From: <u>kirkafrost@yahoo.com</u>
To: <u>comments, EMP</u>

Subject: [EXTERNAL] RE: 2019 Energy Master Plan - Public comment and question towards effectiveness of outreach

**Date:** Friday, October 12, 2018 4:47:42 PM

Dear Energy Master Plan Committee,

## Further comments:

- 1. EMPC definition of renewable energy must not include any fossil fuel and limit use of rare earth materials.
- 2. EMPC to construct first 5 year interval sprint starting 2019 to lay out the initial framework and renewable energy roadmap, promote New Jersey resident involvement. Institute yearly review and 4th year revision of roadmap and detailing next 5 year sprint.
- 3. 30 year Roadmap to focus on forming revised infrastructure strategy, cessation to fossil fuel expansion, rapid transition away from fossil fuels and rapid evolution of infrastructure towards a more aggressively distributed energy infrastructure framework using renewable sources.
- 4. State to engage corporate sponsorship at different tiers along with state sponsored funding to enable grant competitions to New Jersey high school, colleges and universities to occur every year building on the EMPC strategy framework and sprint.
- 5. Task Force/Governance council needs to formed that doesn't just use company representations, must include unaffiliated New Jersey residents.

## Timeframes:

In order to make 2050 target, this means numerous tracks need to take place in the first sprint:

- 1. Roadmap / vision
- 2. NJDEP revamp to stop fossil fuel growth
- 3. Research and collaboration with countries that are further along in going completely renewable such as Germany.
- 4. Collaboration with NJ utilities and emerging companies
- 5. Model NJ education renewable energy initiative (this is the program that engages New Jersey high schools, charter schools, universities and colleges to compete and contribute towards shaping a renewable New Jersey.

I hope that you consider these ideas. There is much to learn from other countries and so much untapped resources at the different levels of school as long as there is funding. Making the timeline mandatory means and forming an organization that coordinates and drives this initiative means it takes away the possibility for various energy vestiges from obstructing progress.

The technology for the most part is here now with a few emerging technologies planned in 2019 that will make this entirely possible. However, transformation is a large task that will require incentives.

Best regards,

Kirk Frost

**From:** kirkafrost@yahoo.com <kirkafrost@yahoo.com>

**Sent:** Thursday, October 11, 2018 11:32 AM

**To:** 'EMP.Comments@bpu.nj.gov' <EMP.Comments@bpu.nj.gov>

Subject: 2019 Energy Master Plan - Public comment and question towards effectiveness of outreach

Dear Energy Master Plan Committee,

I would request to be added to the stakeholders list. I came across this initiative from a notification from a NGO. I would encourage the committee to identify ways to engage all New Jersey residents for enabling a transition towards renewable energy by 2050.

It is great that Governor Murphy has taken a stance supporting renewable energy and placed a marker out in the future for New Jersey to shoot forward. If there are no immediate near-term goals, then this goal vanishes when Governor Murphy is no longer governor. In order to institute 'real' change that addresses the increasing contamination to New Jersey residents from fossil fuels, Governor Murphy needs to institute the necessary institutional changes within New Jersey Agencies and incorporate the public input that immediately and effectively establishes a clear pathway towards a renewable energy platform by 2040 for New Jersey. Anything less is the same old same old.

## Suggested ideas:

- Allocated grant funds for schools and students (HS & college) to participate in competitions for providing renewable energy ideas to be awarded in Q1 2019.
   New Jersey needs to move aggressively into renewable energy in order even consider a 2050 deadline. New Jersey needs to enable disruptive innovation. One way to ensure innovation is to enable young adults to dream and pursue emerging renewable energy ideas.
- 2. Establish renewable energy and Hydrogen task force
  - Setup small task force to review Europe's recent push and leadership into a Hydrogen energy-based system as a platform for renewable energy infrastructure. There are many forms of hydrogen usage and there are numerous companies in New Jersey that have identified many potentials of hydrogen. Most notable is a hydrogen battery that was developed for electric cars. At least three entities are developing solar generation solutions for hydrogen at significantly higher efficiencies than electrolysis (one has several patents). Numerous global initiatives are researching lower cost fuel-cell solutions. Task force focused on reviewing and sponsoring renewable energy initiatives in 2019 through 2050, high priority hydrogen-based energy system transformation, and aggressive review of overall energy supply and distribution for New Jersey.
- 3. New Jersey Awareness Initiative (Conserve, renewable options, public enablement helpline)

More details available.

- 4. **Debase the Hindenburg incorrect negative attribution towards Hydrogen**Too many schools and adults cite the Hindenburg as reasons for not pursuing
  Hydrogen. This has put United States at a disadvantage in comparison to China and
  Europe.
- 5. Revise NJ Agency mandates
  - a. Reviews and inputs for fossil fuel project reviews and approvals
    Greater emphasis must be placed on investing in renewable energies instead of
    expanding legacy fossil fuel infrastructure. Projects that are financed over
    multiple years that have no definite termination of use by 2040 should be denied.
  - b. Energy infrastructure current state (safety, expansion, aggregate culmative contamination)
    - Require New Jersey agencies to initiate tighter auditing and measuring of existing

- infrastructure emissions (airborne, liquid and solid). Current air quality measures throughout New Jersey are inconsistent and not always functioning Mandate that air quality centers are all updated and maintained to monitor known emissions from fossil fuel infrastructure.
- c. Energy infrastructure future state to be placed into effect 1/1/2019
  Alternative energy permits receive fast track. Fossil Fuel permits are responded to immediately by New Jersey Agencies as "denied until further evaluation can be provided."

Set thresholds of agency review where:

- i. If new projects propose updating existing infrastructure without expansion as approved for review.
- ii. If new projects propose increasing capacity or distribution, that project placed under classification "denied, until further evaluation can determine if project supports NJ 2050 renewable energy target."
- iii. If new project doesn't support NJ 2050 renewable energy target, then project is unequivocally denied.

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Best regards,

Kirk Frost