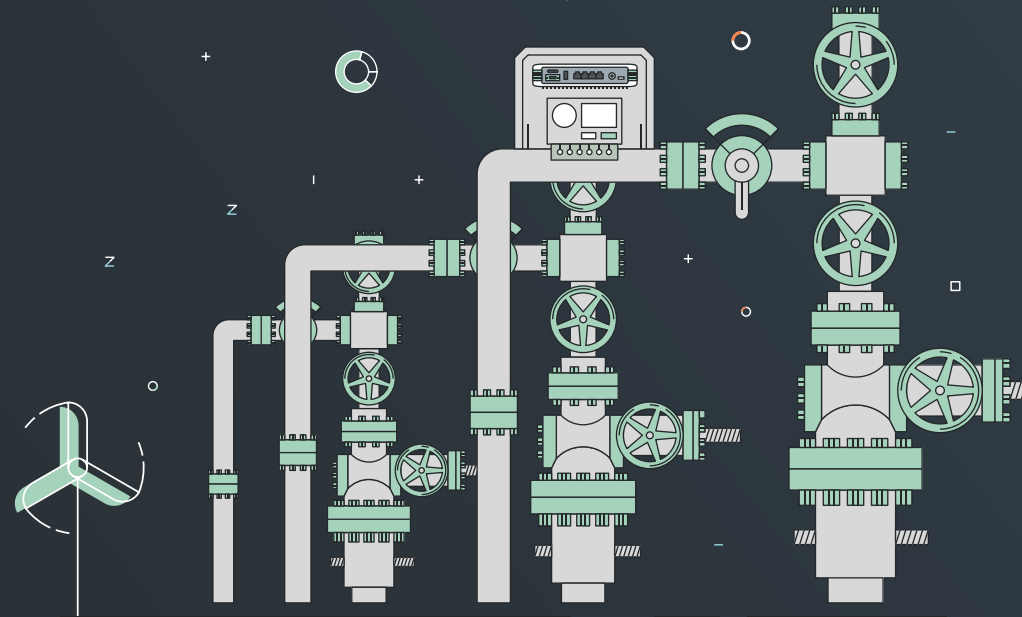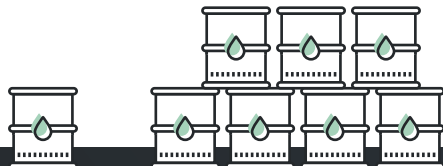# ENERGY

Oil & gas and other energy operations are deploying smart devices to digitize operations. The problem is that much of the new data they generate gets left stranded in the field, too much for the network to transport.
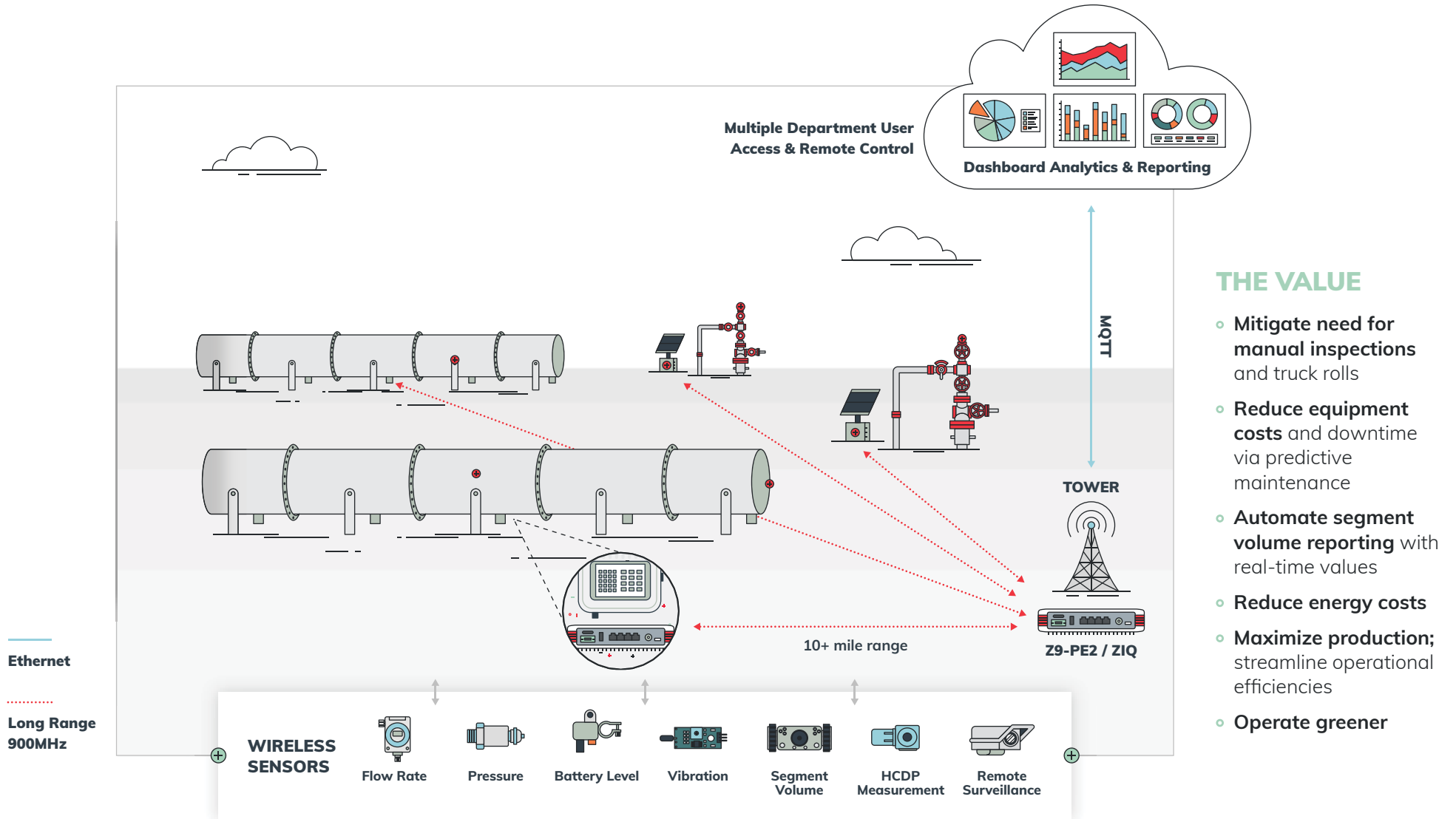
FreeWave enables energy leaders to capture the full value of new IIoT devices and applications by allowing data to be processed as close to the source as possible. With edge computing, operators can extract more data from the same devices—even legacy PLCs and RTUs—and deliver it all to the cloud for immediate analysis and action.

With oil & gas companies today **using less than 1%** of the data they have available, the **production potential of their assets is not being maximized.** Industry-wide, this shortfall represents around
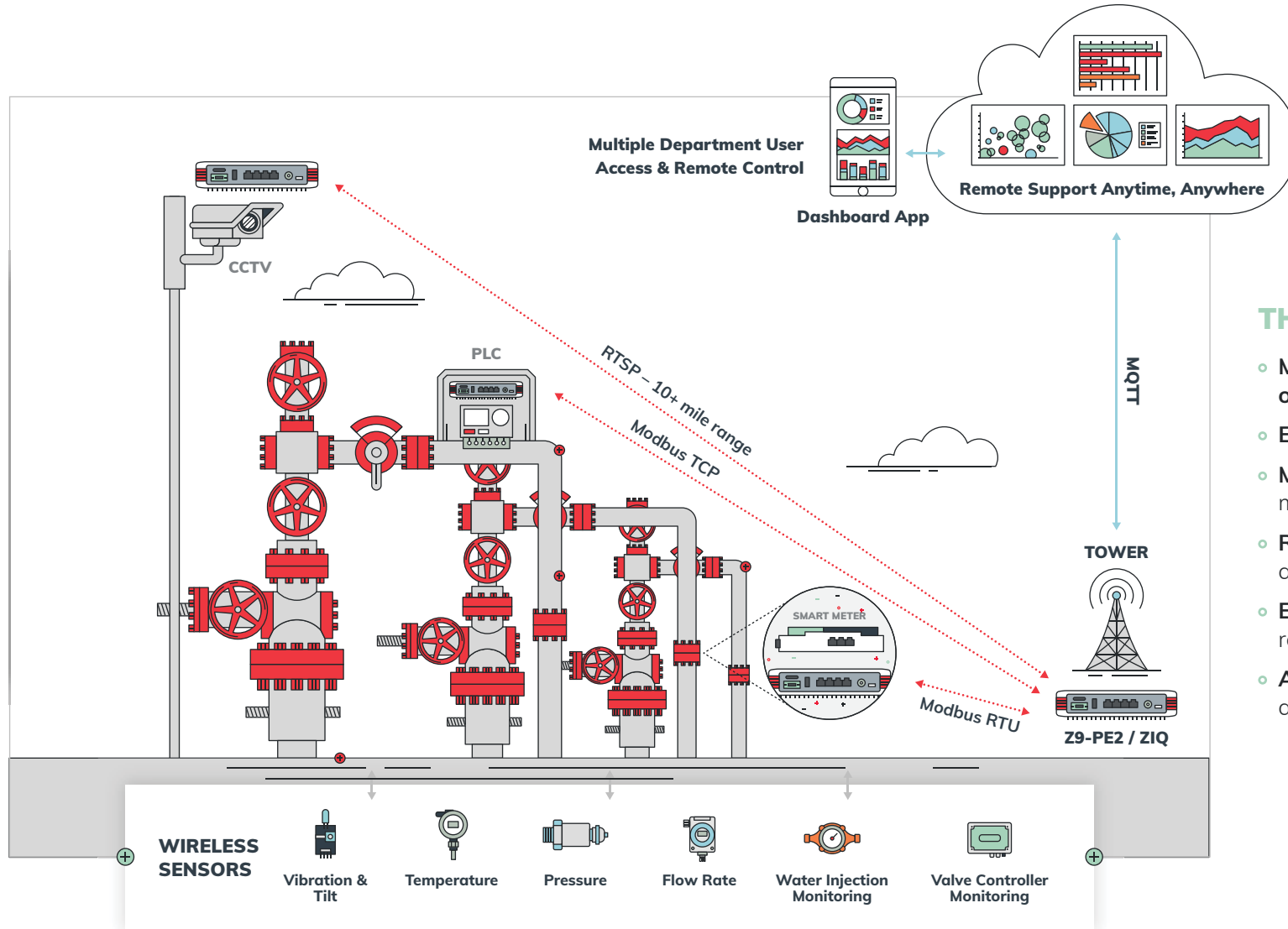
10M barrels per day.

—McKinsey, 2017

ENERGY

Well & Pipeline Gas Measurement

Multiple Department User Access & Remote Control

Dashboard Analytics & Reporting

MQTT

TOWER

Z9-PE2 / ZIQ

10+ mile range

Ethernet

Long Range 900MHz

WIRELESS SENSORS

Flow Rate | Pressure | Battery Level | Vibration | Segment Volume | HCDP Measurement | Remote Surveillance

THE VALUE

- **Mitigate need for manual inspections** and truck rolls
- **Reduce equipment costs** and downtime via predictive maintenance
- **Automate segment volume reporting** with real-time values
- **Reduce energy costs**
- **Maximize production;** streamline operational efficiencies
- **Operate greener**

Real-Time Remote Monitoring

Multiple Department User Access & Remote Control

Dashboard App

Remote Support Anytime, Anywhere

CCTV

PLC

RTSP – 10+ mile range

Modbus TCP

MQTT

SMART METER

Modbus RTU

TOWER

Z9-PE2 / ZIQ

WIRELESS SENSORS

Vibration & Tilt

Temperature

Pressure

Flow Rate

Water Injection Monitoring

Valve Controller Monitoring

Ethernet

Long Range 900MHz

THE VALUE

- **Modernize field operations**
- **Ensure system uptime**
- **Mitigate costs** of manual inspections
- **Reduce water usage** and waste
- **Ensure security** of remote assets
- **Automate reporting** and compliance