

# SPACE POWER



Providing Wireless On-Demand Power Solutions in Space  
Any Spacecraft, Anywhere

---

## SPACE FOR INSPIRATION

CONFIDENTIAL

# SPACE POWER REVOLUTION

PROVIDING WIRELESS SUSTAINABLE ENERGY IN SPACE

## The Business

Photonics-tech integrator with R&D.

Manufacture and supply LASER-based power banks for spacecraft

Patent Granted, Pioneering, Award-winning technology

Offering backwards compatibility to serve an immediate market representing 95% of existing and future spacecraft.

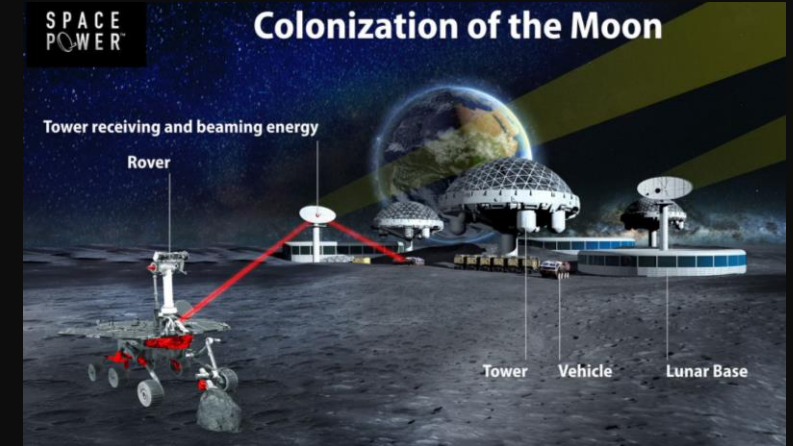
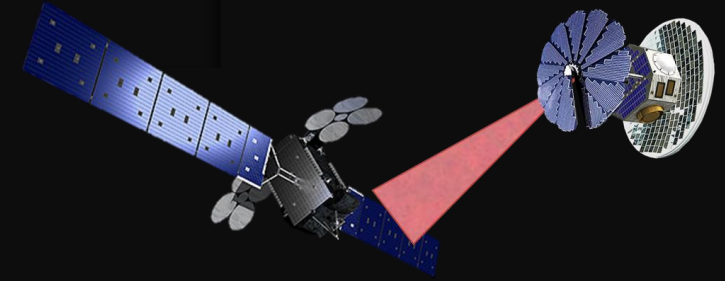
## In-orbit demonstrator

Proposal signed with BAE to launch in 2025 for a first-of-a-kind mission in 2025, proving the technology directly with our customers

SPOC (Space Power Optical Charge) modules

Scalable to any environment.

ESA Lunar Resources Accelerator – 1<sup>st</sup> Cohort.

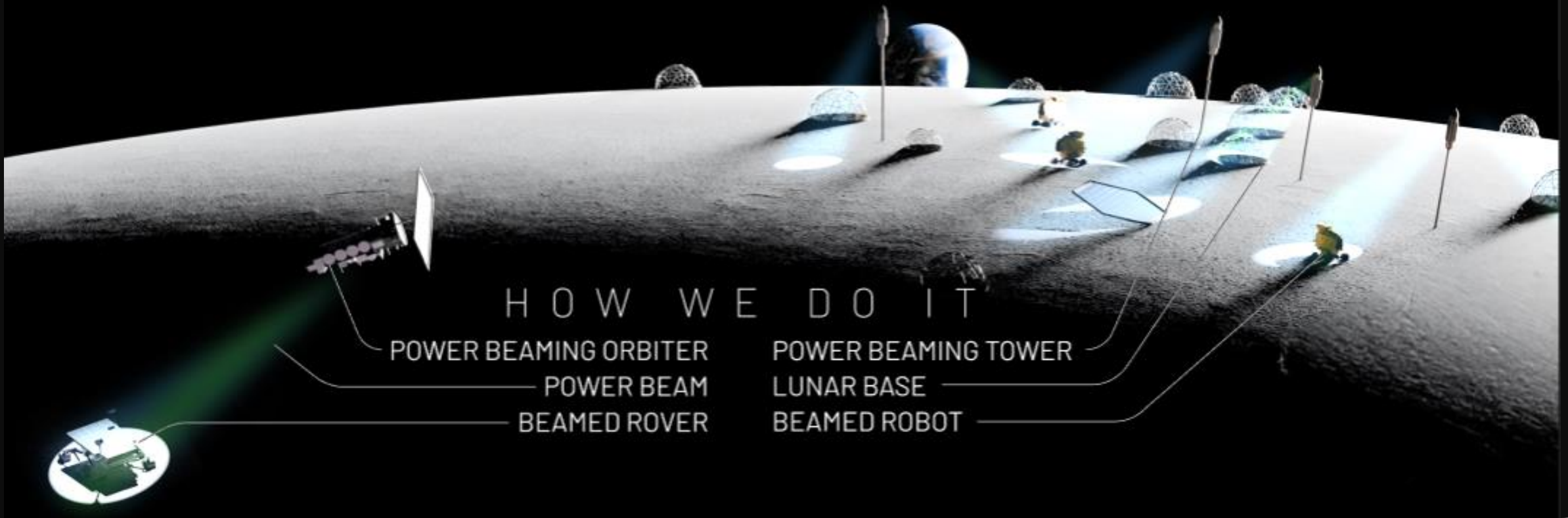


# WHAT POWER BEAMING ENABLES EXPLORATION

OF PERMANENTLY SHADOWED REGION  
AND DISCOVERY OF PRECIOUS RESOURCES

# CIVILISATION

USING EXPLORATION RESOURCES AND  
ALLOWING CENTRALISED POWER SOURCES



# LUNAR APPLICATIONS

THE EFFECTS OF DUST CANNOT BE IGNORED

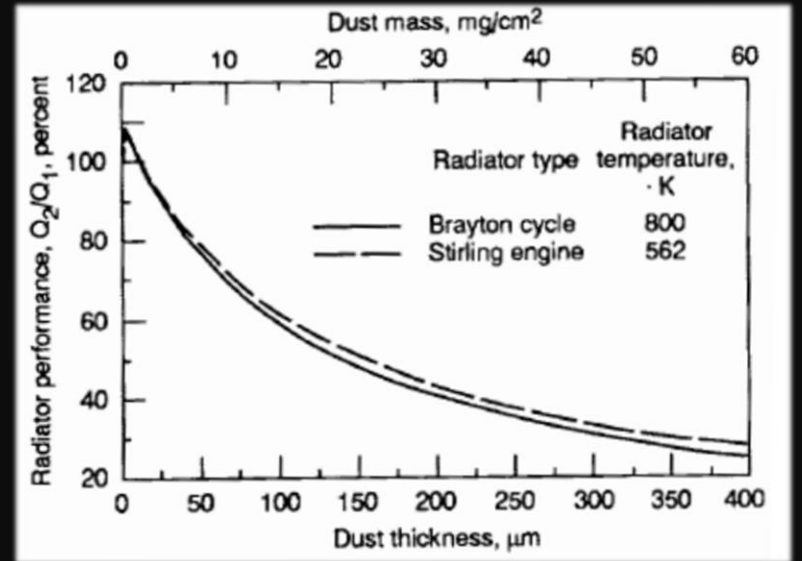
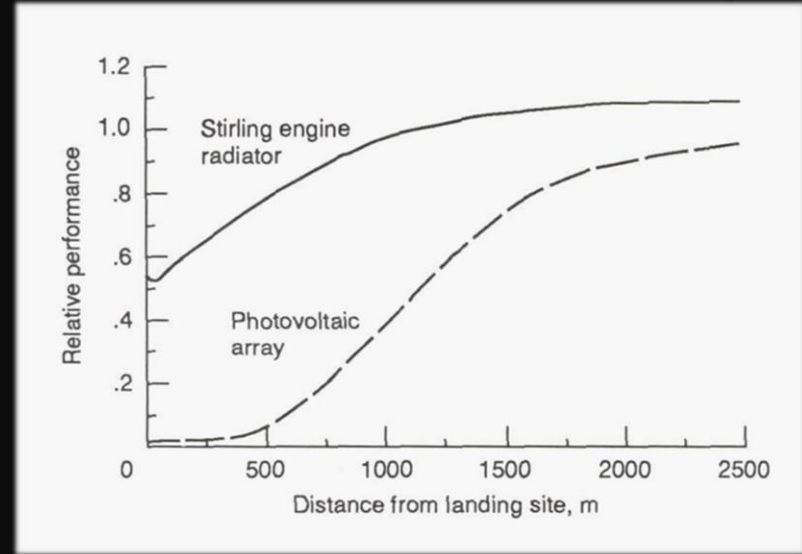
However, dust has been observed to be particularly 'sticky', forming an opaque, insulating layer.

Repeated thermal cycling increases 'caking' and further reduces performance.

Even at 1km away, performance can be significantly reduced

To avoid dust, we position the system far away from existing equipment, making the development of settlements / landing sites difficult.

We are transferring proven terrestrial technology for Lunar environments, maximising mission lifetime and performance



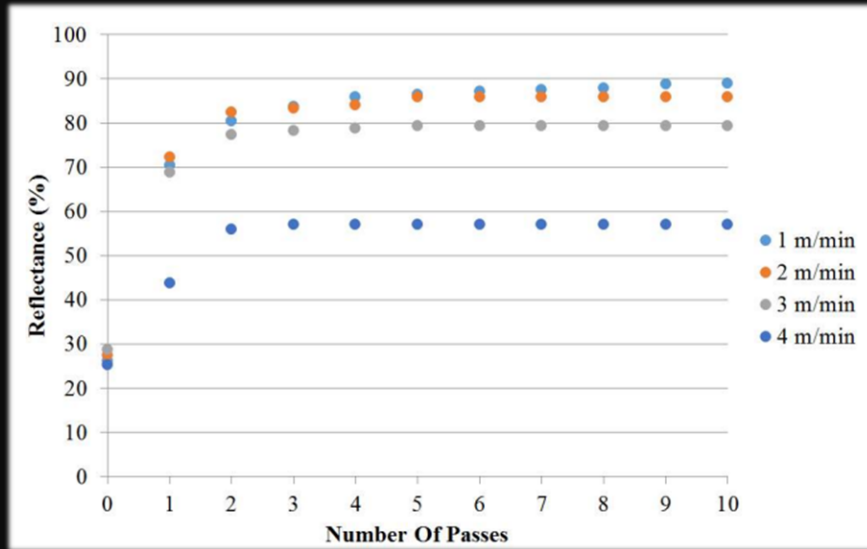


# Power Beaming on the Moon

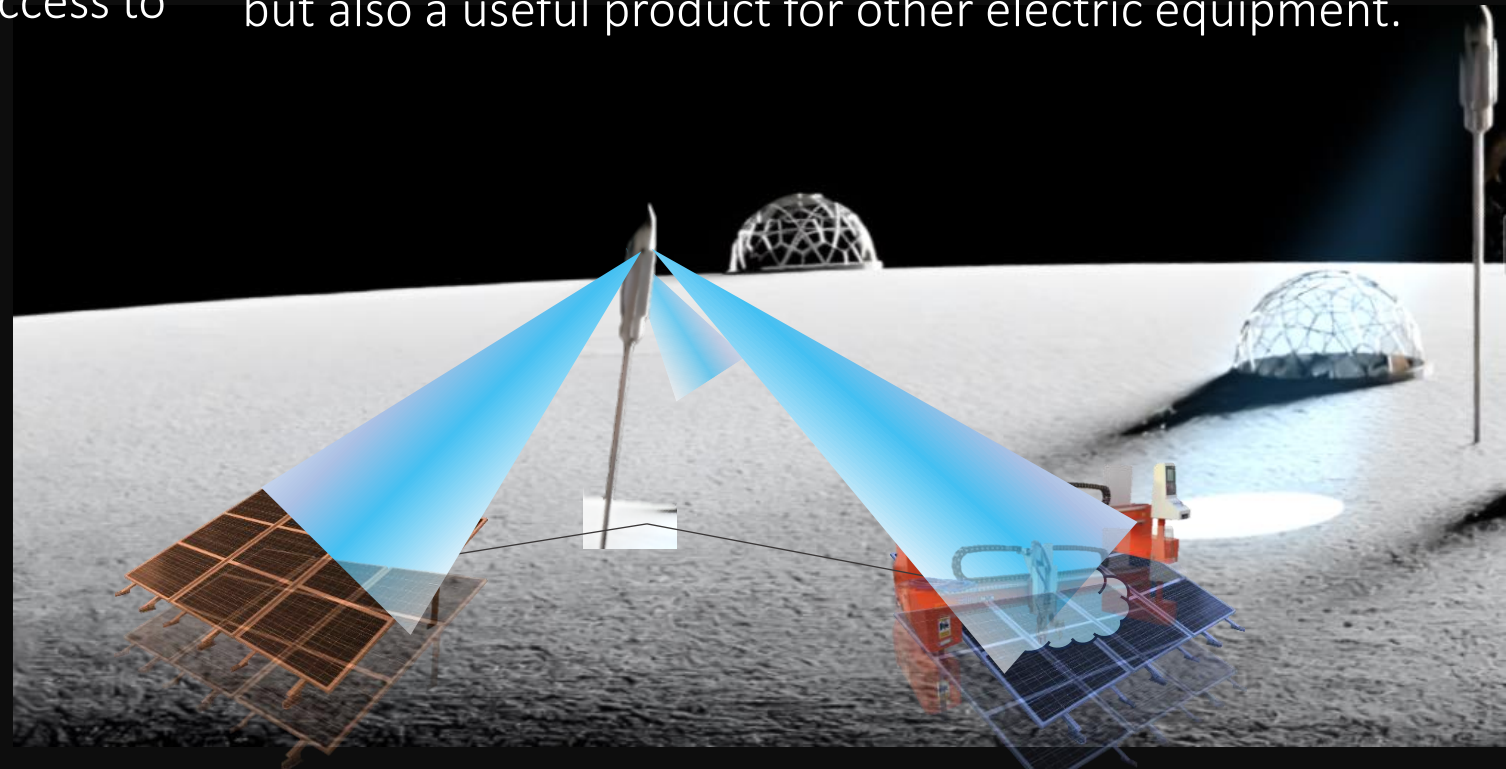
## TACKLING THE KEY RISK – LUNAR DUST

Power beaming is critical to Martian and Lunar missions, providing power when there is no access to Sunlight.

Plasma Cleaning is not only essential for power beaming, but also a useful product for other electric equipment.



Plasma cleaning has been shown to improve performance back up to 90%



Current State

Radiator efficiency reduced to 2% and Photovoltaics to <60%

Plasma cleaning

Restore efficiency to >85% for any surface.



# JOIN THE SPACE REVOLUTION

GET IN TOUCH TO FIND OUT MORE

- [keval.d@space-pwr.com](mailto:keval.d@space-pwr.com)
- [www.space-power.com](http://www.space-power.com)
- <https://www.linkedin.com/company/spacepower/>



## Industrial Partners



## Academic Partners



Consiglio Nazionale  
delle Ricerche



## Grants



B-PHOT  
BRUSSELS  
PHOTONICS

