Energy-Intensive and Trade-Exposed Industries

Chair Eric Gertler Empire State Development

EITE Strategies, slide 1/6

| Strategy under consideration | Provide technical assistance to help identify economically viable decarbonization pathways and to provide comprehensive energy management planning Provide financial incentives for decarbonization projects Refer economic assistance recipients to resources that will result in lower-emitting projects Leverage low-cost hydropower to provide support for industry |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rationale | Decarbonizing EITE sectors will require overcoming significant barriers related to lack of financial, technical, and personnel resources. Technical assistance provides increased evidence of the financial and operational viability, as well as emissions savings persistence, of decarbonization measures and energy management. Financial incentives help speed the transition of stock turnover and adoption of decarbonization projects. |
| Equity considerations | Technical assistance to consider equity considerations Goal of directing public resources towards disadvantaged communities (at least 40% of benefits) Targeted outreach to facilities located in disadvantaged communities to make aware and assist of emission reduction programs |
| Potential Implementation challenges | Heterogeneity of solutions vary across energy-intensive industries (not one-size fits all solutions) Disclosure of intellectual property to other industrial competitors may cause apprehension to participate in state run programs |
| Issues to explore | Funding source and duration Coordination with investor-owned utility programs to deliver comprehensive strategies to market |

EITE Strategies, slide 2/6

| egy under consideration | Create preferential standards for the public procurement of low-carbon building materials |
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| Rationale | Advantages in selection for public procurement provide a revenue stream for low-carbon replacement products Early development of low-carbon products will position NY state manufacturers on the leading edge as more markets require such products |
| Equity considerations | N/A |
| Potential implementation challenges | Success will require robust carbon accounting standards and life-cycle analyses specific to each product class |
| Issues to explore | Cross-collaboration with Energy Efficiency and Housing as well as Agriculture and Forestry advisory panels Incremental cost impact to the state Estimated impact on private procurement of similar materials |

EITE Strategies, slide 3/6

| trategy under consideration | Develop a comprehensive Innovation Roadmap to address knowledge gaps and to guide key priorities for deep decarbonization investment in the areas of carbon-tech, low-carbon fuels, and carbon removal R&D funding for early stage decarbonization technologies Demonstration pilot funding for high impact solutions in coordination with private market Identify potential for innovation clusters to leverage supply chains and infrastructure for novel solutions |
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| Rationale | Road-mapping initiative is needed to determine key areas of investment across multiple interconnected sectors (e.g. manufacturing, transportation, power generation) Significant technological advances are required to meet long-term emissions targets |
| Equity considerations | All activities would include equity and environmental justice as a key parameter in determining recommendations and/or funding decisions |
| Potential implementation challenges | To be determined; challenges to implementation will be identified as part of the road-mapping exercise |
| Issues to explore | Low-carbon fuel generation and midstream infrastructure Geologic storage and mineralization capacity for CO2 Cost/benefit analysis of research investment; techno-economic analysis of solution viability Opportunities for pilot and demonstration funding |

EITE Strategies, slide 4/6

| rategy under consideration | Provide workforce development on existing and new innovative emission reduction technologies that effect EITE industries |
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| Rationale | Expands pool of workforce with skills needed to address emission reduction strategies increasing confidence and reducing risk to EITE industries. |
| Equity considerations | Advance disadvantaged individuals including MWBE firms with job opportunities |
| Potential implementation challenges | Matching supply and demand of trained workforce with companies Funding sources |
| Issues to explore | Cross cutting strategy in many other advisory panels from Transportation, Power Gen, Just Transition |

EITE Strategies, slide 5/6

| trategy under consideration | Expand the universe of industrial facilities that are required to report on their GHG emissions. |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rationale | Collecting emissions data from a larger universe of industrial facilities will enable a more complete picture of greenhouse gas emissions, allowing the State to better track its emission reduction progress, identify the potential for additional EITE sectors and prioritize emission reduction efforts. |
| Equity considerations | N/A |
| Potential implementation challenges | Limited challenge in regulatory development. Potential challenge with outreach to ensure all effected facilities report timely and accurately. |
| Issues to explore | Establishing a GHG emissions threshold at which reporting will be required; concern about placing additional regulatory requirements on facilities already highly regulated by DEC; evaluate whether to align with reporting already done to meet EPA GHG Reporting Program. |

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EITE Strategies, slide 6/6

| ategy under consideration | Leverage the State's climate policies to develop an in-state supply chain of green economy companies by engaging in business development discussions and offering incentives through programs such as NYSTAR, NY Ventures and Excelsior Tax Credits. |
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| Rationale | Green economy industries are poised for significant growth, and anchoring an in-state supply chain or growing green businesses will both make it easier for the State to achieve its climate goals while also attracting new investments and jobs. ESD invests in green/cleantech start-ups through NY Ventures, funds R&D centers to help commercialize new technologies through NYSTAR, and offers Green Economy Tax Credits for job, investment and R&D commitments through Excelsior. |
| Equity considerations | Project location decisions are typically business-driven, not State-driven (e.g., whether they may be inside of a Disadvantaged Community). |
| Potential implementation challenges | N/A - Ongoing |
| Issues to explore | Initiatives to connect non-green EITE businesses to green economy opportunities. |