



Andrew's Bio: Andrew Kozak PE, AEE Fellow has over 30 years of consulting engineering experience. He specializes in projects requiring thorough analysis and well-engineered solutions. Andrew's work has recently earned both the NYSERDA Buildings of Excellence Award and the ASHRAE Technology Award for Engineering Excellence for the Northeast Region. As a Fellow with the Association of Energy Engineers, he is a recognized subject matter expert and for his significant contribution to the profession. Andrew is a part time faculty member with NYU, teaching practical courses in sustainability and building services engineering.

I wanted to share a few important points about the current energy policy in NYS. This is a critical subject for every resident in the state simply because we depend on energy every moment of the day. Its also important to recognize that energy policy is written at the direction of politicians by those with degrees in public policy or political science, not engineering. Whatever your personal beliefs on climate change, I think everyone can agree that a rational approach that takes into account the environment, the needs of our citizens and our economic well being is what we all need.

The US Energy Information Administration website offers some quick facts about the production, consumption and status of energy in NYS: <https://www.eia.gov/state/print.php?sid=NY>

Similar to California or Massachusetts, New York is seeking to adopt a progressive energy policy. Subjects like electric vehicle mandates, congestion pricing, natural gas moratoriums, carbon taxation are constantly in the public spotlight. There is a vast amount of information available, so I will focus on three important aspects of this subject: The New York State Climate Leadership and Community Protection Act (CLCPA), the New York State Energy Research Development Authority and the future of nuclear energy in NYS. I provide links to official government websites with public information so that the reader can see the information I am referencing for themselves.

Please keep in mind that the Fiscal Year 2025 budget for New York State is \$237 billion. The New York State website states: "The \$237 billion budget makes record investments in the people of New York without raising income taxes. It includes hundreds of new initiatives that will help fight crime, fix our mental health system, and build more housing so people can afford to live and thrive in New York." The total state budget is a useful reference point to understand the scale of the budgets and investments listed below.

The **New York State Climate Leadership and Community Protection Act (CLCPA)** is a law passed in 2019 that is aimed at "addressing climate change and promoting clean energy in New York". It sets ambitious goals for reducing greenhouse gas emissions, including reaching net-zero emissions by 2050.

Website as follows: <https://climate.ny.gov/>

Key points include:

- 1 - Renewable Energy: The law requires that 70% of the state's electricity come from renewable sources like wind and solar by 2030.
- 2 - Energy Efficiency: It emphasizes improving energy efficiency in buildings and infrastructure. This includes changing many aspects of how we live and do business, such as the codes that dictate how we construct our commercial and residential buildings.

- 3 - Equity and Justice: The CLCPA aims to ensure that communities most affected by climate change, especially low-income and marginalized communities, benefit from the transition to clean energy.
- 4 - Climate Adaptation: It also focuses on preparing for the impacts of climate change, such as rising sea levels and extreme weather.

The CLCPA has funded a variety of programs including: electric vehicle infrastructure development, solar energy initiatives through NY Sun, community heat pump systems, clean energy community programs, municipal zero-emission vehicle infrastructure grants, weatherization assistance, and programs specifically targeting disadvantaged communities through agencies like NYSERDA, NYPA, and the Department of Environmental Conservation (DEC).

NYSERDA

NYSERDA stands for the **New York State Energy Research and Development Authority**. It's a government agency at the state level that promotes energy efficiency, renewable energy, and innovative energy technologies in New York.

Website follows: <https://www.nysERDA.ny.gov/>

In simple terms, NYSERDA:

- 1 - Supports Clean Energy Projects: It funds and promotes projects that develop renewable energy sources like wind and solar power.
- 2 - Offers Programs and Incentives: NYSERDA provides financial incentives and programs to help businesses and homeowners save energy and money.
- 3 - Conducts Research: The agency conducts research to find new ways to improve energy efficiency and reduce greenhouse gas emissions.
- 4 - Educates the Public: It helps educate New Yorkers about energy-saving practices and clean energy options.

Overall, NYSERDA plays a key role in “helping New York transition to a cleaner, more sustainable energy future”.

For 2024, NYSERDA's direct budget is approximately \$1.4 billion. The contracts for energy infrastructure projects that NYSERDA oversees are outside of this budget. The NYSERDA funding supports various initiatives aimed at advancing clean energy, enhancing energy efficiency, and promoting renewable energy projects across New York State. Key areas of focus include energy storage, electric vehicle infrastructure, and initiatives to reduce greenhouse gas emissions as part of the state's climate goals.

From the NYSERDA website: “New York's unprecedented clean energy investments, including more than \$28 billion in 61 large-scale renewable and transmission projects across the State, \$6.8 billion to reduce building emissions, \$3.3 billion to scale up solar, nearly \$3 billion for clean transportation initiatives and over \$2 billion in NY Green Bank commitments.”

<https://www.nysERDA.ny.gov/About/Newsroom/2024-Announcements/2024-10-17-Governor-Hochul-Announces-New-York-State-Has-Achieved-Major-Solar-Milestone>

NYSERDA also funds new Battery Energy Storage systems which will utilize technologies such as lithium ion batteries on a massive scale. See more here: <https://www.nysERDA.ny.gov/All-Programs/Energy-Storage-Program>

Nuclear Energy in New York State

Nuclear energy has and continues to play a significant role in the generation of electricity to meet New York State's energy needs. New York has several operational nuclear power plants, which provide a substantial portion of the state's electricity—around 25%. The plants are crucial for maintaining low greenhouse gas emissions, as they produce electricity without burning fossil fuels.

Many have had doubts about the future of nuclear power in NYS especially after the 2021 permanent closing of the Indian Point Generating Station. However, New York is now focusing on supporting its nuclear plants to help meet clean energy goals. The state has implemented policies and financial incentives to keep existing plants operational, recognizing their role in reducing carbon emissions and providing reliable energy. The state has plans to add both renewable energy sources by 2040 and expand nuclear energy.

The New York State Energy Research and Development Authority (NYSERDA) released a draft blueprint in September 2024 for advanced nuclear power generation in New York State:

Read it here: <https://www.nysERDA.ny.gov/-/media/Project/Nyserda/Files/ny/Draft-Blueprint-for-Consideration-of-Advanced-Nuclear-Technologies.pdf>

News agencies and print magazines such as AP News, The New York Times and The Economist have all run stories in October 2024 that cite a resurgence in nuclear power through the United States. The reasons for this resurgence center on the need technology companies have for dependable, low cost and carbon free electrical energy. See the following story from CNBC:

<https://link.join1440.com/click/37105261.1304663/aHR0cHM6Ly93d3cuY25iYy5jb20vMjAyNC8wOS8wNy9ob3ctc21hbGwtbW9kdWxhci1yZWJdG9ycy1jb3VsZC1leHBhbmQtbnVjbGVhci1wb3dici1pbi10aGUtdXMuaHRtbA/66c4c0715d78644b3aab54d9B2bf7cc73>

It is the author's belief that nuclear power will play a dominant role in the energy landscape moving forward and that NYS would be wise to establish a rational energy policy that recognizes this fact.