The State Energy Planning Board Meeting will begin at 1:00 pm

NEW YORK STATE | Energy Planning Board

State Energy Planning Board Meeting

July 23, 2025

Welcome and Roll Call

Agenda

1. Opening remarks from the Chair
2. Review and approve June 25, 2025 Board Meeting Minutes
3. Discuss the supplemental study of the State's electric transmission and distribution system.
4. Consider and act upon a resolution to publish the supplemental electric transmission and distribution system.
5. Discuss select State Energy Plan topic areas.
6. Consider and act upon a resolution to publish the Draft State Energy Plan and solicit related public comments
7. Other Business
8. Next Steps

Opening Remarks

Doreen M. Harris

President & CEO, NYSERDA

State Energy Planning Board Chair

Federal Updates

Reconciliation Bill

- On July 4th, President Trump signed the Budget Reconciliation Bill, H.R. 1.
- The law phases out existing federal tax incentives for wind and solar power (including the investment tax credit (ITC), production tax credit (PTC), and advanced manufacturing production credit for wind components), for energy efficiency, and for electric vehicles.
- The law also repeals unobligated energy program funding from the Inflation Reduction Act and Infrastructure Investment and Infrastructure Act.

New York State Updates

RGGI

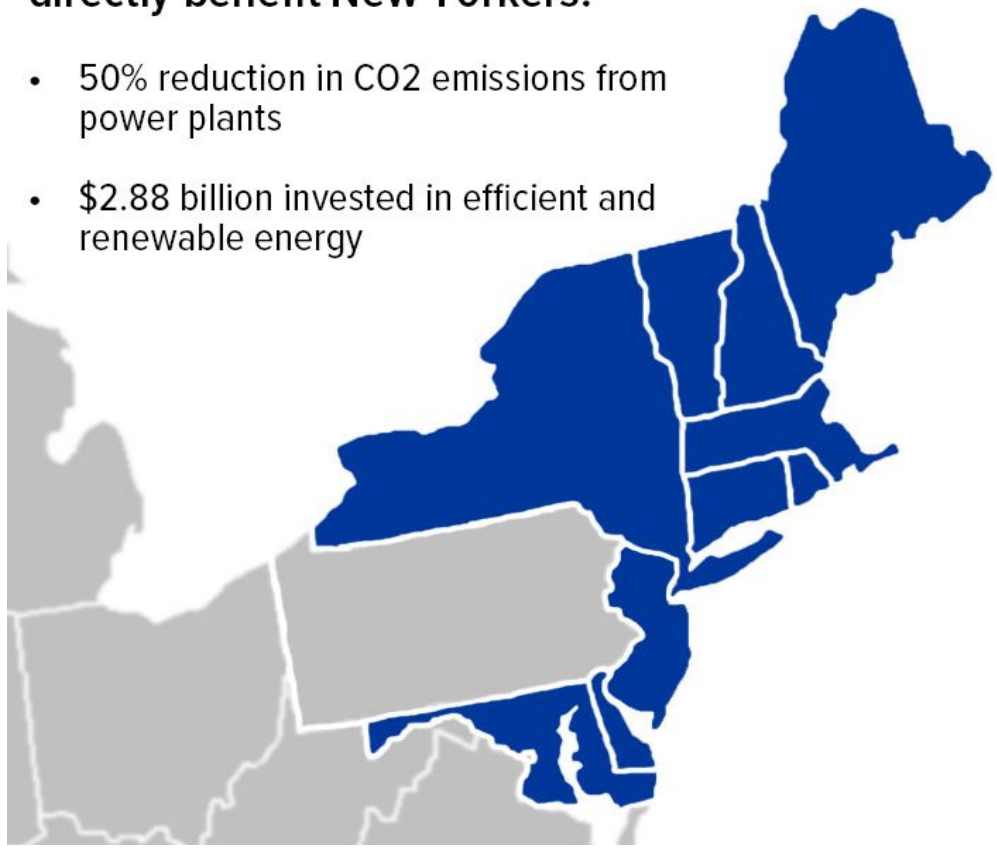
- The 10 Regional Greenhouse Gas Initiative (RGGI) states announced a commitment to strengthening the CO2 emissions cap for the period between 2027 and 2037 and established new mechanisms to protect energy affordability.

PSC Expands Energy Affordability Policy

- The New York State Public Service Commission (PSC) adopted a new enhanced energy affordability policy (EEAP).
  - Will provide energy bill discounts to gas and electric utility customers below median income who do not qualify for existing programs.

The Regional Greenhouse Gas Initiative continues to directly benefit New Yorkers:

- 50% reduction in CO2 emissions from power plants
- $2.88 billion invested in efficient and renewable energy



Review Minutes of the June 25, 2025 Meeting of the Board

Transmission & Distribution Reliability Study

Agenda

1. Background
2. High Level Report Outline
3. Overview of Future Transmission & Distribution Reliability Issues

Energy Law Section 6-108

- *…the board shall undertake a study of the overall reliability of the state's electric transmission and distribution system…*

At a minimum, the study is to include an assessment of:

(A) the current and projected reliability of the electric power system over the term of the planning period, with specific focus on transmission systems and distribution systems within the State. The assessment shall examine: (i) investment in infrastructure, including capital improvements, expansions, and maintenance; and (ii) workforce use.

(B) the potential impact of the following on distribution system reliability and on each factor enumerated in paragraph (a) of this subdivision: (i) distributed electric generation, especially generation, using renewable or innovative energy resources; (ii) energy conservation and efficiency; (iii) load control and peak-saving measures; (iv) corporate reorganization of electric utilities; (v) performance ratemaking, multi-year rate agreements, and other departures from traditional regulatory mechanisms; and (vi) large-scale industrial development.

(C) the potential impact of the following on transmission system reliability: (i) each factor enumerated in paragraph (b) of this subdivision; (ii) changes in protocols for electricity dispatched through the Bulk System Operator or its successor or successors; (iii) accommodation of proposed new electric generation facilities or repowering or life extension of existing facilities; and (iv) the market-driven nature of decisions to build, size, and locate such facilities.

Overall Outline

A. Introduction

B. Transmission System Reliability

C. Transmission System Planning

D. Distribution System Reliability

E. Investment and Expenditure Issues

F. Environmental Regulations

G. Energy Policy Initiatives

H. Future Transmission and Distribution Reliability Issues and Next Steps

Future Transmission and Distribution Reliability Issues and Next Steps

Enabling and Adapting to Rapid Load Growth

- Load growth is accelerating rapidly and causing uncertainty for planners.
  - Large Load MWs ~tripled between the 2022 and 2024 Gold Books.
  - By 2033, RNA projected peak increases of more than 2 GW in Summer and 7 GW in Winter.
  - RNA shows significant capacity shortfalls in cases with high load and cases without load flexibility.
  - The Gold Book that underpinned the RNA had range in peak demand across scenarios of >15 GW by 2050.
- Robust scenario planning that captures a wide range of future grid conditions would help least-regrets planning.
- Grid flexibility can help mitigate reliability risks.
  - RNA scenarios show grid flexibility can help alleviate reliability challenges posed by large load growth.
  - Grid of the Future initiative is an example of an effort to improve the utilization of grid flexibility measures.

Accessing the Full Value of Demand-Side Resources

- Demand-side resources have the potential to provide value in reliability and wholesale market participation but unlocking the full value of demand-side resources will require careful planning.
  - Key challenges include removing regulatory barriers and ensuring demand-side resources are appropriately compensated while maintaining market efficiency.
  - Variability and uncertainty of DSRs require verification mechanisms, telemetry and other measures.
- System operators should continue to remove barriers to enhance the ability of demand-side resources to efficiently provide their full range of potential benefits to the grid.
  - Grid of the Future Initiative focuses on modernizing grid operations and integrating distributed energy resources (DER) into wholesale markets.
  - NYISO's future efforts to improve DER Model to help enable demand-side resources to participate in wholesale markets could include (but not be limited to):
    - Enhancing bidding obligations to allow demand-side resources to provide more precise, flexible offers.
    - Reevaluating telemetry requirements.

Delivering Timely and Cost-Effective Solutions to meet Reliability Needs

- Expanding the grid fast enough to maintain reliability will require overcoming key barriers including:
  - Interconnection backlogs and delays.
  - Permitting challenges.
  - Extensive procurement timelines and supply chain disruptions.
  - Workforce shortages.
- Ongoing and potential future efforts to streamline processes include:
  - FERC Order 2023's efforts to improve best practices in interconnection processes.
  - RAPID Act's centralization of permitting major renewable generation and transmission projects.
  - NERC Reliability Risk Priorities Report made workforce development recommendations.
- Capacity additions will need to outpace load growth and resource retirements to ensure that resource adequacy is maintained.
  - Studies show significant quantities of Dispatchable Emission Free Resources (DEFRs) will be needed.

Advancement of a High-Renewable Grid will Require Aligning Markets and Planning Processes to Maintain Reliability

- Integrating high volumes of renewable energy will require balancing across timescales.
  - **Sub-hourly** balancing involves maintaining grid frequency and stability as renewable generation fluctuates in real time.
  - **Hourly and intra-day** balancing ensures that storage and flexible resources can shift energy between peak and off-peak periods.
  - **Inter-day to seasonal** balancing addresses the need for sustained energy availability over longer durations, particularly during prolonged periods of low renewable generation.
- Ongoing and potential future efforts to address balancing challenges include:
  - **Sub-hourly:** Balancing Intermittency project is exploring how to ensure sufficient reserves are always maintained to handle unanticipated unavailability.
  - **Hourly and intra-day:** Look to improve participation of storage and demand resources.
  - **Inter-day to seasonal:** New York should continue to investigate the availability of DEFRs as it's doing in the DPS Zero by 2040 proceeding.

Evolution of Planning Practices

- Advanced transmission technologies (ATTs) are valuable as modular, flexible, and potentially easily deployable solutions. Planning Processes should assess ATTs on equal footing with traditional transmission solutions.
  - FERC Order 881 requires operators to implement Ambient Adjusted Ratings (AARs)..
  - Order 1920 broadly requires ATTs and right-sizing be studied in future planning processes.
  - The Advanced Technology Working Group (part of the Coordinate Grid Planning Process) has been tasked with identifying and assessing the viability of ATTs.
  - The Public Service Commission issued an order that in part investigates the potential for enabling storage to be used as a transmission asset.
- Interregional coordination will become increasingly important for maintaining reliability.
  - The Northeast States Collaborative is working to improve coordination across state and regional boundaries and establish best practices for integrated offshore wind infrastructure planning.
- Electric and gas system planners should continue evaluating whether additional coordination measures are needed to ensure fuel adequacy and maintain reliability as system conditions evolve.

Increasing System Resilience to Extreme Weather Events

- Extreme weather events pose a significant threat to system reliability.
  - Recent storm hardening efforts include (a) PSL 66(29) (Resiliency Planning Law) and (b) NYISO's updated capacity accreditation for firm fuel resources ensuring performance during winter peaks and when fuel supply is constrained.
  - The 2024 RNA forecasted that New York may have to depend on imports from neighboring regions to meet local demand during extreme and unexpected events, highlighting the importance of interregional coordination.
- Reliability planning processes should consider several potential reliability metrics that may better capture the evolving needs of the grid.
  - Metrics that could supplement the more traditional metric of Loss of Load Expectation (LOLE) include: Loss of Load Hours (LOLH), Loss of Load Events (LOLEV), Loss of Load Probability (LOLP), Expected Unserved Energy (EUE), and Normalized EUE.

Thank you

Board Discussion

Resolution 15

Approval of supplemental Transmission and Distribution Study

State Energy Plan Topics

Transportation

Accelerating the transformation of the transportation system to one that provides **clean, affordable, reliable, and healthy transportation options to all New Yorkers while minimizing greenhouse gas and other emissions and promoting sustainable land use patterns** will involve coordinated investments and collaboration between New York State and its public and private sector partners.

Investment in multiple different modes of transportation is necessary to support diverse travel needs and provide affordable, accessible options for all New Yorkers. This includes public transit, active transportation, transit-oriented development, bus rapid transit, shared mobility, and micro-transit, and operational strategies.

Key Existing State Actions

- Zero Emissions Transit Transition Funding Program
- Modernization and Enhancement Program
- Clean Mobility Program
- Clean Transportation Prize
- Innovative Mobility Pilot Program
- 511NY Program

Related Recommendations

- **Expand public transit** through transit service enhancements, improving affordability, connectivity and convenience. **Modernize transit fleets** through the broader transition to zero-emission transit buses.
- **Support shared mobility services, including micro-transit services,** that provide access to affordable, flexible transportation options that connect more people to transit and provide additional options in communities with limited transit.
- **Enable more walking & bicycling opportunities** by enhancing active transportation network planning. **Work with municipal and economic development partners** to incorporate active transportation and transit planning and infrastructure into any new developments.

Continued public and private investment will help make zero-emission vehicles a more affordable and reliable option for New Yorkers. This includes investment in charging infrastructure and regulations and incentives for zero-emission light-duty vehicles (LD EV), medium- and heavy-duty vehicles (MHD EV), e-bikes, and non-road vehicles.

Key Existing State Actions: LD EV Charging

- PSC/Utility EV Make-Ready Program & EV tariffs
- PSC Proceeding on MHD EV Charging Infrastructure
- Charge Ready NY
- EVolveNY
- DEC ZEV Infrastructure Program
- NEVI & CFI funding

Related Recommendations: EV Charging

- **Continue existing charging programs for both Level 2 charging and DC fast charging** and prioritize funding for charging station locations with the highest impact on EV adoption.
- **Coordinate charging programs across agencies** to develop consistent technical standards and application processes, and to prioritize transparency.
- **Continue to develop MHD EV Make Ready Program and investment strategy for EV infrastructure-supporting utility upgrades.**
- **Identify and fund opportunities for installing MHD EV charging stations at public truck parking and shared public sites**
- **Expand funding to support fleet electrification plans,** as feasible.
- **Develop electrification roadmaps for target market segments**, working with industry to identify near-term and longer-term actions.

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Key Existing State Actions: LD EV Incentives

- Drive Clean Rebate
- DEC Municipal ZEV Program
- EV R&D programs
- New York Truck Voucher Incentive Program
- New York School Bus Incentive Program

Related Recommendations: EV Incentives

- **Continue to fund the Drive Clean Rebate and look for opportunities to increase its impact through higher targeted incentives**, as feasible. **Consider adding incentives for LMI LD EV buyers**.
- **Expand funding for MHD EV incentives** as feasible and **enhance eligibility for existing programs**. Focus on priority market segments where ZEV solutions are commercially available and phase in additional market segments as they become commercially available.
- **Collect and analyze data associated with MHD EVs** to provide better information about vehicle performance and economics to the market.
- **Pursue further demonstrations** in hard-to-electrify sectors.
- **Identify opportunities to support e-bikes**, especially for LMI buyers and delivery workers, through public-private partnerships and targeted funding.

Additional key findings relate to government collaboration, minimizing costs to electric ratepayers, workforce development, and other alternative fuels.

- **Collaboration between state agencies, local governments, and other entities** is vital to the success of transportation investments, including active transportation projects, transit projects, and the buildout of infrastructure that supports zero-emission vehicles.
- **Minimizing the costs to electric ratepayers associated with transportation electrification** through approaches like managed charging can reduce the impact of EVs on the electric grid and the need for additional infrastructure and will grow in importance as more New Yorkers drive and charge EVs.
- Investments in **recruitment, training, and retention** in both the public and private sectors is necessary to both maintain the current transportation system and support a zero-emission transportation system in the future.
- While shifting to zero-emission fuels (electricity and hydrogen) is the priority, **other fuels (e.g., renewable diesel, renewable natural gas) can be an effective option in harder-to-electrify market segments** and provide a transitionary pathway to include more subsectors in achieving emissions reductions.

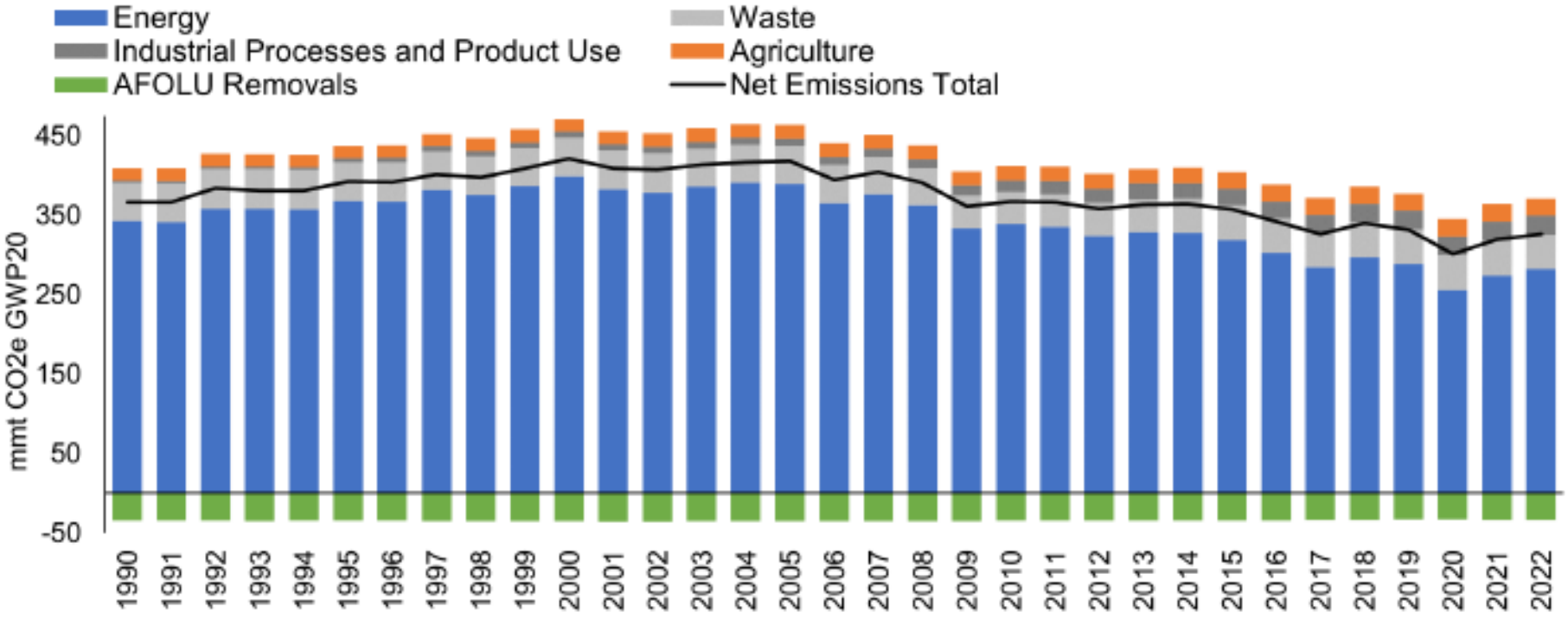
Board Discussion

Climate Change, Adaptation, and Resiliency

NYS must prioritize both reductions in GHG emissions and investments in resiliency measures to prepare New Yorkers for the impacts of climate change.

- Without resilience and adaptation efforts, projected changes in climate hazards will pose a significant risk to New York's energy system.
- NYS will continue to experience a wide breadth of climate-driven impacts, and with thorough planning, can rise to the challenge and adapt through its people, processes, and technologies.

The energy sector contributes 76% of total GHG emissions in NYS. Energy sector emissions have declined 18% since 1990. The State's clean-energy policies have already reduced emissions, and current and new policies are laying the groundwork for more significant economy-wide emissions reductions.



NYS Statewide GHG emissions by Sector, 1990-2022 (mmt CO_{2e} GWP20)

As a threat multiplier, the effects of climate change can exacerbate non-climate related impacts on the state's energy system. Layering a changing climate on factors like shifting energy demands, aging infrastructure, and existing disparities will increase the risks to the system and communities.

Key Existing State Actions

- Environmental Bond Act
- RAPID Act
- Climate Smart Communities
- Clean Energy Communities
- Smart Growth Program
- Community Air Monitoring Program

Related Recommendations

- **Identify and implement actions and policies that reduce the disproportionate impacts of climate change resulting from unequal distribution of energy system burdens and benefits**. Lessening existing disparities can help reduce vulnerability to climate impacts.

- **Consider investing in energy-efficient, clean-energy resilience hubs**, especially in underserved communities that are particularly vulnerable to climate change.

Actions to adapt to an already changing climate are essential to building a more resilient energy system now and in the future. The evolution of New York State's systems offers an opportunity to identify and implement new approaches that will increase resilience to both current severe weather and to future climate conditions.

Key Existing State Actions

- New York State Climate Impacts Assessment
- Extreme Heat Action Plan
- NYS Adaptation and Resiliency Plan
- Utility vulnerability studies

Related Recommendations

- **Undertake additional research on climate hazards with higher uncertainty** (e.g., changes in wind conditions, storm intensity, winter weather; changes in extreme precipitation and resultant impacts on energy system).
- **Conduct research on performance and effectiveness of emerging resilience and adaptation technologies** for the energy system, particularly under changing climate conditions.
- **Ensure that climate change is considered in all aspects of energy system**, including planning, infrastructure, and program design.
- **Coordinate efforts to mitigate GHG emissions with efforts to adapt to the changing climate**, including using existing and future statewide climate plans to inform a coordinated set of strategies aimed at both GHG mitigation goals and building climate resilience.

Environmental and Climate Justice

Reducing the cumulative burdens faced by disadvantaged communities (DACs) requires a multi-disciplinary effort. The energy sector can help by:

- Cutting household energy use and costs through building weatherization and decarbonization programs.
- Improving air quality by reducing fossil-fuel combustion from the buildings, transportation, and electric sectors.
- Creating economic development opportunities through green jobs and promoting supply chains led by Minority/Women-owned Business Enterprise (MWBE) and Service-Disabled Veteran-Owned Businesses (SDVOB).
- Advancing community priorities through meaningful collaboration in planning clean energy programs and projects.

Meaningful community involvement in energy project development is important. The participation of New Yorkers in shaping the development of clean energy projects that will impact their communities helps ensure local needs and priorities are addressed.

Key Existing State Actions

- Climate Justice Fellowship
- Clean Mobility Program
- DEC EJ Grants
- Inclusive Community Solar Adder

Related Recommendations

- Support technical and operational capacity-building for CBOs serving or representing DACs to increase participation, enhance local engagement and planning, provide legal and technical expertise for community-led clean energy projects, strengthen CBO business models with new funding streams, and reduce grant-related administrative burdens.
- Continue Indigenous Nation consultation for all 25MW+ energy generation and storage projects that may affect Indigenous Nation interests, through current and forthcoming RAPID Act regulations. The RAPID Act includes requirements for consultation with local governments and Indigenous Nations.

Inclusive outreach strategies are important to achieving New York's commitment that at least 35% — with a goal of 40% — of the overall benefits from clean energy and energy efficiency investments are directed to DACs. Effective outreach needs to be community-oriented and culturally responsive to drive meaningful participation.

Key Existing State Actions

- Clean Transportation Prize Initiative
- Climate Smart Communities Program
- Regional Clean Energy Hubs
- NYPA's Environmental Justice Program

Related Recommendations

- Address language barriers that hinder participation in clean energy programs and regulatory processes by improving language access plans, translating key outreach materials, and hiring multilingual staff, building on the 2022 state policy and focusing on the 12 most spoken non-English languages.
- Explore ways to leverage the Extreme Heat Action Plan's urban heat island map and DEC air monitoring data to target outreach for weatherization, clean heating and cooling, and solar + storage, which help protect communities from extreme heat and poor air quality.
- Expand community-based outreach through culturally relevant, face-to-face engagement and partnerships with schools, community centers, and local businesses.

Procedural equity is grounded in meaningful stakeholder engagement in clean energy planning and program design to identify solutions to multiple burdens and barriers.
Advancing procedural equity under the Climate Act requires substantive participation of DAC stakeholders in clean energy planning and program design.

Key Existing State Actions

- Community Air Monitoring Initiative
- DAC Consultant Pool
- Energy Equity Collaborative
- Energy Policy Planning Advisory Council
- Offshore Wind Environmental Justice Technical Working Group

Related Recommendations

- Sustain and expand agency capacity to support DAC stakeholder engagement in early-stage clean energy program design and in energy-related regulatory and public comment processes. Efforts should include ensuring language access, plain language explanations, supplemental outreach during public comment periods, and increasing overall efforts to actively engage DAC stakeholders in decision-making.
- Expand and increase participation in energy-related planning and regulatory processes from more frontline nonprofits, faith-based institutions, and CBOs reflecting the full spectrum of DAC needs and health vulnerability indicators.
- Support technical and operational capacity-building among CBOs that have a proven track record of serving or representing DACs.

Clean energy investment presents opportunities for job creation and economic development in DACs. Procurement and contracting can boost MWBE and SDVOB participation, while targeted workforce training and union apprenticeships can support green careers. Programs should be configured to optimize the 35% investment benefits commitment to DACs.

Key Existing State Actions

- Tier 1, On-Shore Large Scale Renewables
- Energy Efficiency and Clean Technology Training Program
- P-12 Schools Initiative

Related Recommendations

- Align workforce development programs to close equity gaps in job access for priority populations.
- Integrate on-the-job training and strong labor standards into clean energy projects to expand quality workforce opportunities in DACs.
- Building on proven models, explore expanding renewable energy and energy efficiency retrofit programs that procure from MWBEs and SDVOBs.

Clean energy investments aimed at reducing air pollution in DACs are critical to advancing health equity. Incorporating strategically designed, locally focused air pollution mitigation projects in DACs into broader clean energy investment portfolios can ensure meaningful and equitable health outcomes for New Yorkers.

Key Existing State Actions

- Coordinated Grid Planning Process
- Deactivation of small NYPA plants in NYC and LI
- Decarbonization Leadership Program
- Energy Storage Roadmap
- Peaker Rule

Related Recommendations

- Advance retrofit offerings for homes and multifamily buildings to improve indoor air quality and address health and safety needs, emphasizing projects in DACs and for LMI households.
- Accelerate deployment of medium- and heavy-duty electric trucks and buses with charging infrastructure to maximize health benefits for vulnerable populations near high-traffic roadways in DACs.
- Advance electrification and clean energy benefits and pursue GHG and co-pollutant reduction strategies, focusing on projects across the energy, building, waste, and transportation sectors identified or informed by the CJWG and DAC Community Advisory Committees under CAM to ensure pollution reductions and equitable investments.

Energy efficiency and clean energy policies should maximize energy security, safety, health, and comfort for low-income households while reducing energy burden. To meaningfully advance energy justice, New York State must prioritize health and energy security, safety, and affordability for low-income households.

Key Existing State Actions

- Empower + Program
- Energy Affordability Program
- LIPA Home Comfort Plus Program
- Renewable Energy Access and Community Help Program
- Weatherization Assistance Program

Related Recommendations

- Increase outreach in DACs so eligible residents can access bill assistance programs.
- Continue to prioritize weatherization and efficiency retrofits for affordability. Integrate funding for deferred maintenance and structural repairs into whole-home upgrades.
- Pilot holistic decarbonization in DACs by combining building retrofits, clean transit, renewables, and non-energy supports like housing and health.
- Strategically address transportation deserts in DACs by scaling Clean Mobility program models and expanding transit and active travel options.

Interagency coordination is key to optimizing clean energy benefits for DACs. Continued and stronger coordination among state agencies, utilities, and nonprofit organizations can support streamlined applications, better coordinated programs and engagement models, and community partnerships to increase DAC resident participation and maximize the benefits of clean energy programs.

Key Existing State Actions

- Extreme Heat Action Plan
- Energy Equity Collaborative (EEC)
- Healthy Homes Values-Based Payment Pilot
- Low-Income Energy Task Force (LIETF)

Related Recommendations

- Through LIETF, support cross-agency efforts to streamline application processes and create universal applications for programs serving overlapping populations.
- Pursue more consolidated funding applications for communities and local governments - where doing so would streamline processes and better leverage resources for clean energy.
- Continue to expand the interagency membership and collaboration within the EEC to strengthen cross sector planning and support more coordinated stakeholder engagement and strengthen interagency involvement across all EEC working groups, including Energy Transition, Workforce and Economic Development, Housing and Buildings, and Engagement and Access.

Local, Regional, and Federal Government Collaboration

The success of New York's clean energy transition depends on robust **government collaboration**. Coordination streamlines energy and climate planning and enables decision-making that appropriately considers economic growth, long-term resilience, and benefits to disadvantaged communities (DACs).

Local governments play a critical role in comprehensive energy planning and enhancing community resilience.

Key Existing State Actions

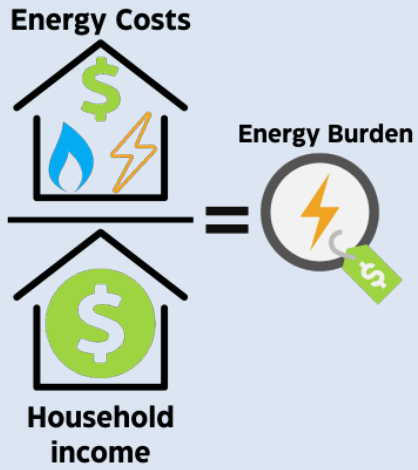
- Training courses for local officials
- Consolidated Local Street and Highway Improvement Program (CHIPS) & Statewide Transportation Improvement Program (STIP)
- Community Choice Aggregation (CCA)
- Clean Energy Communities
- Climate Smart Communities
- Smart Growth Planning Programs
- NYSERDA Build Ready
- Local Hazard Mitigation Planning

Related Recommendations

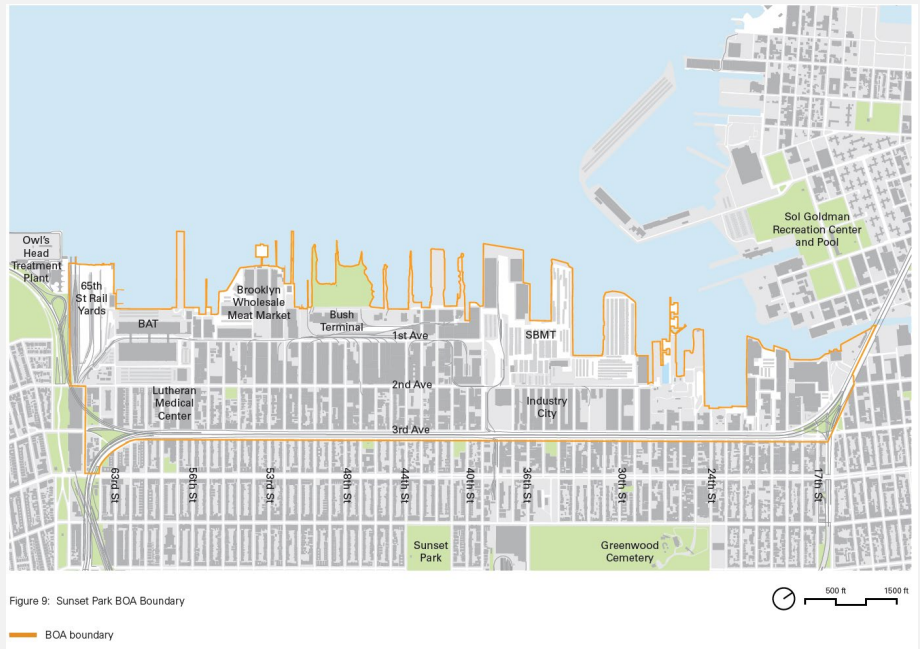
- Empower local governments to make informed decisions by increasing accessibility to climate and energy data.
- Encourage adoption of municipal clean energy policies attuned to local conditions.
- Increase local capacity by providing State support and guidance for energy planning.

Successes of empowering local government action

ECLIPSE
ERIE COUNTY LOW INCOME PROGRAM FOR SUSTAINABLE ENERGY



Sunset Park Brownfield Opportunity Area (BOA) - *Advancing clean energy & unlocking revitalization benefits*



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New York State has built strong regional partnerships that are necessary to advancing a just transition.

Key Existing Intrastate Partnerships

- Regional Planning Commissions
- Metropolitan Planning Organizations (MPOs)
- New York Battery and Energy Storage Consortium (NY BEST)
- Regional Economic Development Councils
- Clean Energy Zones
- New York Green Bank
- NYS Climate Action Council (CAC)

Key Existing Intergovernmental Strategies

- Regional Greenhouse Gas Initiative
- Regional Ocean Partnerships
- Technical Working Groups
- Northeast States Collaborative on Interregional Transmission
- Regional Emergency Preparedness Coordination
- Advanced Nuclear First Mover Initiative
- Collaboration with Indigenous Nations

Related Recommendations

- Continue to explore intrastate and intergovernmental partnerships to advance energy and adaptation solutions
- Develop State capacity and engagement strategies that specifically support cross-border issues of climate and energy planning.
- Continue collaborating with external partners to provide transparent data and reporting on health, environmental, and economic outcomes of the clean energy transition.
- Continue to foster market-driven change and innovation to progress the State's goals and achieve energy savings and livable communities.

New York must remain actively engaged in federal energy policymaking to ensure its unique interests, needs and priorities are represented and that its sovereignty in energy decision-making is retained.

Key Existing Federal Coordination Strategies

- Department of Energy (DOE) Appliance and Equipment Standards Program
- Federal Highway Administration Funding: Congestion Management Air Quality Improvement Program (CMAQ), Transportation Alternatives Program (TAP), and Carbon Reduction Program (CRP)
- Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act

Related Recommendations

- New York State should actively seek opportunities for federal partnerships and collaboration across all levels of government and industry
- The State should advocate for its interests at the federal level.

Board Discussion

The State Energy Planning Board Meeting will resume after a 10-Minute Break

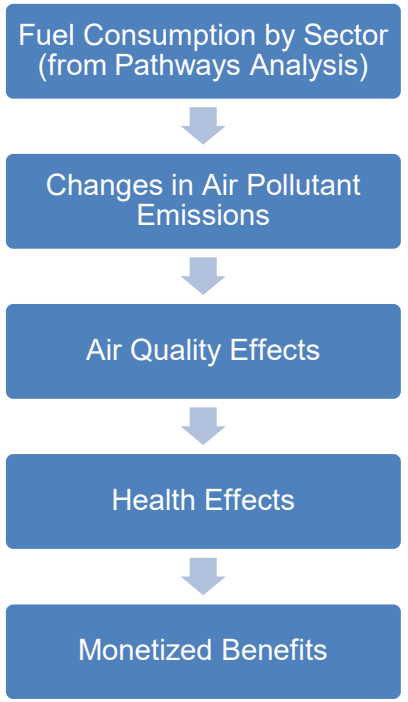
State Energy Plan Topics

Public Health Impacts Analysis

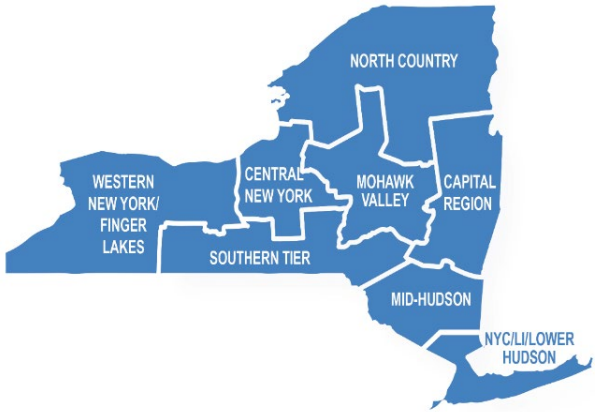
Methods Overview

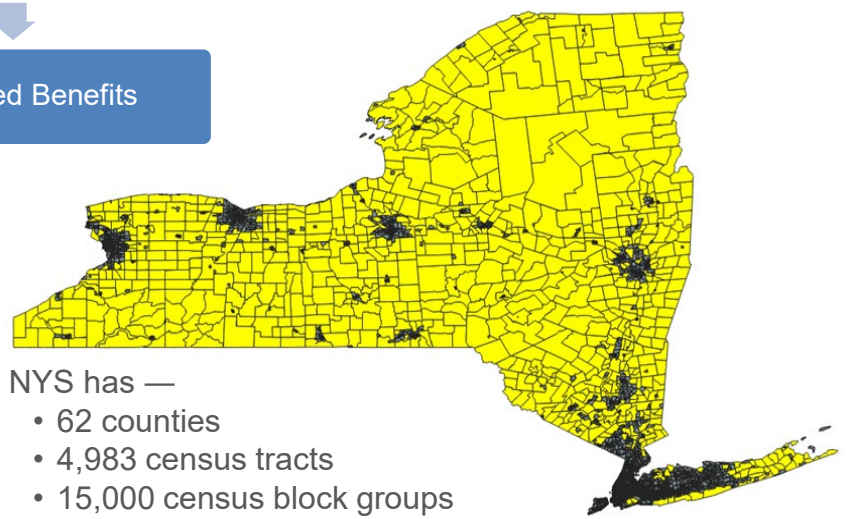
- A **new health impacts modeling framework (NY-CHAPPA)** was developed to assess benefits at the community level.
- This model enables **identification of benefits in disadvantaged community areas and non-disadvantaged community areas**, according to the definitions developed by the Climate Justice Working Group.
- This represents an **improvement over the analysis of the health benefits for the Scoping Plan**, which used EPA's CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA) and was not able to identify benefits by community type.

Analysis Framework



Air Quality and Health Model Regions





NYS has —
- 62 counties
- 4,983 census tracts
- 15,000 census block groups

Represented as 7,004 model units

NEW YORK STATE Energy Planning Board

Methods Overview

Scenarios Considered in the Health Analysis

Scenario	Description
No Action	Includes federal incentives and legacy NYS policies but excludes the Climate Act and more recent additional State and local policies
Current Policies	Current progress toward achievement of enacted State and local policies (e.g., Clean Energy Standard, building code updates, Advanced Clean Cars/Trucks)
Additional Action	All actions included under Current Policies scenario Additional progress toward adoption of clean technologies through some mix of future programs and investments
Net Zero A	Accelerates adoption of clean energy technologies in all sectors toward achievement of economywide net zero by 2050

Results are shown relative to the No Action scenario

Health Impacts of Additional Action: Key Findings

- The core planning scenario would lead to substantially lower air pollutant emissions, better air quality statewide, and substantial ensuing public health benefits
- Exposure to lower $PM_{2.5}$ and ozone concentrations with Additional Action would **avoid** —

	Annually by 2040	Total 2025-2040
Premature mortality	1,200	9,700
Nonfatal heart attacks	500	4,100
Asthma emergency room visits	1,400	12,500

- Health benefits within disadvantaged community areas would be greater.
  - 44-72% of the statewide physical public health benefits of Additional Action are expected to accrue within DAC areas, depending on the health outcome (higher than the approximately 36% of statewide population in DAC areas) — this is true in all areas of the state
  - 50% of statewide value of public health benefits accrue within DAC areas
- Statewide value of health benefits from Additional Action is estimated to increase up to $16 billion annually by 2040
- Cumulatively, most statewide benefits would be from reductions in emissions from transportation (50%) and buildings (39%), and 5% from electricity
- Public health benefits from the Additional Action scenario are approximately 30% greater than the Current Policies scenario

Projected Health Effects: Physical Benefits

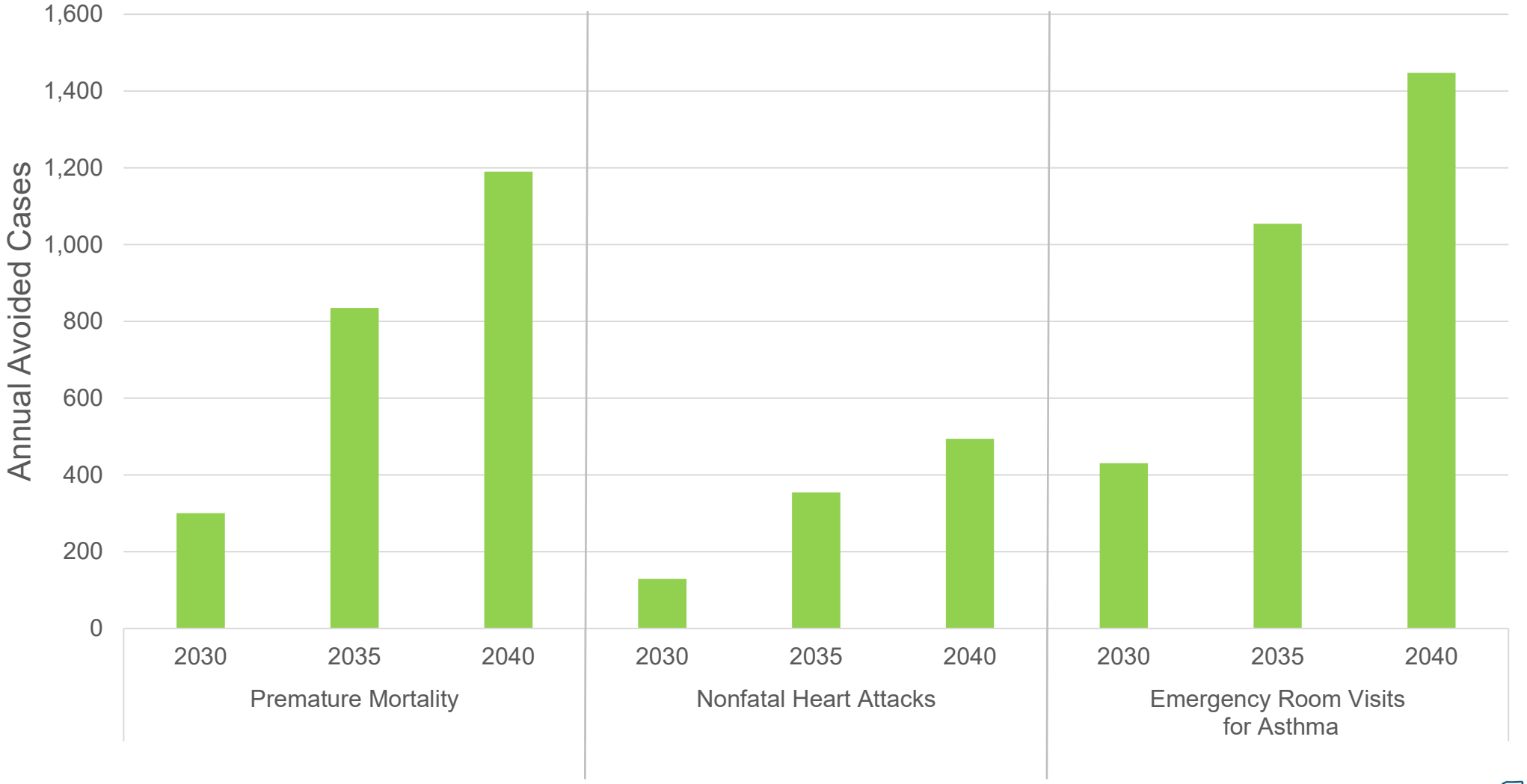
Additional Action Scenario

By 2040, air quality improvements can provide significant annual health benefits, including avoiding up to –

Health Effect	Avoided Cases Per Year	Fraction in Disadvantaged Community Areas
Geographic population of disadvantaged communities in New York:		36%
Premature Mortality	1,200	46%
Nonfatal Heart Attacks	500	44%
Hospitalizations	320	46%
Acute Bronchitis	510	46%
Respiratory Symptoms	16,000	46%
Emergency Room Visits, Asthma	1,400	72%
Asthma Exacerbation	9,800	46%
Minor Restricted Activity Days	321,500	45%
Work Loss Days	54,600	45%

The fraction of each health benefit accrued within disadvantaged community areas is larger than the disadvantaged community geographic areas' share of the population

Statewide Avoided Public Health Impacts by Year



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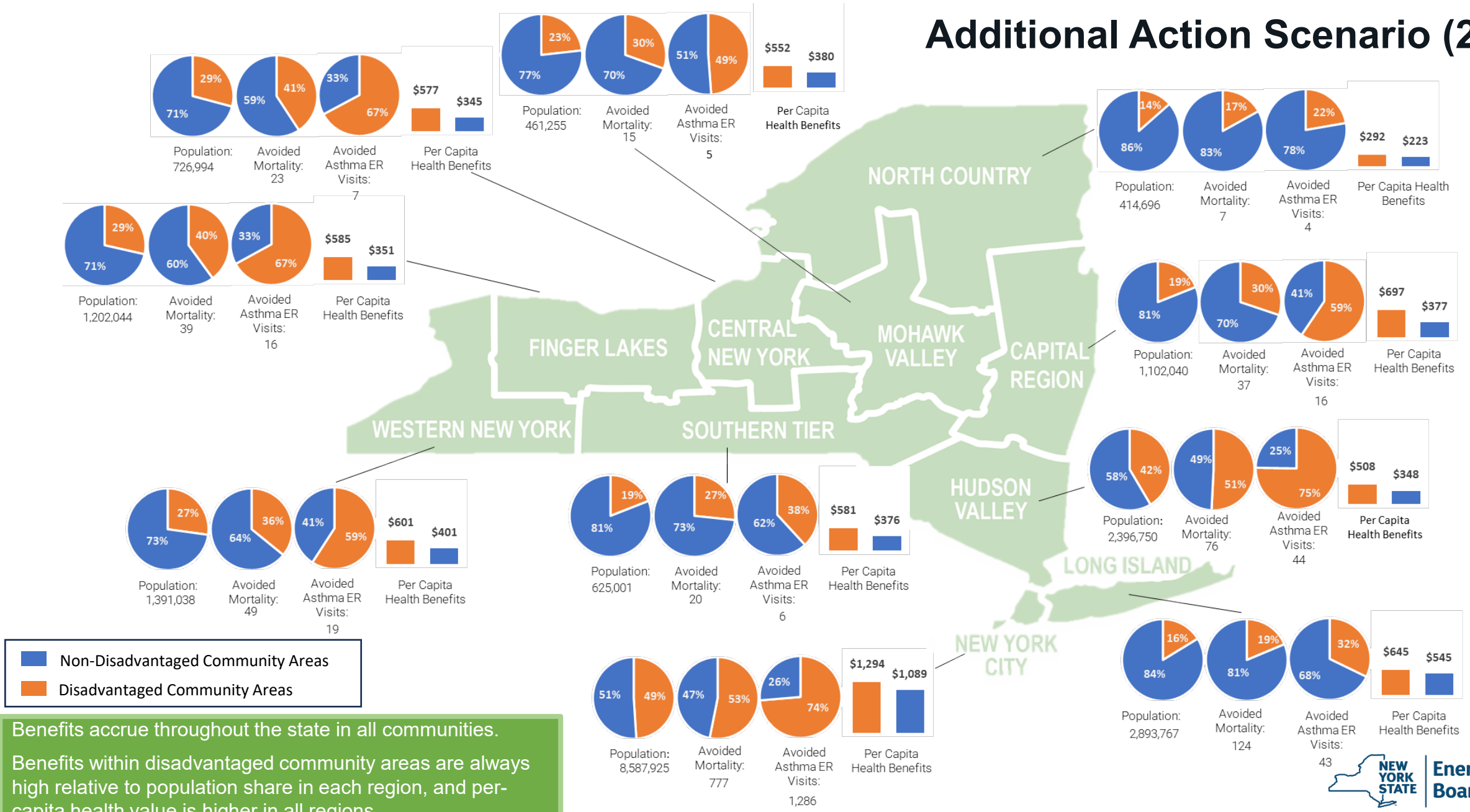
Additional Action Scenario (2040)



Benefits accrue throughout the state in all communities.

Benefits within disadvantaged community areas are always high relative to population share in each region, and per-capita health value is higher in all regions.

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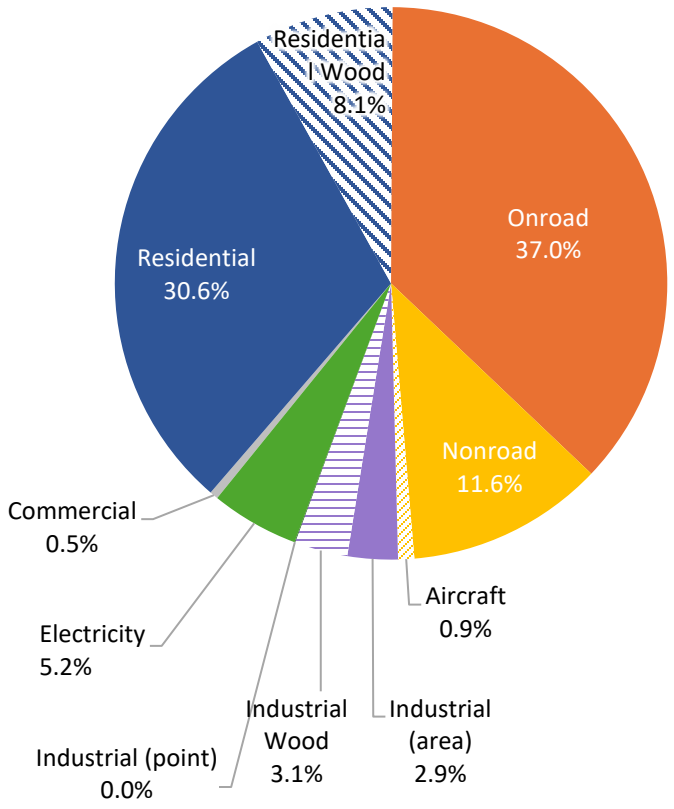
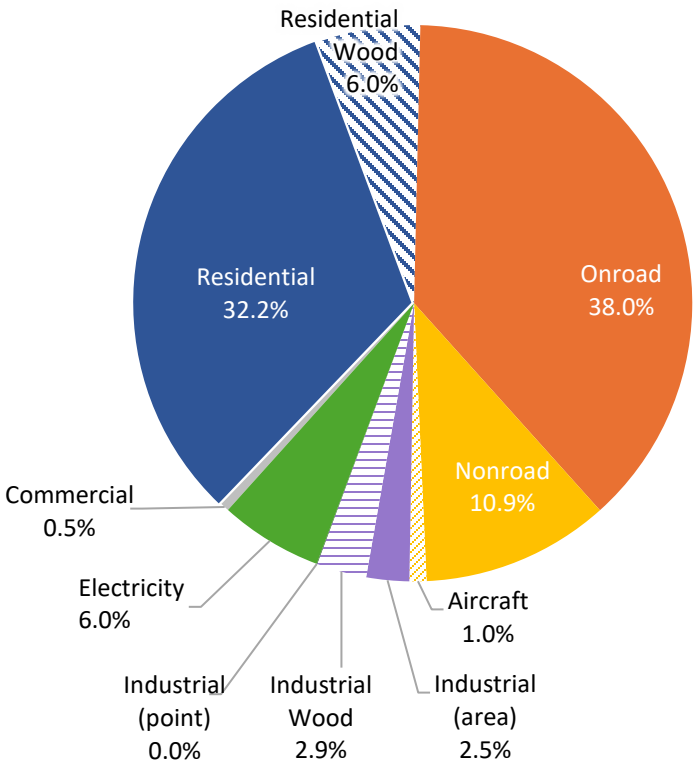
Projected Health Benefits: Value by Sector

Additional Action Scenario – 2025-2040

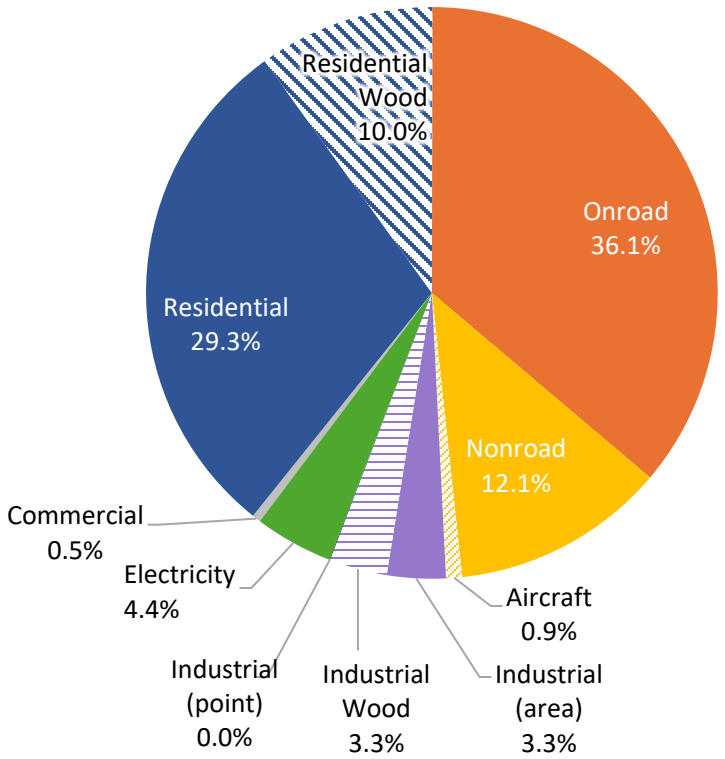
Statewide



Disadvantaged Community Areas



Non-Disadvantaged Community Areas



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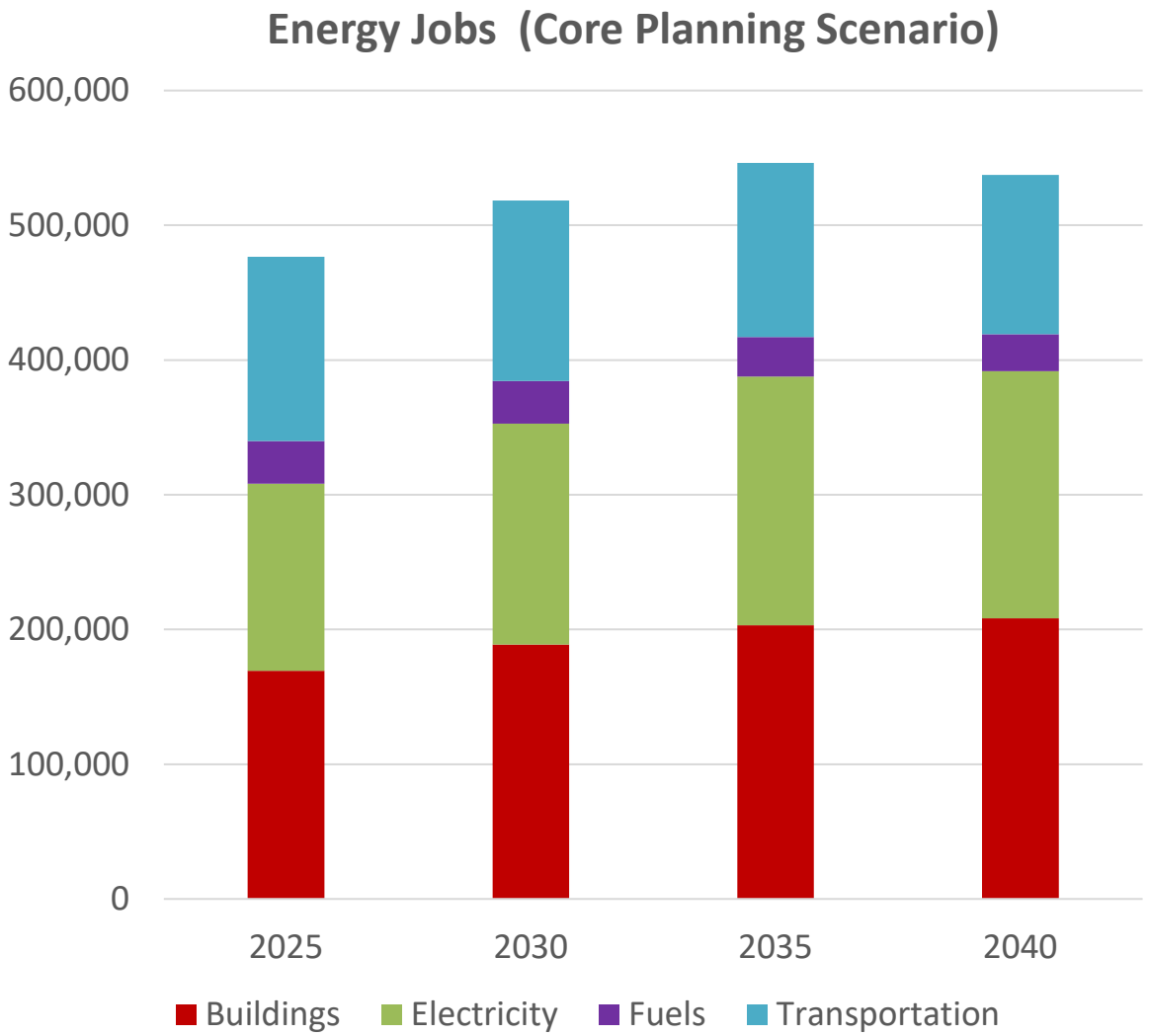
Economic Impacts – Jobs Analysis

Job Impacts: Key Findings



- Job creation is a central economic impact of the State's energy planning efforts
- Clean energy investments stimulate job growth in the energy sector and across the economy
- Employment impact analysis based on investments generated under our core planning scenario (Additional Action)
- Overall, energy jobs are projected to **grow 13%,** generating over **60,000 net jobs** between 2025 and 20240

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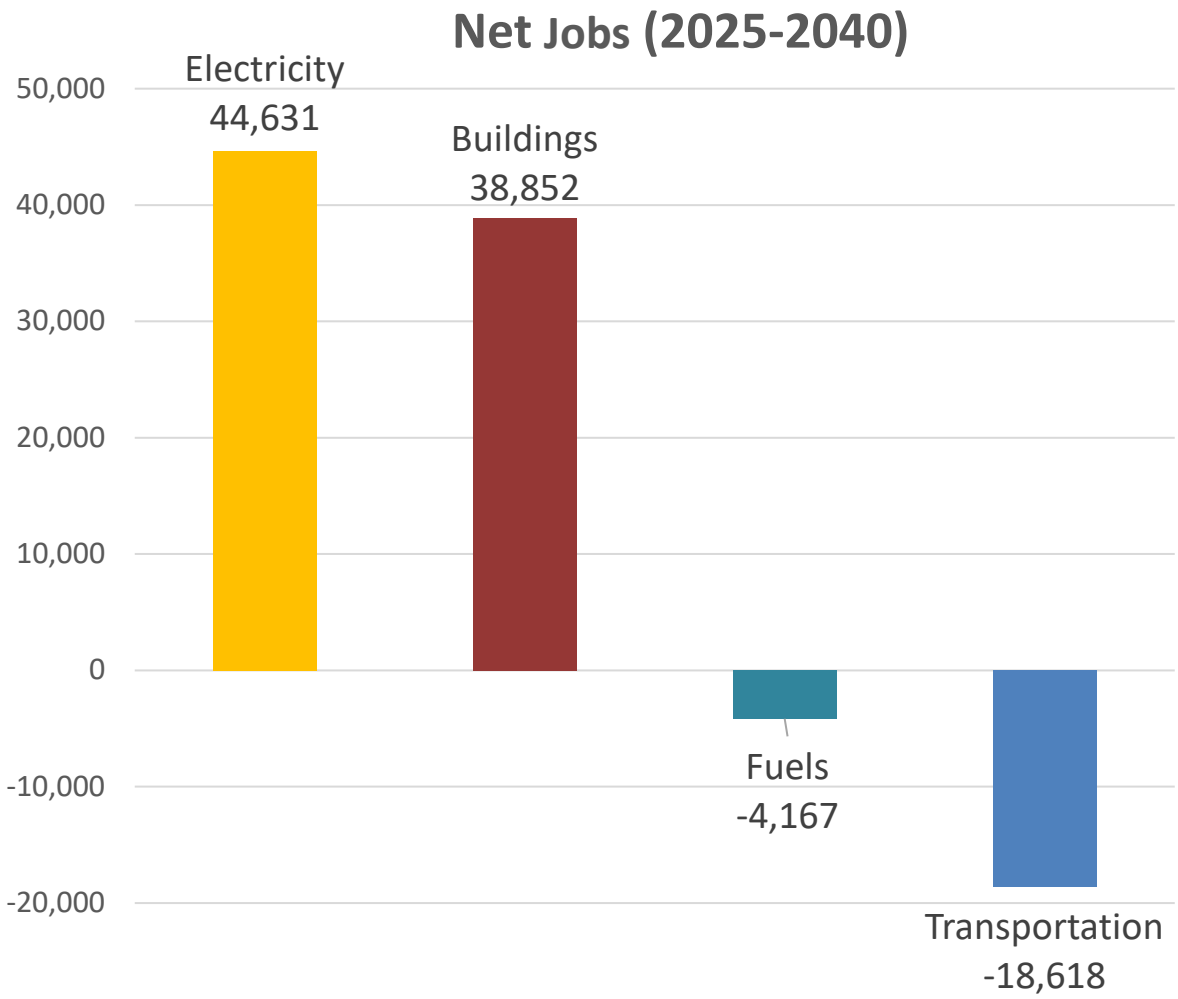
Job Impacts: Key Findings (cont'd)

- The **electricity and buildings sectors jointly added 80,000+ net jobs**, driven by investments into building decarbonization, clean electricity generation, and the utility sector
- Net jobs in growth sectors outnumber net displaced jobs **by nearly four times**
- Fuel delivery, vehicle fueling stations, and vehicle maintenance projected to see displacement as a result of decreased investments



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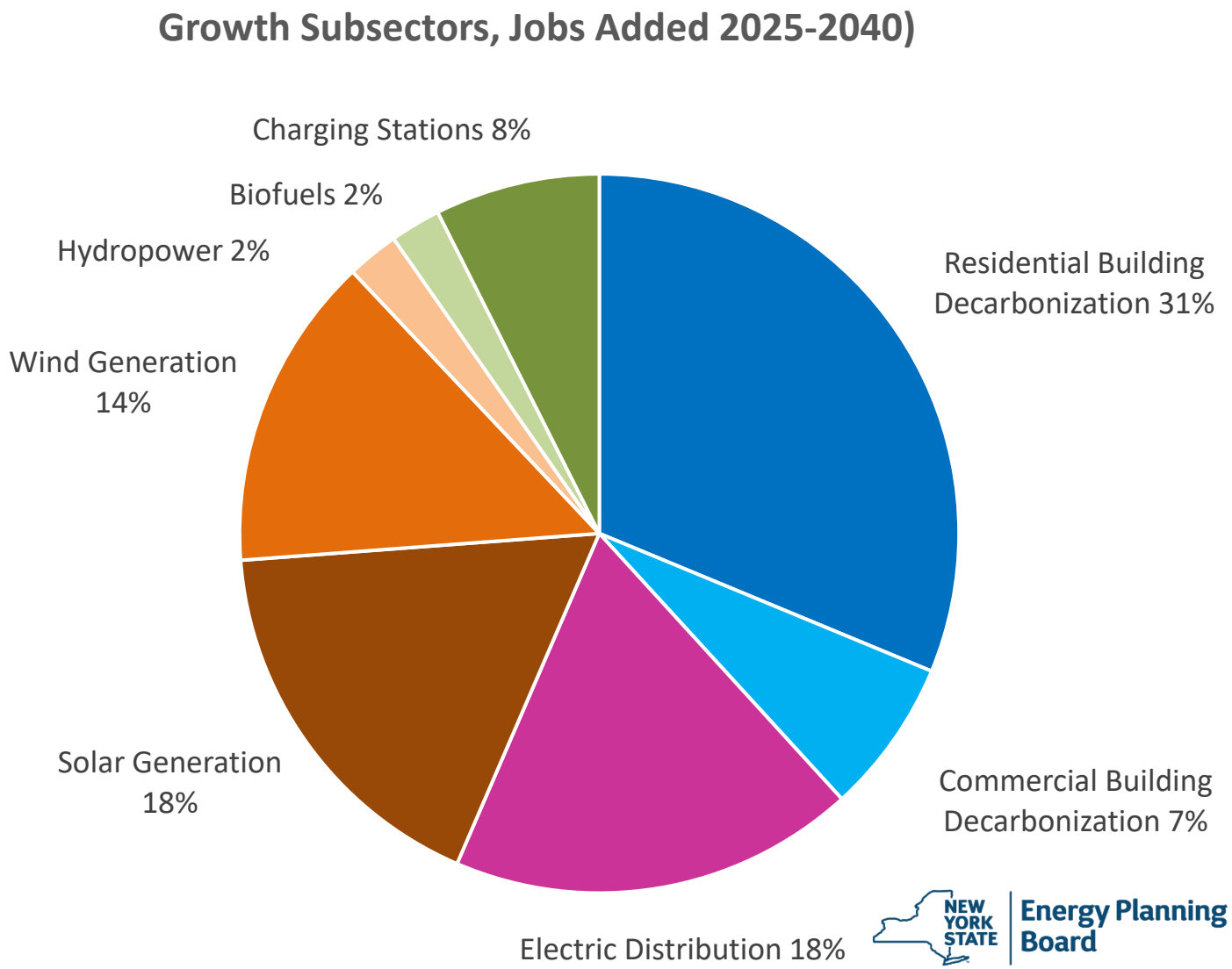
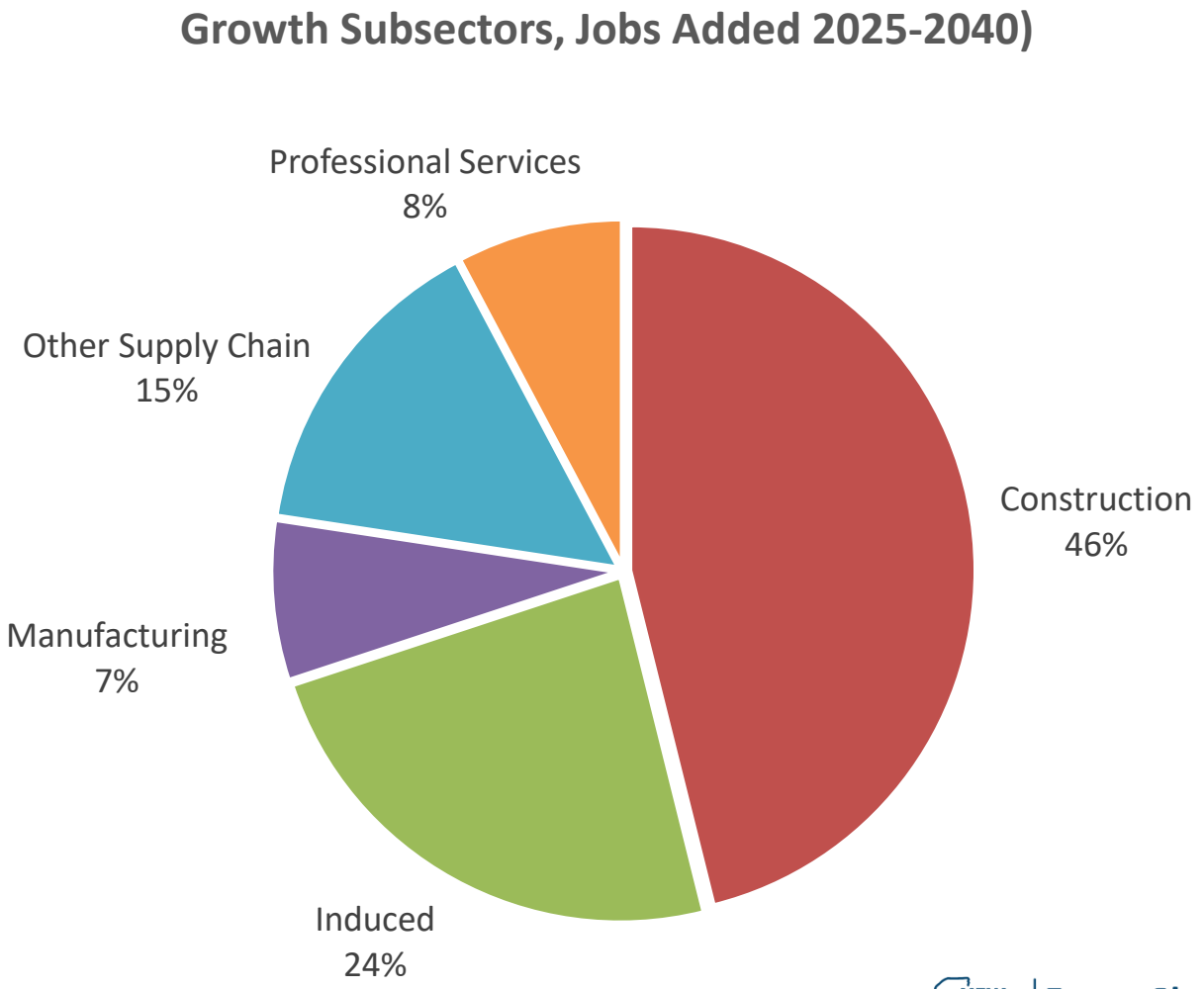
Employment in Growth Subsectors

- Over 80% of growth between 2025 and 2040 are concentrated in:
  - Renewable generation (30%+ of net growth)
  - Residential building decarbonization (30%+ of net growth)
  - Electric distribution (18%+ of net growth)



Employment in Growth Subsectors (cont'd)

- The largest share of jobs added in the growth subsectors is expected in the **construction industry** – projected to add over **45,000** jobs
- The core planning scenario is also expected to create over **7,500 net manufacturing jobs**



Environmental Impacts

Protecting Environmental Resources

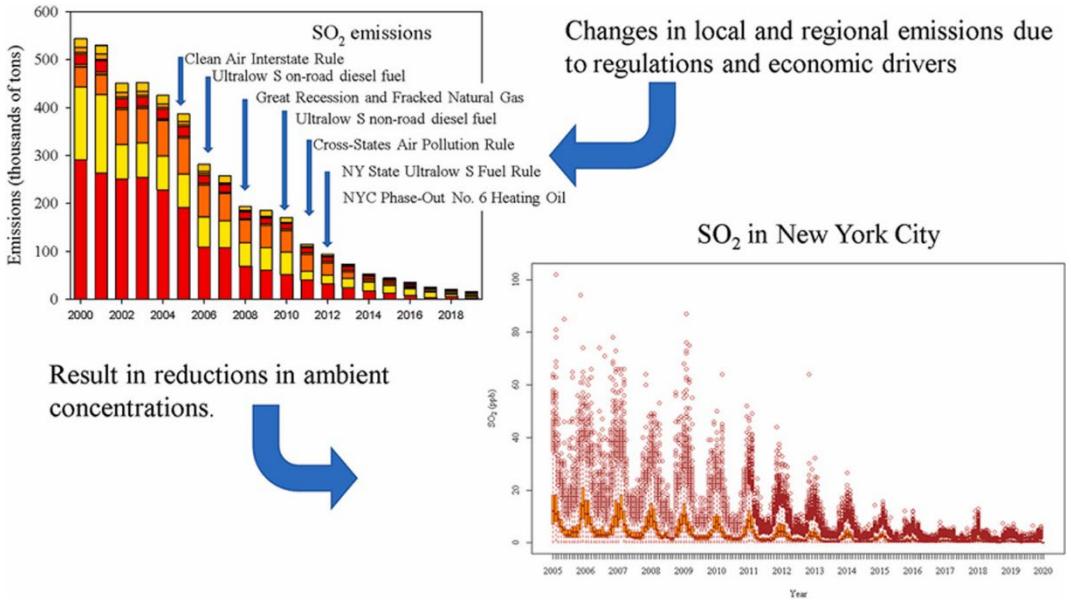
New York State contains a diversity of terrestrial and aquatic ecosystems, which provide critical ecosystem services, including food, water, forest products, air and water purification, flood prevention, carbon storage, climate moderation, recreational opportunities, and cultural services.

New York State's emissions control and clean energy programs are contributing to improving air quality and environmental benefits for communities and ecosystems across the state. Energy market forces and energy-related air quality policies have resulted in substantially reduced emissions and ambient concentrations of criteria air pollutants over the past 20 years, significantly reducing ecosystem stressors such as acid (rain) deposition. These trends in emission reductions and associated benefits are projected to continue under each of State Energy Pathway scenarios.

Key Existing State Actions

- Power plant emissions limits and controls
- Retirement of older fossil-fired "peaking units"
- Policies to reduce vehicle emissions
- Clean Energy and Clean Vehicle deployment
- New York City Clean Heat Program

Changes in ambient Sulfur Dioxide in NYS



Source: *Chen et al; Journal of Atmospheric Environment, Vol 311, Oct 2023*

New York State has a robust regulatory framework for identifying and mitigating environmental impacts associated with energy development, generation, transmission, and use. New York State's regulations and programs are implemented to protect and maintain our air quality, water resources, sensitive ecosystems and land resources, and wildlife from any adverse impacts associated with energy. These regulations and programs seek to address any adverse impacts from the full life cycle of an energy project – from construction to operation, decommissioning and waste.

Key Existing State Actions

- State Environmental Quality Review Act (SEQRA)
- Permitting and regulatory programs
- Wildlife and habitat protection plans
- Legacy fossil fuel site management and reuse
- Material and waste management programs

New York State strategies for procuring and siting energy resources can reduce energy project risks and minimize land use conflicts. Early investments in siting optimization can reduce environmental and project risks, help to inform construction windows and permit conditions, and accelerate project timelines.

Key Existing State Actions

- Programs to minimize and mitigate impacts to Agricultural and Forested Lands
  - Smart Solar Siting Scorecard
  - Agricultural Co-utilization Plans (ACUP)
  - Agricultural mitigation payments
- New York State Offshore Wind Master Plan
  - Pre-development surveys to identify sensitive resources and user conflicts
- Stakeholder driven Technical Working Groups

Opportunities to inform an environmentally responsible energy system transition should be leveraged through continued research into new and emerging technologies and fuels, best practices, and dual use of energy sites. Environmental monitoring enables policymakers to evaluate the effectiveness of energy-related regulations, policies and strategies.

Key Existing State Actions

- Agrivoltaic research and demonstration
- Inquiry into potential regional agronomic impacts from solar energy
- Investments in sustainable fisheries co-utilization and enhancement research
- Environmental monitoring

Board Discussion

Energy Plan Vision and Direction

State Energy Plan

- Provides broad policy direction to guide energy-related decision-making.
- Outlook through 2040 with recommendations for meeting future energy demands that prioritize energy systems that are reliable, clean, and affordable while supporting economic development, equity, and a healthy environment.
- Builds on New York's significant progress toward a clean energy economy, such as investing in energy efficient technologies that are saving New Yorkers money; installing over 6 GW of distributed solar; completing South Fork Wind, and breaking ground on the CHPE, Empire Wind 1, and Sunrise Wind; and the $1 billion Sustainable Future Program.
- Draft Plan was developed in a context of significant uncertainty.

Broad Planning Goals for the State Energy Plan

1. Deliver Abundant, Reliable, Resilient, and Clean Energy
2. Provide Affordable Energy to Households and Equitable Clean Energy Benefits
3. Support Economic Growth and Competitiveness
4. Advance Innovation
5. Continue Progress Toward Decarbonization and a Clean Energy Economy

1. Deliver Abundant, Reliable, Resilient, and Clean Energy

An abundant and diverse mix of energy sources and supply infrastructure benefits reliability and resilience and mitigates price fluctuations.

- Continued investment in renewables, energy storage, advanced nuclear technologies, and T&D grid upgrades, while valuing existing nuclear and hydropower generation.
- Continued focus on energy efficiency as well as load flexibility.
- Maintaining safe and reliable provision of electricity, natural gas, and petroleum fuels – all major fuels that are projected to remain meaningful sources of energy throughout the planning period.

1. Deliver Abundant, Reliable, Resilient, and Clean Energy (cont'd)

System investments and strategic energy planning will be needed to modernize aging infrastructure, integrate advanced technologies, and support economic development.

- Most energy-related investments will be made to maintain reliable energy services; the transition to clean energy will bring some incremental costs.
- Managing costs and risks through:
  - Operational flexibility for the electricity system and load flexibility.
  - Strategic and integrated planning for the electricity and gas systems.
  - Continued multi-agency energy security, emergency management efforts.

2. Provide Affordable Energy to Households…

Energy efficiency is foundational to State action to keep household energy costs manageable, including based on combined household energy and transportation fuel expenses.

- Market development, innovation, and incentives to help reduce the upfront costs of energy efficiency and clean energy choices that benefit households.
- Concerted action to address the disproportionate burden of energy costs borne by low- and many moderate-income households.
- Importance of federal policy and financial support (though uncertainty at present).

2. ... and Equitable Clean Energy Benefits

New York is working to ensure that all communities, and especially people within disadvantaged communities (DACs), will benefit from the State's clean energy transition.

- Clean energy programs tailored to meet the needs of DACs including low-income New Yorkers – to reduce energy burden and air pollution and expand access to quality housing, jobs, and economic opportunities.
- Outreach and engagement with residents and community-based organizations.
- Support for local government capacity for land-use and energy planning.

3. Support Economic Growth and Competitiveness

Reliable and affordable energy is essential to attract and develop strategic industries and support economic growth.

- Focused attention for energy intensive and trade exposed businesses.

Clean energy choices

- Technical assistance, market transformation, targeted financial support, and innovation to reduce the upfront cost of clean energy options for businesses, government and institutional buildings, industry, and agriculture.

Workforce development

- Workforce development initiatives coupled with labor standards to support high quality jobs in the growing clean energy economy.

4. Advance Clean Energy Innovation

Innovation helps reduce the cost of and increase the variety of energy technologies and services.

- Through State support for energy innovation, catalyzing the development and commercialization of technologies that enable the energy transition.
- Strengthening partnerships across New York's innovation ecosystem to foster economic development, create jobs, and leverage State investments

5. Continue Progress Toward Decarbonization and a Clean Energy Economy

Place New York's clean energy transition on a sustainable financial footing

- Diversify public funding sources and leverage private capital.
- Continue to evaluate the role of market-based mechanisms.
- Importance of federal funding and permitting.

Plan for Accelerated Action in the 2030s

- Evaluate emerging technologies and possible policy options, informed by robust public input, to understand which are appropriate for New York.

Board Discussion

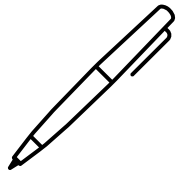
Resolution 14

Issuance of Draft State Energy Plan

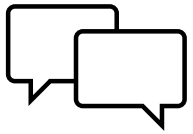
Next Steps

Public Review Process

Read the Plan. The Draft State Energy Plan, a summary for policymakers, fact sheets, and supplemental data can all be found on the State Energy Plan website (energyplan.ny.gov/Plans/Draft-2025-Energy-Plan)



Submit Written Comments. Written comments on the Plan will be accepted until October 6th, 2025. Comments can be submitted on our website (energyplan.ny.gov/Get-Involved/Comment).



Participate in Public Hearings. Public comments will be heard at nine public hearings scheduled across the State in August and September. (energyplan.ny.gov/Get-Involved/Hearings).

Public Hearing Schedule

Date	Location
August 19, 2025 *(2-4 PM)*	Virtual
September 3, 2025 *(5-7 PM)*	Buffalo
September 4, 2025 *(11AM-1PM)*	Rochester
September 10, 2025 *(5-7PM)*	Albany
September 16, 2025 *(5-7PM)*	Poughkeepsie
September 17, 2025 *(5-7PM)*	Brooklyn
September 18, 2025 *(11AM-1PM)*	The Bronx
September 29, 2025 *(5-7 PM)*	Stony Brook
September 30, 2025 *(5-7* PM)*	Virtual

**Will extend to 8pm if commenter attendance is high.*

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