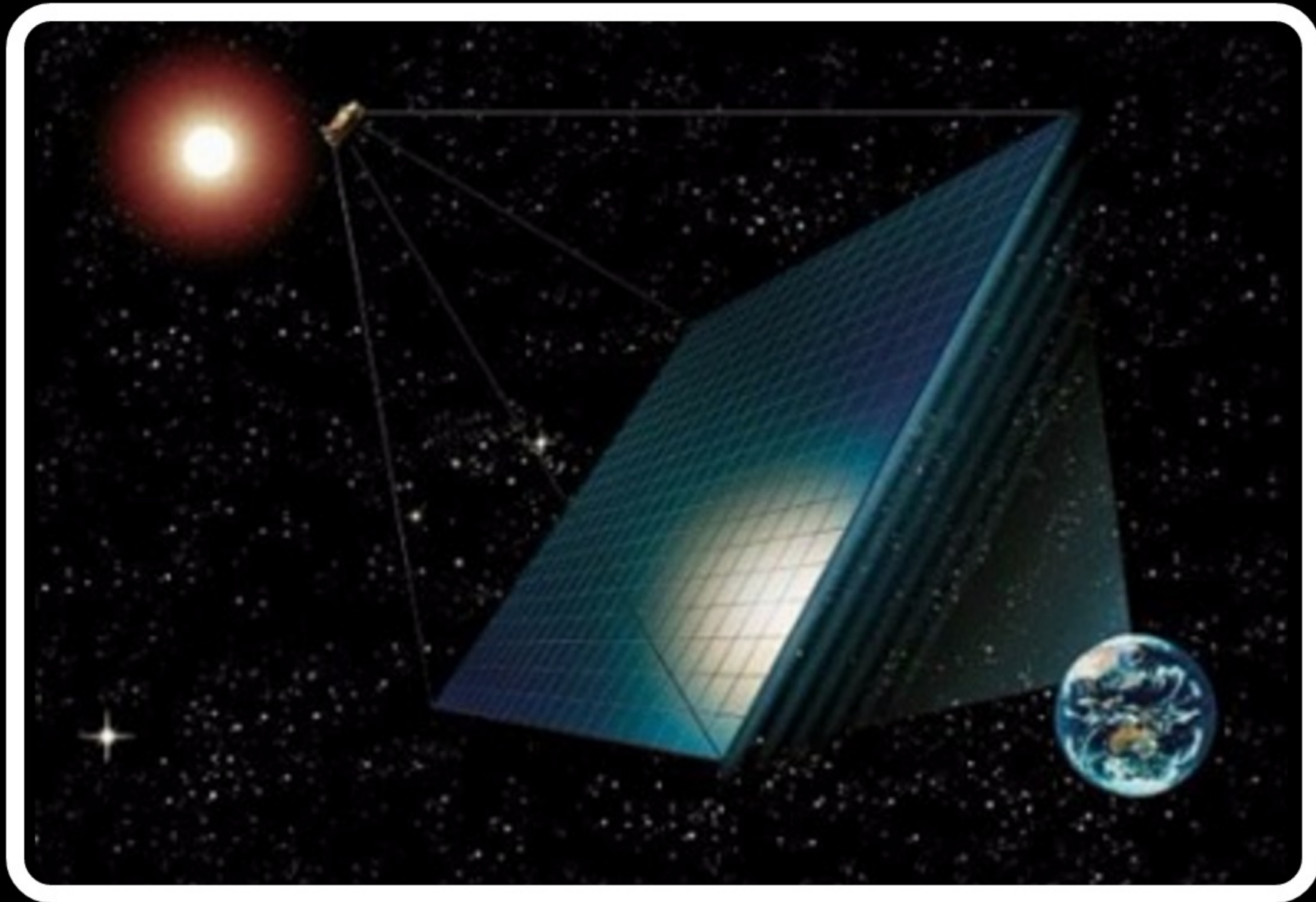


# Harvesting Solar Power from Space to Earth.

## JAPAN PLANTS SOLAR PANELS IN SPACE

A successful ground test of a system designed to ultimately collect solar power from orbit and beam it back down to Earth was announced in Japan by Mitsubishi Heavy Industries.



## THE TESTING OF EQUIPMENT

Mitsubishi says the reception of the power sent through the air was confirmed through the illumination of lights using part of the power transmitted.

## NEW MILESTONES FOR TECHNOLOGY

Mitsubishi says that the successful test conducted at the company's Kobe Shipyard and Machinery Works has verified the viability of the concept, and that the transmission distance and power load mark new milestones for the technology.

## ADVANTAGES

In Minnesota the cloud cover varies from 90% in the winter to 40% in summer.

It is sunny 57.2% of daylight hours. The remaining 42.8% of daylight hours are likely cloudy or with shade, haze or low sun intensity

23 % of solar energy is absorbed in the atmosphere and 48 % is absorbed by the surface. Thus, about 71 %of the total incoming solar energy is absorbed by the Earth system.

There is no cloud cover in space so it is a much efficient way of receiving solar energy from outer space

The sun is not available 24/7 because of the orbiting of the earth so during the night solar power generation is very low on earth but solar power can be generated 24/7 in space.

Much of the solar power emitted by the sun is absorbed by the atmosphere

## DISADVANTAGES

Mitsubishi Electric Corp invested \$21 billion on the Japanese project to build a giant solar-power generator in space within three decades and beam electricity to earth.

The cost of space solar power development always needs to be compared to the cost of not developing space solar power.