

Future50

Energy

Renewable Energy Generation



Maana Electric SA



<https://www.maanaelectric.com>

#GreenManufacturing
#ClimateTech #NatureBasedSolutions

Highlights

Maana Electric participated in the **Mohammed Bin Rashid Innovation Fund (MBRIF)** accelerator programme¹¹⁴ and reports having **raised its first equity round** of an undisclosed amount from business angels and a family office in Luxembourg.¹¹⁵

Strategic alliances:

- Research Institutes
- Governments
- Investors
- Solar Panel Manufacturers
- Large Utility Companies
- Engineering and Procurement Contractors

List impact technologies:

Solar Power

Headquarters:

Luxembourg

Middle East operational countries:

United Arab Emirates

Summary

Maana Electric develops green technologies for solar panel manufacturing. Drawing on its **space technology background**, the company applies a system engineering approach to develop more sustainable and **ESG-compliant products**, such as solar panels and cells, silicon parts and other components.

Maana Electric's premier technology is the TerraBox, which **runs on its proprietary In-Situ Resource Utilisation (ISRU) technology**. ISRU refers to the use of only locally available resources to produce goods. Likewise, the highly portable TerraBox can **produce solar panels anywhere in the world using just electricity and impure sand**.

Impacts

Maana Electric claims that TerraBox **emits less carbon dioxide**, is less chemical-intensive and consumes two to three times less energy on a per watt basis than commonly used panels. The company adds that TerraBox delivers a **per-watt price electricity reduction of around 30% more than conventional silicon solar panels**.

