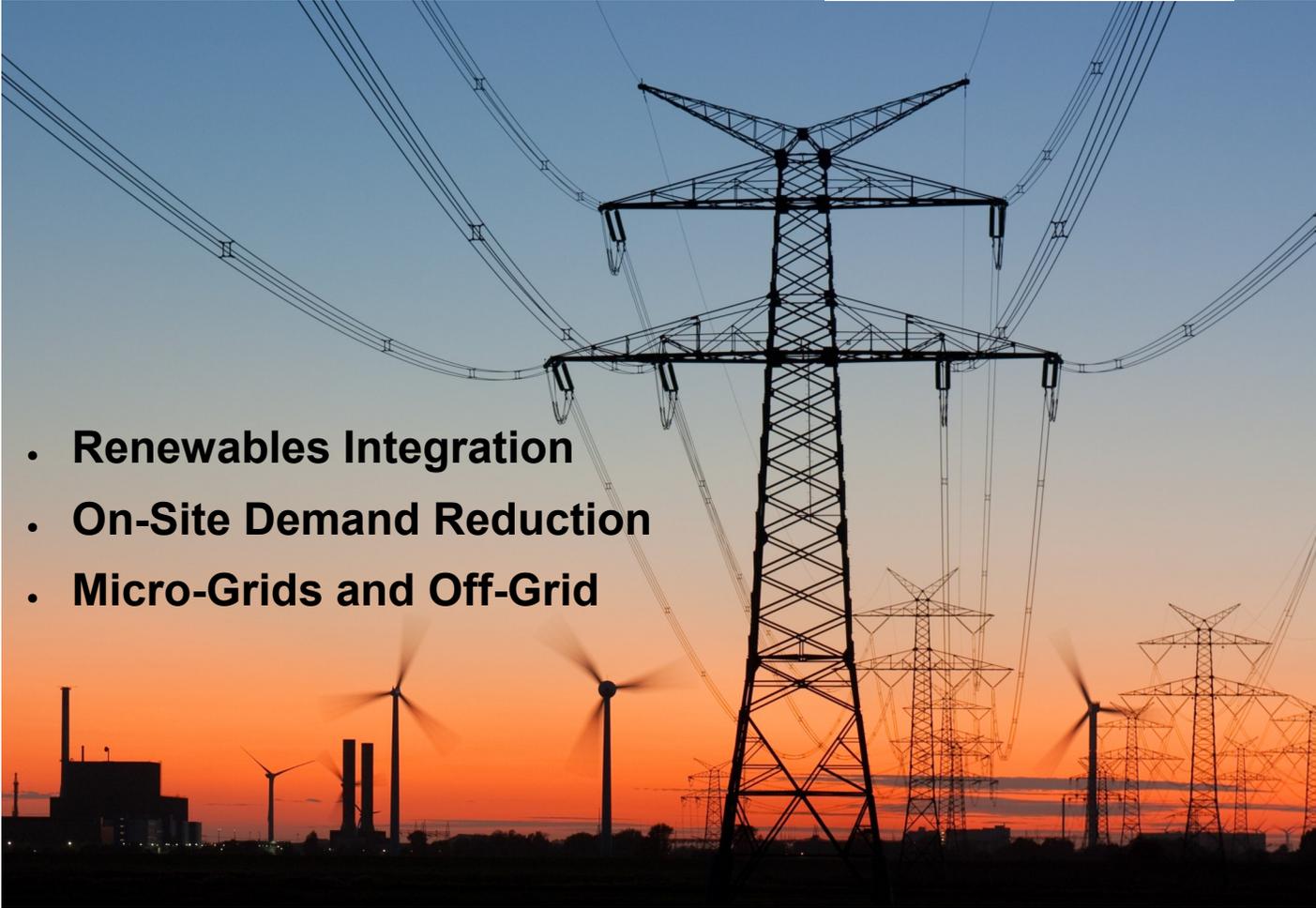


## HALO-GEN™ Energy Storage System

*High Performance, Low Cost Flow Battery*

- **Safe**
- **Versatile**
- **Long Life**
- **Modular, Scalable**

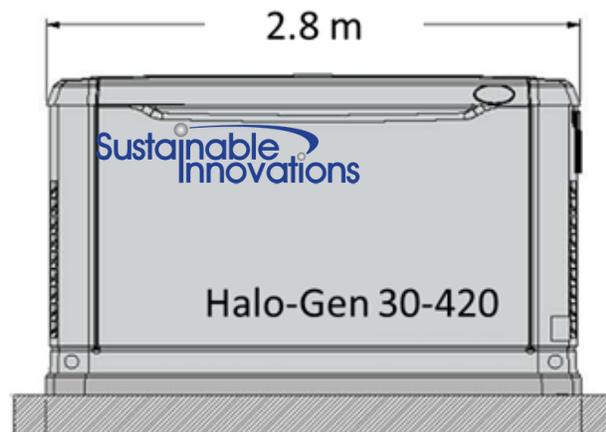
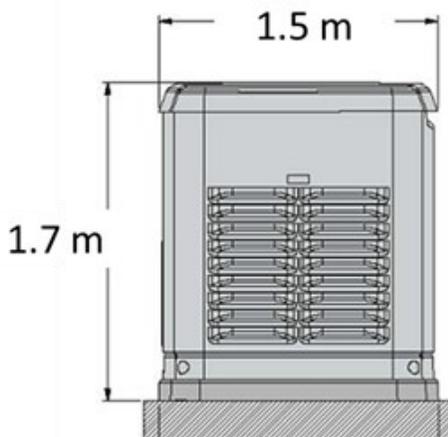
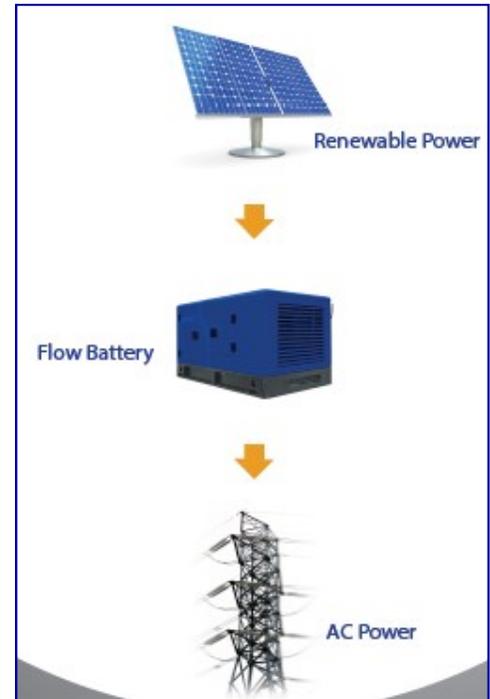
- 
- **Renewables Integration**
  - **On-Site Demand Reduction**
  - **Micro-Grids and Off-Grid**

Sustainable Innovations' HALO-GEN™ Energy Storage System has one of the highest operating efficiencies of any energy storage system considered for renewable energy storage and Smart Grid applications. Using a flexible architecture, the system provides low-cost, modular power/energy storage capacity, making renewable power more widely available.

Sustainable Innovations' HALO-GEN™ can be transported to the point-of-use and readily activated to provide high reliability power. The energy storage component of the system projects to be less than one-half the cost of the best competitive flow batteries currently under development.

# HALO-GEN™ Energy Storage System

Technical Specifications	HALO-GEN™ 30	HALO-GEN™ 200
Nominal Power	30 kW	200 kW
Maximum Power	90 kW	600 kW
Energy (14 hours)	420 kWh	2800 kWh
Dimensions (L x W x H)	2.8 x 1.5 x 1.7 m	5.0 x 2.6 x 3.0 m
Electrolyte Volume (Halogen)	2125 l	11,700 l
Round Trip Efficiency (Total System)	75%	75%
Maximum Response Time	0.01 seconds	0.01 seconds
Minimum Cycle Life	5,000	5,000
Life (Years)	15	15



HALO-GEN™ 30 Flow Battery rated at 30 kW Nominal, 90 kW Peak Power, 14 Hour Maximum Storage Duration

Sustainable Innovations develops and manufactures innovative products based on a proprietary, low-cost, large format electrochemical platform, serving global, high-value, near-term applications; transforming waste gases and power into higher value forms. Our HALO-GEN™ Energy Storage System, developed in partnership with one of the world's largest industrial chemical companies, is a highly efficient, high capacity, reconfigurable flow battery technology for applications across the electric supply system, including for industrial, commercial and residential on-site energy storage and demand control.

**Sustainable  
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