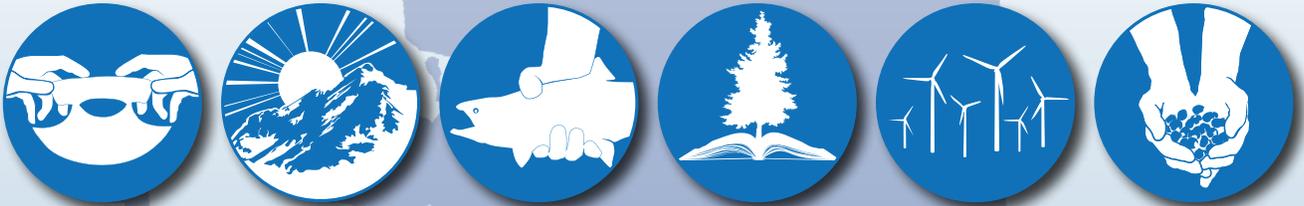


# ALASKA

## CLIMATE CHANGE POLICY RECOMMENDATIONS TO THE GOVERNOR



*Prepared by*

**Climate Action for  
Alaska Leadership Team**

**SEPTEMBER 2018**



## About the Team

The Climate Action for Alaska Leadership Team was created by Administrative Order 298 on October 31, 2017. The Walker-Mallott Administration tasked the team's 21 members with creating climate change policy recommendations and a recommended climate action plan for Alaska.

Numerous State agencies and departments assisted in the development of the recommended climate policy and recommended action plan, including the Department of Commerce, Community, and Economic Development, the Department of Environmental Conservation, the Department of Fish and Game, the Department of Natural Resources, the Alaska Energy Authority and the University of Alaska, as well as the Secretariat, the Institute of the North.



### **Ralph Andersen, Dillingham**

Ralph Andersen is the President and CEO of Bristol Bay Native Association and a member of Clarks Point Tribal Council. Ralph is also Chairman of the Bristol Bay Partnership and the Western Alaska Salmon Coalition, and is former Co-Chairman of the Alaska Federation of Natives.



### **Linda Behnken, Sitka**

Linda Behnken is the Executive Director of the Alaska Longline Fishermen's Association (ALFA) and has 34 years of experience as a commercial fisherman. Linda is a Commissioner of the International Pacific Halibut Commission and has previously served on the North Pacific Fisheries Management Council.



### **Lisa Busch, Sitka**

Lisa Busch is the Executive Director of the non-profit Sitka Sound Science Center, where she is responsible for operations and organizational development and health. Lisa has prior career experience as a radio producer and environmental journalist, and has worked extensively in providing communication training for scientists.



### **Luke Hopkins, Fairbanks**

Luke Hopkins is former Mayor of the Fairbanks North Star Borough and has previously served on the Borough Assembly and the Board of Directors of the Alaska Municipal League. Luke was a member of the Immediate Action Work Group of the former Sub-Cabinet on Climate Change, where he helped to develop policies to protect coastal communities imminently threatened by climate change.



### **John Hopson, Jr, Wainwright**

John Hopson, Jr. is Mayor of the City of Wainwright, President of the North Slope Borough Assembly, Chairman of the Eskimo Whaling Commission and Vice Chairman of the Voice of the Arctic Inupiat. John has been engaged as both a community and corporate leader on the North Slope for over a decade.



### **Nicole Kanayurak, Utqiagvik**

Nicole Kanayurak is a 2017 Knauss Marine Policy Fellow working in the NOAA Office of International Affairs and Seafood Inspection, focusing on international fisheries legislation and negotiations. Nicole is currently the youth representative to the Inuit Circumpolar Council and former representative to Future Arctic Leaders, and has held a variety of positions working for the North Slope Borough.



### **Mara Kimmel, Anchorage**

Mara Kimmel is the First Lady of Anchorage as well as the city's Resilience Team Lead, and is associate faculty at the Institute of Social and Economic Research at UAA. Mara's doctoral research focuses on the relationship between land rights, governance and human development in Arctic and sub-Arctic communities.



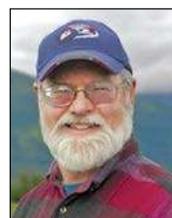
### **Meera Kohler, Anchorage**

Meera Kohler is the President and CEO of Alaska Village Electric Cooperative (AVEC), a non-profit electric utility owned by the residents of 58 communities throughout Alaska. Meera was a member of the former Alaska Climate Change Sub-Cabinet.



### **Michael LeVine, Juneau**

Michael LeVine is the Senior Arctic Fellow at Ocean Conservancy. Michael's work focuses on sustainable management and stewardship of ocean resources, as well as the creation of economic opportunity in the face of changing ocean conditions.



### **Mark Masteller, Palmer**

Mark Masteller is an Assistant Professor at University of Alaska where he teaches classes on energy efficiency and renewable energy as part of the sustainable energy program. Mark serves as the Alaska Director for the Cascadia Green Building Council and as a board member for the Matanuska Electric Association. He has over 20 years of experience in wildlife research and management as a wildlife biologist.



### **Molly McCammon, Anchorage**

Molly McCammon is the Executive Director of the Alaska Ocean Observing System (AOOS). Under her direction, AOOS leads the Alaska Ocean Acidification Network and co-leads the Alaska Harmful Algal Bloom Network and the Alaska Integrated Water Level Observing Network.



### **Denise Michels, Nome**

Denise Michels is a former Mayor of Nome and recently joined DOWL as a Senior Project Manager and will work with Newtok. Previously, while at Kawerak, Denise helped Shishmaref with their relocation efforts. Denise is a former member of the Inuit Circumpolar Council, the Alaska Arctic Council Host Committee, the Northern Waters Task Force, and the Adaptation Advisory Group of the former Sub-Cabinet on Climate Change.



### **Chris Rose, Anchorage**

Chris Rose is the founder and Executive Director of the Renewable Energy Alaska Project (REAP), which is dedicated to increasing renewable energy and energy efficiency throughout Alaska. Chris was a member of the Mitigation Advisory Group of the former Climate Change Sub-Cabinet, and has previously served as the Commissioner of the Mat-Su Borough Planning Commission.



### **Isaac Vanderburg, Anchorage**

Isaac Vanderburg is the Executive Director of Launch Alaska, Alaska's first energy accelerator. Launch Alaska is focused on building companies in the energy sector who are working on climate solutions in the sectors of food, water, energy and transportation.



### **Janet Weiss, Anchorage**

Janet Weiss is the President of BP Alaska Region and has worked in the energy industry for over 30 years, with experience in Alaska, Wyoming and the Gulf of Mexico. Janet is a member of the Alaska Oil and Gas Advisory Board and the University of Alaska Fairbanks Advisory Board.



**EX-OFFICIO**

### **Duncan Fields, Kodiak**

Duncan Fields is a technical advisor to the Gulf of Alaska Coastal Communities Coalition and the owner of Shoreside Consulting, a natural resources consulting firm based in Kodiak, Alaska. Duncan is an attorney and fisheries advocate, former member of the North Pacific Fisheries Management Council and former president of the Kodiak Island Borough School District.



**EX-OFFICIO**

### **Jim Johnsen, Fairbanks**

Jim Johnsen is the current President of the University of Alaska, as well as a commissioner on the Denali Commission and a member of the Alaska Aerospace Corporation Board. Jim's many executive roles in higher education have included statewide academic initiatives to align primary and secondary education sectors and to achieve higher attainment levels throughout Alaska.



**EX-OFFICIO**

### **Reggie Joule, Kotzebue**

Reginald ("Reggie") Joule is a former state legislator in the Alaska House of Representatives and former Mayor of the Northwest Arctic Borough, as well as a member of the UK-based Polar Research and Policy Initiative. While serving as Mayor, Reggie was appointed by President Obama to the President's State, Local and Tribal Leaders Task Force on Climate Preparedness and Resilience.



**EX-OFFICIO**

### **Sam Schimmel, St. Lawrence Island**

Sam Schimmel is a student and alumni of the Center for Native American Youth (CNAY) Champions for Change Program. Sam has worked on numerous legislative and executive initiatives for Native youth, including a 2016 bill establishing the Alyce Spotted Bear and Walter Soboleff Commission on Native Children and a roundtable discussion with Alaska's congressional delegation and Governor at the 2017 Alaska Federation of Natives.



**EX-OFFICIO**

### **Lorali Simon, Palmer**

Lorali Simon is the Vice President of External Affairs of Usibelli Coal Mine in Healy, and has over 20 years of experience working in the natural resource management and energy industries. Lorali is a board member of the Resource Development Council and the Alaska Miners Association, and a former member of the Palmer Chamber of Commerce.



**EX-OFFICIO**

### **Fran Ulmer, Anchorage**

Fran Ulmer is Chair of the U.S. Arctic Research Commission and former Lieutenant Governor of Alaska. Fran is a member of the Global Board of the Nature Conservancy and the Board of the National Parks Conservation Commission, and was appointed to the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling.

## Leadership Team Message

*Alaska's people, communities, economies, and ecosystems make us unique and set us apart from the rest of the world. As America's only Arctic state, we are experiencing first-hand the rapid effects of a changing climate. Those changes create very real and, potentially, devastating threats to our ways of life. They also create opportunities for innovation, leadership, development, and cooperation. The work of the Climate Action for Alaska Leadership Team was premised on the need to take action that addresses those threats and encourages full development of the opportunities.*

*The members of the Leadership Team reflect diverse geography, age, expertise, life experience, sectors of the economy, communities, and points of view. In crafting the recommended Climate Policy and Action Plan, we relied on those diverse backgrounds and on the guidance from representatives of the University of Alaska system and State of Alaska agencies. We built on previous bipartisan efforts in Alaska and were guided by the voices of Alaskans from across the state who provided input through written comments and at listening sessions. These voices—from the Leadership Team, government agencies, and public—reinforced the need to take bold action to adapt to and mitigate the effects of climate change and to seize opportunities where they are presented.*

*We do not view these documents as the conclusion of our work. Rather, we hope to have created a platform from which this administration and future administrations can move forward to implement a climate policy and provide the needed personnel and support to take actions pursuant to that policy. We stand ready to assist the State in taking the actions needed to ensure sustainable communities, vibrant and diverse economies, and healthy ecosystems for all Alaskans and future generations.*

*– The Climate Action for Alaska Leadership Team, September 2018*

# VISION

**The State of Alaska's comprehensive response to climate change ensures that healthy ecosystems and prudent natural resource management benefit current and future generations.**

The State's climate change strategy responds to the urgency of the challenges that climate change poses and promotes the social, ecological, cultural, and economic well-being of our communities, and helps to achieve food security, energy security, and environmental security.

There is an economic, ecological and ethical imperative to reduce greenhouse gas emissions and to stop or slow the rate of climate change.

This should be accomplished while sustaining a robust economy; the challenges and opportunities of climate change can be met with Alaskan innovation and resilience.

This approach encourages public and private sector leadership, as well as investment and follow-through to achieve the goals, objectives, and initiatives that contribute to the long-term resilience and sustainability of Alaska's communities, economies, and people.



Berett Wilber

The State of Alaska recognizes that climate change is occurring and that it is rapidly affecting our water and terrestrial ecosystems, communities, and economies. The State has an obligation to take bold action to address immediate and urgent threats through policy actions and targeted implementation of its climate change strategy.

The State is committed to better understanding and preparing for these risks by implementing a practical, achievable climate change strategy that recognizes that climate change must be factored into State decisions.

The changing climate offers Alaska both challenges and opportunities to innovate and develop a vision for a sustainable and vibrant future. To increase Alaska's resilience, the State must develop solutions that account for and respond to the scale and speed of change, while working to stop or slow the negative impacts on water, land, and human systems.

Alaska's economy is currently dependent on natural resource development, including oil and natural gas production. Although these resources are finite and contribute to global greenhouse gas emissions (the root cause of anthropogenic climate change), they also support essential government services and our ability to adapt and respond.

Responsible development of these resources can be consistent with continued diversification of the economy, increased opportunities for Alaskans, and an intentional focus on clean energy investments and carbon capture and storage technologies. The State is obligated to facilitate this transition while strengthening the economy.



## STATEMENT OF VALUES

Values and principles that reflect the unique nature of our land and people inform the State of Alaska climate change strategy.

The State will foster a collaborative and transparent environment that encourages cooperation with and between Alaskans for long-term shared success. State decision-makers understand resilience as encompassing human and environmental health, and they acknowledge that the future will depend on our ability to adapt to the many urgent threats associated with a changing climate.

As the State moves forward with implementing its climate change strategy, it will value equity, inclusion, and justice, and make use of technology, public engagement, and cost-effective, market-based solutions.

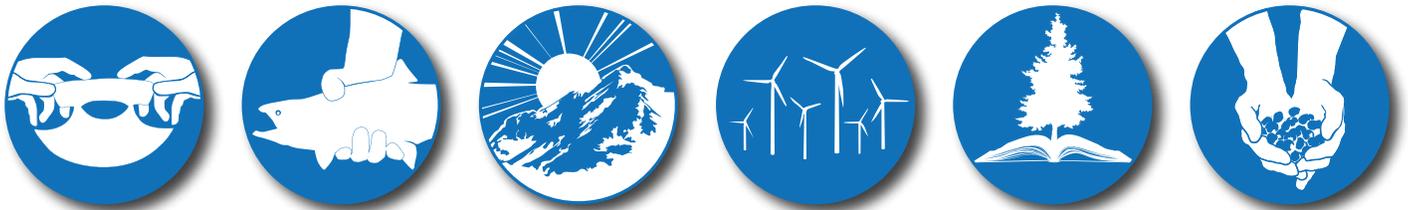
Alaska's climate change strategy recognizes that the benefits and burdens of our changing climate are unevenly distributed across the state and between communities, and envisions a comprehensive and cohesive approach. The State commits to incorporating Indigenous Knowledge alongside science and to using these values and different forms of knowledge to inform decision-making.

The recommended policy and goals are rooted in and responsive to Alaskan values and intended to benefit present and future Alaskans.

# Recommended Alaska Climate Change Policy

The State of Alaska will include the best available science and Indigenous Knowledge, decision support tools, and economic impact and risk considerations in its analysis and implementation of its climate change strategy. The State will also increase stakeholder engagement, education, and outreach in its climate change communications. The overarching effort will be to ensure community awareness, sustainability and resilience, economic opportunity, and human and natural health, while decreasing greenhouse gas emissions and proactively responding to the impacts of climate change. The accompanying Climate Change Action Plan is consistent with this approach and should be updated as conditions change, processes and technology improve, and recommendations are implemented.

Therefore, it is the policy of the State of Alaska as it relates to climate change impacts, mitigation, and adaptation to:



- 1. Communities and Partnerships:** Strengthen community resilience and sustainability, local and State governance, State agency capacity, and collaboration and action between State agencies and with local and regional entities and municipal and tribal governments.
- 2. Human and Ecosystem Health:** Work to better understand and address environmental and ecosystem changes, and their effect on human health and well-being.
- 3. Economic Opportunity:** Invest in, partner with, and encourage private sector diversification, and the growth of Alaska's adaptation and mitigation services, clean energy and blue economy.
- 4. Clean Energy:** Maximize the reduction of greenhouse gas emissions as part of carbon neutral economic growth.
- 5. Outreach and Education:** Expand climate and environmental science, natural resource and energy education, awareness, and workforce development.
- 6. Investment:** Develop and implement equitable funding mechanisms for the State's climate change strategy.



## Communities & Partnerships



Office of the Governor

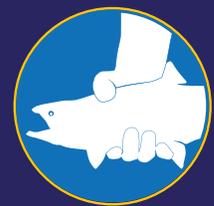
### **Strengthen community resilience and sustainability, local and State governance, State agency capacity, and collaboration and action between State agencies and with local and regional entities and municipal and tribal governments.**

In furtherance of this policy, the State of Alaska shall meet the following goals:

- Support local and regional entities and municipal and tribal governments in their efforts to plan for and address climate change impacts.
- Support research and data gathering and engage local and regional entities and municipal and tribal governments in community risk monitoring, assessment and planning.
- Strengthen existing and further implement effective, efficient systems for community adaptation and relocation.
- Commit to long-term, strategic State leadership on climate change issues, including immediate action, mainstreaming climate change within existing State activities, national and international partnerships, and implementation and continued evaluation of the Climate Change Action Plan.



Berett Wilber



## Human & Ecosystem Health

### **Work to better understand and address environmental and ecosystem changes, and their effect on human health and well-being.**

In furtherance of this policy, the State of Alaska shall meet the following goals:

- Using a co-production of knowledge approach that integrates western science and Indigenous Knowledge, monitor and gather data needed to better understand the impacts of climate change on the natural environment and to identify areas of high vulnerability and risk.
- Adopt an approach that understands ecosystem and food security health as part of human and community health.
- Develop and implement ecosystem-scale resource management.



Barnacle Foods

### Invest in, partner with, and encourage private sector diversification, and the growth of Alaska's adaptation and mitigation services, clean energy, and blue economy.

In furtherance of this policy, the State of Alaska shall meet the following goals:

- Support and incentivize energy efficiency, renewable energy, de-carbonization, and beneficial electrification across all sectors.
- Support diversification, investment, and established business expertise within the climate change mitigation or adaptation sectors.
- Develop a strategic plan for diversified growth within established and emerging economic sectors and consider incentives for value-added business development.



Risha Isom Photography

### Maximize the reduction of greenhouse gas emissions as part of carbon neutral economic growth.

In furtherance of this policy, the State of Alaska shall meet the following goals:

- Produce by 2020 a comprehensive strategy to decrease greenhouse gas emissions, consistent with and corresponding to the Alaska Climate Change Policy's targets and timelines, and responsive to robust analytics.
- Reduce oil, gas and mining industry greenhouse gas emissions in Alaska by 30% (over 2005 levels) by 2030, responsive to advances in available technology, policy, funding, and taking into consideration economic impacts.
- Decrease greenhouse gas emissions due to thermal energy used in buildings by 5.5% (over 2010 levels) by 2030, and increase demand-side energy efficiency within the residential and non-residential sectors, with consideration of higher goals dependent on advances in technology, policy or funding.
- Decrease greenhouse gas emissions within electricity generation by 33% (over 2010 levels) by 2030, and increase renewable energy, with consideration of higher goals dependent on advances in technology, policy or funding.
- Increase the efficiency of and reduce greenhouse emissions in air, rail, road and marine operations and transportation, and promote the use of more efficient and lower-emitting fuels.



Berett Wilber

### Expand climate and environmental science, natural resource, and energy education, awareness, and workforce development.

In furtherance of this policy, the State of Alaska shall meet the following goals:

- Increase public awareness of climate change impacts and opportunities, and human and environmental vulnerability.
- Increase the use and efficacy of science, natural resource, and energy curricula.
- Strengthen the University of Alaska's emphasis on research and education in science, climate change trends, impacts and opportunities, vulnerability, adaptation and mitigation, as well as related natural resource management and hazard forecasting.
- Facilitate the development of energy, adaptation and mitigation training, and workforce development programs.



Berett Wilber

### Develop and implement equitable funding mechanisms for the State's climate change strategy.

In furtherance of this policy, the State of Alaska shall meet the following goals:

- Increase the financing opportunities available for affordable and low-carbon renewable energy and energy efficiency activities.
- Collaborate with federal partners and encourage increased federal funding and programs in support of climate change mitigation and adaptation.
- Evaluate the development of a carbon fee and dividend program.
- Explore and encourage opportunities to generate revenue from carbon sequestration.



[climatechange.gov.alaska.gov](http://climatechange.gov.alaska.gov)

