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FACT SHEET

THE CASE FOR MORE ENERGY EFFICIENCY IN NEW YORK

While New York State generally has been a national leader on climate and clean energy policy, a significant ramp-up in energy efficiency is needed to meet the state's goals. More energy efficiency could save customers an estimated $3 billion by 2030, create thousands of jobs, and improve public health. Governor Andrew Cuomo has committed to releasing a comprehensive plan to strengthen the state's energy efficiency goals by Earth Day: April 22, 2018. This fact sheet describes the potential benefits for New York if the governor establishes an ambitious, nation-leading energy-savings initiative.

New York's Clean Energy Standard requires the state to meet 50 percent of demand with electricity generated from renewable energy and to reduce greenhouse gas (GHG) emissions from the energy sector (power generation, industry, buildings, and transportation) by 40 percent relative to 1990 levels.[1] To meet these bold goals by 2030, New York State must significantly increase energy efficiency via every avenue available. Energy efficiency will help achieve the state's renewable energy targets by reducing total demand, meaning that more customers can be served by each wind farm or solar array. Reducing electricity use also avoids carbon emissions and other pollutants from power plants.

As the New York Public Service Commission has repeatedly affirmed, energy efficiency is the "cheapest and most effective manner to reduce carbon emissions in the energy sector."[2] A strong energy efficiency target and initiative to reach it can create more jobs, improve public health, deliver consumer savings, and improve integration of New York's various energy efficiency policies.

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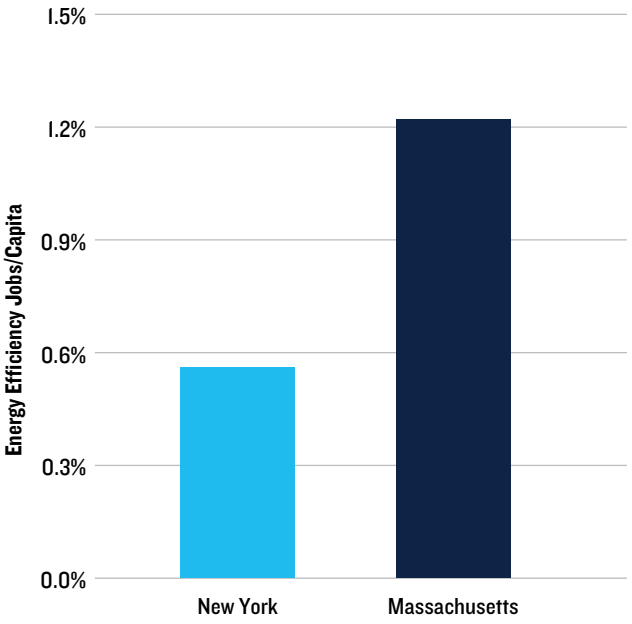
NEW YORK AND MASSACHUSETTS ENERGY EFFICIENCY JOBS/CAPITA



EFFICIENCY CREATES THOUSANDS OF JOBS

Energy efficiency is already the leading source of clean energy jobs in New York State. In 2016, according to the latest data available, 110,582 New Yorkers worked in the energy efficiency industry, performing research, manufacturing, installation, and other tasks. By comparison, there were 4,066 jobs in the natural gas sector and 711 jobs in oil and other fossil fuels.[3] An expanded efficiency market can create more competition and innovation for efficiency products and services, providing new opportunities to small businesses and entrepreneurs.

By spurring greater investment in energy efficiency, New York could create even more jobs. In 2015, Massachusetts, a leader in energy efficiency achievement, had almost twice the amount of energy efficiency jobs per capita than New York—about 1.22 percent versus New York's 0.56 percent.[4] If New York had the same number of efficiency jobs per capita as Massachusetts, it would have roughly 130,000 additional clean energy jobs.[5] Adopting strong energy efficiency targets can provide the impetus needed to create more clean energy employment.

ROBUST ENERGY EFFICIENCY IMPROVES PUBLIC HEALTH

Strong energy efficiency targets can reduce the use of heavily polluting fossil fuel peaker plants (which are designed to run when electricity demand is highest). These plants burn both oil and gas, contributing to higher levels of air pollution that drive asthma attacks and other serious health problems.[6] A recent report by the American Council for an Energy-Efficient Economy modeled the avoided healthcare costs of a 15 percent electricity demand reduction for the 50 largest U.S. cities and across the 50 states. It showed energy efficiency's health benefits would be higher for New York City than for any other city (as measured by avoided healthcare costs) and the avoided costs for New York would be second-highest among the states.[7]

Energy efficiency also has particularly large benefits when implemented in affordable multifamily buildings, which account for 21 percent of the state's housing stock and provide housing to more than 1.7 million New York households. Energy efficiency upgrades to these buildings can:

- improve air quality, decrease humidity to reduce mold, and lead to greater thermal comfort;[8]
- create healthier environments, reducing illnesses such as asthma that cause missed days of work and school;[9] and
- decrease the energy bill burden for low-income New York residents.

EFFICIENCY SAVES CUSTOMERS MONEY

Investing in energy efficiency lowers electricity bills for customers. These marked consumer benefits are clearly demonstrated through empirical analysis of the **Regional Greenhouse Gas Initiative (RGGI)**, the nation's first regional cap-and-invest program to cut carbon from power plants across New York and eight other northeastern and mid-Atlantic states.

The RGGI program caps the amount of carbon emissions from power plants by requiring fossil fuel-fired plants to buy one allowance for every short ton of carbon they emit into the atmosphere. It also channels new funds into clean energy because states reinvest this revenue in energy efficiency, renewable investment, and greenhouse gas mitigation programs.

Across the RGGI states, from 2008 to 2014, energy efficiency accounted for 58 percent of cumulative RGGI investment.[10] Over the lifetime of these programs, these energy efficiency investments are projected to avoid 12.9 million short tons of carbon dioxide pollution while saving customers $3.62 billion on energy bills.[11] In 2015, 64 percent of RGGI revenues were invested in energy efficiency programs; these have already saved customers $65.9 million on energy bills and are projected to save $1.3 billion over the lifetime of the investments.[12]

According to the Analysis Group, between 2012 and 2014, the New England RGGI states invested 81 percent of revenues and achieved $1.54 of positive overall macroeconomic impacts per dollar of revenue raised through RGGI. The RGGI states (Maryland and Delaware) in the PJM region invested 32 percent of revenues in energy efficiency programs between 2012 and 2014, achieving only $1.23 in macroeconomic benefits per dollar of RGGI revenue raised. Even after returning 39 percent of revenues directly to customers, Maryland and Delaware achieved less bill savings than those achieved by New England states.[13]

The potential bill savings impact of energy efficiency has also been demonstrated through analysis from the National Renewable Energy Lab. NREL's analysis estimates that residential energy efficiency improvements (such as adding insulation and installing more efficient heating and cooling technology) could reduce energy use for the average single-family home by 26 percent, resulting in $3.4 billion per year in utility bill savings for customers.[14] Energy efficiency improvements have the potential to reduce gas, propane, and fuel oil use by 149.7 trillion BTUs per year, in addition to 5.3 billion kilowatt-hours of electricity annually.[15]

A STRONG UTILITY ROLE IS KEY

A comprehensive state energy efficiency program will have many components, including strong building energy codes, appliance and equipment standards, and energy-saving initiatives by state agencies such as the New York State Energy Research and Development Authority (NYSERDA). Another particularly important piece of the solution is strong targets for utility energy efficiency programs, whereby utilities encourage energy savings through a variety of actions, such as customers investing in weatherization or administering appliance rebates, and then recover their investment costs through electricity bills.

New York's utilities today are only required to implement efficiency programs that annually save roughly 0.9 percent of the utilities' total energy sales. New York should follow the lead of other states that have incentivized utilities to gradually ramp up energy efficiency targets to a minimum of 3 percent per year. These annual savings are cumulative, meaning that over time they can equate to reducing a large fraction of total energy demand.

Modeling by Synapse Energy Economics shows that increasing New York's utility efficiency target to 3 percent annually, beginning in 2020, could save customers more than $3 billion on their utility bills in just 12 years.[16] Synapse estimates that under such a scenario, every additional dollar spent by New York electric utilities on energy efficiency programs would produce $1.65 in benefits to the system and reduce New York's electricity needs by 20 percent.[17] This could also reduce greenhouse gas emissions by as much as 37.5 percent by 2030.[18]

The best way to achieve savings via utility programs is through a clear and predictable policy framework. Well-defined rules will encourage greater long-term private sector investment in energy efficiency products and services.

A CENTRALIZED ENERGY EFFICIENCY PROGRAM CAN DRAW ON BEST PRACTICES

New York's current framework for energy efficiency is fragmented, operating through several processes. Utility energy efficiency savings targets are set through rate case proceedings in which the Public Service Commission sets the terms for how much individual utility companies can charge customers for energy. Energy efficiency is also addressed by state agencies such as NYSERDA through the Clean Energy Fund and other programs, as well as initiatives overseen by the New York Power Authority such as the BuildSmartNY program to reduce building sector emissions.[19,20,21]

Governor Cuomo's initiative could coordinate and strengthen these various policies and programs to provide a centralized, statewide framework for reporting progress in achieving energy efficiency targets and for updating them over time so they remain aligned with the state's goals. It also would facilitate feedback from diverse stakeholders and dialogue with the Public Service Commission, making it easier for all interested parties to understand and participate in the energy efficiency decision-making process by reducing market confusion.[22]

This initiative can draw from the centralized, statewide planning processes that have been successfully implemented by other states with leading energy efficiency programs. New York previously utilized a more centralized framework under the Energy Efficiency Portfolio Standard, which was operational until 2015.[23] In 2016, Massachusetts, Rhode Island, and Vermont ranked first, second, and third, respectively, in energy efficiency savings.[24] In Massachusetts and Rhode Island, programs are overseen by a central council representing a wide range of interested parties, while Vermont's programs are administered by an "energy efficiency utility" that is independent of the state's electric companies.

Program administrators in Rhode Island and Massachusetts, including National Grid in Rhode Island, are reaching 2.5 percent to 3 percent energy efficiency savings annually through similar centralized statewide planning processes.[25]

The findings of the Clean Energy Advisory Council (CEAC) also support the creation of a centralized energy efficiency planning framework. The CEAC's Energy Efficiency Procurement and Markets Report states that the New York Public Service Commission could "send clear market signals" through a "centralized and unified process" that would give stakeholders such as utilities, energy efficiency companies, and customers more certainty about "procurement funding rules, targets, and performance incentives out to 2030."[26] This in turn would allow energy efficiency service companies to make long-term investments based on the state's plans.

Ultimately, New York's planning process will need to facilitate achievement of the strong energy efficiency targets that Governor Cuomo sets by Earth Day. New York can and should position itself as a leader in energy efficiency and create jobs, improve public health, save consumers billions, and complement the state's nation leading climate and clean energy goals and initiatives.

ENDNOTES

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