

# Space-Based Solar Power: Market Opportunities

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## Abstracts

### Summary

Space-based solar power (SSP) is the future of the solar power generation on Earth. With the availability of the less area for the implementation of the solar farms around the world, it is worth looking at space for better utilization and harness solar energy. There is no day or night cycle above the Earth and no obstruction to sunlight due to the weather or clouds like in the Earth's atmosphere.

“An SBSP system would receive eight times more energy than Earth does.”

- Professor Sergio Pellegrino of CalTech.

Space solar power is clean and inexhaustible as long as the Sun exists and is the largest energy source in the world. SSP has the capacity to provide clean solar energy in large quantities with very little environmental impact.

### Reasons for Doing This Study

Solar power is one of the major renewable energy sources we have on Earth. With the increase in the energy requirements around the world, it is necessary that we find alternatives for power generation. Space-based solar power is expected to play a crucial role in the future of power generation due to its unlimited potential. Although it has few drawbacks, such as the transportation of solar panels to space, with the development of the reusable rockets it is expected that in the future space-based solar power will become a reality and help meet Earth-based energy needs.

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