

# FOOTPRINT



EMPOWERING YOUR WORLD



*Leading the Way...to a Carbon-Free Future*

## Continuously Making Improvements to HG&E's Hydro Generation Assets

### Hadley Unit No. 2 Rehabilitation

Hadley Unit No. 2 has been undergoing significant maintenance this year as it passed the 40-year mark since its original install/commissioning. Rehabilitating the unit will strategically position HG&E for the future, given that its two largest hydro generation units will have undergone recent overhauls. The project began in the spring and is anticipated to be completed at the end of 2024.

Units of this size typically undergo complete rehabilitation every 30-40 years to address component issues and replace wearable items, and also to avoid the risk of any component failure that would lead to an extended unplanned outage. Continuously making improvements to HG&E's assets ensures that we are able to continue to deliver low-cost, reliable and clean power and provide the highest quality of services to our customers.



# Carbon-Free Electric Program

## How It Works

For commercial and industrial customers electing to purchase all of their electricity from 100% carbon-free sources, HG&E will procure the supplemental carbon-free electricity required by purchasing and retiring Renewable Energy Certificates (RECs). These costs will be passed along to the customer on-bill through a newly created rate component associated with their electricity usage.

## Customer Benefits

HG&E has set incremental targets to reach net-zero energy by 2050, but we understand some customers would like to take personal action and be carbon-free today. Program participants will receive carbon-free electricity marketing materials including: a carbon-free logo, print indicia, and webpage materials. In addition, HG&E will provide a letter at the end of the program year indicating the organization's carbon-free electric status.

Made with



## Clean Energy Customer Icon

Sign up and get this icon!

For more information about Holyoke Gas & Electric's Carbon-Free Electric Program, contact Michael Curtin, Technical Support Engineer - Key Accounts, at 413-536-9319, or [mcurtin@hged.com](mailto:mcurtin@hged.com).

# Engineering the Future

## Meet 2024 Cadet Engineers: Zachary Roy & Alexander Dumas

Each summer HG&E welcomes recipients of its Cornelius J. Moriarty, Jr. Scholarship for Cadet Engineers. Open to City of Holyoke residents who are in an accredited college engineering program, or who are graduating from a duly accredited senior secondary school and have been accepted into an accredited engineering program, successful applicants receive invaluable on-the-job-training with HG&E engineers during the summer and \$15,000 per year for college related expenses.

The Cadet Program has allowed HG&E to keep engineering talent local. Fourteen full-time HG&E employees have come through the Cadet Engineer program at the start of their careers.

In 2024, two exceptional high school graduates arrived as HG&E Cadet Engineers, Alexander (Alex) Dumas, a graduate of Holyoke High School, and Zachary (Zack) Roy, a graduate of Hampshire Regional High School.

The Cadet scholarship program is dedicated to the memory of our late Commission Chairperson, Neil J. Moriarty, Jr. He often noted that the admission of new students into the program was one of the most rewarding actions that the Commission made each year. To learn more about the HG&E's Cadet Engineering program, visit [www.hged.com/cadet](http://www.hged.com/cadet).



Alexander Dumas



Zachary Roy

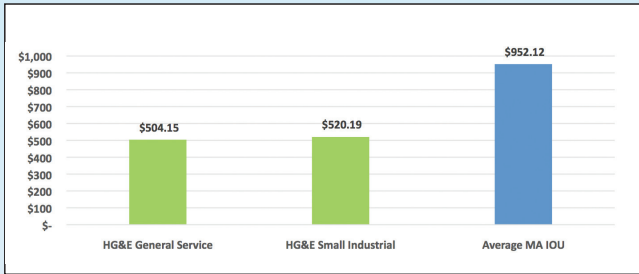


Holyoke's movement t



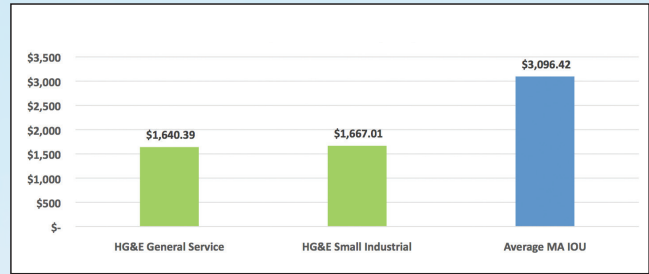
# Our Rates vs. Investor-Owned Utilities

**2024 Commercial & Industrial Electric Rate Comparison  
13 kW - 3,000 kWh Consumption/Month**



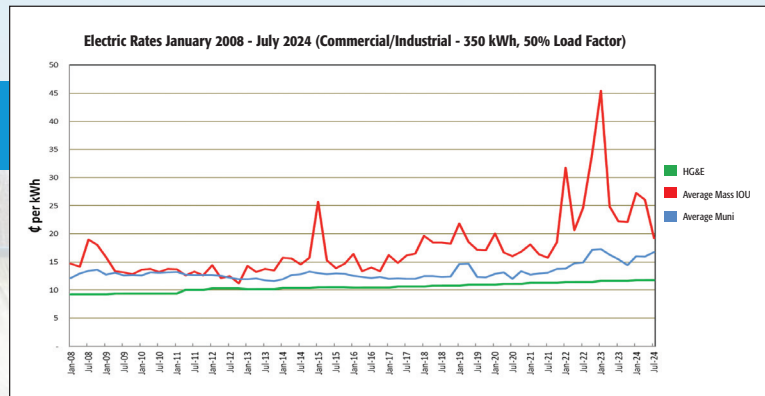
HG&E Electric General Service Annual Savings - \$5,275.64  
HG&E Electric Small Industrial Annual Savings - \$5,183.16

**2024 Commercial & Industrial Electric Rate Comparison  
40 kW - 10,000 kWh Consumption/Month**

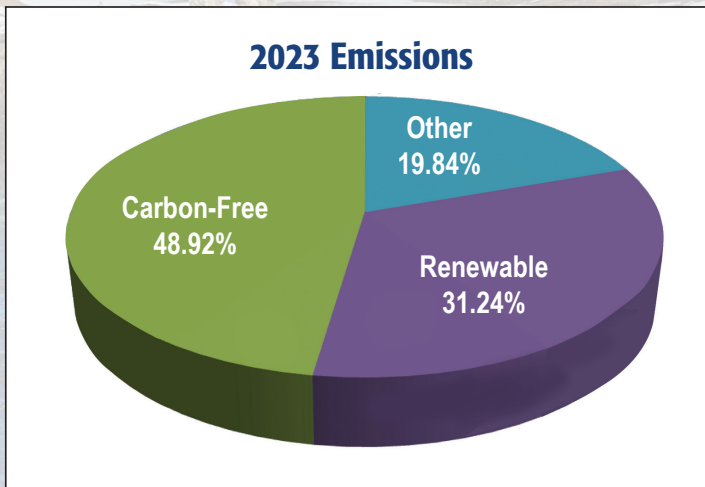


HG&E Electric General Service Annual Savings - \$17,472.36  
HG&E Electric Small Industrial Annual Savings - \$17,152.92

## History of Electric Rates



## Your Renewable Energy Future



HG&E's goal is to expand carbon-free sources of electric generation in environmentally sensitive ways and promote the reduction of energy use through energy efficiency programs, all while maintaining some of the lowest electric rates in the Commonwealth of Massachusetts. This successful balance is reflected in the fact that HG&E's carbon footprint is significantly less than that of the average utility in New England.

*toward a carbon-free energy mix has been steady and forward looking.*





# A Century-Plus Old Mill Comes to Life

## *The Residences on Appleton to be All-Electric*

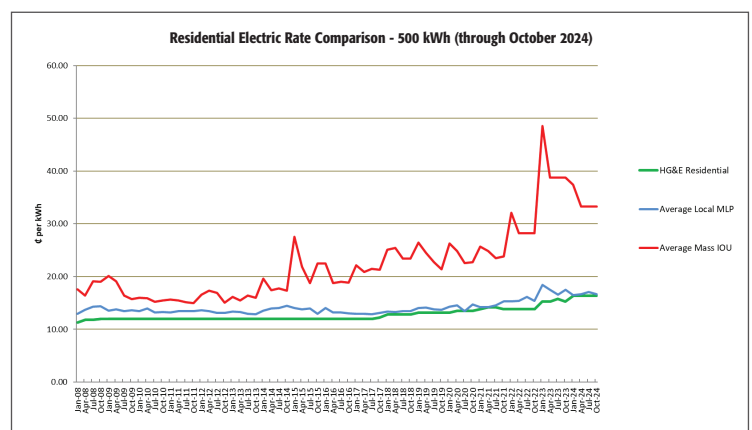
Those traveling on or near Appleton Street notice the ongoing work at the former Farr Alpaca Mill as it transforms into a residential space with 88 income-based apartments for those 55 years and older. Once one of world's largest wool mills that utilized Holyoke's natural and renewable resource of hydro power, the nearly 120-year-old Mill is preparing for its next chapter, again utilizing that natural resource.

The new residential community, being constructed by Boston-based Winn Development, a company with years of experience and expertise in redeveloping old mills into housing, will be all electric, utilizing the green energy supplied by the Connecticut River and delivered by Holyoke Gas & Electric.

An important consideration in choosing a place to live for consumers strapped by the high cost of living is high utility rates for electric power and heat. At The Residences on Appleton, in the heart of Downtown Holyoke, the all-electric building will provide the low cost, highly efficient low-carbon energy that makes Holyoke so attractive (see residential rate comparison chart).

Designed to meet the sustainability criteria of Enterprise Green Communities, the new apartment community will be 100% electric and will feature LED lighting, Energy Star appliances, low-flow, water-conserving plumbing fixtures, and premium roof insulation.

The residences Winn Development is creating will offer a spectacular reuse of a revitalized resource, with a renewable resource powering the community. Occupancy is planned for late 2025.





## Customer Spotlight:

# Sublime Systems to Revolutionize Cement Production in Holyoke

With a promise to reshape the landscape of local manufacturing and global construction, Sublime Systems has announced its plans to bring cutting-edge, low-carbon cement manufacturing technology to Holyoke, Massachusetts. Born out of MIT and Somerville, Massachusetts' Greentown Labs, Sublime is set to leverage Holyoke Gas & Electric's (HG&E) low-cost and low-carbon utility services and hit the ground running.

Sublime Systems, founded in 2020, emerged from the innovative research conducted at MIT. The company's groundbreaking process aims to revolutionize the cement industry by replacing the traditional, heat and fossil-fuel intensive thermal process with an electrochemical alternative. This approach allows for the production of low-carbon cement at near-ambient temperatures using low-carbon electricity. Cement production currently accounts for 8% of global carbon dioxide emissions. Sublime's technology targets both major sources of these emissions: the heating and the CO<sub>2</sub> released from limestone.

## Holyoke, the Home of Innovation

Sublime Systems has secured a strategic location for its operations along Holyoke's historic, three-tiered, 4.5-mile canal system, which runs throughout downtown Holyoke. The canal system hydroelectric

units, combined with HG&E's Hadley Station facility, produce a total combined hydroelectric capacity of approximately 50 megawatts. At the turn of the century, these assets were utilized by factories to drive mechanical equipment and later converted to electric generation facilities. Sublime Systems will certainly contribute to Holyoke's rich history of innovation and sustainability at their 16-acre site on Water Street, reviving an area that was once bustling with business.

**"Holyoke Gas & Electric is exactly the partner we needed to greenlight the construction of our first commercial low-carbon cement plant, based on their affordable rates, renewable energy portfolio, and commitment to the community,"** said Project Development and Community Relations Manager Pat Beaudry.

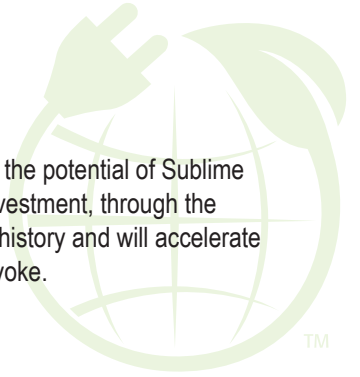
One major factor in the decision to locate in Holyoke was the availability of low-cost, low-carbon energy. Holyoke Gas & Electric (HG&E) is a local, municipal utility with the power to grow business. Located at the crossroads of New England, Holyoke offers an affordable, business-friendly community with many incentives and programs to assist businesses' needs.

The arrival of Sublime Systems is expected to have a significant positive impact on Holyoke's economy, which will contribute greatly to the community as a whole.



We're thrilled to welcome Sublime Systems to Holyoke. This project not only aligns with our commitment to working with clean tech companies but also promises to be a catalyst for economic development in our region," mentioned James Lavelle, HG&E's General Manager. "We hope that HG&E's ability to offer some of the lowest utility rates in the region, combined with our uniquely low-carbon energy portfolio, will attract more companies like Sublime Systems who are looking to reduce their carbon footprint while benefiting from competitive energy costs.





## Substantial Federal Support

The U.S. Department of Energy's (DOE) Office of Clean Energy Demonstrations has recognized the potential of Sublime Systems' technology, selecting the company for an up-to \$87 million funding partnership. This investment, through the Industrial Demonstrations Program, is part of the largest industrial decarbonization effort in U.S. history and will accelerate the scaling of Sublime's "true-zero" manufacturing technology to its first commercial scale in Holyoke.

## Looking Ahead

As Sublime Systems prepares to scale up its low-carbon technology in Holyoke, the project stands as a testament to the potential of innovative, climate-friendly solutions. By bringing high-quality jobs to Massachusetts and pioneering sustainable manufacturing practices, Sublime Systems is not just producing the cement of the future – it's laying the foundation for a cleaner, more sustainable world.

For more information on HG&E's commercial opportunities and economic development, visit [www.hged.com/commercial/default.aspx](http://www.hged.com/commercial/default.aspx).

### Benefits of a Municipal Utility

HG&E is a municipal utility, which means that we are owned by the community we serve – Holyoke. Unlike private utilities, we do not answer to shareholders thousands of miles away. Instead, we answer to our customers. Here are some reasons why a municipal utility is the best choice for Holyoke:

- We operate in the public interest – to improve the quality of life for our customers and the community.
- We are leaders in renewable energy, sustainability and environmental stewardship, with a focus on the future success of the community.
- Our focus is on providing you with excellent and reliable service instead of making a profit for corporate shareholders.
- Our employees live in the community, and many are HG&E customers themselves.
- If a customer has a complaint, they can discuss the problem locally, with HG&E management, and be assured that the problem will be addressed.
- Local ownership means that a good portion of our customers' energy dollars stay in the community – creating jobs and supporting the local economy.
- Our rates and services are controlled locally. This enables us to make decisions and provide services that specifically benefit the community.
- We provide our customers with energy at some of the lowest rates in Massachusetts.
- Our low energy rates and innovative energy conservation incentives serve to assist the City's Economic Development efforts.

### Savings for Commercial & Industrial Customers

**COMMERCIAL ENERGY CONSERVATION PROGRAM:** Financial assistance at 0% interest for qualifying energy efficiency projects.

**ECONOMIC DEVELOPMENT DISCOUNTS:** New, non-contract commercial and industrial customers in Holyoke can receive a 10% discount on electric and natural gas bills for three years.

**HG&EV - ELECTRIC VEHICLE EDUCATION & INCENTIVES:** Learn about electric vehicles (EVs), charging equipment and infrastructure, and currently available incentives for commercial properties on our new HG&EV website, [www.hged.com/ev](http://www.hged.com/ev).

**COMMERCIAL ENERGY AUDITS:** Gain insight into ways to reduce your building's energy use by receiving an energy audit for your commercial property.

**REBATES:** Rebates available for qualifying equipment.

**COMMERCIAL DEMAND RESPONSE:** Program that incentivizes commercial and industrial customers who reduce power usage, or electric 'demand,' during certain times each month when demand for electricity is highest across the entire New England grid, including locally in Holyoke.

For more information, contact Michael Curtin by phone (413) 536-9319 or email [mcurtin@hged.com](mailto:mcurtin@hged.com).

[www.hged.com/SAVE](http://www.hged.com/SAVE)