

# Powering Utility & Municipal Grids with High-Performance, Non-Flammable, Sodium-ion Batteries

Safe, Low-Cost Energy Storage. Deploys Anywhere. Fast.



Safe, low-cost energy storage designed to stabilize modern grids and protect communities without fire risks.

- Grid modernization needs cost-effective storage solutions to keep rates low while upgrading aging infrastructure.
- Hard to achieve 100% reliability power solutions needed to prevent blackouts or brownouts under grid stress.
- Hard to deploy storage near demand centers where fire risks can't be tolerated.
- Delayed project timelines from permitting bottlenecks caused by complex fire safety and emergency response regulations.

## The Alsym Solution: Safety Without Compromise

- Unmatched Safety:** Non-flammable NFPP+ chemistry prevents thermal runaway and dangerous toxic gases. It is safe for high-density utility projects near people and homes.
- Extreme Resilience:** Batteries maintain performance from -40°C to 60°C without expensive cooling systems. This ensures grid stability during extreme heatwaves or winter storms.
- Flexible Siting:** With no fire hazards, Alsym batteries can be placed exactly where the grid needs them. This simplifies zoning and reduces the need for large safety buffer zones.
- Lower Cost:** No need for complex cooling or fire suppression systems lowers total ownership costs. These savings help utilities keep energy rates affordable for the public.
- Stably Sourced:** We use abundant, non-FEOC materials to ensure long-term price stability. This protects projects from geopolitical bottlenecks and sudden supply chain price spikes.
- Scalable Deployment:** Alsym technology scales easily from local microgrids to large-scale utility infrastructure.

## A Better Battery for Utility & Municipal



# Optimized for Utility & Municipal Applications

**Alsym Na-Series provides a versatile and reliable energy asset to strengthen grid resilience and contain costs.**

## Supply/Demand Smoothing:

Balance the grid by storing excess energy from wind and solar sources. This ensures a steady power supply even when the sun isn't shining.

## Higher System Utilization:

Maximize the value of existing assets by running them at optimal capacity. Store excess power for use during peak demand hours.

## Transmission & Distribution Deferral:

Deploy storage to avoid expensive and unpopular transmission line upgrades in crowded areas. This helps manage local power loads without building new infrastructure.

## Microgrids for Critical Infrastructure:

Provide safe, non-flammable backup power for hospitals, schools, and emergency services. Alsym batteries stay operational and safe during city-wide outages.

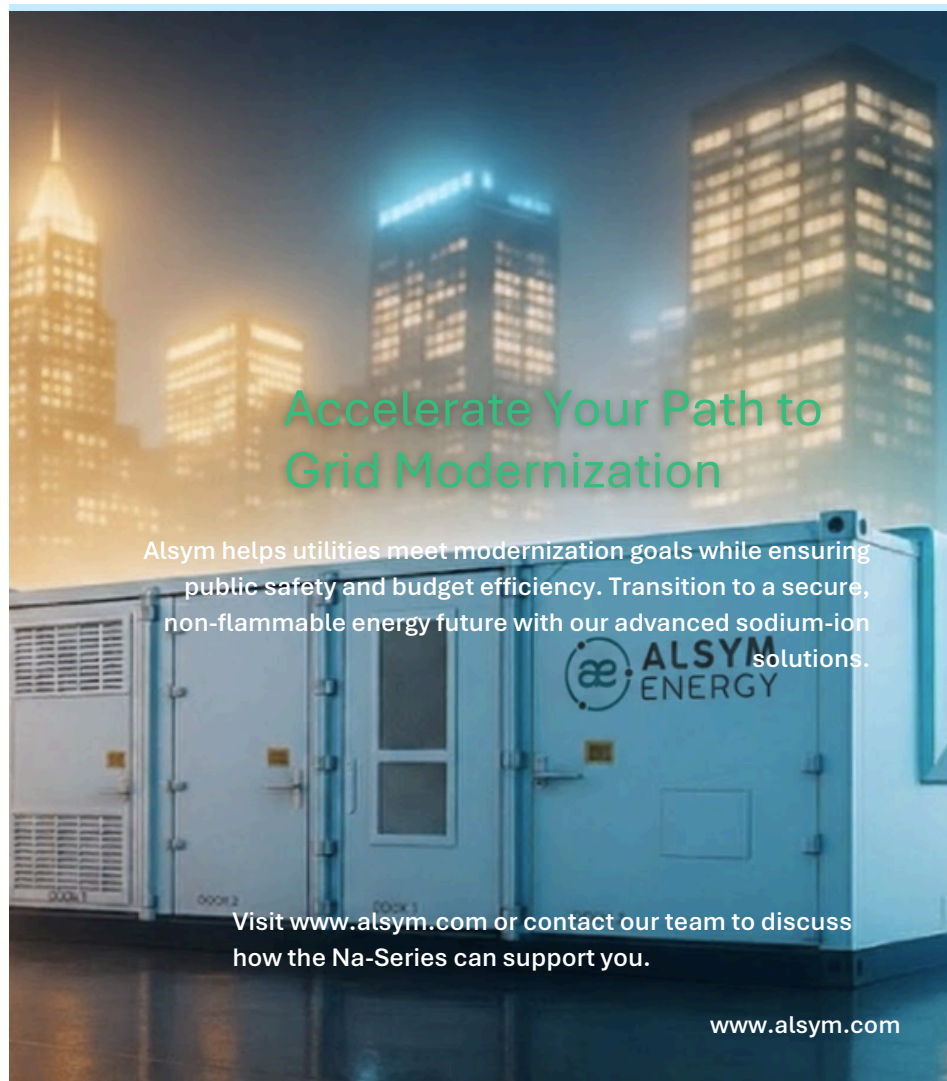
## Peaker Plant Replacement:

Use clean sodium-ion storage to meet high peak demand instead of fossil-fuel plants. This reduces carbon emissions while maintaining total grid reliability.



## Na-Series: Technical Overview

<b>Cycle Life</b>	10,000+
<b>Energy Efficiency</b>	95%+ Round Trip Efficiency (RTE)
<b>Duration</b>	1- 100 hour backup
<b>Charge/Discharge</b>	2C - C/100
<b>Operating Range</b>	0% to 100% SoC (no degradation at 0%)
<b>Safety Certs</b>	UL 9540A (pending) & UL 1973 (pending)



## Accelerate Your Path to Grid Modernization

Alsym helps utilities meet modernization goals while ensuring public safety and budget efficiency. Transition to a secure, non-flammable energy future with our advanced sodium-ion solutions.

Visit [www.alsym.com](http://www.alsym.com) or contact our team to discuss how the Na-Series can support you.

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