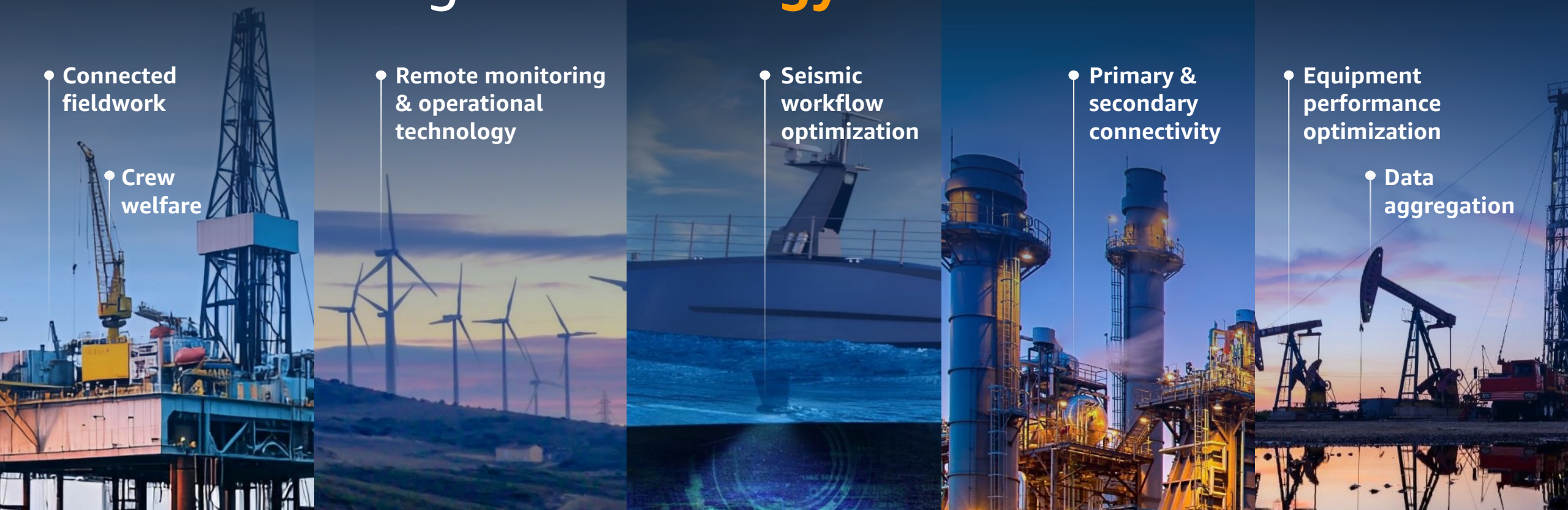What would you do with **secure, high-speed, low-latency connectivity** at every site you operate, anywhere in the world?

# Designed for Energy business needs

**Connected fieldwork**

**Crew welfare**

**Remote monitoring & operational technology**

**Seismic workflow optimization**

**Primary & secondary connectivity**

**Equipment performance optimization**

**Data aggregation**

- **Oil and Gas Well Monitoring**: A primary focus was on monitoring on thousands of wells, collecting and transmitting high-volume data (15-20 terabytes per day) from remote locations with limited connectivity.
- **Control System Modernization**: Integrating Kuiper's connectivity into customer control systems to enable access to assets in challenging network environments like West Africa, Alaska, and Latin America.
- **Exploration and Sampling**: Portable use cases for mining exploration, allowing teams to deploy small terminals in remote areas to uplink data securely.
- **DFOS (Distributed Fiber Optic Sensing):** a potential breakthrough use case with no existing competitive solutions for transmitting such large volumes of sensor data from remote oil and gas sites.

# Connectivity that **transforms mining**

**Connected logistics for ore**

**Air, rail, vehicle, and sea**

**Increase safety and efficiency with autonomous vehicles**

**Improve camp connectivity and worker welfare**

**Reduce time to production with portable, agile connectivity**

**Increase processing efficiency**

**Collect industrial data at the edge**

- **Connectivity across the mining lifecycle**: Simplify how new mining sites are connected, increase resiliency for critical communication, connect data across heavy vehicles and railways, attract workers with camp connectivity, and use data to increase the processing yield

- **Vehicle management, safety, and automation**: Ubiquitous connectivity allows for data collection from vehicles, increase the safety of operation, and enable fleet automation.

- **Use machine learning and AI to enhance operations**: Monitor railway and maritime operations, mineral processing, and preventative maintenance.

# Low Earth Orbit    [Technology]

**Launch costs are reducing** due to an increasing amount of launches and providers

**Beam sizes are smaller** and more focused, and increase in bandwidth over time

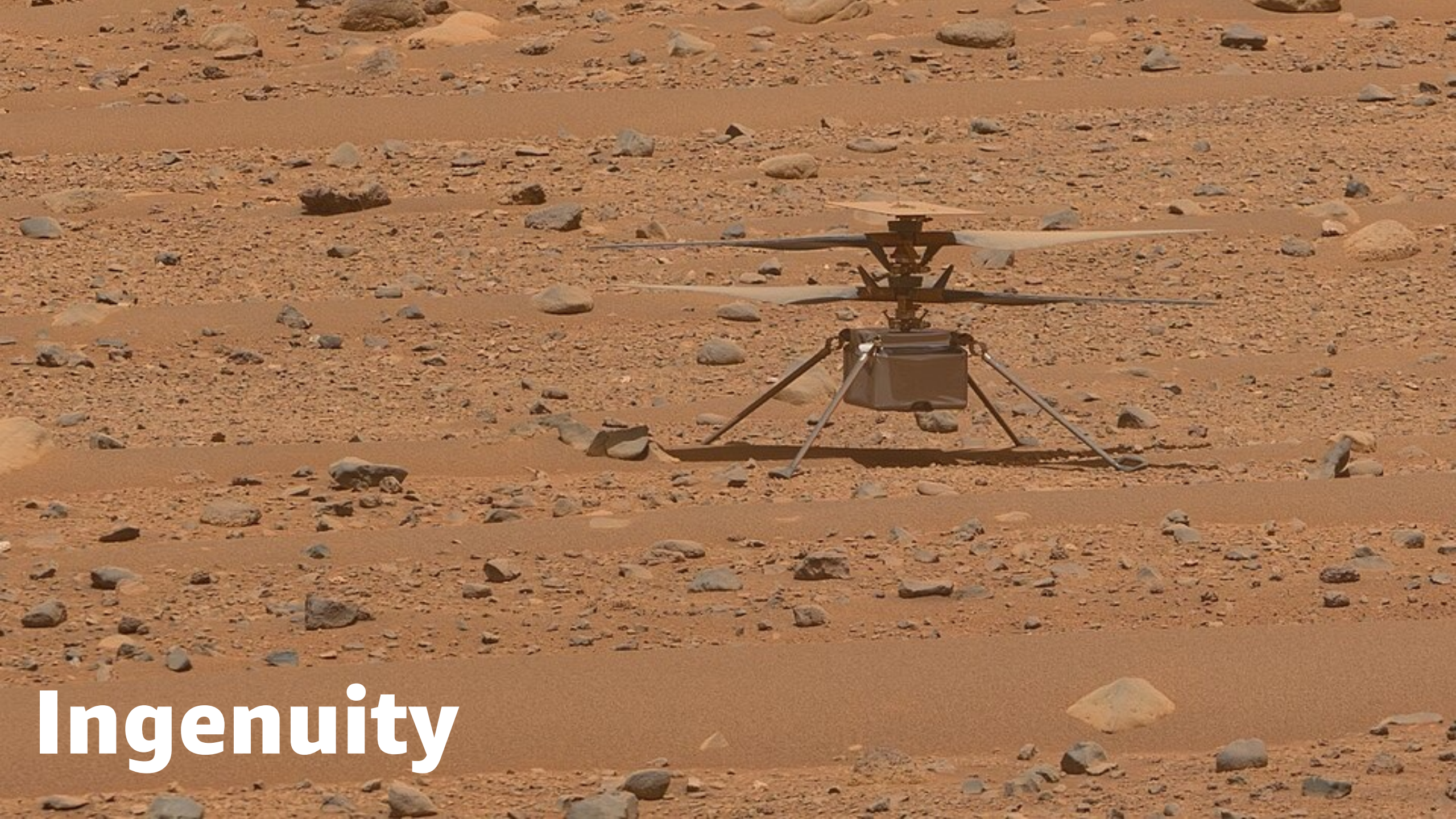**LEO reduces launch cost**, increases performance, has less space risk

**Consumerization** of space – CPUs, ASICs, and solar panels

**Phased arrays:** Increasing capabilities and reducing cost

**Cloud-scale** investment in a historically niche industry

Ingenuity

# Examples across industries

**Sustainability, manufacturing, digital, industrial, and social innovation**

**Power and utilities**: Substation monitoring, remote black start bootstrapping, and reducing cybersecurity infrastructure risk with private connections

**Manufacturing**: Cloud-operated machinery and robotics, building towards 99.999% availability

**FinServ**: Separated guest and payment networks, ultra-low-latency trading that beats undersea cables

**Industrial**: Safety and happy workers, IIoT, critical data at the edge, and revisiting centuries-old processes

**Social innovation**: Combining industry and company connectivity with the community, financial literacy, and connecting renewable power source

Laser

amazon | project kuiper