**Sustainability Summit**

**Preliminary Energy Sustainability Indicators and Targets: Participant Feedback Sheet Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

| **Definition** | **Preliminary Sustainability Indicators** | **Preliminary Targets** | **Does this define sustainability? What do you agree/disagree with?** |
| --- | --- | --- | --- |
| **Primary:** The supply portfolio eliminates dependence on finite fuel fossil fuel sources  | • Percentage of energy content (BTUs or equivalent), measured at the point of primary source supply that is not fossil fuel based . | **Current Status Targets**:• Ratio of non-fossil fuel supply consumed to total supply consumed, by use (heating, electricity, transportation), including imported electricity. For purposes of this target, bio-fuels may be counted as non-fossil-fuel, but may be discounted based on production method. The goal would be to achieve zero energy-related use of fossil fuels by 2050, in which case the “Sustainable Supply” fraction will be 100% (at the state-wide level).**Forward Looking Target:**• Strength of NJ’s enabling legislation and policies relative to the 2050 goal and other states with leading programs• Accessible market opportunity for non-fossil-fuel sources considering resource sizing, and regulatory permissiveness of all types• Relative position of NJ in attracting private investment to non-fossil-fuel solutions |  |
| **Primary**: Energy related greenhouse gas emissions are declining and on track to meet goals set by the Climate Change Response Act.  | • Annual tons of CO2 (equivalent) emissions, estimated bottoms up based on supply mix• Annual tons of CO2 (equivalent) emissions, based on actual atmospheric measurements, as adjusted to account for the energy-fraction | **Current Status Target**:• Level of GHG emissions compared with target levels, for both estimated and measured targets. The goal would be to achieve a reduction to 1990 levels by 2020 and a reduction to 80% below 2006 emission levels by 2050 (at the state-wide level). |  |
| **Secondary**: The energy economy maximizes conversion of primary energy content into useful energy services, resulting in the lowest possible waste fraction. | • The fraction of energy that is not converted to useful energy services as intended•Energy intensity: NJ total and peak energy use per capita, and per unit of economic output (GDP), absolute and trend•Measured efficiency of all in-state power plants•Degree of peak electricity usage and fraction of energy costs driven by demand charges  | • One minus the ratio of energy delivered as useful energy services (in BTU or equivalent) to the energy content of primary energy sources consumed. The goal would be to achieve the lowest possible waste fraction (i.e., maximum energy efficiency), while recognizing that waste cannot be reduced to absolute zero.  |  |
| **Secondary**: There is diversity of primary supplies and no single points of failure in the infrastructure. | • Quantification of supply diversity based on the number of energy supply types and sources, and relative magnitude of each• A measure of the probability of failure and the magnitude of impact of any single points of failure within the infrastructure | • Avoidance of excessive use of any one source• Decreased probability of failure and impact of any single points of failure within the infrastructure over time |  |
| **Secondary**: The state supplies all of its own energy needs, with the need for imports | • The fraction of energy, fuel and electricity, that comes from sources outside NJ borders  | • Minimized dependence on external sources for either fuel or electricity |  |
| **Secondary**: The infrastructure is able to deliver the energy needed, when and where it is needed, in the quantities needed, at the technical quality required.  | • Quantification of the number of failures in delivery or technical quality, and the restoral intervals in the case of outages | • Delivery disruptions are minimized, and when outages occur, the ability to provide at least basic service almost immediately and full restoral of service as quickly as possible |  |
| **Secondary**: The end-consumer cost of energy is on par with other markets (states, etc.) that are attempting to deliver similar levels of sustainability.  | • Cost of energy per unit delivered as perceived on a customer’s bill, compared with other benchmark markets with similar goals• Estimated “all in” cost parameters that more fully consider costs that are not evident on customer bills• Degree of government support of all types for each supply source as delivered | • Cost of energy per unit delivered as perceived on a customer’s bill, compared with other benchmark markets with similar goals is consistent• Cost measures properly and fully capture government involvement, externalities, and lifecycle implications |  |

Please use back of page to list any aspects of the topic missing or other appropriate indicators or targets that should be explore