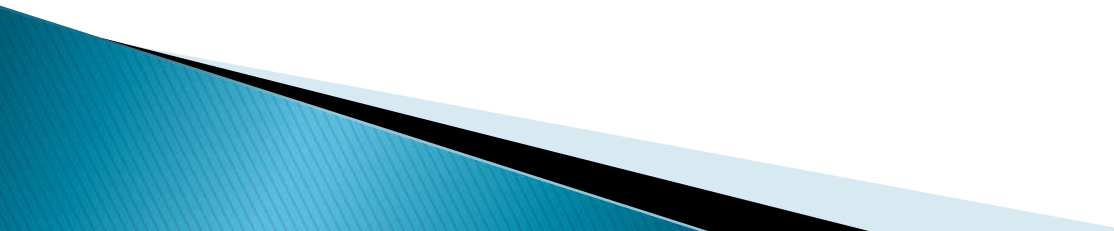


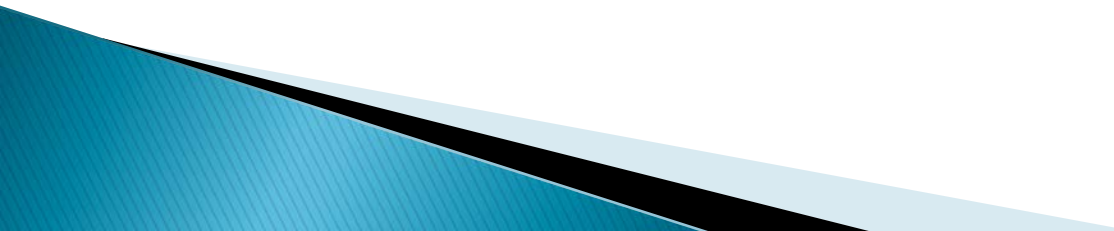
Commentaries on Long Term Generation and Expansion Plan 2018-2037



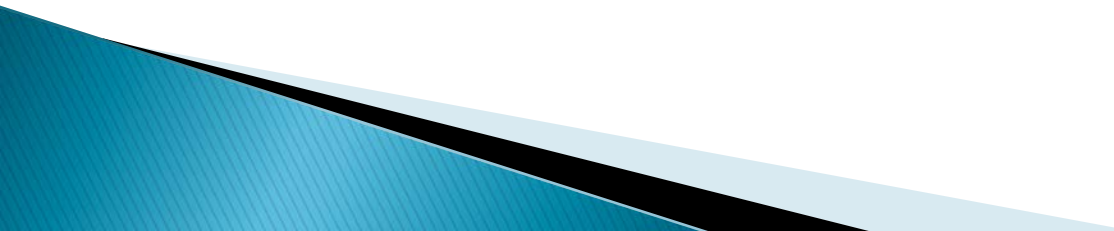
**Small Hydro Power
Developers Association**

Preparation of the Long Term Generation & Expansion Plan (LTGEP)

- ▶ Who is Responsible for preparing LTGEP ?
 - ▶ As per Section 4(1) b of Electricity Act 20 of 2009, it is the commission's responsibility to secure all the demands for electricity in Sri Lanka
 - ▶ . But it has not explicitly mentioned the responsible party for preparing the LTGEP.
- 

- ▶ Conflict of Interest !
 - ▶ CEB is the only transmission Licensee also a Generation and Distribution licensee.
 - ▶ Therefore, if LTGEP is prepared by CEB, it naturally leads to conflict of interest.
 - ▶ Therefore, Long Term Generation Plan should be prepared by PUCSL based on the submissions of CEB and other licensees.
- 

Input Parameters and Planning Guidelines used in LTGEP

- ▶ The industry is of the view that Guidelines used in preparation LTGEP needs to be re-visited.
 - ▶ Some Guidelines are not in par with the latest development of the sector (Specially Vast Developments & technological Advancements in Renewable Energy Sector.)
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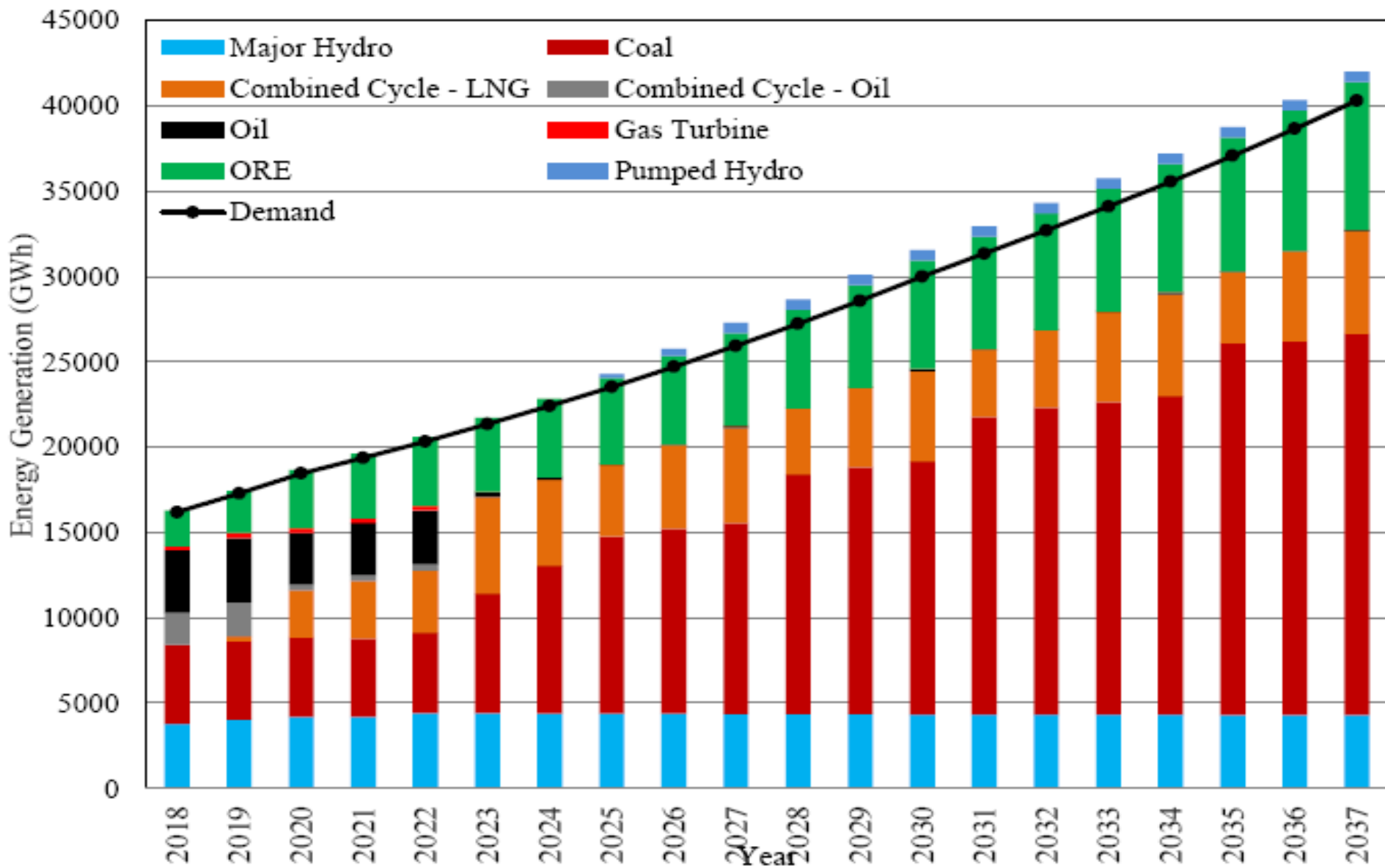
- ▶ No Public Consultation After Request for Feed Back on Input Parameters and Planning Guidelines !
- ▶ We thank PUCSL for requesting feedback on Input Parameters and Planning Guidelines for preparing LTGEP in Mar-2017.
- ▶ Several IPPs and many other interested parties submitted feedback on April-2017.
- ▶ We request that the feed back and any changes made to Input Parameters and Planning Guidelines needs to be discussed and changes made required to be communicated .

National Policies

- ▶ HE The President in Chapter 10 of His election manifesto (compassionate Mythree Governance - Stable Country) promised to meet the basic energy needs through renewable energy. It Includes following..
 - Protecting against rising of imported fuel prices,
 - Inclusion of environmental factors in decision making
 - Removing subsidies for fossil fuel and supporting renewable energy.

Contradiction to National Policies

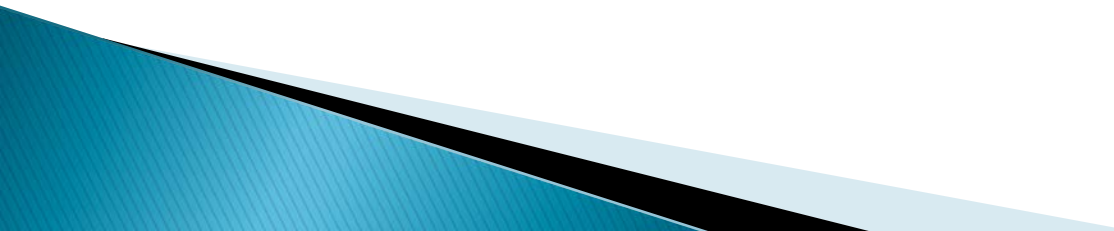
- ▶ Contrary to Government's above statements coal power is set to play a major role in the LTGEP for the period 2018-2037.



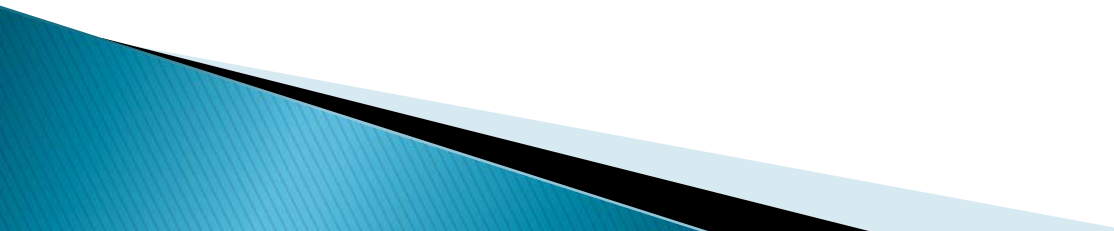
Forecasted Energy mix for the next 20 years (Extracted from:
LTGEP 2018-2037)

Nationally Determined Contributions (NDC) Report submitted by Ministry of Mahaweli & Environment in Sept 2016 to the United Nations Framework Convention on climate change (UNFCCC) held in Oct 2016

“Sri Lanka has recently taken strong initiatives to implement efficient and effective sustainable energy programmes, as well as eliminating the introduction of coal power plants from the national electricity system by 2030.”



NDC report to UNFCCC & LTGEP Contradicts with each other !

- ▶ **By Studying LTGEP, it can be reaffirmed that instead of eliminating coal power plants, there are more additions of coal power on the LTGEP 2018-2037.**
 - ▶ **Furthermore, the recently drafted National Energy Policy (Ministry of Power & Energy) has mentioned these new additions of coal power plants.**
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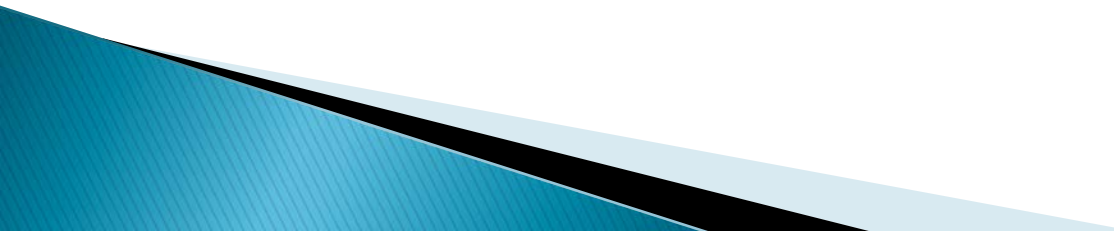
Require more focus in LTGEP towards Renewable Energy

- ▶ The new additions of Coal Power unless they are strictly required in the LTGEP should be discouraged and more emphasis in Renewable Energy based on the vast advancements of the sector needs to be looked at.
- ▶ Otherwise, in another 10-15 years, the coal power plants which have terms for 20 years operation , may have to be operated even if Country does not need them, just to meet the contractual obligations (White Elephant)

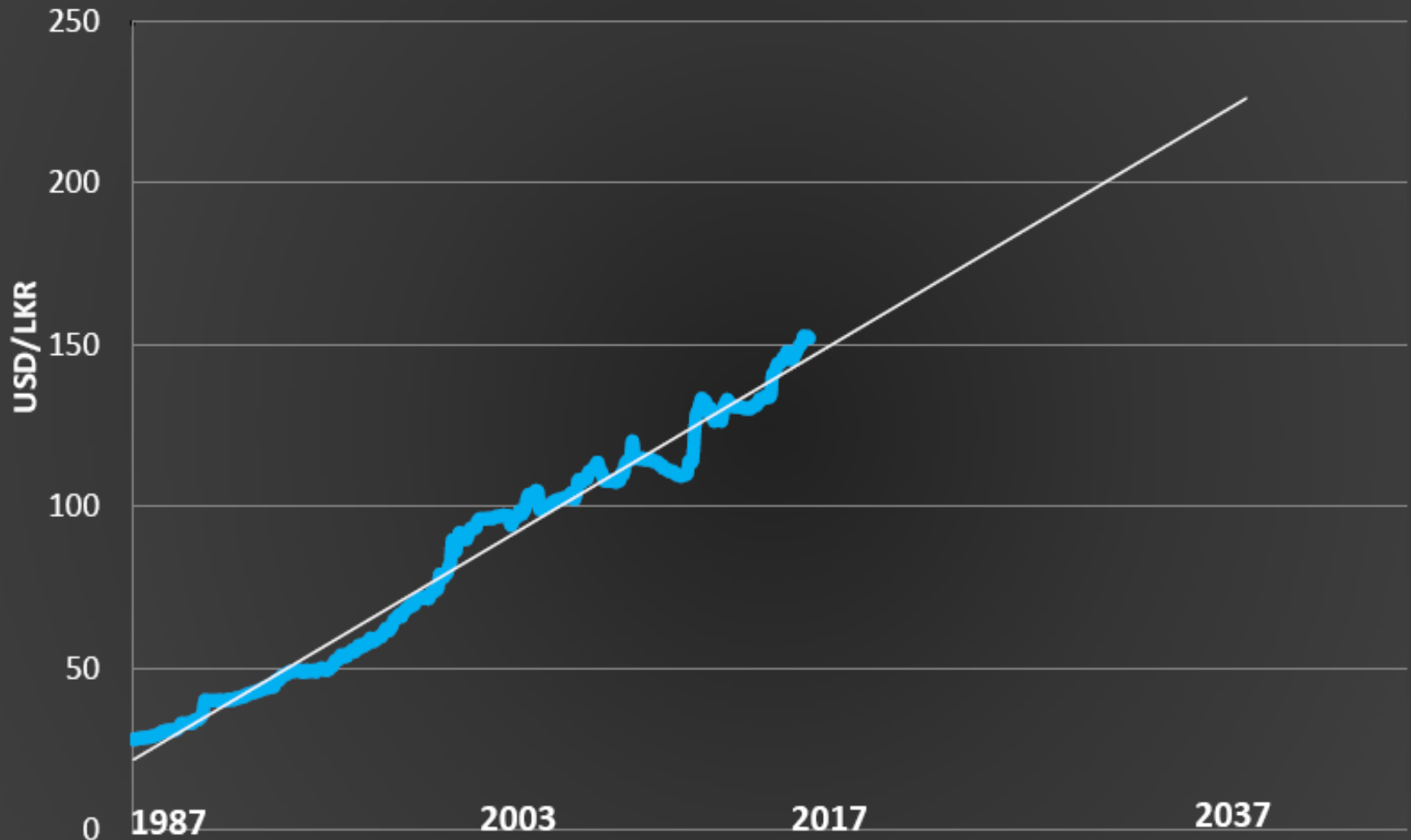
Calculation of the Least Cost for Coal Power is Questionable !

- ▶ Coal has been identified as the least cost generation by CEB. But it has only taken into account expenses for fuel and O&M.
- ▶ Externalities such as impacts on health, green house gas emissions, resource costs and availability, supply security, technological developments have NOT been considered.

Rupee depreciation against USD when Calculation of the Least ?

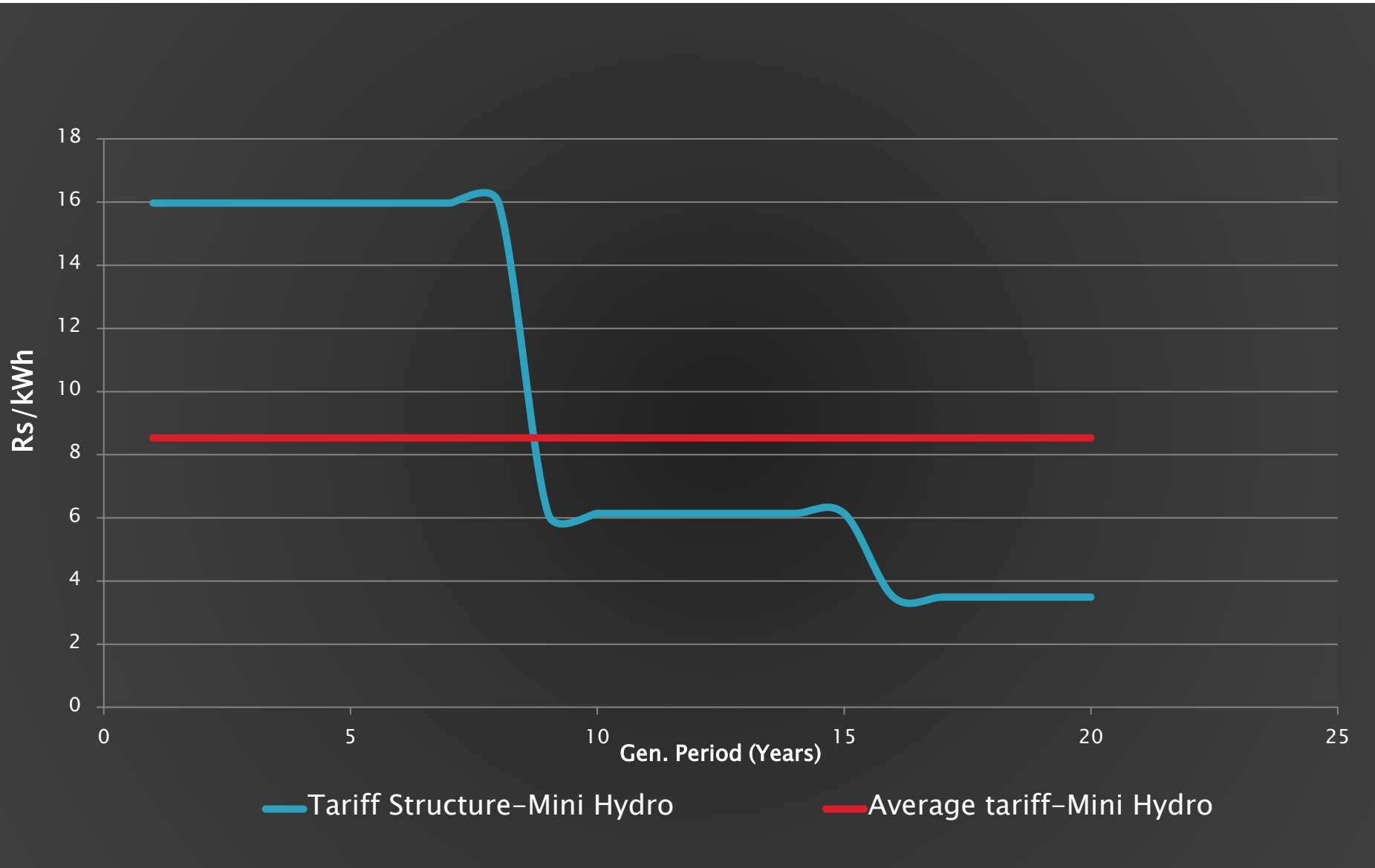
- ▶ Rupee depreciation against USD has also not been considered when calculating the least cost option.
 - ▶ Therefore, the basis on which the least cost has been calculated for coal power is highly questionable.
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USD/LKR-(1987-2037)

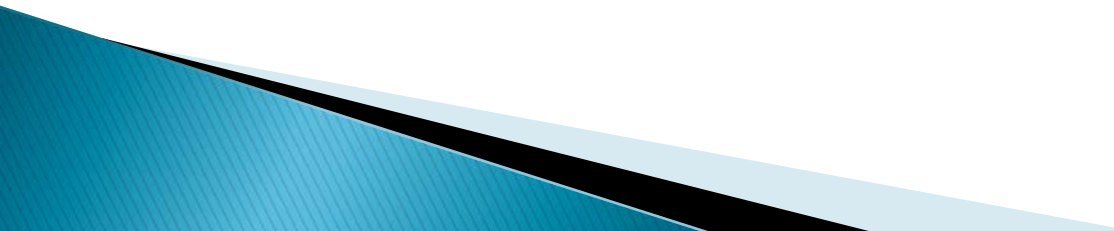


Due to highly depreciative nature of the Rupee, coal costs will also show a steep increase in its price in the future.

Average Tariff Structure of Mini Hydro Power Plants



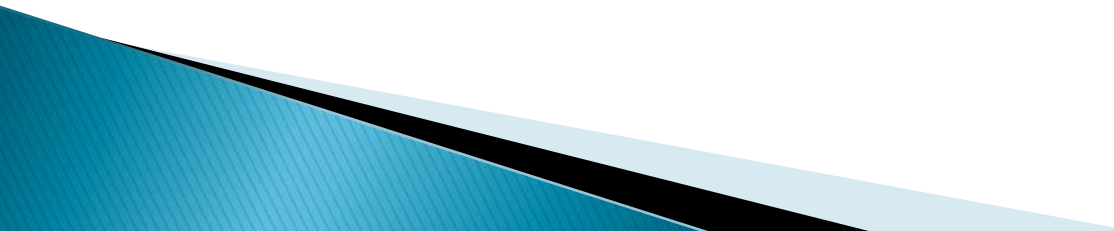
Small Hydro Remains the Cheapest and the Silent Leader of NCRE

- ▶ Presently cumulative capacity of 350MW plants in 190 locations providing direct employment for app. 3000 workers and indirect employment for 5000 people in remote villagers.
 - ▶ Cheapest Green Energy around Rs 10/- (levelised) long term.
 - ▶ Has the capacity to add another 200-250MW in the next 10years.
- 

Concerns for the Growth in Small Hydro Power Sector

- ▶ Out of the 180 individual projects, only few has come across environmental and social issues during construction phase.
- ▶ Only less than 5% of the projects are in Forest areas. Balance 95% in plantation land, home gardens etc.
- ▶ Taking examples from very few projects which has certain issues, some organized groups carry out negative publicity campaigns .
- ▶ There are no scientific studies done to check and effects from small hydro power plants before and after construction. Most are baseless allegations.

CONCLUSION

- ▶ PUCSL should take the responsibility of preparing the Long Term Generation & Expansion Plan.
 - ▶ There is a severe lack of coherence with National Policies in the LTGEP. All these national policies and targets should be taken into account in future planning sessions.
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CONCLUSION

- ▶ All externalities should be considered when calculating the least cost for coal power.
- ▶ Coal power is not an ideal power source for Sri Lanka. There will be a detrimental impact to the country's economy with the steep increase in the coal purchase rate with depreciating Rupee.
- ▶ Small Hydro Power can add another 200-250MW in the next 10 years. LTGEP needs to allocate for such capacity addition by small hydro. Thus, total developed potential of small hydro could be app. 550MW by 2027.

Thank You

Small Hydro Power Developers Association of Sri Lanka