

SOLUTIONS THAT CONTRIBUTE TO “ZERO-CARBON EMISSIONS”

The chief executive officer of SirajPower, **Laurent Longuet**, talks about the firm's ongoing projects, energy efficient electricity consumption, and micro-grids, in conversation with MEP ME editor, **Anup Oommen**



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Over the past few years, UAE-based distributed solar energy provider, SirajPower, has been contributing significantly to the UAE's clean energy initiatives and helping buildings across Dubai save on electricity consumption and reduce carbon emissions through renewable energy alternatives.

In 2020 alone, SirajPower reported significant growth as it doubled its solar assets to achieve a 100MWp distributed solar portfolio.

The firm currently operates and maintains more than 180 facilities in the UAE, covering a total area of 600,000m² of roofs – the equivalent of 112 football fields – and displaces 65,000 metric tonnes of CO₂ emissions annually.

Speaking exclusively to MEP Middle East about the need for residential,

commercial, and retail buildings in the UAE to consider retrofitting to solar technology, the chief executive officer of SirajPower, Laurent Longuet, said: “Solar technology is important to initiate energy retrofits to deliver long-term savings for end-users.

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With the largest portfolio in the market, SirajPower expects to bolster its leadership in the UAE and accelerate its development to take the regional distributed solar sector to new heights.

Through 2020 and early 2021, SirajPower has inked multiple deals for solar rooftop systems, accelerating the adoption of energy-efficient mechanical and electrical systems in the UAE in line with the vision

of the Vice President and Prime Minister of the UAE, and Ruler of Dubai, HH Sheikh Mohammed bin Rashid Al Maktoum, to have solar panels installed on every roof in Dubai by 2030.

The agreements signed include the installation of a 2.3MWp solar rooftop system on end-to-end logistics solutions provider Rex Dubai's cold store and warehouse in Al Quoz; a 900kWp solar rooftop plant installed at KD Industries Inc's steel factory in Dubai's Jebel Ali Free Zone (Jafza); a 940kWp solar rooftop plant for packaging solutions provider Express Pack Print's (EPP) buildings in Jafza; as well as a solar rooftop plant in the warehouse facility of Misterlight, which is a market leader in the supply of specialised electrical cables.

Revealing further details on the firm's ongoing projects, Longuet adds: “As a

continuation to its thriving long-term partnership with its customers, SirajPower has made strides with solar energy for DP World's flagship property of commercial spaces and a conference centre, Jafza One.

"This commercial complex in New Dubai will house more than 1,200 offices and 15,000m² of exhibition halls and a convention centre. The 700kWp solar rooftop installation will produce 1.1GWh annual clean energy, eliminating 800 metric tonnes of CO₂ emissions – which is equivalent to more than 150 passenger vehicles driven for one year."

Apart from Jafza One, SirajPower has also built solar rooftop plants for DP World Jafza East and West, and Hellman.

Longuet adds: "We are also continuing partnership with Landmark with a 3.7MWp solar rooftop plant for their two facilities in Dubai South and Jebel Ali Industrial Area."

Furthermore, as the only locally-owned solar energy company thriving in the UAE, SirajPower also has an increasing number of prominent local conglomerates that the firm is working with, including Al Ghurair – where the initial phase of the deal includes a 1.8MWp solar rooftop plant for Gulf Extrusions.

In addition, SirajPower has also been involved in expansion projects within the residential and educational sectors.

"The construction for Al Khail Heights is

well underway for its 3MWp solar carport for a large residential complex, with 850 car park spaces. For the educational sector, SirajPower has signed a partnership with Kent College Dubai for a 1.3MWp solar power plant installed, making it the largest in scale in Dubai's education sector. Also, a 1,500kWp solar carport is being constructed by SirajPower within the school grounds," Longuet reveals.

The scope for improvement within GCC construction projects remains immense. With awareness for sustainable projects and lower carbon emissions growing, developers and contractors have begun evaluating possibilities to incorporate energy efficient products and systems on ongoing projects.

"Now, there are effective solutions available to integrate solar into even the façade and roofing of projects in the form of solar tiles," Longuet explains. "Such kinds of products will be displayed during Expo 2020 Dubai. For instance, the solar tiles installed on the French Pavilion by Akuo Energy."

The southern façade as well as the roof of the France Pavilion at Expo 2020 Dubai will be covered with more than 1,225m² of photovoltaic (PV) panels, which will power more than 67% of the pavilion's electricity needs.

"These solutions need to be considered



Laurent Longuet
CEO, SirajPower

and coordinated at the design stage between the architect, MEP contractor, and solar integrator," Longuet adds.

"Such solutions can contribute to the overall zero-carbon emission of a building. The perfect example is the DEWA HQ, Al-Shera'a, which is under construction and is set to be the tallest, largest, and smartest government Zero Energy Building in the world. SirajPower actively promotes such solutions now, notably through the usage of the Akuo Energy solar tiles."

As the UAE and the Middle East regions look to construct "smarter cities", the MEP demands for future connected building are also being influenced by micro-grids – which provide decentralisation of electricity generation and distribution – and yet, there is scope for more energy efficient micro-grid solutions.

"In the UAE, there are more than 1GW of gen-set powering micro-grids – including construction camps and facilities, and remote industrial and commercial facilities – which can be converted to solar using hybrid micro-grid technology. SirajPower now offers these solutions, which include solar-battery hybrids."

The renewable energy sector is heavily contributing to more energy efficient electrical and mechanical systems within residential, commercial, retail, and healthcare construction projects, but there's still a long way to go.

Longuet concludes: "We believe that this market is significant in size, and could further reduce CO₂ emissions and support the UAE Energy Strategy 2050."



SirajPower has been involved in solar rooftop projects across the UAE