

Breakthrough in energy transmission

The dream of generating solar power in space, where the supply is endless, and transmitting it back to Earth may be a step closer to becoming reality. In an experiment that is believed to be the first of its kind, Japanese scientists managed this week to transmit energy wirelessly.

Researchers at the Japan Aerospace Exploration Agency (JAXA) used microwaves to deliver 1.8 kW of electric power to a small receiver 55 metres away. Although this is a modest amount of energy, enough only to power a small iron, it is hoped that the breakthrough could pave the way for larger-scale and longer distance transmissions in future. JAXA

already uses solar energy to power its satellites in space, but has no way of transmitting the energy back to Earth.

The technology is of particular interest in Japan, which now imports large amounts of coal and oil to produce electricity, having been forced to close down nuclear plants after the Fukushima disaster. Other Japanese companies, such as Mitsubishi, are known to be working on similar technology, which could have other useful applications, such as transmitting power to remote areas of the country, or charging electric vehicles from a distance.