

Advancing Sound, Science-informed Climate Change Policy in New Jersey: *Opportunities for the Next Governor*

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Changing climate conditions have already had and will continue to have devastating impacts on New Jersey's economy, the health of our residents, the State's natural resources and the extensive infrastructure system that delivers transportation services, energy and clean water to millions of New Jerseyans. New Jersey has had a strong history of being on the forefront of enacting policies to protect the state's natural resources, communities and residents from environmental threats. Given rollbacks in climate change protections at the federal level, now is the time for New Jersey to adopt sound policies to address the sources of climate change, while also making our state more resilient.

We are a group of individuals who share a similar commitment to advancing sound climate change policy in New Jersey because we believe that doing so will contribute to global efforts to address changing climate conditions and will also bring public health, economic, environmental, community development and other benefits to the Garden State. While each of us may not agree with the specifics of every recommendation made here, our intention in preparing this document is to spark a dialogue now with both the public *and* with the incoming administration. And we all strongly agree that it is absolutely essential that New Jerseyans come together to foster a meaningful and civil dialogue that will produce informed policies and specific actions to move New Jersey closer to attaining its statewide greenhouse gas emissions limits while making our state more resilient, healthier, and more prosperous.

Given the federal government's recent decision to withdraw the Federal Flood Risk Management Standard, New Jersey's next Governor has tremendous opportunities to use existing authorities to strengthen standards that protect New Jersey's people, communities and infrastructure from increased extreme flood hazards. Such protections can result from the State's adoption of scientific guidance issued in November 2016 by the New Jersey Climate Adaptation Alliance regarding sea-level rise, coastal flooding, and coastal storms, and to use that scientific guidance to inform state and local planning. Consultation with the science community is also needed to develop similar guidance to address other changing climate conditions, such as temperature and precipitation. New Jersey's next Governor can be a national leader on sound climate change policy by committing to join other states, towns, businesses, and institutions across the country that have united together to continue to support climate action to meet the 2015 Paris Agreement.

New Jersey has ample statutory authority to move the state towards attainment of its long-term statewide emissions limits. Other states are already benefitting from investments in sound climate change mitigation policies. A recent report, *An Examination of Policy Options for Achieving Greenhouse Gas Emissions Reductions in New Jersey*, points to existing authorities that are available to the next Governor to advance sound climate change policy. The report also highlights benefits that other states are gaining through adoption of notable climate change policies. The New Jersey 2020 and 2050 greenhouse gas limits set 10 years ago in the Global Warming Response Act continue to provide an important and viable framework for sound climate change policy in New Jersey. Policy needs to focus on greenhouse gas contributions from all sectors of the state's economy including the transportation sector, which is the largest contributor to greenhouse gas emissions in New Jersey. Policy opportunities in the transportation sector include increasing the efficiency of vehicles, advancing the use of fuels that are carbon-free or less carbon-intensive, and reducing vehicle miles traveled through smart development and redevelopment patterns and substantial investments in mass transit.

Specific opportunities available to the next Governor to advance sound, science-informed climate change policy include:

1. Develop a comprehensive mid-range and long-range economy-wide plan to achieve New Jersey's greenhouse gas limits established in the Global Warming Response Act, including specific implementation strategies that rely heavily on existing statutory authorities.

- a. Set an interim 2030 target for statewide greenhouse gas emissions to ensure that the state's efforts stay "on track," as has been done by several other states with leading climate change policies.
- b. Set sector specific targets for greenhouse gas emissions reductions, particularly for the energy and transportation sectors, which are the largest contributors to greenhouse gases in New Jersey.
- c. Establish routine, quantitative and public reporting of progress towards meeting the statewide limits.
- d. Ensure that the plan addresses all greenhouse gases, not just carbon dioxide, including High Global Warming Potential gases and black carbon from diesel sources, a contributor to global warming.
- e. Assess the extent to which the Global Warming Response Act, and other existing authorities, can be applied to ensure that the statewide limits are binding.
- f. Embrace several key principles, including:
 - i. Placing a priority on climate change mitigation policies that, in addition to contributing to significant reductions in greenhouse gas emissions, deliver important co-benefits to New Jersey such as improving public health, stimulating job growth, increasing and enhancing open space, and contributing to the development of livable communities;
 - ii. Placing a priority on strategies that not only reduce greenhouse gas emissions, but also increase the resilience of New Jersey's communities such as through restoration of coastal wetlands that sequester carbon dioxide and provide a protective buffer to sea level rise or through planting trees in urban communities that reduce heat island effect and that also sequester carbon dioxide;
 - iii. Prioritizing greenhouse gas emissions offsets that result in verifiable and measurable investments in New Jersey, not out of state;
 - iv. Establishing specific strategies to ensure that state policies equitably distribute the environmental, health, economic, and social benefits of climate change actions, including:
 - Ensuring that populations and communities that are most affected by climate change benefit the greatest from state policies, including but not limited to investment of revenues generated from climate change policies;
 - Tracking outcomes of state climate change policies to ensure that those policies result in emissions reductions in communities already disproportionately burdened by pollution and undertaking strategies that result in localized emissions reductions in such communities;
 - Directing public monies and providing incentives to those populations and communities that do not have the independent financial means to implement climate change mitigation strategies, recognizing that strategies such as upgrading homes to allow for installation of renewables and energy efficiency improvements is a cost-effective climate mitigation strategy.
- g. Advance climate change policies that do not create incentives for increases in emissions of greenhouse gases outside of New Jersey. The potential for greenhouse gas emissions to increase outside of a state with comprehensive climate change policies is referred to as "leakage" and is very much a concern of states implementing and developing comprehensive climate change policies, especially in a scenario where federal policy is absent.
- h. Outline implementation actions including identification of resources and appointment of a lead agency for coordinating interagency efforts and monitoring plan implementation.

2. Undertake a set of immediate actions. The next Governor has the opportunity to advance a set of impactful climate change policies within the first 100 days using existing authorities. Consideration should be given to policies that:

- a. Advance New Jersey's participation in and leadership of multi-state alliances to leverage the market and drive private and public sector innovation, for example rejoining the Regional Greenhouse Gas Initiative and signing

- onto the Multi-state Zero Emission Vehicle (ZEV) Memorandum of Understanding. New Jersey can go beyond these actions and actively participate in multi-state efforts especially in the Northeast and Mid-Atlantic Regions to drive market forces towards adoption of innovative climate-friendly technologies and products through establishment of standards, creation of consumer incentives, and further public outreach and education;
- b. Adopt the reporting program required by the Global Warming Response Act to provide a transparent and reliable system for tracking trends and sources of emissions and to monitor emissions resulting from state climate change policies to ensure emissions reductions occur in communities already burdened by environmental pollution;
 - c. Incorporate climate change impacts as part of major state planning and rulemaking efforts, including:
 - i. Establishing a consistent metric for monetizing the social cost of carbon and, requiring all state agencies, to incorporate that metric in state rulemaking, public spending as well as review of filings and cost benefit analyses conducted by the Board of Public Utilities;
 - ii. Applying consideration of climate change impacts and achievement of the state greenhouse gas limits into major state planning efforts and funding decisions, including development and redevelopment, energy, water and wastewater resources, transportation, freight planning, and state facilities capital projects.
 - d. Implement specific strategies that are designed to promote technological innovation and bolster economic development. Priorities can include:
 - i. Increasing the Renewable Portfolio Standard in keeping with attainment of the statewide greenhouse gas limits;
 - ii. Establishing an Energy Efficiency Portfolio Standard both for electricity and gas;
 - iii. Reexamining previous decisions regarding cost benefit of Offshore Wind in light of the monetizing of the social cost of carbon;
 - iv. Putting New Jersey on track to get more than 300,000 Electric Vehicles (EV) on the road by 2025 by bolstering New Jersey's current Zero Emission Vehicle standard with consumer purchase incentives, regulatory and financial incentives to ensure installation of high speed, high power public electric vehicle charging stations, private charging infrastructure in multifamily and commercial properties, and by ensuring that New Jersey's building codes are EV-ready;
 - v. Establishing mandatory leak detection and replacement requirements for natural gas compressor stations and prioritization of replacement of distribution pipelines;
 - vi. Undertaking actions to ensure that development and redevelopment throughout New Jersey presents opportunities to foster more "green" building practices such as those outlined in the New Jersey Green Building Manual, the International Green Construction Code, Leadership in Energy and Environmental Design (LEED) and other rating systems addressing non-building structures such as roads and bridges, wastewater treatment facilities, energy and transit systems. Strategies may include more aggressively enforcing the state's current building codes, maximizing use of existing authorities to incorporate requirements in the state's building codes to promote energy efficiency, demand response, and EV code readiness, and creating incentives for point of sale, change in use, and building benchmarking practices.
 - vii. Reducing diesel emissions from the burning of fossil fuels in on- and off-road sources that contribute to Black Carbon, as well as other pollutants that cause public health impacts.
 - e. Align state climate policies with efforts at the local, regional, and county levels:
 - i. Identify strong incentives for Metropolitan Planning Organizations to integrate attainment of the statewide limits into their own programs, funding and planning.
 - ii. Work with county and municipal agencies to integrate attainment of the statewide greenhouse gas limits into their own programs, funding and planning, and ensure that state climate change leadership is designed to support commensurate efforts of local governments.
 - iii. Direct state departments to provide consistent guidance to municipal and county agencies regarding efforts to attain the statewide greenhouse gas limits.
 - iv. Maximize use of existing authorities, including the Municipal Land Use Law and the County Planning Act to align municipal and county planning, programs, investments and other decision-making to attainment of the state greenhouse gas limits.

- f. The State can lead by example by conducting an inventory of all of its sources of greenhouse gas emissions and setting limits on its own operations consistent with the statewide targets set in the Global Warming Response Act.

3. Conduct a strategic analysis of the extent to which the new Governor’s climate change policies will move New Jersey towards its 2050 statewide emissions limit and assess the extent to which new statutory authority is needed. New Jersey has already met its 2020 statewide greenhouse gas limits due to many factors including public policies, a significant influx of natural gas into the region and the 2008 recession. However, to achieve the state’s 2050 limit, greenhouse gas emissions in the state would need to be reduced 75 percent from current levels. The Update to the New Jersey Greenhouse Gas Inventory conducted by the Rutgers Climate Institute and the Rutgers Bluestein School in 2015 points to the need for significant emissions reductions, particularly in the energy and transportation sectors, to meet the statewide emissions limits. There are important opportunities for New Jersey to advance sound climate change policy using existing authorities. It is likely that the state will need to work in partnership with the Legislature to identify additional authorities that may be needed to meet the statewide 2050 limit. Those efforts can benefit from understanding the experiences of implementing notable policies in other states as well as from understanding the benefits that other states have derived from implementation of climate change policies. Additional quantification of the expected emissions reductions of policies relying on existing authorities is needed, along with engagement of diverse stakeholders, to meet the state’s 2050 greenhouse gas emissions limits.

New Jersey has the opportunity to become a national leader in advancing sound climate change policy. We stand ready to work with the next administration to deliver the benefits of climate change policy to New Jersey.

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