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2 **Climate Action Leadership Team**

3
4 **DRAFT - 04.25.2018**

5
6 **Recommended Introduction to Climate Change Policy for State of Alaska (Page 2)**

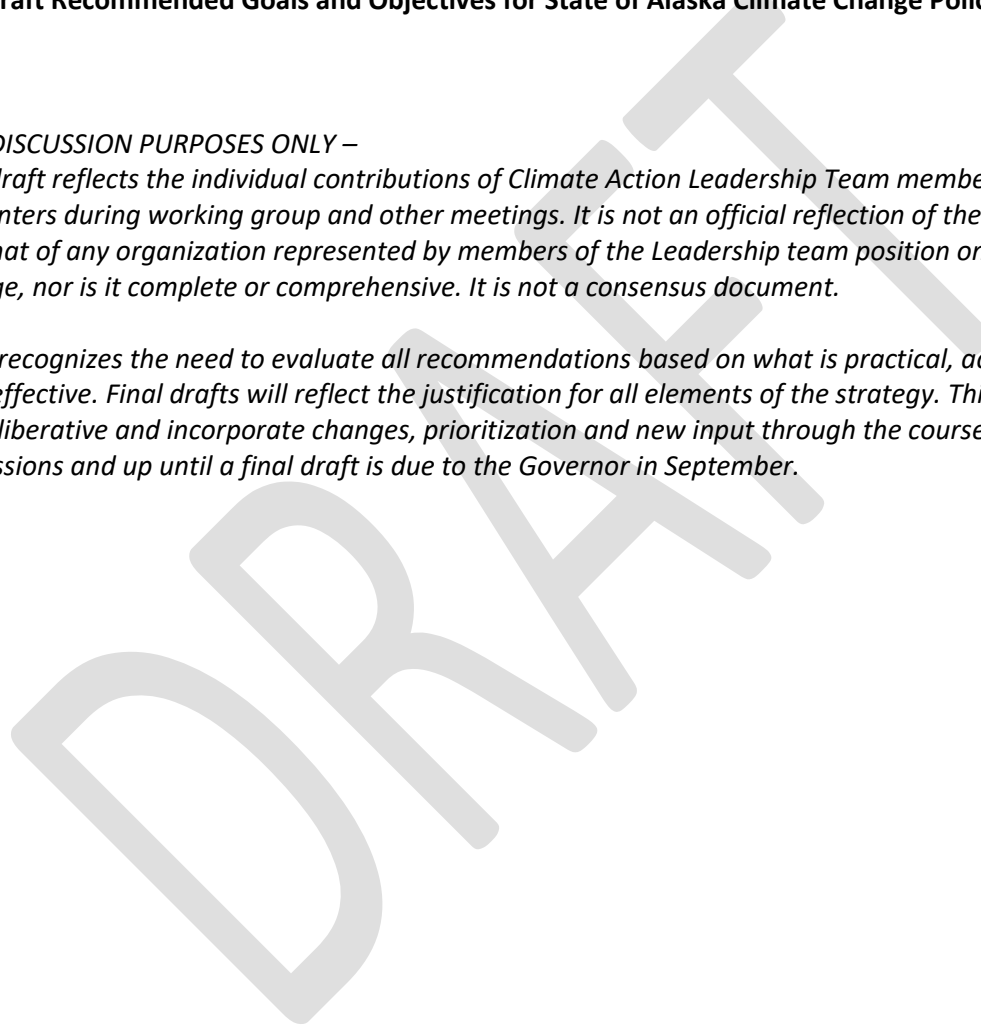
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8 **Recommended Climate Change Policy for State of Alaska (Page 3)**

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10 **Draft Recommended Goals and Objectives for State of Alaska Climate Change Policy (Page 4-7)**

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14 *FOR DISCUSSION PURPOSES ONLY –*

15 *This draft reflects the individual contributions of Climate Action Leadership Team members and invited*
16 *presenters during working group and other meetings. It is not an official reflection of the state of Alaska*
17 *nor that of any organization represented by members of the Leadership team position on climate*
18 *change, nor is it complete or comprehensive. It is not a consensus document.*

19
20 *CALT recognizes the need to evaluate all recommendations based on what is practical, achievable, and*
21 *cost-effective. Final drafts will reflect the justification for all elements of the strategy. This document will*
22 *be deliberative and incorporate changes, prioritization and new input through the course of CALT*
23 *discussions and up until a final draft is due to the Governor in September.*



1 **Introduction and Statement of Purpose**

2 A heightened awareness of the rapid advance of climate change in Alaska and the resulting impacts to
3 our communities, economy and environment prompts the careful consideration of policy options and
4 the corresponding need for strategic action. The state of Alaska is committed to better understanding
5 and preparing for these risks by implementing a climate change strategy that is both practical and
6 achievable, and which recognizes that climate change is interwoven into many state decisions and
7 requires a comprehensive approach.

8
9 There is a clear need to increase resilience; our changing climate offers Alaska both challenges and
10 opportunities that necessitate innovation and a vision for a sustainable and vibrant future. These
11 solutions must account for and respond to the scale and speed of change, incorporate the best available
12 science and Indigenous Knowledge, market-based solutions, and ground decisions in an analysis of the
13 costs and benefits of any policy to this and future generations.

14
15 The state economy is dependent on natural resource development, including oil and natural gas
16 production. While these resources are finite and contribute to global greenhouse gas emissions, which
17 are a root cause of climate change, they also support essential government services and as such our
18 ability to adapt and respond. Development of these resources can be consistent with continued
19 diversification of the economy, increased opportunities for citizens, and an intentional focus on clean
20 energy investments. The state recognizes its obligation to encourage this strategic transition, while
21 strengthening Alaska’s economy.

22
23 The state’s work with and alongside partners – including federal agencies, tribal and municipal
24 governments, corporations, universities and global leaders – will strengthen and further develop
25 realistic expectations for an economic and energy transition, including new forms of governance,
26 attracting investment and financing for clean, affordable energy and energy efficiency, technological
27 innovation, and new industries. Alaska’s efforts to reduce greenhouse gas emissions fit within a broader
28 global leadership effort but are entirely driven by and responsive to where Alaska is today, and where it
29 can be in the future. Alaska’s leadership and practical approach can serve as a model for the U.S., the
30 Arctic and the rest of the world.

31
32 **Statement of Values**

33 Values and principles that reflect the unique nature of our land and people inform the state’s climate
34 change policy. The state of Alaska will foster a collaborative and transparent environment in which it
35 encourages cooperation with and between Alaskans for a durable and shared success. State decision-
36 makers understand resilience as encompassing human and environmental health, recognizes
37 opportunities to include benefits to Alaskans, and acknowledges that the future will depend on our
38 ability to adapt to the many threats associated with a changing climate.

39
40 As the state moves forward with a climate change policy and action plan, it will use values of equity,
41 inclusion and justice, science and technology, cost effectiveness, market-based solutions and public
42 engagement. Alaska’s climate change policy and action plan recognize that the benefits and burdens of
43 our changing climate are unevenly distributed across the state and between communities, but envision
44 a comprehensive and connected approach to the challenges and opportunities. The state commits to
45 incorporating Indigenous Knowledge alongside other sources of science and to using these values and
46 different forms of knowledge to inform decision-making. The policy and goals are rooted in and
47 responsive to the values held by Indigenous cultures and the many other cultures and peoples who call
48 Alaska home.

1 **Draft Climate Change Policy**
2

3 **Vision:** Alaska’s comprehensive response to a rapidly changing climate assures healthy ecosystems and
4 prudent natural resources management, for current and future generations. The State’s climate change
5 strategy promotes the social, ecological, cultural and economic well-being of our communities to
6 achieve food security, energy security and environmental security in the face of climate change impacts.
7 This approach encourages public and private sector leadership, investment and follow-through to
8 achieve the goals, objectives and initiatives that contribute to the long-term resilience and sustainability
9 of Alaska’s communities, economies and people.

10
11 In order to ensure:

- 12 • Safe, resilient and sustainable communities,
- 13 • Economic opportunity for all residents, and a
- 14 • Healthy environment;

15
16 it is the policy of the State of Alaska as it relates to climate change impacts, mitigation and
17 adaptation, to:

- 18
19 1) **Coordinate governance, data, and response and adaptation measures to support community**
20 **risk and resilience planning.**
- 21
22 2) **Invest in and encourage private sector growth of Alaska’s clean energy and green economy.**
- 23
24 3) **Accelerate the strategic decarbonization of Alaska’s economy through increased energy**
25 **efficiency, renewable energy production and electrification.**
- 26
27 4) **Implement climate mitigation and adaptation actions using the best available science,**
28 **economic and risk considerations, and Indigenous Knowledge.**
- 29
30 5) **Make, attract or leverage financial investments that correspond to the state’s climate goals**
31 **and objectives.**

32
33 In the furtherance of this policy, the State of Alaska will:

- 34 • Implement the accompanying Climate Action Plan, as part of an overall Climate Action Strategy;
 - 35 • Implement the accompanying climate communications, outreach and public education and
36 engagement strategy;
 - 37 • Work to inform and request action from federal partners on the accompanying federal climate
38 impact investment, program and policy recommendations;
 - 39 • Request that the University of Alaska – and other research institutions – develop actions in
40 response to the accompanying climate science and research strategy and recommendations;
41 and
 - 42 • Collaborate with municipal and tribal governments on the development of a climate scenarios
43 planning, energy and economic transition strategy.
- 44
45

1 **Draft Goals and Objectives**

2
3 **Policy Statement 1: Coordinate governance, data, and response and adaptation measures to support**
4 **community risk and resilience planning.**

5
6 **Goal 1.1:** The State of Alaska will empower communities to address the impacts of and adapt to climate
7 change.

- 8 • **Objective 1.1A:** Encourage and facilitate a stronger network of municipal governments prepared to
9 leverage resources and maximize efficiencies of cooperation.
- 10 • **Objective 1.1B:** Recognize local rights to self-determination in the process of risk and resilience
11 planning and adaptation.
- 12 • **Objective 1.1C:** Increase community capacity to plan for and adapt to climate change, and reduce
13 regulatory, licensing, and contracting barriers.

14
15 **Goal 1.2:** The State of Alaska will actively engage researchers and local governments to develop a
16 strategic approach to community risk monitoring, assessment and planning.

- 17 • **Objective 1.2A:** Increase the availability and use of monitoring equipment to track and understand
18 sea level, permafrost and other environment changes, as well as mapping, bathymetry and climate
19 modeling.
- 20 • **Objective 1.2B:** Increase the efficacy and accessibility of available risk assessment tools, including
21 evaluating and prioritizing threats.
- 22 • **Objective 1.2C:** Conduct and support prioritized community and regional risk and resilience planning
23 in partnership with local and regional leaders, and including strong public engagement.

24
25 **Goal 1.3:** The State of Alaska will implement effective, efficient systems for community adaptation.

- 26 • **Objective 1.3A:** Request from federal agencies an implementation plan with associated funding in
27 place for threatened and at-risk communities, responsive to community and regional planning.
- 28 • **Objective 1.3B:** Incorporate and make available science, best practices and Indigenous Knowledge
29 into and for adaptation actions that include protect-in-place, migration, and community relocation.

30
31 **Goal 1.4:** The State of Alaska will factor climate change impacts into all intersecting state and federal
32 government research, policy, funding and plans.

- 33 • **Objective 1.4A:** Request congressional action to amend the Stafford Act, and update the disaster
34 definition at state and federal level to include climate change as an immediate threat and slow-
35 onset disaster.
- 36 • **Objective 1.4B:** Reconvene an Immediate Action Working Group or similar body, or strengthen
37 existing, to coordinate climate change action between federal, state, municipal and tribal
38 authorities.
- 39 • **Objective 1.4C:** Increase research funding as a component and necessary aspect of disaster
40 response.

41
42 **Policy Statement 2: Invest in and encourage private sector growth of Alaska’s clean energy and green**
43 **economy.**

44
45 **Goal 2.1:** The State of Alaska will support and see increases of blue and green economic activity and
46 promote technological and process innovation in emission producing activities.

- 1 • **Objective 2.1A:** Increase value-added blue economic activities (e.g.; fisheries, mariculture, high
2 value processing, and marine biotechnology) that leverage clean energy as part of an in-place or
3 relocation adaptation strategy.
- 4 • **Objective 2.1B:** Develop new climate-responsive models of community economic development that
5 support diversification, leverage local investment, and strengthen the green economy, including
6 tourism and clean energy.

7
8 **Goal 2.2:** The State of Alaska will encourage and strengthen business expertise that addresses climate
9 change mitigation or adaptation.

- 10 • **Objective 2.2A:** Consider adaptation processes and technology as an export opportunity, such that
11 Alaskans are able to meet a global demand for climate change adaptation services.
- 12 • **Objective 2.2B:** Export technological and process innovation as it relates to carbon emission
13 reduction.

14
15 **Goal 2.3:** The State of Alaska will develop training and workforce development programs specific to
16 reducing energy demand across all energy-use sectors, and to development of renewable energy
17 systems.

- 18 • **Objective 2.3A:** Expand efforts to train rural Alaskans in home energy audits and weatherization and
19 retrofit techniques.
- 20 • **Objective 2.3B:** Establish training centers in urban and hub communities to train on various
21 renewable energy production systems (solar, wind, biomass, geo-exchange, etc.).

22
23 **Policy Statement 3: Maximize carbon neutral growth in Alaska through a rapid transition to clean
24 energy, electrification and energy efficiency**

25
26 **Goal 3.1:** The State of Alaska will work to reduce greenhouse gas emissions in Alaska by 30% (over 2005
27 levels) by 2025.

- 28 • **Objective 3.1A:** Increase efficiency of and reduce greenhouse gas emissions from natural resource
29 development.
- 30 • **Objective 3.1B:** Increase the use of renewable and low emission energy resources in air, rail, road
31 and marine transportation, and consider the impact to Alaska communities and economy of banning
32 or implementing alternative fuels.
- 33 • **Objective 3.1C:** Periodically monitor for and report on emissions of greenhouse gases and the
34 success of efforts to reduce emissions across the Alaska economy, government and communities.
- 35 • **Objective 3.1D:** Promote market-based solutions, technological innovation, a transition to natural
36 gas, and implementing carbon capture, use and sequestration opportunities.

37
38 **Goal 3.2:** The State of Alaska will increase energy efficiency by 15% and receive 50% of its electric
39 generation from renewable resources by 2025.

- 40 • **Objective 3.2A:** Improve generation efficiency and reduce line loss in industrial activities, within the
41 Railbelt, and in rural Alaska.
- 42 • **Objective 3.2B:** Invest in renewable energy and energy efficiency measures across Alaska.
- 43 • **Objective 3.2B:** Update design and engineering standards to incorporate expected climate change
44 metrics, work toward net zero energy public facilities, and implement a statewide residential and
45 commercial building incentive program that responds to regional differentiation.

1 **Goal 3.3:** The State of Alaska will develop an energy transition scenario planning and strategy that
2 leverages current and potential oil and gas development and the benefit of increased clean energy
3 alternatives.

- 4 • **Objective 3.3A:** Conduct a sectoral analysis based on climate change impacts and opportunities,
5 with evaluation reviewing capacity, strengths, and gaps, and the appropriate timescale for
6 implementation based on prioritization.
- 7 • **Objective 3.3B:** Promote and develop natural gas as a bridge fuel for export and for domestic use.
- 8 • **Objective 3.3C:** Update and expand the scope of the Alaska Energy Strategy to include all areas of
9 the state, support the climate action strategy, and incorporate a strong stakeholder engagement
10 process, the result of which is time sensitive to economic and societal impact, and with mitigation
11 options in place.

12
13 **Policy Statement 4: Implement climate mitigation and adaptation actions using the best available**
14 **science, economic and risk considerations, and Indigenous Knowledge.**

15
16 **Goal 4.1:** The State of Alaska will reduce the impacts from climate change on Alaska’s natural
17 environment and ecosystem, including food and water.

- 18 • **Objective 4.1A:** Maintain food security and sustainable and accessible fish, wildlife and plant
19 harvest, based on science- and Indigenous Knowledge-informed decision-making and in the public
20 interest.
- 21 • **Objective 4.1B:** Assess threatened ecosystem response options, including reviewing harvest
22 planning or increasing or decreasing oceanic/marine acidity.
- 23 • **Objective 4.1C:** Support increased research of impacted environmental systems.
- 24 • **Objective 4.1D:** Adopt an approach that understands ecosystem and food security health as part of
25 human and community health.

26
27 **Goal 4.2:** The State of Alaska will address physical, natural, and social science data gaps in collaboration
28 with local, regional, federal, and international partners.

- 29 • **Objective 4.2A:** Develop research-decision support systems for natural resource management
30 among state, Indigenous, municipal and federal land and resource managers.
- 31 • **Objective 4.2B:** Conduct the baseline studies necessary for community decision-making, state and
32 federal management decisions, and risk assessment.
- 33 • **Objective 4.2C:** Invest in critical and necessary marine, air and terrestrial data gathering equipment
34 and infrastructure.
- 35 • **Objective 4.2D:** Develop effective mechanisms for bridging science and Indigenous Knowledge.

36
37 **Policy Statement 5: Make, attract or leverage financial investments that correspond to the state’s**
38 **climate goals and objectives.**

39
40 **Goal 5.1:** The State of Alaska will increase the financing available for clean energy and energy efficiency
41 activities.

- 42 • **Objective 5.1A:** Identify and work toward long-term state-led financing of clean energy and energy
43 efficiency (e.g.; Green Bank or other mechanism).
- 44 • **Objective 5.1B:** Explore the state’s ability to access or leverage Venture Capital funds, reinsurance
45 programs, and other innovative opportunities for funding.
- 46 • **Objective 5.1C:** Apply funding from state-owned facility energy efficiency savings to renewable
47 energy investments.

- 1 • **Objective 5.1D:** Explore additional one-time or endowed investments that the state may lead,
2 including focused attention to science and technology and emerging clean energy technology.
3

4 **Goal 5.2: The State of Alaska will implement community adaptation funding strategies.**

- 5 • **Objective 5.2A:** Mobilize private, philanthropic, state, federal and international funding sources on
6 behalf of climate change research, adaptation, and innovation.
7 • **Objective 5.2B:** Institute a climate change emergency relief fund for related and anticipated threats.
8 • **Objective 5.2C:** Update the statutes governing Alaska’s Disaster Policy Sub-Cabinet to reflect climate
9 change disaster declaration and slow-onset characterization.
10 • **Objective 5.3D:** Facilitate long-term growth of options and opportunities within communities by
11 means of low carbon economic development.
12

13 **Goal 5.3: The State of Alaska will develop a pathway to a carbon pricing mechanism.**

- 14 • **Objective 5.3A:** Consider implementing a carbon fee and dividend program with reinvestment of
15 dividend in renewable energy development and energy efficiency activities.
16 • **Objective 5.3B:** Incentivize responsible, efficient and cleaner oil and natural gas development to
17 support continued private investment and a clean energy transition.
18 • **Objective 5.3C:** Encourage opportunities for natural resource sequestration, including carbon offset
19 efforts.
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