

The Solar Manufacturing Accelerator presents:

3Sun Factory



Project

Solar cell/module factory expansion



CO2 emissions reduction

2.7 million tons CO2



Production capacity

3,3GW by 2023-2024



Jobs created

2, 500 direct and indirect jobs



Module efficiency potential

28%+



GHG reductions

3.000.000 tCO2eq/y.



Locations: 

3 Sun is a solar cell/module factory located in Catania, Italy, and is 100% owned by Enel. The factory produces **heterojunction bifacial cells**, one of the most efficient PV technology that currently exists, based on the EU Ampere project, supported by H2020. The HJT technology reaches **higher efficiency and performance** compared to other mainstream technologies and is suitable for applications in all the main industrial sectors. The 3SUN factory will follow the **Industry 4.0 approach**: a Smart Factory with fully-automated lines and digitalisation of the production processes. In addition, the location in Sicily benefits from local competencies (Catania Solar Valley) and logistical capacities.

Based on the current 200 MW production line that started in 2019, the 3SUN factory will ramp up its cell / module production capacity to 3.3 GW production of HJT solar modules in 2023-2024, and **3.8 GW in 2028**. By 2024, the 3SUN factory could benefit from the technological roadmap to build further commercial technology modules, based on HJT technologies with **more than 28% of efficiency**. The 3SUN factory will progress to follow an industrial ecosystem approach, linked with the European PV components industry.