Coastal Generation, Distribution, & Storage

March 4, 2025

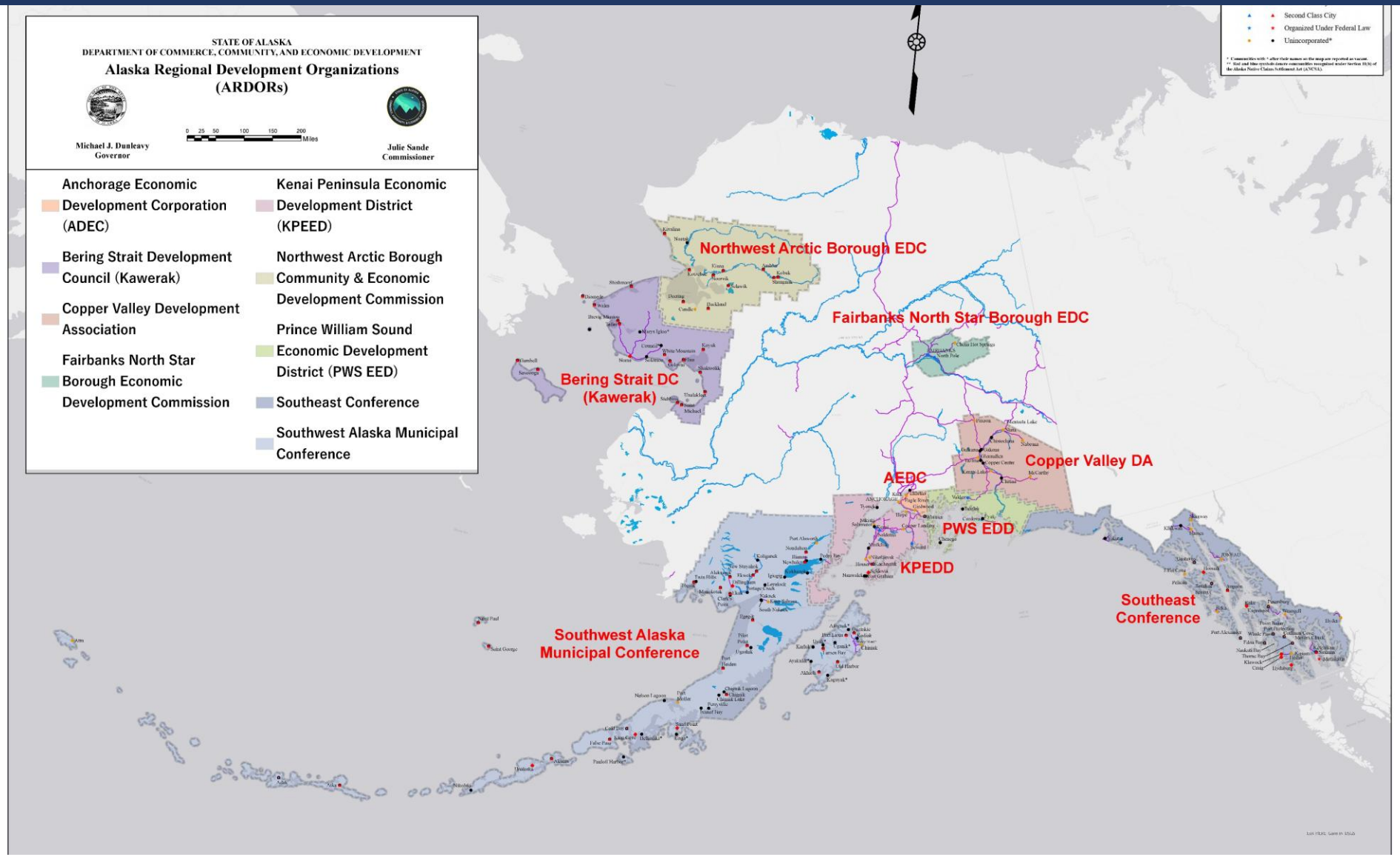
Presentation to the House Energy Committee

SOUTHEAST CONFERENCE

ABOUT SOUTHEAST CONFERENCE

- Southeast Conference was incorporated in 1958, primarily to advocate for the creation of the Alaska Marine Highway System.
- After that success, stayed together to continue to advocate for issues that are key to the southeast region as a whole.
- Looks for consensus for the betterment of the region.
- Members from nearly every community, chamber of commerce, and economic development organization in the region.
- Southeast Conference is the federally designated Regional Economic Development District and the State-designated Alaska Regional Development Organization.
- Energy has been a top priorities with dedicated staff attention since 2002, working with state and federal policy makers and regional planners across Alaska.

ALASKA REGIONAL DEVELOPMENT ORGANIZATIONS (ARDORS)



ARDOR ANNUAL REPORT

Alaska Regional Development Organizations

Fiscal Year 2024 Annual Report

Mike Dunleavy,
Governor
State of Alaska

Julie Sande,
Commissioner
Department of Commerce,
Community, and Economic Development

Sandra Moller,
Director
Division of Community and Regional
Affairs

QR Code to Download Report

SOUTHEAST CONFERENCE COMMITTEES

Energy

Transportation

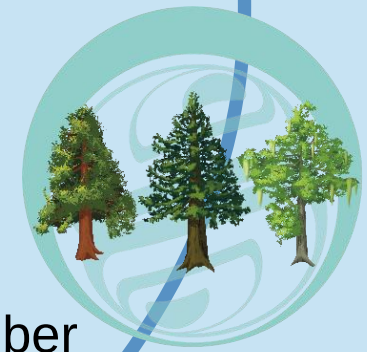
Maritime

Visitors

Mining

Promoting strong economies, healthy communities, and a quality environment in Southeast Alaska.

Seafood



Timber

PUBLICATIONS

available to download at

WWW.SECONFERENCE.ORG/PUBLICATIONS

SOUTHEAST **2030 STRATEGIC PLAN** SUMMARY

In February 2025, Southeast Conference released the draft Southeast Alaska 2030 Economic Plan, a five-year strategic plan for the region. The membership worked together to develop an overall vision statement, 46 objectives, and 7 priority objectives, along with regional and industry specific SWOT analyses. More than 400 people representing small businesses, tribes, Native organizations, municipalities, and nonprofits were involved in various elements of the planning process. The Plan's prioritized objectives are listed below.

Economic Development

1. **Housing objective: Support the sustainable development of housing**
2. **Childcare objective: Increase childcare capacity in Southeast Alaska**
3. **Infrastructure maintenance**
4. **Education objective:** Partner with University of Alaska Southeast and K-12 school districts to build career pathways

5. **Workforce attraction and retention objective**
6. **Coast Guard Objective:** Support Coast Guard vessel homeporting opportunities
7. **Natural disaster planning objective:** Support disaster preparation and relief efforts

8. **Solid waste objective:** Support regional solid waste management solutions
9. **Healthcare workforce objective**
10. **Telecommunications objective:** Improve communications access in Southeast Alaska
11. **Manufacturing objective:** Promote regionally-manufactured local products
12. **Food security objective:** Increase supply and distribution of local foods

Seafood

1. **Further develop markets for Alaska seafood**
2. **Seafood modernization initiative**
3. Work to further promote a year-round seafood economy in the region
4. Full resource utilization and ocean product development
5. Mariculture development
6. Bring back seafood jobs to Southeast's smallest communities
7. Support access to capital for harvesters and processors
8. Maintain a stable regulatory regime

Natural Resources

1. Prepare for potential Chinook salmon listings
2. Work with USFS to direct federal contracts toward locally-owned businesses
3. Support an innovative, integrated timber industry
4. Attract capital investments, maintain global competitiveness
5. Provide an economically viable supply of timber from the Tongass to regional operators
6. Increase access to minerals and energy sources for mining on state and federal lands
7. Advocate for the regulators
8. Revise the Tongass National Forest Land Management Plan

Visitor Industry

1. **Support local tourism ownership and entrepreneurship**
2. Workforce housing for visitor's sector
3. Cultural tourism development
4. Collective regional strategy for accommodating tourism industry growth in Southeast

Energy Sector

1. **Reduce energy costs and increase deployment of renewables**
2. Promote beneficial electrification
3. Support consumer education on heat pumps
4. Policy and regulatory development to meet community energy needs and priorities
5. Continue to support PCE for rural communities
6. Biomass in energy

Transportation

1. **Support the stability, sustainability and longevity of the Marine Highway System of Alaska**
2. Develop a long-term, strategic, multi-modal, regional transportation plan
3. Improve and expand opportunities to move freight to and from markets
4. Ports and harbors infrastructure improvements
5. Transportation Workforce Development
6. Ensure the stability and safety of passenger transportation services
7. Improve marine and road connection to Lower 48
8. Disaster Resilient Transportation Infrastructure

= Priority Objectives

SOUTHEAST CONFERENCE

COASTAL ALASKA OPPORTUNITY: ENERGY INDEPENDENCE

Islanded grids powered by stable priced renewable energy.

+

Relatively mild climate.

+

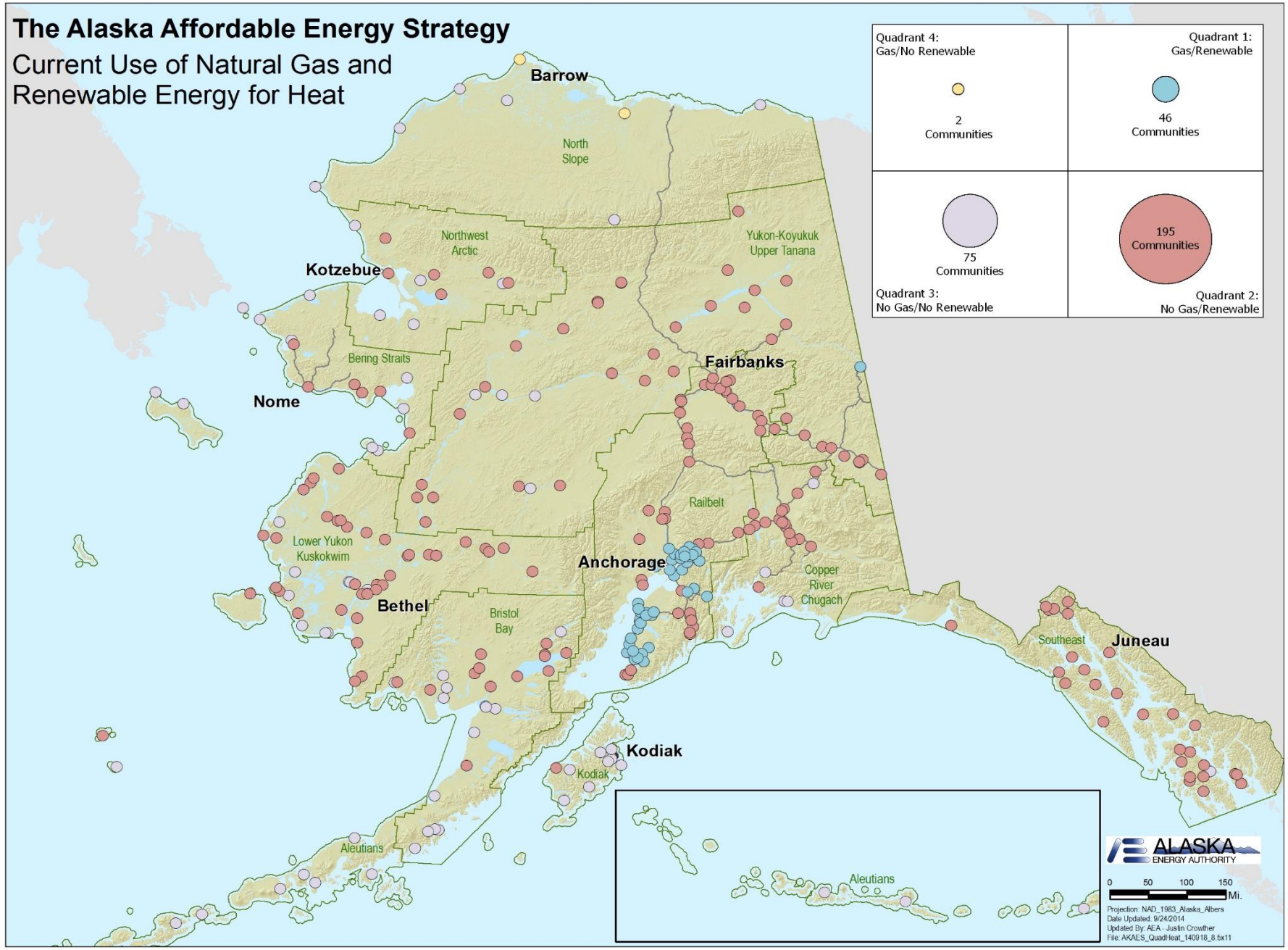
Limited road systems in most communities.

=

Stable priced, locally produced thermal & transportation energy.

THE POTENTIAL IS ENORMOUS.

Southeast, Kodiak, coastal resources are the "Saudi Arabia" of renewables!



EXTERNAL DRIVERS & REGIONAL ISSUES FACING ALASKA

EXTERNAL DRIVERS

- Federal and State energy policy legislation
  - Changes in administration energy priorities
  - State energy policy legislation
  - The State's role in developing energy infrastructure
- Federal funding uncertainty
- Fossil fuel prices and availability
- Land use regulations

REGIONAL ISSUES

- Uniqueness of Alaska
  - Size and geographic expanse
  - Limited interconnections and redundancies
  - Inflexible utility business structure
- High cost of space heating
- Conversion to electric space heating
- Declining population in communities
- Declining economies in communities
- High cost of electricity
  - Relative costs – Alaska versus other states
  - Relative costs – among Rural Alaska communities
  - Economies of scale
- Rapidly declining excess hydro
- Difficulty in developing new hydro and transmission interconnection projects
- Low levels of weatherization and energy efficiency
- Availability and cost of capital
  - Historical dependence on State funding
- Risk management issues
  - Need to maintain flexibility
  - Aging infrastructure
  - Ability to spread regional risks

BENEFICIAL ELECTRIFICATION IS KEY

APPLICATIONS

- Highways - EV's Trucks, Industry
- Food Security (greenhouses)
- Manufacturing & Material Handling
- Infrastructure (Cruise ship Docks, Ports and Airports)
- HVAC systems
- Recreational

STRATEGIES

- Infrastructure Planning and Development
- Rate Design
- Incentives & Financing
- Education & Outreach
- Partnership Planning
- Managed Charging Systems
- What else?

LOCATIONS

- Home and Workplace
- (Space heat & Hot Water)
- Fleets: Automobiles, Buses, Marine - and next? Yes, ferries!

COASTAL BENEFICIAL ELECTRIFICATION EFFORTS = ECONOIMIC TRANSFORMATION




- ~6,000 heat pumps installations in homes currently using heating oil, propane or wood for primary heat
- Tiered incentives
  - 80% AMI or lower = $8,500
  - 81-150% AMI = $6,000
  - No income limit = $4,000
- Workforce development to build skills and support transition.
- Coordination with providers of weatherization services to maximize value to households with low income.
- Coordination with financial institutions to expand access to affordable financing products to leverage grant funds.

FEDERAL CHANGES & UNERTAINITY

Federal policy favors hydro but not wind and solar which may be beneficial options for some communities.

Federal funding uncertainty threaten to end previously fully funded energy projects in Southeast including.

- CPRG award to install 6,000+ heat pumps in Southcoast.
- Construction of Thayer Creek hydro moving Angoon from diesel to hydro.
- Workforce training for contractors to upskill to support heat pump market transformation.

HISTORICAL CROSSROADS

THE FUTURE HAS BEGUN

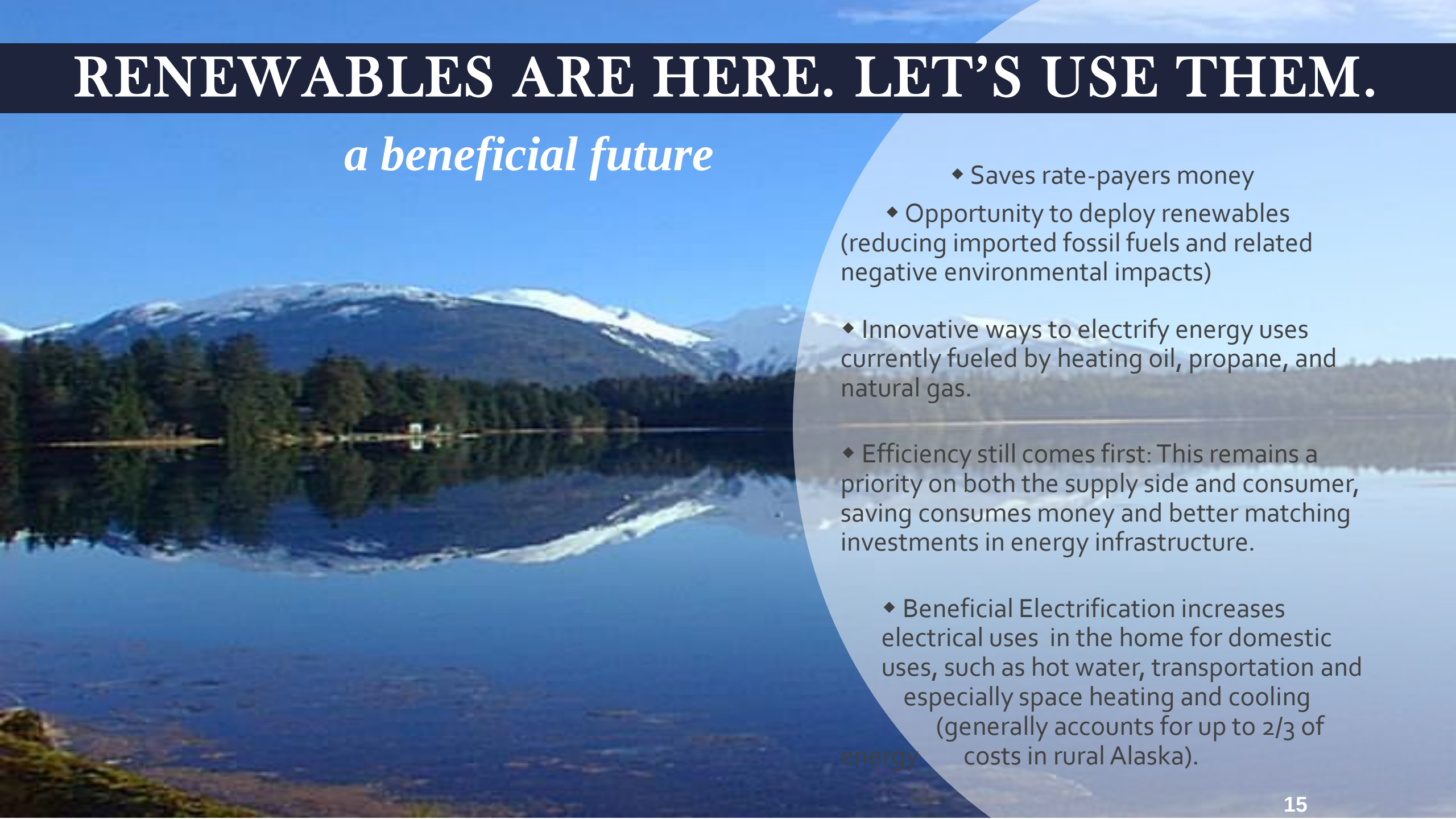
From ground source heat pumps in Metlakatla to excess wind and solar thermal heat in the Arctic, innovation and beneficial electrification is taking shape across Alaska.

The energy security task force recommendations points to the path forward with actions that can lead to both lower energy costs and an invigorated economic future. The PCE Endowment Fund and the Renewable Energy Fund needs to be protected and strategically utilized.

Let’s take advantage of opportunities for stable priced renewable energy.

RENEWABLES ARE HERE. LET'S USE THEM.

a beneficial future



- Saves rate-payers money
- Opportunity to deploy renewables (reducing imported fossil fuels and related negative environmental impacts)
- Innovative ways to electrify energy uses currently fueled by heating oil, propane, and natural gas.
- Efficiency still comes first: This remains a priority on both the supply side and consumer, saving consumes money and better matching investments in energy infrastructure.
- Beneficial Electrification increases electrical uses in the home for domestic uses, such as hot water, transportation and especially space heating and cooling (generally accounts for up to 2/3 of energy costs in rural Alaska).

THE ULTIMATE APPLICATION FOR BENEFICIAL ELECTRIFICATION?

Alaska Brewing Co.

Most breweries sell the spent grain left over from brewing processes as cattle feed, but Juneau is a long way from such customers.

In 2013 the Alaskan Brewing Company completed the final stage of a process it calls “Beer Powered Beer,” when it fired up its unique new steam boiler, fueled by the grain left over from the brewing process. The $1.8 million furnace turns a low value by-product into steam that powers much of the brewery’s operations. The company is continuing to fine tune the boiler system, with a goal of saving approximately $450,000 annually and cutting the use of oil by 60%.

This is the latest in a series of steps the company has taken toward greater sustainability since 1995, when they installed a grain dryer, which allowed them to ship spent grain south for cattle feed. About half of this byproduct was used as a fuel source to heat the dryer itself, allowing them to burn grain effectively. In 2008, the brewery installed a $1.7 million mash filter press to produce a finer grain with less moisture, making it a better fuel source. This inspired them to invest in the boiler which would convert all of the waste to energy.

The value of a spent grain as a fuel versus its value just as a waste material goes from a net value of $30 per ton up to $350 per ton.

Thank You

SOUTHEAST CONFERENCE

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