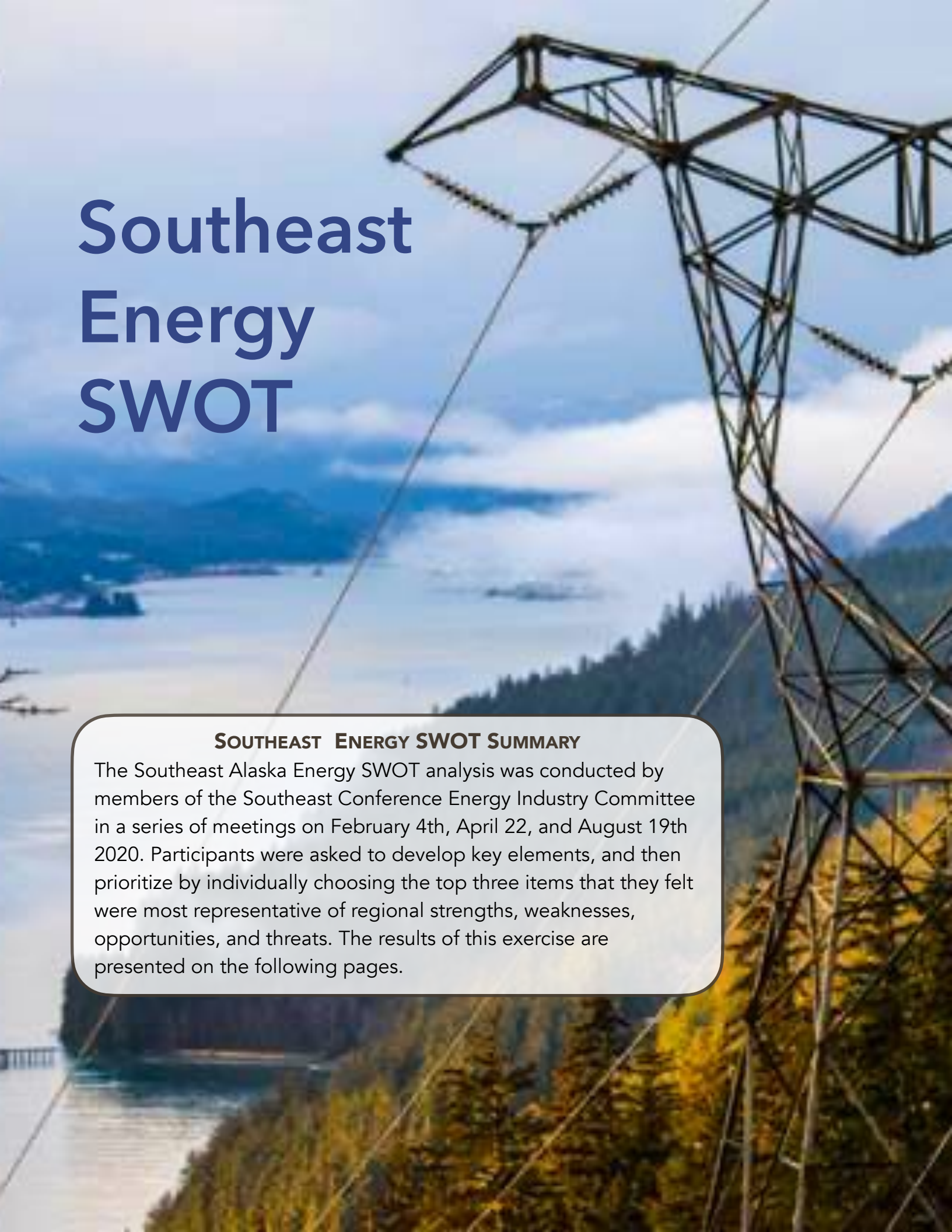
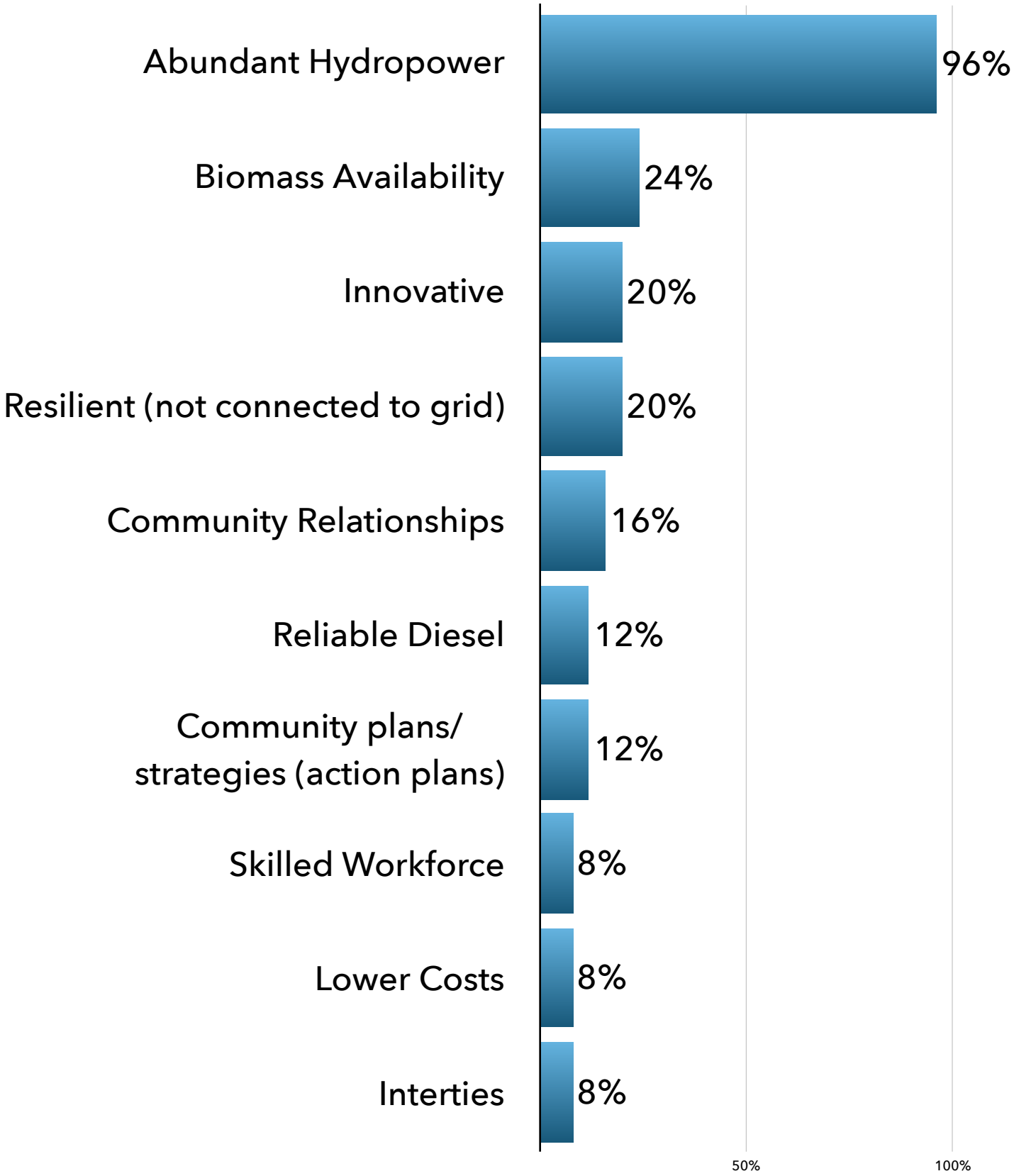
Southeast Energy SWOT



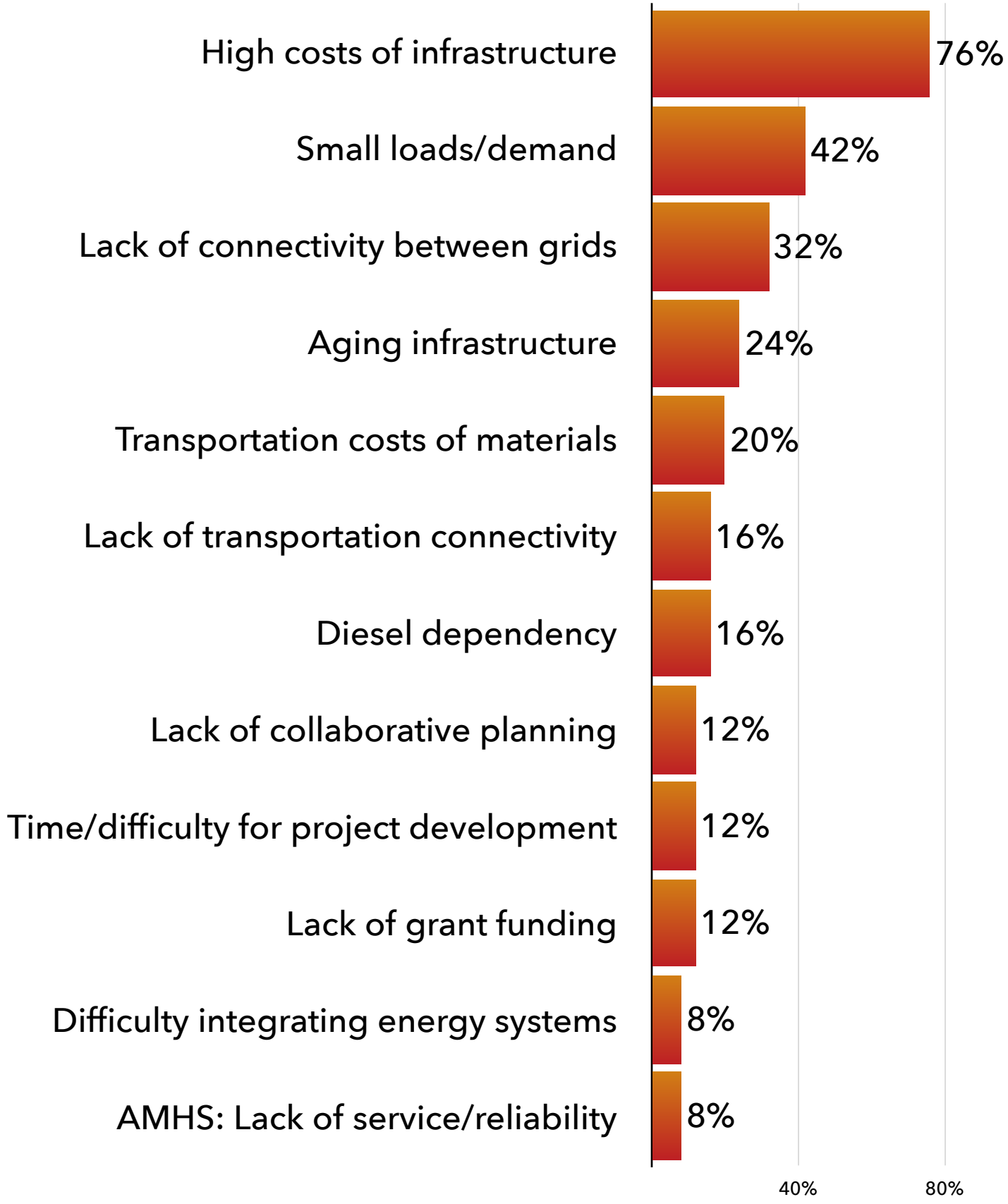
Southeast Energy SWOT Summary

The Southeast Alaska Energy SWOT analysis was conducted by members of the Southeast Conference Energy Industry Committee in a series of meetings on February 4th, April 22, and August 19th 2020. Participants were asked to develop key elements, and then prioritize by individually choosing the top three items that they felt were most representative of regional strengths, weaknesses, opportunities, and threats. The results of this exercise are presented on the following pages.

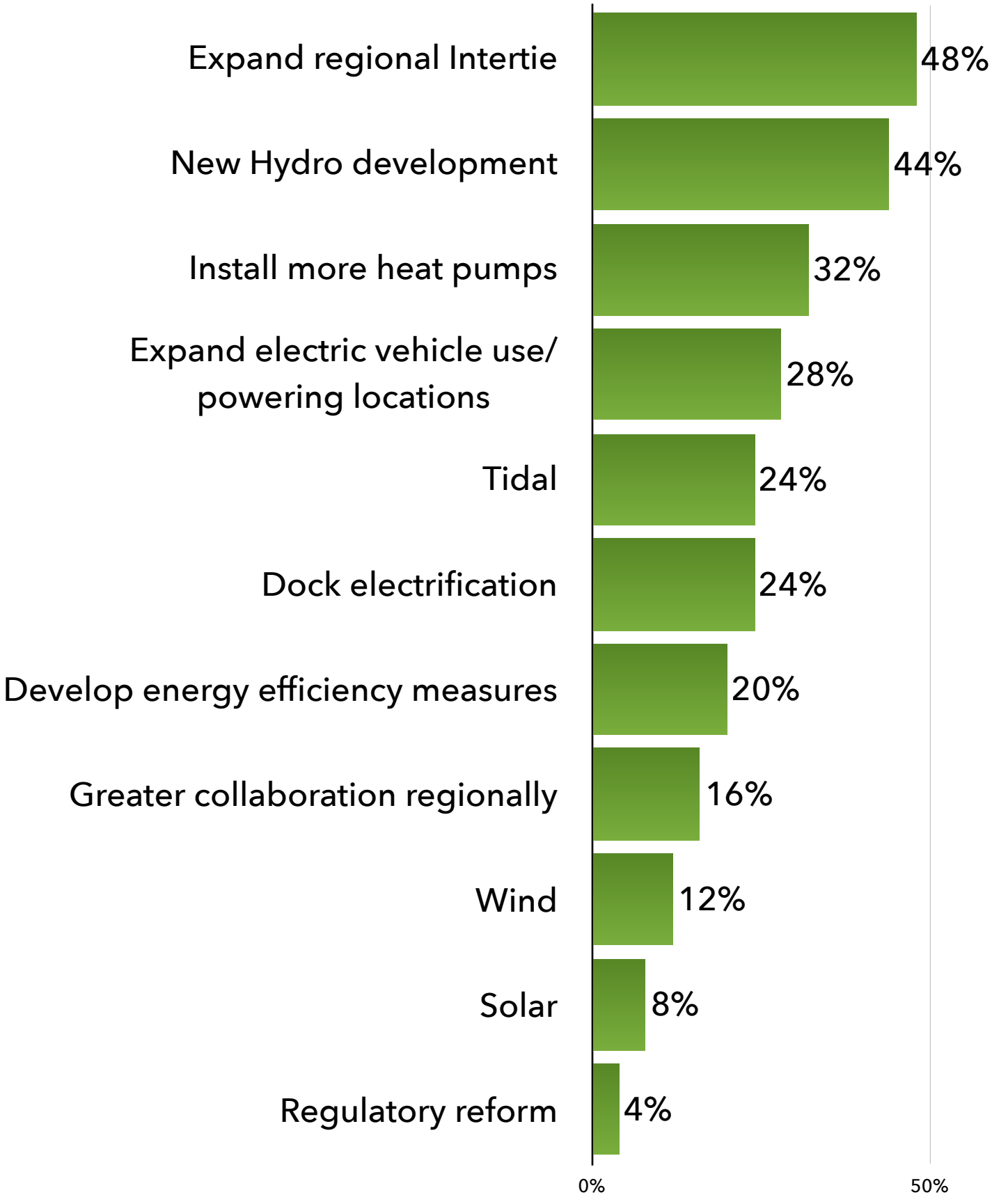
Energy Strengths



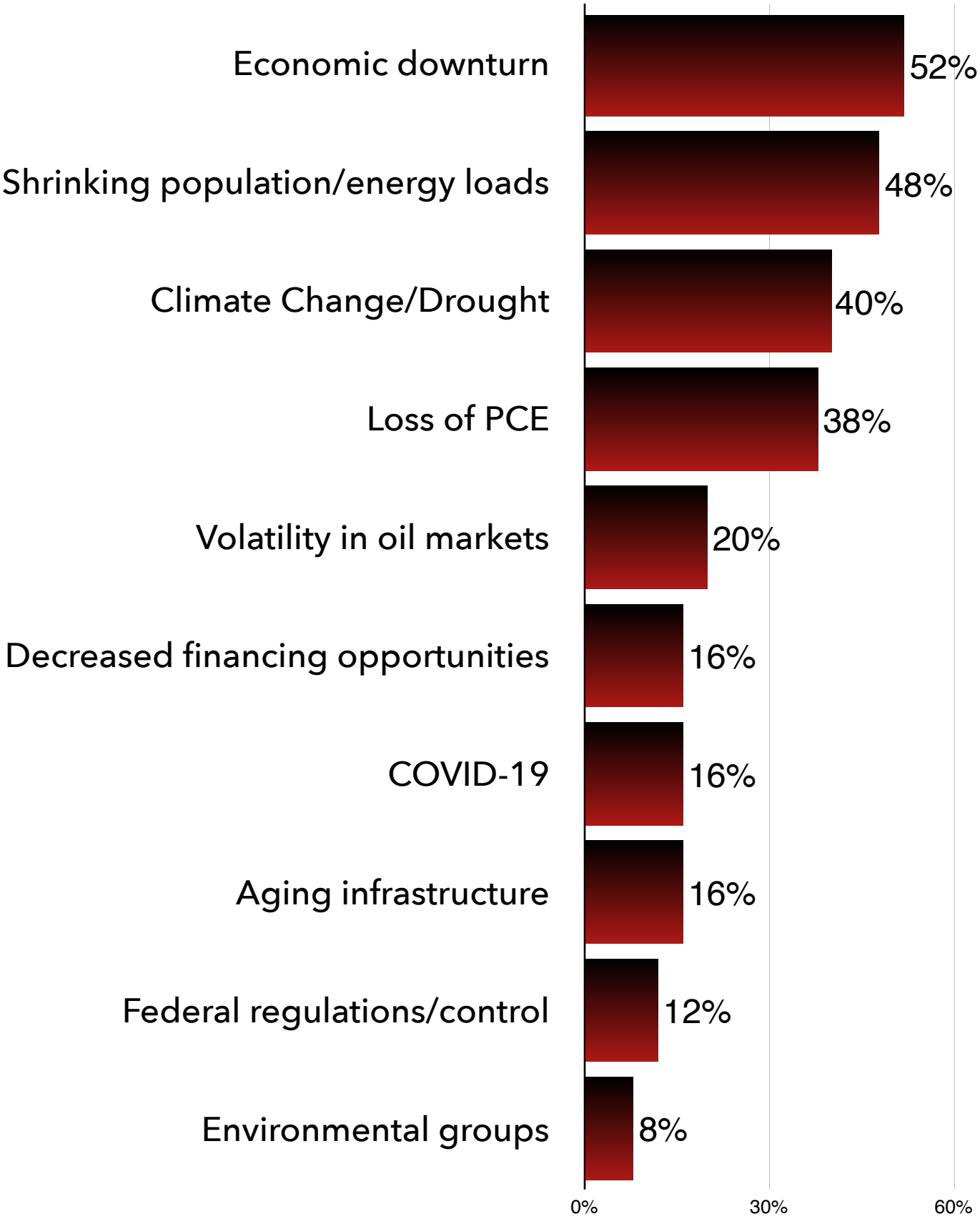
Energy Weaknesses



Energy Opportunities



Energy Threats



ENERGY INITIATIVES

Southeast Conference

Mid-Session Summit 2021

Introduction

The Southeast Alaska Energy initiatives were developed by members of the Southeast Conference Energy Industry Committee in a series of meetings in 2020. They have been prioritized in the order presented.

Five Initiatives for the Energy Sector in Southeast Alaska

1. Continue to support rural Southeast communities with high-cost electric rates that do not have access to lower cost hydroelectricity.

2. Work with communities to create energy systems that provide sustainable, affordable, renewable thermal energy.

3. Promote beneficial electrification.

4. Implement regional energy plan with a focus on "committed units" and deployment of renewables.

5. Energy Workforce Development.

1

Continue to support rural Southeast communities with high-cost electric rates that do not have access to lower cost hydroelectricity

Southeast Alaska's rural remote communities often do not have access to lower cost hydroelectricity.

- Work to preserve the Power Cost Equalization (PCE) Endowment and maintain the PCE program
  - The PCE provides access to affordable electric power for rural Alaskans and allows rural communities to have affordable electricity for streetlights, water and sewer facilities, and other essential public infrastructure
- Work to secure continued access to renewable energy funding for rural communities, while recognizing the risk that costs could be increased by implementation of high-cost energy projects

2

Work with communities to create energy systems that provide sustainable, affordable, renewable thermal energy

- **Biomass:** Expand biomass heating systems in communities with easy access to urban wood waste and post-logging areas.
- **Solar:** Develop off-grid photovoltaic and non-photovoltaic solar hydronic thermal systems for heating individual buildings and water.
- **Hydropower:** Hydroelectric facilities provide the majority of the power requirement in Juneau, Ketchikan, Sitka, Petersburg, Wrangell, Skagway, Haines, Metlakatla, Craig and Klawock.
- **Geothermal, Wind, and Tidal:** Support long-term advances in generation technology, transmission and distribution systems.
- **Liquified Natural Gas:** Support exploration of economic sources of natural gas near Ketchikan.

3

Promote beneficial electrification

Beneficial electrification is the replacement of appliances and equipment that burn petroleum directly with electrically-powered alternatives that allow for more efficient integration of renewable sources of electricity onto the electric grid, or that allow for better utilization of existing electric infrastructure

Work with utilities to support utilizing a wider range of renewable resources in the region and to develop innovative rates and programs that encourage beneficial electrification by consumers.

Work with communities to support consumer adoption of technologies that can be added to the electric system in a manner that increases the value of the grid.

3

Promote beneficial electrification

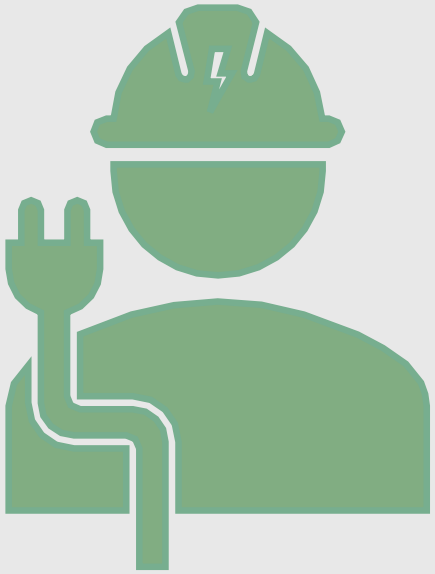
The primary opportunities for beneficial electrification in Southeast Alaska include:

- **Heat Pumps:** Support the continued installation of heat pumps in areas with high heating costs and low electric costs
- **Electric Vehicles (EV):** Support efforts to minimize barriers that inhibit EV adoption in Alaska
- **Research Emerging Technologies:** Identify opportunities to fund research and testing of technologies that will enable greater integration of renewable energy and better utilization of grid infrastructure
- **Dock Electrification:** While not all communities can support port initiatives for electrification due to significant costs, support those that can

4 Implement regional energy plan with a focus on "committed units" and deployment of renewables

Partner	Update	Pursue	Facilitate
Partner with state and federal agencies to advocate for renewable energy development and advance energy technologies in order to promote economic development and jobs to contribute to a resilient tax base	Update the Southeast Alaska Integrated Resource Plan (SEIRP) and list of "committed resources," such as generation projects and transmission hydroelectrical interties, that have regional support	Pursue opportunities for energy efficiency in generation, transmission and demand-side management	Facilitate technical expertise and educate consumers regarding energy use. Educate and communicate the value and importance of regional energy projects, especially small, community-based projects.

5 Energy Workforce Development



Southeast Alaska's energy sector is a small community that requires people to wear many hats– this diversity of experience drives innovation that can be shared across the region.

- Build the workers and workforce involved in regional energy work.
- Promote collaboration between utilities to prepare for, test, and invent emerging technologies that allow us to accomplish more with our abundant renewable resources.
- Address needs for training related to installation and maintenance of heat pumps, hydroelectricity, maintenance of electric vehicles, and operation and maintenance of building energy systems and controls.