



# How Ardagh Glass Packaging – North America achieves major energy savings in demand response

## The customer: Ardagh Glass Packaging – North America

With more than 100 years of glass container manufacturing experience, Ardagh Glass Packaging – North America (AGP – North America) offers technology, expertise, innovation, a vast geographical spread and full end-to-end supply chain service for America’s food and beverage industry. From innovations in complex bottle shapes, to embossing and debossing techniques, to breakthroughs in closure finishes, AGP – North America is constantly pioneering new ways to get its customers’ products beyond the shelf and into consumers’ hands. AGP – North America has 14 manufacturing facilities strategically located throughout the U.S.

Glassmaking is an energy-intensive process. AGP – North America uses electricity and natural gas to melt natural raw materials and recycled glass into molten glass in 2800-degree Fahrenheit furnaces. That glass is then molded into bottles and jars, rigorously quality tested and shipped to customers. AGP – North America continuously seeks ways to reduce its energy usage and stress on the energy grid.

## The solution: demand response

Demand response (DR) programs provide payments to large energy consumers that agree to reduce their energy demand during times of electricity grid stress. As one of the largest and most experienced demand response providers in America, Enel works closely with customers to maximize the payments they receive and minimize disruption to their operations.

### CASE STUDY



#### Solution

Demand response



#### Sites

8 across North America



#### Benefits

- Significant energy savings through enrollment with Enel
- Local resilience and sustainability by reducing energy use at time of grid stress



## Why AGP – North America switched to Enel for better energy savings

AGP – North America had facilities across the country already participating in demand response when its facility in California decided they wanted to switch demand response partners, according to Ted Moser, Manager, OEG Energy for AGP – North America. That facility switched to Enel, and soon additional AGP – North America facilities were signing up for Enel. By now, AGP – North America has recognized significant energy savings at its participating sites in the U.S. “I like the metering, the website and the financial arrangements that Enel X provides,” said Moser.

## How AGP – North America reduces energy with minimal disruption

To ensure a smooth process when curtailing energy, Enel helped AGP – North America craft a plan to minimize disruption.

AGP – North America’s focus in curtailing electricity is the gas and electricity consumed by the glass furnaces. In many production facilities, AGP – North America is able to achieve electrical curtailment by using natural gas or on-site liquid oxygen reserves. As more AGP – North America facilities join Enel, the process becomes simpler.

“There are now eight AGP – North America sites participating, and each site shares its shutdown plans with the others,” said Moser. “So, every time we add another facility, it gets easier. We also track demand response performance across all sites, so it becomes a bit of a competition to see who can perform best during the events.”



## How AGP – North America stays focused on safety

Even as AGP – North America strives to maximize energy savings, its top priority remains employee safety, according to Brian Kristofic, Director, Sustainability for AGP – North America. Its demand response plan ensures no compromise to safety standards.

“Safety is our top priority, and we use demand response without introducing safety risks,” said Kristofic. “Safety, consistency and quality are very important values to AGP – North America, and we are not compromising any of those in this program.”

## Why demand response sells itself to leadership

At first, many customers are skeptical of the risk-free deal presented by Enel demand response – payments for energy curtailment with no penalties for underperformance, other than reduced payments. Sometimes, risk-averse company leadership can hesitate at the thought of changing operations in any way. But Moser explains the program quickly sold itself.

“Because this involves the major piece of equipment for glass production, our leadership team needed assurance that we wouldn’t be putting our facilities at risk,” Moser said. “As soon as AGP – North America implemented a plan to operate safely and without an impact on quality, and we achieved the energy savings, they realized the benefit.”

## How DR ties in with their sustainability efforts

AGP – North America has ambitious long-term sustainability plans in place, focused on supporting its communities and customers in everything they do. Demand response ties into these values, Kristofic noted.

“We try to focus on ‘How can we reduce emissions with no compromise to safety and quality?’ and ‘How can we be more efficient in our resource usage?’” said Kristofic. “We know demand response helps with energy reliability on our local grid. We’re participating in demand response not just because of the economic benefits, but because we are able to execute the program safely while helping our critical infrastructure stay sustainable. By reducing AGP – North America’s electricity load on the grid during critical times, it allows the utility to provide power to crucial users in local communities such as hospitals, nursing homes, schools and residences.”