

MAY-JUNE
2017



CEB'S LEAST COST

LONG TERM GENERATION PLAN

FACES PUBLIC SCRUTINY

“Efficient, coordinated and economical system of Electricity Supply for the whole of Sri Lanka” (CEB Mission)

In line with the duty of developing and maintaining an “efficient, coordinated and economical system of Electricity Supply for the whole of Sri Lanka” (CEB Mission), the Ceylon Electricity Board (CEB) has submitted its Least Cost Long Term Generation Expansion Plan 2018-2037 (LTGEP) for the approval of the Public Utilities Commission of Sri Lanka (PUCSL). The LTGEP draft report is the key document which defines Sri Lanka’s plans for generation expansion while providing information on the demand forecast, economic, environmental and other parameters used to guide future investment and implementation plans as well as the energy mix used to meet expansion needs including the component of renewable energy sources.

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The report was made available for public comments via the PUCSL website and a public consultation was held on the 15th of June

in order to facilitate public participation in the decision-making process of a national document which would have a

decisive role in defining the country's future pathway for energy security, and sustainable economic growth.

Parameters specified in LTGEP

The data in the LTGEP records that the average growth of generation demand for the period from 2018-2022 is expected to be at 5.9 percent per annum, while peak demand is expected to increase at 5.1 percent per annum. Further, from the year 2030 onwards, the day peak is expected to surpass the night peak.

With the installed capacity at the end of 2016 at 4054 MW, the LTGEP identifies plans to have an installed grid capacity of 4269 MW at 2018 and a capacity of 10783 MW at the end of 2037. For this base case projection, the energy mix proposed consist of already committed plants and new additions of coal, major hydro, pumped storage hydro, combined cycle, oil and gas turbine plants and other renewable energy plants.

Given the least cost economic valuation, the LTGEP identifies coal as the least cost generating energy source, and the major source of power during



the 20 year period with its share reaching 40% by 2025 and 50% by 2034. Contrary to the increasing capacity of coal in long term energy plans, the contribution from renewable energy power plants is said to be more than 40% by 2025 and 33% by 2034, manifesting a declining trend.

Overall, the Base Case plan in the LTGEP has delineated the development of 1500MW LNG, 2700MW Coal, 105MW Gas Turbine and 320MW Furnace Oil Power by 2037 as well as renewable energy development of 1205MW Wind, 1392MW Solar, 215MW Mini Hydro and 85MW Biomass. More specifically, the total addition of renewable energy within the 20 year period is mentioned as 1205 MW of wind power, 1232 MW of Solar power 200 MW of Mini Hydro power and 80 MW of Bio mass Power.

SLYCAN Trust's comments for the LTGEP.

The assumptions and scenarios included for generation planning in the LTGEP was subject to public scrutiny at the public consultation held on the 15th of June at the Bandaranaike Center for International Studies. The consultation saw a wide participation of key stakeholders representing various state entities, private sector organizations and institutions, CSO organizations, private citizens and other interested parties.

In line with the request made by PUCSL, SLYCAN Trust made a written submission of comments focusing on the areas of Sri Lanka's NDC commitments, Natural Energy Policies, environmental impact in the implementation of the LTGEP.

The term Intended Nationally Determined Contributions (INDCs) need to be changed to Nationally Determined Contributions (NDCs) as Sri Lanka has ratified the Paris Agreement in 2016, since which the INDCs are converted to NDCs.

The LTGEP needs to align with the NDC commitments to address climate change. Given that the LTGEP 2018-2037 has acknowledged that "Sri Lanka has an obligation to achieve the NDC targets", the development of renewable energy capacities in the LTGEP should align with the NDC targets and allocated time-frames. This includes increasing of renewable energy targets and cutting down on emission creating sources.

The LTGEP needs to be in line with the National Energy Policy developed by the Ministry of Power, and focus on increasing energy potential through renewable energy sources.

LTGEP needs to align with the government policies. Coal power plant development mentioned in the LTGEP contradicts several national commitments and the targets mentioned in the national policy of achieving the total demand for electricity from renewable and other indigenous energy resources by 2030. The viability of the integration of super-critical coal power plants and the pump storage power plant in the LTGEP is questionable.

Sri Lanka has committed in international for a as going to zero emissions by 2050, as indicated by the government policies, presidential manifesto among others. As a member to the Climate Vulnerability Forum, Sri Lanka has committed to become zero emission by 2050. The LTGEP contradicts with this commitment, and needs to be addressing this.

6. Cost evaluation which provides the basis for the low cost aimed at in the LTGEP, only focuses on the economic costs of energy development and ignores non-economic factors such as the environmental and social impacts. trend analysis of the economical costs of the energy sources would point to a comparatively high cost for coal power generation. These need to be incorporated into the LTGEP.

7. Price of energy sources are measured using USD and does not account for the declining value of the Sri Lankan rupee which pushes the cost higher considerably. Further the numbers indicated reflect not the economic cost, but the market cost. This does not reflect the accurate cost of each energy resource to address prioritisation in the LTGEP.

8. Renewable energy development needs to be implemented in a timely manner, and a contingency evaluation needs to be done in order to increase the RE and decrease the fossil fuel resources for energy generation.



Over the recent years the energy sector has drawn much attention due to the rapid infrastructure development wherein the government has taken great efforts to sustain a substantial improvement in the power and energy sector of Sri Lanka. The government has successfully been able to achieve almost 100% of national electrification level which has been recognized as a dramatic improvement in the power sector compared to Sri Lanka's position in late 2005. The newest trend around the world, including Sri Lanka, is the use of renewables as energy generating sources due to its significant environmental benefits. As the Secretary to the Ministry of Power and Energy, Dr. Batagoda

...the government's future plan is to promote renewable energy where reaching 100% energy through renewables is one of the targets.

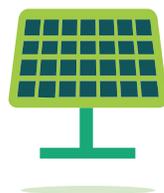
stated that the government's future plan is to promote renewable energy where reaching 100% energy through renewables is one of the targets. He further elaborated that in 2015 renewable energy consumption of Sri Lanka was 50% and the government intends to increase it up to 60% by 2020. From the entire energy generation of Sri Lanka, 43% of energy is generated from wood which is regarded as a renewable because trees can be planted, 13% from Hydro power electricity and 3% from wind power, which is aimed to be further developed. Therefore 59% of energy generation of Sri Lanka depends on renewables.

The Secretary also expressed the belief that Sri Lanka has a brighter future in terms of the

sition from non-renewables to renewable. “According to the new energy policy of Sri Lanka, by 2050 it is expected to achieve 100% energy from solar, wind, hydro, and bio-gas which are renewables”, he said. However, referring to the issue pertaining to the efficient and optimal management of the energy from renewables he stated that,

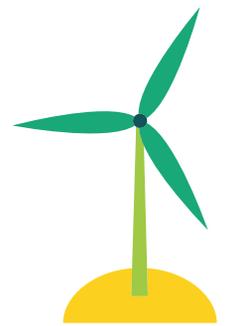
“there are technological issues due to the absence of a proper storage system in Sri Lanka. Introduction of a proper system to generate electricity and efficiently manage it as in using hydro at night and solar in daytime hours, is important. There also needs to be a backup system all the time”.

Further emphasizing the government’s contribution towards the use of renewables to generate energy, Dr. Batagoda stated that few steps are being taken to increase the capacity of generating energy through solar power including the community service project named “Soorya Bala Sangramaya”, which aims to build 01 million houses with solar panel systems, and the other is to introduce solar panels to industries. Commenting on the delay in the implementation phase of the “Soorya Bala Sangramaya”, Dr. Batagoda explained that the process was delayed due to engineers who are against the decision of introducing solar and battery backup systems to Sri Lanka. According to the Secretary, contentions



between the government and the Ceylon Electricity Board arise due to the government’s priority towards using renewables in generating energy and the CEB’s negative approach to the matter resulting in disrupting government efforts”. Stressing on this contentious situation, he further stated that “CEB is concerned with using coal since it’s not costly. The government is willing to cover the financial aspect but still CEB opposes to this kind of valuable projects”.

In terms of Sri Lanka’s efforts in using wind, geo-thermal and Otec Technology in generating power, Dr. Batagoda emphasized that already tender notices have been published to the proceedings of Mannar wind power plant, while geo-thermal plants are also expected to be built in Maha Oya and Kinniya areas. He added that Otec technology is also expected to be introduced to generate power through heat exchange and a pilot project in Trincomalee has already been implemented upon finding the suitability of the location. .



Expressing his views on the recent incidence of the collapse of Meethotamulla Garbage pile, Dr. Batagoda elaborated on the government’s initiative to generate energy from waste. He said that the government accepted a project in Muthurajawela which aims to generate energy from waste and some other projects related to the same issue. “So we can safely

say that in small steps we are following the footsteps of the countries like Sweden, which is a country that currently imports garbage from neighbouring countries since it has run out of garbage to use in its Waste-to-energy power plants”, he noted.

In conclusion, as the Secretary explained,

the government’s approach toward enhancing access to renewable energy lead to the change in most of the policies as seen in the implementation of the “Soorya Bala Sangramaya” project and the land reclamations under the Sustainable Energy Act to enhance the access to

renewable energy. “The plan is to improve the current use of 43% wood to 44%, 13% hydroelectricity to 14% and 3% of wind(renewables) to 34% within the next 13 years. Thereby the government intends to achieve 92% of energy generation from renewables by 2030”, he stated.



Rising Tide of Natural Disasters in Sri Lanka: Case for Climate Change

Sri Lankans experienced yet again the impact of floods in the aftermath of, what has been called the worst torrential rain since 2003. Over 700,00 people have been affected in 15 districts of the country with the current death toll reaching 212, more than 79 people still reported missing.

Incidents of natural disasters have increased in frequency as well as in severity, especially

in light of last year’s urban floods which took its toll on the inhabitants of the country. The May 2016 floods and landslide disasters, which which affected 24 out of 25 districts of the country, caused losses and damages estimated at approximately SLR 100 billion (US\$ 660 million). In consideration of the variations in the recent climatic and weather patterns in the country ranging from recorded extreme temperatures and accelerated disasters, it is of topical importance to question if climate change plays a role in the increased incidence and intensity of the natural disasters in Sri Lanka.

Climate change and natural disasters

According to the Intergovernmental Panel on Climate Change (IPCC), an increase of greenhouse gases in the atmosphere will lead to the rise in global surface temperatures thereby leading to the possible occurrence of more disasters with prolonged and intense impacts. The potential outcome of global temperatures increase include increased risk of drought and increased intensity of storms, including tropical cyclones with higher wind speed. The

United Nations Framework Convention on Climate Change (UNFCCC) has reported that natural disasters are occurring nearly five times as

often as they were in the 1970s, affecting

The occurrences of floods in Sri Lanka are typically attributed to the two monsoon rainfalls. During the Northeast monsoon occurring between December- February, the eastern, northern and north-central provinces face threat of floods. While during the Southwest monsoon season which takes place between May-September the western, southern and sabaragamuwa provinces are particularly vulnerable to risk of floods. The expected



amount of rainfall during this season is said to vary from about 100 mm to over 3000 mm and the overflowing of rivers cause floods in the lower flood plains of Kalu and Kelani rivers during this monsoonal period.

However, the rainfall which caused floods and disasters in Sri Lanka is reportedly the combined result of the deep depression conditions in the Bay of Bengal resulting in cyclonic storm “Mora”, and the natural monsoon rainfall pattern. The low-pressure area over Southeast Bay of Bengal has lead to the

incessant rain lasting over 48 hours. The intensification of the depression conditions to a cyclone situation is a result of the warm sea surface

temperatures associated with climate change.

Current Crisis and the Road to Recovery

In its latest report published on 04.06.2017, the Disaster Management Center of Sri Lanka has reported that due to the flood and landslide conditions caused by incessant rains across Sri Lanka, 717,622 People belonging to 184,265 families were affected in 15 Districts with the current death toll reaching 212, and

more than 79 people still reported missing. The extent to which the storm and the South-west monsoon have impacted the lives and the livelihoods of the citizens has been drastic in measure and beyond the coping capacity of the nation.

On the flipside of the situation are the unsustainable development projects that took place in the recent past. The filling of the low lying wetlands which serve to absorb the overflow of excess water from rivers for construction and developmental purposes has led to the escalation of the disaster situation.

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emotional trauma cast on the nation's citizens due to loss of loved ones, property and livelihoods. International relief aid, and the communal spirit and humanity that unite Sri Lankans in such times of need is simply not sufficient in moving forward. With floods affecting several areas in Sri Lanka, and weather extremities becoming more frequent, the implementation of climate change adaptation plans which accounts for better preparedness with improved disaster risk reduction systems, early warning systems should be expedited in the face of the current extreme weather calamities.

“Going vegan is the least and the best we can all do for ourselves, for others and for the planet! It is the future!” ~Sue Iruge.

Sue Iruge who is a long-time vegan is the winner of our Meatless Monday social media competition held on the 9th of June, 2017. She spoke to us on why she became a vegan, and why she thinks that it is important not to consume meat based products.



“I went vegan 4 years ago after coming across Gary Yourofsky’s famous speech on YouTube, titled “Best Speech You Will Ever Hear”.

For the first time I got to know what was wrong with consuming dairy and eggs, and understood the whole reality of animal agriculture, and its effects on health and the environment.

It was like a slap in the face! I could not bring myself to contribute to those industries anymore, and I went vegan! It seemed impossible at first since I was addicted to animal products, but within a few months, a whole new world I didn’t realize existed opened up for me. Eating was not a problem because anything can be veganized nowadays! My health improved drastically too!



nowadays! My health improved drastically too! I had the great opportunity to try out the vegan buffet at Mount Lavinia Hotel thanks to Meatless Monday Sri Lanka, and it was heavenly! Not just because it was a stunning array of delicious food, but it was one of a kind! The food was completely free of meat, eggs, dairy and other animal products- all plants! People expect vegan food to be just bland vegetables, but this buffet is proof that we can consume delicious food without harming animals, hurting the environment or jeopardizing our health!” she said.

Meatless Monday competition was organised to create awareness on the importance of going meatless and the need for a shift towards meatless lifestyle options. Two vouchers were offered for the winner to the vegan lunch buffet held at the Governor’s Restaurant at Mount Lavinia Hotel every poya day and includes a vast variety of vegan food options.

Animal Welfare in Sri Lanka

In recent times, issues pertaining to animal welfare have been forefront in society. Several key incidents triggered the concerns of animal rights activists and animal lovers including the dog removal carried out in public places across the country and the request regarding the introduction of battery cage system in Sri Lanka.

Dog removal in Sri Lanka

According to a directive issued in April by the Minister of Megapolis and Western Development, Patali Champika Ranawaka, stray dogs in Colombo were to be evacuated from the city within the following three months. This order was issued to facilitate



the development of the Combo city. Around 16,000 stray dogs in Colombo were to be removed. Since then, there have been several incidents of dog removal taking place in and around Colombo as well in the Southern district in places such as Galle. With the keen vigilance of animal lovers and animal rights activities and organizations these issues have been brought to the attention of the general public. Upon further investigation in most cases the dogs were captured for a CNVR programme and was said to be released after the programme. However, in the immediate aftermath of the Sri Jayawardanapura incident, the caution and skepticism of the public on the supposed CNVR reasoning seems warranted.

Request to Introduce Battery Cage system

Citing reasons rooted in the lack of productivity and quality of eggs produced using the traditional method of deep litter system, a request was made by a group of interested parties to implement the battery cage system in Sri Lanka. Regardless of the quality of the production, the introduction of the commercially utilised method raised concerns of animal welfare and also of the livelihoods of small and medium scale farmers in Sri Lanka. This request led to a chain of events starting with the request made by Minister Dayasiri Jayasekera at a cabinet meeting to stop the introduction of the inhumane practice of battery cage in Sri Lanka. The minister also proposed to stop the importation of battery cages in Sri Lanka. Several protests were also carried out by organizations such as the All Island Egg Manufacturer's Association against

this request, as they claim the introduction of the battery cage system would impact over 6,00 small and medium scale egg farmers. As per the directive of the Prime Minister, Ranil Wickramasinghe, the economic development committee would oversee this matter and reach a decision.

The status of animal welfare in Sri Lanka was widely questioned with regard to topical issues arising in the society and the lack of long term legislature to address such pertinent issues. The Animal Welfare Bill was handed over to the legal draftsman for final edits after addressing the concerns of different stakeholders. The need of immediate enactment of the Animal Welfare Bill is felt urgently in order to address the gaps in the legislative premise concerning the welfare of animals.

If you would like to
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