

IN THE MATTER OF THE 2024 NEW JERSEY ENERGY MASTER PLAN

Docket No. QO24020126

Unitarian Universalist Faith Action NJ Comments

June 12, 2024

Overview:

Thank you for the opportunity to present comments to BPU on New Jersey's 2024 Energy Master Plan from Unitarian Universalist Faith Action NJ (UUFaith Action). Our faith guides us to respect the inherent worth and dignity of every person and the interdependent web of life, of which we are all a part. We believe it is our moral obligation to ensure the most vulnerable communities are prioritized as we seek solutions to the climate crisis.

We have commented during the public hearings. Please include by reference our comments at each of those hearings as part of our comments today.

We are deeply concerned that the plan be aggressive enough to address the fact that we are in an existential crisis. The effort to reduce greenhouse gas emissions must be done quickly and completely.

We discuss below six key points:

1. Demand must be emphasized over supply. Reduce electric demand by promoting the use of green space and tree canopy cover, especially in urban areas. Urban Forests store carbon while reducing energy needs for surrounding buildings, reducing heat island effect, and increasing walkability. According to the US Department of Energy, carefully positioned trees can reduce a home's energy costs by 25%. This reduces the pressure that's put on the power grid during heat waves, helping to prevent catastrophic power failures. Research shows that planting deciduous trees in strategic locations around buildings helps reduce the amount of solar energy that they absorb – especially if the trees shade windows and part of the building's roof. Reduced use of fans and air conditioners also results in less waste heat into the outdoor atmosphere.

This is particularly important in underserved communities where many residents don't have access to air conditioners.

In New Jersey, urban centers such as Newark, Camden and Trenton have significantly less tree canopy than in surrounding suburban communities which can result in a temperature difference as much as 10 degrees F or more. Trees should be mandatory in all parking lots. Cooler automobiles result in reduced emissions from fuel tanks and engines and help reduce heat island effect.

Urban tree planting programs which rely on community engagement, should be replicated throughout New Jersey. The Newark Tree Canopy Initiative not only works closely with community members to ensure long term care and maintenance of the trees planted, but includes a long term plan for curriculum and instruction. The New Jersey Tree Foundation's Urban Airshed Reforestation Program and Renaissance Tree Program have engaged community members in planting and maintenance of over 260,000 urban trees in the past 25 years while providing ongoing training and education. This model has resulted in a 95% tree survival rate. Funding to ensure the continuation of these programs using this community involvement model should be available.

2. Supply must come from the cleanest renewable technologies, including solar, wind, geothermal – **but not** including hydrogen (of all types including “green hydrogen”), “renewable natural gas”, or “waste to energy”. Eliminating fossil fuel sources by 2035 should be the goal with no new fossil fuel infrastructure developed. By reducing the overall demand we can have all of our energy supply needs met within our timeline by renewable and sustainable in-state energy sources at a reasonable cost to users.

During the public hearings there was testimony on behalf of the gas companies and the related unions. There is reference within the EMP that reliable energy will in the future be supplied by natural gas. We oppose extending or increasing gas demand and infrastructure that does not curb the leaks of greenhouse gases. On the other hand we promote that the gas companies

convert into providing thermal comfort to our build environment sector by supplying community/utility scale ground-based thermal energy and ground source heat pumps. This should allow the former gas companies and union workers to continue to thrive while providing zero greenhouse gas solutions to New Jersey customers. This is being done in eight states on a pilot basis and are referred to as "Thermal Energy Networks". We recommend that this alternative be studied and pilot programs be conducted in New Jersey.

See <https://buildingdecarb.org/resource-library/tens>

3. We must rethink our communities so that automobiles are part of the transportation picture, but not the dominant one. Figure 4 of the Energy Master Plan identifies 40.6 MMT of CO<sub>2</sub>e greenhouse gases from the transportation sector out of the total 97.2 MMT greenhouse gases overall from all sectors. This needs to be reduced to 24.1 MMT greenhouse gases by 2050 to achieve the goals of the EMP and GWRA. Strategy 1.1.1 of the 2019 EMP states "Support the deployment of 330,000 light-duty electric vehicles on the road by 2025, per the State Zero-Emission Vehicle Program Memorandum of Understanding". Switching of motorized vehicles from fossil fuels to electric vehicles is an admirable first step. However, when compared to current number of millions of vehicles on the road it is woefully inadequate both as to the number of vehicles and pace of vehicle adoption. The dominant transportation-related policy needs to be to Reduce Energy Consumption and Emissions from the Transportation Sector (section 1.0).

We envision a future where New Jerseyans live, work, and learn locally. Where our communities are shaped by the healthy, safe, human-scale living and traveling within the community, and where the dominant form of transportation is "active transportation" such as walking, human-powered biking, and human-assisted biking. These forms of transportation would also be supported by local multi-passenger electric mini-buses (12 passengers), and multi-passenger electric shuttles (6 passenger). Rail-based trolleys, trams, and intra-state electric trains would fill in for most all cars and light-duty trucks for trips outside communities. Walking and biking would be the

dominant form of transportation and therefore the signals and separated travel infrastructure would be set to prioritize the people within the community rather than the motorized vehicles. Community zoning and planning decisions would be made prioritizing living locally, which will result in reduced energy demand, and where we will live in harmony with our natural systems and each other.

Currently personal and business transportation decisions are being made on the local, county, and state level. It is vital that we set Motorized Vehicle Miles Traveled (MVMT) reduction targets for 2035 and 2050, including one for per capita Motorized Vehicle Miles Traveled (MVMT) and another for statewide Motorized Vehicle Miles Traveled (MVMT). We need mandatory reporting for all motorized road vehicles of MVMT annually, and annual publication of MVMT data down to the census tract level.

We strongly recommend the EMP set a target to reduce per-capita motorized vehicle miles traveled by 30% by 2035 and 60% by 2050, compared to the 2019 baseline of 8,800 per capita, as part of the State's efforts to reduce greenhouse gas emissions from the transportation sector.

The EMP needs to treat "active transportation" as a serious substitute for MVMT and its greenhouse gas emissions. "Active transportation" is no longer for entertainment, recreation, and sport alone. It is a real and effective alternative to the unhealthy, unsafe, and unjust system and mechanisms that are driving our climate crisis. The EMP needs to treat working cargo bikes as a serious form of last-mile deliveries. It should provide incentives for NJ-based cargo work bike manufacturing and measure EMP success annually in the number of thousands of cargo work bikes sold by New Jersey companies.

We cannot leave the area of transportation without commenting in strong opposition to hydrogen vehicles, hydrogen fuel cells and any research and development in connection

with them. The State and Federal government have already conducted research, development, and demonstration programs in this field. They have proven that this is a waste of money and a political accommodation not an environmental one.

We have a need to address transportation alternatives in a very short period of time. We have fully developed, effective, and cost-efficient alternatives ready for implementation now. Every dollar spent on so-called "hydrogen research" is a dollar that is being withdrawn from our capital to do those things that are ready to go and proven. State of New Jersey should withdraw all institutions and entities under its influence (including all State universities) from participation in this folly. Funds, time, and effort must be pointed to quicker massive implementation of existing healthier, just, and cost effective alternatives.

4. The EMP needs to add as an overarching priority an increase in public awareness, public school education, and communications supporting new social behavior. NJ is a "home rule" State and the students of today will quickly become the citizens and community members responsible for public participation in purchasing and use decisions for transportation and housing and goods and appliances. They will also quickly become participants in planning, zoning, and community decisions.

All students each year K through 12 should be required to have a school field trip to a nature center, or natural area within New Jersey for educational purposes. These field trip experiences can be added to the Math, and English Language Student Learning Standards.

Student Learning Standards in Math, English Language Arts need to have systems dynamics and systems thinking as part of their K through 12 requirements.

5. The plan must have benchmarks so that we can evaluate on a year-to-year basis whether or not we're meeting our goals and fix it if we aren't. The state of New Jersey should fund projects like the one conducted by Rutgers Professor Clint Andrews in Elizabeth measure air temperatures and pollution in communities and micronet air sampling in homes in all 40 legislative districts. The studies should be repeated each year until 2050. The data and reports should be free and available to the public online.

The Integrated Energy Plan modeling and analysis is one of the key features of the EMP. The input data, models, formulas, outputs, and analysis need to be transparent and open to the general public. The data, models, formulas should be freely available for downloading by the public from online sources (not requiring OPRA request or trips to the State Offices). The software should be free, open source, and readily available to the public. The Integrated Energy Plan should be made available to all the public schools in NJ so that they can use the Integrated Energy Plan data, models and formulas as part of the students' learning throughout New Jersey as a supplement and example of systems dynamics and systems thinking.

6. The BPU should provide the Office of Rate Counsel with funding to enable it to employ additional permanent skilled analysts to protect the residents of New Jersey from unnecessary or excessive utility rate increases. There is a permanent need for such additional staff resources because implicit in the preparation of the EMP is recognition that the consumers will ultimately be required to pay for much of the costs of implementing it. Therefore ,the EMP should include explicit information about the magnitude of those potential costs, or at least an explicit description of how they will be controlled.