

OFFWORLD

GO FURTHER AND FARTHER WITH OFFWORLD



Presenter

Job Title

OffWorld Europe

xxx.xxx@offworld.ai

BOTS BEFORE BOOTS

HIGHLY COLLABORATIVE AND INTEROPERABLE ROBOTIC COLONIES



LEADERSHIP TEAM



Jim Keravala

CEO & Chief Architect



Alicia Kavelaars

Chief Technology Officer



James Murray

Chief Engineer



Mehul Gandhi

Chief Financial Officer



Mark Nail

Chief Strategy Officer



Amaresh Kollipara

Chief Revenue Officer



Josh Izenberg

Chief Legal Officer



Craig Leavitt

Senior VP, Space & Federal

LEADERSHIP TEAM



Ryan Beech

Managing Director
OffWorld Africa



Anagh Kohli

Managing Director
OffWorld Australia



Kyle Acierno

Managing Director
OffWorld Europe

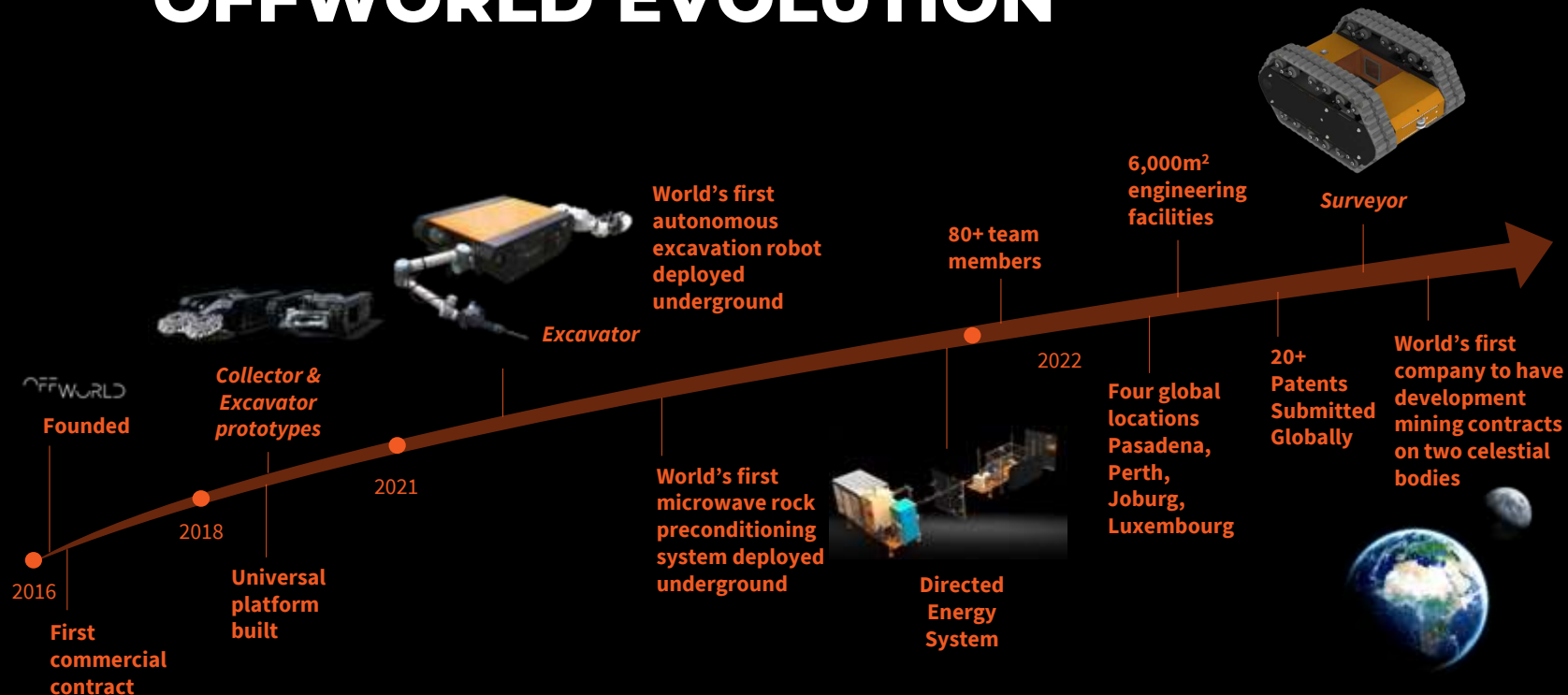


Monica Levine

VP of Human Resources



OFFWORLD EVOLUTION



EARTH IS OUR FIRST TARGET PLANET

SWARM ROBOTIC MINING OPERATIONS

Video deleted due to size

VALUE MULTIPLIERS

REPLACE CONVENTIONAL BULK MINING WITH PRECISION SWARM ROBOTIC MINING

CONVENTIONAL MINING

SWARM ROBOTIC MINING

ORE BODY

Bulk mining

Precision mining

EQUIPMENT

Large & manual

Small & autonomous

HUMANS

Miners at the rock face

Supervisors in C&C centres

DATA

Data is king in exploration

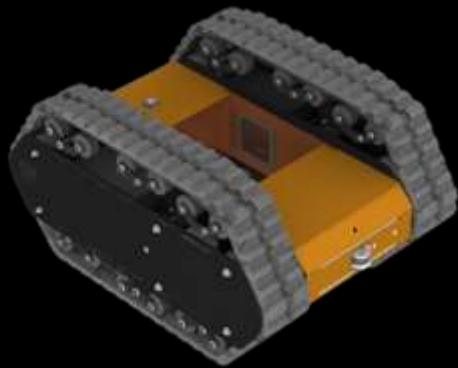
Data is king in production

ENVIRONMENT

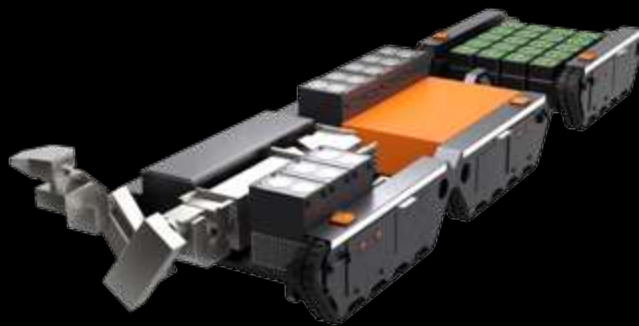
Do what's required

Leave no trace

SWARM ROBOTIC MINING



SURVEYOR
BOT



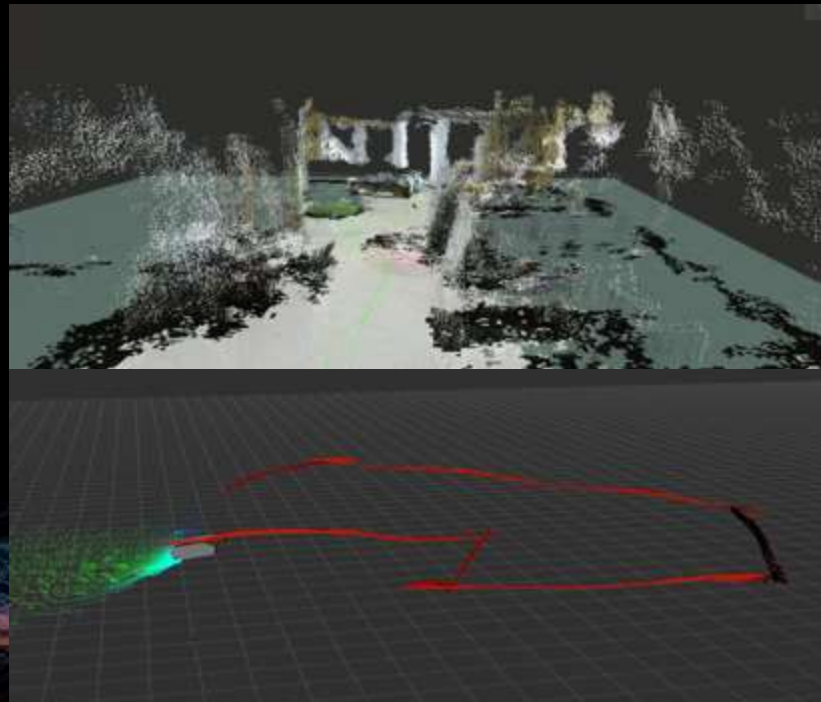
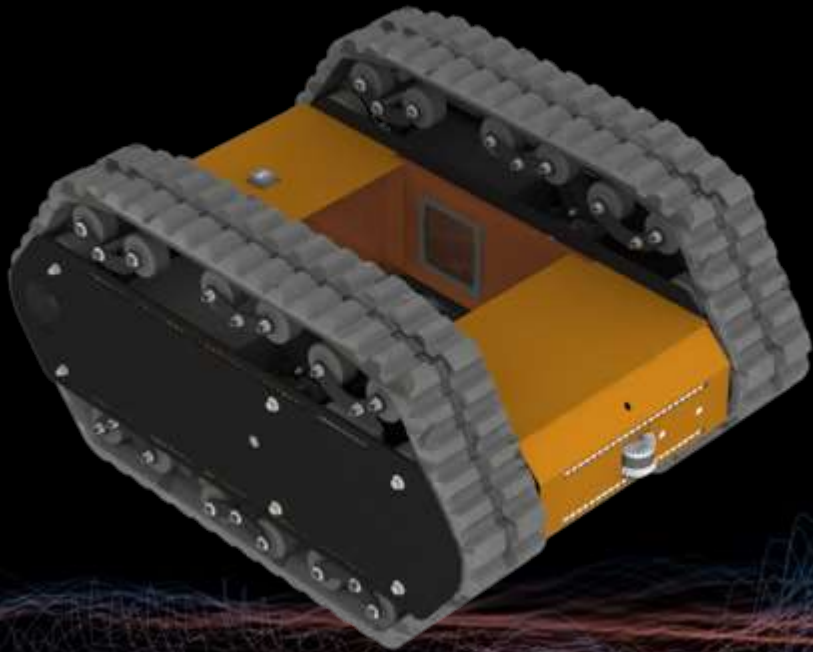
DIRECTED ENERGY
BOT



DIGGER
BOT

SURVEYOR BOT

Extreme environment surveying and mapping

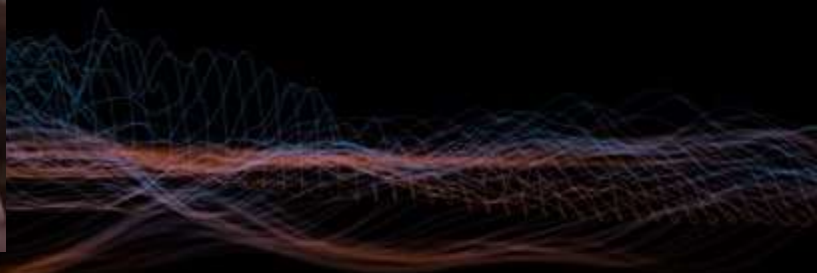


SURVEYOR BOT



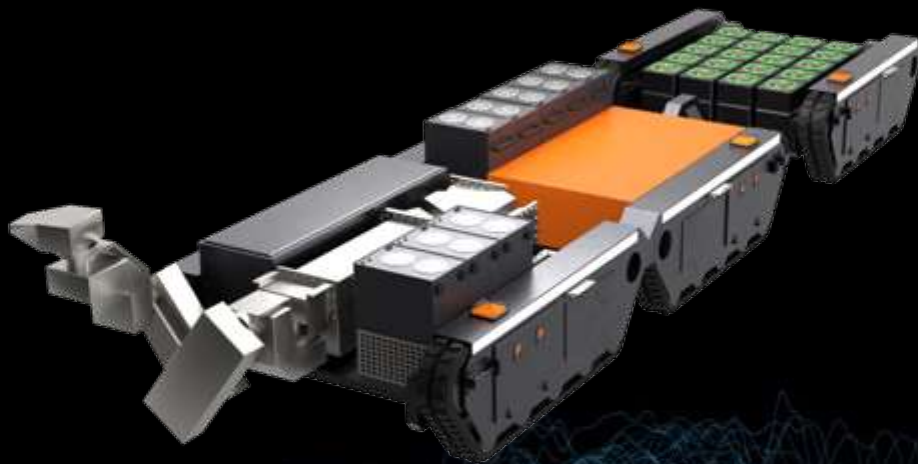
Surveyor is a state-of-the-art rugged autonomous robotic system for mission-critical applications in extreme environments

- ▶ Extreme terrain autonomous navigation to traverse various environments
- ▶ Flippable design that allows for dual-side driving
- ▶ Compatible with various sensors like optical, LIDAR, XRF, and GPR
- ▶ Protected payload sensor bay with direct line of sight to the ground



DIRECTED ENERGY BOT

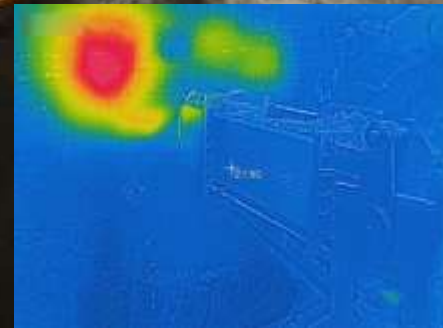
In-Situ rock weakening for excavation and beneficiation



DIRECTED ENERGY BOT

Key Points:

- ▶ Successful test campaign, exceeding KPIs
- ▶ Demonstrated spalling and macrofracturing of rock
- ▶ Significant rock strength weakening
- ▶ Implications for cascading reduction of energy usage in multiple downstream mining processes



DIGGER BOT

Hard rock cutting and excavation



DEMONSTRATED CAPABILITIES IN HARSH MINING ENVIRONMENTS

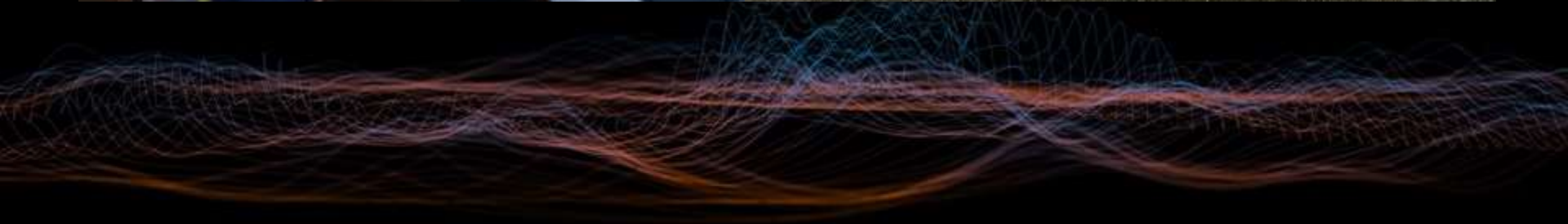


OFFWORLD

PRECISE CUTTING AND CHISSELING



MINIMAL HUMAN SUPERVISION VIA AI







MANY OTHER TERRESTRIAL APPLICATIONS

LANDFILL PROCESSING



MAINTENANCE AND REPAIR



AIRPORT OPERATIONS

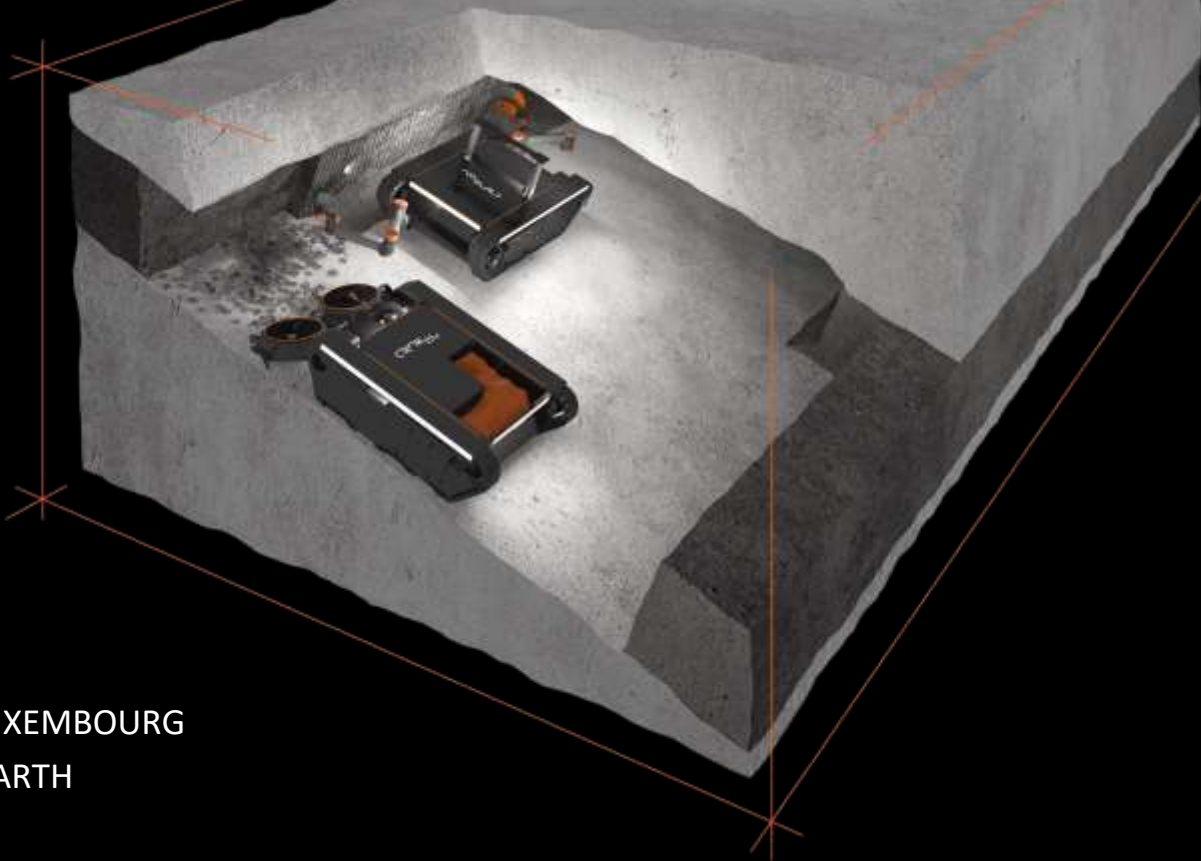


BEYOND EARTH



OFFWORLD EUROPE

HEADQUARTERED IN LUXEMBOURG
TO OPERATE BEYOND EARTH



AT THE HEART OF THE EUROPEAN SPACE INDUSTRY

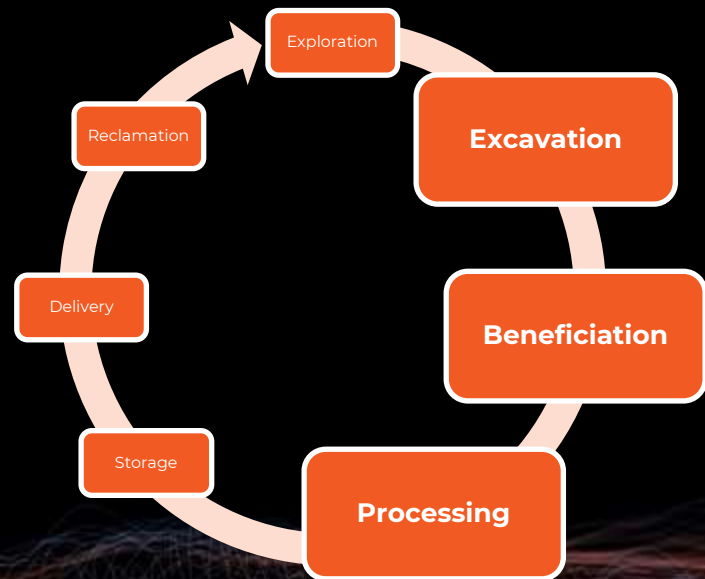


- ▶ Agreements signed with the Luxembourg Space Agency and the European Space Agency to establish an OffWorld In Situ Resource Utilization capability in Luxembourg
- ▶ Multi-phase program to develop and deploy autonomous, AI-powered lunar ISRU capabilities leveraging the swarm robotic technology of OffWorld
- ▶ European office opened in Jan 2023
- ▶ Staffed by highly-qualified scientists and engineers

ISRU AND CONSTRUCTION ON THE MOON



INITIAL FOCUS



Digger Bot



Collector Bot



Crusher Bot



Hauler Bot



DE Bot



Processing Bot

- Excavating from 40 to 400 kg per hour on the Moon
- Preconditioning and improving the feedstock
- Processing icy regoliths into life support and propellant products
- Extracting metals and oxygen from hot regolith
- First Lunar proof of concept in 2027

OFFWORLD

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