## **GLOSSARY OF TECHNICAL TERMS**

This glossary contains explanations of certain terms used in this prospectus in connection with the Company and its business. This terminology and the given meaning may not correspond to those standard meaning and usage adopted in the industry.

Amorphous silicon	:	Non-crystalline form of silicon material for thin film solar cell
Cd Te	:	Cadmium Telluride, compound material
CIGS	:	Copper Indium Gallium Diselenide, compound solarcell material, usually in thin film form
Crucible	:	A quartz vessel used for melting and crystallization of polysilicon when producing multi and monocrystalline silicon ingots
Crystal	:	Material with a regular, periodic arrangement of atoms or molecules throughout material
Crystallization	:	The key process in the production of silicon ingots. For multicrystalline ingots the crystallization starts from the bottom of the crucible and proceeds towards the top as it is gradually cooled (directional solidification) under strict temperature and atmosphere control. In the production of monocrystalline ingots, a seed is lowered into the melt and subsequently pulled under strict control so as to form a growing monocrystal
Feed-in Tariff	:	Subsidy scheme where the owners of solar power systems receive a guaranteed, fixed price from the utilities for the electricity fed into the grid
IEA	:	International Energy Agency, IEA acts as energy policy advisor to 26 member countries in their effort to ensure reliable, affordable and clean energy for their citizens. The IEA conducts a broad programme of energy research, data compilation, publications and public dissemination of the latest energy policy analysis and recommendations on good practices
Ingot	:	The silicon brick created when polysilicon is melted and crystallized in a furnace. Typical size for multicrystalline ingots are 680 x 680 mm with a weight of 250-300 kg. Monocrystalline ingots are cylindrical with typical diameters between 150 mm and 200 mm and a weight of 40-60 kg
Monocrystalline Silicon	:	Processed silicon where all the material consists of only one crystal

## **GLOSSARY OF TECHNICAL TERMS**

Multicrystalline Silicon	:	Processed silicon where the material consists of several small (typically 1-20 mm) crystal grains
Off-Grid System	:	Solar power system not connected to the electric grid. Normally used in areas where grid-connected electricity is unavailable
On-Grid System	:	Solar power system connected to the electric grid. Used in areas where other electricity systems are available
Photovoltaic (PV) Effect	:	The generation of electricity when radiant energy, such as sunlight, falls on the boundary between two different substances (e.g. two different semiconductors)
Polysilicon	:	Highly purified silicon used in the electronic and solar industry
PV Industry	:	The photovoltaic industry, also known as the solar energy industry
Reclaimable polysilicon	:	Polysilicon can be reclaimed through the chemical and physical treatment of scrap such as pot scrap or cropping scrap from the monocrystal or multicrystal process
Silicon	:	The second most abundant element (after oxygen) in the earth's crust. The raw material for solar grade silicon as well as electronic grade silicon
Silicon Wafer	:	A thin slice of silicon used as the key component in a solar cell module
Slurry	:	Cutting fluid used when sawing silicon bricks into wafers. Consists of slicing powders, solvents and surfactants
Solarbuzz	:	Solarbuzz is an international solar energy research and consulting company which is headquartered in San Francisco, California, United States. Its expertise comes from a team of senior executives having experience working in large vertically integrated PV companies
Solar Cell	:	Semiconductor device that creates electricity when exposed to sunlight. Normally made from silicon wafers

## **GLOSSARY OF TECHNICAL TERMS**

Solar Energy	:	Throughout this document the term solar energy refers to the generation of electricity based on the photovoltaic effect. In other literature, solar energy may also include additional technologies for converting solar radiation into electricity or heat
Solar Module	:	Interconnected solar cells encapsulated and protected in transparent materials that protect against humidity, air and mechanical damage. Normally, solar modules are made with a glass front and aluminum frame
String ribbon	:	High temperature strings are pulled vertically through a shallow silicon melt, and the molten silicon spans and freezes between the strings to form a ribbon of silicon
Thin-Film	:	Photovoltaic technology where the generation of solar energy takes place in a thin film of semiconductor material assembled in several layers. Conventional solar modules are made with wafers as the semiconductor material
Wire Sawing	:	The process where crystallized silicon bricks are cut into thin wafers using a saw with a web of thin metal wires
W or Wp	:	Watt peak, unit of power, used as output measure in the PV industry implying the potential peak effect produced by solar cells when the solar cell is exposed to a standard sunlight irradiation (1,000 W/sqm) typical for the peak time of a summer day, MW or MWp= $10^6$ W or $10^6$ Wp
μm	:	Micrometer (micron) 10 <sup>-6</sup> m, measurement unit typically used when describing the thickness of wafers
ton (tonne or metric tonne)	:	1,000 Kg