

ASX Announcement

17 December, 2016

Joint venture agreement with Lendlease to deliver solar, battery & microgrid projects across Australia

- Carnegie Clean Energy's wholly owned subsidiary Energy Made Clean (EMC) signs three-year 50/50 Joint Venture Agreement with Lendlease.
- JVA parties will deliver solar photovoltaic, battery energy storage systems and microgrids through EPC Contracts in Australia.
- JVA has the capacity to leverage EMC's solar and battery design capability and track record with Lendlease's national construction and maintenance capability.
- Brings significantly larger scale construction, logistics and delivery capability to Australia's leading microgrid EPC developer EMC.
- Target Australian immediate market (in the next five years) estimated to be worth in excess of \$1.6 billion and \$5 billion over the next ten years.

Carnegie Clean Energy Limited (ASX: CCE) is pleased to announce that its 100% owned subsidiary, leading Australian battery and solar engineering company, Energy Made Clean, has signed a Joint Venture Agreement (JVA) with Lendlease Services Pty Ltd (LLS), part of the Lendlease Group.

This JVA will provide opportunities to increase EMC's capacity to bid for and deliver a broader range of solar, BESS and microgrid opportunities within Australia, including increased access to the National Energy Market (NEM), leveraging Lendlease's national footprint across Australia. Lendlease's Services business has approximately 3,000 people and has a presence in every Australian state and territory.

The agreement will see EMC and Lendlease's Services business work together for an initial period of three years, and will bring together EMC's proven experience in the design, construction and operation of microgrids, commercial scale solar projects and energy storage systems, with Lendlease's skills and experience in the construction and maintenance of power distribution and generation assets.

The purpose of the 50/50 JV will be to identify, pursue, bid for, secure and deliver EPC contracts for solar and/or battery energy storage systems (BESS) in Australia (excluding the Kimberley Region, where EMC already has a partnership with Aboriginal corporation Eastern Guruma).

Carnegie Clean Energy Managing Director, Dr Michael Ottaviano said this JVA represents a significant milestone in the rapid growth of the EMC business, which turned over \$16 million in revenues in the 2016 financial year, by growing its capability to deliver innovative commercial-scale solar and microgrid solutions for customers across Australia.





"We're excited to commence working closely with a company of the scale and expertise of Lendlease's Services business. Combined with EMC's significant experience in designing and delivering first of a kind microgrid projects, the JVA represents a compelling value proposition to solar and solar microgrid projects across the country. This partnership will bring each parties' respective strengths together to reach a broader range of blue-chip clients including network providers, utilities, large-scale residential developments and defence.

"The size of the target market within Australia, across off-grid; fringe-of-grid; commercial and industrial is estimated to be in excess of \$1.6 billion over the next 5 years, and \$5 billion over the next 10 years, as the costs of solar and BESS continue to fall and renewable energy penetration continues to grow.

"This partnership will enable us to seize this significant opportunity and cement our position as market leader in this space."

EMC has built a significant track record of grid connected and offgrid microgrid projects, primarily in WA to date, including:

- Solar, BESS and diesel microgrid project with remote monitoring on Mackerel Island off the coast of Onslow in Western Australia.
- Engineering, procurement and construction of a 1.6MW solar and 2.4MWh BESS array for the CSIRO-led Australian Square Kilometre Array Pathfinder.
- Construction of a 600KW solar farm on Rottnest Island, Western Australia for Hydro Tasmania.
- Delivery of a 1.1MWh BESS for Western Australian power retailer Synergy in Western Australia, as part of a Lendlease Communities development at Alkimos.
- Delivery and ongoing remote monitoring and maintenance of a number of Standalone Power Systems (SPS) to Western Power customers, replacing traditional poles and wires and bringing energy security, reliability and stability of supply in areas that had suffered significant fire damage in Western Australia.
- Delivery of New Zealand's first grid connected, commercial Battery Energy Storage System (BESS) for Alpine Energy, with strategic alliance partner Infratec.
- EMC is also currently working with Carnegie on its Mauritius wave and microgrid design project.





EMC's utility battery system for Synergy's Alkimos project (left) and solar array for CSIRO's Square Kilometre Array (right)





The Company is not aware of any reason why the ASX would not allow trading to recommence immediately.

About Carnegie Clean Energy Limited

Carnegie Clean Energy Limited is an Australian, ASX-listed (ASX: CCE) wave energy technology developer and solar/battery microgrid project developer. Carnegie is the 100% owner and developer of the CETO Wave Energy Technology intellectual property and is also 100% owner of leading Australian battery/solar microgrid Engineering Procurement and Construction (EPC) company Energy Made Clean (EMC). EMC specialises in the delivery of mixed renewable energy microgrid projects to islands and remote and fringe of grid communities. Carnegie is the only company in the world to offer a combination of wave, solar, wind, storage and desalination via microgrids which are ideally suited to islands, off grid communities and fringe of grid locations.

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