

Executive Summary

This report is about how a young engineer together with her partner aspired to start-up a business which brought rewards to both the economy as well as the environment while solving a basic problem most in our society was facing. That was the ever rising electricity bill. It may be due to the urbanization or due to the complexity of our basic needs, electricity usage is on the rise and it's becoming a painful necessity.

Electricity cannot be stored in mass scale for the government to supply when it's demanded. Electricity needs to be generated in real time for consumption. Hence Sri Lankan government has 3 options to meet the ever growing demand. 1. Increase the tariffs: As price increases the demand will decrease. 2. Control the demand: Power cuts 3. Increase the generation capacity: New generation projects.

It was a disappointment when Sri Lanka opted for Coal power plants in order to meet the increasing demand and to bring down the cost of electricity generation done by the conventional thermal power plants (burning fossil fuels). Coal and Oil have many similarities. Both are imported and traded in dollars. Currency depreciation and Increase of world coal prices would leave Sri Lanka depended more or less the same way oil has done over the years. Similar to thermal power, the maintenance costs and environmental pollution is high in coal power. This leaves sustainability of Sri Lanka in jeopardy.

The burden of high electricity generation cost was put on the users in 2013, April with a new price revision. Especially the middle income earners, had almost 85% bill increment, had to adjust their energy consumption pattern and their normal life style to keep their monthly bill affordable. When most developed countries as governments and as individuals are adapting renewable energy options, Sri Lanka is way behind. Being able to help reduce the global warming and environmental pollution itself made this project of installing Solar PV systems a worthwhile investment of time, energy and money.

The entrepreneurs believed that the frustrated high and middle income households were willing to make a long term investment on their own energy consumption and be relieved from the sudden price hikes the government imposes. Sri Lankan government also encourages renewable energy and specially Solar PV systems. Electricity being a necessity in

the busy life we lead, most people find it difficult to bring down the bill by lowering the consumption. The entrepreneur's aim was to help them solve this issue.

The entrepreneur is an electrical and information engineer and her partner an electronic and telecommunication engineer. Together they carried out a full feasibility on the venture and adapted a lean business operation model. Their main focus was on Grid Connected Solar Systems. They would install a solar system which provides electricity to the national grid while using the electricity from the grid when needed, this technology is famous as 'Net Metering'. The net exchange of electricity between the solar system and the national grid is billed via a special meter called the Net Meter. They selected Negombo as their location to put up their showroom due to the ease of reachability to their suppliers and customers. Together they were able to fulfil their dream of making Sri Lanka one step closer to being a green and sustainable country.