

## SP Group to trial charging points that can draw energy from EVs back into power grid



SP PowerGrid CEO Jimmy Khoo with the V2G-compatible Nissan Leaf and V2G bidirectional charger that will be used for SP Group's trial. PHOTO: SP GROUP



**Toh Ting Wei**

SP signed two memoranda of understanding (MOUs) with the district government, and was appointed the energy and building solutions partner for International Urban Design Centre (IUDC) in Wuhou.

Under the MOUs, SP will be the sustainable-energy solutions partner to the district government, providing smart solutions in line with the city's urban renewal master plan.

There is an estimated rejuvenation pipeline of over 630,000 sq m in gross floor area over the next five years, said SP.

In the first phase of the partnership, SP will design, build, own and operate an integrated energy solution that includes district cooling and heating systems, smart metering, energy management and monitoring for IUDC over the next 25 years, at an estimated total contract value of S\$110 million.

The IUDC consists of four existing buildings with an estimated gross floor area of 48,000 sq m.

SP Group said it will look into areas including EV charging during peak and off-peak periods, as well as the management of the voltage in the distribution system.

"If V2G technology is proven viable, it can be a win-win for the electricity system and EV owners, acting as a cost-effective solution to supplement the larger energy storage systems to overcome intermittency while EV owners can be paid for use of the EV batteries when needed," said SP Group.

Intermittency refers to power supply being interrupted.

SP Group said power plants have traditionally performed the role of mitigating intermittency, but EV owners can now contribute with V2G technology.

Citing the example of EV charging points powered by solar energy, SP Group said:

"When solar generation drops due to rain or cloud cover, the EVs plugged into the system can balance out the fall in supply.

"During periods of significant solar generation, the EVs can store the excess energy."

SP Group chief executive Stanley Huang said the trial is another step forward to support Singapore's green energy transformation.

The Government has said it will phase out petrol vehicles by 2040. It has committed to fitting eight towns with charging points by 2025, and building 60,000 charging points around the island by 2030.