

Energy Intensive and Trade Exposed Industries
Advisory Panel Meeting 7
February 10, 2021

Attendees:

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| 1. Eric Gertler, Chair | Empire State Development |
| 2. Keith Hayes, Co-Chair | New York Power Authority |
| 3. Heather Briccetti | The Business Council of New York State, Inc. |
| 4. Tristan Brown | SUNY College of Environmental Science and Forestry |
| 5. Jason Curtis | Nucor Steel Auburn, Inc. |
| 6. Carlos García | New York City Environmental Justice Alliance |
| 7. Doug Grose | NY CREATES |
| 8. Michael LeMonds | LafargeHolcim |
| 9. Melanie Littlejohn | National Grid |
| 10. Elisa Miller-Out | Chloe Capital |
| 11. David Wasiura | United Steelworkers District 4 |

Not in Attendance:

- | | |
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| 1. Leah George VanScott | Greater Rochester Enterprise |
| 2. Stephen Tucker | Workforce Training Center at Northland |
| 3. Lourdes Zapata | South Bronx Overall Economic Development Corp. (SoBRO) |

Agenda Item I – Welcome and Updates

- Chair Gertler welcomed the panel, reviewed meeting logistics, and took the roll.
- Chair Gertler provided a recap of the panel’s progress to date, including:
 - Defining panel scope and work plan
 - Reviewing industrial emission sources, technology, and process solutions for reducing emissions
 - Identifying potential policies to foster deployment of solutions
 - Synthesizing preliminary emission reduction strategies
 - Collecting public input on preliminary strategies
- Chair Gertler noted that the meeting objectives, as reflected in the agenda, include:
 - Review public input on preliminary EITE strategies
 - Provide panel input on draft of final recommendations for Climate Action Council (CAC).
- Co-Chair Hayes provided an update on Climate Justice Working Group (CJWG)’s principles for a just transition.

Comments and Questions

- **Panel Member Wasiura:** *In regard to “equitable access to high-quality, family-sustaining jobs,” he notes that this includes union jobs. Regarding the phrase “just transition,” he would like the panel and public to think about what this really means. We have already started to see jobs losses due to situations like Siemens Energy deciding to shutter its gas turbine manufacturing facilities causing the loss of 500 steelworker jobs. He has spent time trying to figure out what a just transition would be for a steel worker who used to make turbines for the gas industry and flags this is something we need to be careful about.*

- **Panel Member LeMonds:** *Something we've been focused on is ensuring we have domestic manufacturing in NY as we move through this transition. This is one of the core reasons the EITE panel was put together – to make sure we are still producing things in state and New York doesn't become an import state for the materials the EITE sector produces.*
- Co-Chair Hayes next provides an update on the biogas discussion, including a summary of perspectives, and outlines next steps.

Comments and Questions

- **Panel Member Brown:** *Regarding the bullet stating “technology must be proven at scale” he asks, what is the definition of scale? This technology has been widely deployed for commercial and industrial applications in California and the EU so what is needed to confirm it's been proven at scale?*
 - **Co-Chair Hayes:** *He will leave that response to the experts. They can take this up and respond back.*

Agenda Item II – Recap of Public Input

- Co-Chair Hayes provides a reminder of the public and stakeholder input process and summarizes key topics raised in public input, including:
 - Potential energy cost increases
 - Implementation of the CLCPA
 - Feasibility of reaching the targets and other goals
 - GHG emissions reporting
 - Leakage
 - Reliability of the power system
 - Environmental impacts of renewable energy development
 - Use of renewable natural gas
 - Adaptive re-use of electric generating facilities

Comments and Questions

- *None*

Agenda Item III – Discuss Draft of EITE Panel Final Recommendations [Panel Chat Comments Included]

- Co-Chair Hayes provides a reminder of EITE considerations for industrial emission mitigation strategies and the preliminary EITE strategies.
- Staff Working Group Members Todd Baldyga, Sean Mulderrig, Chris LaLone, and Kevin Hansen walk through each strategy in further detail, including:
 - **Mitigation Strategy – Initiative #1: Financial and Technical Assistance.**
 - **Panel Member LeMonds:** *One of the items brought up in our discussion has been the complexity of permitting fuel switching in New York. Fuel switching was identified in the report as a key lever to quickly reduce emissions, but it doesn't seem like it was addressed here even though it's one of the traditional levers.*
 - **Staff Working Group Member Todd Baldyga:** *As we investigate this and recommendations move forward with biofuels, that lever can be more fully refined. It's not off the table and it is a solution that could be utilized.*
 - **Panel Member Garcia:** *Wants to further explore where these industrial/manufacturing facilities are located in relation to environmental justice (EJ) communities. A suggestion he had brought up in the past is to*

compile a list of the industrial/manufacturing facilities that are considered EITE in New York State and geographically assign/designate if they are near EJ communities. Instead of saying, we think X facilities are going to be impacted and X amount are going to be in/around EJ communities, he would like to take it a step further and try to be more intentional when considering where these facilities are and their relationship to EJ communities. Additionally, he suggests creating some kind of financial incentive to have owners in these communities make updates/advancements quicker so these EJ communities can reap the benefits sooner than other areas.

- **Panel Member Brown:** *Something we should consider with the assistance aspect is whether this should include regulatory assistance. When talking about fuel switching, new capacity, etc., a lot of these companies would appreciate this assistance to ensure they're on the right side of the law.*
- **Mitigation strategy – Initiative #2: Low-Carbon Procurement Policies**
 - **Panel Member Miller-Out:** *Poses two questions. First, what groups are we thinking would be the main customers in this scenario? And second, how early stage are we thinking this could be targeted? Is this an opportunity for early stage innovative technologies for pilots/demonstration projects?*
 - **Staff Working Group Member Sean Mulderrig:** *This will be handled when we get to enabling strategies around R&D. If we were to narrow this particular strategy, it would be much more in terms of bidding for actual public projects – roads, new government buildings, etc. - whereby the use of these products would be given some sort of advantage. Notes we'll get further into this in a later strategy.*
 - **Panel Member Wasiura:** *If we're talking about standardizing measures and things like that, there is already a "Buy American" requirement in place and we can add low-carbon requirements that would ensure the manufacturing and R&D is being done. If there's a federal standard for products, it's would be easier and could tie it back to domestic content to support jobs. This doesn't need to be re-written – already on the books in New York. There may be shorter paths to get to the goals we're looking for because it's public procurement.*
 - **Panel Member LeMonds:** *This to me is what leadership looks like: the state putting its procurement power and funds behind what it wants to accomplish. We don't produce a separate product for Connecticut so this would drive regional transformation and would have massive impact on the entire Northeast. He notes that transparency is important (i.e., product declarations). That framework sets up for good decision making. He whole-heartedly thinks this is a great idea and the direction the state needs to go.*
- **Enabling Initiative – Initiative #3: Research Development & Demonstration Overview**
 - **Panel Member Miller-Out:** *Regarding assembling stakeholders for this research, we should be sure to include a diverse group of start-ups and make sure to involve the demand side. We should think about who the customers would be and engaging them and engage private investors. Looking at all these groups can help ensure success.*
 - **Panel Member Wasiura:** *He would expand it beyond start-ups and new companies coming in. With the Biden administration, there could be financing*

from the federal government for pilot projects or retrofits. The cost will be high but if we are going to do pilot projects, we should select a community that is already being impacted. There are plenty of facilities that would be ripe for something like this.

- **Panel Member Brown:** *Notes this is one of the single most important things New York can do to achieve decarbonization. The R&D potential is tremendous, but there is a great deal of potential to utilize other types of manufacturing. New York is unique in the sense that it has the shortest distance between low-carbon feed stocks and populations centers. There's potential to produce low carbon plastics and low carbon asphalts, which are things we don't think about but are important. Panel Member Garcia: Carbon capture and storage is something NYC-EJA has pushed back against. In the context of this initiative, using money on R&D for initiatives that are not going to decrease CO₂ production, but will allow a facility to continue to produce CO₂ and find ways to capture and store the CO₂ is not viable. Many studies raise questions about the potential of success for these projects. NYC-EJA doesn't feel comfortable with EJ communities being the test hub for these unproven programs or technological ideas where the negative externality is potentially emissions that could have been reduced through another strategy.*
- **Panel Member Miller-Out:** *Innovation should continue to play a role in meeting our goals. Pilots can take place anywhere across the state, and, noted that riskier technologies shouldn't necessarily use disadvantaged communities as testbeds. Note that successful pilots can have multiple layers of contingencies and backup plans in place to mitigate risk and ensure positive impact. Also, note that innovation can come from startups as well as pilots from within larger, more established organizations or some combination of partnerships between entities that vary in size.*
- **Panel Member Wasiura:** *There are industries in New York State that are going to burn natural gas and produce CO₂ and the only way we can stop that from happening is to shut the facility down. As a reminder, the CLCPA is a net zero bill, not a zero carbon bill, so we need to find ways to offset the carbon we're producing now. His organization will never be in favor of shutting industry down. The reality is we won't be able to stop all carbon emissions.*
- **Panel Member Garcia:** *Notes these are great points. We need to sit down and go by line by line through the technologies/energy types. They understand that some sectors cannot completely decarbonize, but don't want this leniency to guide the conversation.*
- **Panel Member Wasiura:** *If we have places that are emitting carbon and this is one of the tools we need to get to net zero, we shouldn't sit around waiting for start-ups to try things. If we have existing facilities in these neighborhoods, we should use every tool we want to try R&D on these facilities.*
 - **Staff Working Group Member Sean Mulderrig:** *The very purpose of this is to look at the technologies that are unproven, stack them up against each other, and make these types of judgments.*
- **Panel Member LeMonds:** *The RD&E initiative is a great idea, and I agree with David's comments that it provides the opportunity to capitalize on federal funding. I enjoyed the discussion on CCUS -- even if you don't like it, CCUS is one*

of the real tools in the toolbox that the public and private sectors are already investing in today.

- **Panel Member Brown:** *The UN IPCC recently concluded that catastrophic climate change will only be prevented via the widespread deployment of CCUS technologies. NYS has an opportunity to be an early adopter and contributor to that critical effort.*
- **Panel Member Miller-Out:** *Expresses support for CCUS.*
- **Panel Member Garcia:** *NYC-EJA and our allies believe CCS/US is a false solution that also enables large quantities of captured CO2 to create a new dirty infrastructure footprint. Unproven schemes that store CO2 mean more groundwater contamination, air pollution and earthquakes. Common estimates of carbon capture technologies – which only look at the carbon captured from energy production at a fossil fuel plant itself and not upstream emissions – say carbon capture can remediate 85-90 percent of carbon emissions. Many studies have found that, once they have calculated all the emissions associated with these plants that could contribute to global warming, and converted them to the equivalent amount of carbon dioxide in order to compare this data with the standard estimate, that in both cases the equipment captured the equivalent of only 10-11 percent of the emissions they produced, averaged over 20 years. Numerous research studies have also looked at the social cost of carbon capture – including air pollution, potential health problems, economic costs and overall contributions to climate change – and have concluded that those are always similar to or higher than operating a fossil fuel plant without carbon capture and higher than not capturing carbon from the air at all. Even when the capture equipment is powered by renewable electricity, it is always better to use the renewable electricity instead to replace coal or natural gas electricity or to do nothing, from a social cost perspective.*
- **Panel Member Hayes:** *Agree and CCUS is not the only solution as renewable penetration needs to continue. CCUS could struggle however if capture costs must fall, regulatory frameworks need to provide the right incentives and technology and innovation make CO2 a valuable feedstock for existing or new products.*
- **Panel Member Garcia:** *We disagree. Not only does carbon capture hardly work at existing plants, but there's no way it can actually improve to be better than replacing gas with wind or solar directly. The latter will always be better, no matter what, in terms of the social cost. You can't just ignore health costs or climate costs.*
- **Panel Member Brown:** *It is important to differentiate between fossil CCUS and BECCS/BECCU. The latter will need to be deployed widely to avoid catastrophic climate change, but we will not have that technology available if we avoid CCUS entirely due to the technologies past failings at coal-fired power plants. Hence the critical need for R&D.*
- **Panel Member Garcia:** *There is a lot of reliance on carbon capture in theoretical modeling, and by focusing on that as even a possibility, that diverts resources away from real solutions. It gives people hope that you can keep fossil fuel power plants alive. It delays action. In fact, carbon capture and direct air capture are always opportunity costs.*

- **Enabling Initiative – Initiative #4: Workforce Development Overview**
 - **Panel Member Miller-Out:** *For the workforce initiative - making sure we're measuring diversity, equity and inclusion along the way and ensuring that these programs benefit everyone is important. It should be noted that the pandemic has had a profound negative impact on women in the workforce and has disproportionately impacted communities of color.*

- **Enabling Initiative - Initiative #5: GHG Reporting Overview**
 - **Panel Member LeMonds:** *Questions whether any of the draft framework EITE industries (i.e., steel, cement, glass, chemicals, etc.) in the state are not already reporting their absolute and gross GHG emissions to the government today. His expectation is yes, they are all reporting today -- just curious on why we would want to create a new framework instead of use one that already exists.*
 - **Panel Member Curtis:** *Agrees with Panel Member LeMonds' question. Expresses that he wouldn't think so, and wonders how these will be taken into account when looking at overall emission reduction goals.*
 - **Staff Working Group Member LaLone:** *Notes that though this is being presented under the EITE panel, the hope is that this would have a bigger reach if adopted by the CAC in the scoping plan. His idea is that any new system that gets set up won't create a new mechanism for facilities already reporting - only for those where we aren't currently collecting GHG info.*

- **Enabling Initiative – Initiative #6: Economic Incentives overview**
 - No panel comments.

- **Discussion: Panel Reflection on Strategies:**
 - **Panel Member Curtis:** *We cannot build a wind and solar infrastructure while generating zero carbon. We all strive to minimize carbon but wants to highlight it is not possible to get to zero.*

Agenda Item IV – Next Steps

- Co-Chair Hayes summarizes next steps, including:
 - The next EITE panel member will be held on 3/10.
 - Future panel meetings will be held on as needed basis for future potential collaboration and recommendation refinement during the remaining scoping plan process.
 - Panel and public can submit comments, strategies, and considerations to climate@esd.ny.gov.