Energy Research Fund Potential Ideas Descriptions:

ODOE Tier 1 in order:

1. **Energy Transition Jobs and Economics** – The Oregon Statewide Energy Strategy requires that the pathways to achieve energy policy objectives must take into account "economic and employment impacts." This would likely be outside the scope and/or contract for the Energy Strategy technical contractor. This study would be an addendum to the development of the potential strategy pathways. For different pathways the study would provide an assessment of: (1) Oregon's energy workforce needs, (2) the effects on Oregon's job landscape, and (3) potential for clean energy economic development in Oregon.
2. **Industrial Sector Decarbonization & Energy Efficiency Options** – Oregon needs additional information to inform policies to address industrial sector decarbonization and energy use reduction. This study would help identify some potential decarbonization and energy efficiency opportunities in the industrial sector.
3. **Non-Energy Benefits of Energy Efficiency** – There are numerous co-benefits that energy efficiency brings to the table that are not included in the traditional cost-effectiveness test, such as jobs; enhancing DERs; contributions to decarbonization; low environmental impacts; easing energy burden; and contributions to capacity, resilience, and reliability. This study would explore the quantification of some of these non-energy benefits from energy efficiency (identified in our co-Beyond Energy Savings – Co-Benefits of Energy Efficiency 2022 BER Policy Brief on page 526).
4. **Residential Code Cost Analysis** – As part of EO 20-04 directives, ODOE is directed to, in cooperation with BCD, "contract with a 3rd party consulting firm to assess cost implications ... of the energy efficiency and building code actions" identified in other parts of the EO. Scoping discussions with Building Code Division resulted in the desire to gather cost information from builders/industry regarding new energy building code measures after a new code becomes effective (the new residential energy building code is effective April 1, 2024). This study would gather this cost information on new measures.
5. **EV Awareness Survey for the BiZEV Report** – Conduct a survey of Oregonians about their awareness of electric vehicles, their costs, and benefits. This is a reporting requirement of the Biennial Zero Emission Vehicle Report (SB 1044, Section 2 (3)(g)), which has previously been assessed using national survey information and state utility survey data. This data is either too broad to accurately reflect the unique perspectives of Oregon communities, or is not able to capture the perspectives of many of Oregon's rural communities. This survey would be conducted to reach Oregon residents who are not reflected in existing data sources, including their perspectives on the benefits and challenges of EVs and barriers to adoption. These results would be informative to EV policy design, including assessing alternative fueling and vehicle options for rural communities, equitable access to chargers, and identifying economic development gaps and opportunities in relevant communities.

ODOE Tier 2 in order:

6. **Grid Electrification Prep** – This study would investigate what types of policies and actions we need to modernize and prepare the electricity grid for electrification. This would be in coordination with the Oregon Statewide Energy Strategy work.
7. **Net Zero Code Development** – This study would research the development and implementation of a state voluntary "net zero" code framework that could include off-site procurement of renewable energy as an option. This could apply to both state and non-state buildings.

7. **Residential Energy Efficiency** – This study would supplement Home Energy Score and NEEA studies and further investigate energy efficiency data in the residential sector, taking into account heating type/source and house age. This would make the data more useable for downstream geospatial analysis with demographic layers, and help with targeted marketing of programs.

7. **Cooling Needs Part II** – This study would complement the recently completed Cooling Needs study with an additional analysis into market-rate and certain housing types, which were omitted from the original scope. We do not have much understanding of cooling needs in these housing types.

10. **Vulnerability Assessment for Energy Sector Resilience** – This study would use the Climate Risk/Vulnerability Assessment to target potential resilience investments more strategically. This would go beyond the Climate Vulnerability Assessment done for the 2020 BER and would supplement the Energy Security Plan.

10. **Construction Technical Assistance** – This effort would provide information to inform ODOE outreach to the construction industry about unfamiliar or new energy efficiency technologies – both to the design side/architects and to the building contractors. Residential building contractors prefer to install technology that they are used to installing or are familiar with, so providing technical assistance could lower resistance to installing heat pumps in new construction.

12. **Integrating Renewables into the Transmission System –** This study would identify the barriers to integrating more renewables into the transmission system, and investigate potential polices, rates, and programs to overcome the barriers.