

TABLE OF CONTENTS

Building on Holyoke's long history of innovation and energy leadership, HG&E's Sustainability Plan highlights a set of strategies and actions that will help the community reach net-zero greenhouse gas (GHG) emissions by 2050.

Introduction	3
Management Letter	4
In This Report	5
Electric Supply & Roadmap to 2050	6-7
Gas Supply & Roadmap to 2050	8-9
Energy Efficiency & Electrification	10
Grid Modernization & Demand Management	11-12
Residential Efficiency Programs	13-14
Commercial Efficiency Programs	15
Electrification Pathway to 2050	16
Community	17
Recognitions	18
Leading the Way	19

Leadership

Commissioner Francis J. Hoey III, Commission Chairman Commissioner James A. Sutter, Commission Vice Chairman Commissioner Marcos A. Marrero, Commission Secretary James M. Lavelle, Manager

INTRODUCTION

HG&E's Pathway to Net-Zero



MASSACHUSETTS MUNICIPAL LIGHT PLANT GREENHOUSE GAS EMISSIONS STANDARDS







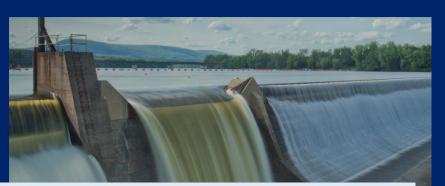
Holyoke Gas & Electric (HG&E) is committed to protecting the environment while providing affordable energy services that meet the needs of the community. The State of Massachusetts announced an aggressive state-wide goal to achieve net-zero greenhouse gas emissions by 2050, with statewide emissions reductions targets of 50% by 2030, 75% by 2040 and 85% by 2050. These actions set forth a plan for reductions that will be 85% below the 1990 levels. This document outlines the innovative steps HG&E has taken in recent history to protect the environment, without mandate, while framing current and future initiatives that will help meet future decarbonization targets. This approach is dynamic and will continue to be modified as regulations evolve and additional resources become available.

Prior to these state-level mandates, HG&E has realized significant emission reductions through a focus on clean energy investments and energy efficiency over the last three decades. In 2021, 95% of Holyoke's electric supply came from carbon-free sources but the net-zero strategy will not come without challenges. Any additional percent of carbon-free energy, and any increase in customer demand, will come at a premium to HG&E customers.

Here at HG&E, we believe we all must do our part to address climate change as we strive to maintain our progressive path to a cleaner tomorrow.

REPORTING PROGRESS

Management Letter



Since its establishment in 1902, HG&E has had a strong history of innovation, triumph, and sustainability, and continuously maintains some of the lowest utility rates in the region. Currently, a large percent of Holyoke's population is low-income, minority, and/or English is not their primary language. With this in mind, HG&E remains committed to making essential utility services affordable and accessible to meet the needs of the entire population.

HG&E has been recognized as a leader in utility transformation and clean energy innovation. Partnering with national and regional energy leaders, over \$5 Million in grant funding has been received to support local, clean energy goals and HG&E has invested approximately \$20 Million in collaborative clean energy projects that provide carbon-free energy to the community while enabling future clean energy development. Additionally, HG&E continues to offer and build upon energy efficiency, electrification, and demand response programs that assist with saving energy and money for customers, stabilizing rates, and reducing carbon emissions.

On the electric supply side, the generating resource fuel mix has changed significantly over the last few decades, increasing clean energy sources that replaced fossil fuel generators. We are committed to continue that trend moving forward by balancing competitive rates while maintaining and increasing clean energy within the fuel mix through sustainable, long-term business practices, keeping the best interest of the ratepayers in mind.

On the natural gas supply side, over the last 30 years, HG&E has been focused on transitioning from its use of higher emitting fuel sources, such as oil and propane, to natural gas, successfully reducing GHG emissions. Even with system growth of 21%, HG&E's emissions have dropped 29% since 1990. In 2005 and 2010, respectively, HG&E decommissioned Holyoke's Propane-Air Plant, focusing its use on cleaner-burning LNG, and its Steam Plant, converting steam customers to the cleaner, natural gas alternative. HG&E is a leader in innovation and customer fuel conversion with a focus on viable and cost effective alternatives. Supporting the state's climate goals for 2050 will include continued analysis of natural gas operational practices and new regulations, as well as emerging technologies.

HG&E has identified critical components of the energy transition, one of which is time. It is unreasonable to assume we can quickly meet net-zero goals or convert to all clean electric equipment in short order, we see this as a long-term strategy that will grow and evolve over the next three decades. At present, energy efficiency is extremely important to saving energy and money. We also see natural gas playing a key role in the road that will lead us to a carbon-free future, as it currently provides a lower emissions and lower cost solution for customers. Natural gas, emitting fewer GHG emissions than oil or propane, represents an important bridge to a carbon-free future.

HG&E will continue to work diligently to provide customers with competitive rates, innovative and sustainable energy solutions, reliable service, and excellent customer care. We appreciate the support of our customers, elected officials, and community partners.

Respectfully, James Lavelle, Manager

IN THIS REPORT

This report outlines the significant steps HG&E has taken in recent history to protect the environment, while framing current and future initiatives that will help meet targets set by the state. The approach is dynamic and will continue to be modified as additional resources become available.



Environmental

HG&E prides itself on its ability to conserve and protect the environment, while reducing the overall carbon footprint of the Holyoke community.

HG&E's mission is to provide competitive rates, innovative and sustainable energy solutions, reliable service, and excellent customer care.



Social Responsibility

Through innovative local clean energy projects including hydro, solar and battery storage, and through the procurement of additional carbon-free electric supply, HG&E consistently maintains an electric portfolio that is comprised of a high percent of renewable and carbon free electricity. The Holyoke Dam and canal system alone, acquired in 2001, can produce on average 65% of the city's electrical power. HG&E's electric mix far exceeds the Commonwealth's renewable portfolio standard requirements for independently operated utilities. HG&E takes its social and community responsibilities very seriously, offering customers some of the lowest utility rates in the Commonwealth. In addition, HG&E is available to help customers with budget billing, payment plans, connections to fuel assistance, and energy efficiency opportunities.



Governance and Community Engagement

As a community-owned, municipal utility, HG&E is committed to transparency and accountability. HG&E is governed by a Board of Commissioners whose members are appointed by the Mayor of Holyoke. The Commissioners are sworn to uphold and operate in the best interest of the ratepayers. The Commission holds monthly public meetings and posts the minutes on the Department's website (hged.com). HG&E also coordinates with community organizations to share important information and gather feedback. This engagement is important to HG&E.

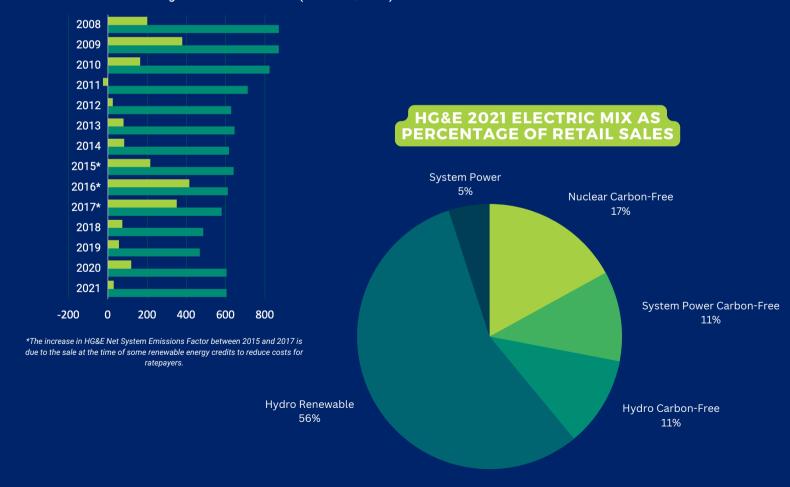
ELECTRIC SUPPLY & ROADMAP TO 2050

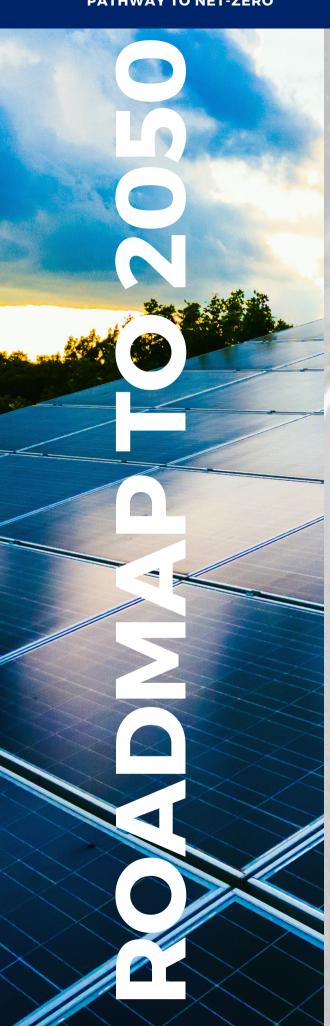
The carbon-free portion of HG&E's overall electric portfolio mix is currently among the highest in the region, and HG&E is uniquely positioned in the near term to meet or exceed the state targets through 2035 due to owning hydro-electric generation assets, deployment of various utility-scale clean energy projects throughout the city, and strategic procurement of power generated from clean energy resources. However, there is still a need to purchase electricity from the New England Grid during certain times throughout the year in order to meet the total customer demand.



HG&E'S CARBON FOOTPRINT: 2008 - 2021 COMPARISON AGAINST THE AVERAGE MASSACHUSETTS EMISSIONS FACTORS

- HG&E Net System Emissions Factor (Lbs CO2e/MWh)
- Mass-Based Non-Biogenic Emissions Factor (Lbs CO2e/MWh)





ELECTRIC SUPPLY ROADMAP:

TO ACHIEVE A NET-ZERO PORTFOLIO BY 2050, HG&E WILL RELY ON THE **FOLLOWING:**

- Decarbonization of the regional electric sector
- Focus on maintaining carbon-free electric supply that remains in compliance with Massachusetts Municipal Light Plant GHG emissions standards (50% by 2030, 75% by 2040 and 100% by 2050)
- Innovative research and development of clean energy technologies
- Continue to offer energy efficiency programs to help reduce customer electric use in order to assist with maintaining and advancing a clean electric portfolio
- · Maintain competitive rates
- Explore and engage in carbon-free power procurement opportunities as they become available beyond 2035* to replace contracts that are ending and to cover anticipated load growth
- Continue to explore and pursue local renewable and/or clean energy projects

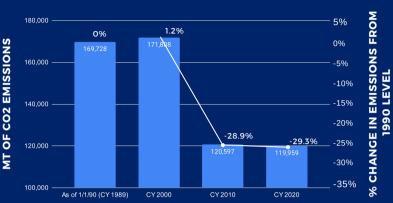
In order to meet the state targets for 2040 and 2050, HG&E will give future consideration to power supply opportunities, such as: local renewable energy projects (hydro, solar, energy storage), off-shore wind, small modular nuclear reactors, Canadian hydro, clean hydrogen, as well as emerging technologies.

*HG&E has hedged long term power supply contracts that meet and/or exceed the states targets though 2035.

NATURAL GAS SUPPLY & ROADMAP TO 2050

HG&E's natural gas portfolio is made up of both firm pipeline capacity from the Tennessee Gas Pipeline and liquefied natural gas (LNG) which is stored at HG&E's West Holyoke LNG Facility. The Tennessee Gas Pipeline's Northampton Lateral, however, is severely constrained due to a dramatic increase in demand between 2000 and 2020. This increase in demand was largely attributed to residents converting from oil and propane to cleaner natural gas, which has assisted the overall community by reducing emissions. Unfortunately, there has been no corresponding increase in pipeline capacity to deliver additional supply to the region.

HOLYOKE GAS & ELECTRIC - GAS DIVISION MT OF CO2 EMISSIONS 1990-2020

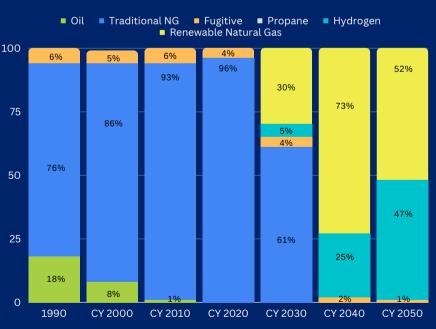


HG&E'S EMISSIONS REDUCTIONS SINCE 1990

As a result of this increase, during peak demand periods HG&E is now operating at capacity. This forced HG&E to impose a moratorium on new natural gas connections in January 2019. Unfortunately, this has led to many residents continuing their use of oil and propane to heat their homes and businesses, hot water, and various other equipment types.

With a moratorium in place, HG&E is actively seeking and reviewing natural gas pipeline solutions and alternatives to help reduce the impact from consumption of higher emitting fuel sources. These solutions may be in the form of pipeline transportation solutions, alternative supply options (LNG), compressed natural gas (CNG), renewable natural gas (RNG), Hydrogen, and Geothermal) and/or energy demand programs that address the system's needs while remaining economical for the customer base and allowing HG&E to achieve its long-term clean energy goals. This has included identifying and targeting the largest natural gas users for energy efficiency and demand side management opportunities.

HG&E NATURAL GAS SYSTEM ENERGY MIX 1990-2050 OUTLOOK



HG&E also explored power-to-gas technologies by assisting ITM Power and Pacific Northwest National Laboratory (PNNL) in the development and evaluation of alternative power-to-gas (P2G) control and dispatch algorithms. However, it was determined that without cavern-like storage for hydrogen, the technology would not be cost effective to implement. HG&E continues to review and monitor hydrogen solutions that could help reduce overall emissions to the community.



HG&E'S NATURAL GAS SUPPLY ROADMAP TO 2050 INCLUDES THE FOLLOWING:

- Focus on alternative solutions to reducing GHG emissions, such as renewable natural gas, hydrogen, and alternative thermal energy technologies
- Continued focus on elimination and replacement of leak prone assets and upgrades to the gas distribution system through aging infrastructure replacement plans. Since 1990, these efforts have resulted in avoided emissions of over 64 metric tons (MT) of GHG emissions.
- Focus on compliance with state regulations and mandates as they relate to net-zero goals for the natural gas industry
- Promote awareness of alternative options to natural gas when viable and cost effective
- Focus on aggressive, targeted, and innovative energy efficiency programs that will encourage replacement of low efficiency natural gas systems, weatherization enhancements and overall energy reduction (see Energy Efficiency section for more detail)
- Focus on reduction of GHG emissions from the direct use of oil and propane to benefit the community as a whole

In order to meet the state targets for 2040 and 2050, HG&E will continue to give consideration to innovation and emerging technologies, such as: Renewable Natural Gas, Power-to-Gas (Hydrogen), and Ground Source Heat Pumps, as well as to technologies not yet developed or considered.

ENERGY EFFICIENCY & ELECTRIFICATION

Energy efficiency and electrification will play a major role in our local energy transition. HG&E currently offers a variety of energy efficiency programs, which incentivize customers to conserve energy, as well as a variety of electrification programs, which encourage customers to convert from fossil-fuel based equipment to electric alternatives. In addition, HG&E works to educate customers on new and emerging technologies in order to prepare ratepayers for potential adoption. A special focus is placed on energy use in buildings and transportation as these are major energy end-uses. HG&E intends to continue focusing on efficiency and electrification in order to provide customers with tools and resources that will assist along the pathway to net-zero. In addition to offering electrification incentives, HG&E will focus on keeping electric rates competitive, which will continue to incentivize customers to adopt electric technologies and equipment.

Building

Buildings consume roughly 40% of the energy used in the United States. Therefore, in order to achieve Massachusetts' climate goal of achieving net-zero emissions by 2050, many technologies which have historically operated on fossil fuels will need to be converted to highly efficient electric alternatives powered by low-carbon, or carbon-free, electricity.

In the building sector, HG&E continues to offer and expand energy efficiency and electrification programs which provide incentives for the installation of cleaner, more efficient, alternative technologies with a special focus on energy used for heating, as heating is a major use of energy in buildings. In 2021, HG&E launched a Whole-Home Heat Pump Program, designed to support the installation of high-quality, high-efficiency and optimally designed air source heat pump systems that replace fossil fuel heating systems. HG&E plans to target customers who heat with oil and propane, the highest-emitting fossil-fuel based space heating fuel types, with information about this program in 2023.

Transportation

In the U.S., the transportation industry accounts for 28% of total GHG emissions. Advances in electric vehicle technology now allow customers to convert from gasoline vehicles more easily, saving up to 70% on GHG emissions with the current New England power mix. To support electrification of the transportation sector, HG&E provides various incentives for off-peak electric vehicle charging as well as education on state and federal incentives and continues to seek grant funding opportunities available for charging infrastructure. Through the program website (hged.com/ev), customers can learn about the benefits of electric vehicles, incentives available, and contact electric vehicle specialists for personalized support. In 2022, HG&E installed Level 2, dual port charging stations at the Holyoke Public Library, the Holyoke Amtrak Station, Veterans Park (on-street parking on the corner of Dwight Street and Chestnut Street), and HG&E's Main Office with the assistance of a grant through MassEVIP. HG&E also coordinates with local dealerships who provide education on our electric vehicle incentives, and public electric vehicle test drive events.

GRID MODERNIZATION & DEMAND MANAGEMENT

Electrification of the building and transportation sectors is anticipated to increase overall demand for electricity so it is critical that HG&E continue to strategically improve distribution infrastructure in order to meet future demand.

GRID MODERNIZATION

In 2021, HG&E developed a comprehensive grid modernization plan that identifies a strategic path forward, including cost effective grid solutions that can be implemented over time. The recommended grid improvements will modernize the distribution system, improve reliability, and allow for adoption of additional clean energy technologies in the future.

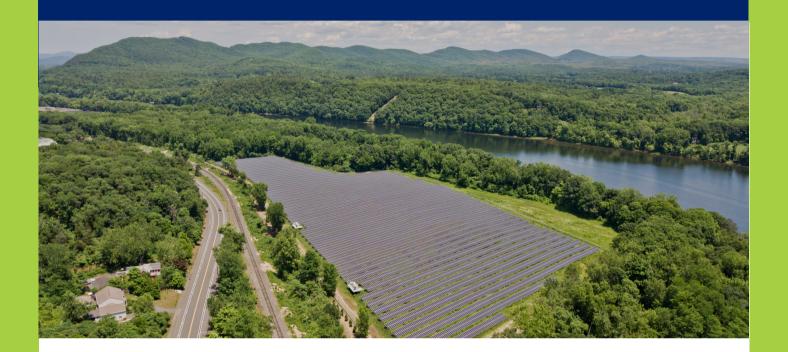
As part of the grid modernization plan, HG&E has developed a sophisticated advanced metering infrastructure that is being installed with target completion by 2028. Advanced metering technologies will be instrumental in reaching future clean energy goals by assisting HG&E with data analytics, energy efficiency assessments, consumption management, outage communication, power quality reporting, and remote accessibility.

The shift to clean energy will increase the importance of system reliability and resiliency, it will also change the way in which distribution systems are planned and operated. To improve reliability and limit the number of customers impacted by a particular outage, HG&E has been deploying automated "Smart" equipment across the system that can sense the system operation and attempt to "self-heal" itself. The higher level of automation will transform the traditional distribution system into smart distribution systems. HG&E will continue to install new technology to strengthen the distribution system-resiliency and response to disturbances.

DEMAND MANAGEMENT

Because electrification will result in increased demand on the electric grid, managing this demand will become increasingly important. Lowering demand during peak periods can reduce stress on the electric infrastructure and help to defer certain costly upgrades. Lowering demand during gas peaks can also help stabilize customer rates and overall system reliability.

DEMAND MANAGEMENT (CONTINUED)



Load Reduction & Energy Storage Systems

Since 2012, HG&E has realized significant savings by deploying load reducing (LR) assets, which help offset HG&E's peak loads and are strategically dispatched during periods of high demand. In 2021, twenty-four individual LRs, including solar, hydro, fossil fuel generators and two additional lithium-ion battery systems helped to lower HG&E's monthly peak load. The strategic utilization of these assets is expected to continue providing yearly savings of over \$1 million.

In 2021, HG&E signed two additional energy service agreements for energy storage systems totaling 9.55 MW / 28.65 MWh, slated to be commercially operational by the end of 2024. Energy storage is a significant strategic opportunity for Holyoke and will help improve grid operations, defer costly infrastructure upgrades, reduce energy costs, provide backup power through storms, complement intermittent renewable generating assets, and benefit the local economy.

Customer Demand Response Programs

HG&E offers a variety of electric demand response programs that encourage customers to reduce or shift their use of electricity when demand is highest. Additionally, HG&E continues to explore new demand response program opportunities to assist with both electric and natural gas peaks.

HG&E'S <u>RESIDENTIAL</u> ENERGY EFFICIENCY, ELECTRIFICATION & DEMAND RESPONSE PROGRAMS



Residential Energy Conservation Program

This program provides financial assistance at 0% interest for the implementation of qualifying energy efficiency, electrification and renewable energy projects including energy efficient heating and cooling systems, hot water heating systems, weatherization projects, electric vehicle charging infrastructure, solar panels and more.

Appliance Rebates

HG&E provides rebates for a variety of energy efficient appliances including qualifying hot water heaters, dishwashers, air conditioners, dehumidifiers, air purifiers, refrigerators, clothes washers & dryers, and thermostats.

Weatherization Rebates

Rebates for weatherization projects include a rebate of 50% of the cost up to \$2,000 for qualifying insulation, air sealing and duct sealing projects as well as a blower door test rebate of 50% of the cost up to \$500.

Heating & Cooling Rebates

Various rebates are available for qualifying energy efficient heat pumps, mini-splits, and central air conditioners. The central air conditioner rebate is \$100/ton up to \$500. The basic heat pump and mini-split rebate is \$250-ton up to \$1,000. Through our Whole-Home heat pump program, HG&E offers a higher rebate of \$600-\$750 per ton up to \$3,000 for qualifying heat pump systems designed to provide 100% of a home's heating. Through the Mitsubishi Muni Heat Pump Discount, customers can receive an additional \$300-\$600 discount off heat pump installation costs when they work with a Mitsubishi Diamond Contractor.

For more information visit hged.com/save.

HG&E'S RESIDENTIAL ENERGY EFFICIENCY, ELECTRIFICATION & DEMAND RESPONSE PROGRAMS (CONTINUED)



Electric Vehicle Charger Program

HG&E's electric vehicle charger program provides customers an ongoing \$5-\$10 monthly incentive as well as a \$200-\$450 Level 2 charger rebate for avoiding charging during certain hours when demand for electricity is highest.

Beat the Peak

Through this voluntary demand response program, customers are encouraged to reduce energy use when demand for energy is highest by signing up to receive alerts of upcoming peak events.

Connected Homes Smart Device Monthly Incentives

Through this program, customers can enroll qualifying smart devices to be remotely adjusted a few times each month when electric demand is highest. Customers receive a \$5-\$8/month incentive for enrolling a qualifying smart thermostat, HVAC control or water heater in this program.

Free Home Energy Audits

Residential customers are eligible to receive free home energy audits. During the audit, a professional energy advisor assesses the customers home and identifies ways that they can save on their energy bills such as adding insulation to a certain area of their home or upgrading their heating equipment. Customers receive an audit report listing all recommendations along with estimated annual cost savings

For more information visit hged.com/save.

HG&E'S <u>COMMERCIAL</u> ENERGY EFFICIENCY, ELECTRIFICATION & DEMAND RESPONSE PROGRAMS

Commercial Energy Conservation Program

This program provides financial assistance at 0% interest for qualifying energy efficiency, electrification, and renewable energy projects in commercial and industrial buildings. Eligible project types include energy efficient heating and cooling systems, hot water heating systems, weatherization projects, energy audits, electric vehicle charging infrastructure, solar panels and more.

Carbon-Free Electric Pilot Program

In 2022, HG&E rolled out a pilot program for commercial and industrial customers who are interested in purchasing 100% carbon-free electricity. Through this program, HG&E will procure the supplemental carbon-free electricity required by purchasing and retiring Renewable Energy Certificates and passing those costs along to the customer on their monthly HG&E bill. Program participants receive carbon-free electricity marketing materials including: a carbon-free logo, print indicia, and webpage materials.

Commercial Demand Response Program – Coming Soon

HG&E anticipates the launch of a new commercial demand response program that will provide customers an incentive for assisting HG&E in reducing demand on the electric grid during the times when demand is highest. Customers will be able to receive an incentive for either dispatching electricity during peak demand events, or, through curtailing their use of electricity.

FOOTPRINT NEWSLETTER

In 2021, HG&E launched FOOTPRINT, a regular newsletter to inform key stakeholders and the community at large about HG&E's leadership in renewable energy. This provides another avenue to share HG&E's initiatives around innovation in working towards a carbon-free energy future.

Additional Incentives:

HG&E connects commercial customers to a variety of incentives and resources that are available through partner organizations, the state, and/or federal government.

Learn more at hgev.ene.org.



MOMON

ENERGY EFFICIENCY & ELECTRIFICATION PATHWAY TO 2050

- Balance energy efficiency and electrification programs with low rates
- Educate customers and contractors on energy efficiency and electrification opportunities and promote associated incentives (HG&E, MassCEC, DOER...etc.)
- Align HG&E incentive programs with state and federal incentives and local customer needs
- Educate and promote HG&E, state and federal efficiency and electrification incentives, focusing on low and moderate-income customers and multi-family buildings
- Research emerging technologies
- Continue to analyze consumption and target customer opportunities
- · Focus on energy audits
- Seek grant opportunities and partnerships
- Continue to refine and track estimated energy and emissions savings for customers who participate in HG&E incentive programs
- Monitor load growth from electrification and continue to be proactive in upgrading infrastructure as necessary
- Improve electric distribution system efficiency through new automated "Smart" technology
- Demand Management to improve cost savings, strain on grid, and lower emissions
- Maintain effective vegetation management plan to minimize severe weather impacts
- Evaluate and promote cost-effective emerging technologies



HG&E is empowering the community through investments that go beyond powerlines and distribution pipes. This includes providing energy conservation and safety education programs, volunteering, supporting non-profit organizations, facilitating tours, hosting monthly public meetings, and engaging with the community in a variety of other ways throughout the year. This outreach included hosting public events, such as our annual community event to celebrate Public Power Week, providing cadet engineering scholarships, and designing curriculum to support Holyoke students.

HG&E publishes a monthly newsletter, Energy Insights, to keep customers informed and educated. In addition, customer surveys have been a valuable tool to gain better understanding of the community needs and areas for improvement. Customers also provide valuable input every day when interacting with HG&E employees.

Environmental Justice Populations

Approximately 31,000 people, or 77% of Holyoke's population, live in a census block group that has been identified as an Environmental Justice community by the Commonwealth of Massachusetts, a designation based on income, English language isolation (no one older than 14 speaks English well in the home) and is a member of a minority population in Holyoke. With this in mind, HG&E commits to continuing to work with community partners to improve opportunities throughout the community and more specifically within our Environmental Justice block groups and is working to incorporate both State and Federal Environmental Justice recommendations into our practices. Some of this work includes:

- Competitive Rates, Discounts, and Budget Plans
- · Connections to Fuel Assistance
- Bilingual Communication & Customer Service
- Community Engagement & Goodwill Program
- Program Development (Schools, Scholarships, Tours, Community Partners)
- Annual Public Power & Natural Gas Week Event

RECOGNITIONS





HG&E has been recognized nationally for its commitment to provide reliable, low cost power to its customers and for its innovation in adoption of new technology. Below are some highlights:



Mt Tom Solar & Battery Storage

Received numerous recognitions including The IRA W. Leighton Jr. Outstanding Innovation Technology Award from Environmental Business Council of New England and Energy Manager Today Project of the Year.

2021 Utility Transformation Leaderboard from the Smart Electric Power Alliance (SEPA)

Recognition for our leadership in transforming to a carbon-free energy system. One of only 10 utilities to receive this designation.

RP3 designated utility by American Public Power Association (APPA)

Recognition given to electric utilities that demonstrate high proficiency in reliability, safety, workforce development, and system improvement. SEPA also ranked HG&E as third nationally in energy storage per capita.

Smart Energy Provider from APPA

For a commitment to and proficiency in energy efficiency, distributed generation, and environmental initiatives that support the goal of providing safe, reliable, low-cost, and sustainable electric service.

Certificate of Excellence in Reliability from APPA

HG&E has also received the Certificate of Excellence in Reliability from APPA.

Ranked 3rd out of 41 Massachusetts Municipal Electric Utilities in Mass Climate Action Networks (MCAN) 2021 scorecard

Utilities were ranked in four categories: energy efficiency, energy transition, transparency, community engagement, and policy context.

Safety Achievement Award from the American Gas Association

For excellence in operating its natural gas utility.

LEADING THE WAY



HG&E is a leader in clean energy innovation, paving the way to a carbon-free future. HG&E has made many strides in decarbonizing its power portfolio and is offering innovative ways for customers to increase energy efficiency in their homes, vehicles, and businesses, and we recognize the path to realizing net-zero emissions by 2050 will be a challenging one.

Department Pathway to 2050 will include:

- Focus on maintaining carbon-free electric supply consistent with the State of Massachusetts net-zero targets by 2050 (50% by 2030, 75% by 2040, 85% by 2050)
- Focus on electrification (transitioning energy technologies and systems from the current fuel type to electric)
- Focus on weatherization and energy efficient equipment
- · Focus on opportunities to transform the heating sector
- Focus on advancements that reduce conventional natural gas usage
- Focus on Demand Management (Load Reduction)
- Focus on emerging technologies and grant opportunities
- · Focus on affordability for all customers
- Focus on collaboration with local, state, and federal stakeholders to protect local control
- Focus on customer engagement, outreach, and education

Together, HG&E will work with customers and the community to pave the the way to a cleaner, greener tomorrow.





Holyoke Gas & Electric 99 Suffolk Street Holyoke, MA 01040 (413) 536-9300 www.hged.com