



Liberty Utilities (St. Lawrence Gas) Corp.

Natural Gas Long-Term Plan Stakeholder
Pre-Filing Information Session

Docket No: 24-G-0630

January 8, 2025

Mark Murray, President



Meeting Logistics

- The purpose of today's Information Session is to share background information regarding the Liberty Utilities (St. Lawrence Gas) Corp. ("Liberty SLG") system to enable stakeholders to effectively participate in the long-term planning process established by the Commission.
- There will be an opportunity for Q&A at the end of the presentation.



Members of the Liberty SLG LTP Team



Mark Murray
President



Erica Menard
Senior Director, Rates &
Regulatory Affairs



Kimberly Dragoo
Director, Key Accounts &
Energy Programs



Josh Tilbury
Director, Energy
Procurement



Dan Burke
Director, Operations



Carolyn O'Connor
Director, Government
Affairs



Christine Downing
Director, Customer
Experience



Kimberly Baxter
Senior Manager, Rates &
Regulatory Affairs



Ryan Hayes
Senior Manager, Engineering
& Resource Planning



Noelle Mashburn
Senior Manager,
Communications & Marketing



Agenda

1. **Background: CLCPA History and LTP Proceeding Timeline**
2. **Company Overview**
3. **Customer Overview**
4. **Gas System Overview**
5. **Existing Decarbonization Efforts**
6. **Q&A**



Background: History of CLCPA and LTP Proceeding Timeline

- The 2019 Climate Leadership and Community Protection Act (“CLCPA”) established state-wide, economy-wide goals to reduce GHG emissions 85% by 2050 from a 1990 baseline.
- The PSC’s 2022 Gas Planning Order requires each gas utility to file a long-term plan.

Liberty SLG LTP Proceeding Timeline

Major Milestones	Timeline
Pre-Filing Information Session (today)	January 8, 2025
Initial Long-Term Plan Filing	January 31, 2025
Technical Conference	~30 days after Initial LTP Filing, late-February 2025
Independent Consultant Report	~75 days after Initial LTP Filing, mid-April 2025
Stakeholder Initial Comments	~30 days after Consultant Report, mid-May 2025
Reply Comments	~14 days after Initial Comments, late-May 2025
Final Long-Term Plan Filing	~30 days after Reply Comments, late-June 2025

- Liberty SLG LTP Website: www.stlawrencegas.com/new-york-gas-long-term-plan

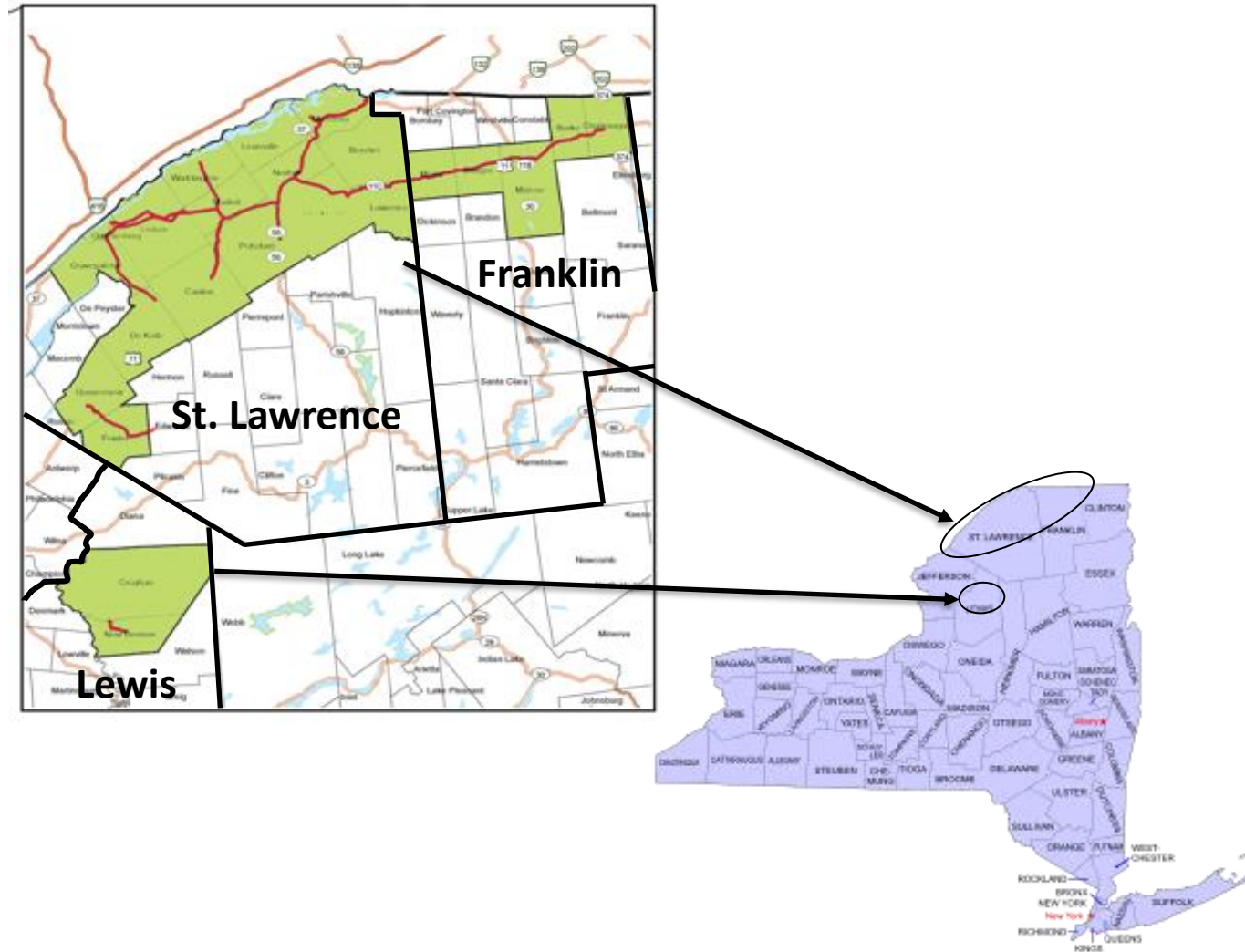


Company Overview

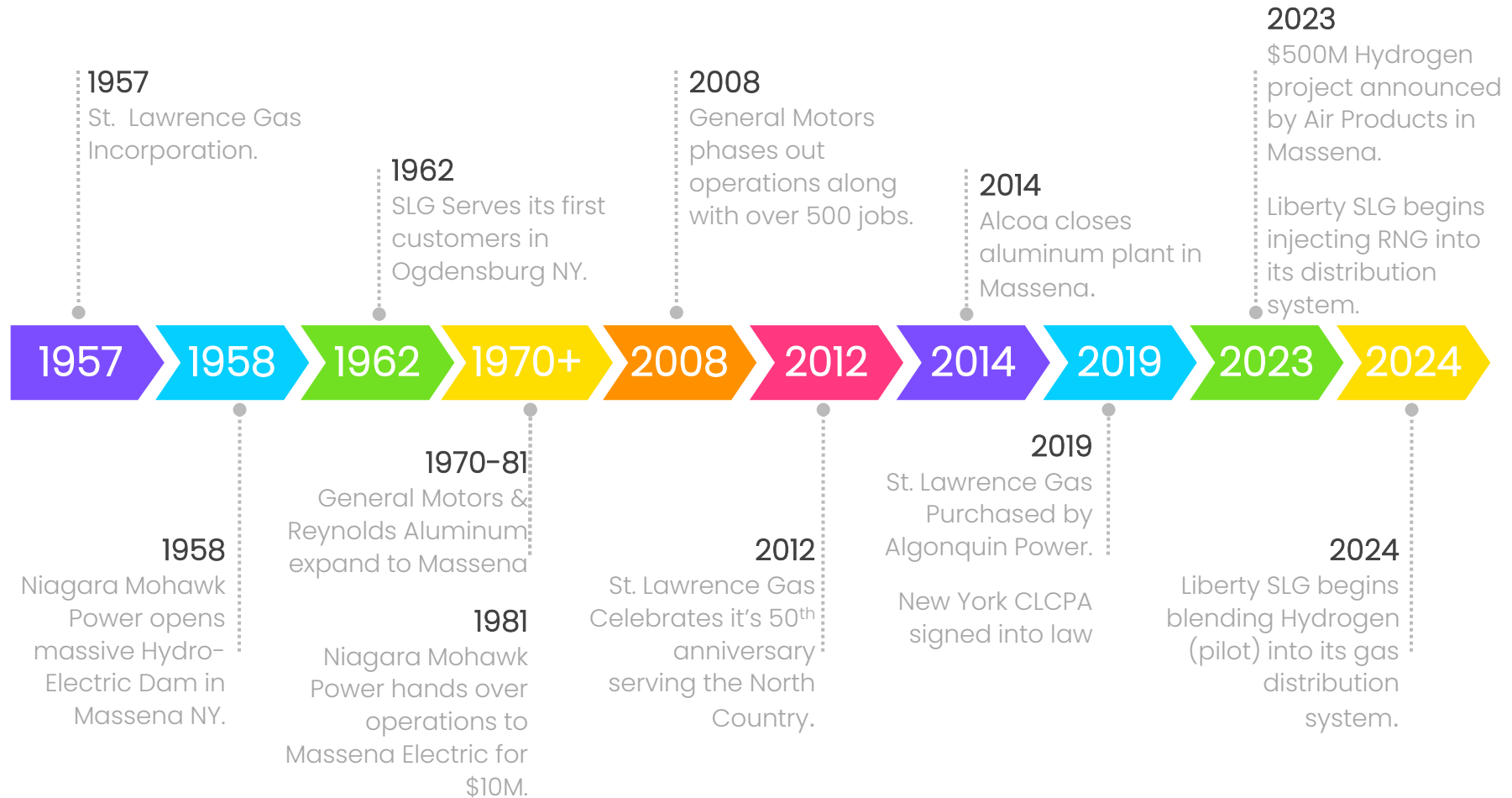


Liberty SLG System Characteristics

- **Communities Served:** Northern portions of St. Lawrence, Lewis, and Franklin Counties
- **Approximately 17,000 customers**
- **Approximately 480 miles of transmission and distribution mains**
 - Expanded into Franklin County in 2015
- **Delivers 2,800 MSCFH at peak load**
- **Regulated by:** New York State Public Service Commission, Pipeline and Hazardous Materials Safety Administration (PHMSA), and others

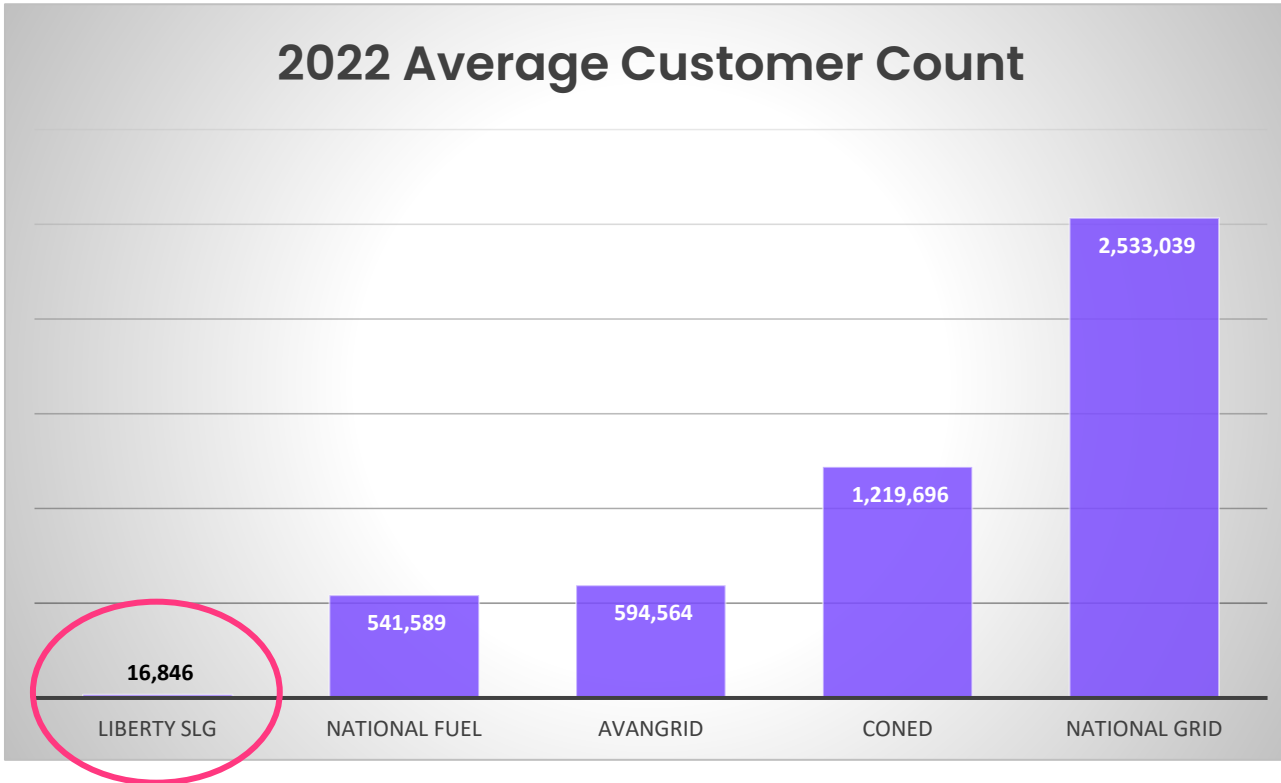


Liberty SLG - 67 years serving the North Country

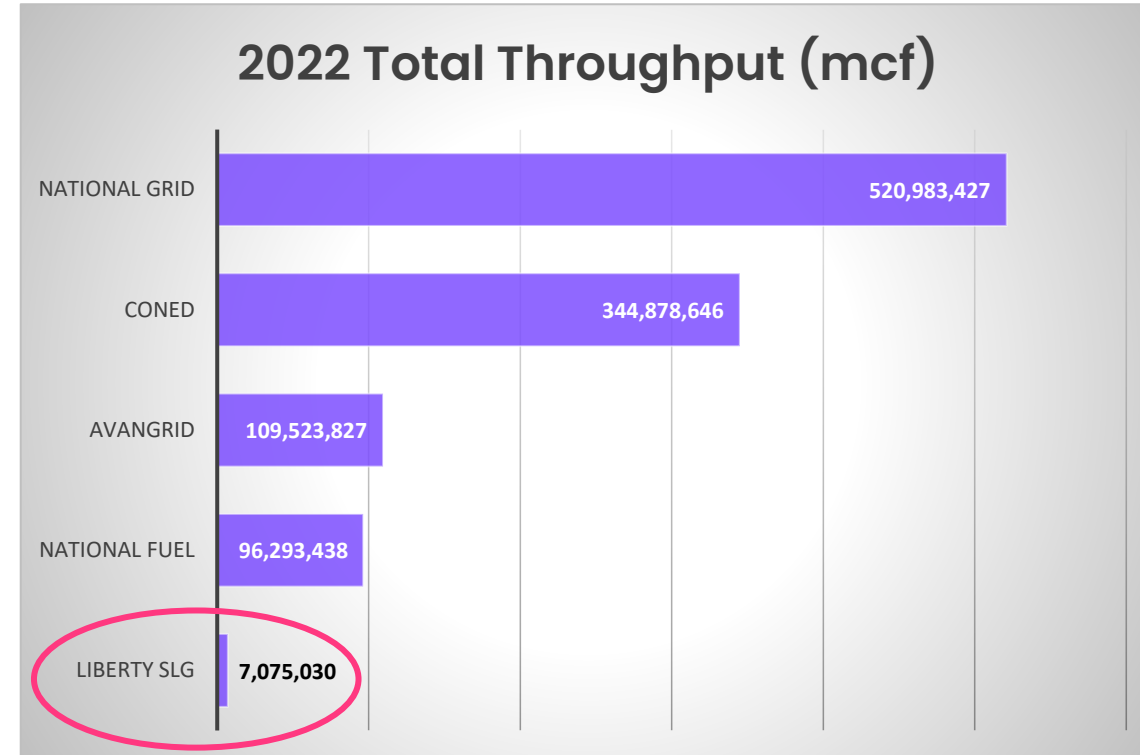


Liberty SLG is a Small Gas Utility Compared to Others in NY

2022 Average Customer Count



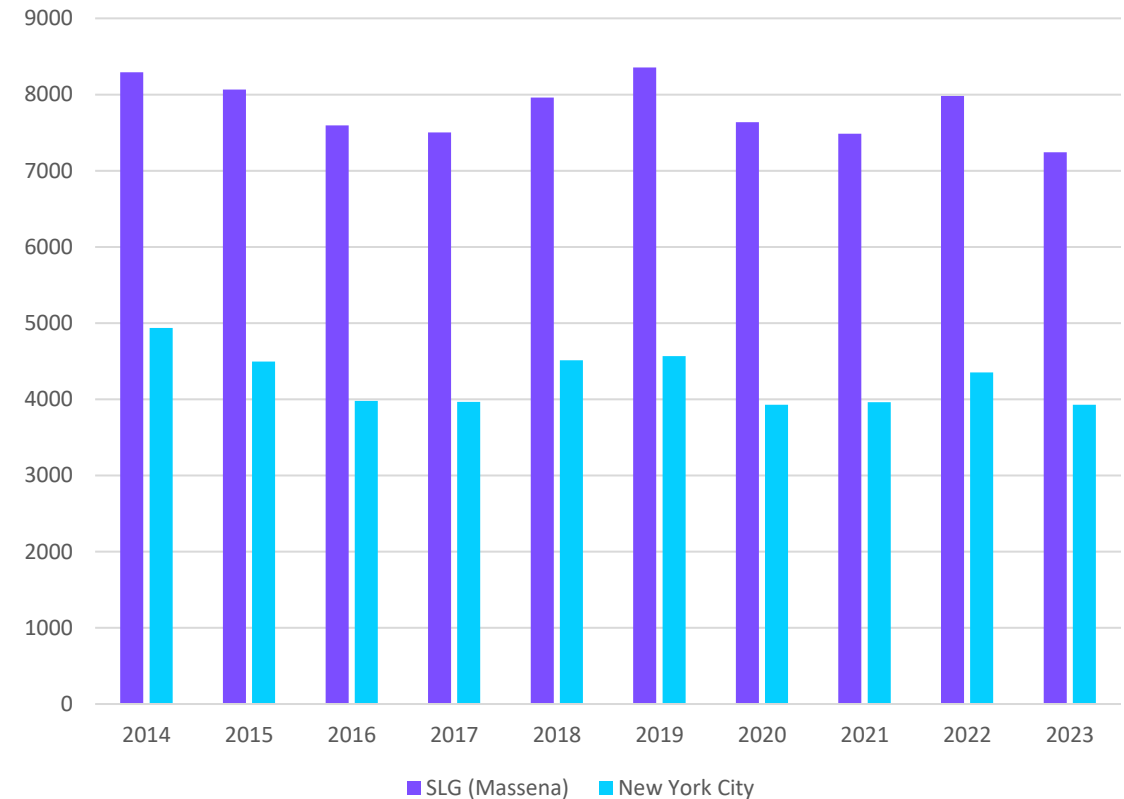
2022 Total Throughput (mcf)



Liberty SLG's Weather is Significantly Colder than Downstate

- Liberty SLG's winters are significantly colder than other parts of the state, with high temperatures ranging between 10°F and 30°F.
 - For the past five years, (2019-2023) Liberty SLG has averaged approximately 7,750 HDD/year, while New York City has averaged approximately 4,150 HDD/year.
- Cold winters require a reliable source of heat, including natural gas.

Annual HDDs - Liberty SLG vs. NYC



Source: NYSERDA



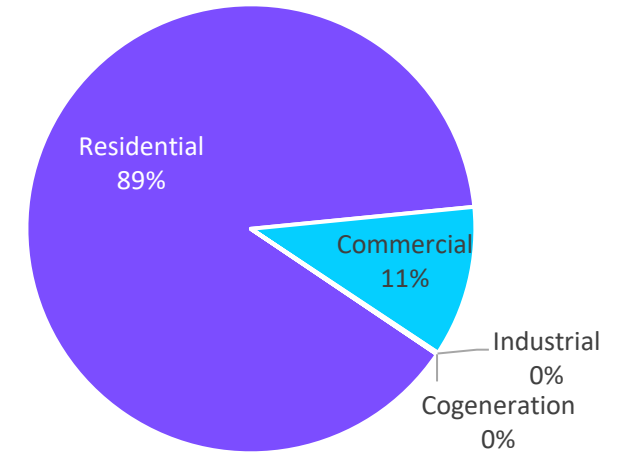
Customer Overview



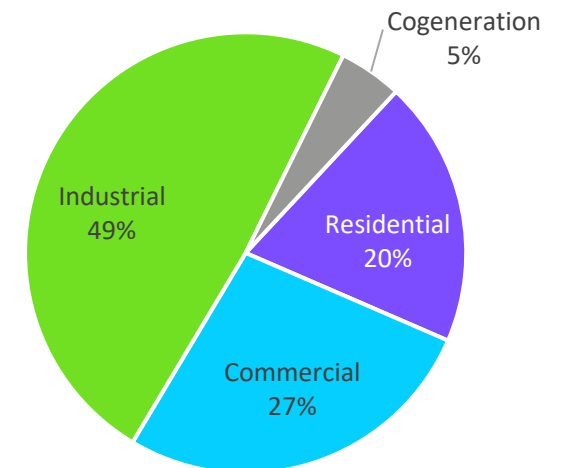
Liberty SLG's Customer Base

- **Approximately 17,000 customers**
- **Almost 90% of customer base is Residential**
 - 19% of service territory at or below the poverty rate
 - Residential load is 20% of total usage
- **Commercial customers make up 11% of customer base**
 - Commercial customers represent 27% of total load
- **Industrial and cogen customers combined make up <0.2% of the customer base, but represent over half of total load**
- **Industrial load is primarily comprised of:**
 - Paper mills
 - Aluminum smelting
 - Glassware and glass product manufacturing
 - Dairy production/cheese manufacturing

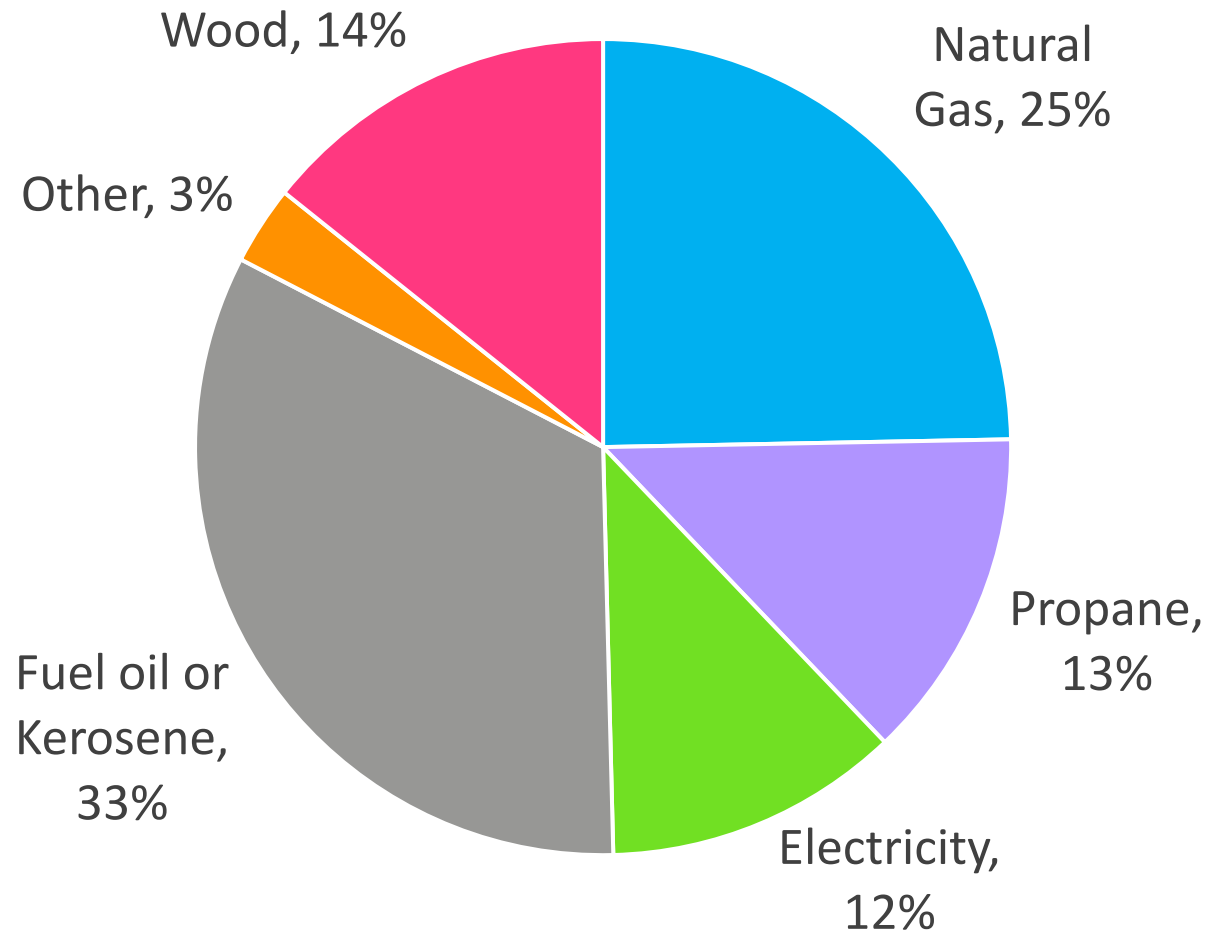
Customer Count



Customer Usage



Home Heating – Franklin, Lewis and St. Lawrence Counties



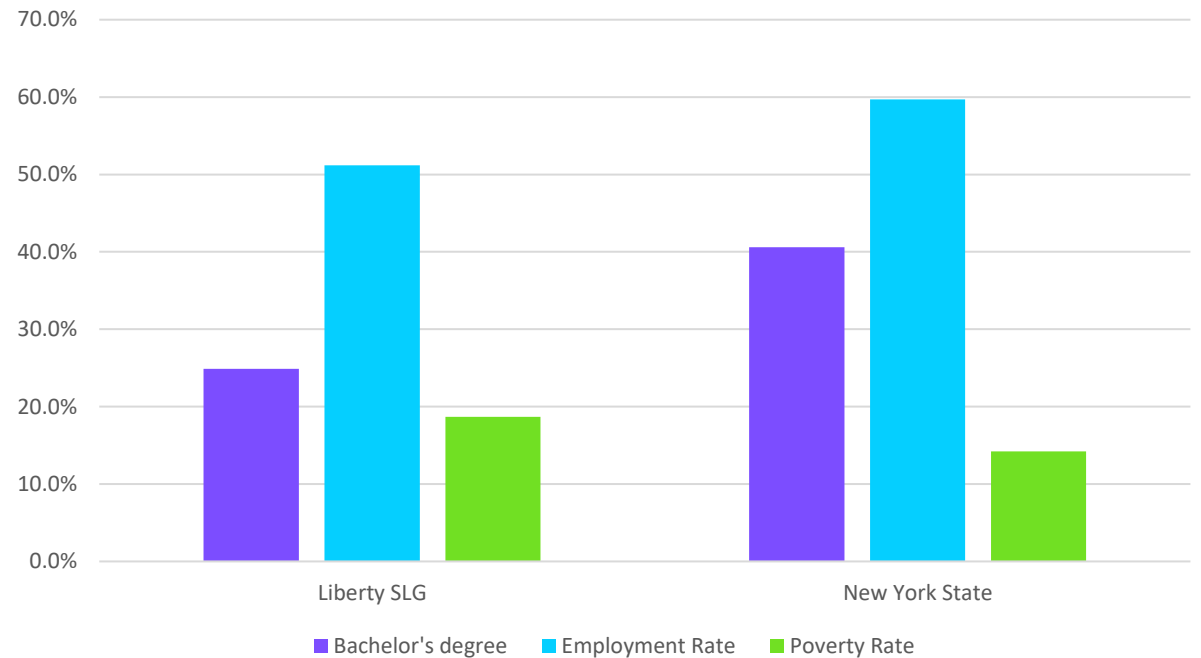
<https://www.nyscrda.ny.gov/About/Publications/Energy-Analysis-Reports-and-Studies/Patterns-and-Trends>



Liberty SLG's Economic Conditions Are Challenging

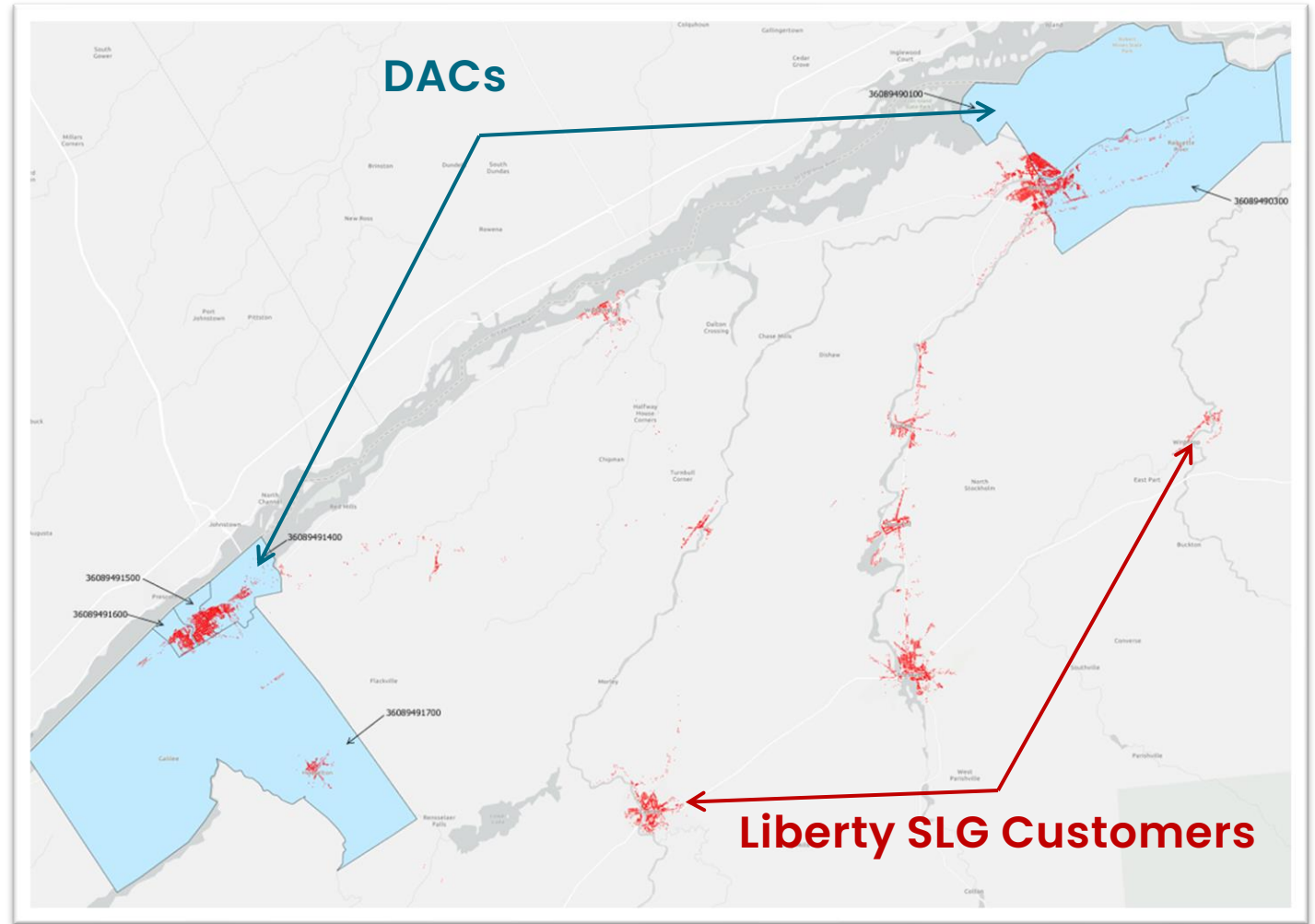
- **Liberty SLG's three counties have lower household income and higher poverty rates compared to NY State**
 - The median household income for the three counties of Liberty SLG's territory is \$58,800. New York State's median income is \$82,100.
 - The average employment rate in Liberty SLG's three counties is 51%, compared to New York state at 60%.
 - The poverty rate in Liberty SLG's three counties is 19%, compared to 14% statewide.
 - In Liberty SLG's counties, 25% of the population has a bachelor's degree, while 41% of the NY state population has a bachelor's degree or higher

Liberty SLG vs. New York State



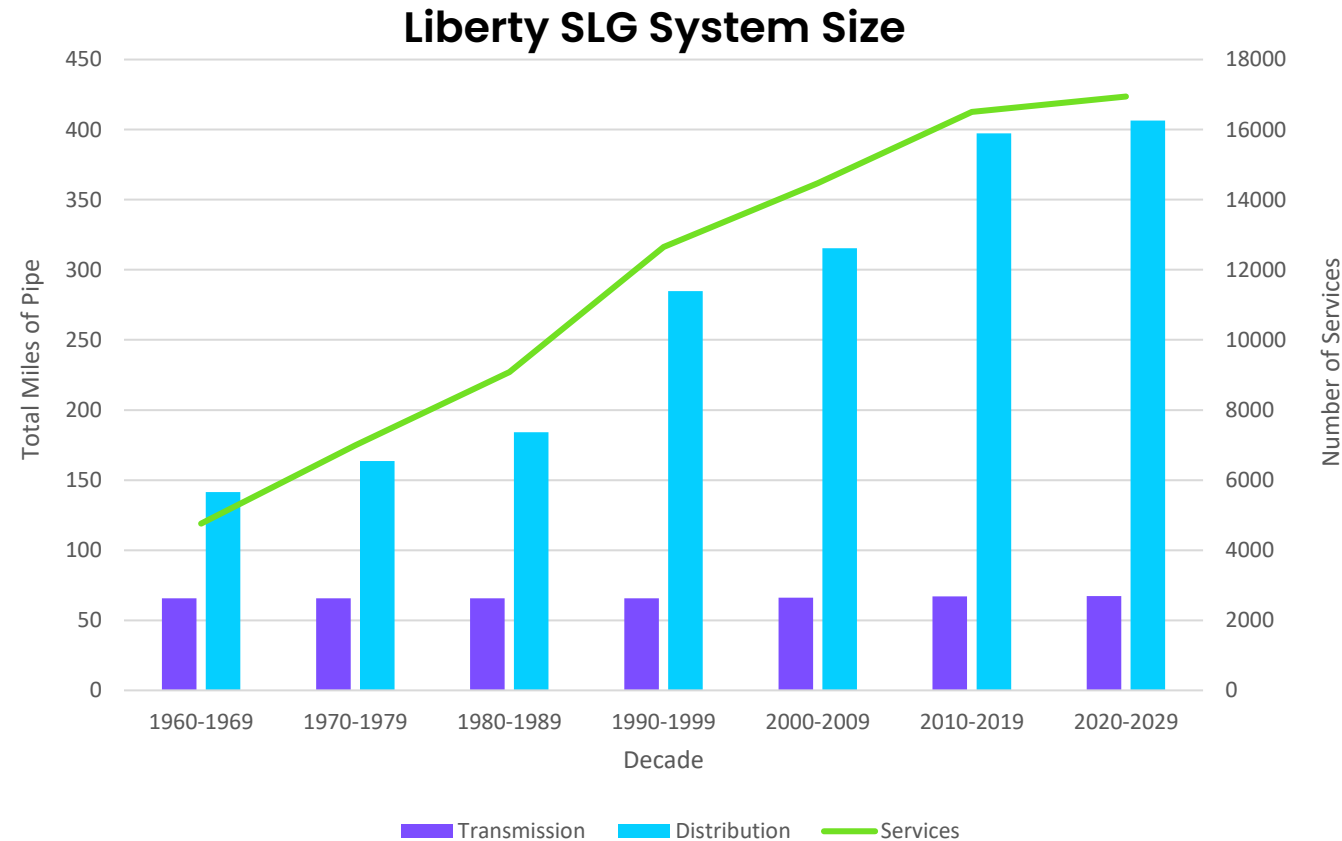
Disadvantaged Communities (DACs)

- 38% of Liberty SLG customers reside in DACs
- Energy affordability
 - Home Energy Assistance Program: federally funded program help pay for heating bills of income qualified customers
 - Budget billing spreads payments equally over 12-month period



Liberty SLG is Growing

- **Liberty SLG has increased miles of distribution pipeline and customers over time**
 - Since 2022, 167 residential customers have converted to natural gas from other fossil fuel heat sources
 - Combusting natural gas emits 38% less CO₂ than oil and 19% less than propane
- **Expanded into Franklin County starting in 2014**
- **Liberty SLG's system is sufficiently sized to serve all customers on peak winter day.**

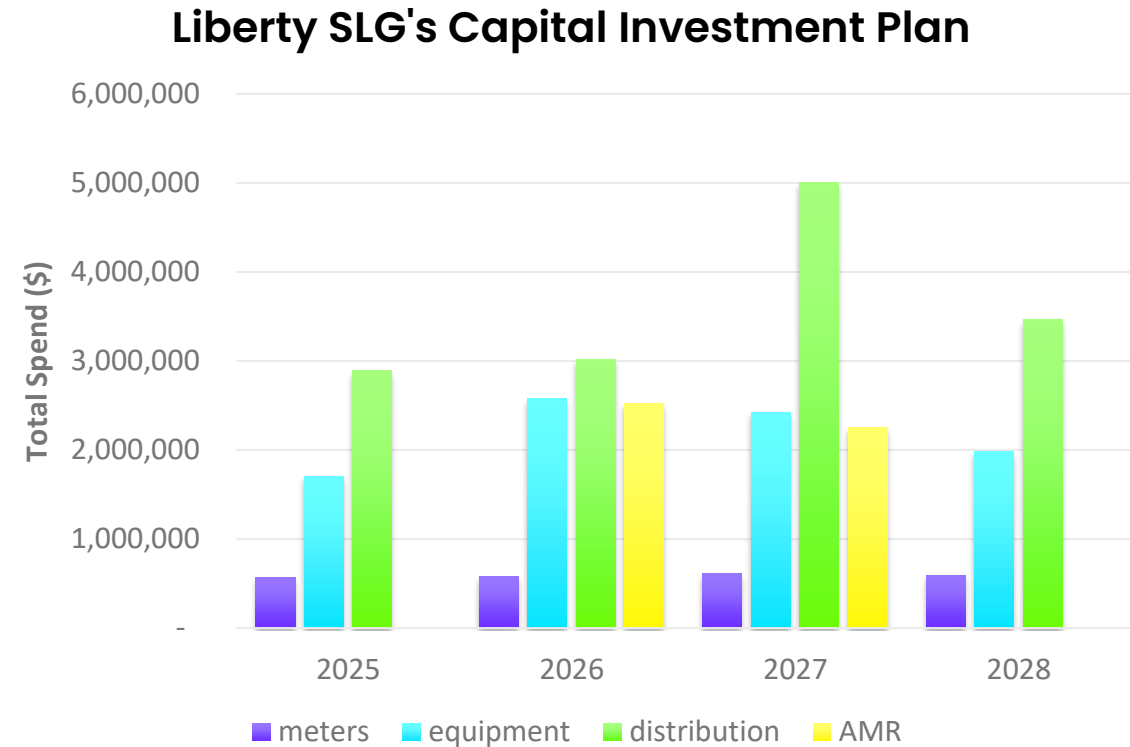


Gas System Overview



Liberty SLG's Capital Investment Plan

- **Distribution is the largest capital investment**
 - Comprised of pipeline repairs and reinforcement, pipeline relocations, main extensions, and new service installations
- **Meters and new equipment are on-going investments**
- **AMR will be deployed in 2026 and 2027**



Liberty SLG's Gas Supply Portfolio

- **Due to its location, Liberty SLG sources most of its gas from Canada**
 - 70% of natural gas in SLG is delivered from Western Canada and Dawn, Ontario on firm capacity held on TransCanada Pipeline
 - 30% of natural gas in SLG is delivered from Ontario on firm capacity held on Iroquois Pipeline
 - Also hold gas storage on Enbridge at Dawn, Ontario to balance system
- **Local RNG production of up to 1,800 Dth/day**

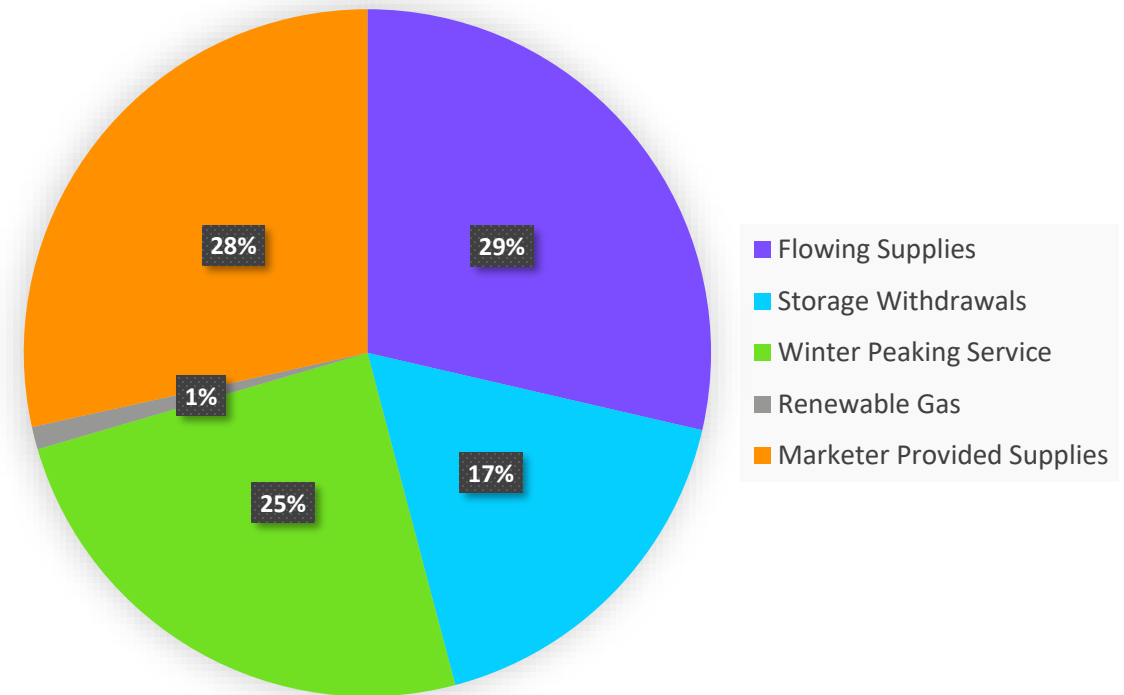


Liberty SLG's Peak Day Gas Capacity

Peak Day Considerations:

- **Diverse supply portfolio of flowing supplies, storage, winter peaking service, and RNG to ensure reliability**
 - Gas storage is filled in the summer when loads and commodity prices are lower
 - Gas storage is used to serve heating load needs above flowing supply amounts when the weather is cold
 - On the coldest days winter peaking supplies are used to provide supplemental gas

2024-25 Winter Total System Firm Peak Day Capacity



Gas System Planning

- **Liberty SLG uses hydraulic models of the gas networks (Synergi) to inform its gas system planning**
 - Identify system vulnerabilities (reliability risks)
 - Sub-optimal pressure points in gas networks
 - Single feed subsystems
 - Forecast system capacity for new growth projects
 - Routine engineering tasks
 - Mains and service line sizing
 - Excess flow valve selection
 - Evaluation of customer requests for additional gas load
 - Flow tracing and capacity analysis for emergency valve closure scenarios
 - Sizing bypass lines for emergencies and planned maintenance work



Gas System Operations

- **Miles of pipeline as of 2023**
 - 77.3 miles of coated steel transmission pipe
 - 406.4 Miles of distribution pipe
 - 165 miles of plastic pipe
 - 241 miles of coated steel pipe
 - 54% of pipe is 2" or less
- **16,959 services – 96% are 1" or less in diameter**
 - 6,588 steel services
 - 10,371 plastic PE services
- **Only 12 leak incidents in 2023, none remaining at the end of the year**
- **Operate a safe system**
 - Gas emergency response and dedicated emergency hotline
 - Pipeline damage prevention – “call before you dig”
 - No leak prone pipe in system



Existing Decarbonization Efforts



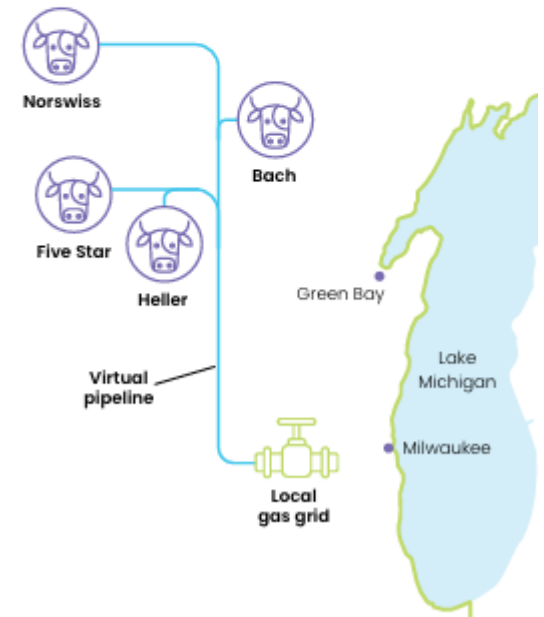
Commitment to Reducing Greenhouse Gas Emissions

- Liberty's utilities are making progress toward a carbon-neutral energy future.
- **Actions in other jurisdictions include:** (*Liberty SLG's actions will be discussed on subsequent slides.*)
 - In Wisconsin, Liberty Utilities purchased the Sandhill Advanced Biofuels, a renewable natural gas developer
 - 4 anaerobic digesters at dairy farms in Wisconsin. Facilities went into service in 2022 and 2023.
 - Liberty's Midwest electric utilities built 600 MW of wind generation since 2020
 - Retired the Asbury coal-fired generator in 2020
 - Algonquin's electric generation capacity is 65% renewable



RNG projects

Dairy farm RNG projects have the potential for negative carbon intensity, typically pulling between 200 and 400 grams of GHGs from the atmosphere per megajoule of energy produced.



Liberty SLG GHG Emissions Reductions from Conversions to Natural Gas

- **Natural gas is the least expensive, lowest-carbon alternative compared to other fuels in the region**
 - Full electrification currently isn't economically feasible for many homes and buildings in Liberty SLG's service territory
- **North Country winters require a reliable source of heat, which natural gas provides**
 - Natural gas is an affordable, reliable alternative to propane and fuel oil
 - Other fossil fuels emit more GHG than cleaner-burning natural gas
 - Natural gas heating has 38% lower emissions than oil and 19% lower emissions than propane



Liberty SLG Proposed Hybrid Heating Pilot

- **Hybrid heating pilot proposed in rate case filed in November 2024**
 - Designed to reduce GHG emissions by 8,000 metric tons CO₂e over the life of the equipment
 - Provide incentives to existing homes with natural gas, oil, or propane central heating system (with ductwork) and located near Liberty SLG's gas main to convert to hybrid heating system that uses electricity for cooling and heating on moderate days and a gas furnace for heating on cold winter days
- **Benefits:**
 - 30% reduction in natural gas consumption by converting from a traditional natural gas furnace to a hybrid heat pump
 - Help older vintage homes move toward full electrification – electric panel upgrades, etc.
 - Gradual transition to electrification – start now and have slow, steady conversions – allows time for electric system build-out
 - Maintain reliability and comfort on cold days
 - Spread fixed gas costs over larger customer base

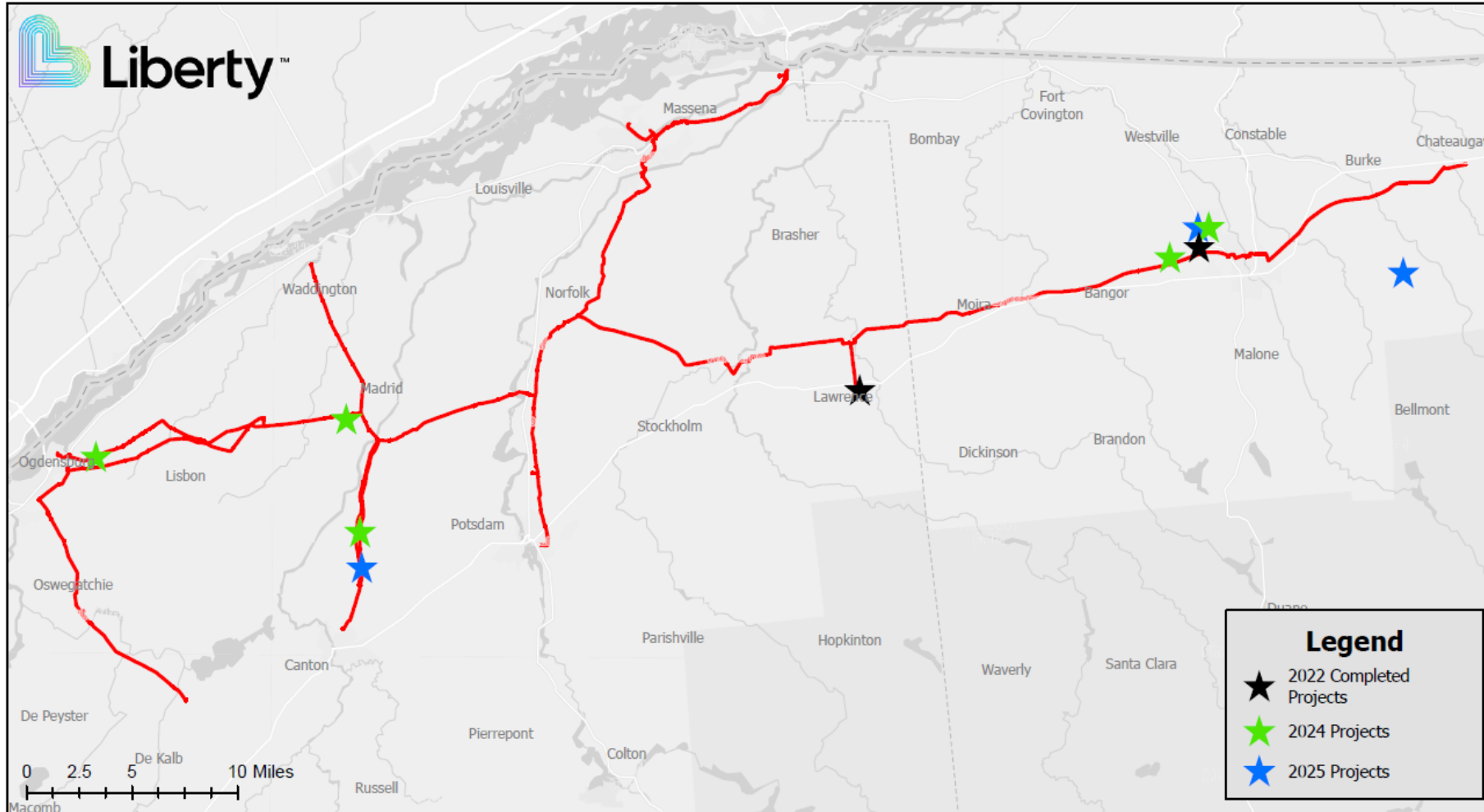


Liberty SLG RNG from the Dairy Industry

- 2 Digester Projects in 2023 injecting RNG into Liberty's system (700 dth/day)
- 3 Projects in 2024 (1,100 dth/day)
- Current Max System Injection (1,800 dth/day)



Liberty SLG RNG From The Dairy Industry



Liberty SLG Green Hydrogen Pilot



Massena, NY

- Liberty launched its first hydrogen pilot program in June 2024.
- This advanced technology, now operational at the Massena office, represents a significant step towards achieving Liberty's sustainability goals.
- Phase 2 of this project is in progress.



