



Environmental Justice Task Force

Comments for EMP meeting on Clean and Renewable Power

General

- 1. For the purposes of the Energy Master Plan (EMP) and reaching Governor Murphy's goal of 100% clean energy usage in New Jersey by 2050, how should clean energy be defined?**

Clean energy should be defined as the energy generated by solar, wind, geothermal, and hydrologic sources, along with other renewable, non-GHG emitting sources. Bioenergy should be considered clean energy only if it is produced by burning materials that would otherwise be waste. No other form of bioenergy should be considered clean; in particular, crops should not be grown for the purpose of producing bioenergy.

Reducing energy usage should receive as much emphasis in the Energy Master Plan as using clean energy. The BPU Clean Energy Program has done good work on energy efficiency, but more work is needed, including more home energy audits, weatherization, and the use of more efficient appliances and lighting. Other measures, some statutory and some educational, include:

- Improving public transportation and encouraging its use.
- Increasing the insulation requirements in the Building Codes for new construction.
- Requiring all new roofs to be oriented and engineered to support solar absorption equipment.
- Enforcing the 3-minute idling law for vehicles, including over the road truck tractors and school buses.

- Using wind and solar energy to dry laundry
- Turning off appliances and devices when not in use.

2. **Should the definition of clean energy contain flexibility between now and 2050 to allow for transitional fuels to be used and phased out over time? What intervening steps should be taken to complete the transition?**

In the short term, we need nuclear power to meet our electrical energy needs. But as the term of the NRC license for each nuclear power plant ends, that powerplant should be decommissioned and the State should have developed sufficient clean energy generating and distribution facilities to replace the power from each plant.

3. **What is the most significant obstacle to getting to 100% clean energy by 2050? How can the state address it?**

There are two important challenges. One is reducing the footprint of the transportation sector, which is now the heaviest emitter of carbon in the NJ economy. The other is replacing nuclear power with renewable energy.

Reducing the footprint of the transportation sector will be the biggest obstacle. A crucial piece of this is to improve public transportation to make it an attractive alternative to individual cars. This will be expensive and it will be difficult to convince individuals to try it, but it will be the one most effective thing we can do to reduce energy use, pollution, and carbon emissions. The second important piece of this is to eliminate the use of fossil fuel powered freight trucks into and through New Jersey. Since these are interstate companies they will be hard to regulate, but they harm New Jersey residents and we must reduce the damage.

We will also need to convert NJ Transit and all state and local government fleets to electrical as quickly as possible, but as the fleets age out it should become increasingly economical to replace them with electrical vehicles. It will be even more difficult to improve the cleanliness of ship and aircraft fuels. The state should support development of innovative clean fuels for these modes of transportation.

We will address these issues further for the session on Clean and Reliable Transportation.

New Jersey's nuclear power plants will all be offline by 2046, but that will require us to replace their energy production by renewables.

Transition and Technology

- 4. How can the State immediately begin to transition to clean energy production and distribution? What intervening steps should be considered to clean existing technology? How should stranded costs be addressed?**

The state should prohibit all further development of fossil fuel infrastructure, meaning gas and oil pipelines and fossil fuel burning electricity generating plants.

Fixed stacks emitting GHG should be subject to random, unannounced, inspections by trained NJDEP inspectors and financial penalties assessed proportional to the degree by which the stack exceeds permitted limits.

For existing fossil-fuel plants, early divestment will escape the costs of stranded assets. The less money we put into building/expanding poison-power (coal, oil, nuclear, gas) infrastructure, the more stranded costs we avoid. Otherwise, stranded costs should be absorbed by the investors and owners, and not by the State or the ratepayers. "Reasonable rates of return on investments for state regulated utilities" should vary over time as market rates for 20- or 30-year Grade B+ bonds.

Extensive investments are planned for new pipelines and infrastructure for natural gas in New Jersey. The state needs to find a way to divert these investments to development of clean energy sources.

- 5. How should the state analyze the construction of additional fossil fuel infrastructure during the transition? How can the state plan to accommodate this infrastructure in both its short-term and long-term clean energy goals? What statutory or regulatory changes will be needed for the state to make and implement these determinations?**

The state should prohibit further development of fossil fuel infrastructure.

All applications for new infrastructure shall be required to conduct a comprehensive alternatives analysis as part of the EIS, considering all other infrastructure (including that which is owned by other regulated entities) suitable and available for meeting the purpose for which the new project is being proposed. As part of this analysis a system-wide analysis of the “No-Build” or “Do-Nothing” alternative must be developed and provided. The statutory authority already exists in the Freshwater Wetlands Protection Act and NEPA, among other laws.

6. How should the state invest in and encourage innovative technologies for renewable energy and energy efficiency?

The state should invest in innovative technologies for energy storage, for uses of biomass, for storage and uses of hydrogen, and for use of tidal energy.

State Policy

7. Evaluate existing clean energy policies and programs: where are they most/least effective, and are they aligned with the 100% clean energy by 2050 goal? If not, what modifications can be made, if any?

8. How should the state integrate low use property, such as brownfields and blighted zones, into new clean energy economy development?

Encourage their use for solar farms and onshore wind farms.

“Blighted Zones” should be considered on an individual basis, taking into account the needs and desires of the existing residents and businesses in such areas. The creation of locally owned “Community Development Corporations” should be considered and authorized to implement innovative methods for supplying the existing residents and businesses with the energy they need, e.g. community solar farms

9. How should the state address the baseload needs v. intermittent elements of clean energy generation? What is the role of energy storage in the conversion to 100% clean energy?

The entire statewide electricity distribution system needs to be re-examined to

seek ways to improve reliability and to account for increased reliance on the variation in generating capacity of solar and wind generating units as a function of weather conditions and climate change.

The state should install pilot storage whenever as the prices begin to come down and fund research on storage devices. Energy storage will be essential to even out the load.

Planning and Zoning

10. How can clean and reliable power support the expansion of clean transportation?

Transportation can't be entirely clean without clean and reliable power, since vehicles have to be charged.

The presence of a network of charging stations for electric powered vehicles and hydrogen powered vehicles, comparable in density to the existing gasoline stations will be needed in the future. Most of those gas stations could be converted to handle vehicle charging, especially those along major highways, park and ride lots and near high voltage power lines and substations

11. Is there a role for communities in local energy planning and, if yes, what should it be? Are there opportunities for public-private partnerships to aide communities undertaking this planning?

Inclusion of local planning is critical; people in the immediate geographical area of a project are directly affected in many ways: loss of property, construction chaos, health effects of ongoing operations, and potential damage from an accident.

12. What portfolio mixtures can the state utilize in achieving its 100% clean energy goal? What can a transition portfolio mixture resemble in 2030 and what portfolio mixtures can the state utilize in 2050?

Tie transition portfolio mixture goals to the dates when the NRC licenses for each of the 4 nuclear power plants supplying NJ are due to expire: 2033 for Peach Bottom Unit 1, 2034 for Peach Bottom Unit 2, 2036 for Salem Unit 1, 2040 for

Salem Unit 2, and 2046 for Hope Creek.

13. **Should changes be made to zoning and planning laws and requirements to allow for the development of clean energy generation?**

Any changes to planning and/or zoning should be the product of a robust public-participation process.

Economic Growth and Workforce Development

14. **How should the state address the workforce development needs associated with the transformation to 100% clean energy?**

The state should provide incentives for developers to locate projects in overburdened communities and to train individuals from these communities to install and maintain their projects.

15. **How can the transition to 100% clean energy grow New Jersey's economy and create new innovative and high paying careers for New Jersey residents?**

16. **How can the State encourage, require, or otherwise develop a robust supply chain for all clean energy industries?**

Economic Justice

17. **How will the State consider and integrate overburdened communities into clean energy advancements?**

The state must address both the public health and the economic aspects of the problem in low income communities.

For public health, the issues are air quality and increased flooding due to global warming. For air quality, the state must put its priority on overburdened communities to reduce the number of fossil-fuel based vehicles. This can begin with what the state controls — NJ Transit and all other state vehicles. As the vehicles are replaced, they must be replaced with electrical vehicles only, and this should happen first in the most overburdened communities.

For economics, the state must support the development of jobs and job training programs in overburdened communities. Incentives to developers need not only be financial, but also could include moving the developers up in queues for approval of projects if they provide jobs and job training in overburdened communities.

Similarly, incentives should be provided to manufacturers of any products related to clean energy to locate in overburdened communities.

Finally, the benefits of clean energy can be provided in overburdened communities in two ways. One is to provide clean energy alternatives for the generation of electricity. This is already available, but not widely known and confusing to understand. Educational programs should be developed to help consumers in all communities, but especially overburdened communities, to understand the possibilities for using clean energy. Second, the Community Solar Pilot offers an opportunity for renters and people in houses not suitable for solar to obtain the benefits of using solar, ultimately including lower electricity prices. It is important that incentives for this program not drive up overall electrical rates. To avoid the need for excessive subsidies to developers, municipalities should be encouraged to build Community Solar projects to provide local electricity.

18. What efforts are most successful towards making clean energy and energy efficiency measures affordable and accessible to all?

California has been using funds from cap-and-trade auctions to provide “free renewable energy, energy efficient upgrades, and technical assistance” to low income residents¹. California state law directs that 35% of the funds benefit low income communities. New Jersey should use funds from RGGI for the same purposes as California: to publicize free energy audits in low-income neighborhoods through trusted organizations such as churches and community groups; to weatherize homes for better energy efficiency; to install more efficient lighting and appliances; and to develop community solar farms to provide energy in low income neighborhoods.

¹ <https://e360.yale.edu/features/green-upgrade-how-california-is-pioneering-renewable-energy-justice-cap-and-trade>

19. How can the state play a role in ensuring that disproportionately impacted communities receive opportunities and benefits connected to the clean energy economy?

The state can influence behaviors through regulation and financing. It already finances homeowners who install solar panels by allowing a homeowner to charge retail rate for feeding electricity to the grid and also by awarding the homeowner an SREC for every Mwh of electricity produced. In addition there are tax breaks.

These subsidies are rarely available to individuals in disproportionately impacted communities, because they are mostly renters rather than homeowners. In fairness, subsidies applicable to electrical bills should be provided to renters or anyone else who subscribes to clean energy generation. In fact, the most economical way to provide solar is not using rooftop solar but using large solar farms. A consumer can then choose to “use” the output of these farms (actually, just to pay for it, regardless of which actual electrons he uses and which consumer actually uses the solar-generated electrons).

Other possibilities include requiring clean energy developers to include a percentage of customers from disproportionately impacted communities; provide jobs and job training in these same communities; and to provide incentives to developers, both financial and otherwise, to develop projects in these communities.

Finally, New Jersey should begin its transition to clean energy by encouraging use of public transit and by converting NJ transit and the state and local fleets to electrical energy first in disproportionately impacted communities.

Ideally, New Jersey should prohibit any new fossil fuel infrastructure, but at a minimum New Jersey should prohibit building new fossil fuel infrastructure in any community with more than 20 high ozone days in the previous year.