A Roadmap for the Green Economy

2025 Jersey Renews Policy Platform

JERSEY RENEWS

CONTRIBUTORS

We want to extend a special thank you to the organizations that contributed to writing and editing portions of the policy platform:

- New Jersey Work Environment Council*
- Environment New Jersey*
- International Brotherhood of Electrical Workers
- Eastern Atlantic States Regional Council of Carpenters
- United Steelworkers District 4
- BlueGreen Alliance
- NJ Manufacturing Extension Program*
- New Jersey Environmental Justice Alliance
- ISLES, Inc*
- New Jersey Policy Perspective*
- Vote Solar*
- New Jersey Offshore Wind Alliance
- Energy Efficiency Alliance*
- Regional Plan Association*
- Charge EVC
- Environmental Defense Fund*
- Clean Water Action*
- Sierra Club*

**organizations that have endorsed the platform in its entirety*

ENDORSERS

JERSEY RENEWS

Jersey Renews is a broad coalition of labor, environment, and faith organizations working to make New Jersey a leader in climate policy by increasing clean energy infrastructure, reducing greenhouse gas emissions, and ensuring good, family-sustaining jobs in the transition to a clean energy economy.

ENVIRONMENT NEW JERSEY

SIERRA CLUB

ATNJ ACTION TOGETHER NEW JERSEY

NEW JERSEY SUSTAINABLE BUSINESS COUNCIL

EEA ENERGY EFFICIENCY ALLIANCE PENNSYLVANIA NEW JERSEY

isles Self-Reliant Communities

greenfaith USA

CLEAN WATER ACTION

MAKE THE ROAD NEW JERSEY

RPA Regional Plan Association

TRI-STATE TRANSPORTATION CAMPAIGN Mobilizing the Region

32BJ SEIU

NJSNA NEW JERSEY STATE NURSES ASSOCIATION

WATERSPIRIT

VOTE SOLAR

Banking On NEW JERSEY

new labor

HPAE AFT / AFL-CIO

NEW JERSEY League of Conservation Voters EDUCATION FUND

Environmental Defense Fund

NJMEP Helping New Jersey Manufacture Success

WEC

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SOLAR UNITED NEIGHBORS

NEW JERSEY POLICY PERSPECTIVE

LWV LEAGUE OF WOMEN VOTERS OF NEW JERSEY

Wind of the Spirit Immigrant Resource Center

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Introduction

The next few years will be consequential both for the state of New Jersey and our country. We are living through a time of increasing dynamism and are on the precipice of extreme technological breakthroughs that have the potential to significantly improve almost all aspects of life as we know it. At the same time, between proposed drastic federal policy changes, international upheaval, and a sense of uncertainty that has gripped the nation, optimism for the future seems to be at an all-time low. To break the fears and concerns we must move forward in a smart way that captures the economic opportunities and empowers residents and workers, all while striving to make life better for everyone.

A major component that we must address in order to move forward is around how we will power the future. Energy needs are predicted to grow substantially and our electric grid and energy production facilities are not currently sufficient to handle the projected increases. We are at a crossroads. Doing nothing means energy rates rise, technological advancement is stifled, and, in general, everyone is worse off. Another option is trying to expand capacity by using 20th century technologies when we are dealing with 21st century problems, which may help in the short term, but does not fundamentally solve the challenge. The final choice, which is proposed in the forthcoming pages, is to embrace the challenge and meet it with innovative solutions that will generate clean energy with no co-pollutants, create good paying jobs and economic benefits to our state, and modernize our grid, all while mitigating extreme weather events and improving air quality and public health.

New Jersey has the opportunity to build upon past success and help lead the way in producing new clean energy, like wind and solar, which will help us meet growing energy demand. The State can electrify our transportation sector, which will improve air quality and public health, while also providing the opportunity for grid storage solutions that improve reliability and ensure energy is deployed when and where it is needed. We can develop a workforce to fill the high paying, often union jobs that come with a modern clean energy economy, which, if done right, will provide opportunity to communities and regions that have historically been left behind. And, New Jersey can invest in grid modernization and efficiency measures that will prepare us for future demands by using innovative technologies that make sense from both a fiscal and reliability angle.

By tackling these four components of the clean energy economy – building clean energy projects, electrifying transportation, workforce development, and grid modernization – New Jersey can be a leader, not only in clean energy, but also in employing technologies that enable the future and mitigate the worst impacts of climate change. Now is the time to look forward and think big, so that everyone in the state can take advantage of the benefits. At this crossroad, we hope that you will join Jersey Renews and our partner organizations in embracing the promise and potential of a Jersey-made, clean energy driven future.

SECTION 1

Clean Energy Production

Clearing the Way for Grid Supply Solar

New Jersey has been a national leader in clean energy deployment and made an ambitious commitment to secure 100% of its energy from clean sources by 2035. Especially with offshore wind project timelines delayed, we will not be able to achieve that goal without massive amounts of solar. Large-scale solar farms are an important piece of the puzzle, especially those that are located on existing brownfields or support local farming practices through agrivoltaics.

Additionally, in a state like New Jersey where open land is scarce and as ratepayers begin to struggle with increased energy prices brought on by a spike in energy demand, we must be creative and forward looking in our solutions. We should be aggressive in leveraging coordinated networks of distributed energy through virtual power plants, which allow every-day New Jersey residents to actively contribute to cleaning up the broader energy grid. Virtual power plants coordinate distributed energy resources like solar, energy storage, and smart home devices on behalf of ratepayers who opt to participate, resulting in resource adequacy at a dramatically lower cost than the leading alternatives. Virtual power plants provide direct economic benefits to families across the state, contribute to a more flexible and decentralized power system, and increase energy security and independence, in addition to the health and environmental benefits that accompany displacing dirty peaker plants. Large-scale solar farms combined with virtual power plants can help our state simultaneously meet the increasing demand for electricity and our clean energy goals.

RECOMMENDATIONS

Create aggressive goals to power NJ with clean solar energy

- Set a goal of generating at least 20% of New Jersey's energy from in-state solar by 2030, which would represent a more than doubling of our current level of production
  - Bolster incentive programs and reduce red tape to allow for increased solar development
  - Apply pressure to PJM to clear the current backlog of projects waiting to be connected to the grid and to fast-track new in-state solar projects

Use solar to conserve and repurpose land

- Expand and improve incentive programs for farmers to engage in agrivoltaics, which can decrease the cost of farming while increasing crop yields on productive farmland
  - Work with New Jersey's nearly 10,000 farms, a number that is growing in contrast to national trends, to develop solar programs and incentives that will decrease the cost of farming while also preserving the state's rich agricultural legacy
  - Expand the state's dual-use solar pilot program to make solar energy available to every farmer who desires to participate
  - Include community solar as eligible projects
  - Enhance support for women- and minority-owned farms
- Publicly commit to return 30% of the state's known brownfields into productive use, including solar, by 2030, including 50% of brownfields in environmental justice areas
  - Create public benefits from the state's thousands of brownfields – previously contaminated sites, which now sit vacant or underutilized – by developing solar, especially in overburdened areas where they are often not just a nuisance, but also a danger to local communities
  - Leverage both existing and new programs to accelerate site remediation, building on lessons learned through New Jersey's Landfill to Solar Incentive
  - Require or incentivize solar-ready warehouses to install solar (including community solar arrays) with a goal of 80% hosting arrays by 2030 to realize the goal of the state's existing solar-ready roofs requirement

Strengthen NJ's grid to unleash a clean energy future and meet our goals

- Finalize a process to fund grid upgrades fairly and efficiently, with a particular emphasis on overburdened communities, where utility redlining has often meant that people of color are left with unreliable and under-maintained grid infrastructure
  - Collaborate with impacted communities to identify key issues and co-create appropriate solutions based on community needs and vision for the future
- Require local utilities to fully utilize modern interventions that help our existing grid work better, like non-wires alternatives, grid-enhancing technologies, and reconductoring, all of which save ratepayer money by averting the need for more expensive and often outdated interventions
- Develop a long term plan to ensure our grid is ready to accommodate a dramatic increase in our energy needs over the coming years with utilities as active partners in the creation and implementation of such a plan
  - Consider performance based ratemaking as an approach to utility compensation to facilitate reaching this goal

RECOMMENDATIONS

Embrace and deploy virtual power plants

- Facilitate the development of virtual power plants while prioritizing low-income benefits and access, and ensuring robust data and privacy protections for all participants
- Initiate a pilot program to help low- and moderate-income households to adopt smart devices, which can inform a longer term strategy to ensure all NJ residents are able to fully participate in virtual power plants moving forward
- Build on NJ Board of Public Utilities requirements for utilities to create virtual power plants and encourage smart homes and microgrids that will support reliability

Accelerate and automate solar permitting

- Accelerate NJ's permitting timelines, which currently are the third-slowest in the country and are cited by contractors as the largest factor contributing to the fact that approximately 22 percent of residential solar projects that apply for permits are canceled
- Adopt a free, tested, and effective automated permitting platform, which if implemented is projected to increase the number of New Jersey families going solar by approximately 15% by 2030, totaling more than 19,000 new projects and more than 150 megawatts of clean energy

Leading the Nation on Community Solar

Community solar projects allow individuals to go solar even if they don't own their home or business, have old or shaded roofs, or face financial barriers to rooftop solar. Community solar enables multiple customers to share the benefits of a single solar energy project, which consumers can subscribe to or, ideally, own in part. It is a powerful tool to expand equitable access to the benefits of solar, and provides every New Jerseyan the opportunity to choose local, reliable, and lower-cost clean energy solutions.

New Jersey's Community Solar program is one of our state's crown jewels, helping to tangibly lower bills for participants while building strong local economies and a resilient clean energy future. Already leading the nation with regards to targeted low-income benefits, overall savings for subscribers, and strong consumer protections, the immediate task for NJ's community solar program is simple – deepen its commitment to equitable program design while broadening its reach, in order to tangibly improve the lives of even more New Jersey residents.

RECOMMENDATIONS

Facilitate Project Ownership in Overburdened Communities

- Require that 20% of New Jersey's community solar projects employ an equity-based subscription model by 2030 and support local community ownership, which has been shown to generate three times the local benefit, when compared with third party ownership[1] and adds wealth building to the myriad other benefits of community solar
- Encourage and build upon the pilot program committed to by the NJ Board of Public Utilities where subscribers own a share of the project,[2] and develop concrete goals and the means to achieve them, including technical support, designated funding to address high upfront costs, and incentives for developers to partner with communities
- Target community ownership programs in overburdened communities and develop programs through a robust stakeholder process that emphasizes participation from local frontline communities

Use Community Solar to Deepen Community Resiliency

- Ensure that 50% of New Jersey's Community Solar facilities provide community resilience services by 2030, through program design and incentives, to help local communities become more resilient in the face of climate uncertainty
- Pair community solar with energy storage to further strengthen the already meaningful benefits that community solar projects bring to the energy grid, as well as to local communities during blackouts, brownouts, and periods of peak grid congestion
    - Incentivize projects to operate as community resilience hubs during extreme weather events and disasters – with measures in place to ensure that resiliency benefits are concentrated in overburdened communities. This will also help the state achieve its goal of 2,000 MW of energy storage by 2030
- Allow Community solar to participate in NJ's dual-use solar program, as part of an overall strategy to conserve soil quality for NJ farms, protect pollinators, and increase crop yield while generating community-sustaining local clean energy

Photo: Edwin Torres/ NJ Governor's Office

1 Institute for Local Self Reliance, *Advantage Local: Why Local Energy Ownership Matters*

2 Office of the Governor: New Jersey to Receive Over $156 Million through U.S. EPA's Solar for All Program

RECOMMENDATIONS

Deliver the highest level of public benefits

- Extend the increased thresholds for the community solar program that resulted from federal incentives funding[3] that are poised to sunset in energy year 2027
  - Continue the current requirements of serving 80% low income and disadvantaged communities with a 20% minimum guaranteed savings, which improve upon the community solar law's requirement of at least 51% low- and moderate- income communities with a minimum guaranteed bill savings of 15%, to ensure our state's commitment to a clean energy economy does not leave behind roughly half of the population who reside within an overburdened community[4]
- Required or incentivize projects to negotiate meaningful community benefits agreements (CBAs) with local communities
  - Support the development and assessment of CBAs, which are a powerful, versatile, and effective way to ensure that local community needs are met, whether they relate to workforce development, support for local services or projects, resiliency investments, or more
  - Collaborate with stakeholders to create and publicize a recommended CBA template, including a sample of potential benefits, in order to streamline the process of CBA adoption while also giving communities the ability to have their specific needs met

Expand NJ's successful community solar program

- Remove the community solar program's size limit and expand the goal to serve at least 250,000 subscribers by 2030, which would more than triple the size of the program through sustained year-over-year growth and allow more New Jerseyans to experience the benefits of strengthened local communities, cleaner air, improved public health, and lower energy bills

3 Office of the Governor: New Jersey to Receive Over $156 Million through U.S. EPA's Solar for All Program

4 NJ Department of Environmental Protection: "What are Overburdened Communities (OBC)?"

Laying the Groundwork for Future Offshore Wind

New Jersey's demand for electricity is forecasted to grow significantly as population and development increase and greater reliance on technology, including shifts to vehicle and building electrification create more demand on our grid. Offshore wind represents a major opportunity for the U.S. – and New Jersey – as a grid scale, domestic, renewable power source to help meet growing demand, while also reducing emissions, creating good paying, long-term jobs, and achieving a more sustainable and livable future.

Although offshore wind projects will likely not be completed in the next few years, New Jersey can still take tangible steps to ensure future success. This pause gives our state the opportunity to reevaluate the processes by which we procure offshore wind power in the future and invest in the onshore infrastructure necessary for projects to be successful. We should learn from prior Board of Public Utilities solicitations, unsuccessful projects, and community challenges and adopt changes to the process that will facilitate a faster completion of future projects and ensure projects are developed responsibly for the environment, workers, and local communities.

Additionally, an offshore wind farm is only useful if it is connected into the electric power grid that delivers electricity to our communities. While

offshore wind farms will generate power 10 miles or more from the nearest coastline, that energy will need to be transmitted from the ocean to points onshore and connect into our existing electric grid to power our homes, businesses and critical infrastructure. The challenge around onshore transmission – moving power from a cable landing point along the coast and connecting to the existing electric grid – will be significant and will require cooperation from coastal communities and those along the new transmission routes. The state needs to invest in grid upgrades along our coast that will have the dual benefit of creating additional reliability for coastal communities and enable easier connection of offshore wind or other power projects to the grid in areas that historically did not produce electricity.

The ideal model of offshore wind transmission has evolved significantly, and the state should use the next few years to ensure we can implement best practices in the future. In early solicitations, each project developer was responsible for mapping out their own transmission route from ocean to grid. Had these projects advanced, and the state continued this practice, there would have been multiple points of interconnection along the coast, requiring approval from several communities, adding time and complexity to the transmission process. Instead, New Jersey's Board of Public Utilities (NJBPU) collaborated with grid operator PJM on a groundbreaking State Agreement Approach (SAA) to streamline offshore wind transmission. This led to the selection of the Larabee Collector Station (LCS), which will enable up to four offshore wind projects to connect at a single point along a designated route, reducing environmental and community impacts. The state is now working on Pre-Build Infrastructure (PBI) to support transmission cables reaching LCS. While this effort is underway, New Jersey must continue to plan for further transmission investments to meet its offshore wind goals and position itself as a leader in grid readiness.

RECOMMENDATIONS

Review and adapt future goal and solicitations

- Analyze and amend current state offshore wind goals to reflect the current conditions, capacity, and timelines of future projects to provide more certainty to the industry
- Evaluate and update the solicitation process and foundational law "Offshore Wind Economic Development Act" (OWEDA) to learn from previous challenges and increase the chance of success, especially with regards to the uncertainty around project costs

Continue current and future transmission planning and investments

- Advance the solicitation of the PBI by awarding the project and supporting its build out, ensuring a fully developed critical transmission system for decades to come
- Study and explore a State Agreement Approach 2.0
- Ensure the BPU has the resources to adequately review and approve offshore wind transmission projects, and participate in regional transmission planning efforts
- Explore long-term regional transmission planning that will meet the policy interests and energy needs of New Jersey and other nearby states

Promote community benefits and increase engagement

- Support and facilitate collaboration between developers and host communities to ensure future projects have public support and provide a variety of benefits to communities
- Continue to effectively communicate with host communities about ongoing transmission plans, construction efforts and developments, creating public forums for community members to express their thoughts and opinions and ensuring there is a publicly available website maintained with relevant planning and project details
- Engage with local communities in coordination with developers to learn about their concerns and desires for offshore wind and, as appropriate, incorporate suggestions into future solicitations and projects
- Establish and maintain a working group of diverse pro-offshore wind stakeholders to inform, educate, and coalesce support

Future-proof transmission

- Direct the EDA to continue workforce development initiatives and work with local trade unions to educate the next generation of workers
- Direct the BPU to work with local utility companies to upgrade and repair coastal transmission facilities to facilitate offshore wind and increase storm resilience
- Build energy storage system to be used as a transmission asset from electricity generated from offshore wind and provide energy resilience benefits for neighboring communities

SECTION 2

Transportation Electrification

Ramping Up Electric Vehicles Across New Jersey

Transitioning our vehicle fleets to electric vehicles (EVs) is critical if we want to address climate and air pollution in New Jersey, given that more than 40% of climate emissions come from our transportation sector in addition to other pollutants that threaten public health. New Jersey currently has a goal of registering 330,000 EVs by the end of 2025 as part of the 2020 EV Law. The EV law also drew notice for its nation-leading EV sales incentive, which quickly proved to be so popular that the rebates ended after a few months when it ran out of funds. While we are not yet on pace to reach the registration goal, we have seen tremendous growth in EV sales, which should serve as a barometer for the policy options that we should be adopting. This growth has continued in spite of some of the retrograde EV policies that were adopted in 2024. New Jersey has now surpassed more than 200,000 EV registrations, double the number of EVs from two years ago, and the 10 states that signed onto a MOU from NESCAUM in 2013 – including New Jersey – hit their goal of 3.3 million EVs on the road by 2025.

Manufacturers are currently offering 57 EV models to consumers across the state. According to NESCAUM data, the state's market share of EV sales in Q3 of 2024 was 14.4 percent compared to a national average of 10.2 percent. But to be able to reach the requirements of the Advanced Clean Cars II program, New Jersey will need to significantly increase EV sales and EV charging infrastructure, and convince the 36% of New Jersey drivers who are EV curious to buy an EV.

RECOMMENDATIONS

Encourage more EV sales by fixing the tax, registration, and incentive programs

- Reverse the 2024 decision to levy the full 6.625% sales tax on all EV purchases starting in July 2025, and institute a full exemption or at least a phase in period of a few years for vehicles at the more affordable end of the EV market ($55K MSRP and below) to promote sales for buyers at the lower end of the market
- Reform and reduce EV registration fee, which is considered among the most punitive in the country
  - The $250 per year registration fee is akin to the fuel efficiency of a 2006 light-duty vehicle. The appropriate and equitable fee for an EV would be closer to $100 per year, which is approximately what the most efficient gasoline vehicle – a Toyota Prius Prime – pays each year
  - Allow the registration fee to be paid yearly instead of requiring a four year up-front payment when purchasing a new EV, which currently adds more than $1000 to the cost due at the point of sale

- Create Stability & Incentive the Charge Up New Jersey rebate
  - Complete a new assessment of the program budget and rebate levels that factors in average EV cost, taxes, fees, and purchaser demographics
    - The funding for the Charge Up NJ program has been consistently set at $30 million. In the FY25 NJ budget, an additional $20 million was made available (and the same funding levels are stable in Gov. Murphy's proposed FY26 budget). However, the rebate level available for customers was cut in half, from $4,000 to $2,000 with a higher amount available for income-eligible customers (who do not typically purchase new vehicles). The prices of EVs have not been reduced by similar amounts, and the added costs of the sales tax and registration fee nullify the impact of any state rebate.
  - Create stability in the program by guaranteeing funding levels and rebate size over the course of multiple years
- Expand the Charge Up New Jersey rebate to make new offerings in the market "rebate eligible," such as short-term leases that provide the opportunity for potential customers to live with an EV before committing to it longer term. These types of offers should be able to take advantage of state-based rebates and are a strategic way to get more bang for the buck out of state rebates
- Ensure legislative and regulatory flexibility in all changes to EV incentives to protect against significant changes in the federal landscape that could impact the bottom line for EV customers and put the state's electrification goals into jeopardy

RECOMMENDATIONS

Enact policies that invest in and promote the future EV market

- Maintain support for the state's adoption of the Advanced Clean Cars II program for light duty vehicles that will require auto manufacturers to ramp up the sale of electric vehicles and plug-in hybrids over the next decade and oppose legislative bills to undo the program
- Renew the state's commitment to the build-out of convenient public 'fast chargers' (DCFC) at both the corridor and community level
  - Update the now out-of-date "200 chargers by 2025" target to be more appropriate given the current market
  - Prioritize community chargers near Multi-Unit Dwelling (MUD) concentrations – an equity consideration
  - Update the technical requirements for public charging, now eight years old. For example, the EV charging platform requirement of CHAdeMO can be dropped, and we can add support for NACS and "Plug to Charge" over time, reinforcing the need for interoperability and availability
- Start permit reform and coordination among jurisdictional authorities that allow for high powered public electric vehicle supply equipment (EVSE) to be installed in 6 months rather than 18 months, a critical market signal that addresses the number one barrier to EV adoption – range anxiety
- Jumpstart program development for Autonomous light duty EV pilots
  - Develop pilot programs to test out autonomous light duty EVs in strategic locations, and attract the talent and the companies that can begin to test this technology can also bring economic benefits to New Jersey, seeding the growth of this important sector that brings together AI, transportation technology and telecommunications

Cleaning Up Dirty Diesel Medium & Heavy-Duty Vehicles in New Jersey

New Jersey is the Garden State, but it is also the most highway-dense state in the country. The transportation sector accounts for more than 40 percent of greenhouse gases in the state, and, equally as important, cars, trucks and buses are the leading source of harmful air pollution. Commercial vehicles make up less than 10% of our road traffic, but are responsible for almost half of all toxic tailpipe pollution – 44% of emissions of nitrogen oxides (NOx), a smog precursor, and 39% of fine particulate matter.

New Jersey's more than 420,000 trucks and buses produce an outsized amount of dangerous pollutants and these emissions disproportionately impact communities of color, according to data from the Union of Concerned Scientists. New Jersey is the 2nd worst state in the country in terms of cancer risk from diesel soot. In 2023 alone, diesel pollution in New Jersey was responsible for more than 330 premature deaths, 19,900 lost days of work, and $3.75 billion in monetized health damages. These health harms are significantly higher around the Port Authority of NY/NJ operations in Newark and Elizabeth, the largest port on the East Coast with over 20,000 daily truck trips, where nearby communities have asthma rates double the state average.

New Jersey has made strides to deal with pollution including having stronger than federal tailpipe pollution standards for 15 years. Additionally, the state adopted the Advanced Clean Trucks (ACT) program in 2021, which fully went into effect in January 2025. The program has been adopted by eleven states and is designed to have

manufacturer flexibility built into the program. The ACT rules will gradually increase the supply of pollution-free buses and trucks across the state (especially for garbage trucks and delivery vans, which drive through densely populated areas every day to deliver packages and pick up garbage) with increased manufacturer sales requirements for pollution free vehicles over a ten-year period from 2025 through 2035. The Murphy Administration also adopted a complementary Heavy-Duty Omnibus (HDO) rule to ensure that diesel vehicles sold during the transition to pollution-free vehicles are as clean as possible by requiring new trucks and buses to have reduced nitrogen oxide (NOx) emissions.

To further jumpstart this transition, the Murphy Administration rolled out the NJ Zero Emissions Incentive Program (NJ ZIP) program through the NJ Economic Development Authority. NJ ZIP uses revenue dollars generated through the Regional Greenhouse Gas Initiative (RGGI) to fund vouchers incentives for the purchase of medium duty vehicles targeted in environmental justice communities. Additionally, the NJ Board of Public Utilities (NJBPU), rolled out the adoption of minimum filing requirements for utilities to expand charging infrastructure across NJ for medium and heavy-duty (MHD) vehicles, which is further bolstered by the $250 million US EPA grant awarded to NJDEP to expand charging infrastructure on the Turnpike.

RECOMMENDATIONS

Continue to fully implement and defend Advanced Clean Trucks (ACT)

- Oppose efforts to delay implementation of ACT (currently S3817/4967) by the trucking industry, which are weaponizing truck dealers and spreading misinformation about the program even after successfully negotiating additional flexibility in the program
- Ensure compliance of ACT goals now that the program is in effect (nearly all vehicle classes are in full compliance as of 2024)
- Defend the 2023 EPA waiver that allowed NJ to adopt ACT, which is expected to be legally challenged by Trump Administration, and strongly oppose any efforts to not allow states to adopt stronger programs than the federal EPA

Adopt Advanced Clean Fleet (ACF) regulations that don't require federal approval

- Adopt the portions of ACF regulations from California's law that do not require an EPA waiver and that focus on state and local governments
- Prepare the outreach and stakeholdering materials enabling the state to quickly scale up efforts for potential ACF adoption for larger vehicle fleets in the event the EPA grants California the waiver for the larger program

Implement Indirect Source Review (ISR) for ports, warehouses, and community truck traffic

- Take regulatory action or pass legislation (currently S3546/A4679) to adopt comprehensive ISR policies, which are a holistic flexible strategy to mandate reduce emissions from truck traffic entering and leaving facilities, including large industrial centers like ports, warehouses, and where large volumes of trucks congregate and create micro diesel death zones
- Require additional and faster mandates for communities in already overburdened communities as a part of ISR policies

Establish Zero Emission Zones at the port and along designated truck corridors

- Use gubernatorial powers and incentives to move the Port Authority of NY/NJ more aggressively towards zero emissions
- Promote "zero emission zones" or corridors where electrification of trucks, equipment, and warehouses are mandated both at the port and in port adjacent communities where goods movement and operations are concentrated

Electrify and retrofit vehicles under state contracts

- Issue executive order or pass legislation to require retrofitting emission controls, engine upgrades, repowering, and/or electrification of diesel equipment used under state contracts to reduce air pollution impacts for impacted communities and workers

Move Forward with Regular Utility Filings for MHD Charging Infrastructure

- Direct NJBPU to begin holding regular filings from utilities to fill in gaps for public charging hot-spots for MHD vehicles that meet the demand of the growing market now that the straw proposal for minimum filing requirements for MHD charging infrastructure received Board approval in 2024 and the first filing process has kicked off in 2025
- Re-evaluate the budget caps of the filings
  - Incorporate public health benefits and amortize costs over multiple years
  - Allows utilities to invest annually based on approved program structures to mitigate ratepayer costs

Establish a weight exemption for electric heavy-duty trucks similar to the exemption that has already been applied to natural gas-fueled trucks

- Adopt a 2,000 lbs. gross vehicle weight exemption for electric trucks, consistent with the federal exemption and similar exemptions in other states

Expand NJ Transit Bus Electrification

Photo: Jarrett Stewart via Flickr

Everyone deserves clean air regardless of race or place. In New Jersey, one of the biggest obstacles to cleaner air is our transportation sector, which is the largest contributor to air pollution and greenhouse gas emissions. The burden of air pollution is also not evenly distributed with communities closer to highways and ports having worse air quality than other parts of the state due to the high amount of traffic, particularly diesel vehicles. As a direct result of the overexposure to harmful air pollutants, especially fine particulate matter, people in these areas suffer from higher rates of asthma and heart disease. However, this problem is solvable through the transition to electric vehicles, and in particular, transitioning the NJ Transit bus fleet that serves our overburdened communities. By replacing diesel buses with electric ones, New Jersey is poised to reap significant benefits in air quality, reduce emissions, and improve public health.

Our state currently has three targets codified into the EV law signed by Gov. Murphy in January 2020, regarding procurement of NJ Transit's bus fleet:

- 10% of purchases be zero-emission vehicles by December 2024
- 50% of purchases be zero-emission vehicles by December 2026
- 100% of purchases be zero-emission vehicles by December 2032

While the agency did not hit the 2024 mandate, it is essential to keep striving for the 2026 and 2030 requirements. However, transitioning the fleet to electric buses will require extensive capital investment, and NJ Transit's budget is currently not suited to meet this goal. Lawmakers have a history of raiding the Clean Energy Fund for unrelated purposes, including its current raids for more than $70 million for NJ Transit's operating budget (despite budget language indicating the funds would be used for bus electrification). The agency also continues to raid its own capital fund to pay for operations, at a clip of more than $330 million in the FY25 budget. These continued diversions have hamstrung the capital budget and are preventing our state from hitting the goal of 100% new electric bus purchases by 2032 through the modernization of NJ Transit bus garages across the state.

Fortunately, the new Corporate Transit Fee (CTF), which was created to ensure NJ Transit has enough operating funding to avoid drastic service cuts and fare hikes, opens the door to allow the end of these raids. However, the Corporate Transit Fee is set to sunset by FY 2030 and funds are not constitutionally dedicated opening the potential for them to be siphoned off to plug unrelated budget holes. Both are concerns that threaten the state's ability to meet our transit and clean energy goals. The CTF generates around $800 million a year, which is more than enough to cover the Clean Energy Fund and the capital fund diversions, ensuring those funds can go to their intended purposes. The Clean Energy Fund and the capital fund can both be used to purchase electric buses and the needed infrastructure investments. NJ Transit estimates that it will require $200 million annually, less than 20% of the funds available through the CTF and Clean Energy Fund, to meet its internal roadmap for NJ Transit bus electrification and leverage federal funds which have been awarded.

RECOMMENDATIONS

Protect and use existing funding sources to enable NJ Transit electrification

- Make the Corporate Transit Fee permanent and constitutionally dedicate the dollars
- End the annual raids on the Clean Energy Fund and NJ Transit's capital funds and dedicate them to electrifying NJ Transit's bus fleet
- Increase New Jersey Turnpike Authority allocation to NJ Transit operations to at least $746 million, matching FY23 levels

Prioritize meeting state goals for electric bus procurement

- Commit to hitting 2026 and 2032 goals for NJ Transit electric bus procurement
- Include Buy American sourcing and labor provisions to ensure domestic source from pro-union facilities

Strategically invest in modernizing and expanding NJ Transit bus garages for electrification

- Fully fund the electric bus garage modernizations for the Hilton Bus Garage in Maplewood, the Meadowlands Bus Garage in Secaucus, and the shuttered Union City bus garage to initiate the planned roll-out of electric buses in Newark and across Hudson County, which all have received nearly $200 million in federal funding, but need state capital investments
- Prioritize the funding of the Northern Bus Garage in Ridgefield Park with a timeline for completion in 2029, which will be the hub for NJ Transit's electric bus fleet and will require a capital expense of more than $500 million

Expanding Electric School Buses in New Jersey

Diesel-burning school buses create a myriad of problems: the exhaust from diesel-burning school buses is harmful to students' physical health, putting them at risk for serious conditions like cancer and asthma; diesel exhaust pollution is linked to negative cognitive development impacts, endangering students' academic progress and learning; diesel buses emit high levels of greenhouse gases like carbon dioxide, directly contributing to climate change; and, the impacts fall disproportionately on communities of color, who already face higher on-road air pollution, and other low-income students, as well as students with disabilities, who are all more likely to ride the bus to school.

On the other hand, electric school buses (ESBs) have zero tailpipe emissions, reducing students' exposure to the dangers of diesel exhaust pollution. They're responsible for significantly lower levels of greenhouse gases than diesel-burning school buses, and EPA research suggests that compared to a new diesel-burning school bus, a new ESB can save an average of $6,000 every year on operational expenditures, depending on circumstances. ESBs are successfully operating in every part of the country including urban, rural, suburban communities, and in all types of climates throughout the U.S.

Currently, there are roughly two dozen ESBs on the road in the Garden State, with 150 more on order. These zero-emission vehicles represent a small fraction of the more than 21,700 registered school buses in New Jersey, over 99% of which run on fossil fuels. The effort to get ESBs on New Jersey roads was spearheaded by 2022 legislation, which led to the kick-off of a NJDEP annual $15 grant program to local school districts.

While often framed as an action to address climate change, the public health benefits of switching to ESBs should not be discounted. A cleaner cabin for school children to ride in that will have a direct impact on their health and reduced pollution in their lungs. A 2019 study conducted by researchers from Georgia State University showed that diesel pollution from school buses had a significant negative impact on children's aerobic capacity and even their academic performance, such as lower test scores. This research linking school performance and diesel fumes was replicated in research published in the Journal of the American Medical Association in March 2024. The study, which looked at more than 1,900 school districts that received funding under the 2012-2016 EPA School Bus Rebate Program, showed that districts that replaced the oldest and highest-polluting buses saw significantly greater improvements in district-average test scores compared with other districts.

Replacing diesel school buses with ESBs may yield up to $247,600 in climate and health benefits per individual bus, according to a new study by researchers at Harvard T.H. Chan School of Public Health. The researchers found that these benefits were strongest in large cities and among fleets of buses older than 20 years.

Finally, it is important to note that ESBs are one of the safest options for transporting students. Riding a school bus is much safer than driving in a passenger vehicle. Bus fires, including for school buses, accounted for only 1% of all vehicle fires in 2021, none of which involved ESBs.

RECOMMENDATIONS

Ensure funding for the NJ Electric School Bus pilot program for the initial three years

- Continue the annual disbursement of at least $15 million in funds from the Clean Energy Fund, RGGI or the General Fund with the allotment increased based on demand from school districts
- Commit NJ Department of Environmental Protection (DEP) to providing state funding to build upon the pilot's first $15 million in grant funding and the anticipated second round of funding in spring 2025 to provide districts with resources, especially given the uncertainty of federal funding
- Include Buy American sourcing and labor provisions to ensure ESBs come from pro-union facilities in the pilot and other future state grants

Allow utilities to include ESB charging infrastructure in regular NJ Board of Public Utilities (BPU) medium and heavy duty filings

- Permit utilities to include ESB charging infrastructure in regular medium and heavy duty filings, as opposed to in the electric vehicle utility filings, as was done in 2020, or letting individual districts negotiate separately
- Require charging infrastructure and "Make Ready" charging costs should be included in the utility rate-making proposal
- Adjust NJBPU policy to account for smart charging considerations such as vehicle to grid and areas of most need

Allow school districts to directly bond for ESBs outside of property tax cap akin to school energy efficiency savings program

- Apply the same framework, which exempts capital investments for energy efficiency projects from the 2% cap, to ESBs
  - ESBs provide similar cost savings for districts and often face the similar constraint of large upfront capital expenses
  - To save money – and kids' lungs – you need to spend money, but, as was the case with energy efficiency projects before the exemption, the tax cap prevents the upfront investment, and therefore should not be applied to bonding for ESBs

Accelerate and expand programs to help local school districts purchase or lease ESBs through government aggregators

- Expand the innovative financing program passed in 2024 that allows organizations the NJ School Board Association to help facilitate government aggregation for ESB procurement through both purchasing and leasing agreements, and permit more school districts to procure ESBs through government aggregators

Issue DEP reports analyzing the rollout of the electric school bus program and convene the interagency task force to look at inspections and training

- Review the approval process for the release of funds to shorten the delay between approved grant requests and money in hand based on the reports and interagency task force suggestions

Promoting and Expanding Microtransit

Employers, healthcare institutions, and nonprofit organizations have identified that a significant barrier to workforce development, accessing healthcare and essential services, and economic development is transportation. Furthermore, surveys of community members have also reported that lack of transportation has caused significant hardships including inability to maintain jobs, difficulty accessing medical care – particularly specialty care, and challenges shopping for their everyday needs. Even in areas with some traditional public transportation, lack of access to consistent and affordable transportation is negatively impacting our communities!

NJ ranks 48th in car ownership, and 30-40% of our residents lack consistent access to a vehicle. Statewide studies have identified transportation deserts throughout the state, and, even in communities that have public transportation, an inability for people to traverse within cities or towns – this is known as the challenge with the last mile. Microtransit bridges the mobility gap by offering flexibility on routes and timing, meeting the individual or family where they are, getting them to their final destination, or connecting them with another mode of transportation that will.

Microtransit is a 'multi-modal' connector that not only connects people to where they need to go, but gets people to established bus lines, serving as a feeder for traditional public transit systems. Microtransit, or tech-enabled on-demand transportation, promotes shared rides and overlapping routes, reducing Vehicle Miles Traveled (VMT) and greenhouse gas emissions. Integrating energy efficient Microtransit within our state's transportation network brings increased economic opportunity, operational efficiency, and more access to all New Jersey residents.

To quote Cheryl Kastrenakes, Executive Director of the Greater Mercer TMA, "Public transit flourishes with microtransit surrounding it – it enhances and increases its accessibility… it's the first and last-mile solution."

RECOMMENDATIONS

Bolster state policy and funding to expand current and facilitate the adoption of new Microtrasit projects

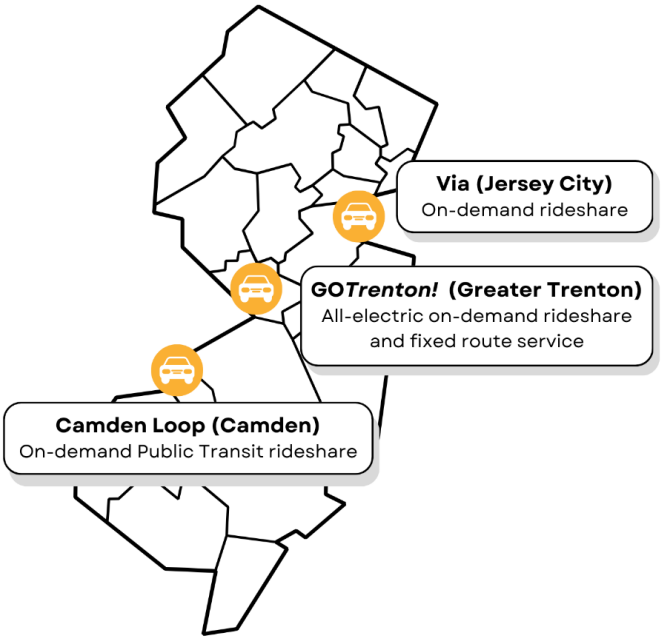
- Strengthen Mobility and Transportation Innovation Programs (MATIP) to allow for more communities to pilot and launch Microtransit programs with ramp to access existing, sustainable funding like the Transportation Trust Fund (TTF)
- Pass legislation (currently A4672/S3526) to facilitate additional Microtransit by amending eligibility and criteria for projects and fully fund the proposed appropriation of $20 million to allow NJ regions to access critical start up and sustaining funding to implement innovative strategies
- Encourage and incentivize emission-free projects to further increase the climate and health benefits of Microtransit programs for communities
- Support electric vehicle supply equipment (EVSE) and other infrastructure installation throughout the state, seeding pathways for electric Microtransit programs

Partner with municipalities to further maximize the impact of Microtransit

- Promote local needs assessment – community by community – in order to truly develop Microtransit programs that address the communities' needs and link to existing transportation systems (use GOTrenton! case study Appendix A as a starting point)
- Encourage cities and towns to financially invest in supplementing Microtransit initiatives to increase access to residents and other support

Integrate Microtransit services into comprehensive transit plans for communities

- Encourage and incentivize collaboration with NJ Transit (NJT), county based transportation, and Microtransit models to promote integration within routes
- Expand NJT/State transportation coverage to transit deserts by utilizing cost-effective on-demand shuttles provided by Microtransit projects
- Integrate Microtransit into all NJ County's Combined Human Services Transportation plans



SECTION 3

Workforce Development and Safety

Creating a Green Career Pipeline

The state and the country more broadly are currently facing two major, related energy challenges. First, New Jersey is already seeing the impacts of a warming planet, driven by fossil fuel emissions, such as persistent drought, wildfires, tornados, unprecedented flash flooding, and extreme heat. Each climate related event is a reminder of the reality that we must work together on solutions that reduce our dependence on fossil fuels and transition us to a cleaner and greener future. The second challenge is a need to generate significantly more energy to keep up with increasing demands. Some of this increasing need is the result of recent solutions to the first problem, which have focused on the decarbonization of the transportation and residential sectors. As a result of these positive policies combined with the rise of artificial intelligence, at this point in time, we are both producing too many greenhouse gas emissions and not enough energy to power the future.

While our power grid is much cleaner today than it was a decade ago, the projected skyrocketing need for energy driven by increased electrification in the buildings sector, a growing electric vehicle market share, and artificial intelligence, means we are going to have to bring more power onto the grid. This need leaves us with two options - go backwards and restart or expand fossil fuel plants OR to invest and grow clean energy production to meet demand. Both these paths will create more energy, but choosing option one means ignoring climate and health impacts, increasing our reliance on foreign sources of fuel, and creating very few new jobs. By contrast, deploying clean energy to meet our needs will help us to continue to lower our emissions, power our country with purely American energy, and create thousands of building, manufacturing, and supply chain jobs, many in areas that desperately need economic development. The choice is obvious.

Choosing to develop and deploy clean energy means we will need thousands of new workers in our state who are trained and ready to work in these relatively new industries. Taking steps to develop this workforce who can step into these roles is critical to success. These careers will be able to sustain families and create direct and indirect economic benefits throughout the state, including in some of the more in need areas. New Jersey, between our world class educational institutions and our many highly trained and qualified union workforce, has historically been on the cutting edge of many industries and clean energy should be no different. Investing once again in our workforce to ensure they are ready and trained to create, deploy, and maintain innovative clean energy technologies will allow us to address both the challenge of mitigating disasters caused by a warming climate and produce enough domestic energy to power our future.

RECOMMENDATIONS

Increase awareness of green economy and union career pathways

- Support the development of relationships between local unions and school districts to ensure students at all levels are aware of the various career pathways available to them, particularly within green careers, and the necessary reading and math requirements required to successfully enroll in a pre-apprenticeship or apprenticeship program. One example would be organizing and hosting localized "Green Career" fairs across the state that connect secondary and college students with representatives from the sector
- Connect programs such as the new "Fund My Future" program directly to local high schools to assist any interested students with receiving coaching and job training upon graduation
- Creating an educational toolkit distributed by the Department of Education to inform interested educators and students on the Just Transition framework and how to integrate this into the current curriculum to provide a holistic and systems-based approach to understanding climate change and clean energy solutions

Remove barriers and facilitate entry into the green economy workforce

- Expand grant funding for local community-based organizations providing support services (e.g., transportation, food, housing, childcare soft and technical skills training) to meet the needs of those who are underserved and/or underemployed
- Prioritize language access and inclusion in workforce development related literature and programs so residents across New Jersey are able to fully participate in identifying a career path and understand the importance of supporting the transition to clean energy
- Create a database within the NJ Department of Labor that outlines the work local unions perform, their respective hiring prerequisites and other post hire requirements, and the municipalities, counties, region or industries they cover

Strengthen cross-sector partnerships

- Increase workforce grant partnerships with New Jersey state agencies, local unions, training partners, and community based organizations to ensure career pathways are available following the completion of training and certification programs
- Expand state-funded grant opportunities for unions to access and increase training facility space(s) and to reshape the ways in which they are currently working with outside organizations to develop apprenticeship pathways

Ensuring Workplace Health and Safety

The labor movement has worked for generations to improve working conditions and increase safety standards across almost every industry. Because of these efforts, workplaces today, both union and nonunion, are significantly safer for both employees and the public, but there is still more to do. In New Jersey, there have been 32 reported workplace deaths and thousands of workplace injuries in 2023. Furthermore, many industries still use and transport highly hazardous chemicals, which pose a significant threat to both workers and the public in the event of a disaster. The state can play a major role in limiting these dangers by adopting new health and safety standards for workplaces, implementing common sense regulations for high-risk industries that use extremely hazardous substances, and increasing first responder and public preparedness through right to know provisions, regardless of actions taken by the federal government.

Heat related injuries such as dehydration, heat stroke, heat syncope, and rhabdomyolysis, are especially prevalent in jobs that include physically demanding labor outdoors or in facilities with insufficient cooling, but pose a risk even in jobs that do not include manual labor under certain circumstances. Increasingly hot summers, spurred on by climate change, are further increasing the risk of heat related injury. Currently, there are no federally mandated worker protections regarding heat, commonly referred to as a heat standard, and only five states have adopted their own heat

standards. In New Jersey, there is no statewide heat standard. Some unions whose members are at a particularly high risk have negotiated heat related protections into their contracts, but this is far from universal and does not protect thousands of workers, both unionized and not, who deal with increasingly common extreme heat conditions.

In addition to heat, workers and the public in our state face significant threats from chemical disasters. There are approximately 90 facilities in New Jersey that use hazardous materials regulated under federal and state law. Additionally, trains carrying hazardous materials, both for use in state and for export at our ports, are daily occurrences on our over 1,000 miles of freight rail tracks. Almost all of these chemicals are necessary for industry operations, but that does not negate their risk if workers and the public are exposed as a result of an unintended disaster. New Jersey was a leader in adopting the Toxic Catastrophe Prevention Act (TCPA) in 1986, four years before the federal government introduced the Risk Management Plan (RMP) through amendments to the Clean Air Act in 1990. TCPA was readopted and updated in 2003, but needs to be updated based on new data and threats, especially with the risk of a weakened federal RMP. While protections against disasters originating in facilities have been relatively strong, rail safety, as demonstrated by frequent derailments and the recent East Palestine rail disaster, is lagging behind. Common sense regulations can be implemented by the state to decrease the probability of a major incident. Finally, for both facilities and rail, we must increase information given to first responders, as well as the public more broadly, so they can be better prepared in the event of a disaster to contain and limit the impacts.

RECOMMENDATIONS

Implement a statewide heat standard

- Pass legislation (currently A5022) to create a statewide heat standard to protect workers in most industries
- Limit industry carve outs to the protections, as much as feasible, to ensure the largest number of workers possible are covered by the standard
- Ensure sufficient enforcement mechanisms are in place to protect workers
- Permit and encourage workers covered by a collective bargaining agreement to negotiate above and beyond protection for workplaces or facilities that pose an especially high heat risk through their union representatives

Adopt common sense chemical safety laws and regulations

- Strengthen TCPA
  - Formally adopt the Safer Communities by Chemical Accident Prevention rule, which finalizes revisions to the Risk Management Program to further protect vulnerable communities from chemical accidents, especially those living near facilities in industry sectors with high accident rates.
  - Cover industrial warehouses (and potentially other types of facilities) that store large quantities of "hazardous" – not just "extraordinarily hazardous" – substances
  - Improve TCPA rules for better evaluation of potential risks and implementation of practicable, inherently safer, processes and designs
  - Increase public transparency of chemical safety information submitted by facilities to the Department of Environmental Protection
- Pass and enforce rail safety legislation, currently A4460/S3389, that requires two man crews, wayside detectors, the sharing of bridge inspection reports with the state, and limits the length of trains carrying hazardous materials

Expand "Right to Know" for first responders and the public

- Create and expand information sharing systems for first responders to include details about chemicals stored and being transported in their jurisdiction so they have the ability to properly respond in the event of a disaster
- Secure funding for additional first responder training on how to appropriately deal with various chemical disasters
- Increase public transparency, without compromising security, so that the public can take appropriate steps to protect themselves and their communities from chemical disasters

Helping Legacy Energy Workers and Communities Impacted by the Move to Clean Energy

New Jersey's clean energy transition will create significant employment opportunities for good paying, union jobs as well as environmental and public health improvements. However, as we make the transition to clean and renewable energy technologies, we need to have worker and community-based policies in place to protect oil and gas workers and their communities. The transition to clean energy cannot come at the expense of legacy energy workers whose efforts helped build a thriving economy.

The NJ 2019 Energy Master Plan has a goal of 100% clean energy consumption by 2050 and NJ has a 50% renewable portfolio standard (RPS) by 2030 already in law. Nuclear power currently makes up just under 40% of the state's electricity. As energy use increases, this percentage will become smaller since production is not anticipated to increase at any significant rate but will still be between 37 and 38% in 2030. Between nuclear and the RPS, in 2030, NJ will be at about 88% clean energy. While consumption, which is what the RPS regulates, and in-state production are not the same, the state's express desire is to move away from fossil fuels in favor of clean power sources. Clean energy, such as solar, offshore wind, nuclear, and storage, has huge benefits for both the economy and society but does raise the question - what does this move mean for legacy energy workers who lose their jobs in the transition to a clean energy economy?

Workers in the fossil fuel industry or related professions that lose their current job because of the closure of a facility are often termed "displaced workers." There will be both direct and indirect jobs lost in the transition to a clean energy economy. While some current workers in the fossil fuel industry and supporting industries will be able to -obtain jobs in the clean energy sector, there will be workers for whom this transition is difficult, impractical, or impossible. The latter, which can be labeled "primary displaced workers," will need to be a focus of state policy to ensure a just transition

to the clean energy economy. Other workers who may lose their job, but will have an easier time transitioning to a similar position within the clean energy economy or another industry completely (eg, truck driver who currently delivers to a natural gas plant), are "ancillary displaced workers," and will also need support, but likely to a lesser extent.

While all analysis of the economic impacts of the transition to clean energy shows significant benefits and overall job growth, the state must not ignore the challenges that will be faced by workers in affected industries and their communities, as a result of their adopted policies. Oil and gas workers, many who have spent decades in the industry, may face significant challenges in finding new employment opportunities, especially positions that offer similar salaries and benefits. Putting in place policies that facilitate their transition or directly make them whole is an economic and moral imperative for the state.

RECOMMENDATIONS

Create an office within the Department of Labor (DOL) to analyze the impact of the clean energy transition on workers and administer a Displaced Workers Fund for "primary displaced workers" who lose their jobs because of the closure of fossil fuel plants. The office should also create:

- A displaced workers bill of rights that will provide benefits, both financial and non-financial, to workers after they lose their position.
- A fund to be used for re-training mid-career professionals to be able to reduce barriers to entry into the clean energy economy
- A fund to pay workers as they are being re-trained
- A fund to help off-ramp late career workers, which would pay union workers full salary that have lost their jobs because of a plant closure or layoffs who have five years or less until they can retire and collect their pension
- A scholarship fund for children of displaced workers who lose their job at a fossil fuel plant and are unable to find a job where they make at least 85% of their previous salary, which would provide full tuition for up to 4 years at any NJ state university, community college, or NJ based trade school

Study the impact of the move to clean energy to create a more holistic picture of the potential job losses, needs of workers, and transition opportunities

- Create a working group with key stakeholders to develop and make specific recommended actions the state should take
- Direct the DOL to study and release a report on the comprehensive labor impacts of the clean energy economy that includes industry and regional breakdown in order to better develop and target policies

Facilitate new employment opportunities and provide training resources to displaced workers

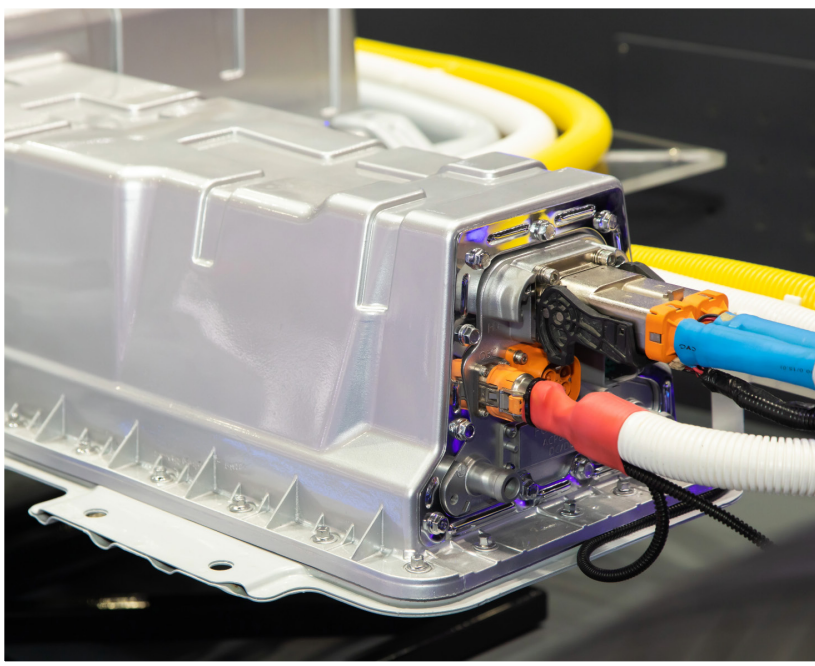
- Direct the DOL to create resources and training materials specifically designed for former fossil fuel and related industry workers
- Provide incentives for clean energy companies to hire displaced workers
- Work with unions to develop and implement re-training programs for their members
- Require any facility to give two-year notice of full closure to all employees, including non-direct employees who regularly work in and around the facility

Prioritize and incentivize investment in communities where the fossil fuel industry is currently a major employer

- Facilitate community reinvestment and support by allocating funding for local infrastructure projects, small business support, and social services to stabilize affected communities
- Create tax incentives for clean energy development that set up operations in former fossil fuel dependent areas, ensuring economic continuity

SECTION 4

Grid Modernization and Energy Storage



Modernizing Our Electric Grid

New Jersey's aging electric grid needs to be readied to support customer demand for electric vehicles, buildings and appliances, distributed generation, and emerging technologies such as artificial intelligence. Under today's regulatory regime, the pace of modernizing the grid moves too slowly. New Jersey needs a proactive, modern regulatory framework and a modern grid that ensures all utility customers realize the economic benefits of strategic grid planning.

By accelerating the pace at which New Jersey's aging grid is modernized, and doing so in a strategic manner, utility customers will get the electric service they require, when they require it. Grid modernization will facilitate the transition to electric cars, trucks, buses, and efficient appliances that can save consumers money while also ensuring reliable service even in the face of increased demand. Requiring utilities to right-size and future-proof grid investments will yield cost savings for all utility customers – not just those who own EVs or live in electrified buildings – especially if utilities seek to avoid grid upgrades whenever it is less costly to invest in load management and non-wires alternatives. Real-world data shows total costs of grid buildout can be halved if the utility builds appropriately plans for future deployment and right-sizes infrastructure investments rather than making multiple incremental upgrades.

EVs will play a significant role in how we modernize New Jersey's grid. EV charging can spread the costs of maintaining the grid over more kilowatt-hours, reducing the price per kilowatt-hour to the benefit of all customers. This phenomenon has already been observed in real-world New Jersey data. Synapse Energy Economics has documented that, between 2011 and 2021, EV customers in New Jersey contributed $85.3 million more than what it cost to serve that additional EV load. This additional revenue pushes electric rates down for all customers, not just those that own EVs. However, benefits won't be fully realized unless we proactively plan and build the grid needed to support all beneficial electrification, while also allowing the state to meet its climate, air quality, and equity goals.

RECOMMENDATIONS

Require robust data collection and analysis in order to be able to develop effective long-term grid modernization plans

- Conduct analysis of the present state of the grid, including grid functionalities and distribution system planning
- Identify data gaps and what work needs to be done to reach New Jersey's goals
- Incorporate additional data sources (e.g., geospatial analyses of fleet depots and truck route patterns) into utility planning to better identify future load sources
- Develop concrete steps for ensuring equal and reliable service for all New Jerseyans
- Require regularly updated, transparent, and verifiable hosting capacity maps, and transparent interconnection cost estimates to support New Jersey's goal of maximizing solar development and distributed energy resources by 2050

Redouble efforts to modernize electric distribution systems to support faster electrification

- Support improved utilization and efficient expansion of the grid in preparation for electrification loads including vehicles and buildings

Incorporate express consideration of community benefits in the development, evaluation, construction, and operation of major grid projects

- Identify community benefits and pursue energy justice through local stakeholder participation

Require utilities to develop and adopt comprehensive plans for modernizing the grid infrastructure given projected demand based on clear data and in line with state initiatives

- Require electric utilities to align their grid deployment efforts with the needs identified through state policies and planning initiatives
- Require long-term planning, consistent with EO 317, for gas utilities that includes non-pipeline alternatives and integrates these plans with electric distribution system plans
- Require utilities to engage in climate resilience planning by identifying climate-related vulnerabilities and exploring cost-effective options to enhance system resiliency

Adopt and expand initiatives to use creative and nontraditional solutions to modernize the electric grid

- Expand utilization of cost-effective non-wires utility-side solutions, such as energy storage, to defer or mitigate the need for traditional grid infrastructure
- Implement programs that enable greater load flexibility, such as flexible interconnections and structured utility management of customer-side distributed energy resources (DERs), to enable more customers to connect to the grid without triggering the need for capital upgrades

Increasing and Promoting Energy Efficiency and Storage

To ensure an equitable and sustainable energy future for New Jersey, the state must prioritize energy efficiency, building decarbonization, and energy storage as cornerstones of its clean energy strategy. By prioritizing these measures, New Jersey can lead the way in creating a clean energy economy that benefits all residents while addressing the urgent challenges of extreme weather events and energy equity. The dollars invested in expanded energy efficiency programs, including incentives, network lists, and installer and consumer education, will have a direct and beneficial effect on our GHG reduction and climate goals. Additionally, energy storage is both a strategic and significant technology necessary to achieve our transportation and clean energy goals, as well as to provide increased reliability throughout the distribution system.

New Jersey has an opportunity to set a national example by integrating these strategies into a cohesive framework that prioritizes accessibility and affordability. Targeted investments in efficiency, storage, and electrification—especially in underserved and overburdened communities—will drive job creation, strengthen local economies, and position the state at the forefront of the clean energy transition. A comprehensive and well-coordinated approach that leverages state, federal, and private-sector resources will be essential in meeting New Jersey's climate goals while ensuring that all residents, regardless of income or location, benefit from cleaner, more affordable, and more reliable energy solutions.

RECOMMENDATIONS

Adopt common sense changes to energy efficiency and building decarbonization initiatives

- Incorporate and integrate improvements to the building envelope to ensure proper sizing of heating and cooling equipment through Energy Efficiency programs
- Develop coordination of building decarbonization programs in conjunction with weatherization measures
- Prioritize encouraging the switch to high efficiency electric appliances whenever fossil fuel appliances are replaced

Prioritize and Improve Access to Energy Efficiency Programs

- Invest in outreach and education that targets those residents and buildings that can benefit the most; for example, municipalities with the oldest building stock.
- Improve language access to make sure all communities across our state know about the programs they can access

Expand and improve the Whole House Retrofit Program

- Expand this program from a pilot, utilize the findings to scale up and achieve its goals of holistically addressing health, energy burden, and equitable participation in the clean energy transition for New Jersey's disadvantaged communities.
- Provide a venue for robust stakeholder participation to both maximize the successful elements of the pilot and make adjustment to improve the program moving forward
- Revisit previously deferred accounts who applied for Comfort Partners assistance to incorporate health and safety repairs

Develop clear plans for meeting EO 317's requirements for gas infrastructure planning

- Proceed with the future of gas planning and set NJ on a clear path forward towards an affordable, reliable, & secure energy future that accounts for the best interest of the rate payer
- Develop plans and strategies to meet the goal of as close to zero leakage in any methane gas systems as feasible and for future proofing any gas piping
- Develop strong guidelines for responsible hydrogen usage to ensure that, when it is being deployed, it is indeed meeting its stated decarbonization goals
- Focus the use of hydrogen on hard to electrify sectors, given its lower energy density and potential safety concerns

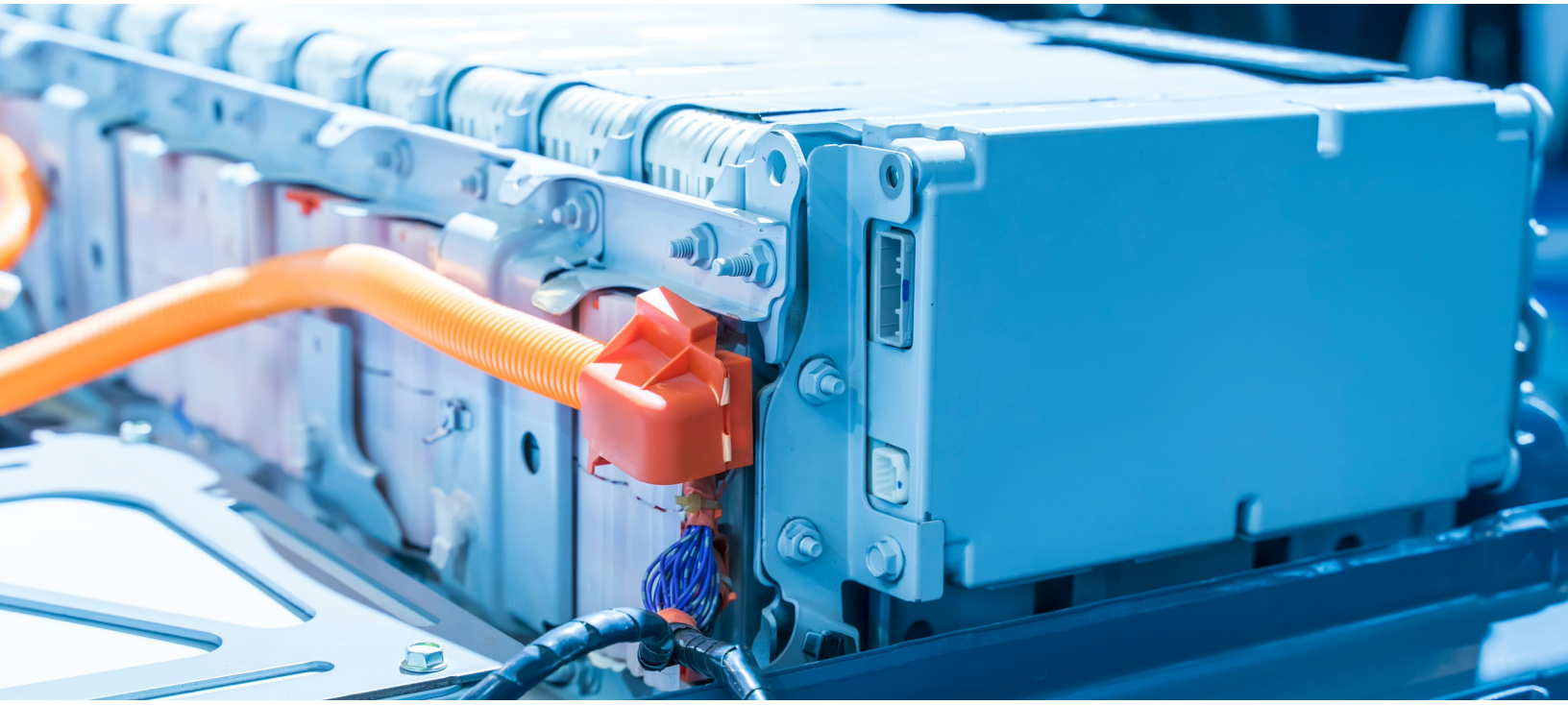
Increase energy assistance and access to programs for low- and moderate-income families who bear a disproportionate burden of not only the health impacts of maintaining the status quo but also have disproportionately high energy burdens

- Expand and improve accessibility to state programs that help make energy bills more affordable to ensure all residents can benefit from clean energy initiatives
- Codified the dedicated BPU's Office of Clean Energy Equity program and provide a budget of at least $50 million annually

Invest in and incentivize energy storage technologies to improve grid reliability

- Meet the Board of Public Utilities' statutory mandate of deploying 2000 MW of energy storage by 2030 and develop future goals and timelines for additional storage
- Explore widespread adoption of micro-solutions with clear storage goals along with suggested incentives at the local, county, and state level
- Creatively utilize the state's resources as natural batteries by implementing and incentivizing neighborhood-based distribution systems and incorporating combo systems like e-mobility and thermal networks into district storage
- Incentivize adding or upgrading central heating piping and underground electric utility lines whenever streets are opened for other purposes in order to decrease long term costs, increase efficiency, improve infrastructure, and prepare for the future

Electric Vehicles and Grid Storage



Electric Vehicles (EVs) can help the power grid and increase reliability by storing renewable energy, balancing supply and demand, reducing costs, and improving grid resilience. Vehicle to grid (V2G) or Vehicle to X (V2X) (i.e. Vehicle to building, battery, grid, etc.) allows EVs to send power from their batteries back to the grid or another receptor when electricity demand is high. This technology enables the energy stored in EVs batteries to be used for other purposes at times of need, which improves the efficiency of electricity usage and overall grid reliability.

Research from the National Renewable Energy Laboratory (NREL) based in Colorado and Leiden University's Institute of Environmental Sciences in the Netherlands evaluated if vehicle-to-grid (V2G) bidirectional charging programs could offer short-term grid storage opportunities, and concluded short term demand for storage could be met as soon as 2030. This result can only be achieved, though, by increasing participation rates in V2G or V2X markets, which is more likely with higher capacity batteries and state incentives.

The importance of expanding grid resiliency through expanded use of EVs bidirectional batteries is exemplified during extreme weather events and power loss. U.S. electricity consumption tends to follow predictable demand cycles that do not always coincide with energy supply. For example, solar panels generate electricity from sunlight, but energy demand—particularly during winter's shorter days and colder nights—tends to rise in the evenings when it is dark. While utility companies have introduced time-of-use rate structures that charge consumers more during peak consumption periods, V2G and V2X offer a more skillful instrument to manage grid demand. Energy stored in fully charged EV batteries could offer a distributed network of backup power, using V2G programs to supplement power to homes and communities during periods of peak demand, while then resuming EV charging during lower peak demand.

RECOMMENDATIONS

Create a market based framework allows and incentivizes Vehicle to Grid (V2G) and Vehicle to X (V2X) energy storage solutions

- Develop a market framework for V2X that will improve resiliency, provide grid services, and allow for value creation for EV owners, which will, over time, reduce the need for public subsidies

Integrate solar, storage, and EV charging equipment (EVSE) throughout energy policy

- Eliminate the current siloed approach to solar generation, battery storage, and EVSE, which when combined are more than the sum of their parts and offer significant benefits to all ratepayers
- Implement a more holistic approach to energy production and storage, that also considers the benefits EVs can provide through V2X, across clean energy programs to speed up and facilitate the process of interconnecting distributed energy resources to the grid and improve resiliency

Accelerate grid readiness, focusing on integration of solar and storage in strategic locations

- Deploy solar generation and storage in strategic locations for the grid in order to prepare for the anticipated load growth and provide time to develop additional distributed energy resources (DERs) that will be needed
- Use strategically placed solar generation and storage, including V2X, to spread out the cost of electrical grid upgrades that are necessary to accommodate more DERs, which will benefit ratepayers without sacrificing reliability

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