

LECO-UOM MICROGRID PROJECT LAUNCHED IN PARTNERSHIP WITH DIMO AND DHYBRID



Representatives of partnering institutes and businesses together with Dullas Alahapperuma, Minister of Power and ministry officials at the project inauguration ceremony.

Lanka Electricity Company (LECO) and University of Moratuwa (UOM) launched a pilot project on Microgrid with a grant assistance of 1.8 million US dollars (approximately 325 million rupees) from Asian Development Bank (ADB). DIMO and the German specialist DHYBRID, have been selected for the supply of comprehensive Renewable Energy Microgrid consisting of power generation and storage, a model, which can be scaled up for uninterrupted power distribution for customers across the country. The project contains a commercial Microgrid and R&D facility, which will be used as a research platform for the studies in nature of renewable energy integration and smart grids. Data obtained from the commercial Microgrid, the equipment and simulation environment will facilitate these R&D functions towards meeting the predefined research targets. The UOM has signed a Memorandum of Understanding with LECO in establishing the 'LECO Smartgrid Laboratory'. The facility will be maintained by LECO for the first 20 years. South Asia Energy Division of ADB with the Ministry of Power and Energy conceptualised this intervention as a part of its continuous assistance to expand clean energy development in Sri Lanka.

"ADB has been a long-term partner in Sri Lanka's energy sector development. Our assistance in the clean energy, includes Sri Lanka's first large scale 100MW wind park in Mannar, 30MW hydropower station in Moragolla and the solar

rooftop credit line, among others. ADB has been supporting the strengthening of power evacuation from distributed renewable energy generation at transmission and primary distribution level, in addition to its support for supply side and demand side energy efficiency improvements. ADB is committed to supporting Sri Lanka's inclusive energy sector development focussing on clean energy with new, innovative technologies and solutions", said Dr Chen Chen, Country Director- Sri Lanka, ADB.

Dr Narendra De Silva, Acting General Manager, LECO said, "LECO is always dedicated to maintaining a safe and hassle-free electricity supply to our customers around the clock on their demand. This project will be developed as a solution for power interruptions consumers face due to breakdowns and outages during maintenance activities. During such power failures, solar inverters withdraw from the system by anti-islanding protection, driving even the customer who has sufficient power to power up their premises through their solar generation, go out of power. Microgrids are identified as a solution for these problems, where it can increase the hosting capacity of the distribution network and can feed the power to the network when the grid is not available, since the excess power can be stored while storage issues like reverse power flow and subsequent voltage issues are also expected to be mitigated. Through this project, LECO will seek the possibility of replicating the concept for other transformers and similar premises, to improve power supply reliability and the lessons learnt through this project will be shared internationally."

He highlighted the contribution and assistance from ADB and the support from Dr Yongping Zhai, Chief of Energy Sector Group, Dr Priyantha Wijayatunga, Director of South Asia Energy Division, Dr Mukhtor Khamudkhanov, Dr Aiming Zhou, and Ranishka Wimalasena, Dr Tilak Siyambalapitiya as well as Upali Daranagama for creating this concept.

Ranjith Pandithage, Chairman/ Managing Director, DIMO, said, "As a company, which plays a significant role in power sector through transmission and distribution projects and power generation - mainly focusing on renewable energy, we are privileged to work together on this historic project that will take local power supply to the next level. DIMO's highly-qualified and experienced team of engineers are assigned to execute this project while sharing the knowledge with our German partner DHYBRID. We believe that this project will help DIMO to enhance the expertise in developing the Microgrid concept in Sri

Lanka. DIMO has also been contributing to the constructing of the utility grid of Sri Lanka for the past 50 years.”

Fabian Baretzky, Country Manager, DHYBRID said, “Together with DIMO, we plan to further support the transition of the country towards a more independent and greener energy system.” The event was held with the participation of Dullas Alahapperuma, Minister of Power and Energy, Prof G L Peiris, Minister of Education, Wasantha Perera, Secretary, Ministry of Power and Energy, as well as Prof Kapila Perera, Secretary, Ministry of Education.