Investing in Alaska
Going Beyond ESG

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Alaska has strong ESG policies that demonstrate excellent results & long-term sustainability

• **ENVIRONMENTAL** – Comprehensive & rigorous environmental permitting, monitoring and compliance programs focus on sustaining human health and our ecosystem
  
  • Alaska is longtime leader in all categories measured under ESG metrics and ranks lowest among all energy producing states. page 2
  
  • Alaska has already embraced “Energy Transition” with operators improving Oil & Gas Operations and State funding renewable energy solutions throughout the state – page 6
  
  • Alaska is contemplating a carbon offset program that would continue to demonstrate commitment to energy transition and reducing carbon intensity

• **SOCIAL** – Royalty/Mining revenues provide Alaska’s indigenous people as well as ALL Alaskans significant enhancement of education, health, water/sewer infrastructure that results in life expectancy increases and overall improved quality of life. – page 12
  
  • Oil industry and other natural resource development is foundation of Alaska’s economy providing jobs, community sustainability, support of non-profits, Native revenue sharing and preservation of Alaska Native culture

• **GOVERNANCE** - Legal system & social license drive corporate culture & values. Alaska requires public input at all stages of development and protects subsistence rights and practices – page 16
  
  • Alaska meets & exceeds the **Equator Principles** which are documented on page 17
Alaska environmental metrics lead the nation and the world

- Alaska is longtime leader in all categories measured under ESG metrics
  - Ranks top quartile in average “carbon intensity,” production-weighted average of 17 kg CO₂/boe¹
  - Alaska ranks 10th LOWEST among U.S. states in carbon emissions from human activities²
  - Alaska is the LOWEST in carbon emissions from fossil fuel state²
- Alaska has anti-wasting statues that prohibit natural gas venting
- Fugitive natural gas emissions must be monitored and corrected
- Alaska has the most comprehensive environmental regulatory requirements in the nation. These laws and regulations focus on protecting human health and our ecosystem and require return of lands to equal or better use upon completion of operations. (statutes too lengthy to list)

¹ Envernus: http://future.enverus.com/esg-energy
² U.S. Energy Information Administration https://www.eia.gov/environment/emissions/state/
Alaska’s Environmental Regulatory Programs and Compliance Policies are comprehensive and rigorous

- Alaska’s Department of Natural Resources, Alaska’s Department of Environmental Conservation, Alaska Oil & Gas Conservation Commission and Alaska’s Department of Fish and Game employ 2,872 positions to manage and oversee compliance for natural resources. (all have distinct and overarching statutory requirements for preservation of wildlife, human health and environmental protection)

- 40+ years of production, demonstrated technological advancement and reducing environmental footprint in oil development with exemplary record of environmental stewardship. Alaska’s wildlife stocks remain strong in number; higher than at start-up of TAPS and are managed for subsistence harvest.

- State’s comprehensive, science-based regulatory program provides oversight of scope and site development, mitigation of impacts, and mandates public engagement at all project stages

- All developments fully Federally complaint (NEPA, EPA, Army Corps of Engineers, etc.)

- North Slope Borough manages development across the Arctic through local planning authority; realizes tax revenue through petroleum property taxes and bonding

Alaska is the “Gold Standard” for environmental stewardship and responsible resource development
Alaska has steadily reduced Surface Footprints, reducing impact to environment

- 65 Acre Gravel Pad (1970)**
- 12 Acre Gravel Pad (2016)**
- 12 Acre Gravel Pad (Future ERD)**

Drilling area accessible from pads:
- ~ 3 sq. miles
- ~ 55 sq. miles
- ~ 125 sq. miles

*Assumes similar reservoir depth

** 1970 Drilling Radius ~ 5,000 ft vs 2016 Drilling Radius ~ 22,000 ft vs Future Extended Reach Drilling (ERD) drilling radius ~ 33,000
Alaska’s Surface Use and well density is significantly lower than other locations.

Red areas depict well locations

- **Alaska North Slope**
- **North Dakota**
- **Texas**

- $\bullet$ = 1 well

(1 inch = 50 miles)
Alaska has been deploying renewable energy solutions for years

- Alaska Energy Authority is a State agency dedicated to development of renewable energy solutions, efficient energy transmission and reducing cost of energy for Alaskans

- Energy Transition projects are in place and operating throughout our state. These solutions include hydro, wind, solar, tidal, biomass and geothermal

- Department of Natural Resources is establishing a new “Renewables” group within the State Geologic Survey to gather baseline science to drive renewables development and attract renewable investment.

- The following transition projects are in progress:
  - Transition from coal burning to expanded natural gas use in Fairbanks. This project is partially funded by AIDEA, a state funded corporation, in partnership with private O&G. (Fairbanks will continue to use coal for power until there is a natural gas pipeline. Installed new clean coal power station at UAF ~ 5 years ago. Alaska coal is some of the cleanest coal in the world.)
Alaska has been deploying renewable energy solutions for years

• The following transition projects are currently in operation and generating power today (continued)
  
  • First “Micro-Reactor is being stalled at Eielson Air Force Base. Test will offset diesel power generation.
  
  • Eva Creek wind farm (Healy), Bradley Lake hydro (Homer), Willow Solar Farm (Willow) are installed and functional
  
• Transition Projects currently under review
  
  • Natural Gas Pipeline - 800 mile large diameter gas pipeline with exports to Asia
  
  • New hydro in Southeast and Southcentral Alaska to offset diesel power generation
  
  • Tidal power in Cook Inlet near Kenai
OPERATING RENEWABLE CAPACITY ALREADY IN PLACE

- Kodiak (Pillar Mtn.) Wind
- Willow Solar Farm Expansion
- Bradley Lake Hydro

- VEEP (Efficiency)
- Wind
- Heat Pump
- Heat Recovery
- Biomass or Biofuels
- Hydro
- Ocean/River
- Solar
- Transmission
- Other
As Alaska’s largest source of renewable energy, hydropower supplies more than 20 percent of the state’s electrical energy in an average water year. There are approximately 51 utility-scale hydroelectric projects throughout the state.

- **Bradley Lake**, Homer –120 MW
- **Terror Lake**, Kodiak –33 MW
- **Blue Lake Expansion**, Sitka –16.9 MW
- **Hiilangaay Hydroelectric Project**, Prince of Wales Island –5 MW
- **Whitman Lake**, Ketchikan –4.6 MW
- **Susitna-Watana**, Talkeetna –600 MW (2/3 toward FERC License)
- **Dixon Diversion**, Homer –≤ 180 MW (under review)
Alaska’s latitude presents the challenge of having minimal solar energy during long winter months when energy demand is greatest. At the same time, solar generation in the shoulder months (spring and fall) is often impressive in northern latitudes where clear skies, cool temperatures, dry air and bright, reflective snow all support solar generation: Solar photovoltaic (PV) systems can actually exceed their rated output during these times of year.
In Alaska there are abundant wind resources available for energy development particularly along the western and coastal portions of the state, and in major passes.

Volatile-priced fossil fuel generation and improvements in wind power technology make this clean, renewable energy resource attractive to many communities. Alaska is a leader in designing, planning, constructing, and operating integrated wind energy systems in small microgrid systems.

- **Eva Creek Wind Farm**, Healy, AK – 24.6 MW
- **Fire Island Wind**, Anchorage, AK – 17.6 MW
- **Pillar Mountain Wind Farm**, Kodiak, AK – 9 MW
- **Banner Peak Wind Farm**, Nome, AK – 2.8 MW
- **Delta Area Wind Farm**, Delta Junction, AK – 1.9 MW
SOCIAL IMPACTS FROM OIL & GAS REVENUES PROVIDE SIGNIFICANT BENEFITS TO INDIGENOUS PEOPLE AND ALL ALASKANS

- Oil & Gas Royalties fund Alaska Permanent Fund ($83B) which, through State government, funds social programs, power cost equalization for rural communities, water/sewer infrastructure, roads, bridges, dividend to individual Alaskans, etc. Currently ~70% of direct government services

- Oil & Gas Taxes/Royalties also fund Alaska education, health, village infrastructure, roads, bridges, non-profits, etc.

- Local communities receive significant direct tax revenue due to O&G operations (Sales & Property taxes, bonds)

- Government funded education programs are in place to train indigenous people for O&G jobs

- Economic development and local hire preferences build resilient Native and remote communities

- Alaska Native Regional Corps. share 70% of resource revenues among all 13 corporations (ANCSA 7i), which split it between village corporations and shareholders
  - $3.1 billion 1982-2015 (45% from oil & gas)
  - Ensures strength of Native and local culture
## Petroleum Property Taxes Sustain Communities

<table>
<thead>
<tr>
<th>Company</th>
<th>Type of Business</th>
<th>Assessed Value</th>
<th>Tax Levy</th>
<th>% Total tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>ConocoPhillips Alaska, Inc.</td>
<td>Oil &amp; Gas Producer</td>
<td>$7.0 billion</td>
<td>$125.6 million</td>
<td>31%</td>
</tr>
<tr>
<td>BP Exploration Alaska, Inc.</td>
<td>Oil &amp; Gas Producer</td>
<td>$6.0 billion</td>
<td>$107.7 million</td>
<td>26.6%</td>
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<tr>
<td>Alyeska Pipeline Services Co.</td>
<td>Pipeline Transportation</td>
<td>$2.3 billion</td>
<td>$40.0 million</td>
<td>9.9%</td>
</tr>
<tr>
<td>ExxonMobil Corporation</td>
<td>Oil &amp; Gas Producer</td>
<td>$2.2 billion</td>
<td>$39.7 million</td>
<td>9.8%</td>
</tr>
<tr>
<td>ENI US Operating</td>
<td>Oil &amp; Gas Producer</td>
<td>$1.7 billion</td>
<td>$30.5 million</td>
<td>7.5%</td>
</tr>
<tr>
<td>Hilcorp/Harvest Alaska LLC</td>
<td>Oil &amp; Gas Producer</td>
<td>$1.4 billion</td>
<td>$25.5 million</td>
<td>6.3%</td>
</tr>
<tr>
<td>Doyon Drilling Inc.</td>
<td>Oilfield Services</td>
<td>$223.4 million</td>
<td>$4.0 million</td>
<td>1.0%</td>
</tr>
<tr>
<td>Schlumberger Companies</td>
<td>Oilfield Services</td>
<td>$ 90.3 million</td>
<td>$ 1.6 million</td>
<td>0.4%</td>
</tr>
<tr>
<td>Arctic Slope Regional Corp.</td>
<td>Oilfield Services</td>
<td>$ 80.7 million</td>
<td>$ 1.5 million</td>
<td>0.4%</td>
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<tr>
<td>Nabors Alaska Drilling</td>
<td>Oilfield Services</td>
<td>$ 79.7 million</td>
<td>$ 1.4 million</td>
<td>0.4%</td>
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</tbody>
</table>

*(FY 2020 NSB Revenue Sources Book)*
Local governments have established large reserves for today and future generations

- North Slope Borough Permanent Fund - FY2020 - $788 Million
- City of Valdez Fund - $13.6 Million
- Native Corporation Settlement Trusts

Preserving wealth and ensuring sustainable communities for tomorrow
Cultural & Regional Resilience

Enduring Traditions

Economic self-determination

Alaskans’ life expectancy rose along with oil development, 1980-2014¹

- Lifespans increased 4-16 years; highest increase in residents of North Slope Borough (Arctic communities)

¹ 2017 American Medical Association
\( G = \text{Governance} \)

- Legal system & social license drive corporate culture & values
  - Requires public input at all stages of development
  - Protects subsistence rights and practices
  - Partner with Native landowners and communities
  - Supports local workforce that can function safely in Alaska’s unique environment
ALASKA ADDRESSES THE EQUATOR PRINCIPLES

1. Our development record and environmental standards put Alaska projects in high-interest Category B

2. Project proponents must meet federal, state EA requirements

3. Our 40+ years’ success in meeting comprehensive environmental and regulatory standards is known globally

4. North Slope Borough planning authority already requires action plans consistent with local standards

5. Stakeholder engagement is cornerstone of Alaska process; Alaska Constitution requires it
ALASKA MEETS EQUATOR PRINCIPLES

6. Aggrieved parties have multiple administrative and legal processes to review concerns at all project development stages

7. Projects already receive robust independent reviews

8. All oil and mineral leases require decommissioning/restoration at end of project life; environmental covenants match regulatory requirements

9/10. Ongoing monitoring & reporting required by state regulation; operators welcome and use independent monitoring as QA/QC audit
THANK YOU!