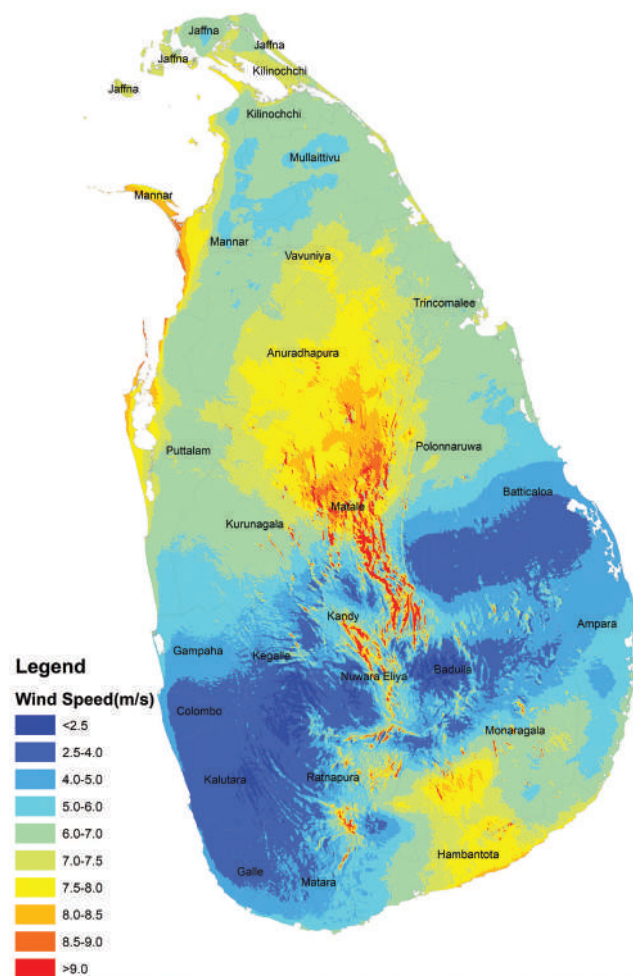


## Supply Side Management Activities

### (b) Wind Resource Assessment

Wind resource assessment implemented in the past years has resulted with the availability of wind energy resource data in the areas with high wind energy potential in the country. It has supported the development of large-scale wind power projects such as the Mannar wind power project which is under development at present. Also the data have been extensively used in the formulation of renewable energy resource map as well. Availability of real-time ground data is one of the most expected aspects in the case of wind power project development, and as there are high wind power plant capacity additions targeted for the future periods, continuous data for further periods will be very useful. So, island-wide wind resource assessment was continued using the National Reference station Network comprising of wind measuring masts installed in different parts of the country.

Wind Resource Map (Mean Wind Speed at Height 100m)

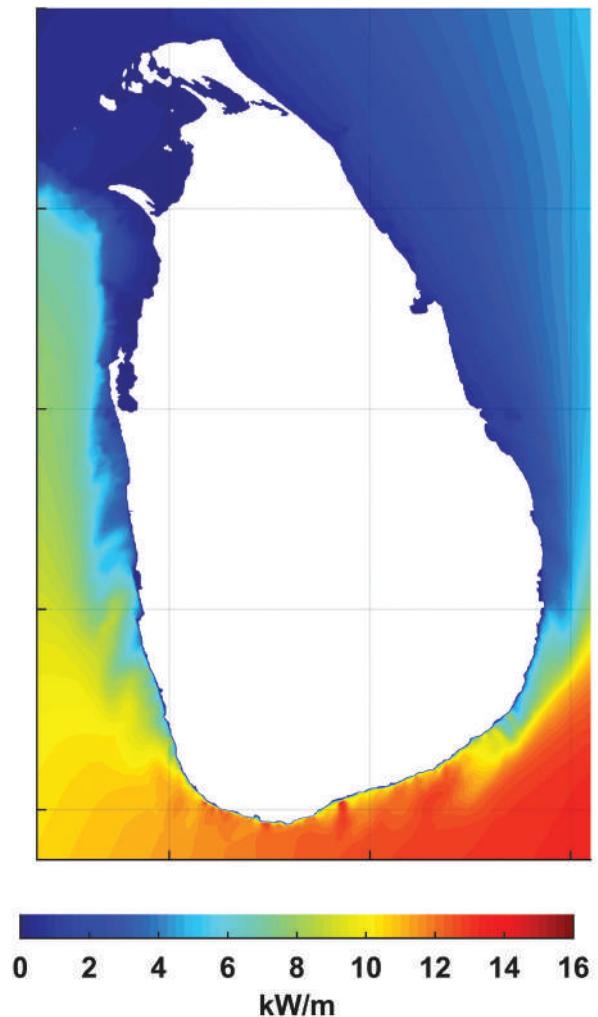


(Source: Global Wind Atlas 3.0)

### (c) Wave Energy Resource Assessment

Wave energy is one of the emerging renewable energy sources in the country. Apart from small scale research type interventions, no major efforts have been made to develop this resource. As the initial step of developing this resource, a wave energy resource assessment was carried out in collaboration with the Department of Mechanical Engineering, University of Peradeniya.

Wave Energy Resource Assessment in Sri Lanka

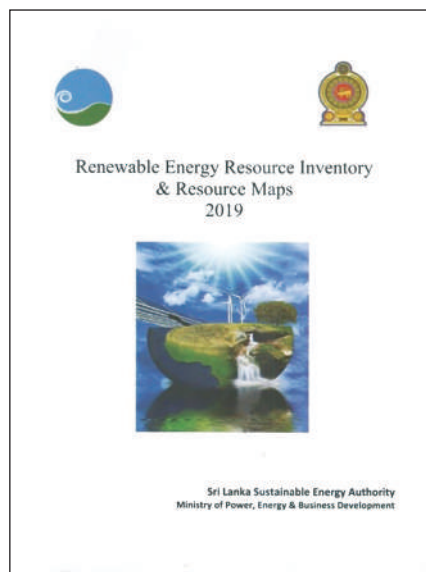




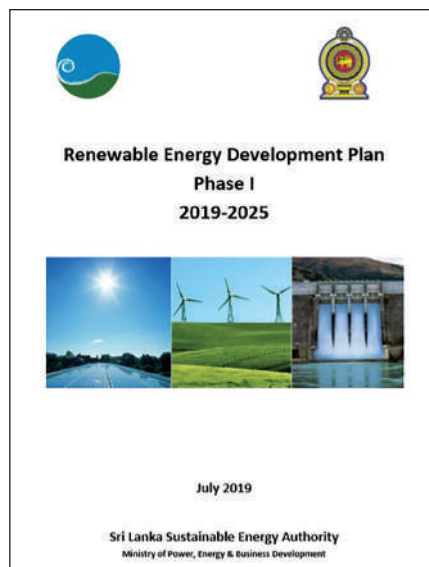
## Supply Side Management Activities

### Renewable Energy Resource Inventory and Resource Maps

In meeting an important compliance requirement stated in section 7 of the Sri Lanka Sustainable Energy Authority Act, Renewable Energy Resource Map & Renewable Energy Resource Inventory was compiled.



### Renewable Energy Resource Development Plan



Section 8 of the Sri Lanka Sustainable Energy Authority Act makes provisions for preparing a comprehensive Renewable Energy Resource Development Plan, which is to be submitted to the Minister, whereby the Minister shall invite public comments for the same through publication of the plan in newspapers. This

process was followed and the draft Plan was published for public comments. At the review stage, processes getting involved in land allocation had also to be taken into further review. Further, availability of the resource, availability of transmission system for evacuation and the possibility of obtaining lands had to be further considered. Accordingly, it is expected to look into the matter in a more practical level in consultation with the CEB and authorities relevant to obtaining lands, and publish the plan after the review.

Four renewable energy resources, namely, hydro, biomass, solar and wind were considered under this.

### Preliminary Development Interventions in Energy Park Projects

Development of solar power and wind power projects in large scales such as 100 MW or above would attract international investors at competitive prices. Therefore, initiatives were made to implement projects of the particular scale, as Energy Parks. Pooneryn solar-wind hybrid energy park and Siyamabalanduwa solar energy park are the first two initiatives in line with this.

#### (a) Pooneryn Solar-Wind Hybrid Energy Park

Pooneryn area of Kilinochchi District has been identified as a prospective area for wind and solar power development, approval of the Cabinet has been granted to develop wind and solar power plants with the capacities of 240 MW and 800 MW in Pooneryn area. Initial project development activities were conducted by SLSEA in collaboration with the National Agency for Public-Private Partnership (NAPPP) of the Ministry of Finance and International Finance Corporation (IFC), which is the private arm of the World Bank.



*Pooneryn Solar-Wind Hybrid Energy Park*

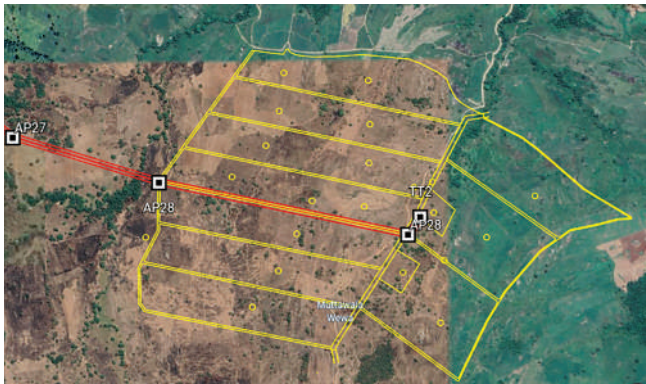
A pre-feasibility study was conducted for the project, where it has been proposed to develop 130 MW of solar power and 240 MW of wind power as the first part of the project. It has been estimated that the direct investment for these projects as US\$ 146 million and US\$ 249 million. The solar power plant which is going to be

## Supply Side Management Activities

installed first will be connected to the Kilinochchi grid substation through the proposed 132 kV transmission line. In the second stage it will be upgraded to 220 kV and connected to the Vavuniya grid substation. Bird study for the project was also completed in consultation with University of Colombo.

It will be possible to add 1,120 GWh of electricity to the national grid when the project is fully implemented. This is 7.5% of the total annual energy demand of the country. In addition to that 845,462 tons of CO<sub>2</sub> emission reduction can also be achieved annually.

### (b) Siyamabalanduwa Solar Energy Park



Under the Energy Park development programme, the first 100 MW solar park is going to be implemented in the Monaragala district. An area of 500 acres has been identified for the project, located in 124/H Kotiyagala Grama Niladhari Division in the Siyambalanduwa Divisional Secretariat of the Monaragala district. Tracing of the land (boundary making by the Department of Survey, Monaragala District) for this project has been completed. Several approvals, such as those from the Land Use Committee and Department of Irrigation of Monaragala District have been obtained. Studies related to archaeological value and water availability were conducted during the year. The Environmental Impact Assessment was conducted obtaining technical assistance of a consultancy firm, having experience in the particular area of subject.

### Energy Policy & Research

Solar power and wind power are expected to make the maximum contribution to the renewable energy based power plant capacity additions in the future periods. Nevertheless, the intermittent nature of these resources creates difficulties in absorbing electricity generated using these resources in large scale. So, it is a major area for research in the current context. In connection to that, two research projects on integration of solar power to the grid were completed as means of identifying solutions for the issues created due to the intermittent nature of solar power, in collaboration with the Department of Electrical & Electronics Engineering, University of Peradeniya.

#### (a) Research project on energy efficient utilization of solar PV through a DC micro grid

Research project on energy efficient utilization of solar PV through a DC micro grid was carried out with the following objectives.

- To investigate design, control and operation of a dc micro-grid with a utility connection, PV panels and energy storage unit
- To investigate the effects of time varying loads and renewable output on energy storage
- To investigate the applications of super capacitors on dc micro-grids
- To investigate an Energy Management System (EMS) that maximizes the renewable energy usage and controls the storage capacity to reduce dependency of utility power.

According to this study, it is observed that interfacing PV to a dc network through a dc-dc converter brings more than 10% energy saving. In order to obtain maximum gain from solar PV connected to a dc network, the loads such as LED lights, computer equipment and air conditioners that have dc bus should be directly interfaced to the dc bus. Further, if LED lights, computer equipment and air conditioners in a commercial building are connected to a dc network powered by solar PV, the electricity bill can be matched with a solar panel having much lesser payback periods compared to the case of conventional operation using ac systems. Further, in order to get the optimal use of solar power in buildings as well as in identified geographical boundaries of the grid, using energy storage systems (ESS), it will be required to optimize systems using energy management systems. In this context, dc micro-grid will be an appropriate technology intervention. The project outcome will provide with the knowhow of different configurations for system optimization in such cases.

## Supply Side Management Activities

### (b) Research project on security of supply with the large-scale deployment of PV

Research project on security of supply with the large-scale deployment of PV in Sri Lanka was carried out with the following objectives.

- Assessing and quantifying solar PV power output variations in power plants connected to Sri Lankan power system using suitable correlation techniques
- Assessing the reserve requirements of the Sri Lankan power system by considering uncertainties of generation and latent demand
- Modeling the Sri Lankan power system with varying amounts of renewable generation and carrying out dynamic studies

According to this study, it has been found that upward and downward regulating reserve for load variability ranges from 2.8-4.7% during the 2018-2028 period and scaling up the renewable energy share from 10% to 20% beyond 2020 increases the total regulating reserve requirement from 4.45 to 7.5% on average. Three methods have been presented to estimate reserve and operating cost for reserve while considering the uncertainties in solar forecasts. Accordingly, methodology for an accurate estimation of the net load requires forecasting solar PV generation with good accuracy. Further, the use of dynamic reserve margin ensures the minimum operating cost and requires maintaining minimum amount of reserve.

### Vidulka National Energy Symposium and Innovation Forum

Vidulka National Energy Symposium was conducted with a view to obtain inputs from the researchers in the universities, research institutes, professional bodies, etc. to make fruitful use of their research outcomes in the sustainable energy development process. A wide spectrum of research papers including the diverse subject areas of energy such as energy policy & planning, electrical engineering, thermal energy systems, chemical engineering, energy management, biomass energy, solar energy, wave energy and geothermal energy were presented in the symposium. Innovations are also a key aspect in adapting renewable energy technologies, and this year's innovation forum was dedicated to solar energy. Valuable innovations in both solar electricity and solar thermal systems were also presented.



### Formulation of Energy Policies

SLSEA collaborated with the Ministry of Power & Energy in the formulation of national policies related to the energy sector. Sri Lanka National Energy Policy & Strategies was published in 2019, which will be a very valuable step in context of the future development activities in the energy sector, particularly in the area of sustainable energy development. This was a key intervention coming under the policy development thrust, one of the key objectives of SLSEA.

# SOLAR ROOFTOPS

# 261 MW

## Connected Accounts

# 24,696

Solar energy usage by residents saw a spike in 2019 encouraged by global trends in renewable energy and environment conservation





## Demand Side Management Activities

### Energy Efficiency Improvement & Conservation

In the area of energy conservation, programmes have been implemented focusing commercial, industrial and domestic sectors under following three categories.

- Regulatory interventions
- Strengthening the energy efficiency services
- Training and awareness

Programmes implemented in the year 2019 are shown in the following sections.

### Establishment of Energy Management Systems

SLSEA facilitates the energy conservation in commercial, industrial and domestic sectors through long term programmes such as Energy Manager programme, Energy Auditor programme, Establishing Energy consumption benchmarks, etc.

#### • Energy Manager Scheme

This year, the SLSEA officials took initiatives to strategically increase the number of energy managers across multiple industries. As a result, 7 new energy managers were accredited in 2019 increasing the total SLSEA registered energy managers to 223. Energy managers play a vital role in sustainable energy management in ensuring that energy consumption and wastage is managed efficiently within organizations. They will be responsible in reducing energy wastage through day to day activities which will contribute towards reducing the carbon footprint of local companies.

#### • Mandatory Energy Conservation Initiatives

The SLSEA together with the Ministry of Power & Energy and through the presidential secretariat, released a Circular on Energy Conservation for government institutions, revising a previous circular. This circular has mandate the appointment of Energy Management Officers and include renewable energy interventions for every government institution. Energy Management Officers will ensure that the energy wastage is kept minimum and energy efficiency is improved within the organization. SLSEA believes this would minimize significant amount of energy waste within state sector institutions that would help lower overall energy use in the country.

#### • Public Sector Awareness on Energy Management

To support above efforts by SLSEA officials, a series of district level workshops and seminars were conducted during 2019 to create awareness and educate energy managers on their role and contribution towards Sri Lanka's sustainable energy goals. Three workshops in Matale (130 participants), Badulla (200 participants) and Monaragala (100 participants) were held during the year.

#### • Registering Accredited Energy Auditors

Energy auditors play vital role in exploring the energy use and thereby identifying energy conservation opportunities in both private and public sectors. In 2019, 2 Energy Auditors were accredited increasing the total No. of Accredited Energy Auditors to 20.

### Introducing Standards and Regulations

SLSEA has implemented multiple activities to set in place regulatory interventions and awareness creation to manage energy efficiency improvement in all sectors i.e. industrial, domestic and commercial sectors.

#### • Guideline for Sustainable Energy Residences in Sri Lanka

Over the years, the implementation of sustainable energy activities has been limited to mostly industrial and commercial sectors. However, during the last few years, domestic sector has also shown an interest in energy conservation and renewable energy usage. Having realized the potential of the domestic sector in achieving sustainable energy goals, SLSEA published the 'Guideline for Sustainable Energy Residences in Sri Lanka', which will provide a set of guidelines for residential buildings, to design and build an energy efficient home. So far 250 copies of this publication have been circulated.

SLSEA organized a stakeholder forum to build awareness on 'Guideline for Sustainable Energy Residences in Sri Lanka'. Professionals from the construction sector architects, contractors and other related industry stakeholders were aware of how they could incorporate these guidelines in building energy efficient residences.

#### • Energy Labelling

Appliance energy labelling is a key area of which regulations are implemented and monitored by the SLSEA. This ensures that products that consume energy follow certain standards and have energy consumption limits. Energy labels display on the products will help the consumers to choose energy efficient products during purchase.

## Demand Side Management Activities

Below table provides detailed progress of the energy labelling for appliances in 2019:

Description	Progress
Minimum Energy Performance Standard for LED Modules	<ul style="list-style-type: none"> <li>• Purchased relevant international standards.</li> <li>• Collected samples of LED modules from the market for testing in order to set benchmarks on energy performance.</li> <li>• Preparation of the standards is in progress.</li> </ul>
Energy Labelling programme for Ceiling Fans	<ul style="list-style-type: none"> <li>• Test facility established at SLSI became fully functional.</li> <li>• Convened a stakeholder forum to make aware ceiling fan import companies on mandatory energy label.</li> <li>• Called for bids to create media content on ceiling fan energy label and the job was awarded.</li> </ul>
Energy Labelling programme for Computers	<ul style="list-style-type: none"> <li>• Established a computer test lab at University of Moratuwa.</li> <li>• Convened a stakeholder forum to make aware computer manufacturers and importers on voluntary energy label and launched the voluntary label.</li> </ul>
Energy Labelling programme for refrigerators	<ul style="list-style-type: none"> <li>• Draft standard was finalized and sent to SLSI for approval of sectoral committee.</li> <li>• Several models underwent testing on energy performance.</li> </ul>
Energy Labelling programme for LED lamps	<ul style="list-style-type: none"> <li>• Cabinet approval has been received for the regulation on mandatory MEPS label.</li> </ul>

### Advisory and Counselling Services

SLSEA assists industries, commercial and state sector institutes to solve their energy related issues by conducting energy audits, providing consulting services, answering queries, awareness programs in the area of energy management and conservation upon request. A well maintained instrument bank is available for hiring for energy audit activities. The Authority has registered energy services companies to provide particular services in carrying out energy audits and implementation of energy efficiency improvement projects.

Some of the activities implemented on advisory and counseling are as follows:

- Total number of instrument hiring days - 1,710
- Added 2 hand held power meters and 5 Lux meters for the instrument bank
- Altogether 44 ESCOs have been registered with SLSEA
- Conducted 4 Energy Audits at Dockyard PLC, Galewela Divisional hospital, District General Hospitals in Dambulla & Matale
- DSI Rajarata Tile Factory power measurement and analyzing
- Conducted 5 ISO 50001 Energy Management System (EnMS) audits with SLSI at Gislaved Gummi Lanka (Pvt) Ltd, Jetwing Lagoon Hotel, St Andrews Hotel, Induruwa Beach Resort, and Heritage Tea Factory Hotel
- Determination of Cooling Load and Designing of Air Conditioned system for National Victims Protection Authority
- Providing Consultancy services for 15 Energy Audits in Industrial Zones

### Formulation & Dissemination of Energy Data & statistics

- Compilation of Energy Balance 2017 and Key Energy Statistics 2017 have been completed. Data verification on Energy Balance 2018 is in progress.

### Research and Development

Initiatives were taken to explore the potential of adopting new and innovative technologies for the development of energy management practices in Sri Lanka.

Designed a prototype of a tea withering trough including modified duct, radiators, process control and spreading mechanism with the assistance of Tea Research Institute (TRI), which would help in accurately evaluating the energy performance.

### Pilot Project on Tri Generation Facility in Biyagama

The SLSEA conducted a feasibility study for implementation of Tri-generation of a pilot project to identify potential energy optimization and reduce energy wastage in the Biyagama Export Processing Zone. This project took into account the types of manufacture and production processes that take place in selected factories and the energy consumption in each of these stages. The project identified that of the input energy for manufacturing process a significant portion of the output energy is underutilized. The project explored how the excess and energy developed as a bi product could be further optimized in managing the energy consumption of industries. As a result, central thermal energy was

## Demand Side Management Activities

identified as a valuable energy resource that is developed in most industries, which could be reutilized for industrial processes for power, cooling and heating.

This feasibility study was conducted for a tri-generation facility with the assistance of ISB Kurunegala, which explores the potential of multiple input and output energy resources for reuse within the Biyagama Industrial Zone, thereby minimizing energy wastage and optimizing energy usage. The final report was submitted and presented to SLSEA, showcasing the virtues of a central thermal energy supply utility for industrial zones with added on-site power generation capability.

### Operation Demand Side Management (Operation DSM) Programme

SLSEA having the responsibility to design and implement the EEI&C programme, initiated a national programme named Operation Demand Side Management (Operation DSM) under the guidance of a Presidential Task Force on Energy Demand Side Management (PTF on EDSM) with modest success. The programme which was launched in 2017 could not source the financial and human resources as anticipated in the programme design. Nevertheless, the programme was implemented under severe constraints. A brief summary of its status in the ten thrust areas identified by SLSEA to reduce energy demand is given below:

#### Efficient Air Conditioning

A proposal is being prepared seeking international funding to establish a test facility for testing room air-conditioners.

#### Efficient Lighting

A study of 100 commercial buildings was completed. The study showed that approximately 515GWh of electrical energy per year can possibly be saved with lighting retrofits.

#### Efficient Refrigerators

A pilot project to replace 10,000 used refrigerators is being developed and is awaiting utility response on inclusion of hire purchase installment payments in the electricity bill. The procurement of storage cylinders to store discarded refrigerants from aging refrigerators is in progress.

#### Efficient Chillers

A funding proposal was prepared and was not considered by the development partner. It will be further developed as a two pronged programme targeting other development partners. Nevertheless, a pilot project on chiller replacement which was channeled through Ministry of Industry and Commerce was launched and is in progress.

#### Efficient Motors & VSDs

A study of induction motors in the industrial sector revealed that not much efficiency gains can be realised by motor replacement

approach. A promising scope to introduce variable speed drives (VSD) was uncovered from the same study. A pilot project to increase motor efficiency improvement was commenced and 3 proposals were submitted by the industries that participated in the survey. All three proposals were rejected as not much savings were possible to justify the investment.

#### Eliminating Incandescent Lamps

The first phase of the programme, targeting families that use less than 30kWh per month was implemented. The programme achieved modest success, with different distribution entities of the two utilities responding in varying degrees of commitment. Analysis of pre and post implementation energy use is in progress. Automated reporting mechanism reported that only 35% of the first consignment reached intended households by end 2019.

#### Efficient Fans

Mandatory labelling scheme is fully implemented and the import of inefficient fans to the country is now prohibited. The pre-test phase results of appliance survey indicate that a large stock of aging fans are functioning in most residences in the country. A targeted programme to replace this stock of aging fans is being formulated after analysing the data from an island wide survey of homes involving a representative sample of 6,357 residences.

The survey, titled 'Household Domestic Electrical Equipment Survey (HDEES)' which was conducted in late 2019 by the Department of Census and Statistics and they generated a vast array of data on all electrical appliance types, age, penetration and time of use, information on cooking energy and other household expenses on energy and non-energy commodities. The data analysis of this survey is expected to be completed shortly, and provide valuable load research data for estimation of demand from the residential sector.

#### Green Buildings

A programme to promote the building code is being drafted.

#### Smart Homes

Wide acceptance of the solar rooftop programme shows the realisation of the targets of the programme much earlier than anticipated. However, other aspects related to Smart Homes were not implemented as expected.

#### Power Factor Improvement

A limited study on the optimal location of power factor correction equipment was undertaken.

An approximate estimation of possible energy savings (kWh) and demand savings (MW) indicates that the programme can save 1,243 GWh by 2020 and differ a 417 MW capacity in generation expansion.



# Demand Side Management Activities

## Energy Education Programme

Creation of mass awareness on sustainable energy requires long term retention of concepts and practice. School children will not only play a vital role in propagating efficient use of energy but also furthering the larger cause of educating the society about new opportunities in sustainable energy. Recognizing the immense potential that school children can make towards this, SLSEA introduced the Energy Education Programme, in which the School Energy Club (SEC) takes the pride of place in collaboration with the Ministry of Education.

School Energy Clubs have been conducted since 2015 and SECs have been established in schools island-wide. In order to improve the programme based on past experience, the programme has been reviewed, and a modified programme was implemented in 2019. Science teachers in the 9 provinces were selected to be trained so that they can take charge of the School Energy Clubs. 1,250 teachers were trained under this programme in 2019. As a result, 700 energy clubs were set up and re-registered in the nine provinces.



'Rata Wenuwen Ekata Sitimu' programme organised by the Presidential Secretariat involved SLSEA where it conducted school awareness programmes in Monaragala district on 02-05 July, 2019.



## Awareness Programmes

- Exposure was provided to provincial journalists on the importance on renewable energy development and to inculcate energy conservation tips. It was held in Nuwaraeliya, Kegalle, Ratnapura Districts.
- Energy efficiency proficiency badge was promoted in Scout Cambory programme with the participation of 2,500 scouts.
- The quarterly magazine 'Sanraksha' was published to educate the school and university community on events carried out by SLSEA regularly, keeping them informed of the energy sector activities.





## Donor Funded Projects

The Sustainable Energy Authority has been partnering with international development agencies over the years in achieving targets set by the Paris Convention to reduce GHG and increase renewable energy generation. Donor agencies provide the Authority with technical assistance, training and knowledge transfer opportunities, funding and resource mobilization as well as research and development support to explore renewable energy resources.

In 2019, the Sustainable Energy Authority focused on increased renewable energy awareness, electricity generation, and preparation towards CoP21 Paris agreement through preparatory work in emission reduction, monitoring, reporting and verification of emission reductions through an elaborate reporting system.

### Supporting Electricity Supply Reliability Improvement Project

**Partners:** CEB, LECO, National Water Supply and Drainage Board (NWSDB)

**Donor Agency:** Asian Development Bank

**Objectives:**

- supporting productive energy use for small isolated islands and rural communities
- improving livelihoods in local communities,

**Location:** Jaffna area of the Northern Province (Nainathivu, Analativu and Delfts)

**Activities:**

- i. Training on the safe use of electrical equipment
- ii. Training on productive use of income opportunities emerging with the electricity access
- iii. Increasing employment in maintenance, operation of hybrid renewable energy systems and other facilities and
- iv. Developing additional infrastructure.

**Project outcomes**

The project was implemented successfully during the year with Initial reconnaissance field visit was completed by the consultants. In line with the Sustainable Energy Authority's goals as well as the project objectives a socio economic survey pilot test was completed to identify suitable communities to benefit from the project.

This project specifically targets small isolated islands where their energy needs are not sufficiently met and face transmission challenges. In addition, educating communities on opportunities and benefits of utilizing renewable energy resources and their economic benefits.

Initial insights were gathered on residents' needs and their expectations from the new electrical infrastructure. This was followed by a first and second income generation opportunities mapping workshops aimed at identifying the economic benefits and potential for the communities through this project. Was completed. A pilot community gathering consultations were also concluded thereafter.

### Appropriate Mitigation Actions in the Energy Generation and End-Use (NAMA Project)

**Partners:** Ministry of Power and Renewable Energy, Climate Change Secretariat (CCS) under the Ministry of Mahaweli Development and Environment.

**Donor Agency:** UNDP/ GEF

**Objectives:**

To support appropriate climate change mitigation actions in energy generation and end-use sectors to assist the efforts of the Government of Sri Lanka to achieve its GHG mitigation targets.

**Duration:** July 2015 - December 2019

This project was successfully concluded in 2019 and has met its energy and GHG emission reduction targets with 3 targeted NAMAs in energy generation and end use sectors. The project implementation focused in solar PV installation with battery storage, which would reduce emission generation by reducing arising from fossil fuel based electricity generation.

Having identified sectors with potential to lower GHG emissions, the project targeted tea factories that would generate less emission through electricity savings. As a means of further encouraging a transition from high GHG emission energy generation, the project invested in biogas digesters (varying in sizes from 8 to 15 m<sup>3</sup>) to produce biogas, to offset LPG usage for emission reductions.

**Project outcomes**

**Reducing Green House Gas (GHG) Emissions**

- 79% (12,766 tCO<sub>2</sub>eq) of the target GHG emission reductions and 93% (69,983 GJ) of target energy savings were achieved through this project.
  - Solar PV systems with battery storage - 101 tCO<sub>2</sub>eq (23%)
  - High efficiency motors (HEMs) and variable frequency drives (VFDs) - 4,355 tCO<sub>2</sub>eq (100%)
  - Biogas digesters - 8,309 tCO<sub>2</sub>eq (73%)

## Donor Funded Projects

### Renewable Energy Data Capturing and Reporting

- A web based app EnerGIS was developed by the project and it is managed by SLSEA. It uses adopted MRV systems and is linked to national and provincial energy and GHG emission baseline inventories to capture and record renewable energy generation and end-user consumption by provincial personnel and private sector entities.
- Prioritized Nationally Appropriate Mitigation Actions (NAMAs) in the energy generation and end-use sectors were identified and designed for energy-sector stakeholders including SLSEA and CCS, using combined results from Marginal Abatement Cost Curve (MACC) analysis and Multi-Criteria Analysis.

### Technical Support and Training

- Private and public sector entities including several tea plantation companies, biogas installers, solar PV installers and provincial-level officers and personnel with NAMA oversight, have implemented aforementioned NAMAs that contribute to Sri Lanka's voluntary mitigation targets and provided those entities with the necessary experience and confidence to implement NAMAs in the renewable energy and end use energy sectors.
- Tools and expertise were provided for accurate measurements and accounting of actual GHG emission reduction resulting from an institutional framework for NAMA project processing procedure, an established NAMA registry and accounting of actual GHG emission reduction through an MRV framework. Expertise is available through provincial-level personnel and field officers, solar PV installers and biogas experts as well as CCS personnel.

### Electric Three-Wheeler Pilot Project

Availability of fossil fuel as an energy resource is diminishing due to increased demand that is not equally met by the availability. This widening gap between new oil discoveries and consumption, and reaching world's peak oil production have mostly been due to increasing demand from transportation sector, which is also a significant contributor of air pollution.

Sri Lankan situation is no different. It is estimated that there is approximately 1 million 3-wheeled vehicles in Sri Lanka. These three-wheelers often operate with the 4 and 2-stroke internal combustion engines where the piston transmits power by rotating the crankshaft.

These are usually powered by diesel and are more difficult to pass emission tests due to higher greenhouse gas emissions (GHG emissions). They are also more expensive to maintain. The government is also considering restricting three wheel imports.

The E-trike, on the other hand, does not require engine service or emission testing and has zero maintenance costs, which has a monetary gain of about \$ 1,000 per year. The Sustainable Energy Authority has obtained five 3-wheelers donated by the Korean Energy Agency which are available at BMICH as a demonstration project.

This e-trike project will prove to be a solution for the high cost as well as high GHG emission released by the three wheelers in the roads of Sri Lanka.



# BIOMASS

# 43.5 MW

## No. of projects

# 12

Biomass is being explored as a high potential energy source that could be generated from agricultural residue and grown biomass, under the energy resource mapping initiative.







# Human Resource Development

The Sustainable Energy Authority has continuously invested in the renewable energy sector stakeholders both internal and external, as a means of ensuring a steady growth in the renewable energy platform in Sri Lanka. The Authority has created opportunities for technology transfers, knowledge transfers, capacity development and increased exposure and training in the sustainable energy sphere. This is one of the key priorities in the Authority's human resource development mandate which has contributed immensely towards the increase in sustainable energy project in the country.

## Internal Human Resource Development Programmes

Several programmes were conducted for Sustainable Energy Authority staff aimed at enhancing their knowledge and increasing their exposure to global sustainable energy development trends.

The overseas training opportunities offered to engineers and project planners focused on identifying potential renewable energy projects that can be implemented in the Sri Lankan landscape with maximum benefits.

Overseas training was provided in solar and wind energy, off shore wind energy, green buildings, demand side energy efficiency and project financed energy contracts, while the local training programmes were in procurement procedures, advanced software skills and internal audit planning.



*South -South Knowledge Exchange Program on Energy Efficient & Green Buildings, Seoul, Korea*



*Wind Resource Assessment and Wind Farm Planning, National Institute of Wind Energy, India*



*Offshore Wind Energy Programme, United Kingdom*

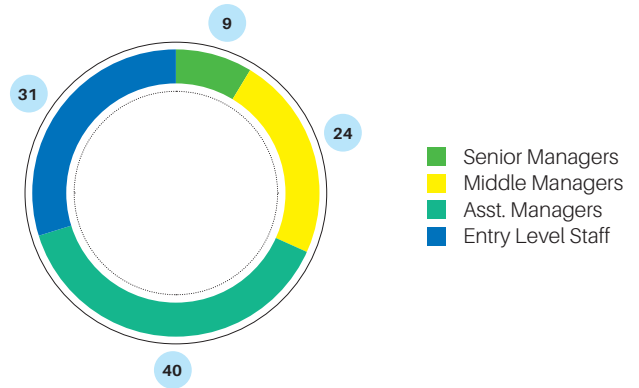
# Human Resource Development

## Our Staff

The Authority takes great pride in the contribution of the staff in achieving the national sustainable energy goals.

Our staff composition ensures that the renewable energy project approvals, supervision, implementation, assessment, research and on ground support is available to international and local sustainable energy investors.

SLSEA Staff Chart





# Action Plan 2020

The Nationally Determined Contributions (NDCs) to Green House Gas (GHG) emission reduction efforts have been ratified to the United Nations Framework Convention on Climate Change (UNFCCC), where the NDC targets have been declared for the period 2020-2030.

The Government of Sri Lanka (GoSL) is committed to align the development programmes in the country to the Sustainable Development Goals (SDGs) set by the United Nations. Action Plan 2020 has been developed taking in to consideration of national and international sustainable energy development needs.

The Sustainable Energy Authority together with the Ministry of Power and Energy has set in place a national renewable energy strategy that is aimed towards achieving the commitments made to the United Nations Climate Change Convention. The Government aims to secure reliable, affordable and clean energy to all the citizens across the island.

As the national entity responsible for sustainable energy development, SLSEA aims to diversify energy resources, and improve energy efficiency, conservation, conducive policies, energy information management and investments in the sustainable energy sector as key priorities. Towards this, the Sustainable Energy Authority has identified below to be achieved by 2020 as its sustainable energy goals.

- Generating 20% grid electricity  
By 2020, to alternate imported fossil fuel by replacing it with new renewable energy sources that can generate upto 20% of the national grid.
- Reduce 10% total energy usage  
By 2020, implement strategies for energy efficiency improvement and conservation (EEI&C) measures.

SLSEA has engaged several strategies to realize these targets whilst ensuring energy security.

- Increasing the use of all forms of renewable energy
- Improvement of energy efficiency and conservation across all energy value chains
- Formulation of policies and strategies to encourage transition of the country's energy system from fossil fuel base to a sustainable energy base
- Creation of a conducive climate for sustainable energy investments in the country
- Introduction and promotion of new sustainable energy technologies
- Engaging the public to adopt sustainable lifestyles, habitats and neighbourhoods

The Sustainable Energy Authority has implemented energy efficiency improvement programmes focusing on regulatory interventions and on strengthening energy efficiency services sector through an accelerated programme under a Presidential Task Force. This programme is expected to help realize the 20% improvement programmes target by 2030.

The programmes are implemented under 4 thematic areas:

- Energy Efficiency Improvement & Conservation – The objective is to directly involve in the realisation national energy efficiency targets
- Renewable Energy Development – The objective is to directly involve in the realization of national renewable energy targets
- Knowledge Management – The objective is to implement energy education programmes towards an energy conscious nation
- Strategy – The objective is to develop policy interventions, R&D interventions, technological dialogues, etc. to support long-term sustainable energy establishment in the country

# Action Plan 2020

## Planned Activities in 2020

Supply Side Management Activities	Demand Side Management Activities
Renewable energy resource allocation process; facilitation and monitoring of projects	Implementation of energy management programmes in establishments through energy managers, energy auditors and ESCOs
Stakeholder awareness activities including training and workshops on the project implementation process and environment assessment	Establishment of energy consumption benchmarks
Performance monitoring of the commissioned renewable energy projects	Implementing the Code of Practice for Energy Efficient Buildings and Households
Wind energy development	Initiate energy labelling programmes for ceiling fans, computers, refrigerators, LED lamps, tubular fluorescent lamps and ballasts, room air conditioners
Implementation of energy parks (Siyambalanduwa and Pooneryn)	Conduct the Sri Lanka National Energy Efficiency Award
R&D in new solar power technologies and piloting solar storage and floating solar panels	Compilation of energy balance and disaggregation of energy data by end use
Soorya Bala Sangramaya	Energy efficiency improvement related R&D, feasibility studies and pilot projects
Clean energy and network efficiency project	Operation Demand Side Management (ODSM) programme
UNDP/GEF funded sustainable biomass project (Phase II)	Implement energy education and promotion
Support electricity supply reliability improvement project	
Operation and maintenance of Renewable Energy plants (Hambantota and Indurana)	

# SAVING ENERGY

# 738 GWh

Several interventions spanning from regulatory measures to market transformation, Sri Lanka realised large scale energy saving in 2019.



# FINANCIAL INFORMATION



# Income Statement

For the year ended 31st December		2019	2018
	Note	Rs.	Restated Rs.
<b>Income</b>			
Operational Income	3	278,066,627	856,019,486
Non Operational Income	4	85,770,181	67,551,064
<b>Total Income</b>		<b>363,836,808</b>	<b>923,570,550</b>
<b>Expenditures</b>			
<b>Project/Activity Expenses</b>			
	5		
Renewable Energy	5.1	48,476,570	259,310,879
Energy Management	5.2	33,195,655	18,985,107
Knowledge Management	5.3	8,963,770	13,837,618
Strategic Activities	5.4	9,667,808	4,922,150
		<b>100,303,803</b>	<b>297,055,754</b>
<b>Recurrent Expenses</b>			
	6		
Salaries and Allowances	6.1	92,202,463	94,375,523
Travelling and Subsistence	6.2	1,647,123	1,005,671
Supplies	6.3	3,996,352	3,755,925
Maintenance Expenses	6.4	10,288,766	7,825,793
Contract Service	6.5	56,708,875	39,132,316
Depreciation Expenses	6.6	44,125,670	351,857,878
Other Recurrent Expenses	6.7	11,122,948	12,342,441
		<b>220,092,197</b>	<b>510,295,547</b>
<b>Total Expenditure</b>		<b>320,396,000</b>	<b>807,351,301</b>
<b>Surplus/(Deficit)</b>		<b>43,440,808</b>	<b>116,219,249</b>

For and on Behalf of the Sri Lanka Sustainable Energy Authority



Director (Finance)



Director General



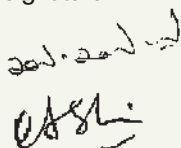
Chairman

"The Accounting policies on pages 50 to 52 and Notes on pages 53 to 68 form an integral part of these Financial Statements. The Board of Management is responsible for the preparation and presentation of these Financial Statements. These Financial Statements were approved by the Board of Management and signed on their behalf."

#### Name of the Director

- Nayana Nathawitharana
- A.K.Gunasekara

#### Signature



# Statement of Financial Position

As at 31st December		2019	2018
	Note	Rs.	Restated Rs.
<b>Assets</b>			
<b>Non Current Assets</b>			
Property, Plant and Equipment	10		
Free Hold	10.1	502,192,773	529,357,676
Lease Hold	10.2	38,977,984	40,506,532
Intangible Assets	11	2,285,407	3,467,173
Work in Progress	12	73,059,179	46,357,142
Investments	13	102,332,758	93,587,042
<b>Total Non Current Assets</b>		<b>718,848,101</b>	<b>713,275,565</b>
<b>Current Assets</b>			
Receivables	14	43,414,997	22,974,640
Other Current Assets	15	33,993,375	31,225,640
Cash and Cash Equivalents	16	437,313,627	452,808,494
<b>Total Current Assets</b>		<b>514,721,999</b>	<b>507,008,774</b>
<b>Total Assets</b>		<b>1,233,570,100</b>	<b>1,220,284,339</b>
<b>Equity And Liabilities</b>			
<b>Equity</b>			
Accumulated Fund	17	22,100,336	22,100,336
Net Surplus/Deficit		188,150,643	189,150,949
Deferred Grant	18	380,496,286	423,846,967
Sri Lanka Sustainable Energy Fund	20	370,902,975	335,605,770
Sustainable Guarantee Fund		107,419,486	98,275,578
Revaluation Reserve		101,217,000	101,217,000
<b>Total Equity</b>		<b>1,170,286,726</b>	<b>1,170,196,600</b>
<b>Non Current Liabilities</b>			
Gratuity Provision		24,427,119	23,907,730
<b>Total Non Current Liabilities</b>		<b>24,427,119</b>	<b>23,907,730</b>
<b>Current Liabilities</b>			
Other Payables	19	33,806,770	21,130,525
Net Deposit On Land Acquisition		5,049,485	5,049,485
<b>Total Current Liabilities</b>		<b>38,856,255</b>	<b>26,180,010</b>
<b>Total Equity and Liabilities</b>		<b>1,233,570,100</b>	<b>1,220,284,339</b>

The Accounting policies and notes appearing pages 50 to 68 form an integral part of the financial statements.



## Statement of Changes in Equity

Description	Accumulated Fund Rs.	Net Surplus/ Deficit Rs.	Deferred Grant Rs.	Revaluation Reserve Rs.	Sri Lanka Sustainable Energy Fund Rs.	Sustainable Guarantee Fund Rs.	Total Rs.
Restated Balance as at 2018.01.01	22,100,336	84,442,825	808,842,964	101,217,000	332,842,788	89,527,434	1,438,973,347
Increase/ (Decrease) for the Year 2018		116,219,249	(384,995,997)			-	(268,776,747)
Transferred to Guarantee Fund		(8,748,144)				8,748,144	-
Transferred to Energy Fund-income		(24,346,730)			24,346,730		-
Transferred to Energy Fund-Project exp		21,583,748			(21,583,748)		-
Land Revaluation							-
Restated balance as at 31.12.2018	22,100,336	189,150,948	423,846,967	101,217,000	335,605,770	98,275,578	1,170,196,599
Increase/ (Decrease) for the Year 2019		43,440,808	(43,350,681)				90,127
Transferred to Guarantee Fund		(9,143,908)				9,143,908	-
Transferred to Energy Fund-income		(44,628,149)			44,628,149		-
Transferred to Energy Fund-Project exp		9,330,944			(9,330,944)		-
Land Revaluation							-
Balance as at 31.12.2019	22,100,336	188,150,643	380,496,286	101,217,000	370,902,975	107,419,486	1,170,286,726

The Accounting policies and notes appearing pages 50 to 68 form an integral part of the financial statements.

# Statement of Cash Flows

For the year ended 31st December		2019	2018
	Note	Rs.	Restated Rs.
<b>Cash Flows From Operating Activities</b>			
Surplus/(Deficit) for the Year		43,440,808	116,219,249
<b>Adjustment For:</b>			
Loss and Damage		-	-
Interest Income	3, 8	(21,829,608)	(19,379,480)
Amortized Grant (for Funds Received)	7	(43,350,681)	(350,329,330)
Transfers From Energy Fund		-	-
Gratuity Provision		2,035,590	4,378,837
Revaluation loss/(Over Depreciation)		-	260,579,597
Profit from Disposal of Fixed Assets		(12,359,442)	
Depreciation	5.6	44,125,670	91,278,282
<b>Operating Profit/(Loss) before Working Capital Changes</b>		<b>12,062,337</b>	<b>102,747,154</b>
(Increase)/Decrease in Other Current Assets		(22,809,899)	(50,587)
Increase/ (Decrease) in Current Liabilities		12,676,245	(7,491,342)
Cash Flow generated Operating Activities		1,928,683	95,205,225
Gratuity Paid		(1,516,201)	(684,422)
<b>Net Cash Flow generated from Operating Activities</b>		<b>412,483</b>	<b>94,520,804</b>
<b>Cash Flows from/(Used in) Investing Activities</b>			
Purchase of Property, Plant and Equipment	9.1	(13,650,053)	(31,810,099)
Intangible Assets		(600,400)	(160,000)
Work in Progress	11	(26,702,037)	(12,594,272)
Investments in FDs and TBs	12	(8,745,716)	(8,679,877)
Interest Income	3, 8	21,431,414	19,311,214
Disposal of Fixed Assets		12,359,442	
Loans Disbursed to Developers		-	-
<b>Net Cash Flow from/(Used in) Investing Activities</b>		<b>(15,907,350)</b>	<b>(33,933,034)</b>
<b>Cash Flows from/(Used in) Financing Activities</b>			
Deferred Grant	18	-	-
Sri Lanka Sustainable Energy Fund		-	-
Accumulated Fund		-	-
Sustainable Guarantee Fund		-	-
Loans Repayable to Foreign Donors		-	-
Loans from ADB (L 2892 SRI)		-	-
Disbursement of Loan ADB (L 2733 SRI)		-	-
<b>Net Cash Flow from/(Used in) Financing Activities</b>		<b>-</b>	<b>-</b>
<b>Net Increase/(Decrease) in Cash and Cash Equivalents</b>		<b>(15,494,867)</b>	<b>60,587,770</b>
<b>Cash and Cash Equivalents at Beginning of the Year</b>	16	<b>452,808,494</b>	<b>392,220,724</b>
<b>Cash and Cash Equivalents at End of the Year</b>		<b>437,313,627</b>	<b>452,808,494</b>

The Accounting policies and notes appearing on pages 50 to 68 form an integral part of the financial statements.

# Notes to the Financial Statements

## 1. Corporate Information

### 1.1 General

Sri Lanka Sustainable Energy Authority (SLSEA) was established on 1st of October 2007. It is located at Block 5 of the BMICH in Colombo 07.

Energy Conservation Fund (ECF) Act No.02 of 1985 was repealed by Sri Lanka Sustainable Energy Authority Act No.35 of 2007. All the assets and liabilities of ECF as at 30th September 2007 were automatically transferred to the accounts of SLSEA from 1st October 2007.

The Regional Center for Lighting (RCL) which was under the SLSEA was transferred to the Ceylon Electricity Board as per instructions received from the Ministry of Power & Energy. Accordingly, the assets and liabilities and employees of the RCL were transferred to the CEB in December 2012.

### 1.2 Principal Activities of Authority

The principal activities of SLSEA are developing renewable energy resources including declaring energy development areas, implementing energy efficiency and conservation measures, conducting programs to promote energy security, reliability and cost effectiveness in energy delivery and carrying out information management of the energy supply and demand.

### 1.3 Funds of the Authority

As per the Sri Lanka Sustainable Energy Authority Act, the SLSEA is required to maintain and operate 3 funds. They are as follows:

#### 1.3.1 Fund of the Authority

This fund is maintained to deposit initial capital, permit fees, loans, lease rentals and other receipts approved by parliament. All sums of money to defray expenditure incurred by the authority in exercise, discharge & performance of its powers, functions and duties as per the act, are paid out of this fund.

#### 1.3.2 Sri Lanka Sustainable Energy Fund

This fund is maintained to deposit initial grant from consolidated fund, proceeds of cess, royalties, fees for professional services, money from lease rentals, application fees and fees for managing carbon assets.

Subsidies for renewable energy conversion plants, subsidies for promoting energy efficient appliances & technologies, subsidies for fuel switching, expenses of awareness programs, incentives for encouraging energy conservation measures are payable out of this fund.

#### 1.3.3 Sustainable Guarantee Fund

The purpose of this fund is to provide guarantees on behalf of investors who apply for loans to carry out projects relating to energy efficiency. As per the act there shall be credited to this fund an initial capital from the consolidated fund, an annual premium and interests for guarantees offered and funds received from the Fund of Authority.

### 1.4 Number of Employees

Number of employees as at 31st December 2019 – 102 .

## 2. Basis of Accounting

### 2.1 Summary of Significant Accounting Policies

#### 2.1.1 Basis of Preparation and Statement of Compliance

The Balance Sheet, Income Statement, Statement of changes in Equity and Cash flow statements of SLSEA as at 31st December 2019 together with accounting policies and notes have been prepared in compliance with the Sri Lanka Public Sector Accounting Standards.

The financial statements of the SLSEA are presented in Sri Lankan Rupees. The financial statements are prepared on accrual basis under the historical cost convention. Where appropriate the accounting policies are disclosed in succeeding notes.

#### 2.1.2 Comparative Figures

Comparative figures have been adjusted to conform to the changes in presentation in the current Financial Year. The comparative figures for year 2018 have been restated.

#### 2.2.1 Accounting for Government Grants and Disclosure of Government Assistance

Government Grants are divided into two categories as capital grant and recurrent grant. Recurrent grant is used to meet the reoccurring expenses such as salaries of the staff, building rent, etc. Capital grant is used to meet program (activities) expenses and purchase of fixed assets. As the Activity/program expenses comprise recurrent and capital expenses, they are incurred from the capital grant.

Government Capital grant used in purchase of fixed assets are considered as income for the year.

Grants related to activates/program expenditure are presented as a credit in the income statement, under the heading capital grant for programs/activity expenses.

## Notes to the Financial Statements

### 2.2.2 Accounting for Foreign Aid

The SLSEA carries out many foreign aid projects. Most of the assistance is received from the ADB and UNDP in the form of loans and grants. However, some of the payments to supplies and loans are made directly by the CBSL and the ADB on the recommendations made by SLSEA. They have been accounted for in the financial statements.

### 2.2.3 Accounting for Long-term Investments

Investment are made in Govt. Treasury bills and Fixed Deposits at National Savings Bank and stated on cost basis. Interest receivable from investments in fixed deposits and treasury bills at the end of the year is credited to the respective fund.

### 2.2.4 Revenue Recognition

Revenue represents Energy Permit fees, sale of electricity, training course fees, income from exhibitions, hiring of instruments and other income.

Part of the interest from Sustainable Guarantee Fund has been treated as income, while part of it has been re-invested. Part has been utilized to meet the cost of maintaining/earning the income to the fund.

### 2.2.5 Contingent Liabilities and Contingent Assets

As per the cabinet decision dated 31 March 2008, SLSEA has to pay the Ceylon Electricity Board an estimated Rs. 897 million for the purchase of electricity from non-conventional renewable energy producers. Currently, SLSEA has no means of making this payment, unless funds are granted by the Treasury or earnings through cess, royalty, etc. are received, which is subject to the approval of the General Treasury. Therefore, this is disclosed only as a contingent liability.

Further, SLSEA sells the electricity generated from the Hambantota solar power plant to the CEB on monthly basis. However, the payment for the production sold during the last few months of 2019 was paid only in 2020.

## 2.3 Property, Plant and Equipment

### 2.3.1 Cost and Valuation

Fixed Assets is stated at cost less accumulated depreciation. The provision of depreciation for fixed assets is calculated by using straight line method. Power purchase agreement with CEB for Hambantota solar power plant will be expired in 2031. Therefore, revalued fixed assets in Hambantota solar power plant will be depreciated within the remaining 12 years.

Hambantota solar power plant was revalued in 2018.

### 2.3.2 Depreciation

Depreciation rates of fixed assets are based on the estimated life span of the assets and could be subject to revision. The current rates are given below.

Item	Rate of Depreciation %
Furniture & office equipment	25
Motor vehicles	20
Photocopiers	25
Computers	33.33
Electrical goods	25
Library books	20
Energy instruments	33.33
Exhibition equipment	25
Wind towers	20
Building & structures	5
Refrigerator testing laboratory	20
<b>Solar Power/Mini Hydro Projects</b>	
A. Solar panels	8.33
B. Steel structures	8.33
C. Buildings	5
D. Switch gears	8.33
E. Inverters	8.33
F. Transformers	8.33
G. Power electronics	8.33
H. Sanitary & plumbing	8.33
I. Cables	8.33
J. Furniture fittings & office equipment	25
K. Tools	8.33
L. Machinery	20
M. Other	20

## Notes to the Financial Statements

### 2.3.3 Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value as at the date of acquisition. Following initial recognition, these assets are stated in the Statement of Financial Position at cost, less accumulated amortization and accumulated impairment losses, if any.

Intangible assets are amortized on a straight-line basis over their estimated useful lives, which do not exceed the contractual period, if any.

Software	5 Years
----------	---------

### 2.4 Liabilities and Provisions

#### 2.4.1 Gratuity

An amount equal to a half-month's salary for each year of employment based in the salary of the last month of the financial year is allocated for gratuity for all entitled employees.

#### 2.4.2 EPF & ETF

Employees' are entitled to contribute to EPF & ETF according to the respective rules & regulations. Contributions by SL SEA are made to EPF & ETF as 12% and 3% respectively.

#### 2.4.3 Indurana Land

The title deed for the Indurana land (2 rood & 32.32 perches) donated by M.P. Harshana Rajakaruna for the Sarathchandra Rajakaruna Memorial International Centre for Hydropower Promotion has not been valued yet. Hence it has not been included as an asset in the financial statements.

#### 2.4.4 Approval of the Board

The financial statements for the year ended 31st December 2019 were authorized by the Board of Management of the Authority on 28th July 2020.

## Notes to the Financial Statements

## Note 3 - Operational Income

For the year ended 31st December		2019	2018
	Note	Rs.	Restated Rs.
Treasury Income (Capital)	7	65,600,000	59,572,500
Amortized Differed Grant	8	43,350,681	350,329,330
Treasury Income (Recurrent)		103,688,168	97,761,666
FARDF (17)			-
Treasury Grant (Installation of Solar Systems in Religious Place)			210,041,000
Power Generation-Hambantota		22,270,178	19,885,310
Power Generation-Indurana		1,846,645	1,211,444
Energy Manager Training Pro-Income		25,000	15,000
Solar Atlas Income		35,000	47,500
Wind Data Income		-	-
Energy Audit Income		88,000	45,000
Energy Permit Income		24,818,830	109,735,536
Solar Registration Fee		16,190,700	6,275,000
Solar Equipment Regi.Fee		153,425	325,000
Solar Training Programme		-	775,200
<b>Total</b>		<b>278,066,627</b>	<b>856,019,486</b>

## Note 4 - Non Operational Income

For the year ended 31st December		2019	2018
	Note	Rs.	Restated Rs.
UNDP Projects (NAMA)		4,521,803	6,333,000
Lanka Electricity Co. (LECO) - ODSM		-	-
Tender Fee		64,000	139,985
Supplier's Registration fee		235,250	128,500
Distress Loan Interest		553,477	527,677
Sponsorship		-	1,800,000
Other Income		295,908	37,000
Special Advance Interest		4,244	3,362
Vidulka Stall Reg Fee		2,300,000	1,528,429
UNDP Projects (Biomass)		11,664,000	16,700,000
UNDP -Ministry of Mahaweli Development		-	-
Income from Energy Fund	9	44,628,149	24,346,730
Performance Test Fees		-	-
Revenue ADB Project - Sampath Bnak		-	-
Revenue ADB Project - NDB Bank		-	-
Interest Income		9,143,908	8,748,144
Disposal of Fixed Assets		12,359,442	
Income- Write off Creditors		-	7,258,237
<b>Total</b>		<b>85,770,181</b>	<b>67,551,064</b>



## Notes to the Financial Statements

### Note 5 - Project Expenses

#### Note 5.1 Renewable Energy

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
Resource Allocation and Development	3,802,791	2,449,875
Progress Monitoring	371,484	446,178
Technology Development and Research	1,435,479	2,555,836
Donor Funded Projects UNDP Bio Mass Project	9,068,613	10,632,944
Donor Funded Project -ADB (L 2892 SRI)	47,820	24,545
NAMA Project	16,572,380	18,998,867
Operation of Hambanthota RE Site	8,684,008	13,752,536
Operation of Indurana Site	580,379	2,814,381
Pooneryn Energy Park Project	-	1,256,587
Supporting Electricity Supply Reliability Improvement Project	60,697	135,310
Mahaweli Project Developments	-	283,709
Provincial Energy Programmes	-	3,899,683
Sooriya Bala Sangramaya	7,852,919	202,060,428
<b>Total</b>	<b>48,476,570</b>	<b>259,310,879</b>

#### Note 5.2 Energy Management

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
Energy Management Cells	1,520,776	1,188,918
Standards and Regulations	1,903,381	2,106,067
Advisory and Counseling	61,065	1,122,572
Rewarding and Achievements	1,865	5,015,989
Sector Specific Programs	389,450	280,683
Research and Development	1,911,600	123,100
Energy Audit	44,797	240,500
Demand Side Management	27,345,571	8,876,452
Establishment of Pilot Project	17,150	30,826
<b>Total</b>	<b>33,195,655</b>	<b>18,985,107</b>

## Notes to the Financial Statements

### Note 5.3 Knowledge Management

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
Energy Education Programs	1,240,828	2,561,012
Promotion Programs	6,148,110	6,688,903
Vidulka	1,574,832	3,616,549
SEA Web hosting charges	-	971,153
<b>Total</b>	<b>8,963,770</b>	<b>13,837,618</b>

### Note 5.4 Strategic Activities

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
Implementation Solar R & D Center	18,220	-
Technology Development	1,908,997	2,320,675
Pooneryn Energy Park	235,909	-
Solar Energy Park	6,539,920	-
National Energy Balance	-	1,065,532
Wind Power Development	964,762	1,251,776
Biomass Resource Assessment	-	284,167
<b>Total</b>	<b>9,667,808</b>	<b>4,922,150</b>

### Note 6 - Recurrent Expenses

#### Note 6.1 Salaries and Allowances

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
Salaries for Staff	52,901,697	51,334,290
Cost of Living Allowance	8,381,360	8,470,800
Adjustment Allowance	417,633	2,074,810
E.P.F. 12%	7,969,448	7,966,423
E.T.F. 3%	1,992,362	2,033,105
Overtime and Holiday Pay	8,129,782	7,090,345
Own Vehicle Utilization	1,801,667	2,413,333
Fuel Allowance	2,070,024	2,175,580
Professional Allowance	5,090,400	5,281,000
NAITA Salary	1,412,500	1,157,000
Gratuity Expense	2,035,590	4,378,837
<b>Total</b>	<b>92,202,463</b>	<b>94,375,523</b>

## Notes to the Financial Statements

## Note 6.2 Travelling and Subsistence

<i>For the year ended 31st December</i>	2019	2018 Restated
	Rs.	Rs.
Travelling- Domestic	1,231,131	550,747
Travelling- Foreign	415,992	454,924
<b>Total</b>	<b>1,647,123</b>	<b>1,005,671</b>

## Note 6.3 Supplies

<i>For the year ended 31st December</i>	2019	2018 Restated
	Rs.	Rs.
Printing, Stationary and Office Requisites	763,980	813,323
Fuel and Lubricants	3,105,432	2,846,282
Other – News Papers and Miscellaneous Service	126,940	96,320
<b>Total</b>	<b>3,996,352</b>	<b>3,755,925</b>

## Note 6.4 Maintenance

<i>For the year ended 31st December</i>	2019	2018 Restated
	Rs.	Rs.
Vehicles, Insurance and License Fees	9,445,109	7,275,972
Plant Machinery	49,950	458,151
Office Equipment	785,933	-
Building and Structure	7,774	91,670
<b>Total</b>	<b>10,288,766</b>	<b>7,825,793</b>

## Note 6.5 Contract Services

<i>For the year ended 31st December</i>	2019	2018 Restated
	Rs.	Rs.
Office Rents and Hire Charges	50,199,531	33,247,178
Postal and Telecommunication Charges	5,276,668	4,532,213
Transport	434,076	626,925
Audit Fees	798,600	726,000
<b>Total</b>	<b>56,708,875</b>	<b>39,132,316</b>

## Notes to the Financial Statements

## Note 6.6 Depreciation, Impairment and Amortization

<i>For the year ended 31st December</i>	2019	2018
	Rs.	Restated Rs.
Furniture and Office Equipment	689,991	1,092,112
Motor Vehicles	1,169,946	1,286,909
Photocopier	453,938	409,132
Computers	1,158,906	594,975
Electrical Goods	4,442	41,676
Library Book	197,000	197,000
Energy Instruments	1,845,700	994,670
Wind Towers and Instruments	1,029,340	2,481,963
Refrigerator Testing Laboratory	-	8,433,067
Hambantota and Indurana Energy Park	34,160,832	72,451,282
Exhibition Equipments	-	-
Fixes Assets for UNDP Projects	104,860	104,860
Ammortization of Lease Hold Land	1,528,548	1,528,548
Impairment of Hambanthota Solar park	-	260,579,597
Intangible Assets Ammortization	1,782,167	1,662,087
<b>Total</b>	<b>44,125,670</b>	<b>351,857,878</b>

## Note 6.7 Other Recurrent Expenses

<i>For the year ended 31st December</i>	2019	2018
	Rs.	Restated Rs.
Office and Miscellaneous Expenses	1,125,310	2,213,476
Paper Advertisements	184,275	762,350
Insurance	2,445,673	2,302,072
Translation Fees	206,981	61,428
Allowances for Board Members	1,349,218	816,320
Refreshment Charges	489,633	706,996
Local/Foreign Training Program	3,467,135	2,698,859
Bank Charges	80,896	39,910
Nation Building Tax (NBT)	1,773,827	2,741,030
<b>Total</b>	<b>11,122,948</b>	<b>12,342,441</b>

## Notes to the Financial Statements

**Note 7 - Treasury Income (Capital)**

For the year ended 31st December	2019 Rs.	2018 Restated Rs.
Capital Grant Received from Treasury	65,600,000	59,572,500
<b>Total</b>	<b>65,600,000</b>	<b>59,572,500</b>

**Note 8 - Amortized Deferred Grant**

For the year ended 31st December	2019 Rs.	2018 Restated Rs.
Depreciation for Current Year	43,350,681	350,329,330
<b>Total</b>	<b>43,350,681</b>	<b>350,329,330</b>

**Note 9 - Income From Energy Fund**

For the year ended 31st December	2019 Rs.	2018 Restated Rs.
Energy Management Income	1,723,450	727,394
RE Income	30,219,000	12,988,000
Net Interest	12,685,699	10,631,336
<b>Total</b>	<b>44,628,149</b>	<b>24,346,730</b>

## Notes to the Financial Statements

**Note 10 - Property, Plant and Equipment****Note 10.1 Free Hold Assets**

Description	Restated Balance as at 01.01.2019 Rs.	Acquisition Rs.	Revaluation Rs.	Disposal Rs.	Balance as at 31.12.2019 Rs.
Land – Hambanthota	101,217,000	-	-	-	101,217,000
Furniture and Office Equipment	20,519,475	815,390	-	-	21,334,865
Motor Vehicles	52,266,495	-	-	(1,080,000)	51,186,495
Photocopier	4,809,941	-	-	-	4,809,941
Computers	35,707,660	3,152,249	-	-	38,859,909
Electrical Goods	446,964	-	-	-	446,964
Library Book	1,438,352	-	-	-	1,438,352
Energy Instruments	96,507,677	487,500	-	-	96,995,177
Wind Towers and Instruments	50,767,527	2,377,000	-	-	53,144,527
Refrigerator Testing Laboratory	42,165,337	-	-	-	42,165,337
<b>Solar and Mini Hydro Projects</b>					
A. Solar Panels	79,329,510	-	-	-	79,329,510
B. Steel Structure	57,650,000	-	-	-	57,650,000
C. Building	131,017,606	-	-	-	131,017,606
D. Switch Gear	10,007,800	-	-	-	10,007,800
E. Inverters	59,479,277	1,575,348	-	-	61,054,625
F. Transformers	4,700,000	-	-	-	4,700,000
G. Power Electronics	31,619,040	-	-	-	31,619,040
H. Sanitary and Plumbing	82,881,814	0	-	-	82,881,814
I. Cables	30,000,000	-	-	-	30,000,000
J. Furniture Fittings and Office Equip.	3,014,584	43,400	-	-	3,057,984
K. Tools	5,700,000	(0)	-	-	5,700,000
L. Machinery	4,047,375	5,193,466	-	-	9,240,841
M. Other	60,039,664	5,700	-	-	60,045,364
Exhibition Equipments	354,853	-	-	-	354,853
Fixes Assets for UNDP Projects	524,300	-	-	-	524,300
<b>Total</b>	<b>966,212,252</b>	<b>13,650,053</b>	<b>-</b>	<b>(1,080,000)</b>	<b>978,782,304</b>



## Notes to the Financial Statements

## Depreciation Account

Description	Restated Balance as at 01.01.2019 Rs.	Depreciations Rs.	Disposal Rs.	Accumulated Depreciation as at 31.12.2019 Rs.	Net Book Value as at 31.12.2019 Rs.
Land - Hambanthota	-	-	-	-	101,217,000
Furniture and Office Equipment	18,744,929	689,991		19,434,920	1,899,945
Motor Vehicles	50,923,158	1,169,946	(1,080,000)	51,013,104	173,391
Photocopier	3,946,539	453,938		4,400,477	409,464
Computers	34,033,240	1,158,906		35,192,146	3,667,763
Electrical Goods	433,639	4,442		438,081	8,883
Library Book	1,044,352	197,000		1,241,352	197,000
Energy Instruments	91,385,395	1,845,700		93,231,095	3,764,082
Wind Towers and Instruments	47,325,585	1,029,340		48,354,925	4,789,602
Refrigerator Testing Laboratory	41,587,728	(0)		41,587,728	577,609
<b>Solar &amp; Mini Hydro projects</b>					
A. Solar Panels	-	6,610,793		6,610,793	72,718,717
B. Steel Structure	-	4,804,167		4,804,167	52,845,833
C. Building	48,115,002	5,997,096		54,112,098	76,905,508
D. Switch Gear	30	833,984		834,014	9,173,786
E. Inverters	-	5,087,886		5,087,886	55,966,739
F. Transformers	-	391,667		391,667	4,308,333
G. Power Electronics	31,619,040	-		31,619,040	-
H. Sanitary and Plumbing	-	6,906,818		6,906,818	75,974,996
I. Cables	-	2,500,000		2,500,000	27,500,000
J. Furniture Fittings and Office Equip.	3,014,584	11,193		3,025,777	32,207
K. Tools	-	475,000		475,000	5,225,000
L. Machinery	4,047,375	541,353		4,588,728	4,652,113
M. Other	60,039,664	875		60,040,539	4,825
Exhibition Equipments	354,853	-		354,853	-
Fixes Assets for UNDP Projects	239,463	104,860		344,323	179,977
<b>Total</b>	<b>436,854,576</b>	<b>40,814,955</b>	<b>(1,080,000)</b>	<b>476,589,531</b>	<b>502,192,773</b>

## Note 10.2 Lease Hold Assets

Description	Balance as at 01.01.2019 Rs.	Acquisition Rs.	Amortization Rs.	Balance as at 31.12.2019 Rs.
Land - Battaramulla	40,506,532	-	1,528,548	38,977,984
<b>Total</b>	<b>40,506,532</b>	<b>-</b>	<b>1,528,548</b>	<b>38,977,984</b>

## Notes to the Financial Statements

## Note 11 - Intangible Assets

Description	Balance as at 01.01.2019 Rs.	Acquisition Rs.	Amortization Rs.	Balance as at 31.12.2019 Rs.
Computer Software	3,467,173	600,400	1,782,167	2,285,407
Data and Information	-	-	-	-
<b>Total</b>	<b>3,467,173</b>	<b>600,400</b>	<b>1,782,167</b>	<b>2,285,407</b>

## Note 12 - Working in Progress

For the year ended 31st December	2019 Rs.	2018 Restated Rs.
Renewable Energy Assessment - Wind tower (Bagawanthalawa)	-	2,377,000
ADB Quantum Leap - WRA (Wind Force) -(Equipment tax portion)	2,299,935	2,299,935
Centre of Excellence in Sustainable Energy (SLSEA)	23,290,653	17,515,653
Electric Prototype Vehicle	7,956,800	7,956,800
Poonarin Project	23,726,194	16,207,754
Indurana Mini Hydro	15,785,597	-
<b>Total</b>	<b>73,059,179</b>	<b>46,357,142</b>

## Note 13 - Investment

## Fixed Deposits (in NSB, Borella)

Deposit Reg. No.	Date of Maturity	Rate of investment	Net Interest for 2019	Deposit as at 31.12.2019	Deposit as at 01.01.2019
2/0061/11/33829	9/21/2020	10.50%	144,861	1,605,119	1,459,530
2/0061/11/33861	9/21/2020	10.50%	144,861	1,605,119	1,459,530
2/0061/11/33853	9/21/2020	10.50%	144,861	1,605,119	1,459,530
2/0061/11/33888	9/21/2020	10.50%	149,798	1,605,119	1,459,530
2/0061/11/33772	9/21/2020	10.50%	144,861	1,605,119	1,459,530
2/0061/11/33837	9/21/2020	10.50%	144,861	1,605,119	1,459,530
2/0061/11/33845	9/21/2020	10.50%	144,861	1,605,119	1,459,530
2/0061/11/33756	9/21/2020	10.50%	144,861	1,605,119	1,459,531
2/0061/11/33764	9/21/2020	10.50%	144,861	1,605,119	1,459,531
2/0061/11/33802	9/21/2020	10.50%	144,861	1,605,119	1,459,531
2/0061/11/33713	9/21/2020	10.50%	144,861	1,605,119	1,459,531
2/0061/11/33896	9/21/2020	10.50%	144,861	1,605,119	1,459,531
2/0061/11/33799	9/21/2020	10.50%	144,861	1,605,119	1,459,531
2/0061/11/33870	9/25/2020	10.50%	54,334	601,919	547,324
2/0061/09/60845	10/20/2020	10.50%	54,072	598,273	544,008
2/0061/11/34051	9/30/2020	10.50%	349,568	3,871,617	3,520,452
2/0061/09/49981	5/2/2020	10.50%	1,059,236	11,820,136	10,748,021
<b>Total</b>			<b>3,405,343</b>	<b>37,758,488</b>	<b>34,333,700</b>

## Notes to the Financial Statements

### Treasury Bills - (In People's Bank, Head Quarters)

Deposit Reg. No.	Date of Maturity	Rate of investment	Net Interest for 2019	Deposit as at 31.12.2019	Deposit as at 01.01.2019
LKB01024A014	18/01/2020	10.5%	2,063,541	19,893,930	18,318,536
LKB01024A014	11/7/2020	8.05%	3,675,023	44,680,340	40,934,805
<b>Total</b>			5,738,564	64,574,270	59,253,341
<b>Total Investment</b>				102,332,758	93,587,042

### Note 14 - Receivables

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
Interest Receivable on Fixed Deposits	1,396,109	1,415,552
Interest Receivable on Treasury Bills	3,690,620	3,272,984
Ceylon Electricity Board -RCL Rent	8,033,271	8,033,271
Power Generation - Hambanthota/Indurana	15,770,712	10,126,483
Receivable from Employees	213,589	2,382
VAT Credit from Dept of Inland Revenue	13,176,658	-
Employee Receivable-Telephone	4,520	
Trade - Receivable (EF)	1,005,550	
Trade - Receivable (FOA)	-	
Local Training Program (Suspense)	82,000	82,000
Aitkenspence Travel	6,309	6,309
Heritance Ahungalla	35,659	35,659
<b>Total</b>	43,414,997	22,974,640

## Notes to the Financial Statements

## Note 15 - Other Current Assets

For the year ended 31st December	2019	2018
	Rs.	Restated Rs.
<b>Refundable Deposit</b>		
Water Board	2,500	2,500
Medical Insurance	500	500
Fuel, Etc.	186,500	186,500
Hambantota - CEB	52,000	52,000
Indurana- CEB	62,500	62,500
Sooriyawewa - CEB	1,500	1,500
Telephone	8,776	8,776
Hambantota Hostel Rent	132,000	132,000
Spring Water Pvt Ltd	3,500	3,500
American Premium Water	23,000	23,000
Mobitel	2,000	2,000
W.D.G.S Onil - ODSM	2,100,000	2,100,000
BMICH	520,233	369,153
Vidulka Exhibition	25,000	25,000
<b>ADVANCE</b>		
Advances for Programs, etc.	470,070	169,918
Provincial Education Dept, Eastern	911,329	911,329
Provincial Education Dept, Northern	790,191	790,191
Provincial Education Dept, North Western	400,800	-
Provincial Education Dept, Southern	1,544,949	1,544,949
Secretary-Min EDU-Uva /North Western Pro-NAMA	1,391,750	522,250
Chief Secretary Southern/Eastern pro.-NAMA	2,880,050	1,955,680
Advance-Secretary ministry of road development (Central Pro.)-NAMA Pro.	2,231,265	2,214,750
Other	6,785,378	6,125,168
<b>Total</b>	<b>20,525,791</b>	<b>17,203,163</b>
<b>Revolving Fund</b>		
Distress Loan	13,100,565	13,077,507
Special Advance	5,385	108,185
Festival Advance	41,989	31,989
Flood Loan	319,645	804,796
	13,467,584	14,022,477
<b>Total Other Current Assets</b>	<b>33,993,375</b>	<b>31,225,640</b>

## Notes to the Financial Statements

### Note 16 - Cash and Cash Equivalent

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
NSB Savings Account - 100610493406	180,115,763	173,410,145
Peoples Current Account - 078100188503576	4,227,731	25,214,869
Peoples Current Account - 078100278503576	4,620,072	4,620,071
BOC Current Account - 8002630	2,697,932	933,764
BOC Current Account - 74944408	48,209,002	76,202,054
BOC Savings Account - 75803419	185,208,026	134,548,641
BOC Current Account - 80595356	12,235,101	37,878,950
<b>Total</b>	<b>437,313,627</b>	<b>452,808,494</b>

### Note 17 - Accumulated Fund

Accumulated fund of Energy Conservation Fund (ECF) as at 30 September 2007 transferred to Sri Lanka Sustainable Energy Authority (SLSEA) on 1 October 2007. It consists the following :

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
Accumulated fund as at 30 September 2007	7,076,392	7,076,392
Initial Capital	5,000,000	5,000,000
Capital Grant - Ministry of Power and Energy	5,761,145	5,761,145
Capital Grant from UNDP	3,612,560	3,612,560
Donor Grant from Food and Agriculture Organization	650,239	650,239
<b>Total</b>	<b>22,100,336</b>	<b>22,100,336</b>

## Notes to the Financial Statements

## Note 18 - Deferred Grant

<i>For the year ended 31st December</i>	2019	2018
	Rs.	Restated Rs.
Capital Grant 2008	33,770,435	33,770,435
Capital Grant 2009	11,955,533	11,955,533
Foreign Grant 2009 - Japanese	24,165,380	24,165,380
Capital Grant 2010 - Hambantota Solar Park	46,693,991	46,693,991
- Unamortized Capital Grant	10,646,819	10,646,819
Foreign Grant 2010 - Japanese	11,419,569	11,419,569
Capital Grant 2011 - Indurana Mini Hydro Project	15,523,945	15,523,945
- Unamortized Capital Grant	68,798,341	68,798,341
Foreign Grant 2011 - Japanese	1,155,016,402	1,155,016,402
- Korean	191,097,075	191,097,075
Differed grant 2012 - ADB	15,082,346	15,082,346
Capital Grant 2012	23,581,236	23,581,236
Differed grant 2013 - ADB	43,416,071	43,416,071
Differed Grant 2013 - KOICA	35,662	35,662
Capital Grant 2013 - FARDF	41,873,961	41,873,961
Capital Grant 2014	20,487,827	20,487,827
Capital Grant 2015	14,655,015	14,655,015
Capital Grant 2016	17,855,251	17,855,251
Capital Grant 2017	19,806,619	19,806,619
<b>Less:</b>		
- Deferred Revenue Previous Years	(1,342,034,511)	(957,038,514)
- Deferred Revenue for The Year	(43,350,681)	(350,329,330)
<b>Total</b>	<b>380,496,286</b>	<b>423,846,967</b>



## Notes to the Financial Statements

## Note 19 - Other Payable

For the year ended 31st December	2019	2018
	Rs.	Restated Rs.
Switch Asia Control Account	4,548,176	4,548,176
Ministry of Power and Energy	500	500
Accrued Expenses	10,855,691	2,508,909
Unpresented Cheques	1,260,442	1,282,665
Renewable Energy Solar Registration Fees	295,860	295,860
Ministry of Mahaweli Development and Environment	470,000	470,000
Audit Fees	2,274,976	2,058,636
VAT Payable	1,922,152	3,782,610
WHT tax Payable	379,602	
Stamp Duty payable	7,675	
Jeewa Shakthi Associates - Survey Fee	252,875	252,875
Bid document	20,000	5,000
Others	370	
Other Deduction Payable	47,323	
<b>Creditors</b>		
Renewable Energy-E Net Solutions (Private) Ltd.	1,667,500	1,667,500
Acquisition of Energy Instruments	326,025	326,025
Retention	2,249,488	3,168,918
Narahenpita Jathika Pola	99,405	99,405
Kondasinghe Constructions	6,465,264	
<b>Sundry Creditors</b>		
Sri Lanka Custom	310,748	310,748
Welfare Society SEA	442	442
<b>Refundable Deposit</b>		
E-Net solutions (Pvt) Ltd	10,000	10,000
ENL Consultant	150,000	150,000
Zigma Technologies	10,000	10,000
Rainco Renewable Energy Co. (Pvt.) Ltd	30,000	30,000
Vidulka Exhibition	9,256	9,256
Ceylon Petroleum Corp	54,000	54,000
Refundable Deposit - Vehicle	14,000	14,000
ATA International	50,000	50,000
Vidulka symposium - Entertainment Ltd	25,000	25,000
<b>Total</b>	<b>33,806,770</b>	<b>21,130,525</b>

## Notes to the Financial Statements

## Note 20 - Sri Lanka Energy Fund

For the year ended 31st December	Note	2019 Rs.	2018 Restated Rs.
<b>Statement of Financial Position as at 31.12.2019</b>			
Non current Assets			-
<b>Current Assets</b>			
SEA Current Account (FOA) - Energy plus Building		48,678,878	48,678,878
Cash & Cash Equivalent			
NSB Savings Account		180,115,763	173,410,145
BOC Savings Account		185,208,026	134,548,641
		414,002,667	356,637,664
Accumulated Fund		335,605,770	332,842,789
Surplus / Deficit for the year		35,297,205	2,762,982
Total Accumulated Fund		370,902,975	335,605,771
<b>Current Liabilities</b>			
SEA Current Account (FOA)		43,099,692	16,368,808
VAT payable			4,663,085
<b>Total</b>		414,002,667	356,637,664
<b>Income</b>			
Income - Energy Fund	9	44,628,149	24,346,730
<b>Expenses</b>			
Resource Allocation & development			823,590
Provincial Energy Programmes			3,326,188
Operation of Hambantota site		7,276,625	5,348,808
Operation of Indurana site			5,392,059
Pooneryn Energy Park			1,470,600
Introducing Standards and Regulation			1,200,000
Energy Education Programme			1,053,326
Promotion Programme		2,054,319	2,969,177
		9,330,944	21,583,748
<b>Surplus/Deficit</b>		35,297,205	2,762,982

## Notes to the Financial Statements

**Note 21 - Sri Lanka Sustainable Guarantee Fund**

<i>For the year ended 31st December</i>	2019 Rs.	2018 Restated Rs.
<b>Income</b>		
Interest Income - Fixed Deposit	3,405,343	3,401,099
Interest Income - Treasury Bonds	5,738,565	5,347,045
<b>Total Income</b>	<b>9,143,908</b>	<b>8,748,144</b>
<b>Less:</b>		
Expenses	-	-
<b>Total Expenses</b>	<b>-</b>	<b>-</b>
<b>Net Surplus/Defecit</b>	<b>9,143,908</b>	<b>8,748,144</b>

# Audit Report from National Audit Office



## ජාතික විගණන කාර්යාලය தேசிய கணக்காய்வு அலுவலகம் NATIONAL AUDIT OFFICE



මගේ අංකය } POE/D/SLSEA/FS/2019/46  
எனது இல. }  
My No. }

ඔබේ අංකය }  
உமது இல. }  
Your No. }

දිනය } 13<sup>th</sup> January 2021  
திகதி }  
Date }

Chairman,  
Sri Lanka Sustainable Energy Authority.

The audit report of Sri Lanka Sustainable Energy Authority in terms of Section 12 of the National Audit Act No. 19 of 2018 on financial statements and other legal and regulation requirements for the year ended on 31<sup>st</sup> December 2019.

### 1. Financial Statements

#### 1.1 Opinion

The audit of the financial statements of the Sri Lanka Sustainable Energy Authority for the year ended on 31 December 2019 comprising the statement of financial position as at 31 December 2019 and the statement of comprehensive income, statement of changes in equity and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, was carried out under my direction in pursuance of provisions in Article 154 (1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with provisions of the National Audit Act No. 19 of 2018 and the Finance Act, No.38 of 1971. My report will be tabled in Parliament in due course as per Article 154 (6) of the Constitution.

In my opinion, except for the effects of the matters described in the basis for qualified opinion in my report, the financial statements give a true and fair view of the financial position of the Authority as at 31 December 2019 and its financial performance and cash flows for the year then ended in accordance with Sri Lanka Public Sector Accounting Standards.

# Audit Report from National Audit Office

## 1.2 Basis for Qualified Opinion

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- (a) Information on property, machinery and equipment costing Rs. 340,629,707 which had been depreciated as at the end of the year under review as per Section 92 of the standard on property, machinery and equipment in Sri Lanka Accounting Standard No.7, yet are already being utilized had not been disclosed in the financial statements and action had not been taken to amend the estimated defect regarding these assets in terms of Sri Lanka Accounting Standard No. 03 and indicate the same in the financial statements.
- (b) The land containing 0.28 hectares which had been donated on 09<sup>th</sup> January 2017 for Sarathchandra Rajakaruna International Centre, Indurana had not been valued and indicated in the financial statements.
- (c) Since the Amortized Differed Grant Income was identified to have been understated by Rs. 3,221,352 as an income in the financial performance statement, the operational income of the year under review had been understated by that value and the balance of the Differed Grant Income Account had been overstated by that value in the financial statements.
- (d) Due to a defect occurred by duplicate entry of invoices, the operational income of the year under review and the money receivable for the energy fund had been overstated by Rs. 1,005,550 in the financial statements.
- (e) Although taxes on equipment amounting to Rs, 2,299,935 relating to an Asian Development Bank Project of which the work had been completed, had been included under the work in progress in financial statements for several years and action had not been taken to verify and make adjustments in the accounts even in the year under review.
- (f) Since a sum of Rs. 301,918 had been erroneously credited to other advances account classified under other current assets, the balance of advance accounts had been understated by a similar amount.
- (g) The vouchers and the contributory documents for the payment of Rs. 9,192,859 paid to the University of Colombo for providing in relation to Punarin Electricity Project had not been produced for the audit.

## Audit Report from National Audit Office

I conducted my audit in accordance with Sri Lanka Auditing Standards (SLAuSs). My responsibility, under those standards is further described in the Auditor's Responsibility for the Audit of the Financial Statements section of my report. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified opinion.

### **1.3 Responsibilities of Management and Those Charged with Governance for the Financial Statements**

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Management is responsible for the preparation of financial statements that give a true and fair view in accordance with Sri Lanka Public Sector Accounting Standards and for such internal control as management determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Commission's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Commission or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Commission's financial reporting process.

As per Sub-section 16 (1) of the National Audit Act No. 19 of 2018, the Commission is required to maintain proper books and records of all its income, expenditure, assets and liabilities, to enable annual and periodic financial statements to be prepared of the Authority.

### **1.4 Auditor's Responsibilities for the Audit of the Financial Statements**

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My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sri Lanka Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they



## Audit Report from National Audit Office

could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

I have performed the audit in accordance with Sri Lanka Auditing Standards, by exercising professional judgment and maintain professional scepticism throughout the audit. Further,

- Obtaining audit sufficient and appropriate evidence in order to avoid those risks caused by fraud or error, by means of design of audit procedures that are appropriate in the circumstances when identifying and assessing the risks of material misstatement of the financial statements, due to fraud or error, provides the basis for my opinion. The impact of a fraud is greater than an impact of material misstatements, and collusion, forgery, intentional omissions or the override of internal control may result in fraud.
- Although an understanding of internal control relevant to the audit was obtained in order to design audit procedures that are appropriate in the circumstances, I do not intend to express an opinion on the effectiveness of the Authority's internal control.
- The reasonableness of the accounting policies and the accounting estimates used and the appropriateness of the related disclosures made by the management were evaluated.
- Conclusions were made on the appropriateness of the management's use of the going concern basis of the institution for accounting, based on the audit evidence obtained on the matter whether a material uncertainty exists related to the going concern of the Authority due to events or conditions. If I conclude that a material uncertainty exists, I am required to draw attention in my audit report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- Evaluations were conducted on the overall presentation, structure and content of the financial statements, including the disclosures and the financial statements were evaluated as having represented the underlying transactions and events in a manner that achieves fair presentation were evaluated.

The significant audit findings, key internal administrative defects and other matters identified during my audit were communicated to the administrative parties.

# Audit Report from National Audit Office

## 2. Report on Other Legal and Regulatory Requirements

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Special provisions on the following requirements are set out in the National Audit Act No. 19 of 2018.

- I have obtained all details and explanations required for the audit in terms of the requirements set out in Section 12 (a) of the National Audit Act No. 19 of 2018 except for the impact of the matters depicted in the basis for qualified opinion section in my report, and as it is apparent from my inquiry the Authority had maintained proper financial reports.
  
- The financial statements of the Authority which were submitted in terms of the requirement set out in Section 6 (1) (d) (III) of the National Audit Act No. 19 of 2018 are consistent with the preceding year.
  
- The financial statements which were submitted contain the recommendations I had made except for the matters indicated in paragraphs No. 1.2 (a), (e) of the financial statements of the preceding year in terms of the requirement set out in Section 6 (i) (d) (iv) of the National Audit Act No. 19 of 2018.

There are no sufficient facts that have drawn my attention to make any of the following statements upon the measures followed and the evidence obtained, and being confined to material facts.

- That any member of the Administrative Board of the Authority has any interest, direct or otherwise, in any contract entered into by the Authority outside the general business condition in terms of the requirement set out in Section 12 (d) of the National Audit Act No. 19 of 2018.
  
- That the Authority has not complied with any applicable written law or other general or special directions issued by the Administrative Board of the Authority in terms of the requirement set out in Section 12 (f) of the National Audit Act No. 19 of 2018 except for the following observations.

# Audit Report from National Audit Office

Reference to Rules/Regulations	Description
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<p><b>(a) Sustainable Energy Authority</b>  <u>Act No. 35 of 2007.</u>            Section 46(3)</p>	<p>A total sum of Rs. 48,678,878 had been withdrawn from the investment of Energy Fund, contrary to the objectives of the Fund to lease a land for 30 years for the construction of an office building to the Sustainable Energy Authority and to prepare a building plan therefor, during the period from 2015 to 2019.</p>
<p><b>(b) Establishments Code of the Democratic Socialist Republic of Sri Lanka</b>            Paragraph 13.7 of Chapter II</p>	<p>Although an additional remuneration should not be paid to an officer unless he has been appointed by the appointing authority for an acting post, the Authority, outside this rule, had paid a total sum of Rs. 3,714,952 as acting allowances for acting posts during the period from 2013 to May 2019 and a sum of Rs. 4,853,050 as fuel allowances and Rs. 5,020,000 as transport allowances during the period 2015 to May 2019.</p>
<p><b>(c) Financial Regulations of the Democratic Socialist Republic of Sri Lanka</b></p> <p>(i) Financial Regulations 454</p>	<p>Inventory books had not been maintained in terms of the said regulation.</p>

## Audit Report from National Audit Office

(ii) Financial Regulations 757(1)	Assets had not been physically verified and submitted to the Auditor General as at the end of the year under review.
(iii) Financial Regulations 395(c)	Monthly bank reconciliation statements related to the 05 current accounts maintained by the Authority had not been prepared.
(iv) Financial Regulations 396(d)	The Authority had not acted in compliance with this financial regulation regarding outstanding cheques amounting to Rs. 1,260,442 of which the period of validity had exceeded and had not been presented for payment.
<b>(d) Treasury Circular No. 842 dated 19 December 1978</b>	Register of Fixed Assets for the total value of fixed assets amounting to Rs. 864,995,252 had not been maintained and updated in terms of the requirements of the circular.
<b>(e) Public Enterprises Circular <u>No. 12 dated 02 June 2003</u></b>	
(i) Section 6.5.1	Although the approved financial statements should be submitted to the Auditor General within 60 days of the end of financial year, the financial statements for the year 2019 were submitted on 08 <sup>th</sup> September 2020 with a lapse of around 06 months.
(ii) Section 9.9	A detailed document on overtime expenses had not been submitted monthly to the Board of Directors.

## Audit Report from National Audit Office

(iii) Section 5.1.1

The Board of directors had not taken steps to prepare a corporate plan for a period of at least three years with a short term and long term vision on the affairs of the institution and to direct the institution accordingly in such manner which would enable them to achieve the proposed goals.

**(f) Public Enterprises Circular  
No. 95 dated 04 June 1994**

A sum of Rs. 3,135,202 out of Rs. 7,334,354 received from the European Union under SWITCH-Asia programme had been paid as professional allowances to all officers of the Authority in the years 2010 and 2011 contrary to the provisions of the circular. Action had not been taken so far to recover this unlawful payment from either the relevant officers or the officers accountable therefor.

**(g) Public Administration  
Circular No.28/2011 dated  
12 December 2011.**

Without obtaining the approval of the Department of Management Services and on the approval of the Board of Directors, a sum of Rs.14,861,000 had been paid by the Authority to officers holding the post of Engineer of the Authority who are not categorized under the Sri Lanka Engineers Service, as professional allowances during the period from August 2016 to 31 December 2019.

- That the Authority has failed to perform in compliance with its powers, functions and duties in terms of the requirement set out in Section 12 (g) of the National Audit Act No. 19 of 2018.
- That the resources of the Authority have not been procured and utilized economically, efficiently and effectively within the time frames and in compliance with the applicable laws in terms of the requirement set out in Section 12 (h) of the National Audit Act No. 19 of 2018.



## Audit Report from National Audit Office

### 3. Other Audit Observations

- (a) Advances totalling Rs. 13,348,087 had been given to zonal offices under the knowledge management project for zonal officers programmes in the year 2016 in respect of 9 provinces, of which advances totalling Rs. 3,765,051 provided for three provinces had not been settled even by 31 December 2019.
- (b) A sum of Rs. 1,094,015 included under the advances receivable had been brought forward from periods 01 to 04 years and the Authority had failed to recover them or to take another appropriate action in that regard even by the end of the year under review.
- (c) Of a sum of Rs. 2,953,225 shown in the accounts as other payments and creditors by the end of the year under review, a sum of Rs. 277,256 indicated as repayable deposits had been brought forward from 01 to 04 years and over 5 years respectively, and the Authority had failed to take an action to resolve the matter even up to the end of the year under review.
- (d) The budgeted expenditure and the actual expenditure of the 4 main projects of the Authority in the year under review amounted to Rs. 207,400,000 and Rs. 131,129,145 respectively. Thus it was observed that a sum of Rs. 76,270,855 that is, 37 per cent of the total provision was saved.
- (e) 04 three wheelers driven by solar power that the Authority had received as a grant under a pilot project implemented by the Korean Energy Agency (KEA) and Sri Lanka Sustainable Energy Authority were handed over to Bandaranaike Memorial International Conference Hall as the operating agency, on 13<sup>th</sup> December 2019. Nevertheless, no contract had been entered in to for the purpose of collection of data in relation to the pilot project. Similarly, it was observed that, as neither a collection of data nor a follow up has been conducted in relation to the pilot project, the project had not been utilized effectively to realize the expected objectives.
- (f) Even though management and assets of the Regional Centre for Lighting (RCL) had been entrusted to the Ceylon Electricity Board by the Sustainable Energy Authority of Sri Lanka in November 2012, it had not been appropriately entrusted and as such, the rent amounting to Rs. 8,033,270 paid to the Bandaranayake Memorial International



## Audit Report from National Audit Office

Conference Hall Foundation by the Authority could not be recovered from the Ceylon Electricity Board even up to October 2020.

- (g) According to the report of the investigation carried out in respect of errors caused in the revision of salaries of the employees since the foundation of the Sustainable Energy Authority, the overpayments of salaries and allowances made during the period from 2007 to 2011 amounted to Rs. 2,171,760. The Authority had not taken action to recover the overpaid amounts from the relevant officers or to correct the same even up to now.
- (h) According to the Lease agreement entered into between the Urban Development Authority and the Sustainable Energy Authority bearing No.631 of 22 June 2015, a land, 75 purchase in extent had been obtained for a sum of Rs. 45,856,451 from Baththaramulla Area on 30-year lease basis, and from the year 2015 to the end of 2019 only the plan had been designed by spending a sum of Rs. 23,290,653 but action had not been taken to begin construction works.
- (i) According to an agreement entered into on 28 September 2007, a sum of Rs. 7,956,800 had been paid to an external party to develop three proto type electric vehicles within 18 months in the year 2007. Nevertheless, the Authority had failed to take proper action to settle the matter or to recover the damage, though 12 years had lapsed up to 31 December 2019.
- (j) The balance of the money received under the 'Switch Asia' programme amounting to Rs. 4,548,176 remained in a current account of the People's Bank since the year 2011 and a sum over Rs. 150,000,000 relating to the Energy Fund had remained in a savings account of the National Savings Bank for several years without being invested fruitfully.
- (k) A provision of Rs. 17,000,000 had been made for the Indurana International Promotion Centre Project for the year 2019 and only a sum of Rs. 7,594,466, that is 45 per cent thereof had been spent as at 31 December 2019. Since a sum of Rs. 9,405,534 or 55 per cent had not been spent for the project, it was observed that the provisions made for the project had not been effectively utilized.

## Audit Report from National Audit Office

- (l) It was observed that although the Authority has initiated accounting through a computerized accounting system in the year under review, General Controls and Application Controls have not been activated in relation thereto.




Sgd./illegibly

W.P.C. Wikramaratne

Auditor General

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I do hereby certify that the foregoing translation of }  
Audit Report from Sinhala into English is true, }  
accurate and correct to the best of my knowledge. }

  
19/05/2021  
**H.A. ANASUYA M. CHANDRASIRI**  
**SWORN TRANSLATOR (SINHALA - ENGLISH)**  
**GOVERNMENT TRANSLATORS' SERVICE**  
**ATTORNEY GENERAL'S DEPARTMENT**  
**COLOMBO 12 - SRI LANKA.**

# Observations of SLSEA for Auditor General Report 2019

27.01.2021

Auditor General  
National Audit Office,  
306/72, Polduwa Road,  
Battaramulla.

**Summary Report of the Auditor General as per Section 12 of the National Audit Act No. 19 of 2018 on Financial Statements and other legal and regulatory requirements for the year ended at 31 December 2019.**

Answers for the Auditor General's report sent by you on 13.01.2021 with reference to the above matter are submitted herewith.

**1. Financial Statements**

**1.2. Basis for Qualified Opinion**

- (a) There were no adequate details on the fixed assets purchased by our institution before the year 2015 and therefore, it was unable to disclose them in the financial statements as it is difficult to identify the property, machinery and equipment which had been depreciated in full as at the end of the year, and yet are in use. Nevertheless, preparations are underway to revalue all fixed assets possessed by the institution.
- (b) Lands of Government institutions should only be revaluated by the Government Valuation Department and although requests were made several times to evaluate the land of the Indurana Sarathchandra Rajakaruna International Centre the valuation report has not been by them even up to the present.
- (c) The error made while calculating the Amortized Differed Grant Income is expected to correct through the financial statements of the year 2020.
- (d) Arrangements have been made to restore and correct the balance indicated in the receivable accounts as the money receivable for the energy fund, in the financial statements of the year 2020.

## Observations of SLSEA for Auditor General Report 2019

- (e) It has been arranged to make the corrections in this regard in the financial statements of the year 2020.
- (f) It has been arranged to make the corrections in the financial statements of the year 2020.
- (g) A request has been made to the University of Colombo to send the receipts for payments made to the University of Colombo for providing counseling services in relation to the Punarin Electricity Project immediately to the finance division of our Authority.

### **2. Report on other legal and regulatory requirements.**

- (a) Among the objectives of Sri Lanka Energy Fund, consuming electricity economically, developing local resources for electricity generation and aligning the public for efficient consumption of energy can be cited mainly.

Accordingly, the main building of the Sustainable Energy Authority situated near Ape Gama in Battaramulla is designed under the Theme 'Energy Plus', as it is easy to direct the public towards it by giving them a practical experience. It is a demonstration building to show the people that buildings can be invented with energy economy and with the minimum use of natural resources. Since, it is a creation that the people can see the methodologies to use energy conservation methods practically with naked eye, it is disagreeable that the audit interprets this building as "a creation of an office to the Sustainable Energy Authority, contrary to the objectives of the Fund". Therefore, it emphasized that, the truth should be studied and the matter should be rightly perceived.

Since the provisions are available in the Authority Act to raise awareness among the Public, expenditure can be incurred. It is informed that, "all these expenses had been incurred subject to the approval of the Board of Directors."

Further, the amount spent on this building from the Energy Fund is Rs. 48,678,878 only.

## Observations of SLSEA for Auditor General Report 2019

(b) According to the audit opinion on the appointment of officers for acting posts in the year 2013 a paper has been submitted to the Board of Directors on 22/09/2020 for the approval of the Board of Directors as the appointing authority. A subcommittee of Board of Directors consisting of the following representatives has been appointed by the Board of Directors for resolving these issues.

1. Chairperson - Mrs. Nayana Nathavitharana- Additional Secretary, Public Administration, Home Affairs, Provincial Council and Local Government.
2. Member - Mr. Nishad Upendra- Member of Board of Directors
3. Member - Mr. D.G. Wikramasinghe- Additional Secretary (Administration), Ministry of Electricity and Energy.

A report on this is to be obtained through the above subcommittee.

(c) (i) Arrangements have been made to maintain the new computer software after revaluation of assets.

(ii) Physical verification of assets has been completed.

(iii) It has been arranged to prepare the monthly bank reconciliation statements.

(iv) Arrangements have been made to send letters to customers in this regard.

(d) After revaluation of fixed assets, they will be programmed in computer software and maintained properly and up-to-date.

(e) (i) Computerization of the accounting process of our Authority was initiated in the year 2019. With the shortage of employees in the Accounting Division it was a difficult task to carry on the accounting process as we had to maintain both book-keeping while recording entries in journals and the computerized accounts system simultaneously and therefore, the preparation of financial statements was delayed. The preparation of financial statements and obtaining approval of the Board of Management were delayed due to COVID-19 pandemic situation and as a result, it was only on September 08<sup>th</sup> that it was able to submit the accounting reports to the Auditor General.



## Observations of SLSEA for Auditor General Report 2019

- (ii) Arrangements have been made to submit a detailed report on overtime expenses to the Board of Directors.
- (iii) A corporate plan was prepared for a period of 5 years and submitted to the Board of Directors. It was pointed out by the Board of Directors to profoundly focus on investment required for the development of sustainable energy in the country within the forthcoming period of time, and accordingly, it has been laid out to obtain counseling services on analyzing global trends related to the development of sustainable energy, identifying investment opportunities and developing more comprehensively the corporate plan prepared at present.
- (f) The financial provisions for the 'SWITCH-Asia' programme have been duly dealt with in terms of the provisions of the Establishments Code, and it has been submitted for the approval of the Secretary to the Ministry.
- (g) The Secretary to the Cabinet of Ministers has sought recommendations of the National Salaries Cadre Commission on 29.10.2019 after forwarding for Cabinet approval. The National Salaries Cadre Commission has forwarded to our Ministry, the details on the posts of Engineers as per the approved Recruitment Procedure on 24.08.2020 through the Management Services Department in terms of the letter forwarded to us on 18.06.2020 through the Ministry of Electricity and Energy, by the letter dated 21.10.2020 to give those recommendations.

### 3.0 Other Audit Observations

- (a) Letters of inquiry regarding this matter have been forwarded to the relevant provincial education offices and it has been notified with a copy to the Secretary to the Ministry of Education to settle this amount of advance immediately.
- (b) Arrangements have been made for actions to be taken to recover this amount or remove from journal entries.

## Observations of SLSEA for Auditor General Report 2019

- (c) Arrangements have been made to take necessary actions to resolve this money.
- (d) There were a few projects to be implemented by obtaining provisions at the beginning of the year 2019. Among them,
- It had been budgeted to spend a sum of 135 Million Rupees for the construction of an air-conditioning laboratory to introduce standards and conclusions for air-conditioners and a sum of 70 Million Rupees for a solar power panels laboratory and a sum of 120 Million Rupees for the biomass project.
- (e) Although this project was initiated at the end of year 2019, upon the prevalent condition it was unable to achieve a progress up to the expected level in the year 2020. Further, the goods have been provided to the BMICH by letters and necessary training and guidance has been rendered to the Engineers in need.
- (f) A letter has been forwarded to the Ministry and the Treasury seeking permission to identify the arrears rent of the RCL (Regional Center for Lightening) as an expense of Sri Lanka Sustainable Energy Authority.
- (g) The Committee appointed by the Board of Directors for the preparation of the absorption process was informed to study the above defects as a task herein and include the same in the report and approval of the Board of Directors held on 22.09.2020 has been received for the said compiled report.
- (h) A difficult condition has arisen in relation to the commencement of the construction in terms of the Government policy.
- (i) The Authority, after receiving instruction from the Attorney General, took action to refer the matter for an arbitration process in terms of the provisions contained in the Agreement. Accordingly, the Board of Directors of the Authority has given approval on 12-06-2019 to appoint the Retired Justice Upali Abeyrathne as the arbitrator of the National Arbitration Center No. SLNAC/125-06-2019 to make the final award on this



## Observations of SLSEA for Auditor General Report 2019

project. As a result of the arbitration procedure, having proposals from the contracting parties regarding the settlement of this issue been summoned, the said proposals were presented to the Board of Management on 21.05.2020. It has been informed by the Board of Management to submit the said list of proposals as a more detailed report with a specific time frame, and the matter has been communicated to the relevant party. Further, a reminder has been sent asking for a detailed report and it is expected to obtain the approval of the Board of Management upon receipt thereof and settle this matter.

- (j) As an audit query lies before the COPE Committee regarding the distribution of a part of the money received under "SWITCH-Asia" programme among the employees the said money has been left as it is in the same account. However, it is expected to be invested after receiving the approval of the Treasury upon instruction of the Auditor General.
- (k) Although this sum of money was allocated and it was unable to spend the same within the relevant financial year, this project has been completed at present.
- (l) Using the Computer Accounting System commenced in the year 2019 and therefore, implementation of control methods was difficult during that year and necessary action has been taken to implement the control methods.



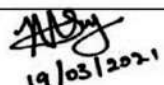
Sgd./illegibly

Chairman

Sri Lanka Sustainable Energy Authority

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I do hereby certify that the foregoing translation of Summary Report from Sinhala into English is true, accurate and correct to the best of my knowledge.



**H.A. ANASUYA M. CHANDRASIRI**  
SWORN TRANSLATOR (SINHALA - ENGLISH)  
GOVERNMENT TRANSLATORS' SERVICE  
ATTORNEY GENERAL'S DEPARTMENT  
COLOMBO 12 - SRI LANKA.

# Corporate Information

## **Name of the Authority**

Sri Lanka Sustainable Energy Authority

## **Legal Status**

A statutory authority established by the Sri Lanka Sustainable Energy Authority Act, No. 35 of 2007.

## **Registered Office**

Block 05, 01st Floor, BMICH, Bauddhaloka Mawatha, Colombo 07.

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