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The 2019 General Meeting and PIESA-IERE South Africa Forum  
October 28-31, 2019

## **Status and Future of Renewable Energy Technology Development and Application in KEPCO**

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**Keywords:** *Offshore Wind, Suction Bucket, Co-location Renewables, Renewables-connected ESS*

### **Abstract**

Korean Government set '3020 Strategy' to support renewable energy supply, and KEPCO also is performing renewable energy R&D project and business about wind and solar energy.

For wind power, KEPCO Research Institute (KEPRI) has developed the technologies of offshore wind farm design, suction bucket foundation, offshore substation and condition monitoring, and applied these to 60MW offshore wind farm at west coast of Korea.

For solar power, KEPCO set the strategy for R&D and business by two directions of solar power business; to make more power at same area and increase power generation site. KEPRI is developing and demonstrating the technologies of Utility-scale AgroPhotovoltaic (UAPV), underwater salt-farm PV, road-integrated PV (RIPV) and innovative PV cell like Perovskite.

KEPRI has plans to develop, as future of renewable energy technologies, floating wind farm and PV, MMB (multi-purpose mobile base), PV O&M optimization and asset management, reflection PV, and renewable co-location complex model (wind farm-floating PV-fishery farm complex), etc.