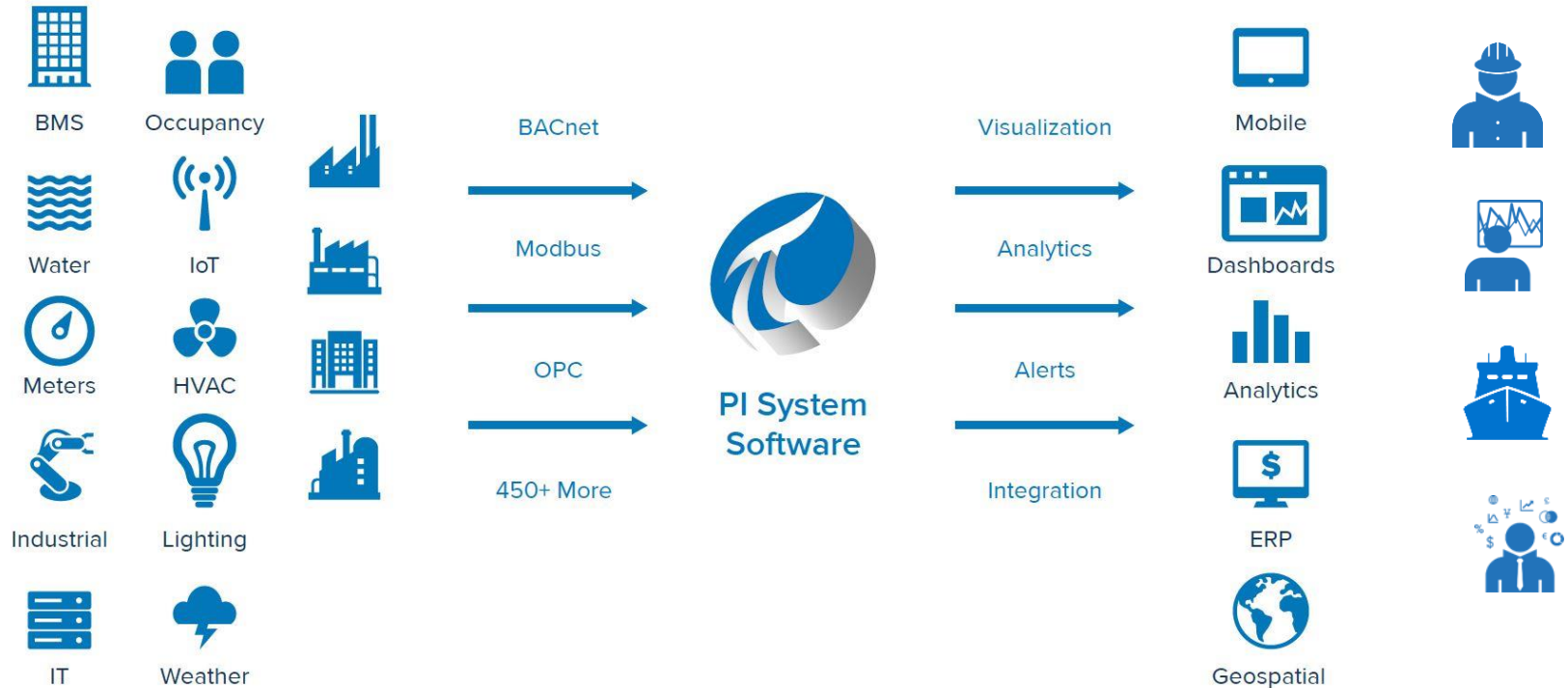# Energy Storage:
One Fact and Three Misconceptions

Michael Kanellos
IoT and Technology Analyst
OSIsoft

OSI Who? The Inside Secret of IIoT

The Right Data to the Right People at the Right Time

BMS | **Occupancy**

Water | **IoT**

Meters | **HVAC**

Industrial | **Lighting**

IT | **Weather**

BACnet

Modbus

OPC

450+ More

PI System Software

Visualization

Analytics

Alerts

Integration

Mobile

Dashboards

Analytics

ERP

Geospatial

OSIsoft.

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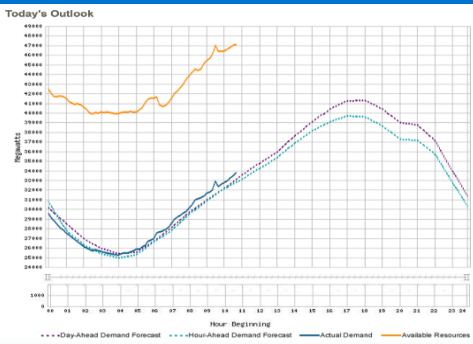
A Nerve Center for Utilities

Cal ISO
Navigating the daily renewable dance

Maynilad
Delivering 640 million more liters a day by finding leaks

DTE
Cutting 6.6 million minutes of outages a year

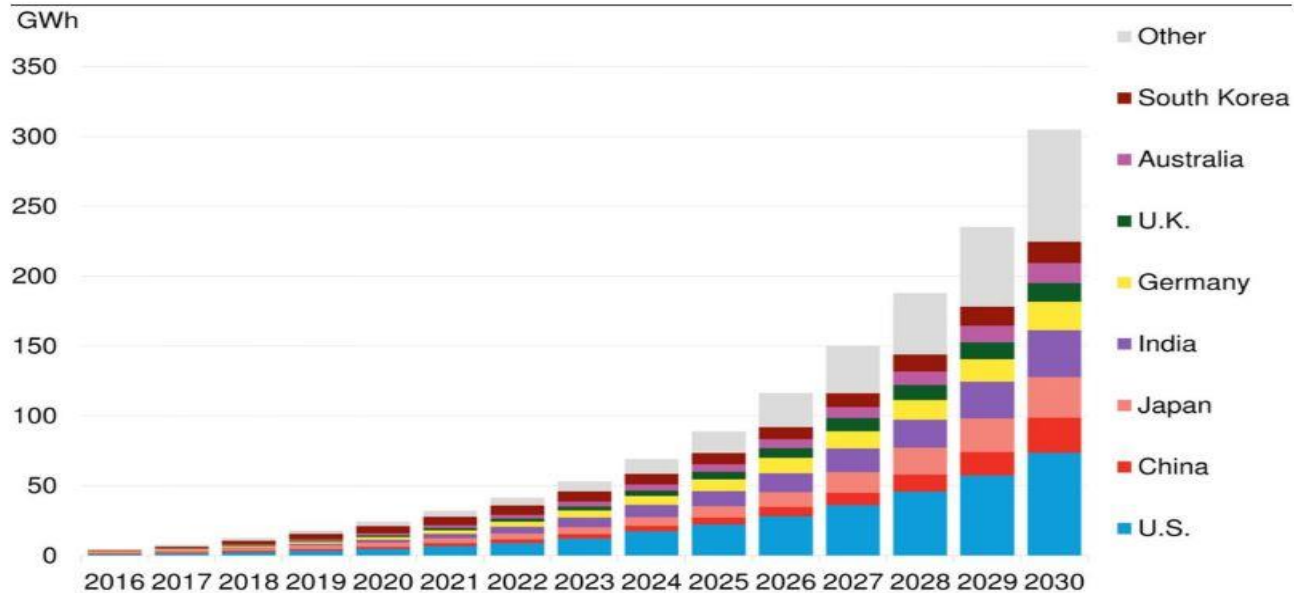**Duke Energy**
Helping $2.5 million 40 year olds live longer

4

Why Electricity Storage?
The Only Critical Commodity That Isn't

The Fact: Demand Is up and to the Right

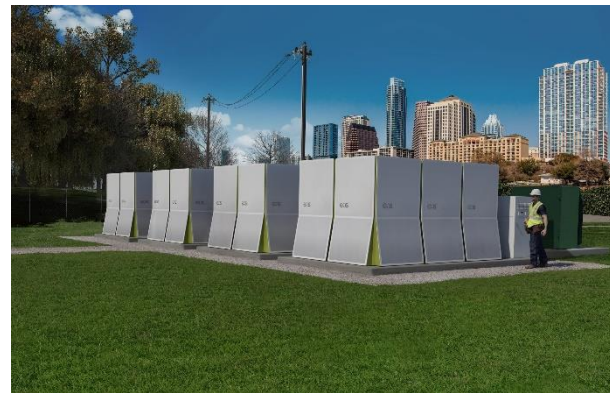Global cumulative storage deployments

Source: Bloomberg New Energy Finance
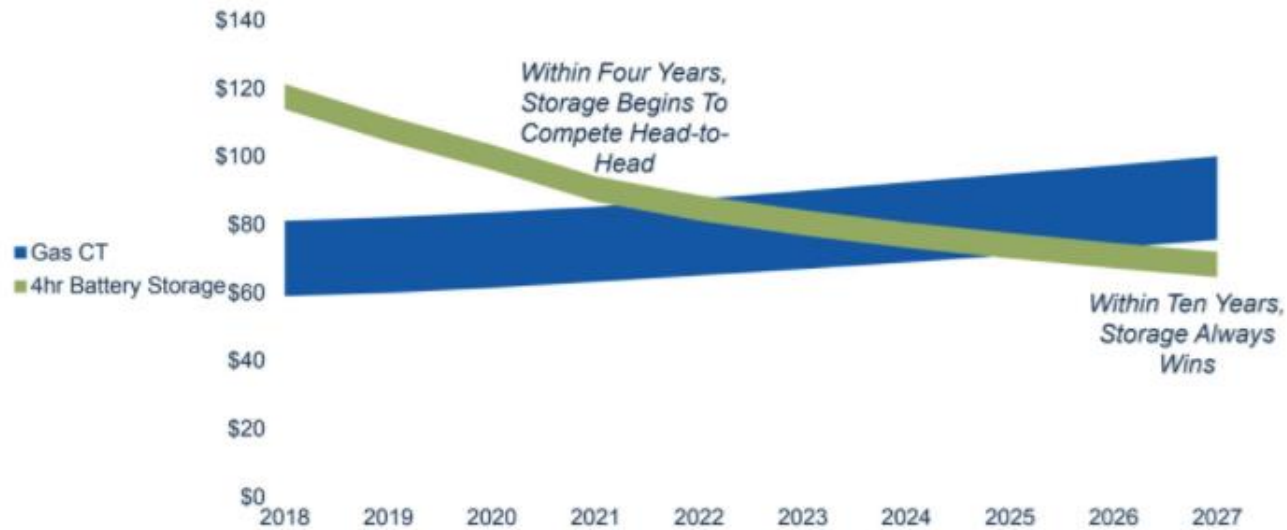
The Technology Landscape Expanding...Maybe

The Noble Effort Hall of Fame

- Compressed air
- Sodium batteries
- Fiberglass batteries
- Undersea hydrogen
- Aquion's Water Battery
- Gravel
- Graphene!
- Undersea plastic bags
- Etc etc etc

Misconception #1: It's About Power at Night

It's really about more peak power during the day

Source: GTM Research/Wood Mackenzie

Misconception #2: It Puts Consumers in Control

Which one do you want to manage?

Solar Array:
- 16-40 panels
- Lasts for 25+ years
- Degrades predictably

Storage Array:
- He's got 4,480
- Cells last 2-3 years
- Degrade unpredictably

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Misconception #3: It's About Batteries
It's about minimizing batteries through software

Thank You