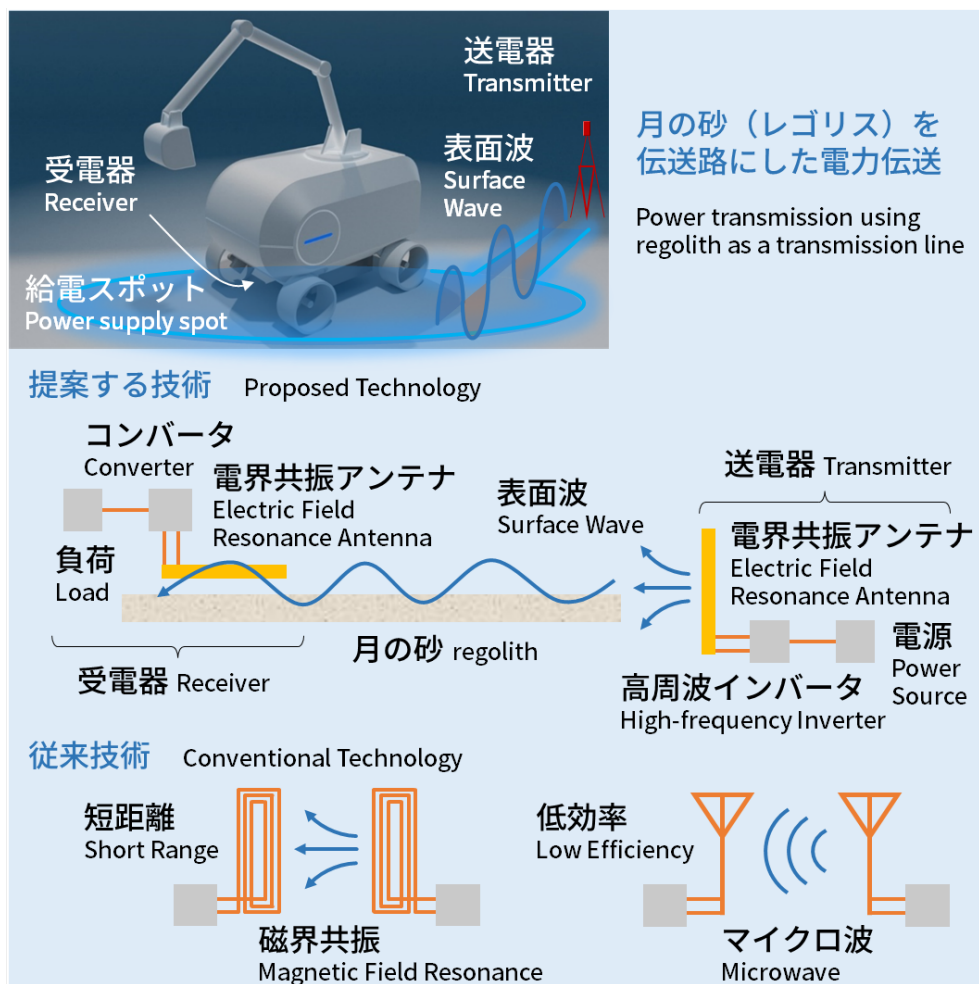


New wireless energy transmission technology

This system provides highly efficient, contactless power to rovers operating on the lunar surface

#Productivity Improvement



///Technical Issue

Because the lunar environment changes rapidly and it would be costly to transport cables from Earth, it is necessary to provide stable power via wireless transmission.

///Research Goal

Develop high-efficiency, contactless power transmission technology using materials that can be obtained on the Moon and implement a lunar power grid.

---Technology

Proprietary electric field resonance antennas that generates strong electric field waves with high efficiency. Energy transmission technology that efficiently transmits electric field surface waves generated by the antenna by placing them on the surface of conductors or dielectrics.

---Applicable Business

In the field of lunar development, applied to powering unmanned rovers (from 2030) [market size: 400 billion yen]
In the field of space development, applied to powering the lifts of space elevators (from 2050) [market size: 1 trillion yen]

---Novelty

Compared with magnetic resonance to perform pinpoint, contactless charging, it is possible to expand the transmission area by more than 100 times. As a wireless power transmission technology using a single-element antenna, it achieves a transmission efficiency more than 10 times higher than that of microwave-based systems.