

Current Issues - Energy

Solar panels in space for green energy

A prototype will soon test the feasibility of space-based solar power. The orbiting panels will bask continuously in bright sunlight and supply renewable energy to Earth.

Cheaper panels and the falling cost of launch make such projects promising.

Scientists are working on ways to address some of the major hurdles including:

- How to build large solar farms? It may take a decade to build.
- What kind of solar cells should be used? The cells should be lightweight, able to concentrate adequately and have longevity.
- How to transfer solar power to Earth? The solar rays would be converted to microwaves which would be collected by kilometre-wide receiving stations and back to electricity.
- Other questions include the safety of the process of using microwaves and whether all the efforts will be worth the effort. The microwaves will be spread over a large area.

It is thought that the process to be ready by 2050 could contribute to achieving net-zero carbon emissions.

05.02.2023