The State Energy Planning Board Meeting will begin at 2:00 pm

NEW YORK STATE | Energy Planning Board

State Energy Planning Board Meeting

May 27, 2025

Welcome and Roll Call

Agenda

1. Opening remarks from the Chair
2. Review and approve May 1, 2025 Board Meeting Minutes
3. Gas system planning
4. Select Energy Plan topic areas
   - Economic Development, Industry, and Agriculture
   - Innovation
   - Workforce and Just Transition
5. Other Business
6. Next Steps

Opening Remarks

Doreen M. Harris

President & CEO, NYSERDA

State Energy Planning Board Chair

Federal Updates

Empire Wind 1 Restart

Restoration of transformational offshore wind project, protecting 1,500 union jobs and locally produced energy

E.V. and Wind Litigation

A.G. Tish James filed litigation against federal actions on electric vehicle infrastructure and wind energy

Other Federal Updates

We continue to monitor federal actions, including the federal budget, executive orders, and agency actions

New York State Enacted Budget for Fiscal Year 2026 was passed and signed into law on May 9, 2025. Key energy initiatives include:

$1 Billion to Sustainable Future Program

$450+ Million
for Building Greenhouse Gas Emissions

$250+ Million
for Zero-Emission Transportation

$200+ Million
for Renewable Energy Projects

Additional $25M
for Home Energy Affordability (HEAP)

$25 Million
to electrify SUNY campuses

$2 Million
to Green Affordable Pre-Electrification (GAP)

$10K tax credit
for geothermal energy systems

Additional May energy announcements

Energy Efficiency and Building Electrification Order

Public Service Commission (PSC) plan authorizes $5 billion of funding of funding for programs

Clean Energy Standard Biennial Review

PSC approved operational reforms to improve flexibility and increase clean energy targets

Tier 1 Executed Contracts Announced

Contracts executed for 26 large-scale solar, onshore wind, and hydroelectric energy projects

Enforcement Discretions for Clean Vehicle Standards

Department of Environmental Conservation (DEC) issued discretions to ease requirements

Review Minutes of the May 1, 2025 Meeting of the Board

Opening remarks: Gas System Planning

Chair Rory Christian
NYS Public Service Commission
State Energy Planning Board Member

Panel: Gas System Planning

Chair James M. Van Nostrand, *Massachusetts Department of Public Utilities*

Commissioner J. Andrew McAllister, *California Energy Commission*

Keith Hay, Senior Director of Policy, *Colorado Energy Office*

The Natural Gas Transition in Massachusetts

New York State Energy Planning Board

May 27, 2025

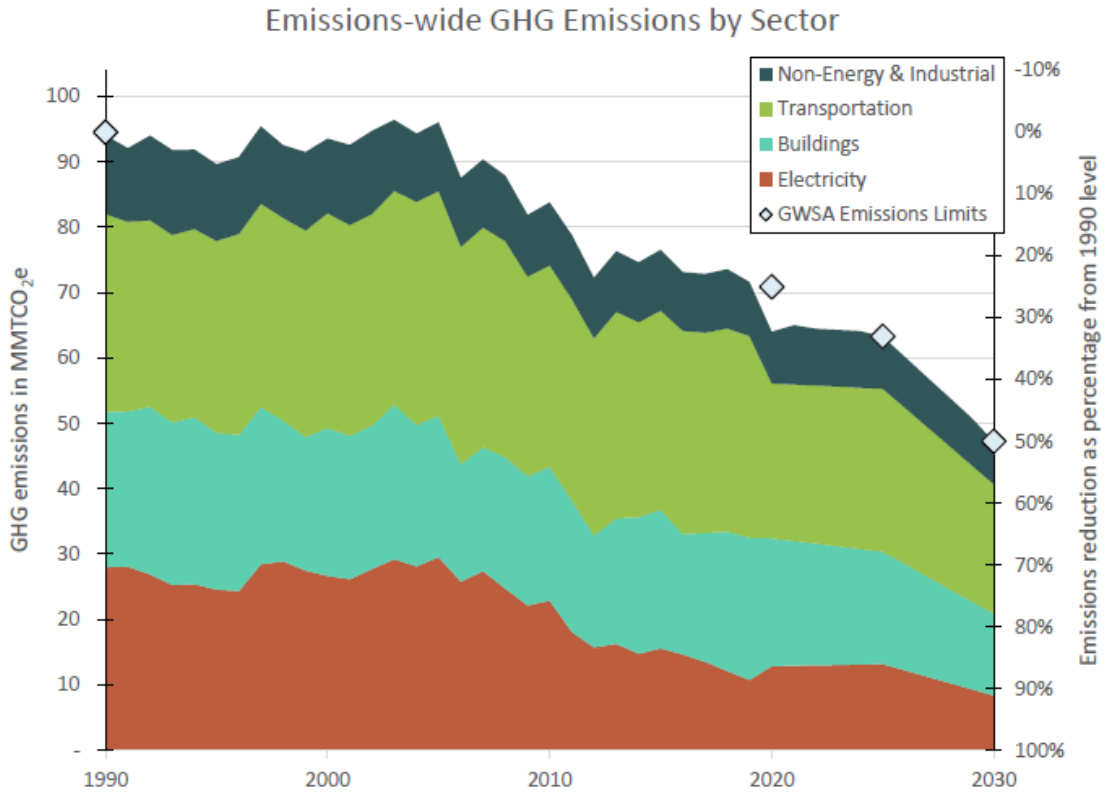
James M. Van Nostrand

Chair, Massachusetts Department of Public Utilities

Clean Energy Targets in Massachusetts

- Commonwealth set a target of net zero greenhouse gas (GHG) emissions by 2050 in the Global Warming Solutions Act of 2008
- Established sector-specific emissions reduction targets for 2025 and 2030 in the Clean Energy and Climate Plan (June 2022)

Clean Energy Targets in Massachusetts



[Source: 2022 CECP]

Table ES.2. Historical GHG Emissions and 2025/2030 GHG Emissions Sublimits for Residential and Commercial Building Heat

Buildings (Residential & Commercial) Sector GHG Emissions (MMTCO2e)	1990	2010	2015	2020	2025	2030
Residential	15.3	13.7	13.6	12.2	10.8	7.8
Commercial (without Industrial)	8.4	6.7	7.6	7.3	6.4	4.7
Total Gross Emissions ($MMTCO_2e$)	23.8	20.4	21.2	19.5	17.2	12.5
Total Percent Reduction from 1990		14%	11%	18%	28%	47%

Regulatory Framework

- D.P.U. “Future of Gas” proceeding
  - Order 20-80-B (December 6, 2023)
  - Electrification is primary pathway to achieve GHG emissions reduction targets
  - Requires consideration of non-gas pipeline alternatives (NPAs) before investing in additional natural gas distribution infrastructure
  - Each LDC filed a Climate Compliance Plan (CCP) on April 1, 2025

Regulatory Framework

- D.P.U. “Future of Gas” proceeding
  - Each local gas distribution company (LDC) is required to file a targeted electrification project by March 1, 2026
    - Must work with applicable electric distribution company (EDC)
    - National Grid filed Targeted Electrification Demonstration proposal (communities of Winthrop and Leominster) in December 2024 (D.P.U. 24-194)

Current Challenges

- “Reset” of Gas System Enhancement Plans (GSEPs) to address leak-prone pipe
  - April 30, 2025 Orders
- Currently evaluating whether to continue authorizing LDCs to provide line extension allowances
- Addressing the continuing obligation to serve existing natural gas customers

Panel: Gas System Planning

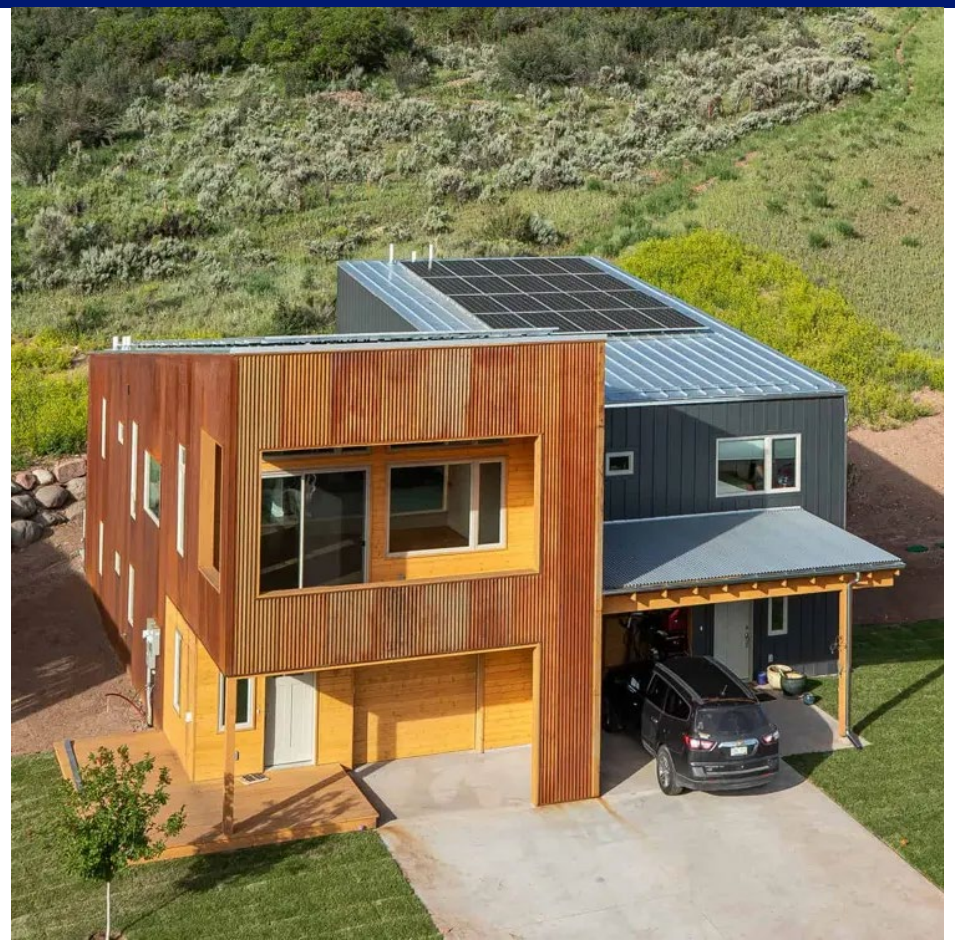
Commissioner Andrew McAllister, *California Energy Commission*

Panel: Gas System Planning

Keith Hay, Senior Director of Policy, *Colorado Energy Office*

Gas Utility Planning in Colorado

Legislation and Implementation



CEO Mission & Vision

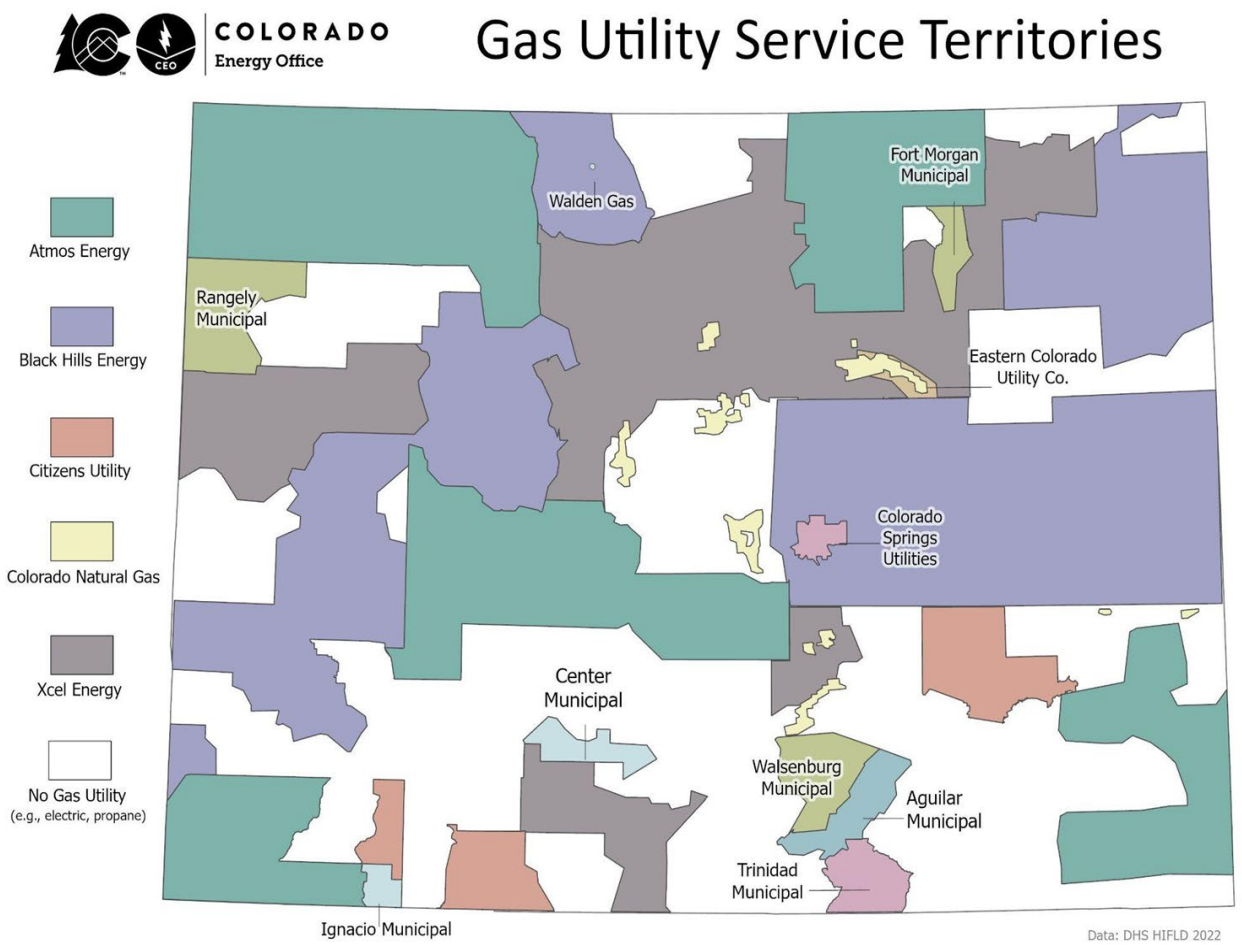
Mission

Reduce greenhouse gas emissions and consumer energy costs by advancing clean energy, energy efficiency and zero emission vehicles to benefit all Coloradans.

Vision

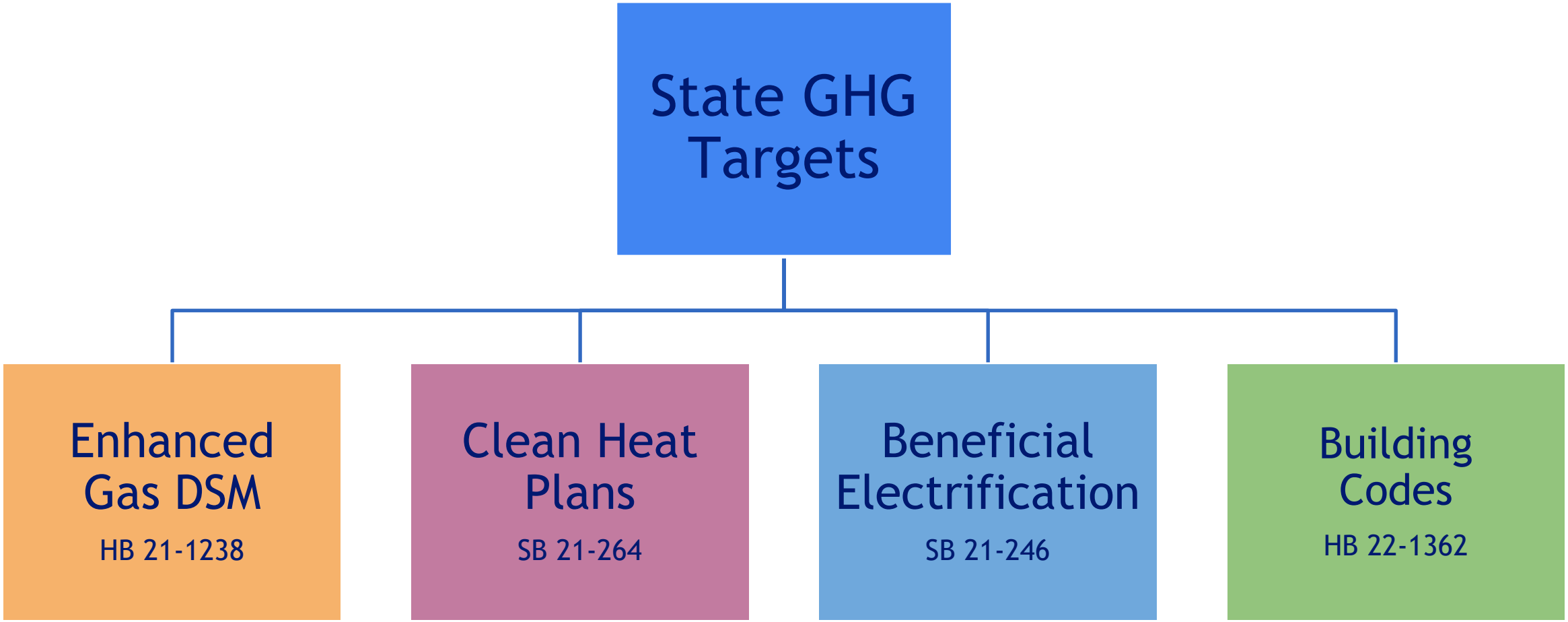
A prosperous, clean energy future for Colorado.

Colorado Gas Utilities



Utility	Percent of GHG Emissions	Customer
Xcel	76.4	1.4m
Colorado Springs	12.8	225,000
Black Hills	5.7	207,000
Atmos	4.8	25,00

Colorado Building Decarbonization Legislation



Gas Utility Plan Filings with the PUC

Gas DSM Strategic Issues

- Energy Savings and demand reduction targets
- Program budgets
- Financial incentive proposals
- Treatment of Social Cost of GHG
- Cost effectiveness methodology and calculation

Gas DSM Plan

- Measures, products, and programs
- Program Budgets
- Rebate & Incentives levels
- Specific cost effectiveness calculations

Clean Heat Plans

- GHG oriented planning
- Portfolios of Resources
- Explanation of interaction between Beneficial Electrification and DSM Plans, including budgets, targets, and incentives
- Non-pipeline alternatives

Gas Infrastructure Planning

- 5-year look at gas infrastructure investments with 10-year forecast
- Spending by category
- Identify impacted communities and report on impacts
- Scenario plans
- Non-pipeline alternatives

Beneficial Electrification Plans

- 10-year projection
- Program Budgets
- Measures and programs
- Rebate & Incentives levels
- Cost effectiveness calculations
- Treatment of Social Cost of GHG
- Customer engagement Plan

Colorado's Clean Heat Plan Framework

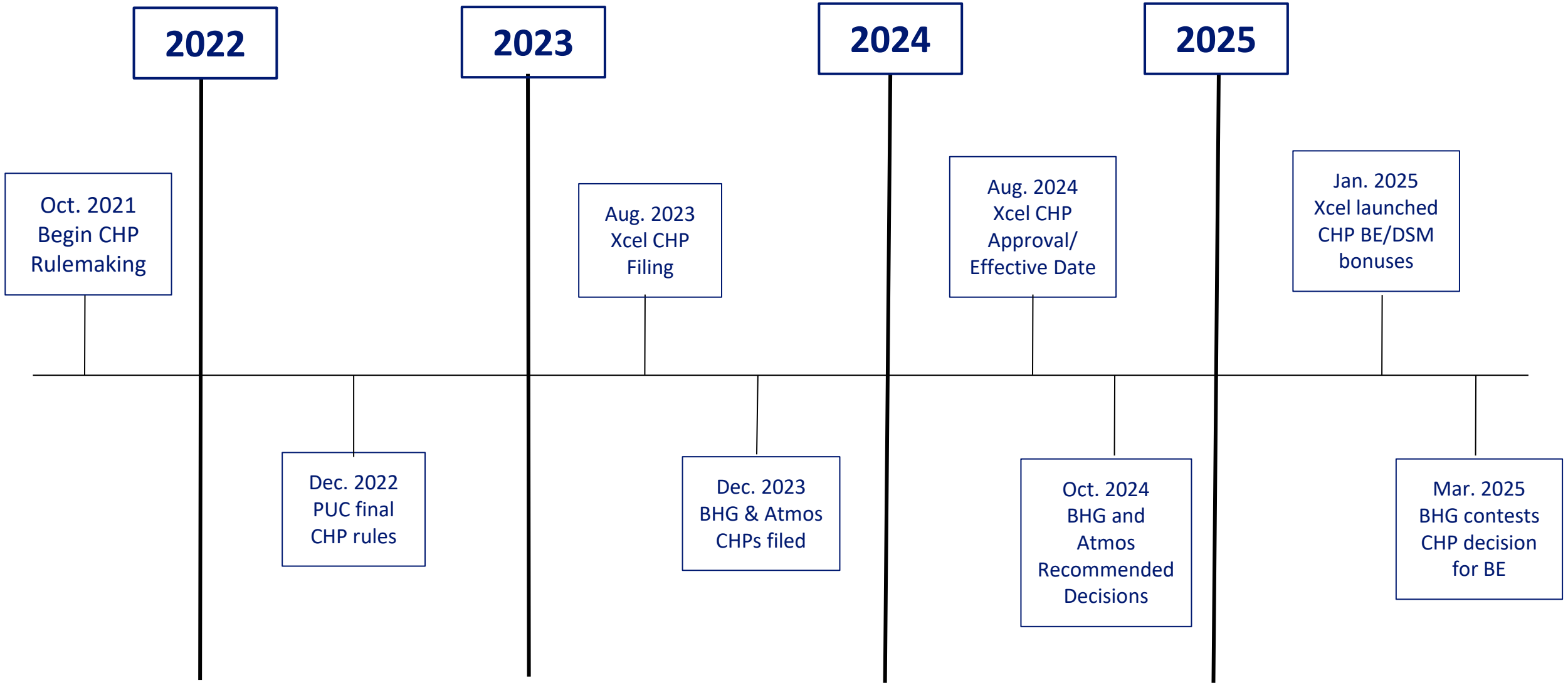
Gas Distribution Utilities Must Submit Plan For Emission Reductions

- Targets of **4 percent for 2025** and **22 percent for 2030** relative to 2015
- Recovered methane protocols set by Air Quality Control Commission
- Investor-owned gas utilities must file a 2024-2028 CHP with the PUC with budgets and emission reduction estimates for 2024-2030

Eligible Clean Heat Resources to Reduce Emissions at End-Use

- Demand-side Management (energy efficiency + demand response)
- Beneficial Electrification
- Green Hydrogen
- Recovered Methane
- Thermal Energy
- Additional Commission- designated resources

Timeline of Clean Heat Plan Implementation



Lessons Learned

- Legislation and rules need clarity on resource eligibility and cost sharing
- Align planning cycles for DSM, BE, and CHP to simplify timing and assessment of information
- As planning becomes less siloed, we need to consider how the goals of DSM and BE have changed over time from general energy efficiency to targeted avoidance of gas infrastructure investments and emission reductions
- CEO has prioritized advancing BE through Xcel Energy to drive market change before focusing on smaller, gas-only LDCs
- Stakeholders and utilities should agree on modeling assumptions ahead of time to reduce the number of contested issues
- Data is needed to assess CHP effectiveness and impact on customers

Board Discussion

Presentation: Gas System Planning in New York

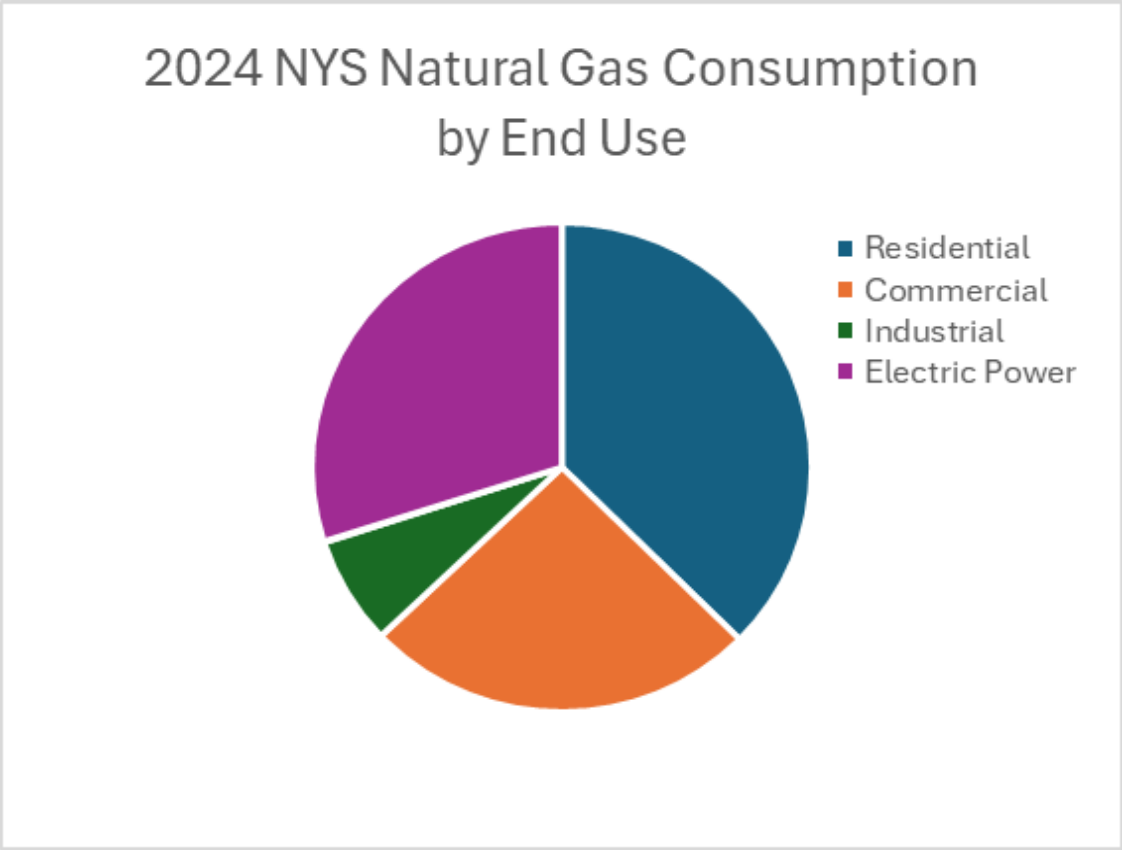
Ross Turrini, Chief Operating Officer of
New York Gas, National Grid

Gas Planning and Reliability

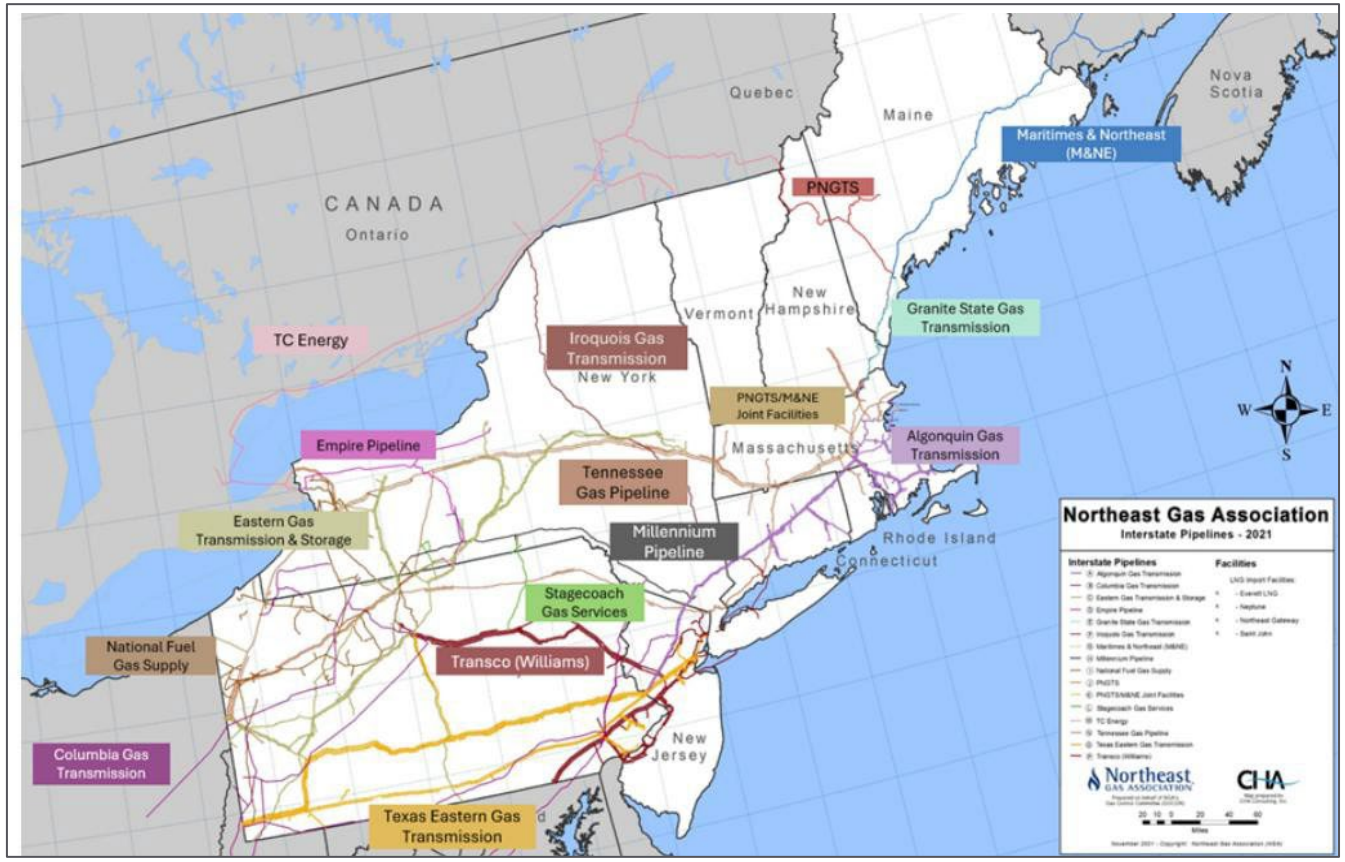
NY State Energy Planning Board
May 27, 2025

nationalgrid

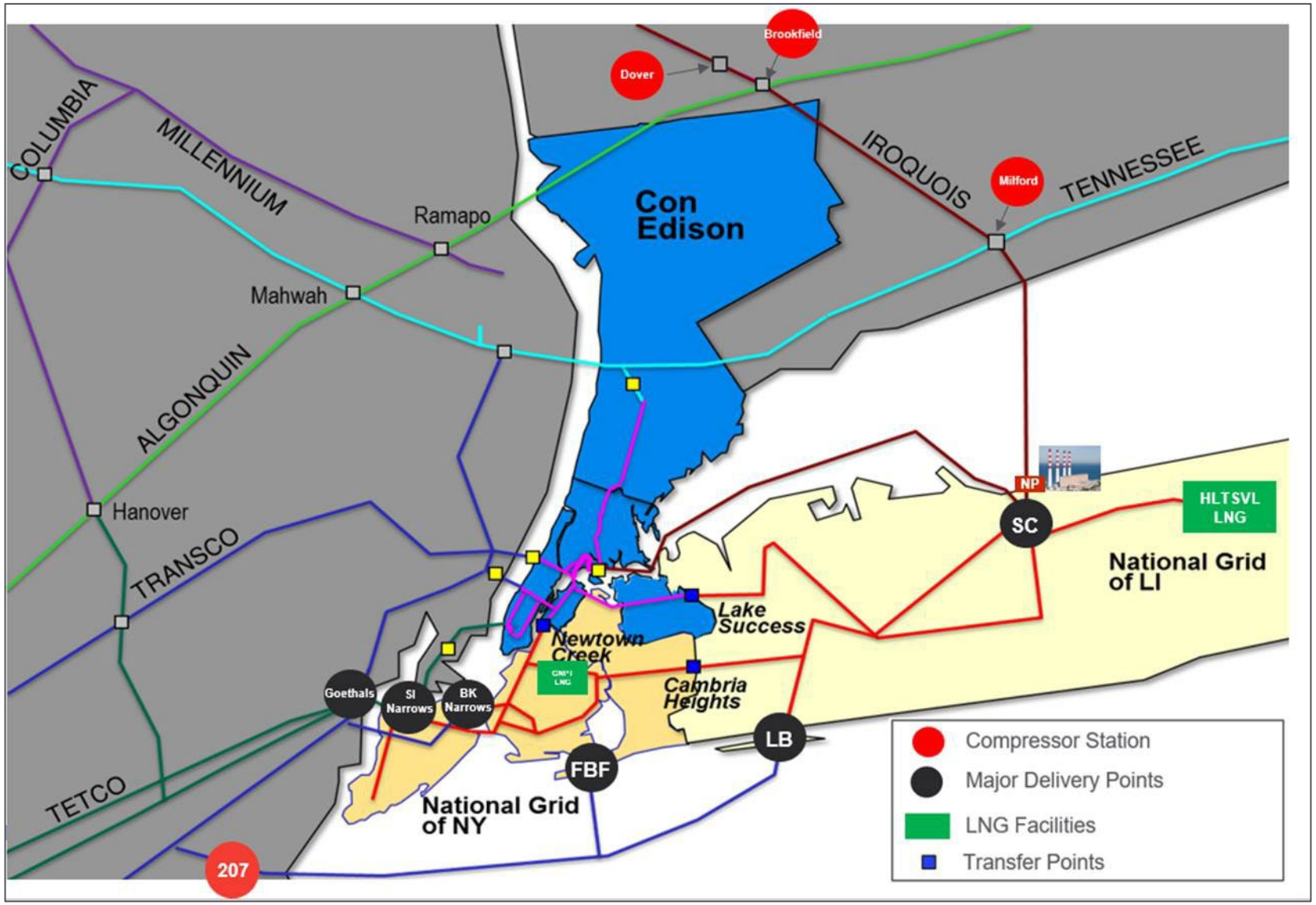
Natural gas supplies homes, businesses, and power generation across NY



US EIA, 4/30/25



Gas delivery requires a portfolio strategy to meet demand (DNY illustration)



Utilities rely on a range of clean energy programs to reduce demand

There are four primary programs for customer demand for gas during peak periods.

Energy Efficiency (EE)

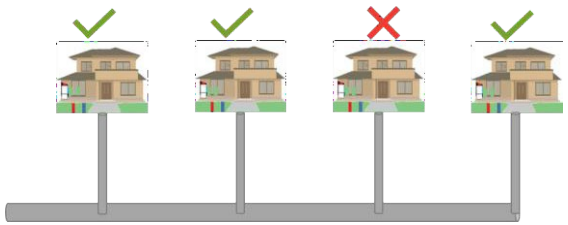
Our EE programs reduce the amount of gas customers use for heating, cooking, and other uses.

Gas Demand Response (DR)

DR programs offer customers financial incentives to reduce peak gas consumption.

Full Heat Electrification

Our heat pump incentive programs, together with partners, support some customers who wish to fully electrify, reducing peak demand



Non-Pipeline Alternatives (NPAs)

We are seeking locations where electrification could potentially avoid building new infrastructure or enable retirement of existing infrastructure.

Our forecast regularly assesses and incorporates expected achievements from these programs.

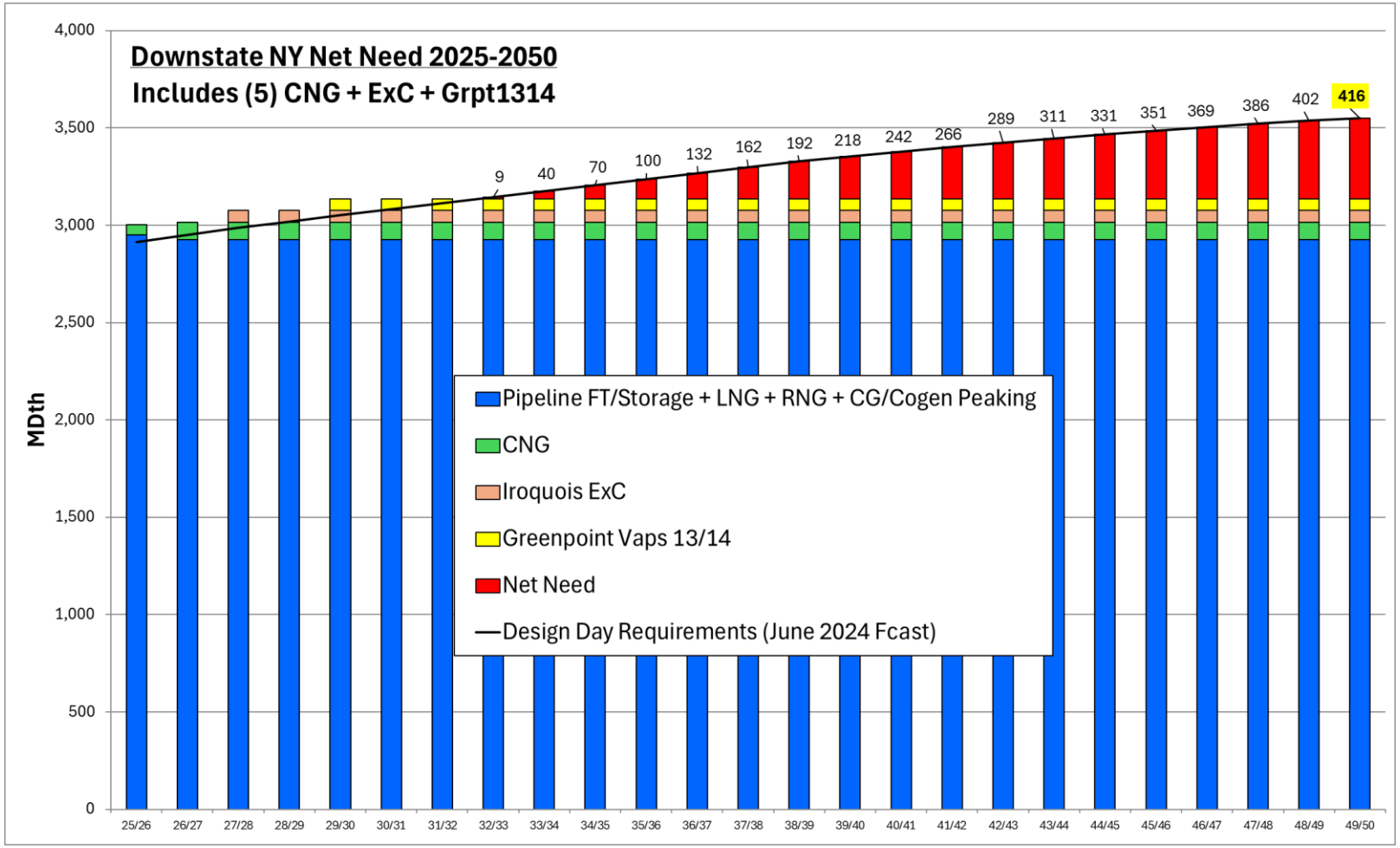
How utilities plan for peak demand and supply solutions (NG DNY example)

Our latest forecast (June 2024) for Downstate NY shows that we have enough gas to meet customer demand through the winter of 2027/28.

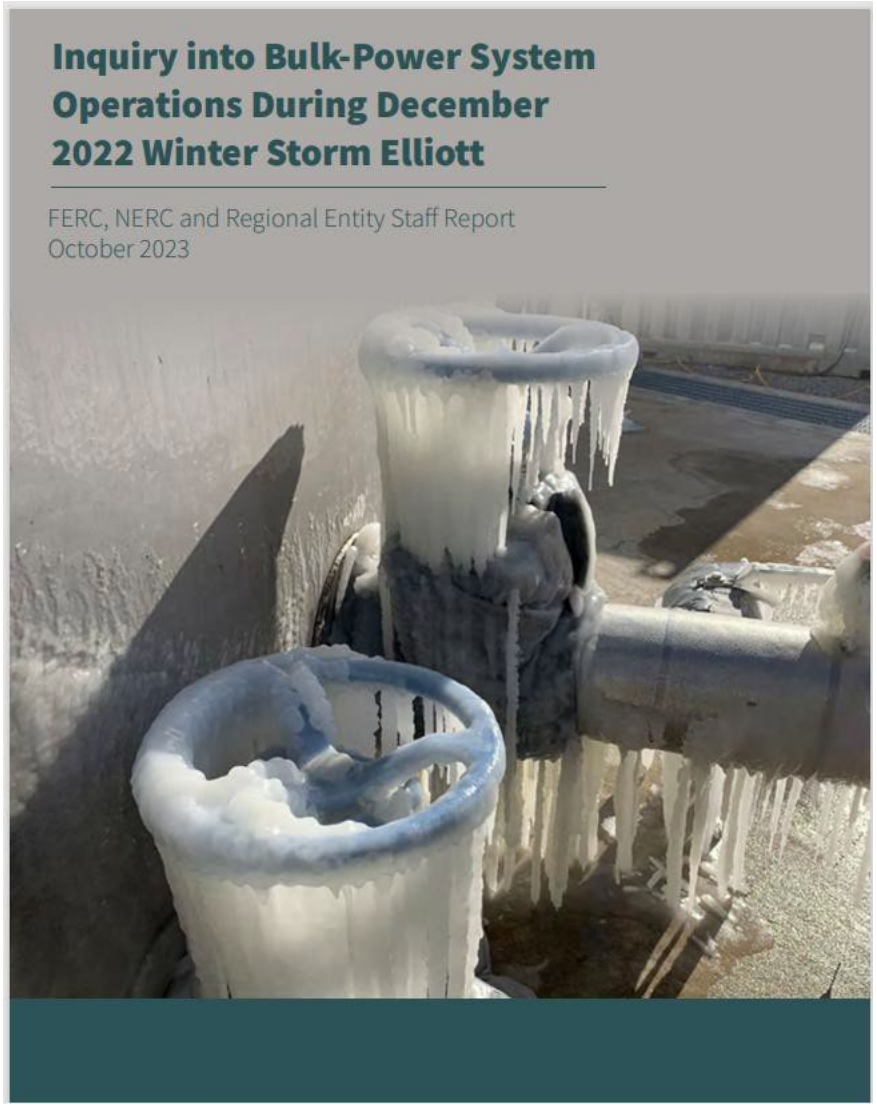
Starting in the winter of 2028/29, we expect a gap in between supply and demand, even after accounting for all expected energy efficiency savings, demand response program savings, and avoided gas usage due to electrification of heat and non-pipeline alternatives**. This gap will continue to grow unless we find new sources of supply.**

Potential Solutions:

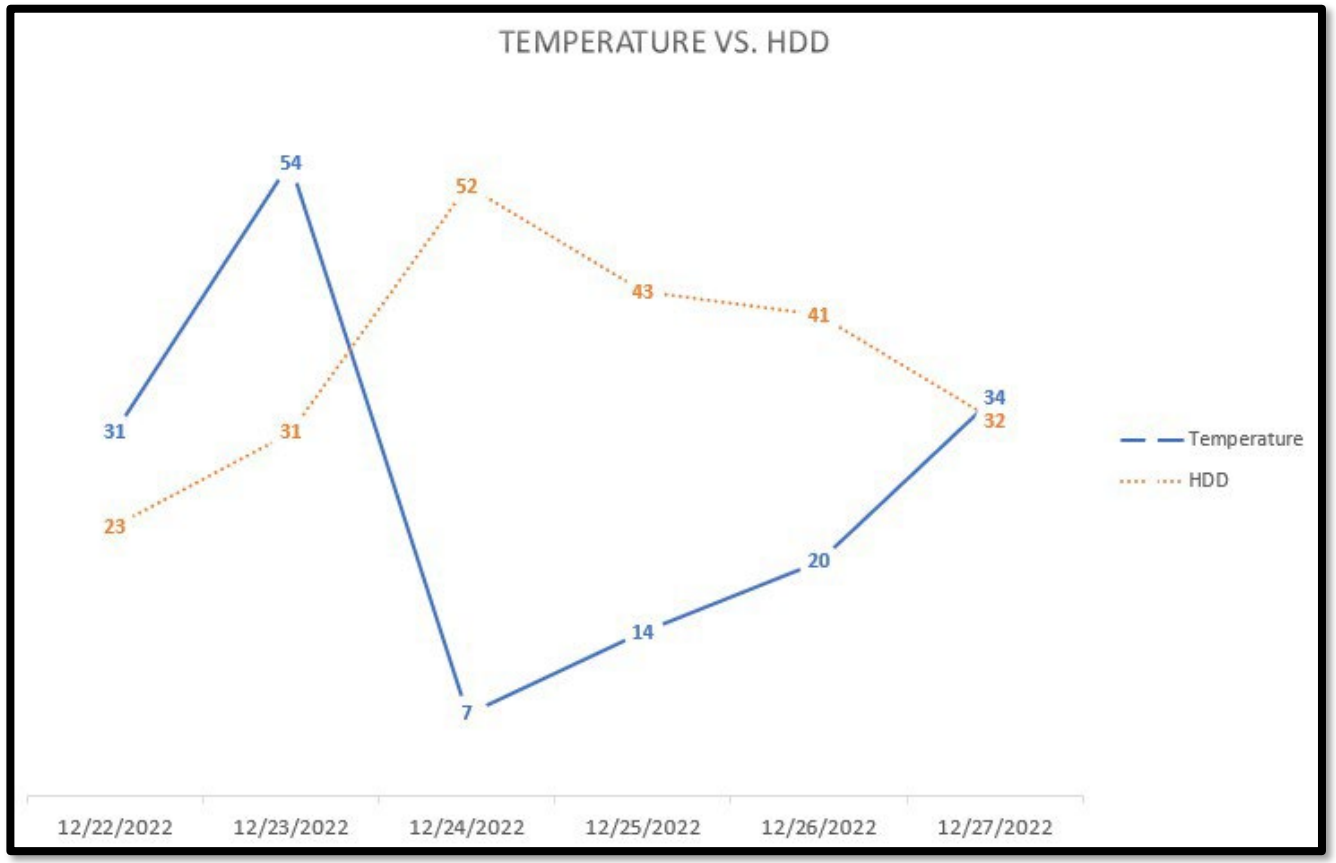
1. Iroquois Enhancement by Compression (ExC) Project
2. Greenpoint LNG Vaporizers 13 & 14



2022 Winter Storm Elliot was a “very close call” for downstate customers



12/23-12/27/22 Weather (Town of Farmingdale – Long Island)



- **Blue Temperature line reflects swing from high on the 23rd to low on the 24th onward.**
- **47-degree swing in temperature experienced within twelve hours.**

NY needs to ensure gas system reliability as it decarbonizes

Board Discussion

Topic Area: Economic Development, Industry, and Agriculture

Unprecedented growth in energy demand for the industrial sector is expected in the coming years. State agencies should continue to collaborate to ensure that reliable, affordable power can be provided to the sector in a way that supports local communities and aligns with the state's climate goals.

Treating the clean energy transition as an economic development opportunity will speed the transition. Supporting the clean energy sector will promote job growth and investments, while also localizing supply chains, reducing costs, and ensuring the availability of clean energy products.

Other Considerations:

- **Resiliency:** Investing in energy efficiency, hardening connections between industrial facilities and the electric grid, pipelines, and thermal networks, and localizing manufacturing and supply chains can increase energy and economic resiliency.
- **Disadvantaged Communities:** Industrial facilities can bring jobs and economic growth to communities but also increased fuel combustion and pollution. The State should prioritize investments with MWBEs and that benefit DACs, and work to better understand the extent of the public health benefits of a low-pollution industrial sector.
- **Cross-Cutting Opportunities:** The economy-wide energy transition will create large demand for new equipment, presenting an opportunity to support clean energy industry. Key examples: batteries and charging equipment, heat pumps, grid and generation equipment, and low-emission construction materials.

Energy demand from industry is expected to grow, especially from large, energy-intensive industries. Continued State coordination and investments in reliable, clean, and affordable power are needed.

Key Existing State Actions

- Coordinated Grid Planning Proceeding
- Clean Energy Zones
- 0x40 Proceeding
- Brownfield Opportunity Area

Related Recommendations

- **Expand interagency coordination and planning** on generation and transmission infrastructure investments, with an emphasis on brownfield redevelopment.
- **Continue investing in power affordability and the use of rate design mechanisms that promote competitiveness.** Explore opportunities for industrial participation in innovative rate designs that:
  - Differentiate charges based on peak and off-peak usage.
  - Incentivize flexible usage, including on-site energy generation.
  - Value the storage and/or recycling of thermal energy.
- **Explore opportunities to support private-sector development of clean, firm, in-state energy supply** including offsite power purchase agreements.
- **Examine opportunities and challenges presented by emerging energy intensive subsectors** to best accommodate new load while balancing State policy goals and targeting support to strategic industries that create wider community, economic, and workforce benefits.

New York's energy system is critical for attracting strategic industries and driving the State's competitiveness. Providing power-ready sites and localizing clean energy supply chains can help the State capitalize on high value opportunities in advanced manufacturing and maximize the value of the energy transition.

Key Existing State Actions

- ReCharge New York
- POWER UP
- FAST NY
- Build Ready

Related Recommendations

- **Expand interagency coordination** to affordably and reliably meet the energy needs of new, large industrial customers.
- **Continue supporting investments into power-ready sites** for new large-scale manufacturing, with emphasis on strategic industries like microchips, materials processing, agribusiness, and transportation equipment.
- **State support should be targeted towards strategic industries,** which maximize job creation and in-state investments.
- **Identify opportunities and strategies to grow in-state clean energy supply chains,** including through the development of targeted incentive programs and marketing campaigns.

Cost-effective investments in industrial energy efficiency and electrification can reduce energy use and on-site combustion.

Key Existing State Actions

- FlexTech
- Strategic Energy Management Program
- Commercial & Industrial Carbon Challenge
- Heat Recovery Program

Related Recommendations

- **Continue technical assistance to industrial facilities** to facilitate energy-efficiency and decarbonization upgrades and provide targeted financial support for promising investments.
- **Help facilities maximize the value of process heating** by recycling thermal energy on-site or supporting Thermal Energy Networks.
- **Prioritize action on process heating**, given its status as the top source of industrial energy demand. Measures that can reduce energy needs include enhanced insulation and heat recycling. Electric alternatives include electric boilers, infrared heating, and microwaves.
- **Study the public health benefits of clean energy investments at industrial and agricultural facilities** to better value investments.

Support medium- and long-term decarbonization of industry through a diverse RD&D portfolio of emerging technologies. Target development for specific subsectors and high-heat industrial processes.

Key Existing State Actions

- Hydrogen Roadmap
- RNG Potential Study
- Master Plan for Responsible Advanced Nuclear Development
- C&I Carbon Challenge
- Clean Fuels R&D and Pilots Program

Related Recommendations

- **Target RD&D towards hard-to-decarbonize processes without market alternatives** such as high-temp heating, carbon capture utilization and sequestration, low-emission processes for chemicals and construction materials production, alternative fuels.
- **Prioritize clustered infrastructure** to reduce costs and transportation needs, matching energy-intensive processes with nearby energy production or high-emission processes with nearby sites for utilization or sequestration.
- **Pursue risk-sharing mechanisms with the federal government, other states, and industry** to reduce the barriers to developing new energy sources.
- **Ensure policies, programs, or regulations appropriately reflect environmental requirements** for alternative fuels and prioritize GHG emission reductions while minimizing co-pollutant emissions.

Agricultural operations can reduce costs and enhance resiliency through energy efficiency, efficient electrification, and on-site energy production.

Farms often lack connectivity to the energy system and can benefit from on-site investments that reduce energy needs, result in energy production on-site, or increase grid/pipeline connectivity.

Related Recommendations

- **Expand the NYS Climate Resilient Farming Program to support adaptation projects** that also reduce GHG emissions or at least do not increase emissions.
- **Create and expand programs to support efficient electrification systems on farms** including three-phased power upgrades, or on-site renewable electricity production.
- **Support the measurement, monitoring, and verification of energy efficiency co-benefits associated with the adoption of conservation best management practices.**
- **Create programs or incentives to facilitate pilot projects for small-scale digestion systems that incorporate innovative technologies that maximize production of electricity, RNG, or biogas.** Localized use of biogas can avoid investments in connections and avoid enhanced processing requirements, but large production can serve broader fuels markets.
- **Continue to support RD&D of co-digestion of anaerobic manure and food waste for strategic and limited use**, where possible community sites pooling resources of several farms.

Topic Area: Innovation

State support of energy innovation (RD&D and commercialization) plays an essential role in catalyzing the development and commercialization of technologies that help enable New York's energy transition. Innovation helps reduce the cost of and increase the variety of energy technologies and services. The State's extensive research and innovation hubs play an important role in supporting advanced markets for energy technologies and stimulating economic development.

Continued State investments in energy innovation (RD&D and commercialization) will catalyze the development and adoption of technologies that help enable the energy transition.

Key Existing State Actions

- NYSERDA RD&D Funding Opportunities
- NYSERDA Commercialization Programs
- NYSTAR
- NY Ventures
- SUNY Energy Research Centers and Commercialization Hubs

Related Recommendations

- **Continue to fund RD&D aligned with key priorities and problem statements identified across all energy sectors** to accelerate the deployment of beneficial technologies, increasing performance and reducing costs.
- **Continue to support commercialization activities, startup growth, and bringing market-ready products and businesses to New York State**.
- **Continue to commission studies and performance evaluations** to provide objective information to the public on the trade-offs in cost, performance, environmental benefits and policy compatibility of emerging and existing energy technologies.

Strengthening partnerships that leverage New York's innovation ecosystem will foster economic development and create jobs. Coordination among regional and statewide technology partnerships is critical to continue driving innovation, attracting new talent and industry, and supporting our energy needs.

Key Existing State Actions

- NYSERDA Commercialization program administrators
- National Offshore Wind R&D Consortium
- NY-BEST
- NENY Battery Tech Hub
- SUNY-NYSERDA innovation partnership
- Centers for Advanced Technology and Centers of Excellence
- Decarbonization Leadership Program

Related Recommendations

- **Formalize partnerships across the entire NYS innovation ecosystem.** Working with public and private organizations and universities to accelerate deployment of key energy technologies, including development of strategic market roadmaps to align the broader innovation ecosystem, including research, industry and investors.
- **Coordinate with universities and community organizations to establish a set of effective and feasible best practices for integrating the priorities, needs and participation of disadvantaged communities** that can include demonstration sites, project participation, project benefits assessments.
- **Build upon successful models to leverage combined market share and economies of scale to accelerate cost reductions and market adoption of energy technologies.**

New York's education system is critical to the State's clean energy research and innovation portfolio. It not only provides education and workforce development but also drives research and commercialization efforts and hosts large-scale demonstration projects. Investing in the State's clean energy technology education pipeline can produce the talent needed to develop and scale emerging energy technologies.

Key Existing State Actions

- Stony Brook Advanced Energy Research and Technology Center
- University at Buffalo RENEW Institute
- Binghamton University S3IP Center of Excellence
- SUNY Climate Research Task Force

Related Recommendations

- **Continue to prioritize and expand SUNY clean energy research and education portfolio**, in addition to continuing to identify opportunities to leverage SUNY's expansive physical footprint (111 million square feet of conditioned space or 40% of the state's footprint, including 54,000 acres) to support clean energy demonstration sites.
- **Leverage SUNY's successful research task force model** to include clean energy innovation and related areas as focus areas.
- **Continue to support commercialization investments** through recruitment of researchers, business education, market training and incubation space to create the leadership and support for early-stage startups and key emerging energy industries.

Topic Area: Clean Energy Jobs and a Just Transition

Over 318,000 workers are employed in New York's energy sector. More than half of these workers make up one of the most mature and steadily growing clean energy workforces in the country. 2023 marked New York's biggest year-over-year increase in new clean energy workers (5%) since tracking, with growth expected to continue.

Clean energy job growth is both a marker and instrument of success in the clean energy transition:

- The State's clean energy workforce will continue to grow as the state makes investments into the clean energy industry
- The State's climate goals can only be met by growing a well-trained workforce to carry out transformational work across the entire energy system.

State support for workforce development is essential to making progress on our energy transition, as private industry is unlikely to meet the needed pace and scale of workforce training on its own.

Continued State investments into workforce development programs, curriculums, and related services are essential to the energy transition.

Key Existing State Actions

- NYSERDA Workforce Development Program
- ESD's Office of Strategic Workforce Development
- NYPA (under expanded authority)
- DOL programs, including the Office of Just Energy Transition (OJET) and for clean energy awareness

Related Recommendations

- **Identify opportunities to incentivize and bolster workforce training participation in key occupations where shortages are projected** (such as technicians, construction trades, and manufacturing).
- **Expand clean energy career awareness in K-12 schools across NYS as well as initiatives to provide educational resources and subsidize teacher training.**
- **Continue and expand investments into clean energy career training curriculums on SUNY/CUNY campuses across the state.**
- **Continue investing in Direct Entry and pre-apprenticeship programs that support clean energy projects**. Identify any need for additional long-term State funding.

Cont'd Related Recommendations

- **Workforce development programs should also evolve to account for emerging cross-sectoral needs, including:**
  - The need to expand the capacity of the energy efficiency workforce and skilled installation for high-efficiency HVAC equipment to **decarbonize buildings**.
  - Meeting the decarbonization goals for **State operations**.
  - The growing demand for building and maintaining new **transmission and distribution** infrastructure.
  - Further investments in **energy storage**, distributed and large scale **solar**, **thermal energy networks**, and **wind**.
  - The expansion and operations of **EV charging** infrastructure.
  - The need to build up transferrable skills that would support **future nuclear** development

Labor standards are a key tool to improve the quality of life of workers who drive the transition, minimize inequality, generate local economic benefits, and improve project outcomes. The State should continue to identify opportunities to implement high-road labor policies for energy jobs.

Key Existing State Actions

- Amendments to Labor Law § 224-d (for publicly funded renewables)
- Utility Thermal Energy Network and Jobs Act labor provisions
- NY-Sun prevailing wage adder

Related Recommendations

- **Undertake research that analyzes the labor standards that apply to clean energy jobs.** This analysis should identify gaps in federal or State labor standard coverage and consider policy actions that can ensure clean energy jobs are high quality.

Improved program awareness and accessibility can facilitate equitable participation of workers, including from DACs, in the clean energy workforce. The State can improve representation of DACs by investing in accessibility and inclusive program design.

Key Existing State Actions

- DOL clean energy awareness programs
- NYSERDA educational resource funding

Related Recommendations

- **Consider new potential statewide communications campaign** to promote inclusive participation in clean energy.
- **Continue to identify and pursue opportunities to fund wraparound services.**
- **Expand clean energy training programs in correctional facilitates**.

To support a just transition for fossil fuel workers, it is essential to build out safety net policies for workers at risk of job loss. The creation of Office of Just Energy Transition is a step in the right direction, and the state should build on this effort.

Key Existing State Actions

- NYSDOL Office of Just Energy Transition

Related Recommendations

- **Undertake research to assess the employment impacts of transitioning fossil fuel subsectors** designed to better inform how to design and prioritize just transition policies.
- **Research and estimate the potential impacts of safety net measures that support workers affected by climate policies.** Such measures could include wage guarantees, bridge to retirement, transitional opportunities, support for communities facing plant closures, and more.
- **Consider additional funding for a Just Transition Fund** that could support safety net policies mentioned above.

Board Discussion

Other Business

Thank you for your participation in this meeting of the State Energy Planning Board

For more information, please visit the State Energy Plan website:

energyplan.ny.gov