



# DISTRIBUTED ENERGY STORAGE: FROM BATTERIES TO BUILDINGS TO BOTTOM-LINE BENEFITS





# IN-DEPTH BUILDING KNOWLEDGE





WORLD-CLASS BATTERY  
**TECHNOLOGY**



# Modular Project Portfolio



## In-Building Solutions

Modular in 43 and 65 kWh increments



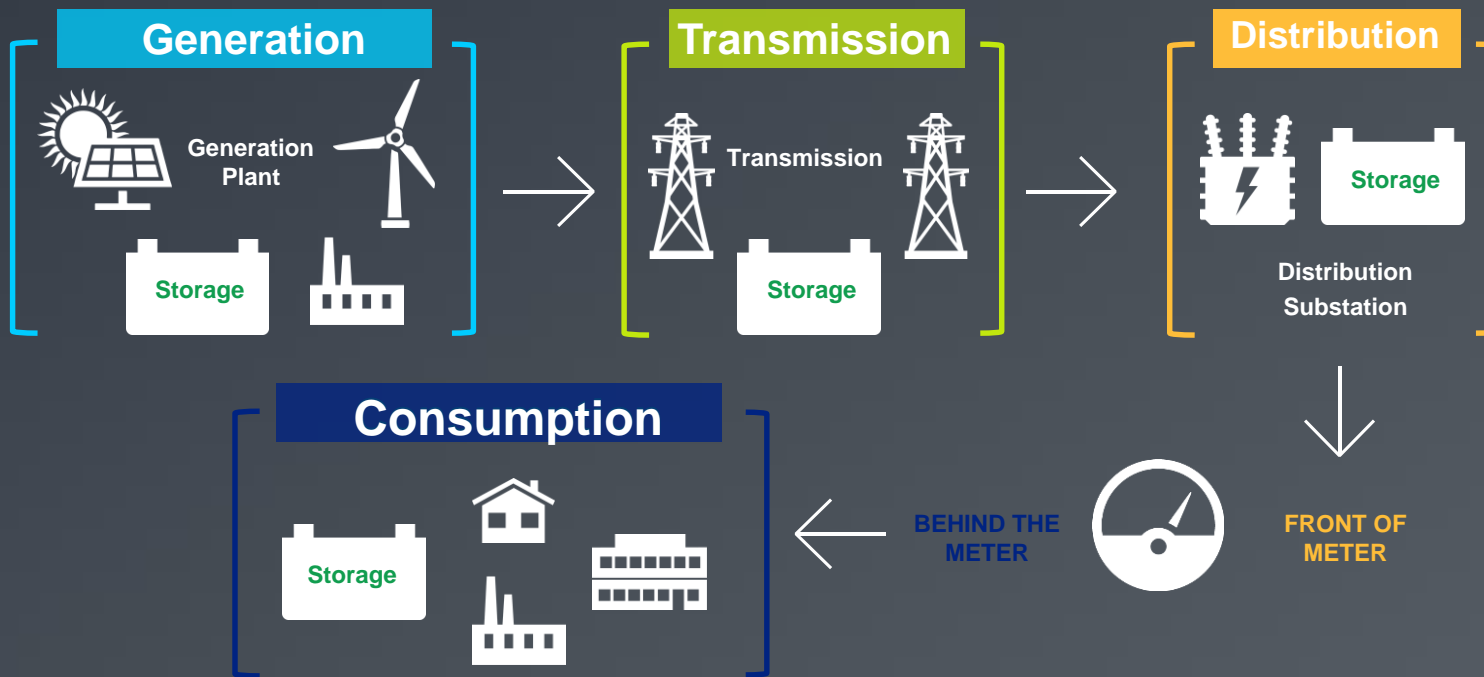
## Containerized Solutions

Modular in 510 kWh increments



# Opportunities for Energy Storage Exist Across the Grid

## Electric Grid Market Overview





# Energy Storage Can Provide Multiple Operational Benefits Along With Cost Savings and Revenue Opportunities

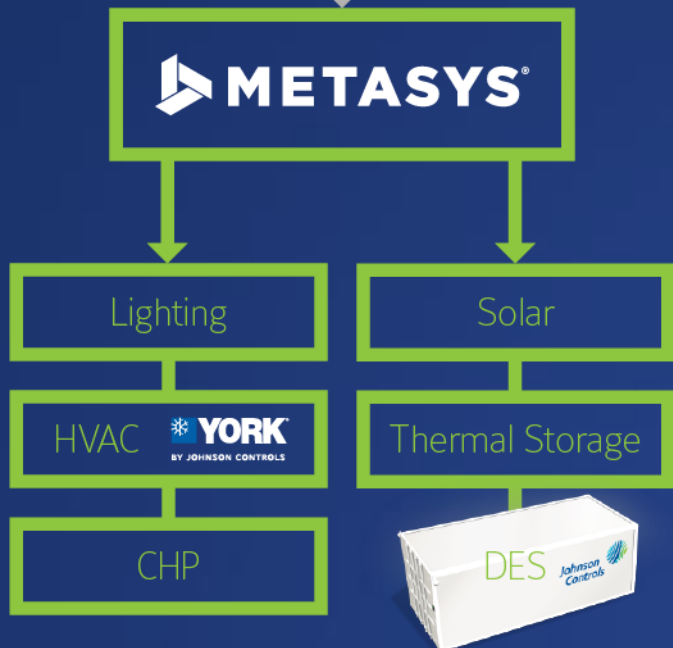
Examples of potential value:

- Demand Charge Management
- Load Shift
- Frequency Regulation
- Capacity Demand Response
- Renewable Energy Support
  - Power Factor Correction
  - Voltage Support
- Back Up Power

Batteries can provide up to 13 services to three stakeholder groups



# DISTRIBUTED ENERGY STORAGE: THE BIG PICTURE



# Johnson Controls is a Complete Solution Provider



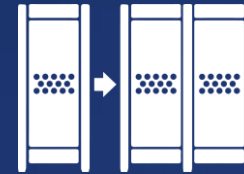
## Technology

- + JCI manufactured battery technology
- + Leader in building systems



## Low Risk

- + Experience and stability of a large corporation
- + Proven history of providing energy efficiency solutions



## Manufacturing

- + Manufacturing excellence and supply chain scale drives down cost
- + Modularity allows for design flexibility and customization



## Service

- + Global service infrastructure
- + 7,500 trucks in service
- + Predictive diagnostics and remote monitoring



# Identify Goals

Preliminary audit/Site visit

Project commitment

Detailed audit  
Sophisticated analysis tools used to gather data and develop customized solution

Energy Performance Contract with Savings Guarantee

Improvements  
such as:



Lighting, water, HVAC, Energy Storage, renewable energy, building upgrades, controls

Lower  
Water Use

Lower  
Utility Use

Demand  
Reduction

Reduce  
Emissions

Reduce Ops  
Budget

Reduce  
Maintenance

Meet Project Goals