Annual Report 2018

TOMORROW'S ENERGY Today

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Sri Lanka Sustainable Energy Authority

TOMORROW'S ENERGY Today

With an eleven year history of having provided sustainable energy to the nation, we are spearheading the nation's renewable energy movement with the vision of guiding Sri Lankans in embracing energy efficiency and renewable energy. While we continue to empower Sri Lanka from sustainable energy, we have a greater responsibility in driving investments in sustainable energy to a much bigger scale.

Furthermore, with the global energy crisis and global warming catastrophe, compelling countries to reconsider fossil fuel and switch to sustainable energy sources, SLSEA continues to bolster the nation's energy supply by making sustainable energy widely available. We continue to inform, educate and create widespread awareness across Sri Lanka in empowering more and more Sri Lankans for adopting the energy of the future. In addition, we continue to fulfil gaps in harnessing and storing intermittent energy sources that will increase the scale of use, moving away from the use of fossil fuel and adopting leaner processes and energy efficient solutions across all aspects of life.

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We engage people with activities which are focused on creating, collecting, analysing and storing, using or sharing knowledge. As well as building knowledge, these activities can also build networks that strengthen industry capacity, collaborations and partnerships.

About Us

Our Vision

An Energy Secure Sri Lanka.

Our 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.

About Us

The Sri Lanka Sustainable Energy Authority (SLSEA) was established on 1st 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 organisation 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 this Report

Welcome to the Sri Lanka Sustainable Energy Authority (SLSEA) Annual Report for the year 2018.

The SLSEA is constantly looking at ways to improve our Annual Report so that it is more professional, transparent and informative than in previous years. In this year's Annual Report, we hope to build on these attributes of the 2017 Annual Report and provide our Stakeholders with a balanced and comprehensive review of the organisation's overall performance during the year 2018.

The Report covers the operational activities of SLSEA for the period from 1st January 2018 to 31st December 2018.

Performance Highlights

Description	Unit	2018	2017
Performance Highlights			
Renewable electricity generation	GWh	1,742	1,462
Cumulative capacity from hydropower projects	MW	379.61	364.12
Cumulative capacity from solar projects (ground mounted)	MW	51.36	51.36
Cumulative capacity from wind projects	MW	128.45	128.45
Cumulative capacity from biomass projects	MW	33.61	32.62
Cumulative no. of solar rooftops connected to national grid	No.	19,164	10,389
Cumulative capacity from solar rooftop projects	MW	176.37	93.72
Generation from solar rooftop projects	GWh	215.14	129.65
Energy saving from efficient appliances	GWh	721.29	705.84
Electricity saved through SLNEEA interventions	GWh	27	n/a
Units of furnance oil saved through SLNEEA interventions	Million Litres	16.5	n/a
CO_2 avoided	Metric Tonnes	2,193,563	1,862,805
Human Capital			
Total staff of SLSEA	No.	100	103
No. of employees more than 10 years	No.	45	41
No. of employees more than 5 years	No.	71	61
Total payment of employee	LKRM	94.375	89.676
Social and Relationship Capital			
No. of energy audits conducted	No.	23	7
No. of equipment hiring days	Days	1,220	1,580
No. of energy labelling standard published	No.	2	1
No. of visitors for the Hambantota Solar Park	No.	1,364	3,434
No. of solar service companies registered by SLSEA	No.	251	185
No. of solar standards published	No.	2	7
No. of rooftop installations for the religious/government premises	No.	95	116
No. of research facilitated	No.	4	2
No. of publications	No.	7	7

Renewable Electricity Generation

1,742 GWh

Electricity Saved

748 GWh

Units of Furnance Oil Saved

16.5 Mn Litres

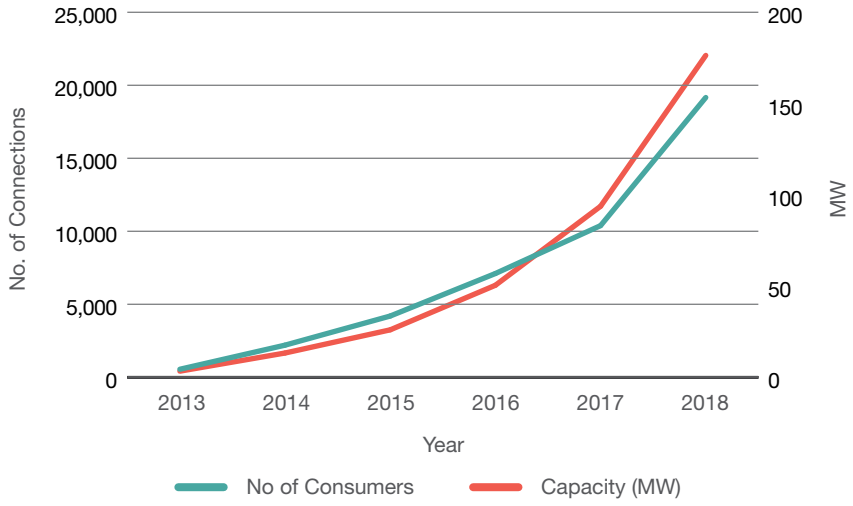
CO_2 Avoided

2.2 Mn MT

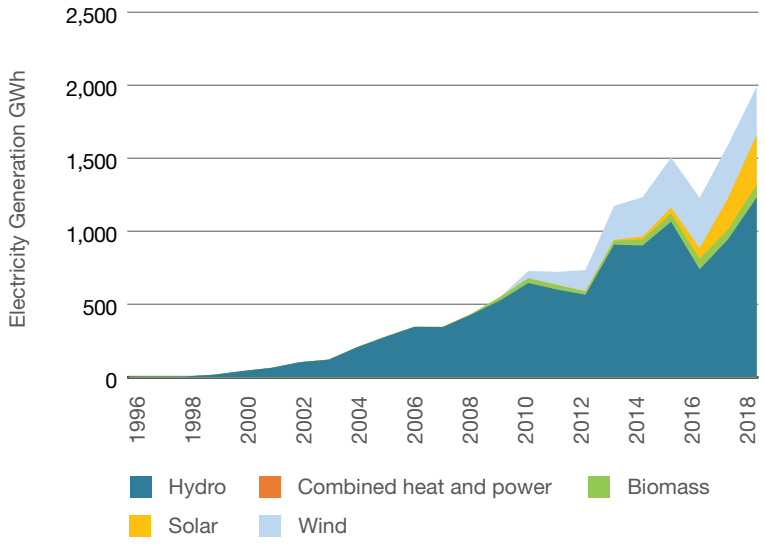
No. of Solar Rooftops Connected to National Grid

8,775

Growth of Rooftop Solar Installations



Contribution of NRE to Electricity Generation



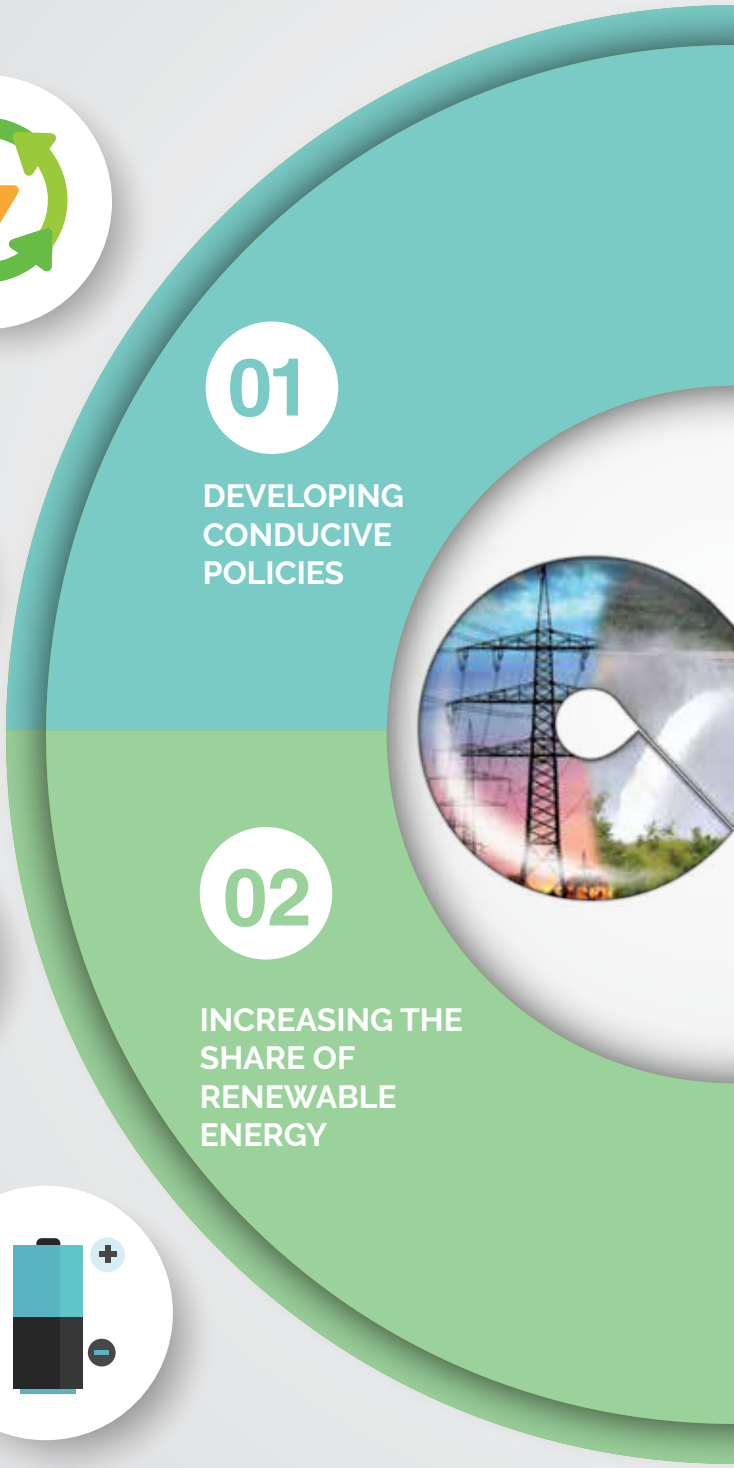
Key Milestones

2007
Establishment of SLSEA

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

2014
Published Solar Resource Atlas of Sri Lanka



03

IMPROVING ENERGY EFFICIENCY

04

EMPOWERING PEOPLE

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

2017

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

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

Introducing Appliance Energy Labelling Standards and Regulations

Improving energy efficiency of energy consuming appliances is a major item to be considered in enhancement of demand side energy efficiency. This can be achieved through disseminating energy efficient products in the market and preventing energy inefficient products entering the market. Appliance energy labelling programme is the strategy identified and put into action to achieve improved energy efficiencies of appliances in the market.

In this programme, an energy label which indicates the energy efficiency of the product through a star rating system is introduced. This energy label helps the customers to compare the energy efficiency of the products in the market and make better purchase decisions. In addition to this type of label, 'Minimum Energy Efficiency' labels are introduced for some products. This label helps customers to identify products with high energy efficiency. Display of the energy label is made mandatory by legislation through gazette notification which also includes regulation on prohibiting import and manufacture of inefficient products.

Energy Labelling Standards, which present energy efficiency bench marks, test parameters, test methods and many more information, play an important role in this process. These Standards are published as Sri Lanka Standards by the Sri Lanka Standards Institution and below mentioned are the Standard number and the gazette number (as available up to date) for the appliances addressed under this programme.

In line with the standard, we have by far contributed to the following regulatory instruments:

Compact Fluorescent Lamps (CFLs)
Standard Number
SLS 1225:2002
Regulation
1611/10 of 22nd July 2009
Progress
The revised Standard on Energy Labelling for CFLs has been published in 2016

Ceiling Fans
Standard Number
SLS 1600:2011
Regulation
1794/15 of 22nd January 2013
Progress
Standards are available. Test facility available.

Fluorescent Lamp Ballasts
Standard Number
SLS 1200:2012
Regulation
1971/13 of 15th June 2016
Progress
Establishment of test facilities in progress

Tubular Fluorescent Lamps
Standard Number
SLS 1625:2012
Regulation
1971/13 of 15thJune 2016
Progress
Establishment of test facilities in progress

Electric Motors
Standard Number
SLS 1525:2013
Regulation
N/A
Progress
Seeking funds for establishment of a test facility

Air-conditioners
Standard Number
SLS 1586:2018
Regulation
N/A
Progress
Energy Labelling Standard finalised

Computers
Standard Number
SLS 1580:2018
Regulation
N/A
Progress
Energy Labelling Standard finalised

LED Lamps
Standard Number
SLS 1530:2016
Regulation
N/A
Progress
Voluntary energy labelling scheme introduced

Refrigerators
Standard Number
SLS 1230:2003
Regulation
N/A
Progress
The standards are being revised. In parallel to this, the Minimum Energy Performance Standards (MEPS) are under formulation

Energy Media Awards 2018

The Sri Lanka Sustainable Energy Authority has organised Energy Media Awards 2019/2020 with a view to motivate journalists, media institutions and interested parties to promote Renewable Energy and Energy Management among the general public of Sri Lanka.

Sri Lanka National Energy Efficiency Awards

The aim of the Energy Efficiency Awards is to provide public recognition to energy consumers, energy service providers and energy managers for demonstrating commitment and excellence in systematic energy efficiency improvement, conservation and management and achieve substantial savings. It also aims to encourage best practice within the industries and sectors.

The award scheme mainly consists of 3 components namely, the National Energy Efficiency Award, the Best Energy Services Company (ESCo) Award and the Outstanding Energy Manager of the Year Award.

Chairman's Message

Achieve the long-term goal of realising Carbon Neutrality in the energy sector in 2050

The Government continued to give priority to sustainable energy development initiatives in line with the current global trends in the energy industry. With the ratification of the CoP21 Paris Agreement, Nationally Determined Contributions (NDCs) under the United Nations Framework Convention on Climate Change have become mandatory targets.

I am privileged to have led the Sri Lanka Sustainable Energy Authority (SLSEA) during a challenging, yet opportunity filled year. It is with great pleasure that I present this Annual Report for the year 2018.

Pioneering the sustainable energy revolution

The SLSEA is the governing body responsible for pioneering the sustainable energy revolution in Sri Lanka. It was established with the aim of forming a key institution which would drive energy efficiency across the country and also by proactively identifying sustainable energy resources which could generate energy in an effective, efficient and eco-friendly manner. All our efforts are focused on improving energy efficiency across all end use sectors and facilitating the development of our island's rich energy resources that includes solar, wind, water and bioenergy.

Looking back at 2018

The Government continued to give priority to sustainable energy development initiatives in line with the current global trends in the energy industry. With the ratification of the CoP21 Paris Agreement, Nationally Determined Contributions (NDCs) under the United Nations Framework Convention on Climate Change have become mandatory targets. Thus, implementing sustainable energy development programmes has attained a high significance to realisation of the NDC targets in the energy sector. During the year, Sri Lanka continued to demonstrate her commitment to ensuring the country's energy security. The sustainable energy initiatives in the current context are in perfect alignment with this approach.

The various activities carried out by SLSEA in 2018 were initiated as a measure of paving the way to achieve the long-term goal of realising Carbon Neutrality in the energy sector in 2050. Sustainable energy development activities implemented by SLSEA are primarily focusing on the two key areas - Supply Side Management (SSM) and Demand Side Management (DSM). All our current programmes under SSM and DSM are focused on achieving these targets and I am pleased to note that we are making steady progress on both fronts.

Future Outlook

While we can be satisfied with the progress we have made in 2018, we must continue to push ahead with initiatives in order to meet our medium and long-term goals especially in view of the fact that the necessary framework for mass implementation of sustainable energy in the island has been laid down. We look forward to add substantial implementation capacity to the sustainable energy sector, as it has become a matter of paramount importance to face the climate change catastrophe. I am pleased to note that the foundation to this effort was laid with the concept of Climate Change Combat Centre (C4) where we intend to use the strength and the discipline of our armed forces to accelerate renewable energy development and energy efficiency improvement efforts of the country. When the skilled cadre of the armed forces are equipped with new knowledge and skills of sustainable energy, we are confident of providing leadership to the rest of the world to meet the challenges from impending climate change with courage and determination.

While we can be satisfied with the progress we have made in 2018, we must continue to push ahead with initiatives in order to meet our medium and long-term goals especially in view of the fact that the necessary framework for mass implementation of sustainable energy in the island has been laid down.

Acknowledgements

I would like to take this opportunity to thank the key individuals at the Ministry of Power & Energy, notably the Hon. Minister, the Hon. State Minister and the Secretary, together with other Ministry Officials, for the support and guidance given during the year. Let me express my sincere thanks to the Board Members and the Principal Officials of the SLSEA for their invaluable insights and to every member of the SLSEA team for their hard work, dedication and passion. I am grateful to all other stakeholders for their continued cooperation throughout the year. I am confident that by working together as one team we will be able to successfully overcome all challenges and lead the country towards energy sustainability.

Keerthie Wickramaratne
Chairman

Renewable Energy Power Generation Capacity Reached

750MW

We aim to facilitate the development of our nation's rich energy resources, including solar, wind, hydro and bio energy through strategic investments in the energy sector, which will enable Sri Lanka to transition to cleaner, sustainable and indigenously sourced energy solutions in the future.

We have arrived at the conclusion of another eventful year and as the Director General of SLSEA, I am pleased to give my views on the performance of the organisation during the year 2018.

The SLSEA is the governing body responsible for pioneering the sustainable energy revolution in Sri Lanka. We aim to facilitate the development of our nation's rich energy resources, including solar, wind, hydro and bio energy through strategic investments in the energy sector, which will enable Sri Lanka to transition to cleaner, sustainable and indigenously sourced energy solutions in the future. At the same time, it is important that we also aim to ensure efficient use of energy, while also facilitating research and development and knowledge transfers that will enable us to develop innovative energy solutions and processes to meet the nation's requirement for sustainable energy.

A Promising Year

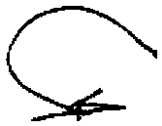
Through Supply Side Management (SSM), our goal is to achieve 20% grid electricity generation using New Renewable Energy sources by 2020 as an alternative to imported fossil fuel. When it comes to Demand Side Management (DSM), we aim to achieve 10% reduction in total energy consumption by 2020 through implementation of energy conservation measures. I am pleased to state that 2018 was a successful year for SLSEA where the renewable energy power generation capacity reached 749.86 MW when compared to the 653.72 MW registered in 2017.

Looking Ahead

As the world is faced with increasingly uncertain times when it comes to the climate change and the future of energy, Sri Lanka will remain steadfastly committed to accelerating the use of sustainable energy to meet its national goals and international commitments. As a new initiative, a long term programme on women empowerment on energy has been designed and implemented by SLSEA in line with the sustainable development goals of the United Nations (SDG Goal 5 – Gender Equality). SLSEA will continue to concentrate on programmes with a future focus in terms of technology, policy, strategy, research and development as well as awareness creation. The ongoing initiatives hold a lot of promise and I am sure future initiatives will continue to build upon the excellent work that has taken place over the years. We are confident that the Government will provide its fullest cooperation to help us make great strides in energy sustainability.

Appreciations

I would like to convey my appreciation to the Hon. Minister, the Hon. State Minister and the Secretary, together with other officials of the Ministry of Power & Energy, for their support given to me during the course of the year. I would like to say "Thank you" to the Chairman and Board of Management of SLSEA for their wise counsel during the year. The wonderful team at the SLSEA demonstrated that they are some of the most talented and hard working individuals in the Public Sector and I thank them for their efforts. Let me express my sincere gratitude to all other stakeholders for showing determination in reaching for our goals. It is clear that our journey towards energy sustainability is a long one but with the support of all parties concerned not just the SLSEA but the whole of Sri Lanka can achieve wonders in the coming years.



Ranjith Sepala
Director General

Board of Management

Mr. Keerthie Wickramaratna
Chairman – Sri Lanka Sustainable Energy Authority

Ms. K. M. Malini Kumarihamy
Add. Secretary (Admin & Proc.) – Ministry of Power and Renewable Energy

Ms. I. J. Abeyrathna
Director (Commerce and R&D) – Ministry of Industries and Commerce

Mr. B. N. Damminda Kumara
Senior Assistant Secretary – Ministry of Provincial Councils and Local Government

Mr. G. Vijitha Nanda Kumar
Add. Secretary – Ministry of Lands

Mr. D. V. Bandulasena
Add. Secretary – Ministry of Agriculture

Mr. K. B. Guruge
Chief Accountant – Ministry of Plantation Industries

Mr. W. T. H. Ruchira Vithana
Senior Assistant Secretary – Ministry of Mahaweli Development and Environment

Mr. D. D. Ariyarathne
Add. Secretary – Ministry of Irrigation and Water Resources Management

Ms. Thejani Thilakarathne
Add. Secretary (Admin) – Ministry of Irrigation and Water Resources Management (from 09 February 2018)

Mr. A. M. R. J. K. Jayasinghe
Senior Assistant Secretary – Ministry of Transport and Civil Aviation

Mr. S. Tharshan
Assistant Director – Ministry of Finance

Mr. Damitha Kumarasinghe
Director General – Public Utilities Commission of Sri Lanka

Mr. D. D. Ananda Namal
Appointed Member

Mr. E. M. Piyasena
Appointed Member (from 09 November 2018)

Mr. Sarath Jayathilaka
Appointed Member

Mr. Hiran Ajith Karunarathne
Appointed Member

Mr. A. M. C. Perera
Appointed Member

Mr. G. Mahendra Perera
Appointed Member

Ms. Farzana Aniff
Attorney-at-Law; Appointed Member

Mr. Chandrasiri Senevirathne
Attorney-at-Law; Appointed Member (from 09 November 2018)

Mr. Kishan Nanayakkara
Appointed Member

Mr. M. Ismail Nazar
Appointed Member (from 09 November 2018)

Audit and Management Committee

Composition of the Audit and Management Committe

Mr. S. Tharshan
Chairman

Ms. K. M. Malini Kumarihamy
Member

Ms. Farzana Aniff
Member

Observers of the Audit and Management Committee

Ms. H. A. D. Chandani
Auditor General's Department

Ms. B. A. D. A. Abeywardena
Ministry of Power and Renewable Energy

We promote the widespread adoption and sustainable use of all forms of renewable energy, including hydropower, wind, biomass and solar in the pursuit of sustainable development, energy access, energy security and low-carbon economic growth and prosperity.

Corporate Governance

Corporate Governance

The Board of Management of Sri Lanka Sustainable Energy Authority (SLSEA) operates on the principles of equity, fairness, impartiality, transparency and accountability. These governing principles are the foundation on which SLSEA endeavours to build strong relationships with all its stakeholders and nurture 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 the right roles, structures and information which are in alignment with the stated policies of the government.

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Board of Management

The Board of Management is ultimately accountable and responsible for discharging 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 also bears the ultimate responsibility of meeting the objectives set out in the Act, exercising the powers vested in it by the Act, proper functioning of systems of internal controls and for the integrity of the financial information provided. The affairs of the Authority are 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 a sub-committee named the Audit & Management Committee to oversee the financial aspects of the Authority. Similarly, the Board is assisted by advisory committees which are appointed when a need arises to make decisions on matters of deep academic or professional character.

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 comprised 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 as well as the recurrent and the capital expenditure programs. These meetings also provide the forum for the officials of the Authority to submit proposals to meet the objectives of the Authority for the consideration of the Board. The Board Members are given appropriate documentation in advance of each Meeting. The level of participation of the Board of Management at these meetings during the year 2018 was as follows:

No.	Date of Meeting	Participation
1	18 Jan 2018	12
2	21 Feb 2018	14
3	21 Mar 2018	13
4	17 May 2018	13
5	19 Jun 2018	13
6	31 Jul 2018	13
7	19 Sep 2018	11
8	08 Oct 2018	11
9	10 Dec 2018	13

Compliance with Legal Requirements

The Board of Management makes every endeavour to ensure that the Authority complies with the Act and other applicable rules, regulations and guidelines published by the government periodically. 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 and therefore has identified a number of common risks as well as a few additional risks which are specific to sustainable energy.

The specific risks are mainly in relation to the energy efficiency improvement and renewable energy development and the policy environment in which it operates in. The Board of Management therefore places special attention on the risk management together with the senior management of SLSEA to ensure sound financial and operational control systems are put in place. Internal auditors and the management team periodically review the systems' effectiveness in delivering the mandate of the Authority.

Risk Culture

The Board of Management has identified its position and a clear uniform tone has been maintained in risk assignment. The management, in reflecting on their commitment to ethical principles, has taken into consideration the positions of all stakeholders during decision making. In adherence with the leadership, the staff has also recognised the importance of such ethical principles and has continued to follow the same.

Risk Identification

The Authority is closely following the external environment identifying risks. The Authority further categorises these identified risks, some common to the global energy industry and some specific to the country, for effective control purposes. In addition, the Authority monitors the evolution of the policy environment of the country and identifies programmes which will be least affected by the policy evolution by choosing them for their cohesiveness and alignment with other national policies.

Risk Management

The Authority considers renewable energy resources and reduction of energy waste as the primary thrust areas and foresees the main risks as low fossil fuel prices. This can become a cheaper alternative to renewable energy and can cause end user indifference to energy costs, which will lead to energy waste at the end user point.

Accordingly, SLSEA has undertaken a risk management strategy of transforming the sustainable energy market to the least possible cost condition, so even under a low fossil fuel price condition, the demand for sustainable energy services will not diminish. 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 a large number of start-up companies to become service providers to encourage competition in the solar rooftop industry, again bringing out solar electricity to become price competitive. Similarly, the energy services companies are nurtured and supported so that they can continue to serve the industry and commence delivering energy efficiency services, even at lower electricity and fossil fuel prices.

During 2018, weather conditions enabled hydropower generation to recover from two consecutive poor rainfall years. However, solar power generation was not adversely affected as expected due to high rainfall conditions, which is a welcome feature of a wider basket of renewable energy resources.

Risk of Losing Resources

The valuable renewable energy resources of the country are adversely affected by change of land use patterns and human activities. Vast swathes of productive wind energy resource sites are lost due to expanding settlements. Similarly, good hydropower resources which exhibited excellent streamflow characteristics in the past have started to behave erratically, due to deforestation of catchment areas, again due to expansion of commercial plantations and also as a result of changing rainfall patterns, a direct result of climate change. Further compounding these natural causes are the increased legal actions taken by the civil society organisations against renewable energy project development. Number of lawsuits brought against project developers in which SLSEA was made a respondent rose to 03 in 2018, causing severe loss of productive renewable energy resources.

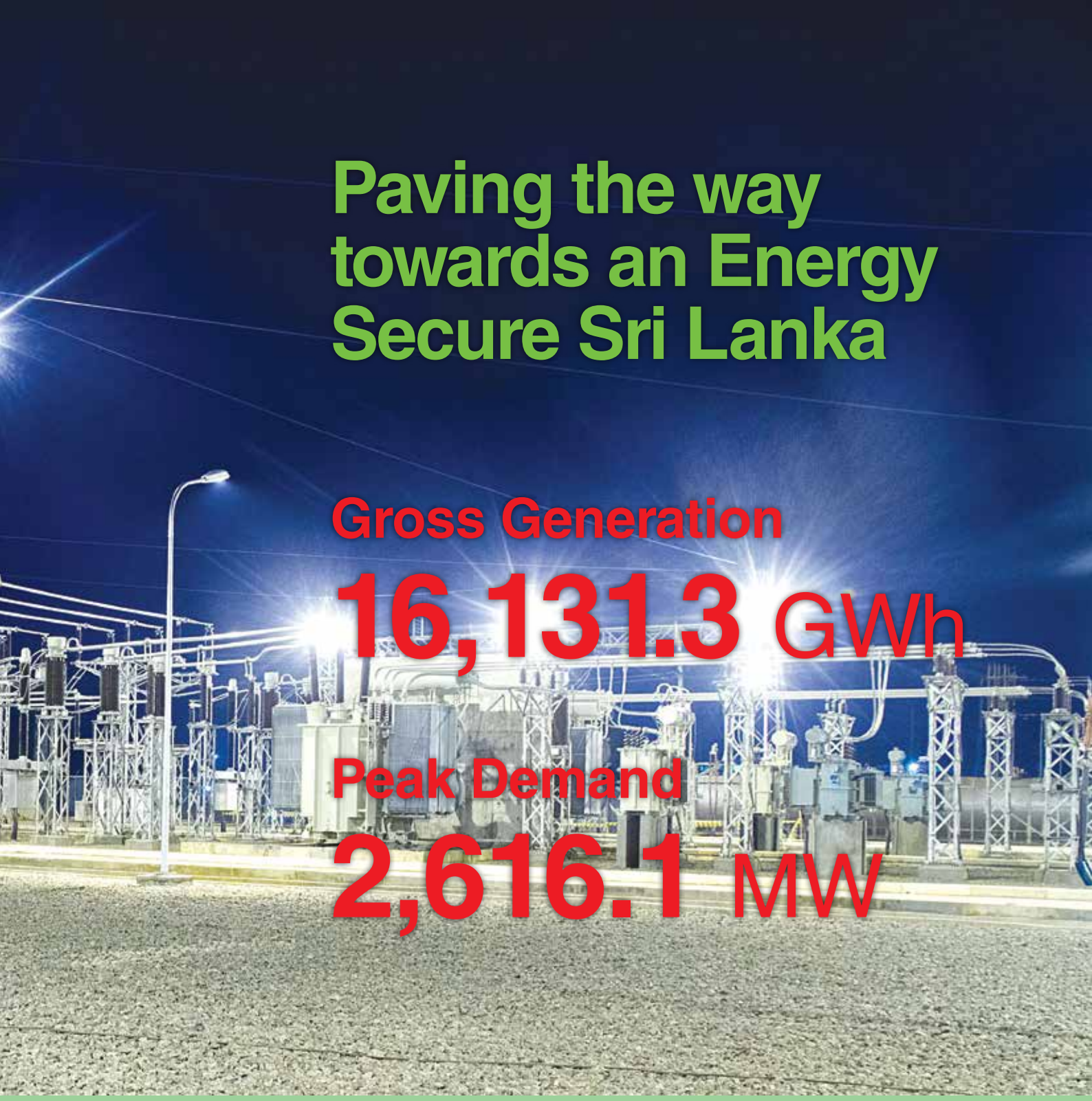
Risk of Low Prices of Energy Services

Electricity prices which underwent a 25% price reduction in 2014 continued to affect the energy services industry as the enthusiasm of institutional users remained diminished. The industrial sector continued to enjoy very low tariffs during day time, bringing down cost of production. This resulted in reduced interest in curtailing energy waste and caused significant market shrinkage in the energy efficiency services sector. Similarly, fossil fuels used in industrial thermal applications too 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 reduced carbon footprint and lower operating costs.

Risk Monitoring and Review

The presence and the functioning of the Authority's risk management components are assessed over time with the purpose of identifying weaknesses in the controls thereby undertaking the required internal and external changes. While the Senior Management and the Audit and Management Committee hold the ultimate responsibility for ongoing monitoring activities or separate evaluations, the Internal Auditor carries out frequent system base audits by focussing on different service delivery arms of the Authority. Effectiveness of the risk management process is reviewed annually, and adjustments are made to the current process.

‘Energy Efficiency’ simply means using less energy to perform the same task - that is, eliminating energy waste. Energy efficiency brings a variety of benefits like: lowering our costs on a household and the entire economy.



Management Discussion and Analysis

Sri Lanka Sustainable Energy Authority (SLSEA) is the focal national entity for the implementation of sustainable energy development programmes in the country.

Activities of SLSEA in 2018 were carried out as a measure of paving the way to achieve the long-term goal of realising Carbon Neutrality in the energy sector in 2050.

The sustainable energy development activities implemented by SLSEA primarily focus on the following two major areas where all current programmes are geared towards the given targets.

Details of activities under different programmes are given in the subsequent sections classified under the following two headings. Some of the programmes contributing different aspects coming under these subject areas were implemented with the technical/ financial assistance of donor funded agencies. Details of those projects are given as a separate section.

∞ Supply Side Management (SSM)

Achieving 20% grid electricity generation using New Renewable Energy sources by 2020 as an alternative to imported fossil fuel

∞ Demand Side Management (DSM)

Realising 10% reduction in total energy consumption by 2020 through implementation of energy conservation measures

∞ Supply Side Management Activities

Under the Supply Side Management activities primary intervention was resource allocation, and further to that interventions were made with a view to uplifting the national renewable energy development programme in the country. Enhancement of project implementation methodology through direct involvement of the government in the preliminary project development phase under energy parks as well as promotion of some of the key renewable energy interventions in the country, R&D, pilot projects, etc. were the key areas under this. Substantial interventions were also made in connection to the resources and technologies that have not been developed so far.

(a) Renewable Energy Resource Allocation

Renewable energy resource allocation for implementing renewable energy projects by way of issuance of approval of the Government (Provisional Approvals and Energy Permits) took place throughout the year. The project approval process in connection to the implementation of renewable energy projects was in accordance with the provisions given in the Act.

Issuance of Provisional Approvals (PAs)

5.68 MW OF HYDRO PROJECTS

40 MW OF SOLAR PROJECTS

10 MW OF OCEAN ENERGY PROJECTS

0.4 MW OF WASTE PROJECTS

30 MW OF WIND PROJECTS

Issuance of Energy Permits (EPs)

21 MW OF SOLAR PROJECTS

5.5 MW OF HYDRO PROJECTS

10 MW OF WASTE PROJECTS

20 MW OF WIND PROJECTS

Land acquisition, a significant part of the implementation of projects, progressed well throughout the year. SLSEA supported project developers in the land acquisition process under the provisions of the Section 38 of the Act. Land acquisition process was carried out in connection to 3 hydro projects, one of which has already been completed.

With the aim of speeding up the project approval process, two-day workshops were conducted for relevant Government Officials, including Divisional Secretaries, with the participation of Officials of the Land Commissioner's Department.

(b) Renewable Energy Parks - A New Initiative in RE Project Development

As a key milestone in the renewable energy development process, initiation of renewable energy parks was carried out. Under renewable energy parks, facilitating the implementation of large-scale renewable energy projects by way of engaging in infrastructure development, arranging fast-track approval processes and many other progressive steps are expected. Once all project development interventions are done, the park will be ready for investors to commence construction work related to the project, and thus the energy park concept will avail with ready-to-implement projects. It will be yet another key milestone in the national renewable energy development programme.

Solar Power Park at Siyambalanduwa

The first solar power park is set to be established in Siyambalanduwa in the Monaragala District, with a total capacity of 100 MW. SLSEA has identified appropriate land blocks in collaboration with the Forest Department and the District Secretariat, Monaragala. Project development activities are being carried out by SLSEA in collaboration with the CEB. Activities related to the establishment of solar power park were initiated in the year in concern, and ten blocks of land with a total area of 500 acres were identified for the project.

It is expected to generate 148 GWh of electricity which will result in a saving of LKR 3,383 million annually by way of reducing fossil fuel imports.

Proposed land for Solar Power Park at Siyambalanduwa

Pooneryn Solar - Wind Hybrid Park

The Northern parts of the country have excellent wind power potential especially in the coastal regions. Pooneryn area was identified as the location for a large-scale solar-wind hybrid power park. Avifauna study, which is a major aspect of environmental assessment for wind power projects, was started obtaining expertise from the University of Colombo. The avifauna study will provide detailed scientific information of the birds in the area as the very nature of wind power projects are known to affect birds more than any other animal species. Most of the proposed project area has been surveyed and arrangements have been made for land appropriation.

(c) Promotional Programmes in Renewable Energy

Two major renewable energy promotional programmes were implemented to deploy renewable energy projects with mass-scale public engagement as Soorya Bala Sangramaya and Sulan Bala Meheyuma.

Soorya Bala Sangramaya

The Soorya Bala Sangramaya programme, which was introduced by the Government to help different segments of the community to join renewable energy based power generation, was continued with a successful level of project implementation. Under the 3 schemes of integration of solar power to the national grid, namely net-metering, net accounting and net plus, the programme was able to establish more than 130 MW of solar rooftop systems in different sectors by end 2018. SLSEA continues to actively facilitating the implementation of projects in state sector buildings, religious institutions, commercial establishments and many others. Registration of solar PV service providers was done based on conformity of the solar rooftop equipment standards prepared by SLSEA in collaboration with Sri Lanka Standards Institution (SLSI). Accordingly, 251 solar rooftop service providers were in registration by the end of the year.

Public Institutions going for Solar PV Systems under Soorya Bala Sangramaya

SLSEA received funds from the National Budget to implement solar energy systems in public institutions. Accordingly, 72 hospitals across the island were selected and chosen into four clusters. Bidders were selected through National Competitive Bidding and SLSEA conducted the supply, installation, testing and commissioning with three solar service provider companies. Under this scheme, 28 base hospitals, 20 district general hospitals, 9 teaching hospitals, 2 provincial general hospitals and 13 other hospitals were benefited with 20 kW systems each. SLSEA engineers and technical officers conducted on-site training for the system operators in each hospital. It is estimated that 2 GWh of green energy is generated from these installations to the national grid each year. This project aids to reduce the energy bills of the individual hospitals and to demonstrate the use of renewable energy to the society, all over the country.

Rooftop solar installations in Government hospitals

Soorya Bala Sangramaya receives Financial Support for its expansion

SLSEA introduced a low-interest loan scheme with the support of US$ 50 million credit line from the ADB for domestic, industrial and commercial establishments to access funds for up to 50 kW solar rooftop systems. There has been a positive response to this loan scheme with several organisations coming forward to sign up for it. Initiatives were also made to obtain a further credit line facility of US$ 100 million from the Government of India. Cooperation of International Solar Alliance (ISA), of which Sri Lanka is a member state, was also requested for enhancing activities in solar power development in Sri Lanka.

'Rivi Balaya Liya Saviyata' – Women Workforce trained for Soorya Bala Sangramaya

Solar PV industry has reached new heights after the successful implementation of the 'Soorya Bala Sangramaya' programme, which has created more than 5,000 job opportunities for Sri Lankan youth across the island. These jobs include engineers, technicians, managers, sales executives, IT executives, market analysts, customer liaison officers and many more. Additionally, local manufacturing also found ways to make inroads into the global market and expand in local markets. For instance, aluminium infrastructure, DC cables, AC cables, electricity meters, cable accessories, combiner boxes and similar products are locally manufactured and are of a very high quality standard.

Nevertheless, the majority of field work in solar installation is carried out by male workers, while only a few female workers have excelled their career in solar installations. Most of the solar service provider companies have offered the marketing and sales roles to females, with less emphasis on giving them opportunities in technical roles. Women are shown that they are even ahead of the male trainees in certain areas, especially when it comes to working methodically, with discipline, rules, safety and hygiene, while it is also a proven fact that they are good at multi-tasking. SLSEA understood that the training of committed women on solar energy related work would be an asset to the whole Sri Lankan society and provide a significant boost to the other female workers, especially those interested in pursuing a career in technical roles. So, Sri Lankan solar service provider companies need to be convinced of the increasing skills and knowledge of the women employees. SLSEA took initiatives to support this through 'Rivi Balaya Liya Saviyata'.

'Rivi Balaya Liya Saviyata' is a comprehensive programme for women empowerment in solar PV rooftop installations. The programme comprised of a well-balanced mix of site visits, practical sessions and on-site installations delivered through experts in the sector. 18 young ladies have successfully undergone the first intake, which would be completed by the International Women's Day on March 8, 2019.

Rivi Balaya Liya Saviyata

Sulan Bala Meheyuma – A New Focus for Small-scale Wind Turbines

Facilitating the harnessing of wind energy using small-scale and medium-scale wind turbines, a national wind energy programme named 'Sulan Bala Meheyuma' was introduced. Under this programme, small-scale wind turbines were installed at the National Renewable Energy Park, Hambantota. Activities were also planned to promote wind turbines in the respective scales along-with providing facilities for local manufacturing of the particular turbines.

(d) Technology Development, R&D and Pilot Projects

SLSEA carries out various technology development and R&D interventions in order to resolve technological limitations related to different renewable energy technologies as well as integration of renewable energy based power to the national electricity grid. Key areas of technology development focused in the year 2018 are listed below, along-with a brief of the projects being implemented under each.

Energy Storage Systems (ESS)

Energy Storage Systems can provide significant support towards cushioning the fluctuation effects of renewable energy as well as for enabling the use of solar power to meet the peak electricity demand. A small-scale demonstration project was implemented in the National Renewable Energy Park, Hambantota, with the technical assistance of the Government of Korea.

Micro-grid Systems

Micro-grid systems can be used to achieve efficient utilisation of renewable energy-based power systems, and weather forecasting and other transient system studies can support increase of integration of solar power to the national grid. R&D was in progress in these areas in collaboration with the Department of Electrical & Electronics Engineering, University of Peradeniya.

Floating Solar Projects

Initiatives were made to implement a floating solar pilot project of 50 kW capacity at Bandaragama. Floating solar technology is emerging as an alternative for ground mounted solar systems, and implementation of floating solar technology projects would be very important for a country with limited lands like Sri Lanka.

(e) Interventions in Novel Resources and Technologies

Wave Energy Resource Development

Being an island nation that is exposed to long oceanic stretches, wave energy resource is observed to be an important new renewable energy resource available in the country. In order to facilitate the development of this resource, wave energy resource assessment was started in collaboration with the Department of

Mechanical Engineering, University of Peradeniya. This research will be done according to the IEC 62000-101 standard to provide good quality wave resource data to assess and characterise wave resource and identify the most promising areas for wave energy exploitation. The project will also cover the wave energy resource mapping in Sri Lanka.

Development of Exotic Energy Technologies

Arrangements were made to implement exotic energy technologies (that have not been tried out so far in the country) in collaboration with the CEB through International Competitive Bidding.

∞ Demand Side Management Activities

(a) Energy Data & Information

Formulation of energy data and statistics was continued to facilitate better management of energy resources in the country and to provide support in policy formulation related to energy. Energy consumption benchmarks published by SLSEA were used to monitor and control energy consumption while also promoting the saving of energy, comparing the overall efficiency levels of entities with peer organisations within Sri Lanka as well as in other countries. The benchmarks are revised from time to time based on survey inputs, allowing organisations to aim for incremental levels of energy efficiency. In 2018, SLSEA made plans to conduct a building survey to revise the benchmarks of commercial building sector.

(b) Energy Management Systems & Services

SLSEA successfully carried out the necessary regulations and facilitation of services to implement sound energy management programmes as well as energy efficiency improvement projects in establishments.

Under the Energy Manager/ Energy Auditor regulation, Energy Managers and Energy Auditors are appointed to implement continuous energy efficiency improvement and conservation programmes in industrial and commercial sectors. Energy Manager is the key person involving in implementing the energy management practices in an organisation. The role of an Energy Manager is to create a culture within an organisation with the assistance of employees in all levels, and thereby make energy efficiency a regular business practice. The programme was continued successfully from the previous years.

Energy Managers and Energy Auditors

Capacity building and project implementation assistance by way of providing the necessary technological guidance are provided by SLSEA. In 2018, SLSEA started conducting district wise workshops on Energy Conservation and Management targeting Energy Management Officers in government sector. This has been initiated under the Circular issued by the Presidential Secretariat on Energy Conservation in government institutions. Accordingly, 4 workshops were conducted covering Kurunegala, Puttlam, Kegalle and Rathnapura districts. Energy Services Companies (ESCOs) registered under SLSEA are involved in carrying out energy audits and implementation of energy

Programme for Energy Management Officers at Kegalle

Programme for Energy Management Officers at Kurunegala

efficiency improvement projects. An instrument bank is maintained at SLSEA in order to cater to the energy measuring requirements of institutions, consultants, professionals, ESCOs as well as energy consuming organisations. Further, SLSEA provided energy audits and consulting services including ISO 50001 EnMS Audits in government and other organisations.

Code of Practice for Energy Efficient Buildings

Revision of the Code of Practice for Energy Efficient Buildings, which was published in 2009, was carried out. With the revision, awareness and training programmes will be carried out for professionals employed in the construction sector in order to make them adhere to the Code prior to making it mandatory. Guideline for Sustainable Energy Residencies was being developed and public awareness will be carried out.

Appliance Energy Labelling Programme

Through the appliance energy labelling programme, it is expected to promote and disseminate high energy efficient products in the market while gradually eliminating energy inefficient products. This is done by educating the public on how to identify energy efficient products during purchasing, promoting suppliers of high energy efficient products and banning low energy efficient products in the market through enactment of legislations. An energy label with a star rating or a Minimum Energy Performance (MEP) level was introduced for energy consuming appliances. This label enables the buyer to select high energy efficient products when purchasing. Energy label for Compact Fluorescent Lamps has extensively supported to eliminate sub-standard products whereby high energy savings and demand reduction have been realised. For LED lamps a voluntary energy labelling programme is in operation and it is expected to make it mandatory in the future. Further, within the next couple of months an energy label for ceiling fans will also be introduced. A Minimum Energy Performance label will be introduced for domestic refrigerators and the energy labelling standard for refrigerators is being revised. Energy performance tests of refrigerators are conducted at the test facility established at the National Engineering Research & Development (NERD) Centre and the results of the tests will be used to determine a bench mark on MEP level for refrigerators.

Energy labelling standards for computers and room air conditioners were finalised and they were published by the Sri Lanka Standards Institution as SLS 1580:2018 and 1586:2018. Technical Specifications for a computer test laboratory were prepared with the technical support from University of Moratuwa.

(c) Research & Development and Pilot Projects

With a view to disseminate energy efficient technologies among industrial and commercial sectors, SLSEA carries out research & development and pilot projects related to energy efficiency improvement.

Energy Efficiency Improvement in Tea Withering

As the tea industry is a large-scale industry in the country, energy efficiency improvement in tea industry has been focused during the past few years. Tea withering is the major electricity consuming process in the particular industry, and therefore it is very important to improve the particular process to reduce

energy consumption and wastage. SLSEA has started a joint project with the Tea Research Institute to modify withering troughs to reduce electrical and thermal losses by changing the duct layout, incorporating a heat exchanger and a process control system.

An MOU was signed in 2018, and the project is expected to be finished by the end of 2019 with a funding of Rs. 2 million which will be disbursed in stages. The design proposed by the SLSEA was discussed with TRI and CFD modelling results were obtained from University of Moratuwa to find the most viable design.

Introduction of Tri-generation

Tri-generation or Combined Cooling, Heating and Power (CCHP) refers to the simultaneous generation of electricity, useful heating and cooling from one source of energy. 80% of the energy in primary fuel can be utilised by using tri-generation, and it is one of the best methods available for maximum utilisation of energy. SLSEA expects to explore the possibilities of introducing tri-generation facilities for industrial and commercial sectors such as hotel sector and Export Processing Zones (EPZ). A feasibility study for implementing tri-generation systems in Biyagama Export Processing Zone (BEPZ) was started in 2018.

(d) SLNEEA - Energy Efficient Establishments/ Contributors Nationally recognised

Through the Sri Lanka National Energy Efficiency Award (SLNEEA), energy consumers, energy service providers and energy managers, who have made systematic and serious attempts in efficient energy utilisation, conservation and management of energy and achieve substantial savings are nationally recognised.

Sri Lanka National Energy Efficiency Award 2018

This award scheme mainly consists of 3 components targeting different categories involved in realising successful energy efficiency improvement project implementation – establishments in state sector & private sector, Energy Services Companies (ESCos) and Energy Managers. The Sri Lanka National Energy Efficiency Award ceremony was held on 21st August 2018 at the BMICH, awarding 31 organisations who have made significant contribution to energy conservation.

(e) Operation Demand Side Management

This focuses on implementation of national programmes with wider stakeholder engagement to fast-track the implementation of focused energy efficiency improvement interventions. The Demand Side Management (DSM) case of the long-term generation plan 2014-2039 of CEB, was found to be the least cost option for implementation. As per this option, for the implementation of nine thrust areas under commercial, residential and industrial sectors,

LED Distribution Pilot Programme

the Presidential Task Force for energy demand side management was established under the SLSEA and is guided by a national steering committee. In addition to SLSEA, CEB, LECO and LTL are set to fund the project while funding is expected from external sources as well. The unit officially commenced operations on 2nd January 2017. The following trust areas have progressed towards the implementation stage in 2018.

Eliminating Incandescent Lamps

The general public is known to waste a lot of energy mainly due to the use of wrong equipment and poor habits in homes and offices. Incandescent lamps are still widely used across the country primarily due to their low cost although they are known to be very inefficient and have a much shorter lifespan compared to LED lamps. In order to promote the use of LED lamps in low-income households, SLSEA commenced the 'Shakthi' Programme. Through this programme, it is planned to distribute 10 million LED lamps for households consuming less than 90 kWh per month. A pilot project was carried out at Kolonnawa, Horana and Ruwanwella areas for the identification of suitable distribution mechanism for the national project. Creating awareness of good energy saving habits to be practised at home and office is also an integral part of the programme.

Efficient Chillers

A significant number of air conditioning systems in offices and factories have been installed several years ago and are therefore inefficient due to less advanced technology being available at the time and natural wear and tear due to constant usage over the years. Replacing the chillers in these air conditioning systems with newer ones can have a drastic impact on the electricity consumption with the potential to reduce the monthly electricity bill by as much as 30-40%. A proposal has been prepared and discussions are ongoing with the ADB to obtain funds for replacement of these inefficient chillers in Sri Lanka. Further, a study has commenced with the aim of developing case studies on existing chiller performance.

Efficient A/Cs

Proposal and technical specifications were prepared to obtain foreign funds for the establishment of an air conditioner test laboratory.

Efficient Fans

A domestic appliance survey was planned, which would establish the true potential of saving through the replacement of inefficient ceiling fans with efficient fans.

Efficient Refrigerators

Guidelines for replacement of inefficient domestic refrigerators were prepared with the participation of the relevant stakeholders. Once the minimum energy performance standards are prepared the scheme can be launched.

Efficient Lighting

Initiatives were taken to conduct a detailed study on lighting systems in commercial and industrial facilities.

Efficient Motors

A study on use of motors was carried out in the industrial sector. The study will support with the necessary data on motors and use of variable speed drives in different industries.

(f) Energy Education and Awareness Creation

Various education programmes to facilitate better engagement of the general public in sustainable energy interventions especially with a future focus.

Vidulka National Energy Exhibition

'Vidulka' Energy Exhibition was held from 17th to 19th August 2018 at the BMICH. 43 stalls were available by government and private sector institutions in the energy sector and approximately 20,000 people visited the exhibition. The following programmes were conducted in order to actively engage the participants and to have an interactive learning process on energy conservation and renewable energy aspects.

'Vidulka' Energy Exhibition at the BMICH

- A quiz programme was conducted to measure the level of awareness on energy management of the visitors and around 3,000 LED lamps were distributed among the participants based on the results of the quiz.

- An art competition was conducted for school children and branded school bags were distributed to the participants.

- Scouts demonstrated their group activities and engaged in energy related awareness programmes.

- A vigorous media campaign was launched on TV channels Derana and Rupavahini as well as in several newspapers.

'V 2025' Enterprise Sri Lanka

SLSEA participated in the 'V 2025' Enterprise Sri Lanka exhibition at Monaragala from 29th to 31st August 2018. The event primarily focused on educating the public on the 'Battle for Solar Energy' Programme. An open art competition was held among school children on the theme of renewable energy. Further, street dramas were performed to educate the public on energy management and solar energy. The winners were awarded with SLSEA branded school bags.

Educational Exhibition - Ruwanwella

SLSEA participated an education exhibition at Ruwanwella public grounds on 1st and 2nd October 2018 which coincided with the 'World Children's Day' celebration. A stall was set up by SLSEA to educate the public about energy management and renewable energy and to guide them on how to become a more energy conscious citizens.

SLSEA education exhibition at Ruwanwella

'V 2025' Enterprise Sri Lanka exhibition at Monaragala

Energy Journalist Awards Programme

A workshop on sustainable energy was conducted for 50 journalists, including editors and producers, on 2nd October 2018 at the Waters Edge Hotel with the participation of Hon. Minister of Power & Energy. The 'Energy Journalist Award' was ceremonially unveiled at this programme. The Energy Journalist Award recognises outstanding contribution of mass media personnel towards disseminating knowledge on energy management, renewable energy development and demand side management activities in the country, employing print, electronic and social media. Submissions made by journalists will be scrutinised by an expert panel, comprising of academics in mass communication, representatives of mass communication and information the Sri Lanka Press Council, representatives of the electronic media as well as the SLSEA.

Energy Journalist Awards

∞ Donor Funded Projects

(a) United Nations Development Programme (UNDP) /Global Environment Facility (GEF) funded Sustainable Biomass Project

The UNDP/GEF funded 'Promoting Sustainable Biomass Energy Production and Modern Bio-energy Technologies' project came to an end in the year 2018. It has been evaluated by an international expert committee appointed by the United Nations in its Project Terminal Evaluation, and was appraised as a 'highly satisfactory' project.

Fuelwood plays a vital role in the lives of a large segment of the rural population. The importance of fuel wood is such that if the whole nation used LP Gas for cooking in their homes back in 2012, the whole country would have struggled economically due to the extensive outflow of funds to purchase LP Gas. Therefore, the use of fuel wood in homes, bakeries, tea industry and many other areas, is of great significance for the economic well being of the nation. Sri Lanka is blessed with the ideal climate for growing trees for fuel wood due to the fertile soil and plenty of rain and sunshine.

Given this background, the UNDP/GEF funded Sustainable Biomass Project, a 5-year project which commenced in 2013, was concluded during year under review. This project had the following objectives.

- Approve and implement policy instruments that promote and support the use of sustainably-produced fuel wood in industrial thermal applications

Hot Water Boilers for Karawanella Hospital by the Sustainable Biomass Energy Project

- Enhance knowledge and improve support network for sustainable fuel wood production
- Increase sustainable fuel wood production
- Improve confidence among industrial and banking sectors on the feasibility, stability and economic benefits of sustainable fuel wood supply chains
- Enhance knowledge on biomass energy technologies and maintenance skills and increase number of wood-based gasification projects

1. The National Energy policy identifies the requirement of a conducive policy/regulatory framework to support biomass energy sector.

- A standard for sustainable production of fuel wood has been developed with the support of Sri Lanka Standards Institute (SLSI) and other relevant stakeholders. The standard namely SLS 1551:2016 addresses issues of traceability, legal requirements, etc. to promote and support the use of sustainably produced fuel wood in industrial thermal applications. Following supporting studies and mechanisms are in place.

    - Biomass transport study
    - Biomass pricing study
    - SLS 1551:2016 standard and certification system
    - 25 Auditors trained and accredited on SLS 1551
    - Solid Bio fuel standard

SLS 1551 Auditor Training Programme

2. Fuel wood growing models have been established in the field covering an area of 900 hectares. The plantation activities have been closely monitored with the Forest Department, Coconut Cultivation Board, Rubber Research Institute, Regional Plantation Companies and NGOs/CBOs.

- 14 fuel wood production models were established in the field which exceeded the project target of 5 demonstration models.
- Survey on biomass resources, land use and land availability for different growing models plus survey on current management practices, socio-economic benefits and challenges in 11 districts were completed and validated.
- A standard for sustainable production of fuel wood and certification (SLS 1551:2016) was published and the required certification system has been developed. 25 Auditors have been trained under this standard.
- 40 community level awareness, training and visibility events were completed in various parts of the country with the participation of more than 1,400 people.
- Best fuel wood growing models and handbook on fuel wood growing models were published.

3. Operation of biomass energy terminal in Colombo launched in November 2017 was continued producing 40 MT of wood chips daily. The biomass energy terminal in Monaragala was opened in July 2018. The database is nearing completion (90%) and the user interface has been finalised.

4. 31 feasibility studies and 26 pilot technology demonstration projects for the implementation of Biomass Energy Technologies were completed under different biomass applications.

A total of 18 workshops were conducted for 800 participants of the target groups of Engineers (Kurunegala) as well as Factory Officers & Technicians (Badulla, Galle, Ratnapura). 235 Officers in the tea sector, 30 Engineers, and 200 Law Enforcement Officers were trained for various aspects related to sustainable production and consumption and technologies of biomass.

- A technical study report on utilisation of technology in biomass energy conversion systems in Sri Lanka was completed and validated through key stakeholder validation workshops.
- 5,000 leaflets (2,500 in English and 2,500 in Sinhala), 1,000 booklets and a video on sustainable biomass production and utilisation have been published.

(b) United Nations Development Programme (UNDP) /Global Environment Facility (GEF) funded Nationally Appropriate Mitigation Actions (NAMA) Project

NAMA project intends to develop a robust and transparent framework along with an inventory and MRV system to quantify Greenhouse Gas (GHG) emission reduction and the cost-benefits of low carbon interventions in the energy generation and end-use sectors. The framework will be demonstrated through the dissemination of bio-digesters, high efficient motors in tea factories and solar PV net metering systems with battery storage.

As at the end of the year 2018, the progress of the project was as follows:

- The project completed the development of ICT-based data collection system for energy sector pilots and the data collection has commenced.
- Marginal Abatement Cost Curve (MACC) analysis was completed for the energy sector and results were compared against Nationally Determined Contributions (NDC) targets of the country.
- MRV framework for energy sector and MRV protocols were developed for project specific pilots. NAMA institutional arrangement was formulated.
- 342 variable frequency drive (VFD) units were installed in 48 tea factories under the 1st phase of VFD installation and the 2nd phase has already commenced.
- Installation of more than 200 biogas digesters in five provinces was completed.
- Total emission reduction of approximately 3,750 tones CO_2 equivalent and energy saving of 5,850 GJ have been realised by the Project.

(c) Electricity Supply Reliability Improvement Project

Electricity Supply Reliability Improvement Project is a collaboratively implementing project with CEB, LECO, SLSEA and National Water Supply and Drainage Board (NWSDB). SLSEA and NWSDB will be the implementing agencies for the subproject of the above main project which is to support productive energy use for small isolated islands and rural communities, in 3 islands in the Jaffna area of the Northern Province (Nainathivu, Analativu and Delfts) funded by a grant from Japan Fund for Poverty Reduction (JFPR) and administered by ADB.

This subproject aims at improving livelihoods in local communities, including for women, through

(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 as maintenance crew for simple and routine repairs, operation and maintenance of hybrid renewable energy systems and other facilities and

(iv) Developing additional infrastructure.

Pilot Demonstrations of the NAMA Project

∞ Human Resource Development

Human Resource Development has always been of great importance to SLSEA. This entails enhancing the knowledge and skill levels of human resource both internally within the Authority as well as externally in terms of various key individuals and groups within the society that play a key role in the industry.

External Human Resource Development Programmes

During the year, several skills development programmes were carried out for the solar energy sector. Two 5-day comprehensive training programmes were conducted for the solar service provider companies. This has paved the way for enhancing the professionalism in the rooftop solar PV system installation process, not only increasing the outputs of systems, but also in terms of safety and reliability aspects.

Moreover, SLSEA staff imparted their knowledge and skills by being resource persons in various disciplines of sustainable energy. Such training programmes made an impact on all tiers of society including school children, universities, professional institutes, government organisations, media and many societal groups across the country. SLSEA also publishes quarterly newsletters providing reading material for the interested reader community including the younger generation.

SLSEA Officers training employees of solar service provider companies in Hambantota

Internal Human Resource Development Programmes

Human resource development programmes that focused on internal staff were also conducted to ensure updating of their knowledge and skills in the subject of energy and allied field. This was supported by providing the staff foreign training opportunities and through the participation at training programmes conducted by various local institutions. The foreign training programmes primarily were in the areas of solar and wind energy, sustainable consumption and production and energy storage while the local training programmes were related to procurement and mass media.

ITEC Master Trainers Programme for the International Solar Alliance member countries, India

SAARC Special Programme on Renewable Energy, South Korea

ESS system and technical tour at South Korea

Action Plan 2019

Following programs will be implemented under the Supply Side Management and Demand Side Management areas in 2019.

Supply Side Management

1. Continuing the Renewable Energy Resource Allocation process along with the facilitation and monitoring of projects
2. Stakeholder awareness, training and workshops on the project implementation process and strategic environment assessment
3. Performance monitoring of the commissioned Renewable Energy projects
4. Wind Energy Development
5. Implementation of Energy Parks (Siyambalanduwa and Pooneryn)
6. R&D in solar power and piloting new technologies in solar power including storage and floating solar
7. Soorya Bala Sangramaya
8. Clean energy and network efficiency project
9. UNDP/GEF funded sustainable biomass project (Phase II)
10. UNDP/GEF funded NAMA project
11. Supporting electricity supply reliability improvement project
12. Operation and maintenance of Renewable Energy sites (Hambantota and Indurana)

Demand Side Management

1. Implementation of energy management programmes in establishments through Energy Managers, Energy Auditors and ESCOs
2. Establishment of Energy Consumption Benchmarks
3. Enforcing the Code of practice for Energy Efficient Buildings and Households
4. Energy Labelling Programmes for Ceiling Fans, Computers, Refrigerators, LED lamps, Tubular Fluorescent Lamps and Ballasts, Room Air Conditioners
5. Sri Lanka National Energy Efficiency Award
6. Compilation of Energy Balance and Disaggregation of Energy Data by End Use
7. Energy efficiency improvement related R&D, feasibility studies and pilot projects
8. Operation Demand Side Management (ODSM) project
9. Energy Education and Promotion

SLSEA's goals are to support the implementation of enabling frameworks that attract timely and sufficient financial resources; identify and develop cost-effective renewable power options; and encourage the reliable integration of higher shares of renewables into systems.

Financial Statements

Income Statement

	Note	2018	2017
Income			
Operational Income	2	853,080,087	295,154,683
Non-Operational Income	3	67,551,064	270,591,538
Total Income		920,631,151	565,746,221
Expenditures			
Project/Activity Expenses	4		
Renewable Energy	4.1	284,068,203	227,448,436
Energy Management	4.2	18,510,107	16,485,745
Knowledge Management	4.3	12,976,760	20,506,782
Strategic Activities	4.4	2,926,150	4,856,913
		318,481,220	269,297,876
Recurrent Expenses	5		
Salaries and Allowances	5.1	94,375,523	89,676,107
Travelling and Subsistence	5.2	1,005,671	1,439,234
Supplies	5.3	3,755,925	4,418,298
Maintenance Expenses	5.4	7,825,793	8,486,842
Contract Service	5.5	39,132,316	35,339,903
Depreciation Expenses	5.6	351,857,878	92,808,654
Other Recurrent Expenses	5.7	12,342,441	12,577,014
		510,295,547	244,746,052
Total Expenditure		828,776,767	514,043,928
Surplus/(Deficit)		91,854,384	51,702,293

FOR AND ON BEHALF OF THE SRI LANKA SUSTAINABLE ENERGY AUTHORITY

Director (Finance)

Director General

Chairman

The Accounting policies on pages 52 to 54 and Notes on pages 55 to 70 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	Signature
1. A.M.R.J.K. Jayasinghe	
2. S. Tharshan	

Statement of Financial Position

	Note	2018	2017 Restated
Assets			
Non-Current Assets			
Property, Plant and Equipment	9		
Freehold	9.1	541,878,399	877,417,703
Leasehold	9.2	40,506,532	42,035,080
Intangible Assets	10	3,467,173	4,969,260
Work in Progress	11	46,753,399	35,699,243
Investments	12	93,587,042	84,907,165
Loans Recoverable	13	-	49,780,000
Total Non-Current Assets		726,192,545	1,094,808,450
Current Assets			
Receivables	14	20,035,241	21,557,402
Other Current Assets	15	34,557,498	37,990,919
Cash and Cash Equivalents	16	452,808,494	392,179,336
Total Current Assets		507,401,233	451,727,657
Total Assets		1,233,593,778	1,546,536,108
Equity and Liabilities			
Equity			
Accumulated Fund	17	22,100,336	22,100,336
Net Surplus/Deficit		164,786,083	99,679,846
Deferred Grant	18	458,513,634	809,739,764
Sri Lanka Sustainable Energy Fund	20	335,605,770	318,204,590
Sustainable Guarantee Fund		98,275,578	89,899,767
Revaluation Reserve		101,217,000	101,217,000
Total Equity		1,180,498,401	1,440,841,303
Non-Current Liabilities			
Gratuity Provision		23,907,730	20,213,314
Loans from ADB (L 2892 SRI)		-	49,780,000
Loans from ADB (L 2733 SRI)		-	2,020,356
Total Non-Current Liabilities		23,907,730	72,013,670
Current Liabilities			
Other Payables	19	24,138,162	28,631,649
Net Deposit on Land Acquisition		5,049,485	5,049,485
Total Current Liabilities		29,187,647	33,681,134
Total Equity and Liabilities		1,233,593,778	1,546,536,107

The Accounting policies and notes appearing pages 52 to 70 form an integral part of the financial statements.

Statement of Changes in Equity

Description	Accumulated Fund	Net Surplus / Deficit	Deferred Grant	Revaluation Reserve	Sri Lanka Sustainable Energy Fund	Sustainable Guarantee Fund	Total
Balance as at 01.01.2016	22,100,336	88,848,196	985,822,817	-	205,446,714	76,591,020	1,378,809,083
Increase/(Decrease) for the Year 2016	-	6,463,693	(104,609,567)	-	87,810,523	5,344,958	(4,990,393)
Previous Year Adjustments	-	(879,123)	-	-	-	-	(879,123)
Loss and Damages	-	(157,454)	-	-	-	-	(157,454)
Balance as at 31.12.2016	22,100,336	94,275,312	881,213,250	-	293,257,237	81,935,978	1,372,782,113
Prior Year Adjustments	-	(8,792,776)	-	-	(4,593,843)	-	(13,386,619)
Restated Balance as at 2017.01.01	22,100,336	85,482,536	881,213,250	-	288,663,394	81,935,978	1,359,395,494
Increase/(Decrease) for the Year 2017	-	51,702,295	(71,473,486)	-	-	-	(19,771,191)
Transferred to Guarantee Fund	-	(7,963,789)	-	-	-	7,963,789	-
Transferred to Energy Fund	-	(29,541,196)	-	-	29,541,196	-	-
Land Revaluation	-	-	-	101,217,000	-	-	101,217,000
Balance as at 31.12.2017	22,100,336	99,679,846	809,739,764	101,217,000	318,204,590	89,899,767	1,440,841,303
Prior Year Adjustments		(15,237,021)	(896,800)		14,638,198	(372,333)	(1,867,956)
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		91,854,384	(350,329,330)			-	(258,474,946)
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							-
Balance as at 31.12.2018	22,100,336	164,786,083	458,513,634	101,217,000	335,605,770	98,275,578	1,180,498,401

The Accounting policies and notes appearing pages 52 to 70 form an integral part of the financial statements.

Statement of Cash Flows

	Note	2018	2017 (Restated)
Cash Flows from Operating Activities			
Surplus/(Deficit) for the Year		91,854,384	51,702,295
Adjustment for:			
Loss and Damage		-	-
Interest Income	3 , 8	(19,379,480)	(20,285,998)
Amortized Grant (for Funds Received)	7	(351,226,130)	(91,280,105)
Transfers from Energy Fund		-	-
Service Gratuity Provision		4,378,837	4,265,245
Gratuity Payment		(684,422)	(896,513)
Revaluation Loss/(Over Depreciation)		257,115,812	
Depreciation	5.6	91,278,282	92,808,654
Operating Profit/(Loss) before Working Capital Changes		73,337,283	36,313,578
(Increase)/Decrease in Other Current Assets		3,984,427	8,605,626
Increase/(Decrease) in Current Liabilities		(6,513,843)	(11,922,463)
Net Cash Flow from/(Used in) Operating Activities		70,807,866	32,996,741
Purchase of Property, Plant and Equipment	9.1	(9,664,155)	(3,993,230)
Intangible Assets		(160,000)	-
Work in Progress	11	(11,054,156)	(15,813,389)
Investments in FDs and TBs	12	(8,679,877)	(7,136,271)
Interest Income	3 , 8	19,379,480	20,285,998
Loans Disbursed to Developers		-	1,547,708
Net Cash Flow from/(Used in) Investing Activities		(10,178,708)	(5,109,184)
Cash Flows from/(Used in) Financing Activities			
Deferred Grant	18	-	19,806,619
Sri Lanka Sustainable Energy Fund		-	-
Accumulated Fund		-	-
Sustainable Guarantee Fund		-	-
Loans Repayable to Foreign Donors		-	-
Loans from ADB (L 2892 SRI)	13	-	13,332,292
Disbursement of Loan ADB (L 2733 SRI)	13	-	(14,880,000)
Net Cash Flow from/(Used in) Financing Activities		-	18,258,911
Net Increase/(Decrease) in Cash and Cash Equivalents		60,629,158	46,146,468
Cash and Cash Equivalents at Beginning of the Year	16	392,179,336	346,032,869
Cash and Cash Equivalents at End of the Year		452,808,494	392,179,337

The Accounting policies and notes appearing on pages 52 to 70 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 2017 were automatically transferred to the accounts of SLSEA from 1st of October 2007.

The Regional Center for Lighting (RCL) which was under the SLSEA was transferred to the Ceylon Electricity Board as per Instruction 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

Sri Lanka Sustainable Energy Authority, to develop renewable energy resources, to declare energy development areas, to implement energy efficiency and conservation measures to conduct programs to promote energy security, reliability and cost effectiveness in energy delivery and information management.

1.3 Funds of the Authority

As per the SLSEA act 35 of 2007 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. Further there shall be paid out of the fund all such sums of money to defray expenditure incurred by the authority in exercise, discharge & performance of its power functions and duties as per the act.

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.

There shall be paid out of these fund 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.

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 No. of Employees

Number of employees as at 31.12.2018 – 100

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 the Sri Lanka Sustainable Energy Authority (SLSEA) as at 31 December 2018 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 2017 have been approved by auditor General.

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 use 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.

2.2.2 Accounting for foreign Aid

The SLSEA carries out many foreign aid projects. Most of the assistance is received from the ADB & 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 by the 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 at cost. Interest receivable from investments in fixed deposits and treasury bills at the end of the year is credited to 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 the SLSEA has to pay the Ceylon Electricity Board an estimated Rs. 897 million for purchase of electricity from non conventional renewable energy producers. The SLSEA currently has no means of making this payment, unless funds are granted by the treasury or from earnings through Cess, royalties etc, these are subject to the approval of the General Treasury. Therefore, this is disclosed only as a contingent liability.

The SLSEA sells the electricity generated from its Hambanthota solar power plant to the CEB on a monthly basis. But the payment for the production sold during the last few months of 2017 was paid only in 2018 after the intermediation of the ministry of Power & Renewable Energy.

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.

Hambanthota solar power park revalued during the year and revaluation loss recognized to the income statement.

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 bellow:

Depreciation rate for a year is shown below:

Item	Rate of Depreciation
Furniture & office Equipment	25%
Motor Vehicles	20%
Photocopier	25%
Computers	33.33%
Electrical Goods	25%
Library Book	20%
Energy Instruments	33.33%
Exhibition Equipment	25%
Wind Towers	20%
Building & Structures	5%
Refrigerator Testing Laboratory	20%

Solar Power / Mini Hydro Projects:

A.	Solar Panels	5%
B.	Steel Structure	10%
C.	Building	5%
D.	Switch gear	20%
E.	Inverters	20%
F.	Transformers	5%
G.	Power Electronics	33.33%
H.	Sanitary & Plumbing	5%
I.	Cables	20%
J.	Furniture Fittings & office Equipment	25%
K.	Tools	33%
L.	Machinery	20%
M.	Other	20%

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 the SLSEA are made to EPF and 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 MP Harshana Rajakaruna for the "Sarthcharndra 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 2018 were authorized for issue by the Board of Management of the Authority on 25th October 2019.

NOTE 2 - OPERATIONAL INCOME

	Note	2018	2017
Treasury Income (Capital)	6	59,572,500	45,074,381
Amortized Differed Grant	7	350,329,330	91,280,105
Treasury Income (Recurrent)		97,761,666	92,987,000
Treasury Grant (Installation of Solar Systems in Religious Place)		210,041,000	20,000,000
Power Generation - Hambantota		16,945,911	22,959,531
Power Generation - Indurana		1,211,444	864,666
Energy Manager Training Pro-Income		15,000	110,000
Solar Atlas Income		47,500	122,500
Wind Data Income		-	500,000
Energy Audit Income		45,000	62,135
Energy Permit Income		109,735,536	21,194,365
Solar Registration Fee		6,600,000	
Solar Training Programme		775,200	
Total		853,080,087	295,154,683

NOTE 3 - NON OPERATIONAL INCOME

	Note	2018	2017
FARDF-UNDP Projects (NAMA)		6,333,000	39,557,703
Lanka Electricity Co. (LECO)- ODSM		-	50,000,000
Tender Fee		139,985	520,000
Supplier's Registration fee		128,500	
Distress Loan Interest		527,677	514,198
Sponsorship		1,800,000	4,500,000
Other Income		37,000	388,245
Special Advance Interest		3,362	3,479
Vidulka Stall Registration Fee		1,528,429	1,645,000
FARDF-UNDP Projects (Biomass)		16,700,000	-
Income from Energy Fund	8	24,346,730	29,541,196
Revenue ADB Project - Sampath Bnak		-	121,077,929
Revenue ADB Project - NDB Bank		-	14,880,000
Interest Income		8,748,144	7,963,789
Income - Write off Creditors		7,258,237	
Total		67,551,064	270,591,539

NOTE 4 - PROJECT EXPENSES

NOTE 4.1 - RENEWABLE ENERGY

	2018	2017
Resource Allocation and Development	2,449,875	1,008,534
Progress Monitoring	446,178	219,656
Technology Development and Research	2,555,836	389,553
Renewable Energy Services	-	68,852,227
Donor Funded Projects UNDP Bio Mass Project	12,603,778	11,021,719
Donor Funded Project -ADB (L 2892 SRI)	24,545	121,320,932
NAMA Project	20,035,670	1,777,761
ADB Project	-	1,840
Operation of Hambanthota RE Site	35,898,480	6,427,931
Operation of Indurana Site	2,418,124	894,793
IFC Solar Project	-	43,187
Pooneryn Energy Park Project	1,256,587	610,303
Donor Fund Project - ADB (L 2733 SRI)	-	14,880,000
Suporting Electricity Supply Reliability Improvement Project	135,310	
Mahaweli Project Developments	283,709	
Provincial Energy Programmes	3,899,683	
Soorya Bala Sangramaya	202,060,428	
Total	284,068,203	227,448,436

NOTE 4.2 - ENERGY MANAGEMENT

	2018	2017
Energy Management Cells	1,188,918	3,125,444
Standards and Regulations	2,106,067	4,025,436
Advisory and Counseling	647,572	84,400
Rewarding and Achievements	5,015,989	5,393,655
Sector Specific Programs	280,683	107,000
Research and Development	123,100	7,000
Energy Audit	240,500	103,360
Demand Side Management	8,876,452	3,639,450
Establishment of Pilot Project	30,826	
Total	18,510,107	16,485,745

NOTE 4.3 - KNOWLEDGE MANAGEMENT

	2018	2017
Energy Education Programs	2,042,427	19,544,858
Promotion Programs	6,688,903	961,924
Vidulka	3,616,549	
SLSEA Web hosting charges	628,881	
Total	12,976,760	20,506,782

NOTE 4.4 - STRATEGIC ACTIVITIES

	2018	2017
Formulation of Energy Data and Information		1,907,205
Research and Development	324,675	1,354,155
Waste Energy		370,216
Energy Symposium		1,225,338
Island Wide Petrol Shed Survey	-	-
National Energy Balance	1,065,532	
Wind Resource Assessment	1,251,776	
Biomass Resource Assessment	284,167	
Total	2,926,150	4,856,913

NOTE 5 - RECURRENT EXPENSES

NOTE 5.1 - SALARIES AND ALLOWANCES

	2018	2017
Salaries for Staff	51,334,290	44,738,007
Cost of Living Allowance	8,470,800	8,654,100
Adjustment Allowance	2,074,810	5,547,456
E.P.F. 12%	7,966,423	7,405,832
E.T.F. 3%	2,033,105	1,849,797
Overtime and Holiday Pay	7,090,345	6,086,490
Own Vehicle Utilization	2,413,333	2,950,000
Fuel Allowance	2,175,580	1,993,680
Professional Allowance	5,281,000	4,964,000
NAITA Salary	1,157,000	1,221,500
Gratuity Expense	4,378,837	4,265,245
Interim Allowance	-	-
Medical Insurance	-	-
Total	94,375,523	89,676,107

NOTE 5.2 - TRAVELLING AND SUBSISTENCE

	2018	2017
Travelling - Domestic	550,747	598,219
Travelling - Foreign	454,924	841,016
Total	1,005,671	1,439,234

NOTE 5.3 - SUPPLIES

	2018	2017
Printing, Stationary and Office Requisites	813,323	1,369,203
Fuel and Lubricants	2,846,282	2,970,134
Other - News Papers and Miscellaneous Service	96,320	78,960
Total	3,755,925	4,418,298

NOTE 5.4 - MAINTENANCE

	2018	2017
Vehicles, Insurance and License Fees	7,275,972	7,291,695
Plant Machinery	458,151	691,232
Office Equipment	-	-
Building and Structure	91,670	503,915
Total	7,825,793	8,486,842

NOTE 5.5 - CONTRACT SERVICES

	2018	2017
Office Rents and Hire Charges	33,247,178	29,691,288
Postal and Telecommunication Charges	4,532,213	4,292,164
Transport	626,925	696,451
Audit Fees	726,000	660,000
Total	39,132,316	35,339,903

NOTE 5.6 - DEPRECIATION, IMPAIRMENT AND AMORTIZATION

	2018	2017
Furniture and Office Equipment	1,092,112	1,044,732
Motor Vehicles	1,286,909	1,247,215
Photocopier	409,132	333,293
Computers	594,975	1,924,330
Electrical Goods	41,676	52,682
Library Book	197,000	203,408
Energy Instruments	994,670	101,102
Wind Towers and Instruments	2,481,963	2,154,088
Refrigerator Testing Laboratory	8,433,067	8,433,067
Hambantota and Indurana Energy Park	72,451,282	74,054,465
Exhibition Equipments	-	-
Fixes Assets for UNDP Projects	104,860	69,637
Ammortization of Lease Hold Land	1,528,548	1,528,548
Impairment of Hambanthota Solar park	260,579,597	-
Intangible Assets Ammortization	1,662,087	1,662,087
Total	351,857,878	92,808,654

NOTE 5.7 - OTHER RECURRENT EXPENSES

	2018	2017
Office and Miscellaneous Expenses	2,213,476	1,167,877
Paper Advertisements	762,350	614,068
Insurance	2,302,072	2,031,616
Translation Fees	61,428	144,803
Allowances for Board Members	816,320	1,099,700
Refreshment Charges	706,996	1,173,017
Local/Foreign Training Program	2,698,859	5,526,981
Bank Charges	39,910	29,576
Nation Building Tax (NBT)	2,741,030	789,376
Total	12,342,441	12,577,014

NOTE 6 - TREASURY INCOME (CAPITAL)

	2018	2017
Capital Grant Received from Treasury	59,572,500	64,881,000
Less:		
Work in Progress During The Year	-	(15,813,389)
Intangible Assets	-	-
Capital Assets Acquired During The Current Year	-	(3,993,230)
Total	59,572,500	45,074,381

NOTE 7 - AMORTIZED DEFERRED GRANT

	2018	2017
Depreciation for Current Year	350,329,330	91,180,205
Total	350,329,330	91,180,205

NOTE 8 - INCOME FROM ENERGY FUND

	2018	2017
Energy Management Income	12,988,000	1,363,813
RE Income	727,394	15,855,174
Net Interest	10,631,336	12,322,209
Total	24,346,730	29,541,196

NOTE 9 - PROPERTY, PLANT AND EQUIPMENT

NOTE 9.1 - FREE HOLD ASSETS

Description	Balance as at 01.01.2018 (Restated)	Acquisition	Revaluation	Disposal	Balance as at 31.12.2018
Land - Hambanthota	101,217,000	-	-	-	101,217,000
Furniture and Office Equipment	19,251,795	1,267,680	-	-	20,519,475
Motor Vehicles	52,266,495	-	-	-	52,266,495
Photocopier	4,367,941	442,000	-	-	4,809,941
Computers	34,810,610	897,050	-	-	35,707,660
Electrical Goods	446,964	-	-	-	446,964
Library Book	1,438,352	-	-	-	1,438,352
Energy Instruments	91,583,387	4,924,290	-	-	96,507,677
Wind Towers and Instruments	48,992,502	1,775,025	-	-	50,767,527
Refrigerator Testing Laboratory	42,165,337	-	-	-	42,165,337
Solar and Mini Hydro Projects					
A. Solar Panels	660,106,452	-	(580,776,942)	-	79,329,510
B. Steel Structure	222,261,738	-	(164,611,738)	-	57,650,000
C. Building	131,017,606	-	-	-	131,017,606
D. Switch Gear	13,973,767	-	(3,965,967)	-	10,007,800
E. Inverters	79,091,306	-	(7,091,306)	-	72,000,000
F. Transformers	45,753,626	-	(41,053,626)	-	4,700,000
G. Power Electronics	31,619,040	-	-	-	31,619,040
I. Sanitary and Plumbing	166,499,475	251,814	(83,869,475)	-	82,881,814
J. Cables	100,224,571	-	(70,224,571)	-	30,000,000
K. Furniture Fittings and Office Equip.	3,014,584	-	-	-	3,014,584
L. Tools	14,260,781	106,296	(8,667,076)	-	5,700,000
M. Machinery	4,047,375	-	-	-	4,047,375
H. Other	60,039,664	-	-	-	60,039,664
Exhibition Equipments	354,853	-	-	-	354,853
Fixes Assets for UNDP Projects	524,300	-	-	-	524,300
Total	1,929,329,521	9,664,155	(960,260,701)	-	978,732,975

DEPRECIATION ACCOUNT

Description	Balance as at 01.01.2018 (Restated)	Depreciations	Acc Depreciation on Revaluation/ over Depreciation	Accumulated Depreciation As at 31.12.2018	Net Book Value As at 31.12.2018
Land - Hambanthota	-	-	-	-	101,217,000
Furniture and Office Equipment	18,777,928	1,092,112	(1,125,111)	18,744,929	1,774,547
Motor Vehicles	49,889,054	1,286,909	(252,805)	50,923,158	1,343,337
Photocopier	2,944,847	409,132	592,560	3,946,539	863,402
Computers	32,167,903	594,975	1,270,362	34,033,240	1,674,420
Electrical Goods	431,366	41,676	(39,403)	433,639	13,326
Library Book	899,969	197,000	(52,617)	1,044,352	394,000
Energy Instruments	91,583,387	994,670	(1,192,662)	91,385,395	5,122,282
Wind Towers and Instruments	47,503,059	2,481,963	(2,659,437)	47,325,585	3,441,942
Refrigerator Testing Laboratory	33,154,661	8,433,067	-	41,587,728	577,609
Solar & Mini Hydro projects					
A. Solar Panels	214,783,504	33,005,323	(247,788,827)	-	79,329,510
B. Steel Structure	143,311,888	22,226,174	(165,538,062)	-	57,650,000
C. Building	41,564,122	6,550,880	-	48,115,002	82,902,604
D. Switch Gear	13,973,767		(13,973,737)	30	10,007,770
E. Inverters	79,091,306		(79,091,306)	-	72,000,000
F. Transformers	14,811,501	2,287,681	(17,099,182)	-	4,700,000
G. Power Electronics	31,619,040		-	31,619,040	-
I. Sanitary and Plumbing	53,420,927	8,333,839	(61,754,766)	-	82,881,814
J. Cables	100,224,571		(100,224,571)	-	30,000,000
K. Furniture Fittings and Office Equip.	3,014,584		-	3,014,584	-
L. Tools	14,163,269	47,385	(14,210,654)	-	5,700,000
M. Machinery	4,047,375		-	4,047,375	-
H. Other	60,039,664		-	60,039,664	-
Exhibition Equipments	354,853		-	354,853	-
Fixes Assets for UNDP Projects	139,274	104,860	(4,671)	239,463	284,837
Total	1,051,911,819	88,087,647	(703,144,890)	436,854,576	541,878,399

NOTE 9.2 - LEASE HOLD ASSETS

Description	Balance as at 01.01.2018	Acquisition	Amortization	Balance as at 31.12.2018
Land - Battaramulla	42,035,080	-	1,528,548	40,506,532
Total	42,035,080	-	1,528,548	40,506,532

NOTE 10 - INTANGIBLE ASSETS

Description	Balance as at 01.01.2018	Acquisition	Amortization	Balance as at 31.12.2018
Computer Software	4,969,260	160,000	1,662,087	3,467,173
Data and Information	-	-	-	-
Total	4,969,260	160,000	1,662,087	3,467,173

NOTE 11 - WORK IN PROGRESS

	2018	2017 (Restated)
Renewable Energy Assessment - Wind tower (Bagawanthalawa)	2,377,000	2,377,000
ADB Quantum Leap -WRA (Wind Force) - (Equipment tax portion)	2,299,935	2,299,935
Energy Efficiency Utilization of PV through DC Micro Grid (UoP)	-	442,000
Building Office Complex	17,515,653	6,797,403
Electric Prototype Vehicle	7,956,800	7,956,800
Sampoor Wind measuring Mast	-	130,550
Nadukuda Wind measuring Mast	-	1,775,025
Clean Energy Networ Efficiency Project	-	15,788
Revision of Code for Energy Efficiency Building Practice	-	951,778
Poonarin Project	16,207,754	12,952,964
Indurana Mini Hydro	396,257	
Total	46,753,399	35,699,243

NOTE 12 - INVESTMENT

Fixed Deposits (in NSB, Borella)

Deposit Reg. No.	Date of Maturity	Rate of investment	Net Interest for 2018	Deposit as at 31.12.2018	Deposit as at 01.01.2018
2/0061/11/33829	9/21/18	11.00%	143,290	1,459,530	1,321,440
2/0061/11/33861	9/21/18	11.00%	143,290	1,459,530	1,321,440
2/0061/11/33853	9/21/18	11.00%	143,290	1,459,530	1,321,440
2/0061/11/33888	9/21/18	11.00%	143,290	1,459,530	1,321,440
2/0061/11/33772	9/21/18	11.00%	143,290	1,459,530	1,321,440
2/0061/11/33837	9/21/18	11.00%	143,290	1,459,530	1,321,440
2/0061/11/33845	9/21/18	11.00%	143,290	1,459,530	1,321,440
2/0061/11/33756	9/21/18	11.00%	143,290	1,459,531	1,321,440
2/0061/11/33764	9/21/18	11.00%	143,290	1,459,531	1,321,440
2/0061/11/33802	9/21/18	11.00%	143,290	1,459,531	1,321,440
2/0061/11/33713	9/21/18	11.00%	143,290	1,459,531	1,321,440
2/0061/11/33896	9/21/18	11.00%	143,291	1,459,531	1,321,440
2/0061/11/33799	9/21/18	11.00%	143,291	1,459,531	1,321,440
2/0061/11/33870	9/25/18	11.00%	53,107	547,324	495,540
2/0061/09/60845	10/20/18	11.00%	53,066	544,008	492,538
2/0061/11/34051	9/30/18	11.00%	344,505	3,520,452	3,187,372
2/0061/09/49981	5/2/18	8.50 %	1,087,649	10,748,021	9,731,119
Total			3,401,099	34,333,701	31,085,289

TREASURY BILLS - (In People's Bank, Head Quarters)

Deposit Reg. No.	Date of Maturity	Rate of Investment	Net Interest for 2018	Deposit as at 31.12.2018	Deposit as at 01.01.2018
LKB00819K017	18/01/2018	9.85%	1,578,707	18,318,536	16,675,955
LKB00819K017	11/07/2018	10.2%	3,768,338	40,934,805	37,145,921
Total			5,347,045	59,253,341	53,821,876
TOTAL INVESTMENT				93,587,042	84,907,165

NOTE 13 - LOAN RECOVERABLES

	2018	2017 (Restated)
ADB Loan (L 2892/93 SRI) through Sampath Bank - for Clean Energy Network Efficiency Improvement Project		
Wimalasurendra and Sons Ltd	-	12,975,000
ARK Printing Solutions	-	2,437,000
Central Rubber (Pvt) Ltd	-	9,065,000
Aitken Spense Hotel Management (Pvt) Ltd	-	7,924,000
EB Creasy and Company PLC	-	8,493,000
Commercial Export Company	-	8,886,000
Total	-	49,780,000

NOTE 14 - RECEIVABLES

	2018	2017 (Restated)
Interest Receivable on Fixed Deposits	1,415,552	1,262,865
Interest Receivable on Treasury Bills	3,272,984	3,357,405
Ceylon Electricity Board - RCL Rent	8,033,271	8,033,271
Power Generation - Hambanthota/Indurana	7,187,084	5,174,781
Receivable from Employees	2,382	2,382
VAT Credit from Dept of Inland Revenue	-	3,472,802
Local Training Program (Suspense)	82,000	211,928
Aitkenspence Travel	6,309	6,309
Heritance Ahungalla	35,659	35,659
Total	20,035,241	21,557,402

NOTE 15 - OTHER CURRENT ASSETS

	2018	2017 (Restated)
REFUNDABLE DEPOSIT		
National Youth	-	40,000
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	
Telephone	351,048	351,048
Hambanthota 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	369,153	354,153
Buddhist Cultural Centre	-	10,000
Waters Edge Limited	-	50,000
Vidulka Exhibition	25,000	25,000
ADVANCE		
Receivable from Energy Fund to Fund of Authority	-	-
Advances for Programs etc	169,918	311,398
Divisional Secretariat - Ruwanwella	-	251,814
Provincial Education Dept, Uwa	-	1,034,596
Provincial Education Dept, Eastern	911,329	1,323,300
Provincial Education Dept, Northern	790,191	1,618,300
Provincial Education Dept, North Western	-	842,682
Buddhist Cultural Center	-	892,512
Provincial Education Dept, Southern	1,544,949	1,544,949
Government Printer	-	2,412,040
Provincial Education Dept, Western Province	518,585	518,585
Eco Power Lanka Engineering (Pvt) Ltd	-	5,805,000
Solar systems for public institutions	-	
Secretary-Min EDU-Uva /North Western Province - NAMA Project	522,250	
Cheif Secretary Southern / Eastern Province - NAMA Project	1,955,680	
Advance-Secretary Ministry of Road Development (Central Province - NAMA Project)	2,214,750	
Other	8,596,168	4,576,704
Total	20,535,021	24,526,581

	2018	2017 (Restated)
REVOLVING FUND		
Distress Loan	13,077,507	12,089,386
Special Advance	108,185	4,585
Festival Advance	31,989	51,989
Flood Loan	804,796	1,318,378
	14,022,477	13,464,338
TOTAL OTHER CURRENT ASSETS	34,557,498	37,990,919

NOTE 16 - CASH AND CASH EQUIVALENT

	2018	2017 (Restated)
NSB Savings Account - 100610493406	173,410,145	166,914,053
Peoples Current Account - 078100188503576	25,214,869	8,512,421
Peoples Current Account - 078100278503576	4,620,071	4,578,684
BOC Current Account - 8002630	933,764	960,864
BOC Current Account - 74944408	76,202,054	11,228,284
BOC Savings Account - 75803419	134,548,641	153,868,425
BOC Current Account - 80595356	37,878,950	46,116,605
Total	452,808,494	392,179,336

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 :

	2018	2017 (Restated)
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
Total	22,100,336	22,100,336

NOTE 18 - DEFERRED GRANT

	2018	2017 (Restated)
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	18,752,051
Capital Grant 2017	19,806,619	19,806,619
Less:		
- Deferred Revenue Previous Years	(957,038,514)	(865,758,409)
- Deferred Revenue for The Year	(350,329,330)	(91,280,105)
Total	458,513,634	809,739,764

NOTE 19 - OTHER PAYABLE

	2018	2017 (Restated)
Payable to Fund of The Authority from Energy Fund	-	-
Switch Asia Control Account	4,548,176	4,548,176
Ministry of Power and Energy	500	500
Accrued Expenses	2,508,909	11,842,517
Unpresented Cheques	1,282,665	173,696
Renewable Energy Solar Registration Fees	295,860	295,860
Ministry of Mahavali Development and Environment	470,000	470,000
UNDP - NAMA Project	1,036,803	1,036,803
UNDP - Biomass Project	1,970,834	1,970,834
Audit Fees	2,058,636	1,332,636
VAT Payable	3,782,610	
Jeewa Shakthi Associates - Survey Fee	252,875	
Bid document	5,000	
CREDITORS		
Renewable Energy-E Net Solutions (Private) Ltd.	1,667,500	1,667,500
Acquisition of Energy Instruments	326,025	326,025
Retention	3,168,918	4,154,251
Narahenpita Jathika Pola	99,405	99,405
SUNDRY CREDITORS		
Sri Lanka Custom	310,748	310,748
Welfare Society SLSEA	442	442
REFUNDABLE DEPOSIT		
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
Refundable Deposit - Genso Power Technologies	-	50,000
Total	24,138,162	28,631,649

NOTE 20 - SRI LANKA ENERGY FUND

		2018	2017 (Restated)
Statement of Financial Position as at 31.12.2019			
Non current Assets		-	-
Current Assets			
SLSEA Current Account (FOA) - Energy plus Building		48,678,878	47,000,000
Cash & Cash Equivalent			
NSB Savings Account		173,410,145	166,914,053
BOC Savings Account		134,548,641	153,868,425
		356,637,664	367,782,478
Accumulated Fund		332,842,789	335,663,395
Surplus / Deficit for the year		2,762,982	(2,820,606)
Total Accumulated Fund		335,605,771	332,842,789
Current Liabilities			
SLSEA Current Account (FOA)		16,368,808	32,361,801
VAT payable as at 31.12.2018		4,663,085	2,577,888
Total		356,637,664	367,782,478
Income			
Income - Energy Fund	8	24,346,730	29,541,196
Expenses			
Resource Allocation & development		823,590	
Provincial Energy Programmes		3,326,188	18,038,086
Operation of Hambantota site		5,348,808	4,102,166
Operation of Indurana site		5,392,059	
Solar Project			43,187
Energy Management Cell			3,695,003
Rewarding of Achievement			1,000,000
Consultancy/Energy Auditing			103,360
Pooneryn Energy Park		1,470,600	
Introducing Standards and Regulation		1,200,000	
Energy Education Programme		1,053,326	
Promotion Programme		2,969,177	5,380,000
		21,583,748	32,361,802
Surplus/Deficit		2,762,982	(2,820,606)

NOTE 21 - SRI LANKA SUSTAINABLE GUARANTEE FUND

	2018	2017 (Restated)
Income		
Interest Income - Fixed Deposit	3,401,099	2,811,298
Interest Income - Treasury Bonds	5,347,045	5,152,491
Total Income	8,748,144	7,963,789
Less:		
Expenses	-	-
	-	-
Total Expenses	-	-
Net Surplus/Defecit	8,748,144	7,963,789

Audit Report from National Audit Office

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தேசிய கணக்காய்வு அலுவலகம்
NATIONAL AUDIT OFFICE

මගේ අංකය எனது இல. My No. } පීඑම්ඒ/ඩී/එස්එල්එස්ඊඒ/එෆ්එස්/2018/28

ඔබේ අංකය உமது இல. Your No. }

දිනය திகதி Date } 2020 මාර්තු 03 දින

National Audit Office

My. No.: POE/SLSEA/FS/2018/28

Your No.:

Date: March 03, 2020

Chairman,

Sri Lanka Sustainable Energy Authority

Report of the Auditor General on the Financial Statements and other legal and regulatory requirements of the Sri Lanka Sustainable Energy Authority for the year ended 31 December 2018 in terms of Section 12 of National Audit Act No. 19 of 2018.

1. Financial Statements

1.1 Qualified Opinion

The audit of the Financial Statements of the Sri Lanka Sustainable Energy Authority (SLSEA) for the year ended 31 December 2018 comprising the statements of Financial Position as at 31 December 2018 and the statement of income, statements of changes in equity and statements of cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, 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 National Audit Act No. 19 of 2018 and Finance Act No. 38 of 1971. My report comprising of my comments and observations will be issued to the Parliament in due course.

In my opinion, except for the effects of the matters described under the 'Qualified Opinion' section of this report, the accompanying financial statements give a true and fair view of the financial position of the Sri Lanka Sustainable Energy Authority as at 31 December 2018 and its financial performance and cash flows for the year then ended in accordance with Sri Lanka Public Sector Accounting Standards.

1.2 Basis for Qualified Opinion

(A). The amount of Rs. 22,145,944 expensed during the year under review for the purpose of purchasing inverters for the Hambantota Solar Power station had been included in the Income Statement as an expense, instead of capitalising the same amount.

(B). Since the amounts of Rs. 1,036,803 and Rs. 1,970,834 respectively pertaining to the two UNDP funded projects namely the National Appropriate Mitigation Actions (NAMA) and the Biomass Project, which were to be adjusted against the revenue of 2016 had been stated as Amounts Payable in the Financial Statements, the value of current liabilities had been overstated by Rs. 3,007,637.

(C). Since the expenses amounting to Rs. 1,290,079 pertaining to 2016 and 2017 were accounted as expenses for the year 2018, the relevant expenses had been overstated in the year under review.

(D). An amount of Rs. 1,296,000 born under the ST 04 project of the Strategy Division had been understated by the same amount during the year under review as the said amount was debited to Other Advances Account.

(E). A sum of Rs. 4,360,584 of amortisation provisions and government grants had not been accurately adjusted in the Cash Flow Statement and Rs. 980,915 had been understated while calculating the fluctuations in the working capital while the Net Cash Flow of investment activities had been overstated by Rs. 68, 266' Thus, it was observed during the audit that the Statement of Cash Flow had not been prepared in compliance with the SLAuSs 02.

(F). Even though assets amounting to Rs. 457,490, transferred to the Authority from a project funded by the UNDP had been mentioned in the Fixed Assets Register, such amount had not been stated as Fixed Assets in the Financial Statements.

(G). Even though an amount of Rs. 5,049,485, maintained by the Authority as a refundable deposit from project developers for the purpose of land acquisition, had been maintained as a current liability in the financial statements for a long period, no sufficient evidence was presented to the auditors to prove such liability.

(H). An amount of Rs. 2,299,935 had been stated under work in progress for several years in relation to a project funded by the ADB. However, such amount had not been observed and adjusted in accounts during the year under review.

(I). Even though it has been mentioned in the financial statement that the figures mentioned in the financial statement of the previous years had been restated, such restatement was not observed and the amortisation policy had not been disclosed in the financial statements though intangible assets had been amortised.

I conducted my audit in accordance with Sri Lanka Auditing Standards (SLAuSs). My responsibilities under those standards are further described in the Auditor General's Responsibilities 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 Administration Parties on the Financial Statements

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 to determine internal control as management determine is necessary to enable the preparation of financial statements that are free from misstatement, incurred due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Authority'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 Authority or to cease operations, or has no realistic alternative but to do so.

The administration authorities are responsible for overseeing the Authority's financial reporting process.

As Section 16(1) of the National Audit Act No. 19 of 2018, the Authority 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 by the Authority.

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

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 auditor's report that includes my opinion. Assurance on fairness 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 such exists. Misstatements that can arise from fraud or error are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

I have exercised professional judgment and maintained professional skepticism in accordance with Sri Lanka Accounting Standards in carrying out the audit. Further,

- Identifing and assessing the risks of material misstatement of the financial statements, incurred due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.
- Even though an understanding of internal control relevant to the audit was obtained in order to design audit procedures that are appropriate in the circumstances, there is no intention to express an opinion on the effectiveness of the Authority's internal control.

- Appropriateness of accounting policies, fairness of accounting estimates and related disclosures made by the management were evaluated.
- Conclusion was drawn on the appropriateness of the use of the basis of going concern of the Authority for accounting based on the audit evidence obtained. If I determine that a material uncertainty exists, I am required to draw attention in my auditor's 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 its continuous functioning.
- Overall presentation, structure and content of the financial statements, including the disclosures and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation were evaluated.
- I communicate with the administration authorities regarding, among other matters, significant audit findings, including any significant deficiencies in internal control identified during my audit.

2. Report of other Legal and Regulatory Requirements

National Audit Act. No. 19 of 2018 includes specific provisions for the following requirements:

- I have obtained all the information and explanation required for the audit and far as appears from my examination, proper accounting records have been kept by the Authority as per the requirement of section 12 (a) of the National Audit Act. No. 19 of 2018.
- The financial statements presented are consistent with the preceding year as per the requirement of section 6 (l) (d) (iii) of the National Audit Act, No. 19 of 2018.
- The financial statements presented includes all the recommendations made by me in the previous year as per the requirement of section 6 (l) (d) (iv) of the National Audit Act, No. 19 of 2018.

Based on the procedures performed and evidence obtained nothing has come to my attention, substantial to make any of the following declarations:

- to state that any member of the Board of Management has any direct or indirect interest in any contract entered into by the Authority which are out of the normal cause of business as per the requirement of section 12 (d) of the National Audit Act. No. 19 of 2018.
- to state that the Authority has not complied with any applicable written law, general and special directions issued by the Board of Management as per the requirement of section 12 (f) of the National Audit Act. No. 19 of 2018 except for;

Reference to Law/Direction	Description
(A). Sustainable Energy Authority Act No. 35 of 2007	
Section 46(3)	Sri Lanka Sustainable Energy Authority had withdrawn a sum of Rs. 65,794,255 from the investments of the Energy Fund for leasing a land for constructing an office building and preparing the plans for the same building for the period from 2015 to 2018, in violation of the objectives of the Authority. Chairman of the Authority had informed that this building would be constructed as a model for educating the public on the effective use of energy and also as an evidence to the possibility of constructing energy efficient buildings utilizing minimum amount of natural energy resources.

Reference to Law/Direction	Description
(B) Establishment Code of the Democratic Socialist Republic of Sri Lanka	
Clause 13.7 of Chapter II	Even though no additional remuneration should be paid to any officer working on acting basis unless the acting appointment has been made by the appointing authority, the Authority has paid a sum of Rs. 3,714,952 as remunerations for acting positions, Rs. 4,853050 as fuel allowances from 2013 to 2019 and Rs. 5,020,000 as transport allowances from 2015 to May 2019, in violation of the said direction.
(C). Financial Regulations of the Democratic Socialist Republic of Sri Lanka	
(i). Financial Regulation 454	Inventories had not been maintained in accordance with Financial Regulations
(ii). Financial Regulation 757(1)	Assets had not been physically verified.
(D). Treasury Circulars	
Circular No. 842 dated 19 December 1978	As per the circular, fixed assets amounting to Rs. 978, 732, 975 had not been regularly maintained and updated.
(E). Public Enterprise Circulars	
Circular No. PED 12 dated 02 June 2003	Even though the approved financial statements were supposed to be presented to the Auditor General within 60 days after the conclusion of the financial year under review, such financial statements had been presented on the 04th November 2019, after a delay of 08 months.
Clause 9.3 of Circular No. 12 dated 02 June 2003	A Scheme of Recruitment had not been prepared and approved for all employees of the Authority.
(F). Public Administration Circulars	
Circular No. 28/2011 dated 12 December 2011	The authority had paid a sum of Rs. 10,751,000 as professional allowances (to which only members of Sri Lanka Engineering Service are entitled) from August 2016 to 31 December 2018 to employees holding the position of Engineer but are not officially considered members of Sri Lanka Engineering Service, without obtaining approval from the Department of Management Services, based on the approval of the Board of Management.

- to state that the Authority has acted without complying to its powers and functions in terms of Clause 12(g) of the National Audit Act No. 19 of 2018.
- to state that the resources of the Authority had not been effectively, efficiently and productively and also timely maintained in terms of the requirement stipulated in Clause 12(g) of the National Audit Act No. 19 of 2018.

Other Observations of the Audit

(A). A sum of Rs. 13,348,087 had been provided to Zonal Offices as advances under the Knowledge Management Project for Zonal Educational Programmes covering the 09 provinces during the year 2016. However, the Authority had failed to recover an advance amount of Rs. 3,765,051 until 31st December 2018.

(B). A sum of Rs. 1,093,512 had been brought forward for 01 to 04 years under Accounts Receivables. However, the Authority had failed to recover such amount until the end of the year under review.

(C). As at the end of the financial year under review, Rs. 6,952,796 out of Rs. 15,735,724 which had been stated in accounts as other payables and creditors, had been brought forward for 01 to 04 years while the balance of Rs. 73,044 which is included in accrued expenses had been brought forward for 08 years. Yet the Authority had failed to recover such amount until the end of the year under review.

(D). It was observed during the Audit that activities classified under Work In Progress amounting to Rs. 10,333,800 had not been continued for 02 years, and also that no expense had been born for such activities in the year of 2018. It was also observed that the Authority had not taken any action to complete such activities.

(E). It was also observed that an unutilised balance of Rs. 175,744,396 which is 33% of the total provision as a result of the budgeted expense in relation to aforementioned 04 projects had been recorded as Rs. 526,135,593 while the actual expense had been recorded as Rs. 350,391,197.

(F). Even though a provision of Rs. 17,000,000 had been allocated under 06 segments of the action plan during the year under review under the ODSM, only a sum of Rs. 8,876,452 had been spent and a sum of Rs. 8,123,548 which amounts to 48% had remained unutilised. The sum of administrative expenses including rentals for buildings had been reported to be Rs. 5,957,701 though only Rs. 2,918,751 had been spent for the said project.

(G). A sum of Rs. 25,000,000 had been allocated for the Indurana International Promotion Centre project during 2018, but only 26% of the total allocated provision amounting to Rs. 6,392,059 had been spent on the said project as at 31 December 2018. Thus, it was observed during the Audit that only a provision of 74% amounting to Rs. 18,607,941 had not been productively utilised.

(H). Even though the Sri Lanka Sustainable Energy Authority had transferred the Management and assets of the RCL (Regional Centre for Lighting) to the Ceylon Electricity Board in November 2012, that transfer had not been performed properly. Consequently, the Authority had failed to recover the sum of Rs. 8,033,270, paid to the BMICH as outstanding lease rental until December 2019.

(I). The Authority had paid a sum of Rs. 3,135,202 out of the total value of Rs. 7,334,354 received from the European Union under the SWITCH-Asia programme to all employees of the Authority in 2010 and 2011 as professional allowances, in violations of the provision of Public Enterprise Circular No. 95 dated 04 June 1994. It was also observed that the Authority had not taken any step to recover the said amount from the responsible officers until December 2019, in terms of the directive issued by the Secretary to the Ministry on 03 December 2012.

(J). The Authority had not taken any action to take corrective action or recover an overpaid amount of Rs. 2,171,760 paid to some officers from 2007 to 2011 as salaries and allowances, in terms of the Investigation Report conducted in relation to errors in salary conversions since the establishment of the Authority.

(K). The Board of Management had not taken any step to prepare a combined 03 year plan based on a short and long term visions of the Authority in terms of Clause 5.1.2 of the Public Enterprise Circular No. PED/12 dated 02 June 2003, and accordingly, to direct the Authority to achieve proposed targets. Furthermore, it was observed that the Authority had not been amended the Report with progress review pertaining to the year, though it was reported that an action plan is prepared annually.

(L). The Authority had obtained a land with an extent of 75 perches in Battaramulla in 2015 for a 30 years lease period as per the lease agreement No. 631 dated 22 June 2015 between Urban Development Authority and the SLSEA. It was observed when its progress was reviewed in December 2019 that a sum of Rs. 5,984,915 had been spent on preparing the plan of the land though no construction activity had been commenced.

(M). The Authority had paid Rs. 7,956,800 to an external party for developing 03 vehicle prototypes within 18 months as per an agreement effective from 28 September 2007. However, the Authority had failed to take any action regarding this though 12 years had elapsed as at 30 December 2019.

(N). It was also observed that the Authority had maintained a deposit of Rs. 4,548,176 received from the SWITCH-Asia programme on a current account held by Peoples' Bank since the year 2011 and also a sum of over Rs. 150,000,000 related to the Energy Fund since a long time on a savings account held by National Savings Bank, without any productive investment.

W P C Wickremeratne
Auditor General

The original copy of the Auditor General's Report is the Sinhala copy. Refer the original copy in case of translation problems.

Observations of SLSEA for the Auditor General's Report 2018

Auditor General,

National Audit Office,
306/72, Polduwa Road,
Battaramulla.
06. 05. 2020

Replies to the Auditor General's Report on the Financial Statements of Sri Lanka Sustainable Energy Authority for the Year Ended 31 December 2018

Replies for the Auditor General's Report dated 03. 03. 2020 on the aforementioned matter are presented herein.

1.2 Basis for the Opinion

1.2.1 Comments on the Financial Statements

(A) Necessary actions have been taken to capitalize the expenses for reinstalling Inverters as per the directions of Auditor General and arrangements have been made to present such details in the Financial Report for the year 2019.

(B) Action has been taken to correct the notes mentioned as Accounts Payable for the NAMA and Biomass projects, in the Financial Reports for the year 2019.

(C) The Authority expects to inspect the vouchers pertaining to the above matter and correct the details in the Account Statements for the year 2019.

(D) The advance of Rs. 1,296,000 which has been spent for the ST/04 programme under the Strategy Division has been erroneously credited to another account and necessary corrective action will be taken in preparing the financial statements for the year 2019.

(E) Corrected Statement of Cash Flow - Annexure No. 1

(F) Action has been taken to correct the above in the financial statements for the year 2019.

(G) The document pertaining to the money obtained from project developers for the purpose of land acquisition is being prepared and updated.

(H) Action has been taken to correct the details on the taxes on equipment related to the ADB project in the financial statements for the year 2019.

(I) Reinstated financial statements are attached hereto: Annexure 2.

2. Report on Other Legal and Regulatory Requirements

(A) Sri Lanka Sustainable Energy Authority Act No. 35 of 2007.

Efficient energy consumption, utilization of indigenous resources for generating electricity and also encouraging the general public to consume energy efficiently are among the major objectives of the Sri Lanka Sustainable Energy Authority.

Accordingly, the headquarters premises of the SLSEA located near 'Ape Gama' in Battaramulla has been carefully planned in accordance with the 'Energy Plus' concept, considering the ease of directing the public towards the aforementioned objective by providing them with a practical experience. This is also a model building that provides a practical example to the public on the possibility of constructing energy efficient buildings utilizing minimum indigenous resources, based on the principle of the efficient consumption of energy and hence we regret to note that it has been interpreted in the Audit Report as 'establishing an office for the SLSEA in violations of the provisions of the Fund' given the fact that the said building enables to provide opportunity to the public to practically observe the energy conservation methods. Hence, we emphasize that it is important to observe the truth about this building and gain a correct understanding.

The Authority is also enabled to spend the monetary provisions of the Fund for educating the public since there are such provisions stipulated in the Fund for the same purpose. It is also noted that "All such expenses were done in accordance with the approval of the Board of Directors".

(B) The Authority was established in 2007 and commenced operations obtaining the service of the employees of its predecessor, the Energy Conservation Fund. Even though approval was obtained for the combined action plan for the subsequent three years at the first Board Meeting, the Authority has been facing difficulties in obtaining relevant approvals for the proposed recruitment scheme intended at attracting human resources necessary for achieving the objectives of the Authority.Despite the several attempts made during the past decade, it is with the initial employee acquisition scheme in effect when the Energy Conservation Fund was transformed into the SLSEA that the Authority is still operating. It has been difficult for the Authority to attract the necessary human resources in order to perform

the specific functions assigned to it by applying standard job titles and remunerations updated by the Management Services Department and also the said scheme. Considering the above constraints, it was decided to assign additional duties and responsibilities to experienced officers already employed in the Authority. Such appointments were made due to the lack of any alternative human resources strategy to achieve the objectives of the Authority utilizing the assigned powers. However, arrangements have been made to obtain approval for the recruitment scheme in coordination with the Line Ministry, National Salaries and Cadres Commission and the Management Services Department. It has to be further emphasized that this decision has not made any negative impact on the Authority in a context where alternatives are lacking, given the fact the relevant acting officers are experienced and qualified and also that such persons are the eligible officers to the relevant positions, if the recruitment scheme was approved on time. The officers have well-undertaken the responsibilities assigned to them in addition to performing many additional duties while on the respective original positions. However, these acting positions have now been stopped as per a decision made by the Board of Management.

(C) Financial Regulations of the Democratic Socialist Republic of Sri Lanka

(I) Necessary action has been taken to maintain inventories as per the directions issued by the Auditor General.

(II) Actions have been taken to verify the material assets based on the relevant specimens on the instructions of the Auditor General in the financial statements for the year 2019.

(D) Treasury Circulars

A computer software has been purchased for the purpose of regularizing the fixed asset document and it is expected to complete the said process by May 2020.

(E) Public Enterprises Circulars

I. Due to the lack of a Chief Officer in charge of the Financial Division during the year 2018, the publication of the financial statements for the year 2017 was delayed. Even though the financial statements for the year 2017 were presented to the Auditor General in September 2018, the Auditor General did not accept the same since such statement was presented under the approval of the Board of Management and the Audit and Management Committee. Further, due to the political situation prevailed in the country after October 2018, a Board Meeting could be held only in December 2018. Hence, the financial statements were presented to the Auditor General in the month of January 2019. Audit Report on the financial statements pertaining to the year 2017 was issued on the 05th July 2019. Hence, the financial statements for 2018 were prepared including the recommendations of the Audit Report 2017. The Authority expects to present the financial statements for the year 2019 on time.

II. The recruitment scheme has already been prepared and submitted to the Management Services Department for approval and approvals have been issued so far only for the lower employee grades up to the position of Management Assistant. Information on other positions have also been submitted to the Management Services Department and the Director of the Department stated that the relevant approvals would be issued in due course, at a meeting held on the 21st January 2020.

(F) Public Administration Circulars

The necessary steps in this regard to obtain the Cabinet approval are already being taken through the Ministry.

3. Other Observations of the Audit

(A) Communications have already been made with the relevant educational zones and arrangements have been made to settle these amounts immediately.

(B) Necessary actions are being taken to recover the advances receivable.

(C) Steps have been taken to settle and correct the other payables account, creditors account and the accrued expenses account.

(D) Establishment works of the Bogawanthalawa Wind Measuring Mast was completed during the year 2019 and it will be presented under fixed assets in the financial statements for the year 2019, with a value of Rs. 2,377,000. A sum of Rs. 7,596,800 was spent on making electric motor vehicles and such provisions have already been directed for arbitration.

(E) Even though the expenses in relation to implementing many foreign funded projects are supposed to be performed on due time, this situation has arisen due to the delays in reporting such expenses. Further, the regular changes in the top management during 2018 has also made negative impacts on the performance of the Authority.

(F) The Line Ministry has commenced this project in 2017. The responsibility of implementing this project is assigned to the National Steering Committee while the Authority is only responsible for the administration tasks related to its Secretariat. We have made several attempts to obtain approval for the employee positions required to establish the management unit which is necessary for the successful implementation of this project. However, the Line Ministry and the Management Services Department have not yet provided due approvals, presenting various reasons. Under such a situation we are forced to implement this project with the service of employees of the Authority.

Thus, the Authority was unable to utilize the provisions allocated to this project in full due to the constraints on acquiring the essential human recourse.

Even under such unfortunate circumstances, the Authority was able to implement the Ten-Fold Programme and successfully achieve the following success:

1. Efficient Airconditioning

A proposal was prepared for provision of the infrastructure required to inspect the equipment and has been submitted to the External Resources Department through the Line Ministry. Successful discussions in this regard are being conducted with the public institutions under the Korean Government.

2. Efficient Lighting

A study was conducted on the reinstallation of lighting systems in 100 public and private institutions targeting the commercial and industrial sectors. Accordingly, it has been revelated that it can save 515,000,000 units of electricity per year based on investments amounting to Rs. 15,700 million.

3. Efficient Refrigerators

The project of transforming obsolete and high energy consuming refrigerators into energy efficient refrigerators has been planned to be implemented in collaboration with trading companies and banks. In 2019, approximately 6,400 houses were inspected in an island wide survey on domestic equipment including refrigerators. The national programme of replacing obsolete refrigerators with innovative and energy efficient refrigerators will be implemented.

4. Efficient Cooling Systems

The loan proposal for converting obsolete central cooling systems into latest and energy efficient cooling systems in the commercial sector has been submitted to the Asian Development Bank and concessionary loans are pending.

5. Efficient Motors

A study was conducted on the possibility of replacing the obsolete electric motors in the industrial sector with new energy efficient equipment and it was revealed by the same study that this project was not so productive. However, a new project will be planned to conserve electricity by using Variable Frequency Drives.

6. Eliminating Incandescent Filament Lamps from Sri Lanka

The LED lamps project was nationally launched on 20 September 2018, targeting households consuming less than 90 units of electricity per month. Half of the 1,000,000 LED bulbs which have been imported so far have already been distributed among consumers. Accordingly, it has been possible to reduce the maximum power demand in the evening by 7.175 MW and save 10,330,000 units of electricity annually, leading to a cost benefit of Rs. 186 million.

7. Efficient Electric Fans

In 2019, an island-wide survey was conducted on replacing obsolete electric fans with energy efficient fans, covering more than 6,400 houses and a programme will be implemented based on the findings of this survey.

8. Green Buildings

The Code of Practice for Energy Efficient Buildings was prepared and published in 2018 to be implemented on essential basis and was subjected to the review of stakeholders. Directives required to implement this Code will be formulated within this year.

9. Smart Homes

Guidelines for building energy efficient new homes is published on the official website of the Authority to be available for the public.

10. Reactive Power Management

A Cabinet Paper on the conversion of reactive power into a power resource with a commercial value has been prepared and submitted to the Line Ministry. This is being further studied currently.

(G) Even though Rs. 5 million was allocated for the Indurana project, this amount has been spent for the initial construction works of the 'Indurana Rajakaruna Memorial Center for Hydro-power Promotion'. Since the Board of Management approved an amount of Rs. 15 million for the construction of this promotion center, it was decided to conduct the construction processes in the year 2019 under two phases. The first phase was planned to be implemented in 2019.

(H) A Board Paper has been submitted to identify the rental for the Regional Center for Lighting as an expense of the Authority. It is expected to take further action as per the recommendations of the Management Committee.

(I) A Board Paper has been prepared to be submitted to the Board Meeting scheduled to be held in May 2020, in order to obtain a decision regarding the recovery process on the instructions of the Audit and Management Committee.

(J) The investigation report submitted in this regard was prepared by a retired officer on the invitation of the Board of Management. After observing that the report consisted many errors, it was decided that making decisions considering this report as a guideline would be harmful.

Thus, it is inappropriate to make judgements regarding salary grades based on the said erroneous report. Further, employees of the predecessor institution, the Energy Conservation Fund, were provided to alternatives under Section 69(e) of the Act when the Authority was established.

i. The Authority employed all officers and employees of the Energy Conservation Fund who accepted the employment offered by the Authority, in terms of Terms and Conditions which were not less beneficial than those they were previously eligible to; or,

ii. All employees who were not offered such employment by the Authority or who did not accepted the offered employment were eligible to receive a compensation decided by the Ministry on the inquiry of the Board of Management.

Accordingly, the Authority is bound to pay the agreed salary to all employees who accepted the first alternative proposal (1) and entered the service of the Authority. Salary conversions were done accordingly.

As per the new recruitment scheme of the Authority, a committee was appointed with the approval of the Board of Management in order to absorb employees and studying this matter has been included as one of the major functions of the said committee. Report of this committee is expected to be submitted to the Board of Management.

(K) Corporate Plan for 2012-2016 was prepared by the Sri Lanka Sustainable Energy Authority and the programmes identified under the plan were implemented as long-term initiatives. Programmes that were required to be prioritized for the following period were included in the 2015-2025 Ten Year Action Plan.

The National Energy Policy was prepared by the Ministry of Power, Energy and Business Development and the officers attached to the Authority took action to prepare the policies, especially for sustainable energy development, in connection to that. In was intended to prepare the corporate plan in compliance with the National Energy Policy, once it was prepared. The National Energy Policy is published now and the corporate plan is also being prepared based on that.

(L) Despite the plans drafted and requests made to allocate required provisions, the Authority is bound to act in compliance with the decisions made by the Government. Hence, the approval of the National Planning Division is necessary to commence the construction works of this building though the initial approval was granted. The Audit Division should be informed that it was required

wait until the construction approval is obtained. Since construction works were temporarily held in 2019 by the then Government based on policy decisions, our request was also not fulfilled.

(M) To make the expenses for this project productive, legal advise was sought from the Attorney General's Department and the service of an independent arbitrator was obtained for the settlement purpose. Retired Judge Upali Abeyrathne, who was this arbitrator, has held a number of meetings with the relevant parties. Accordingly, the arbitrator has pointed out that it was difficult to complete the project as per the agreement and has suggested to make a vehicle which would be sufficient to exhibit all three models. It is expected to submit this proposal to the Board of Directors and obtain approval.

(N) The Authority expects to invest this amount with the approval of the Board of Management and the Treasury.

Chairman

Sri Lanka Sustainable Energy Authority

The original copy of the Observations of SLSEA for the Auditor General's Report is the Sinhala copy. Refer the original copy in case of translation problems.

ANNEXURE 1

Cash Flow Statement

For the year ended 31st December 2018

(All amounts in Sri Lanka Rupees)

	Note	2018
Cash Flows From Operating Activities		
Surplus/(Deficit) for the Year		91,854,384
Adjustment For:		
Loss and Damage		-
Interest Income	3 , 8	(19,379,480)
Amortized Grant (for Funds Received)	7	(350,329,330)
Transfers From Energy Fund		-
Service Gratuity Provision		4,378,837
Gratuity Payment		(684,422)
Revaluation loss		260,579,597
Depreciation and Amortization	5.6	91,278,282
Operating Profit / (Loss) before Working Capital Changes		77,697,867
(Increase)/Decrease in Other Current Assets		(839,302)
Increase/ (Decrease) in Current Liabilities		(4,483,705)
Net Cash Flow from/(Used in) Operating Activities		72,374,860
Purchase of Property, Plant and Equipment	9.1	(9,664,155)
Intangible Assets		(160,000)
Work in Progress	11	(12,594,272)
Investments in FDs and TBs	12	(8,679,877)
Interest Income		19,311,214
Loans Disbursed to Developers		-
Net Cash Flow from/(Used in) Investing Activities		(11,787,090)
Cash Flows from/(Used in) Financing Activities		
Deferred Grant	18	-
Sri Lanka Sustainable Energy Fund		-
Accumulated Fund		-
Sustainable Guarantee Fund		-
Loans Repayable to Foreign Donors		-
Loans from ADB (L 2892 SRI)	13	-
Disbursement of Loan ADB (L 2733 SRI)	13	-
Net Cash Flow from/(Used in) Financing Activities		-
Net Increase/(Decrease) in Cash and Cash Equivalents		60,587,770
Cash and Cash Equivalents at Beginning of the Year	16	392,220,724
Cash and Cash Equivalents at End of the Year		452,808,494

ANNEXURE 2

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31st December 2018

(All amounts in Sri Lanka Rupees)

	Note	2018	2017 (Restated)	2017
NOTE 02 - OPERATIONAL INCOME				
Treasury Income (Capital)		59,572,500	45,074,381	45,074,381
Amortized Differed Grant		350,329,330	91,280,105	91,280,105
Treasury Income (Recurrent)		97,761,666	92,987,000	92,987,000
Treasury Grant (Installation of Solar Systems in Religious Place)		210,041,000	20,000,000	20,000,000
Power Generation-Hambantota		16,945,911	21,882,117	22,959,531
Power Generation-Indurana		1,211,444	864,666	864,666
Energy Manager Training Pro-Income		15,000	110,000	110,000
Solar Atlas Income		47,500	122,500	122,500
Wind Data Income		-	500,000	500,000
Energy Audit Income		45,000	62,135	62,135
Energy Permit Income		109,735,536	21,194,365	21,194,365
Solar Registration Fee		6,600,000		
Solar Training Programme		775,200		
Total		853,080,087	294,077,269	295,154,683
NOTE 04 - PROJECT EXPENSES				
NOTE 4.1 RENEWABLE ENERGY				
Resource Allocation and Development		2,449,875	1,008,534	1,008,534
Progress Monitoring		446,178	350,206	219,656
Technology Development and Research		2,555,836	389,553	389,553
Renewable Energy Services		-	68,998,517	68,852,227
Donor Funded Projects UNDP Bio Mass Project		12,603,778	11,021,719	11,021,719
Donor Funded Project -ADB (L 2892 SRI)		24,545	119,300,576	121,320,932
NAMA Project		20,035,670	1,777,761	1,777,761
ADB Project		-	459,628	1,840
Operation of Hambanthota RE Site		35,898,480	6,427,931	6,427,931
Operation of Indurana Site		2,418,124	894,793	894,793
IFC Solar Project		-	43,187	43,187
Pooneryn Energy Park Project		1,256,587	610,303	610,303
Donor Fund Project- ADB (L 2733 SRI)		-	14,880,000	14,880,000
Suporting Electricity Supply Reliability Improvement Project		135,310		
Mahaweli Project Developments		283,709		
Provincial Energy Programmes		3,899,683		
Sooriya Bala Sangramaya		202,060,428		
Total		284,068,203	226,162,708	227,448,436

	Note	2018	2017 (Restated)	2017
NOTE 4.2 ENERGY MANAGEMENT				
Energy Management Cells		1,188,918	3,417,816	3,125,444
Standards and Regulations		2,106,067	4,977,214	4,025,436
Advisory and Counseling		647,572	84,400	84,400
Rewarding and Achievements		5,015,989	5,393,655	5,393,655
Sector Specific Programs		280,683	107,000	107,000
Research and Development		123,100	7,000	7,000
Energy Audit		240,500	103,360	103,360
Demand Side Management		8,876,452	6,217,900	3,639,450
Establishment of Pilot Project		30,826		
Total		18,510,107	20,308,345	16,485,745
NOTE 4.3 KNOWLEDGE MANAGEMENT				
Energy Education Programs		2,042,427	21,125,170	19,544,858
Promotion Programs		6,688,903	961,924	961,924
Vidulka		3,616,549	65,885	
SLSEA Web hosting charges		628,881		
Total		12,976,760	22,152,979	20,506,782
NOTE 5.5 CONTRACT SERVISES				
Office Rents and Hire Charges		33,247,178	29,691,288	29,691,288
Postal and Telecommunication Charges		4,532,213	4,240,994	4,292,164
Transport		626,925	696,451	696,451
Audit Fees		726,000	660,000	660,000
Total		39,132,316	35,288,733	35,339,903
NOTE 5.6 DEPRECIATION, IMPAIRMENT AND AMMORTIZATION				
Furniture and Office Equipment		1,092,112	1,044,732	1,044,732
Motor Vehicles		1,286,909	1,247,215	1,247,215
Photocopier		409,132	333,293	333,293
Computers		594,975	1,924,330	1,924,330
Electrical Goods		41,676	52,682	52,682
Library Book		197,000	203,408	203,408
Energy Instruments		994,670	101,102	101,102
Wind Towers and Instruments		2,481,963	2,154,088	2,154,088
Refrigerator Testing Laboratory		8,433,067	8,433,067	8,433,067
Hambantota and Indurana Energy Park		72,451,282	70,590,680	74,054,465
Exhibition Equipments		-	-	-
Fixes Assets for UNDP Projects		104,860	69,637	69,637
Ammortization of Lease Hold Land		1,528,548	1,528,548	1,528,548
Impairment of Hambanthota Solar park		260,579,597	-	-
Intangible Assets Ammortization		1,662,087	1,662,087	1,662,087
Total		351,857,878	89,344,869	92,808,654

ANNEXURE 2

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31st December 2018

(All amounts in Sri Lanka Rupees)

	Note	2018	2017 (Restated)	2017
NOTE 5.7 OTHER RECURRENT EXPENSES				
Office and Miscellaneous Expenses		2,213,476	1,167,877	1,167,877
Paper Advertisements		762,350	614,068	614,068
Insurance		2,302,072	2,031,616	2,031,616
Translation Fees		61,428	144,803	144,803
Allowances for Board Members		816,320	1,099,700	1,099,700
Refreshment Charges		706,996	1,173,017	1,173,017
Local/Foreign Training Programmes		2,698,859	5,649,409	5,526,981
Bank Charges		39,910	29,576	29,576
Nation Building Tax (NBT)		2,741,030	789,376	789,376
Total		12,342,441	12,699,442	12,577,014
NOTE 11 - WORKING IN PROGRESS				
Renewable Energy Assessment - Wind tower (Bagawanthalawa)		2,377,000	2,377,000	2,377,000
ADB Quantum Leap - WRA (Wind Force) - (Equipment tax portion)		2,299,935	2,299,935	2,299,935
Energy Efficiency Utilization of PV Through DC Micro Grid (Uni-Pera)		-	-	442,000
Building Office Complex		17,515,653	6,797,403	6,797,403
Electric Prototype Vehicle		7,956,800	7,956,800	7,956,800
Sampoor Wind measuring Mast		-	-	130,550
Nadukuda Wind measuring Mast		-	1,775,025	1,775,025
Clean Energy Networ Efficiency Project		-	-	15,788
Revision of Energy Efficiency Building Code		-	-	951,778
Poonarin Project		16,207,754	12,952,964	12,952,964
Indurana Mini Hydro		396,257		
Total		46,753,399	34,159,127	35,699,243
NOTE 14 - RECEIVABLES				
Interest Receivable on Fixed Deposits		1,415,552	1,262,865	1,262,865
Interest Receivable on Treasury Bills		3,272,984	3,357,405	3,357,405
Ceylon Electricity Board -RCL Rent		8,033,271	8,033,271	8,033,271
Power Generation - Hambanthota/Indurana		7,187,084	4,097,367	5,174,781
Receivable from Employees		2,382	2,382	2,382
VAT Credit from Dept of Inland Revenue		-	3,472,802	3,472,802
Local Training Program (Suspense)		82,000	89,500	211,928
Aitkenspence Travels		6,309	6,309	6,309
Heritance Ahungalla		35,659	35,659	35,659
Total		20,035,241	20,357,560	21,557,402

	Note	2018	2017 (Restated)	2017
NOTE 15 - OTHER CURRENT ASSETS				
REFUNDABLE DIPOSIT				
National Youth		-	40,000	40,000
Water Board		2,500	2,500	2,500
Medical Insurance		500	500	500
Fuel Etc.		186,500	186,500	186,500
Hambantota - CEB		52,000	52,000	52,000
Indurana- CEB		62,500	62,500	62,500
Sooriyawewa - CEB		1,500		
Telephone		351,048	351,048	351,048
Hambanthota Hostel Rent		132,000	132,000	132,000
Spring Water Pvt Ltd		3,500	3,500	3,500
American Premium Water		23,000	23,000	23,000
Mobitel		2,000	2,000	2,000
W.D.G.S Onil - ODSM		2,100,000	2,100,000	2,100,000
BMICH		369,153	354,153	354,153
Buddhist Cultural Centre		-	10,000	10,000
Waters Edge Limited		-	50,000	50,000
Vidulka Exhibition		25,000	25,000	25,000
ADVANCE				
Advances for Programs etc		169,918	311,398	311,398
Divisional Secretariat - Ruwanwella		-	251,814	251,814
Provincial Education Dept, Uva		-	1,034,596	1,034,596
Provincial Education Dept, Eastern		911,329	1,323,300	1,323,300
Provincial Education Dept, Northern		790,191	1,618,300	1,618,300
Provincial Education Dept, North Western		-	842,682	842,682
Buddhist Cultural Center		-	892,512	892,512
Provincial Education Dept, Southern		1,544,949	1,544,949	1,544,949
Government Printer		-	765,843	2,412,040
Provincial Education Dept, Western Province		518,585	518,585	518,585
Eco Power Lanka Engineering (Pvt)Ltd		-	5,805,000	5,805,000
Secretary-Min EDU-Uva /North Western Pro-NAMA		522,250		
Cheif Secretary Southern / Eastern pro.-NAMA		1,955,680		
Advance-Secretary Ministry of Road Development (Central Pro.) - NAMA Pro.		2,214,750		
Other		8,596,168	1,559,592	4,576,704
Total		20,535,021	19,863,272	24,526,581

ANNEXURE 2

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31st December 2018

(All amounts in Sri Lanka Rupees)

	Note	2018	2017 (Restated)	2017
NOTE 16 - CASH AND CASH EQUIVALENT				
NSB Savings Account - 100610493406		173,410,145	166,914,053	166,914,053
Peoples Current Account - 078100188503576		25,214,869	8,512,421	8,512,421
Peoples Current Account - 078100278503576		4,620,071	4,620,072	4,578,684
BOC Current Account - 8002630		933,764	960,864	960,864
BOC Current Account - 74944408		76,202,054	11,228,284	11,228,284
BOC Savings Account - 75803419		134,548,641	153,868,425	153,868,425
BOC Current Account - 80595356		37,878,950	46,116,605	46,116,605
Total		452,808,494	392,220,724	392,179,336
NOTE 18 - DEFERRED GRANT				
Capital Grant 2008		33,770,435	33,770,435	33,770,435
Capital Grant 2009		11,955,533	11,955,533	11,955,533
Foreign Grant 2009 - Japanese		24,165,380	24,165,380	24,165,380
Capital Grant 2010 - Hambantota Solar Park		46,693,991	46,693,991	46,693,991
- Unamortized Capital Grant		10,646,819	10,646,819	10,646,819
Foreign Grant 2010 - Japanese		11,419,569	11,419,569	11,419,569
Capital Grant 2011 - Indurana Mini Hydro Project		15,523,945	15,523,945	15,523,945
- Unamortized Capital Grant		68,798,341	68,798,341	68,798,341
Foreign Grant 2011 - Japanese		1,155,016,402	1,155,016,402	1,155,016,402
- Korean		191,097,075	191,097,075	191,097,075
Differed grant 2012 - ADB		15,082,346	15,082,346	15,082,346
Capital Grant 2012		23,581,236	23,581,236	23,581,236
Differed grant 2013 - ADB		43,416,071	43,416,071	43,416,071
Differed Grant 2013 - KOICA		35,662	35,662	35,662
Capital Grant 2013 - FARDF		41,873,961	41,873,961	41,873,961
Capital Grant 2014		20,487,827	20,487,827	20,487,827
Capital Grant 2015		14,655,015	14,655,015	14,655,015
Capital Grant 2016		17,855,251	17,855,251	18,752,051
Capital Grant 2017		19,806,619	19,806,619	19,806,619
Less:				
- Deferred Revenue Previous Years		(957,038,514)	(865,758,409)	(865,758,409)
- Deferred Revenue for The Year		(350,329,330)	(91,280,105)	(91,280,105)
Total		458,513,634	808,842,964	809,739,764

	Note	2018	2017 (Restated)	2017
NOTE 19 - OTHER PAYABLE				
Payable to Fund of The Authority from Energy Fund		-	-	-
Switch Asia Control Account		4,548,176	4,548,176	4,548,176
Ministry of Power and Energy		500	500	500
Accrued Expenses		2,508,909	11,832,735	11,842,517
Unpresented Cheques		1,282,665	173,696	173,696
Renewable Energy Solar Registration Fees		295,860	295,860	295,860
Ministry of Mahavali Development and Environment		470,000	470,000	470,000
UNDP - NAMA Project		1,036,803	1,036,803	1,036,803
UNDP - Biomass Project		1,970,834	1,970,834	1,970,834
Audit Fees		2,058,636	1,332,636	1,332,636
VAT Payable		3,782,610		
Jeewa Shakthi Associates - Survey Fee		252,875		
Bid document		5,000		
CREDITORS				
Renewable Energy-E Net Solutions (Private) Ltd.		1,667,500	1,667,500	1,667,500
Acquisition of Energy Instruments		326,025	326,025	326,025
Retention		3,168,918	4,154,251	4,154,251
Narahenpita Jathika Pola		99,405	99,405	99,405
SUNDRY CREDITORS				
Sri Lanka Custom		310,748	310,748	310,748
Welfare Society SLSEA		442	442	442
REFUNDABLE DEPOSIT				
E-Net solutions (Pvt) Ltd		10,000	10,000	10,000
ENL Consultant		150,000	150,000	150,000
Zigma Technologies		10,000	10,000	10,000
Rainco Renewable Energy Co. (Pvt.) Ltd		30,000	30,000	30,000
Vidulka Exhibition		9,256	9,256	9,256
Ceylon Petroleum Corp		54,000	54,000	54,000
Refundable Deposit - Vehicle		14,000	14,000	14,000
ATA International		50,000	50,000	50,000
Vidulka symposium - Entertainment Ltd		25,000	25,000	25,000
Refundable Deposit - Genso Power Technologies		-	50,000	50,000
Total		24,138,162	28,621,867	28,631,649

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.

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