

## Hayleys Solar - Our Contribution towards a Greener Nation

he continuous drive for energy has accelerated global climate change, severely affecting the environment with increased greenhouse gas emissions. Over the century, the burning of fossil fuels like coal and oil has increased due to the rising demand for energy and in turn, increasing the concentration of atmospheric carbon dioxide.

Statistics show that three-quarters of the world's production of energy comes from three primary sources: oil, natural gas and coal, all of which are non-renewable energy sources which have become the largest single sources of global greenhouse gas emissions. As of 2010, the production of electricity and heat made up for 25% of global greenhouse emissions with scientists forecasting a rise in temperature by 2.5 to 10 degrees Fahrenheit over the next century. According to the Intergovernmental Panel on Climate Change (IPCC), which consists of more than 1,300 scientists from various countries, the extent of climate change effects on individual regions will vary over time with the ability of different societal and environmental systems to mitigate or adapt to change.

Tangible effects of climate change have slowly but surely changed the demand for energy to more sustainable forms with more corporates and households switching to renewable energy sources to play their part in contributing to a better environment. However, the shift to renewable sources needs to happen faster to keep the rise in global temperatures in check.

According to Renewables 2018, the International Energy Agency (IEA) market analysis and forecast from 2018 to 2023 on renewable energy and technologies, the share of renewables in meeting global energy demand is expected to grow by one-fifth in the next five years to reach 12.4% in 2023.

If done right, renewables could supply four-fifths of the world's electricity by 2050, massively cutting carbon emissions and helping to mitigate climate change. But solar and wind power have to be fully integrated, with sustainable bioenergy providing another crucial part of the mix. All this means speeding up innovation in business and technology. Above all, it means taking action to promote renewable energy today.

As Sri Lanka is located closer to the equator, we are blessed with abundance of sunshine though out the year. Once installed, solar power systems last over twenty five years without significant maintenance costs. Therefore solar energy is ideal for households, corporates and large scale factories in Sri Lanka.



and Renewable Energy in collaboration with the Sri Lanka Sustainable Energy Authority, Ceylon Electricity Board and Lanka Electricity Company is the local equivalent of this global movement of support of implementing renewable energy usage.

The sole purpose of this initiative is to promote and set up small-scale solar power plants on rooftops of homes, religious places, hotels, commercial establishments and industries. The ambitious project is expected to add 1000 MW of solar electricity to the national grid by the year 2025. (Source: Public Utilities Commission Sri Lanka)

The use of grid-connected solar systems could contribute in three ways. The first being the production of electricity generation to match ones monthly consumption which is called the 'net metering scheme'. There is also a way to generate solar power to generate an additional income whereby the consumer is paid if their solar-generated energy is higher than what is consumed from the grid. This is called 'net accounting scheme'.

The other option is known as 'Net Plus', where there is no link between how much electricity the consumer uses from the grid and supplied to the grid. The consumer will Mini Hydro Power plant at Talawakelle Estates in December 1995. For which the complete Electrical System together with the Protection, Control and Monitoring System was designed, assembled, installed and commissioned internally by Hayleys Fentons.

With Sri Lanka aspiring to become a carbon-neutral country by 2050, we at Hayleys Fentons have branded our solar arm as "Hayleys Solar", taken the reigns to become an industry leader in rooftop solar installations. Being a part of this much-needed change in power generation, which is geared towards sustainable solutions.

In 2011, Hayleys Fentons took up another challenge by embarking on a journey venturing into Solar Photovoltaic (PV) and have managed to grow in leaps and bounds with customers in the finance and banking industry, hotels, education, government complexes, manufacturing, telecom and broadcasting, and healthcare. Some of our key clients include NSB, HNB, Commercial Bank, Sampath Bank, Sri Lanka Navy, Brandix, Mas, Sierra Cables, Laugfs Power, Ceylinco, Kurunegala hospital, etc. and have become one of the country's largest solar EPC contractors. industry leader in the sector of solar power over the years has been able to provide direct and indirect employment opportunities for over 150 personnel who have been given quality training by its principals in the areas of installation as well as operations and periodic maintenance.

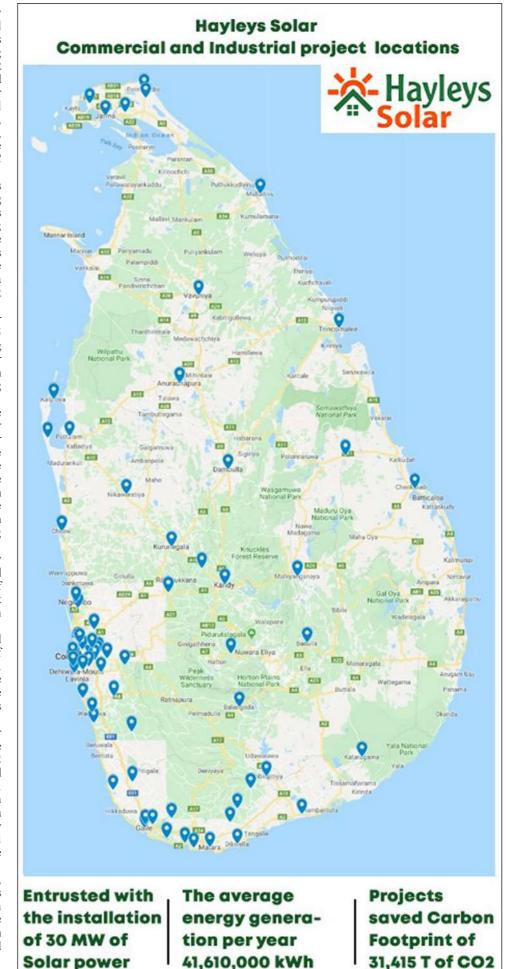
Fuelled by our success in the Sri Lankan market, we plan to expand our solar portfolio in the Asian region, such as Bangladesh and Maldives in the future.

Established in 1921, Hayleys Fentons has carved out a reputation as an industry leader, offering thousands of customers end-to-end Hayleys Solar partners with Global Tier I solar module manufacturers offering 25 year performance warranty and leading manufacturers of solar inverters with 10 year warranty, enabling us to successfully reach this goal in a short period while ensuring quality and value for money. Our Tier I suppliers include Longi Solar, which is the world number one PV module manufacturer as well as JA Solar and Canadian Solar who rank 4th and 5th respectively in the Bloomberg listing.

options for building systems infrastructure encompassing mechanical, electrical, plumbing, renewable energy-solar power, security & surveillance, voice and data infrastructure, structured cabling, missioncritical power, fire engineering solutions and facilities management.

Today, it has diversified into a range of sectors providing its services to corporates which include banking, finance and insurance, hospitality, high-rise developments, education, healthcare, manufacturing and telecom and broadcasting.

Backed by a legacy of excellence and innovation that spans over 140 years, the Hayleys Group continues to serve as a beacon of sustainable innovation and value addition, maintaining a global presence through manufacturing and marketing offices across five continents with business interests spanning a total of 16 sectors.



A key reason most home owners are interested in implementing solar systems is to cut down their high electricity bills.

Under the current energy policy by the government, it is expected that by 2030 the country's renewable mix to be 40% of the total portfolio with the demand for energy is expected to grow further. The CEB forecasts Sri Lanka's electricity demand to grow at 5.3% on average during the 2015-2034 period, and in addition the peak demand to grow at 4.7% on average. (Source Public Utilities Commission Sri Lanka)

The Soorya Bala Sangramaya project launched in 2016 by the Ministry of Power

be charged separately for the units consumed and solar units generated will be paid at a rate of Rs. 22 per unit generated in the first seven years and Rs. 15.50 thereafter for 13 years. This gives the consumer an attractive payback on the investment made. In other words, it is a feasible investment for the consumer whilst eco-friendly towards nature.

Hasith Prematillake, the Managing Director of Hayleys Fentons speaks of climate change and the urgent need to shift to renewable energy sources to protect the environment and reduce greenhouse gas emissions.

Hayleys Fentons entered the renewable industry with the first grid connected 140kVA

Over the past nine years, Hayleys Solar has been entrusted with Solar PV systems totalling to 30 MegaWatts. On average, this generates about 41,610,000 kWh per annum. According to the grid emission factors published by the Sustainable Energy Authority in 2017, this saves 41,610 MWh of energy generated through the usual energy mix of Sri Lanka, resulting in a reduction of CO2 emissions which is equivalent to a 31,415 metric tonnes each year!

Hayleys Solar partners with Global Tier 1 solar module manufacturers offering 25 year performance warranty and leading manufacturers of solar inverters with 10 year warranty, enabling us to successfully reach this goal in a short period while ensuring quality and value for money. Our Tier 1 suppliers include Longi Solar, which is the world number one PV module manufacturer as well as JA Solar and Canadian Solar who rank 4th and 5th respectively in the Bloomberg listing. In terms of inverters, we install SMA and Fronius inverters which are of European origin and also inverters from leading Chinese manufacturers, to provide the best quality solutions to our customers with an unparalleled degree of reliability ensuring maximum energy yield.

Hayleys Solar was commissioned to carry out the installation of a rooftop mounted solar system solution with a capacity of 1,400 kWp which is 50% of total capacity at Camso Loadstars' manufacturing facility in Midigama.

Hayleys Solar is pleased to have completed several turnkey projects in the field of renewable energy for prominent clients. Amongst our most notable projects is the installation of a rooftop solar system with the capacity of 2MWp at the Coca-Cola premises at Biyagama.

In return, we managed to contribute to our clients in their journey towards sustainable growth, by accounting for tons of CO2 savings per annum while generating and delivering the energy to the national grid. Hayleys Fentons was also tasked with providing solar system solutions with a capacity of over 2000kWp to over eighty branches in many of the leading banks in Sri Lanka helping to reduce electricity costs while taking an eco-friendly approach.

Taking these successes into consideration, we have now embarked on an ambitious goal to install solar systems at production facilities under Hayleys group, which include manufacturing, hospitality, leisure, plantation and logistics toward going green and becoming an environment-friendly company. Hayleys Solar which has become an



