# Magellanic

## Security of distributed renewable energy sources

**Albert David Lewandowski, CEO**

# About Magellanic Space

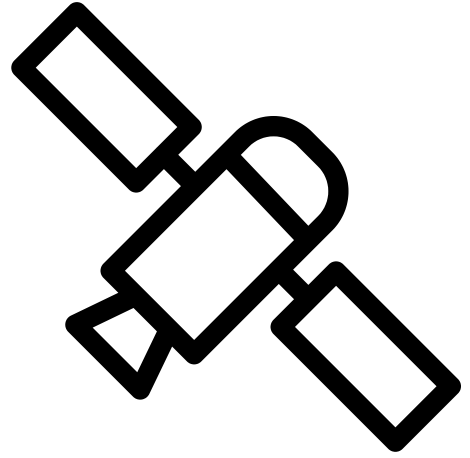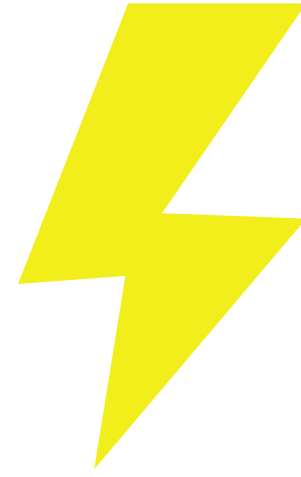Our Mission: **Securing critical infrastructure always, everywhere.**
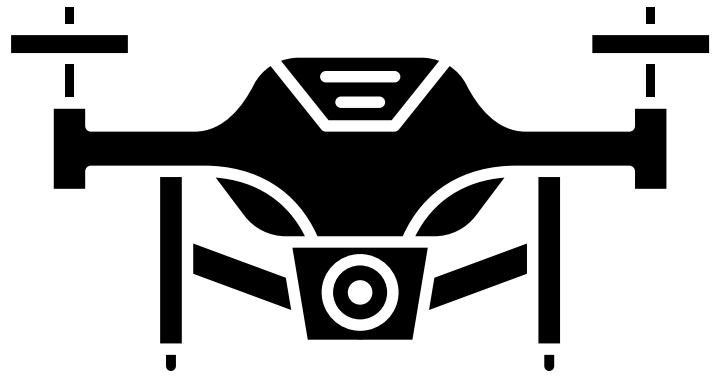


## Accelerator

# About Magellanic Space

**Space Assets**

**Energy**

**Defense**

**Automotive**

# Major Challenges

Current Threats and Issues
To Be Addressed

# Incidents in 2022

## $50 million

was extorded from **Saudi Aramco** after malware attack into their infrastructure

Sources: EC, CPO, S&P

## 45 major

discovered attacks on energy infrastructure since **2017** causing down time.

## 90%

of Delta-Montrose Electric Association's internal controls was turned off and **25 years** of historical data removed.

# Major Threats

Complex Supply Chain starting with software

Access Management and systems interoperability

Large-Scale, dynamic infrastructure

# Continuous Challenges

**Growing need for energy**

**Multi-Entities Infrastructure**

**Legacy Applications & Infrastructure**

# Space Technology

Galileo and Copernicus data

# Space Guardians

## Copernicus

## Galileo

# Infrastructure Monitoring

## Day to day

Cost efficient method of monitoring infrastructure including land monitoring.

## Plan

EO data can be used for future distributed network extension in addition to aerial images.

## Detect

Detect change in in the infrastructure, especially in rural areas with less developed monitoring

# Infrastructure Monitoring

**EO Data**

**Quick insights**

**Secured Shared** Data Repository

# Galileo Value

## Time

Tamper-proof and protected against external interferences timing information.
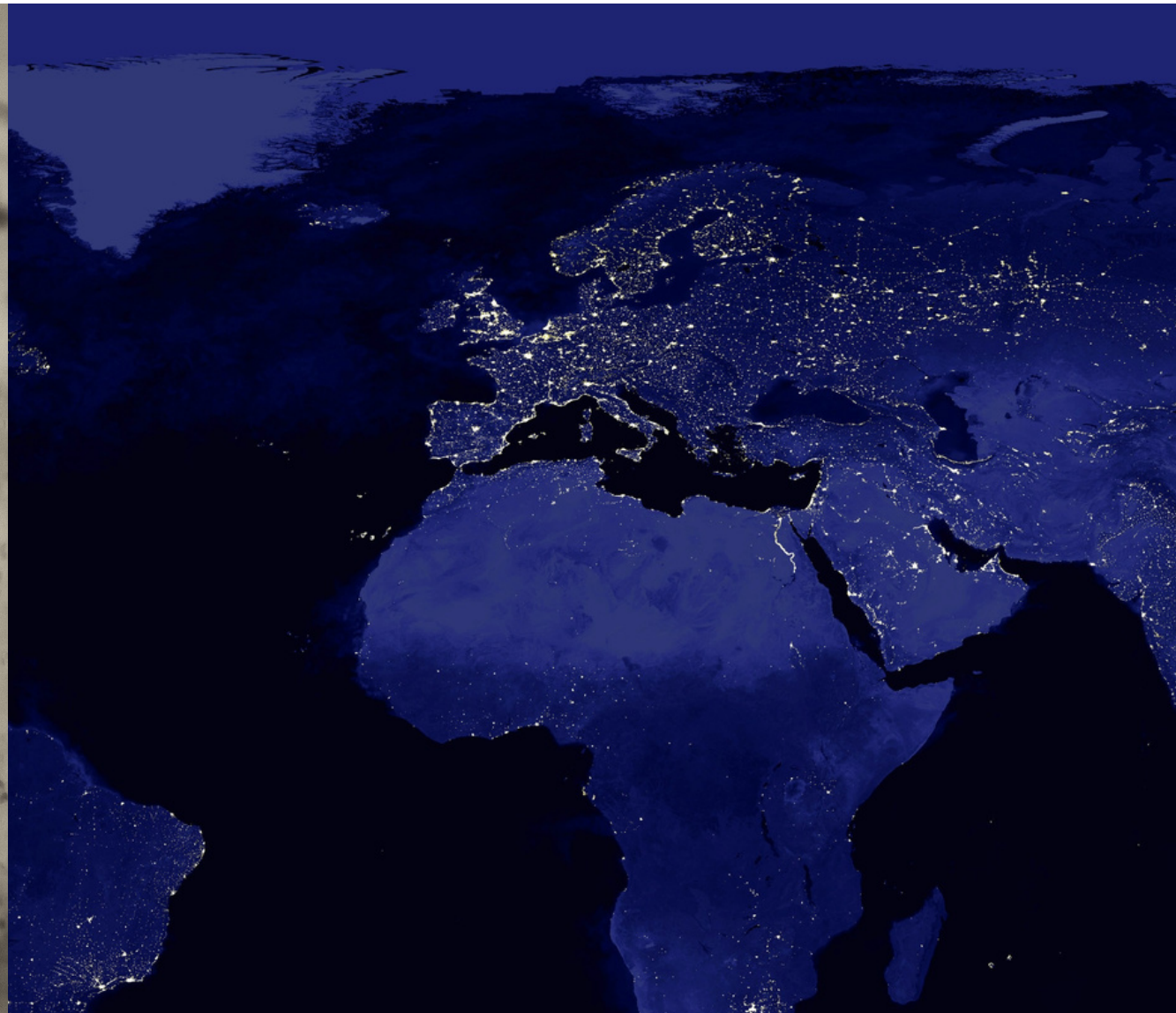
## Geolocation

Precise GNSS receiver for drones to run maintenance tasks and monitoring.

# Securing with Galileo

**Timestamping Data**
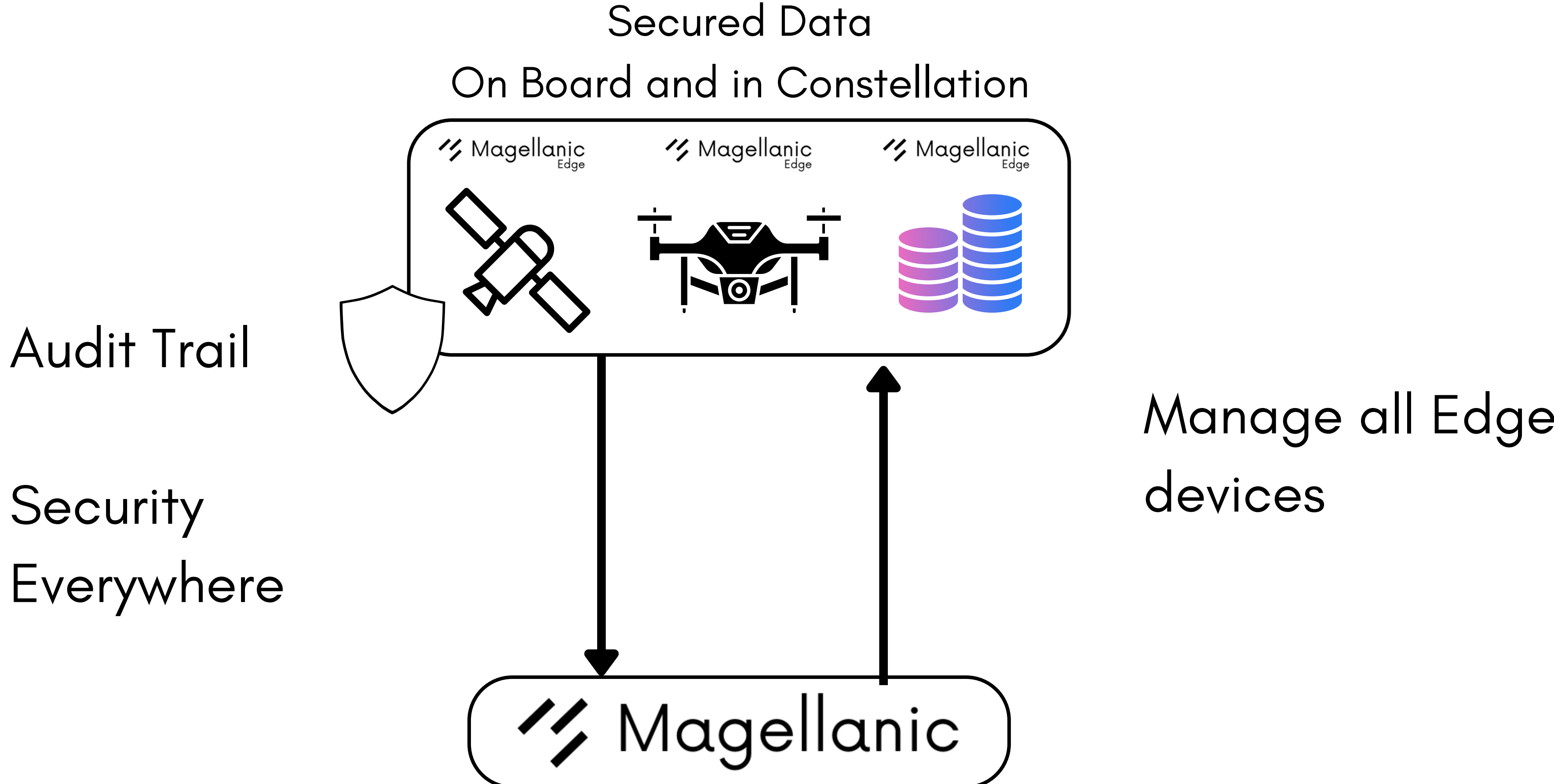
**Access To Robust Time Source**

**Precise GNSS system**

# Distributed, Autonomous Security

Magellanic Space Solution

# Magellanic Space



Secured Data
On Board and in Constellation

Audit Trail

Security
Everywhere

Manage all Edge
devices

# Space for Our Security

## Data

Cost efficient method of monitoring infrastructure including land monitoring.

## Scale

EO data can be used for future distributed network extension in addition to aerial images.

## Real Time

Detect change in in the infrastructure, especially in rural areas with less developed monitoring

# Magellanic - Case study

## Company

National oil&gas company implementing renewable energy production and green hydrogen.

## Challenge

- Securing distributed energy IoT
- Verified passport of energy used for green hydrogen production

# Magellanic - Case study

## Solution

**Energy production**

**Infrastructure Monitoring**

Secure Communication

Malware Protecion

Data Verification
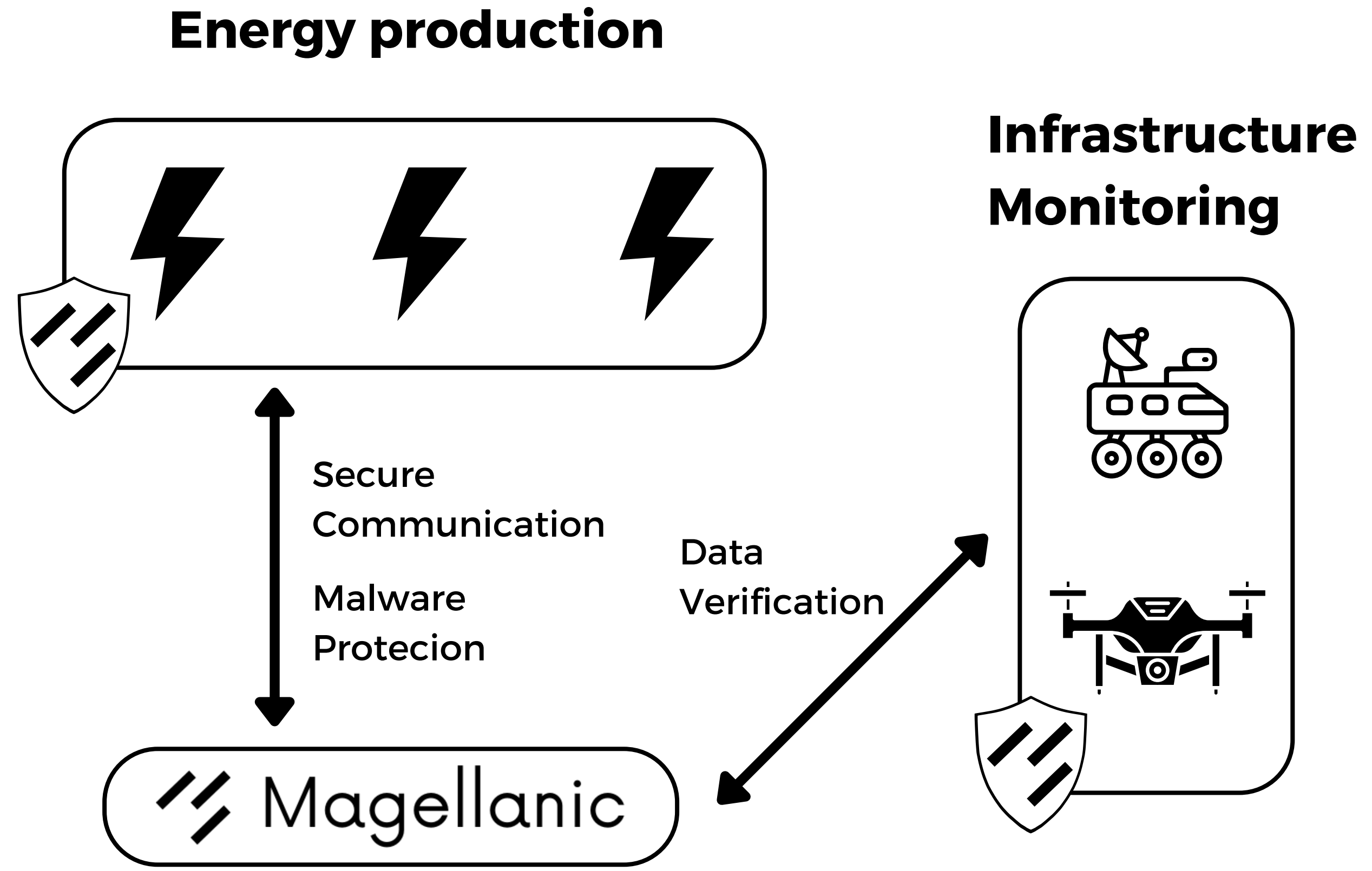
Magellanic

# Magellanic - Value

Protect Connected Devices

Secure Critical Infrastructure

Prevent Security Threats

Automated Distributed Smart Grid

# Secure World. Together.

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