Space-Based Solar Power: Ecosystem Map

Collecting sunlight in space and wirelessly sending green electricity to Earth via radio waves or lasers. Alternatively, reflecting light directly to solar farms.



Wirelessly powering spacecraft from other space assets during eclipse or for extra energy.













- SPACE-TO-MOON -

irelessly powering spacecraft on the Lunar surface from space. Large overlap with space-to-space



The Lunar Grid



LUNAR SURFACE -

Wirelessly powering spacecraft on the Moon. There are many wired energy services planned too.







POWER BEAMING -

Wireless power for/on Earth (wireless energy grid, Earth-space-Earth) or Earth-to-space applications.

















SPACE-TO-EARTH -

Space-based solar power for terrestrial applications using microwave or laser power beaming.





ARTEMIS Innovation













CAVÜ



















VIRTUS SOLIS

Space energy for terrestrial applications using orbital mirrors to reflect light to solar farms on Earth.





Selected entities from the in-space assembly & construction fields as one key enabling technology.



Lunar Outposi

(III) REDWIRE









KINETIK







Selected companies for low-cost mass-produced solar cells for space or made in space or on Moon.













Commercial entities active in the ecosystem but own wireless space energy service plans are TBD.



















NON-COMMERCIAL .

Non-exhaustive list of public and non-profit entities and initiatives active in the space energy field.













Japan Space Systems

























University of Southampton





U.S.NAVAL RESEARCH LABORATORY







