Offshore Wind Supply Chain Study Outline Recommendations

What we want to see:

- Offshore wind market assessment
 - Overview of Tier 1, 2, and 3 components
 - What are the manufacturing requirements for these components?
 - Where are these components currently manufactured?
 - Landscape of existing and announced supply chain at regional and national levels
 - Are there key manufacturing deadlines SC manufacturers and decision-makers need to prepare for?
 - What component needs are currently unmet?
- <u>Assessment of South Carolina's existing supply chain</u>
 - What infrastructure does SC have to support industry needs that are currently unmet?
 - Overview of existing facilities and attributes of SC's manufacturing ecosystem
 - Materials, advanced manufacturing expertise, or specialized labor prevalent in SC
 - Include ports assessment suitability for manufacturing
 - Landscape overview of SC companies that currently support the OSW industry
 - Landscape overview of SC companies that could transition into the industry if given support (training, funding, etc.)
- Estimation of potential economic impact
 - Model economic benefits (local revenue generated, private sector investment, jobs created, etc.) that the offshore wind supply chain can provide to SC
 - How many workers does the offshore wind supply chain currently employ in South Carolina? How many workers COULD be employed?
 - What could the total economic benefit be as a result of SC manufactured products supplying various US projects?
 - What could the total economic benefit be as a result of SC supplying components to the Carolina Long Bay projects?
- <u>Recommendations and next steps</u>
 - Actionable recommendations for supporting existing businesses or recruiting new members of the supply chain
 - Market, policy, R&D, and investment recommendations
 - Identification of components (all tiers) most advantageous for SC to focus manufacturing efforts
 - Which agency is in charge of carrying out each recommendation?
 - Specific plans to engage Small Minority- or Women-Owned Businesses
 - And/or, break down systemic barriers to their entrance into the industry
 - Future complementary assessments (ex: separate ports staging and O&M assessment)

Weaknesses from other states' studies:

- Recommendations lack specificity and actionability
 - Example from Virginia: "Enable and grow Virginia's business opportunity through partnerships and infrastructure...Consider establishing industry specific programs, incentives and resources "
 - What specific programs, incentives, and resources does the author recommend? What has worked well elsewhere? Why is that program well-suited for implementation? Who is in charge?
- Consulting partners may lack expertise specific to the offshore wind industry and the associated value chain
 - Experience studying solar or other renewable energy supply chains does not necessarily translate into a substantial understanding of the wind energy industry. The components required, opportunities, and infrastructure needed to supply offshore wind differs significantly from that of other renewables.

Elements from Clemson's 2013 study that do not need to be included:

- Background on clean energy legislation or prior task forces
- Wind energy census section: methodology should not consist of self-selection for companies that are/are not currently in the supply chain, but should be identified by Commerce or other experts in wind who know the entire OSW value chain *and* SC manufacturers

Example assessment: Maine's Assessment of OSW Supply Chain Opportunity

- Conducted by: <u>Xodus Group</u> for \$299,500
- Examines:
 - Overview of vessels required for construction, as well as anticipated market demand of those vessels across
 - Opportunities to introduce AI and tech solutions, specifically for O&M
 - Research and development agencies and relative capabilities
 - Educational pipeline opportunities
 - Opportunities to support Minority- and Women-Owned Small Businesses' entrances into the industry
- Strengths:
 - Case studies exemplify existing supply chain constraints
 - Recommendations range in cost, potential funding sources, and agencies capable of carrying out the work