How to Make Energy Storage Part of Your Expense Management Strategy

stem | Energy Superintelligence™

Global Adjustment (GA) Is Driving Up Energy Costs In Ontario

Global Adjustment fees can make up 70 to 90 percent of an organization's LDC bill—but they also present a huge opportunity for savings. Organizations with the flexibility to avoid using power from the grid during IESO peaks will achieve significant savings, upwards of $1 million each year. This is a huge opportunity to increase profitability and enhance your competitive advantage.

Energy storage gives you the flexibility to shift energy consumption away from system peaks automatically without any operational disruption, making it one of the most attractive strategies for reducing energy costs.

▲ 300%
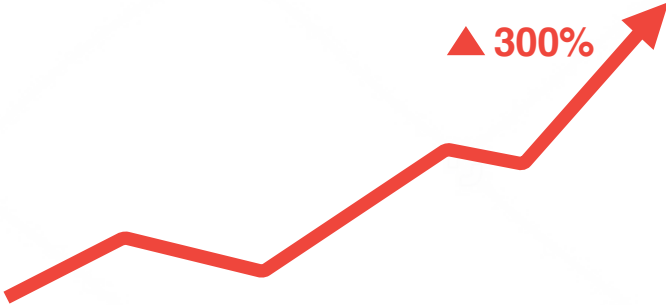
Global Adjustment has increased 300%
since 2011.[1]
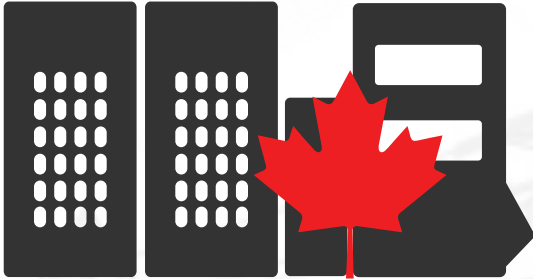
500+ facilities
in Ontario are already evaluating or using energy storage today.[2]

5

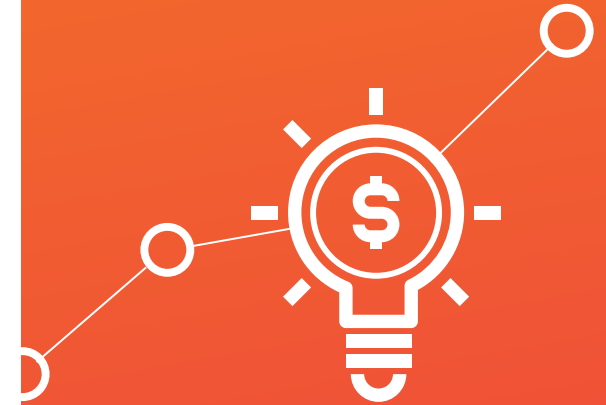## Key Facts to Know
About Managing Expenses with Energy Storage

5 Key Facts to Know About Global Adjustment and Energy Storage

Reducing demand during peaks will result in big savings, but manual curtailment is disruptive.

The ICI allows businesses to reduce energy expenses by lowering usage during system peaks. Some organizations are reducing demand manually, but this approach often requires complete shutdowns, which is disruptive and expensive. Plus, as peaks become harder to identify, longer shutdowns are needed.

Most organizations don't have the ability to halt production or shift operating schedules every time a peak is predicted.

Manual energy reduction **can cost you $**

2

Energy storage will reduce energy expenses with no disruption and no upfront cost.

Energy storage paired with artificial intelligence (AI) allows facilities to reduce peak demand without disrupting operations. AI is required to accurately predict Ontario peaks and to switch a facility's energy consumption to battery power during those times. Storage is nondisruptive and available as a service, requiring no upfront capital.
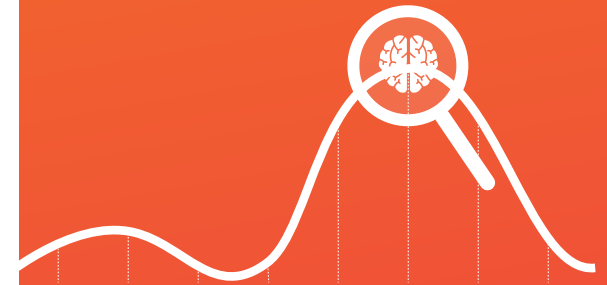
AI predicts energy peaks

3

Artificial intelligence (AI) produces more savings from storage.

AI continuously collects data from various inputs including real-time IESO signals, the utility meter, historical patterns, and local weather forecasts. It applies predictive analytics to these datasets to make the best decisions about when to consume, store, or deploy energy.

500K SAVINGS

1 MILLION SAVINGS

A "dumb" 2 MW battery might deliver a $500,000 GA reduction, whereas AI-powered storage will deliver twice that—

$1 million in annual savings.

4

Experience is key to success.

Energy storage has major payoffs, but installing and operating a storage system is complex. With an experienced provider, the process will run seamlessly every step of the way.

Selecting a provider with experience can mean the difference between a 9-month or a 2-year install. When it comes to energy storage, it pays to select a provider that has at least 5 years of experience, hundreds of systems operating, projects in multiple LDCs, and strong financial backers.
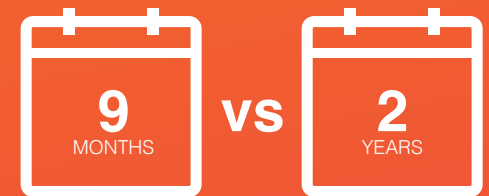
9 MONTHS **vs** **2** YEARS

9 months vs. 2 years in install time.
Energy storage experience makes all the difference

5

5 Key Facts to Know About Global Adjustment and Energy Storage

Activating energy storage takes about 8-9 months.

Anyone evaluating storage as part of their Global Adjustment strategy should consider the amount of time between signing up for service and turning on the system. Typically, this process takes about 8 to 9 months. Take this timeline into consideration so you can sign up in time for the system to generate savings on summer peaks.
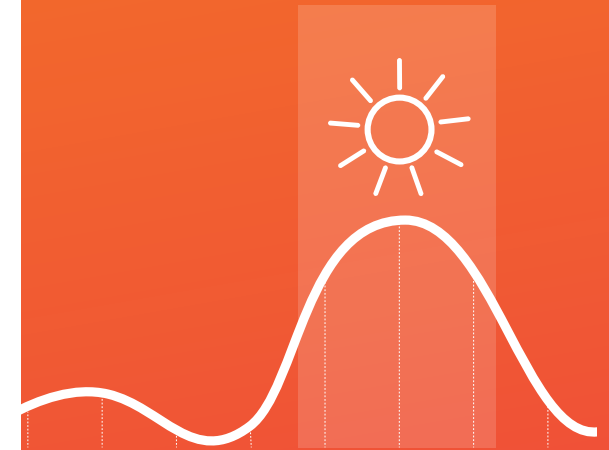
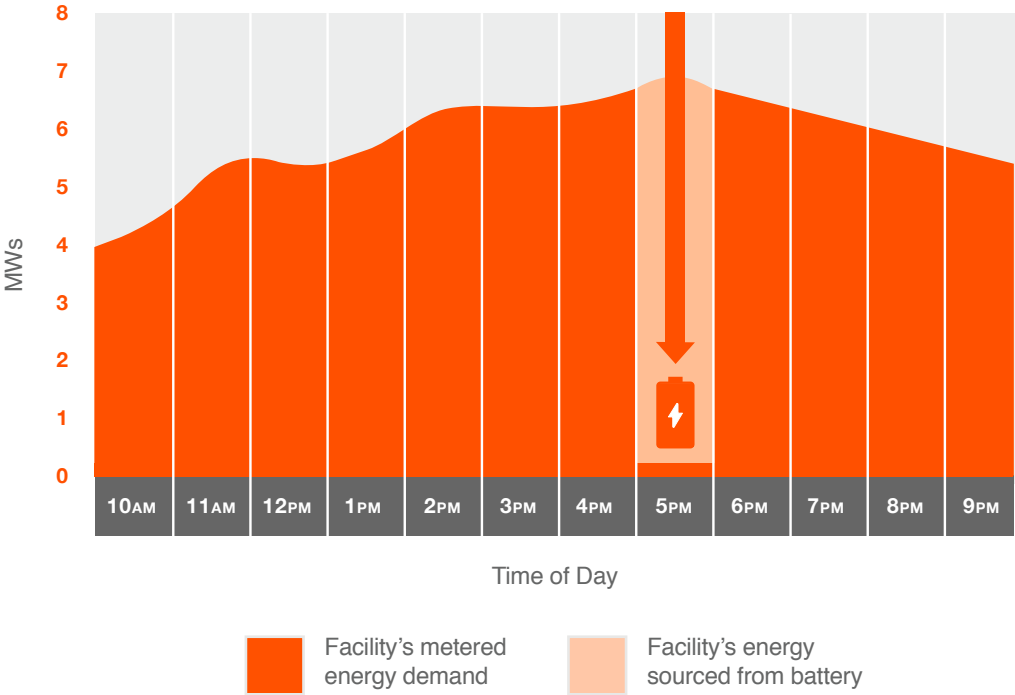Be sure to prepare for **summer energy peaks**

How AI-Powered Energy Storage Cuts Global Adjustment Costs

AI is the only sure way to avoid the IESO peak. Plus, it allows you to reduce facility demand without halting production or changing your operating schedule.

AI uses big data and machine learning to optimize the timing of energy use with lightning speed and surgical precision, saving hundreds of thousands - or more - on your energy bill.

Using Athena's AI, Stem accurately predicts an Ontario system peak at 5:00PM. Your facility uses battery power from Stem instead of power from the grid, reducing your part of the peak and your Global Adjustment.

MWs

Time of Day

10AM 11AM 12PM 1PM 2PM 3PM 4PM 5PM 6PM 7PM 8PM 9PM

■ Facility's metered energy demand   □ Facility's energy sourced from battery

Now is the time to consider energy storage.

Discover how AI-powered energy storage can help your organization increase profitability and enhance your competitive advantage. **Learn more about how to develop a successful energy strategy at stem.com/canada or email info@stem.com.**

STAT SOURCES

1. IESO.ca
2. Stem independent analysis

About Stem

Stem pairs artificial intelligence with energy storage to help organizations reduce energy costs automatically with no change to operations. As the market leader in energy storage, Stem has delivered valuable savings to more than 400 customers and deployed or sold more than 860 systems. Committed to innovation, Stem is the first to introduce AI to the energy storage industry. Stem's AI, Athena™, uses machine learning and predictive analytics to optimize energy use in real time—lowering costs immediately, and continually becoming smarter and more effective. Stem is backed by leading global investors including Ontario Teachers' Pension Plan, Constellation Energy, Temasek, Mithril, RWE, Mitsui & Co, Total, Activate Capital, Iberdrola, GE, and Angeleno Group.