



ENERGY EFFICIENCY

SUMMARY

More than one-quarter of New Jersey's greenhouse gas emissions come from residential and commercial buildings. If emissions from the electricity used to power our buildings are taken into account, this share rises above 40 percent. Despite having the country's highest population density, New Jersey's share of nationwide residential emissions is well above the its share of the total population (2.8% of the population vs. 4.6% of all residential emissions).

Energy efficiency means using less energy, particularly in building construction and operations. Using less energy in buildings saves money and helps the environment, and is the cheapest way to achieve clean energy and better environmental health. Energy efficiency tools include installing efficient lighting, HVAC, refrigeration, and other appliances, insulating homes and repairing leaky doors and windows, using smart controls to turn off heating and lights when not in use. Integrating energy efficiency into construction to fix up existing buildings will reduce energy usage, save money for households and businesses, create new jobs, improve indoor air quality, and fight climate change.

For every \$1 million invested in energy efficiency, approximately 8 jobs are created, while that same amount invested in fossil fuel energy only creates about 2.5 jobs. Energy efficiency jobs are local, family-sustaining, and higher paying than many other industries. Energy efficiency brings significant employment and economic benefits to communities.

Since 2008, 1.3 billion dollars have been diverted from the New Jersey Clean Energy Program, while the state's energy efficiency ranking has slipped from 10th to 24th. It is critical that the state stop siphoning funds away from the Clean Energy Program. New Jersey must take an active role in driving emissions down and increasing renewable energy, as the funds were intended to support.

If the state is to achieve its goal of reducing emissions from 2006 levels by 80% by 2050, it needs to take major steps to address the contribution of its building sector.

POLICY RECOMMENDATIONS

1. IMPROVE ENERGY EFFICIENCY SAVINGS

Require a 30% reduction below 2015 levels for electric and natural gas usage in New Jersey by 2030 with clear, measurable interim benchmarks, including support for conservation programs.

2. EXPAND ENERGY EFFICIENCY AT INDUSTRIAL FACILITIES

New Jersey should support policies and measures that expand the use of industrial energy efficiency technologies, that will serve to reduce greenhouse gas emissions, maximize efficiency, and help industrial facilities be more competitive nationally and globally.

3. GREEN BUILDING STANDARDS FOR NEW & EXISTING CONSTRUCTION

High performance green building standards in new and existing state construction ensure that the state leads by example. Examine and update building envelope and efficiency codes and requirements, train employees for operations and maintenance to optimize building performance, implement green cleaning and renewable energy measures in public buildings, particularly schools. Offer free benchmarking for hospitals, municipalities, public schools, universities, multifamily units, retail, and other sectors allows for greater insight into the benefit of energy efficiency.

4. CONVENE AN ENERGY EFFICIENCY TASK FORCE

The state must convene a task force of building industry professionals and stakeholders to chart a comprehensive and long-term path to reducing pollution in the building sector. The task force should consider best practices in building use and design, ways to increase energy audits and energy use transparency, changes to the state's uniform building code that can improve efficiency in new buildings, recycled materials, location siting, and a full set of policy options to drive retrofits in existing buildings.

5. ESTABLISH ENERGY DATA TRANSPARENCY

Access to energy data is the foundation for any real building efficiency progress; residents and building owners need simple access to understandable, reliable information. The NJBPU should give building owners and managers electronic access to monthly, whole-building, aggregated energy consumption data with reasonable confidentiality protections for tenants. Being able to measure and verify energy reduction is critical.

6. IMPROVE BUILDING PERFORMANCE

Invest in the building performance departments of the future. Local building departments must be given the tools and resources they need to implement New Jersey's building energy standards. Current policy rewards the exceeding of mandatory code, but does not address the larger problems of overall compliance and older buildings that lag far behind current standards. To achieve state goals for efficiency and energy independence, the state must prioritize strong compliance for all buildings with the state's energy code and consider incentivizing up-to-code improvements for buildings designed and built to lower standards.

RECOMMENDATIONS DEVELOPED WITH
[US GREEN BUILDING COUNCIL NJ](#) & [ADVANCED ENERGY](#)

WE WANT

80% REDUCTION OF EMISSIONS BY 2050

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