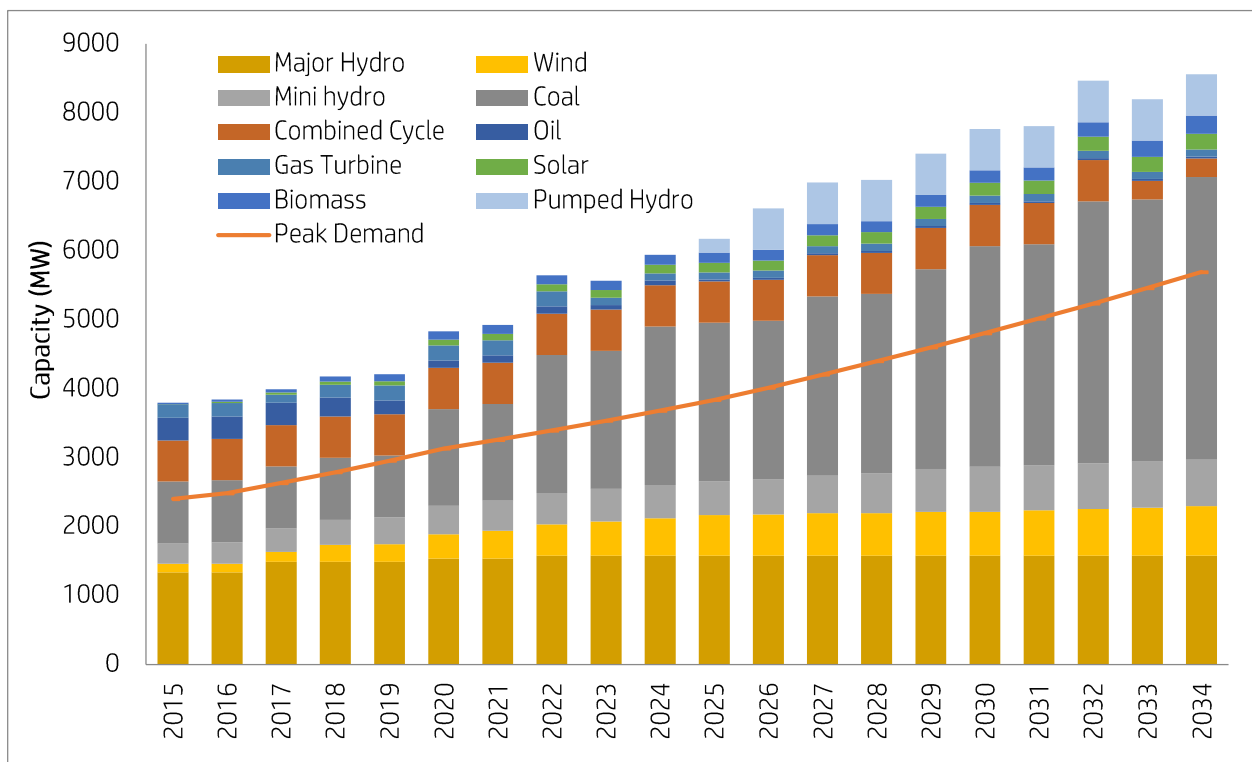


Shifting Towards Greener Power Generation in Sri Lanka

Following multiple power outages in the past several months, Sri Lanka’s power and energy sector has come under the spotlight. The stability and growth of energy provision has strong implications for the stability and growth of the economy as a whole. In attaining longer-term sustainability in energy, the source of supply in the energy sector is once again receiving renewed attention, with the debate on coal plants versus cleaner alternatives.

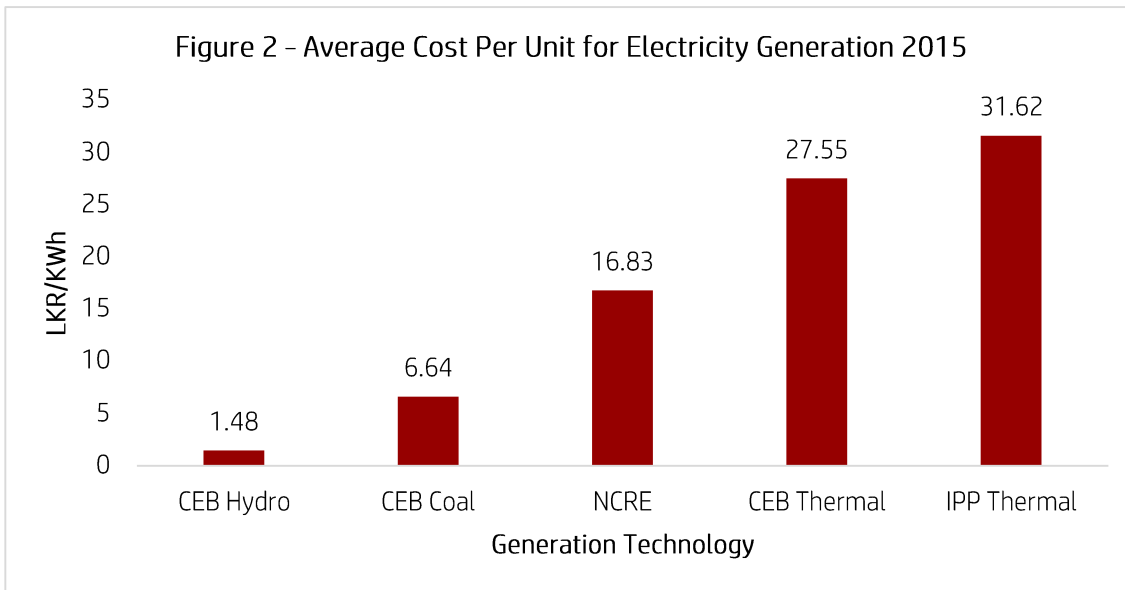
According to the Ceylon Electricity Board’s ‘Long Term Generation and Expansion Plan’ (LTGEP) 2015 - 2034, coal is expected to be the major source of electricity generation in Sri Lanka. According to the Plan, the country’s dependency on coal for power generation is expected to rapidly increase with its share reaching 40% by 2020 and 60% by 2034 (see Figure 1 for an illustration).

Figure 1 System Capacity Distribution –Base Case LTGEP 2015-2034



Source Ceylon Electricity Board

The fundamental reason Sri Lanka opts for coal seems to be its cost effectiveness in power generation in comparison to thermal (see figure 2 below), and our imminent need to steer away from oil and towards a third resource and that third resource being coal, as outlined in Sri Lanka’s National Energy Policy.



Source Ceylon Electricity Board

However, the subsequent cost to the environment caused by storage, transportation and emissions has largely not been accounted for – and therein lays one of the critical issues that need to be addressed.

The cost of coal to export promotion

Given the global trend towards climate change mitigation and adaption, Sri Lanka's long-term dependency on coal could potentially hinder the country's export promotion. Consequent to the signing of the Paris Agreement in 2015, many developed countries took firm steps towards greener power generation and measures to curtail their carbon footprint. These developed nations which aim to significantly reduce their carbon footprint include some of Sri Lanka's largest export markets such as the United States, United Kingdom and Germany. In the United States 154 companies have signed 'The American Business Act on Climate Pledge' in order to demonstrate their support towards action on climate change and the conclusion of the climate change agreement in Paris. Companies and consumers in these countries are becoming more conscious than before on sourcing from countries that also have a lower carbon footprint and have demonstrated commitment to greener energy and other practices. If Sri Lanka continues down the path of primarily coal power generation, it may affect the attraction of our exports in the international market. Whereas a move towards greener energy would help demonstrate an added reason for sourcing/buying from Sri Lanka.

The need for a greener alternative

Identifying an alternative, greener power generation mechanism is thereby of utmost importance in order to remain competitive and in line with global trends. Given the lack of viable and feasible sites for power generation through hydro- the next best alternative would be through Non-Conventional Renewable Energy (NCRE) such as solar, wind and sea wave. While Sri Lanka's current long term plan addresses an increment in NCRE power generation, it does so towards an extent of increasing its share to 20% by 2020 which is far from adequate. As outlined by figure 2, cost of generation is one of the key reasons the CEB opts out of depending solely on NCRE.

Facilitating investment in greener power generation.

Despite the higher costs, NCRE would be inevitable in the longer term, to remain competitive and in line with global environmental trends. Enterprises would either be compelled to generate their own electricity (through in-house/domestic NCRE systems) or through Independent Power Producers (IPPs) selling to the grid, in order to meet this demand. It is

important, therefore, that the national energy plan and policy reflect a transition towards a greater dependency on NCRE power generation. Promoting NCRE as the leading power generation source would require both a shift in policy, regulation, and practice as well as a significant amount of foreign investment.

Sri Lanka has not yet been unsuccessful in attracting large foreign investments into this sector. But, interactions that the Chamber has had with prospective investors suggest that there is substantial foreign investor interest in this sector. Yet, they also cite that there are challenges they face in investing in this sector, including difficulties in obtaining land; dealing with complicated bureaucratic procedures; and secure a plethora of approvals from multiple government agencies. Creating an environment that accommodates and promotes such investments would be key for sustainable and environmentally-friendly power generation, critical to charting a greener growth path for the Sri Lankan economy.

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