



JUNEAU COMMISSION ON SUSTAINABILITY AGENDA

November 02, 2022 at 12:00 PM

Zoom Webinar

<https://juneau.zoom.us/j/9947166989> or Phone +1 253 215 8782 US (Tacoma) Meeting ID: 994 716 6989

A. CALL TO ORDER

B. LAND ACKNOWLEDGEMENT

C. ROLL CALL

D. APPROVAL OF AGENDA

E. APPROVAL OF MINUTES

1. October 5, 2022

2. October 19, 2022

F. PUBLIC PARTICIPATION

G. AGENDA TOPICS

3. Environmental, Social, and Governance (ESG) Report – Wendy Lidskoog, Nick Rose, and Silvia Garrigo (Royal Caribbean Group)

4. Legislative Priorities Nominations - David Teal (JCOS) and Gretchen Keiser (JCOS)

5. Climate –Sustainability Work Plan Draft – Steven Behnke (JCOS)

6. EPA Local Gov Committee - Nomination of Denise Koch to the EPA Local Government Advisory Committee or Small Communities Advisory Subcommittee – Gretchen Keiser (JCOS)

H. INFORMATIONAL ITEMS

I. COMMITTEE MEMBER / LIAISON COMMENTS AND QUESTIONS

J. NEXT MEETING DATE(S)

7. Monthly Work Session - Nov 16, 2022 @ 12PM ZOOM

8. No Meetings in December

9. Monthly Regular Meeting - Jan 4, 2023@ 12PM ZOOM

10. Monthly Work Session Jan 18, 2023 @ 12PM ZOOM

K. ADJOURNMENT

ADA accommodations available upon request: Please contact the Clerk's office 36 hours prior to any meeting so arrangements can be made for closed captioning or sign language interpreter services depending on the meeting format. The Clerk's office telephone number is 586-5278, TDD 586-5351, e-mail: city.clerk@juneau.org.

DRAFT MINUTES
Juneau Commission on Sustainability (JCOS)
Regular Meeting
Wednesday, October 5, 2022, 12:00 p.m. (Noon)
Zoom

I. Call to Order. Chair Keiser called the meeting to order at 12:03 p.m.

Present: Gretchen Keiser, Marian Call, Steve Behnke, Duff Mitchell, Nick Waldo, Dave Teal, Nick Waldo, Jessica Barker, Danielle Meeker

Absent: Jim Powell

A quorum was present.

Staff & Others Present: CBJ Staff Liaison Denise Koch, Lori Sowa (CBJ), Planning Commission Liaison Paul Voelckers, Assembly member Carole Triem, Stuart Aston (CBJ RecycleWorks), Ben Hoch

II. Agenda Changes.

None

III. Approval of Minutes.

a. September 7, 2022

MOTION by Mr. Mitchell to approve 9/7/22 minutes as amended. Approved by unanimous consent

IV. Public Participation. None.

V. Action/Discussion Items

a. Blueprint Downtown Juneau – Beth McKibben (CBJ CDD)

Ms. McKibben announced that the public comment period on the Steering Committee Review Draft of Blueprint Downtown closed in mid-September, but there will be two more opportunities for public comment.

The boundaries of Blueprint Downtown extend from The Rock Dump to Norway Point (just north of the Juneau Yacht Club). Blueprint Downtown divides the region into eight sub-areas, which cover a spectrum of uses. The mission of Blueprint Downtown was to create a unified, “big picture” plan for downtown, over a 20-year planning horizon.

Blueprint Downtown worked with consultants over a year-long visioning process to create nine focus areas that were accepted by the 13-member Steering Committee. An estimated 800-900 people participated in the visioning process. Outputs of the visioning process include a vision statement and six goals, as well as a list of top five priorities.

Ms. McKibben provided an overview of the plan and recommended that JCOS members read the Reader's Guide to Blueprint Downtown and Chapter 2.

Ms. McKibben noted that once the plan is adopted, CBJ will share responsibility for its implementation with other partners, such as the Juneau Downtown Business Association. The plan will be used as a basis for decision-making by CBJ in areas such as land use decisions and capital funding. Ms. McKibben described how Blueprint Downtown will complement and fit within the larger portfolio of CBJ plans.

Comments regarding the plan can be sent to blueprintdowntown@juneau.org.

In response to a question from Chair Keiser, Ms. McKibben said that she is aiming to have the next draft submitted to the Planning Commission by the end of 2022.

Mr. Behnke noted that Blueprint Downtown incorporates a lot of ideas that have been put forward by JCOS, Renewable Juneau, and others regarding green energy, sustainability, etc.

Mr. Mitchell suggested that Ms. McKibben review CBJ's legislative priorities and identify potential synergies between these priorities and Blueprint Downtown.

Ms. McKibben concluded by encouraging JCOS members to submit public comment.

b. Solid Waste Overview – Stuart Aston (CBJ RecycleWorks)

Mr. Aston provided an overview of entities involved in Juneau's waste disposal (Alaska Waste, Waste Management, CBJ and RecycleWorks). Mr. Aston noted that there are no contracts or ordinances controlling how Alaska Waste or Waste Management functions, which constrains CBJ's ability to regulate their operations. In many communities, the local government either owns the certificate to haul waste or the landfill.

Mr. Aston discussed the timeline of waste management in Juneau, beginning in the early 2000s. Mr. Aston suggested that Commissioners review the 2008 Solid Waste Management Strategy, which included a recommendation for CBJ to obtain more local

control of waste management. The Strategy also suggested that CBJ purchase the hauling certificate from Alaska Waste, but efforts to do so have been unsuccessful.

Mr. Aston also provided an overview of the history of recycling efforts in Juneau, including CBJ's contracting with Waste Management to operate the recycling center at the landfill. Mr. Aston noted that the CBJ Recycling Center diverts 7-9% of waste from the landfill per year, and that the success and growth of CBJ's recycling programs (the recycling center, hazardous waste disposal, and junk vehicle disposal program) depend on voluntary citizen participation.

Mr. Aston concluded that he is available and willing to coordinate more with JCOS through regular updates, providing tours, discussing challenges, etc.

Mr. Mitchell recommended that JCOS continues to meet with Mr. Aston to discuss waste management strategies and options for obtaining and exercising more local control. Chair Keiser expressed interest in learning more about options for waste mitigation.

c. Legislative Priorities – Denise Koch (CBJ) and Gretchen Keiser (JCOS)

Ms. Keiser discussed a memo (included in the meeting packet) from Katie Koester, Engineering and Public Works Director, to all CBJ Boards and Committees, providing information on the FY2024 CBJ Legislative Priorities list and soliciting their input into CBJ's Legislative Priorities. Ms. Keiser noted that JCOS previously supported last year's priority of dock electrification and proposed an additional priority of energy retrofits for Juneau housing, which was not accepted as a legislative priority.

Ms. Keiser shared the request from Engineering and Public Works for JCOS to submit brief comments on the draft FY2024 CBJ Legislative Priorities list.

Ms. Koch added that the projects included in the priorities list are meant to be large, visionary projects, rather than deferred maintenance. Ms. Koch also noted that the list is meant to reflect the community's priorities.

Mr. Behnke asked whether the list of legislative priorities limits CBJ or its sub-entities from pursuing federal funding for other projects not included on the list. Ms. Triem responded that she sees the value in having a list of legislative priorities, but does not view the list as the conclusive statement of CBJ priorities.

The plan is for JCOS to bring draft nominations for discussion at a November meeting in order to meet the Dec 1st deadline.

VI. Information Items

VII. Commissioner Comments

VIII. Next Meetings

Monthly Work Session/Subcommittee Oct 19, 2022@ 12PM ZOOM

Monthly Work Session/Subcommittee Nov 2, 2022 @ 12PM ZOOM

Monthly Regular Meeting Nov 16, 2022 @ 12PM ZOOM

IX. Adjournment:

The meeting adjourned at 1:20 pm.

Submitted by Danielle Meeker, Secretary

DRAFT MINUTES
Juneau Commission on Sustainability (JCOS)
Work Session
Wednesday, October 19, 2022, 12:00 p.m. (Noon)
Zoom

A. Call to Order

Chair Keiser called the meeting to order at 12:05 p.m.

B. Land Acknowledgment

C. Roll Call

Present: Gretchen Keiser, Steve Behnke, David Teal, Danielle Meeker, Nick Waldo,
Marian Call

Absent: Jim Powell, Duff Mitchell, Jessie Barker

A quorum was present.

Staff & Others Present: CBJ Staff Liaison Denise Koch, Commission Liaison Paul Voelckers
Members of the Public Present: Lori Sowa (AEL&P)

D. Approval of Agenda

Agenda approved without amendments

E. Public Participation

F. Agenda Topics

a. Legislative Priorities Nominations – David Teal and Gretchen Keiser

CBJ Engineering & Public Works Director Katie Koester recently asked for JCOS input on CBJ's list of legislative priorities. Included in meeting packet is a one-page draft submission from Mr. Teal based on commissioner input. Out of the priorities included in CBJ's list from 2021, JCOS supports dock electrification.

Ms. Koch responded to Mr. Teal's question about CBJ's list of legislative priorities from 2021 by saying that the items on the list are numbered in order of priority.

Mr. Behnke expressed his support for the draft response from JCOS and seconded Mr. Teal's request to get more information from CBJ about how the list will be used, and whether it might preclude funding and support for other sustainability projects not included on the list.

Ms. Keiser directed JCOS members to the meeting packet, which includes a copy of CBJ's request to Senator Murkowski for funding for the design and construction of a new municipal composting facility in Lemon Creek. The request is pending, which means that Senator Murkowski's office has accepted it and is currently pursuing funding.

Ms. Koch noted that JCOS' recommendations to Ms. Koester regarding CBJ's legislative priorities are due by December 1st.

b. Juneau's Climate Action and Sustainability - Work Plan Draft – Steve Behnke

Mr. Behnke provided an overview of the "Juneau's Climate Action and Sustainability: What's Been Accomplished and Recommendations for a 5-10 Year Work Plan " document included in the meeting packet. Mr. Behnke described the sustainability items of importance to JCOS (e.g., dock electrification, electric buses, EV charging, residential energy efficiency programs) and the lack of a comprehensive statement describing JCOS priorities. Mr. Behnke discussed the value of a statement in informing the CBJ Assembly, shaping JCOS actions, monitoring progress towards goals, and identifying synergies with other city priorities (e.g., education, housing). Mr. Behnke concluded by asking other JCOS members what they would like to do with this document and who is the intended audience.

Mr. Teal expressed his support for the document, and suggested that Ms. Keiser or Mr. Behnke consider promoting the document via local radio.

Ms. Keiser said that her motivation for producing this type of document stems from a desire to acknowledge the progress that has been made by CBJ on several climate and sustainability efforts, and to recap past and ongoing efforts for new JCOS members. Ms. Keiser noted that this type of document allows JCOS to better plan for the next five years.

Ms. Call asked about the potential for soliciting community input on this document. Several JCOS commissioners shared their opinions on how best to share the final work plan and recommendations with the public.

Ms. Keiser asked whether JCOS members are comfortable with finalizing the document ahead of the retreat, or would prefer to wait until after the retreat to finalize it. Mr. Teal answered that he would prefer to wait until after the retreat. Mr. Waldo suggested that the document be finalized prior to the retreat by designating a lead author and allowing other JCOS members to submit feedback via a shared Google doc.

Ms. Sowa provided her feedback on the recommendations and work plan document, including an offer to provide relevant statistics and an offer to represent AEL&P in a meeting with JCOS to discuss specific energy questions. Ms. Sowa also offered to provide contact information for the Regulatory Commission of Alaska (RCA) so that JCOS can obtain better information on RCA’s regulatory authority over solid waste disposal.

G. Information Items

Ms. Keiser and Ms. Koch informed JCOS members about the upcoming retreat, which is currently scheduled for Saturday, December 3rd, from 9am to noon. Several JCOS members expressed a preference for meeting in-person, with a COVID testing requirement.

H. Committee Member/Liaison Comments and Questions

I. Next Meeting Date(s)

Monthly Regular Meeting	Nov 2, 2022 @ 12PM ZOOM
Monthly Work Session/Subcommittee	Nov 16, 2022 @ 12PM ZOOM
Monthly Regular Meeting	Dec 7, 2022@ 12PM ZOOM

J. Adjournment

Chair Keiser adjourned the meeting at 1:12 p.m.

Submitted by Danielle Meeker, Secretary



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Royal Caribbean Group • 2021 Environmental, Social and Governance Report

Royal Caribbean Group

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2021 Environmental, Social, and Governance Report

https://www.royalcaribbeangroup.com/wp-content/uploads/2022/06/RCG-ESG-Report-2021_06.pdf



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November X, 2022

To: Katie Koester, Director, CBJ Engineering & Public Works

From: Gretchen Keiser, Chair, Juneau Commission on Sustainability

Subject: FY 2024 Legislative Priorities

The Juneau Commission on Sustainability (JCOS) appreciates the opportunity to provide input to the CBJ's FY2024 Legislative Priority Projects process. JCOS is pleased to learn that the project list is not intended to be a comprehensive. We believe that flexibility in identifying (and shifting) project priorities will be critical to CBJ's ability to leverage once-in-a-generation federal funding opportunities provided by the Infrastructure Investment & Jobs Act and the Inflation Reduction Act. Cities can unlock funding opportunities by identifying priorities, estimating budget needs, pinpointing funding gaps and targeting the appropriate federal funding sources. Billions of dollars will become available for projects involving energy efficiency, electrification, GHG reduction, infrastructure, and climate resilience.

JCOS fully supports Project #5—Electrification of Dock 16B—and urges you to move it to the top of the priority list based on its potential to reduce greenhouse gas emissions, improve air quality and reduce noise in downtown Juneau, contribute to economic development, and function as a springboard for conversion of the tourism shore-based vehicle fleet to electric. The project may be a good fit for the funding opportunities provided by the Inflation Reduction Act.

JCOS also nominates the Municipal Composting Facility Design & Construction project as a priority to be included on the FY2024 list (Attachment). This project would provide a commercial-scale facility to divert organic wastes from the landfill as part of a broader zero waste plan for the community. The project has multiple benefits including the reductions of landfill odor, methane gas emissions, and the high organic loading experienced at the wastewater treatment facilities.

JCOS also supports a more comprehensive approach to large, multi-year projects that may meet the above-mentioned federal funding opportunities and address the long-term sustainability of the Juneau community. Such an approach would focus on

- Energy efficiency upgrades to Bartlett Regional Hospital, schools, libraries, fire stations, etc. This would include ground-source heating, district heating (Civic Center), insulation, and other HVAC improvements;

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- CBJ fleet electrification and needed EV charging infrastructure; and
- Upgrading the energy efficiency of residential and commercial buildings.

Again, thank you for the opportunity to participate in this important task.

Attachment: Municipal Composting Facility Design and Construction – Nomination Form

City & Borough of Juneau Legislative Priorities Project Nomination Form

Section G, Item 4.

Project eligibility

- A. Does the proposed project represent a major, nonrecurring expense with a total project cost over \$1M
☒ YES NO
- B. Will the proposed project result in a fixed asset (e.g., land, major equipment, building or other structure, road or trail) with an anticipated life of at least two years? ☒ YES NO
- C. Will the project provide broad community benefit? ☒ YES NO

If you were able to answer YES to all three questions, please provide additional information:

1. Project title (Suggested heading):

Municipal Composting Facility Design and Construction

2. Project description and benefit. Describe the project (in half a page or less), including specific features, stages of construction, etc. Explain how the project will benefit the community. Are there any green or sustainability elements to the project? What sector/s of the community will this project benefit?

Juneau has a major solid waste problem. The landfill is only ~20 – 25 years away from the end of its useful life. The closure would negatively impact every member of the community.

In March 2021, JCOS finalized the “Juneau Solid Waste Fact Sheet and Recommendations for a Course of Actions by the City and Borough of Juneau Assembly: *History, Current Situation, and the Future*”. One of the recommended actions from that report was to adopt a Zero Waste plan. Zero Waste plans aim to reduce waste through avenues such as composting, recycling, and reuse. The Zero Waste plan concept was presented to the Public Works and Facilities Committee (PWFC) in 2021. The PWFC Chair supported moving towards composting as part of a broader Zero Waste plan.

The purpose of this project is to design and construct a commercial-scale composting facility to serve Juneau residents, businesses and institutions. Food scraps and organic wastes represent a large percentage of the material landfilled each year, taking up valuable space in the landfill and creating odor issues in the surrounding neighborhoods. Beyond the benefits of diverting waste from the landfill, CBJ also has a vested interest in reducing organic waste going to the sewer system. One of the main wastewater treatment facilities in the CBJ experiences high organic loading in the incoming wastewater, and CBJ staff are actively working on ways to reduce this loading through source control efforts. Ground up produce from commercial operations contributes to the high organic loading issues. With a commercial scale composting facility, the CBJ will have the capacity to accommodate large scale producers such as grocery stores, large restaurants and institutions (e.g., Bartlett Regional Hospital and Lemon Creek Prison) as well as residential customers, getting this waste out of both the sewers and the landfill. Through composting, these food scraps and organic wastes then become a locally produced resource as a soil amendment rather than a solid waste or sewer (source control) problem.

For more information, call Katie Koester at 907.586.0800 or Katie.Koester@juneau.org

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3. Plans and progress. Describe (in one or two paragraphs) what has been accomplished so far (if any). This may include feasibility study, conceptual design, final design/engineering/permitting, fundraising and total funds raised to date.

This project is currently at the conceptual stage. CBJ allocated \$100,000 for Zero Waste Planning in Manager's Office as part of the FY2023 CIP projects.

4. Project support. Is the project supported in CBJ or other Area plans (List where the project is mentioned in planning documents. This could include CBJ plans such as the Comprehensive Plan, or regional planning documents like the Comprehensive Economic Development Strategy).

This project would directly support the 2022 CBJ Assembly Goal #5:

- Sustainable Community – Juneau will maintain a resilient social, economic, and environmental habitat for existing population and future generations
 - 5a. Develop a Zero Waste or Waste Reduction Plan

5. Goal of project. In one sentence or less, state the goal of the project. For example "economic development" or "improve non-motorized transportation routes."

The goal of the project is to design, perform site preparation, and construct a municipal compost facility as part of a broader Zero Waste plan.

6. O&M. Who is responsible for operations and maintenance upon completion of the project?

CBJ will likely contract out the operation and maintenance of the compost facility, which the municipality would own.

7. Project cost:

A. TOTAL COST (including funds already secured) = \$ 2.5 million

B. AMOUNT SECURED (include funding source) = \$ 0

B. For construction projects, break out preconstruction costs (feasibility/design/permitting):

Preconstruction costs = \$ 0.5 million Construction costs = \$ 2 million

8. Timeline: Indicate when you hope to complete each phase of the project. Keep in mind that the Legislative Priorities will not be published until February. Legislative funding from the state would not be available until the start of the following fiscal year (July).

A. For projects that consist of land or equipment purchase only, state when the purchase would be made:

For construction projects:

B. Preconstruction phase to be completed by December 2023.

For more information, call Katie Koester at 907.586.0800 or Katie.Koester@juneau.org

C. Construction phase to be completed by December 2025.

Section G, Item 4.

9. Physical Location. Please provide the address or physical description of where the project is located.

This project would likely be built in the Lemon Creek gravel pit.

10. Please provide a photo, drawing, map, or other graphic image if possible.

11. Contact Information

For more information, call Katie Koester at 907.586.0800 or Katie.Koester@juneau.org

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November 2022

To: Mayor Weldon and Assembly Members

From: Gretchen Keiser, Chair, Juneau Commission on Sustainability

Subject: JCOS Report on Climate Action and Sustainability & Action Plan

The Juneau Commission on Sustainability (JCOS) submits for your consideration its report, *Juneau's Climate Action and Sustainability: What's Been Accomplished and Recommendations for a 5-10 Year Action Plan*. The JCOS thought it would be useful to take stock of what's been accomplished since it's about five years since the *Juneau Renewable Energy Strategy* was adopted. We summarize what we know about activities in the community related to climate action, energy, and sustainability, and to offer recommendations on actions JCOS considers "next steps" on Juneau's path forward.

Highlights include:

- A lot has been happening! The CBJ Assembly and staff are commended for the city's accomplishments on targeting CBJ's own use of energy, upgrading energy efficiencies of CBJ facilities, support of heat pump adoption, electric bus & vehicle conversion, multiple new EV charging stations, commitment to dock electrification, and zero-waste planning & composting facility effort (pages 2-6).
- A CBJ-funded project is underway to update Juneau's 2010 energy use profile and greenhouse gas emissions inventory. Getting a current energy picture not only tells us where Juneau is at, but also helps us identify areas to focus efforts and measure progress (pages 2-3).
- Juneau homeowners and developers are embracing heat pump technology - rough estimates of 1500-1800 homes (up to 13% of Juneau housing units) have partial or full heating from heat pumps. At today's fuel prices, homeowners who retrofit are averaging a 67% energy cost saving and GHG reduction equivalent to one automobile annually. Local projects are using federal funds to assist lower income households to upgrade to highly efficient heat pumps (page 4).
- Juneau residents have purchased at least 500 EVs (~2.5% of vehicles), and public-private partnerships have installed 33 public charging stations in 20 Juneau locations. AEL%P has established favorable EV charging rates in recent years (page 5).
- Juneau's Changing Climate & Community Response, a collaborative report by UAS, UAF and CBJ/JCOS, was released in 2022, and identifies probable effects Juneau will face in coming decades (page 6).
- To accelerate energy efficiency and electrification in Juneau's buildings, CBJ could take actions to adopt of building decarbonization policy & lead by example, update building codes, continue support for heat pump conversions, and establish financing mechanisms for residential and commercial properties (page 8).
- To accelerate electrification of transportation, CBJ could collaborate on a community strategy and identify its role as a catalyst to overcome barriers (such as EV charging at multifamily housing) and to advance EV adoption (such as waterfront electrification and work with tourism industry to convert their fleets of buses and vans). CBJ should encourage the Juneau School

District to pursue funding for electric school buses in cooperation with the private school bus company (page 9).

- CBJ can advocate for Juneau and Southeast Alaska with State agencies receiving substantial federal funding for distribution to Alaska communities under the recent infrastructure and climate/energy legislation. This includes advocating for actions to address state and local needs for workforce training to meet the demands for energy efficiency upgrades in residential, commercial, and government properties. (pages 9-10).
- The recommended actions, responsible parties, timeframes, and potential federal funding are summarized in a table.

In conclusion, Juneau's recent and ongoing actions give the community momentum to achieve a sustainable, energy efficient, and climate resilient future. Juneau has several pieces in place that will help CBJ and local partners optimize access to the once-in-a-generation federal funding, much of which focuses on renewable energy, electrification, energy efficiency, equity, and climate resilience. The JCOS intends to focus its efforts in support of CBJ and other local entities on furthering the community's shift away from fossil fuels and towards a stronger, sustainable reliance on renewable energy. The JCOS pledges to be "eyes and ears" pinpointing opportunities to strengthen the long-term sustainability and resilience of the Juneau community.

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**Juneau’s Climate Action and Sustainability:
What’s Been Accomplished and
Recommendations for a 5-10 Year Work Plan**

10/28/2022 Draft
Juneau Commission on Sustainability

Executive Summary – may not need this if cover memo covers highlights

I. Introduction

It’s been 11 years since the City and Borough of Juneau (CBJ) adopted its 20-year community climate plan, the *Juneau Climate Action and Implementation Plan* (JCAIP). The JCAIP identified a goal of reducing GHG emissions by 25% by 2032 and identified hundreds of potential actions to accomplish this goal. A JCAIP Top 10 recommended action was to develop an energy plan for the community, which was completed in 2018 when the CBJ adopted the *Juneau Renewable Energy Strategy* (JRES).

The JRES sets a goal of shifting community energy use away from fossil fuels so that renewable sources provide 80% of the total energy used in Juneau by 2045. Juneau’s JRES is different and more comprehensive than many communities’ strategies in that our strategy provides for 80% renewable energy not only for electrical energy production, but also for Juneau’s heating and transportation needs. This broad focus helps meet the JCAIP climate action goals, reduces vulnerability to fuel price shocks as in 2022, and strengthens the community’s economic sustainability and resilience.

The JRES provides a menu of hundreds of specific policies and actions for meeting Juneau’s climate and renewable energy goals (drawn from the CBJ Comprehensive Plan and the JCAIP). Recommended actions and the development of action plans are placed in four general categories:

1. An internal CBJ energy management program - to track and reduce energy use and costs, contribute to climate and renewable energy goals, and lead by example.
2. Buildings’ energy use and space heating – install energy efficiencies and electrify heating to reduce Juneau’s dependence on fossil fuels,
3. Transportation – electrify fleets, buses and personal vehicles to reduce Juneau’s dependence on fossil fuels, and

4. New renewable energy supplies - to meet demand as Juneau electrification continues.

This white paper offers a retrospective on what's been accomplished since the JCAIP and JRES were adopted, identifies actions currently underway, and makes recommendations for additional actions. While this paper focuses on CBJ's role in reaching climate goals, JCOS recognizes that

1. The city is a leader but is not the only player in strengthening Juneau's energy future. Residents, homeowners, businesses, utilities, organizations, and government agencies all have an important role to play in reducing GHG emissions and our reliance on fossil fuels.
2. The community's climate actions do not happen in a vacuum, but are part of the overall efforts undertaken to sustain and enhance the livability and economic wellbeing of Juneau for current and future generations.
3. There are additional measures of a community's sustainability, including poverty, housing, and environment. Although these issues are important, this paper's focus is limited to actions that tackle the community's underlying use of energy, its handling of wastes, and that address the impacts of the changing climate.
4. The intent of this paper is to position CBJ and community members to take advantage of and optimize the funding opportunities of recent federal legislation that can financially enable the CBJ to meet its strategic climate and sustainability goals and can strengthen Juneau's community values using federal assistance.

II. Are We on the Way to Meeting Our Goals? What's Been Accomplished in Recent Years?

A. Measuring Progress

Ideally, Juneau would publish (and regularly update) dashboard graphics that show where the community started, our goals, and the path (or paths) that will lead us to those goals in a timely manner. Although simple in concept, the unfortunate truth is that we can neither measure progress nor identify roadblocks to progress unless we have good data on energy usage and greenhouse gas emissions.

Juneau does not have adequate and current data. Juneau's 2010 energy use inventory by sector showed: Buildings 40%; Transportation (highway, marine, air) 43%; Industrial (Greens Creek and Kensington mines) 12%; and Equipment & non-highway 5%.¹ At that time,

¹ *Juneau Climate Action & Implementation Plan*, November 2011. P. 12.

77% of Juneau’s energy sources were petroleum products, which accounted for 94% of the GHG emissions produced by Juneau.

While Juneau’s 2010 energy use profile and GHG inventory have not been updated, two actions contribute to getting the data needed:

- In 2020, the CBJ Maintenance staff began to compile 2015-to-present records and monitor energy use in CBJ facilities. Now, energy use in approximately 60 CBJ facilities is tracked, and CBJ Maintenance and Finance are working to automate ongoing electrical bills and fuel purchasing records.
- In 2022, CBJ contracted with a national firm to prepare a current energy use profile and GHG emission inventory for the Juneau community as a whole and for local government, with the capability to model future efforts that help inform decision making. Preliminary results of this update are expected in winter, 2022-2023.

B. CBJ and Community Actions in Recent Years and What’s Underway Now

1. CBJ Energy Management

- Several CBJ facilities have had or are slated for near-term energy efficiency & HVAC upgrades, including Treadwell Arena, Savickas Park, Douglas Fire Station/Library, Downtown Library, CBJ Street Shop (at 7-mile), Glacier Fire Station, Eagle Valley Center, Lynn Canal Fire Station, Syeik Gastineau Community School, Sheik Héen (formerly Riverbend) School, Auke Bay Fire Station, Zack Gordon Youth Center, Centennial Hall, Augustus Brown Pool, Dimond Park Field House, and Dimond Park Aquatic Center.
- New construction and operation at the Juneau Airport’s North Terminal and Bartlett Behavioral Health Facility incorporate numerous energy efficiencies.
- CBJ Engineering & Public Works incorporated energy use data for CBJ facilities into a 2021 Sustainability Report. <https://juneau.org/engineering-public-works>.
- Beginning in 2021, the CBJ now incorporates sustainability as a criterion for projects in its Capital Improvement Plan.
- CBJ replaced five of its 14 light-duty vehicle fleet with EVs (36 %), and is investigating consolidation of its downtown-located vehicles for more efficient utilization and potential future EV purchasing.
- CBJ Transit secured federal funding for eight electric buses (44% of fleet), bus-charging equipment, and bus barn upgrades. Juneau’s first electric bus began operation in April

2021, and provided practical experience and trouble-shooting useful when it ordered the next seven electric buses in October 2022.

2. Buildings: Energy Use and Space Heating in Businesses and Private Homes

- Since 2020, the CBJ Assembly has funded Alaska Heat Smart (AHS), a local nonprofit that provides education & technical assistance to homeowners who then convert their home heating to air source heat pumps. As of October 2022, AHS conducted about 500 home heating assessments, with approx. 40 more in progress. AHS data shows, on average, homeowners save about 67% on annual energy costs (at \$5/gal fuel in 2022) and eliminate CO2 emissions equivalent to those produced by one automobile annually.
- In 2022, AHS secured \$2.4 million in two federal grants to install energy efficiencies and heat pumps in lower income Juneau homes over the next three years. The AHS's Heat Pump Incentive (DOE) program has 60 households on a wait list, and the Healthy Homes (HUD) program has about 120 households on a wait list. Also, AHS posted consumer information on its website about the potential energy efficiency upgrades and home heating rebates and tax credits under the recent federal Inflation Reduction Act.
- The number of heat pumps has increased rapidly in Juneau. While it's difficult to get an accurate number, an estimated 1,500-1,800 Juneau homes have installed heat pumps, roughly 11-13% of Juneau's housing units.
- Air source heat pumps are a preferred heating system for new construction, renovations, and real estate sales. Newer housing developments at Pederson Hill, above Vanderbilt Hill, across from Safeway, and above Blueberry Hill have installed heat pumps.
- High demand for heat pumps has led to increases in hiring by local installers.
- To date, Renewable Juneau's Carbon Offset Fund has installed heat pumps in 33 lower-income homes, with five more installations pending.
- AEL&P is conducting a pilot program with the Cold Climate Housing Research Center and Information Insights that will replace electric resistance heating with heat pumps in approximately twenty rental units in Juneau. Data will be collected before and after installation of heat pumps to measure the energy and capacity savings associated with the change to more efficient heat pumps. The study will explore the value of potential programs to encourage landlords to install heat pumps as lower cost, supplementary heating devices in multifamily rental units.
- Spearheaded by Interfaith Power & Light volunteers and others, an investigation of potential financing options is underway to accelerate the adoption of heat pumps and other energy efficiencies. An application for a federal USDA line of credit project may be feasible.

- A district heating system for Aak’w Kwaan Village district and downtown is being designed.

3. Transportation - Reduce Reliance on Fossil Fuels

- To date, Juneau residents have purchase at least 500 EVs – roughly 2.5% of the community’s 20,000 cars.
- Beginning in 2014, through a collaborative effort among nonprofits, businesses and agencies, 33 public EV chargers in 20 Juneau locations are installed and provide free charging. About 20 of these belong to the CBJ.²
- CBJ investigated the challenges, identified locations, and installed 10 public EV charging stations in 2022 with CIP funding approved by the Assembly, additional funds and in-kind logistical, standard drawings, and coordination support from Juneau EV Assn. and AK EV Assn., and coordination with AEL&P. The new Level 2 charger sites are: 8th St/Basin Rd (2 chargers), Twin Lakes (2), Harris Harbor (2), Eagle Valley Center (2), and Eaglecrest (relocated & added 2 to expand site to 4 chargers).
- In 2017, AEL&P developed (and RCA approved) an off-peak EV charging rate that allows EV owners to pay a reduced rate when charging between 10pm to 5am. Participation in the program has grown steadily, with 138 participants taking advantage of the rate during September 2022.
- AEL&P offers a Level 2 EV charger/metering unit for rent. In October 2022, there were 97 units deployed in the community.
- AEL&P developed (and RCA approved) a High-Power EV Charging rate effective April 1, 2022. This rate eliminates demand charges that could be cost-prohibitive to installation of Level 3 EV charging equipment.
- With a FY2023 \$5M State grant, CBJ is beginning a collaboration with the State on renovation of the State Office Building parking garage to accommodate substantially more parking and EV charging.
- Using 2022 Marine Passenger Fees (MPFs), the CBJ is analyzing the feasibility of electric bus circulators for downtown.
- In 2022, CBJ prioritized electrification of its two public docks for cruise ship shore power – through revenue bonds, MPFs, and potential federal grants.

² <https://www.plugshare.com/directory/us/alaska/juneau>

- With 2022 MPFs, the CBJ commits to upgrade the 20-year-old electrical infrastructure serving the Franklin Dock shore power, as a precursor to electrifying the two city docks for shore power.
- Norwegian Cruise Lines has stated that it expects to provide cruise ship shore power if a new dock is approved. That development is now under Huna Totem Corp. ownership.
- A local entrepreneur has an electric boat operational.

4. New Renewable Energy Supplies

- Studies and grant applications have raised community awareness that replacing fossil fuels with electricity will challenge AELP's current capacity to provide the amount of electricity required to meet the community's climate/energy goals.
- Juneau Hydropower Inc. has conducted background studies to fulfill reporting requirements to establish a transmission and sales agreement with AEL&P for power from its proposed Sweetheart Lake Hydro project.

5. Community Sustainability

- Beginning in 2019, the CBJ Assembly identified annual sustainability goals and has taken actions to implement the Juneau Renewable Energy Strategy and solid waste management issues.
- In 2020, CBJ pursued USDA funding (unsuccessful) to expand Juneau's composting capability in partnership with a private business, local schools, and the Alaska Dept. of Environmental Conservation.
- In 2021, a local business (Juneau Composts) diverted about 180 tons of food waste from the landfill plus wood chips from tree service companies, manure from horse stables, and grains from microbreweries.
- The CBJ RecycleWorks program collects and ships out hazardous wastes, recycled materials, and junk vehicles under contracts with private businesses.
- In 2021, the CBJ Wastewater Utility staff began an analysis of the sources of high organic loads; fats, oils and grease (FOG); and infiltration and stormwater into the community's two larger wastewater treatment facilities (the Juneau and Mendenhall plants). Efforts are underway to address these sources which cause increased treatment costs and equipment maintenance, and higher energy use.

- In FY2023, the Assembly funded a zero-waste planning project to reduce & divert solid wastes and extend the life of Juneau’s landfill. The CBJ also has a request for congressionally designated spending for \$2.5 million to design and construct a municipal composting facility included in the pending FY2023 federal budget legislation.
- An Environmental Projects Specialist was hired in September 2022 to work on CIP-funded zero waste, wastewater utility, EV, and energy/GHG inventory projects.
- A collaborative report by UAS, UAF, and CBJ, *Juneau’s Changing Climate & Community Response*, is published in 2022 and identifies probable effects Juneau residents will be facing in coming decades. For example, due to heavy precipitation in recent years and most recently in September 2022, Juneau has experienced land and vegetation debris flows on steep slopes that have impacted private homes and public streets.

III. A Proposed 5 to 10 Year Juneau Sustainability and Climate Action Plan

The CBJ’s recent and ongoing actions identified above give Juneau strong momentum in achieving its climate, renewable energy, and sustainability goals. Federal legislation in 2021 (Infrastructure Investment & Jobs Act - IIJA) and 2022 (Inflation Reduction Act - IRA) present once-in-a-generation funding opportunities over several years to propel the Juneau community forward on its path to a more sustainable and resilient future. The CBJ has drafted a grant strategy for projects that CBJ would seek funding under the 2021 IIJA. Efforts to understand the IRA funding opportunities focused on climate, energy efficiency, electrification, GHG reduction, equity, and climate resilience are also underway.

In light of ongoing community action and federal grant opportunities, JCOS offers the following recommendations for action during the next 5 to 10 years. The Commission has sought to identify gaps in community-wide efforts to achieve equitable energy efficiency, climate resilience, and sustainability. It is JCOS’s intention that this action plan:

- helps community members, businesses, CBJ staff, and the CBJ Assembly identify priority actions;
- provides guidance on funding of sustainability projects in the CBJ budget and CIP processes;
- supports private, foundation and public funding requests;
- identifies and supports federal funding opportunities;
- contributes to public communications about Juneau climate and energy actions; and

- identifies the connections between climate/energy goals and other community goals such as affordable housing, reducing waste and landfill odors, cost-effective wastewater treatment, etc.

A. Track the Community's Progress on Climate/Energy Goals

- Continue to track and annually report CBJ facility energy performance and cost savings. CBJ should continue to lead by example. Publicize accomplishments and impacts to help the public understand that reducing GHG emissions can also save money.
- Use the 2022 updated energy use profile and GHG inventory as a benchmark to establish measurable sustainability indicators, and then track and communicate the indicators to the public.³
- Use the 2022 modeling tool to identify actions where CBJ and others in the community can make notable progress toward energy savings and GHG emission reductions.
- Embed information on changes in energy use and GHG emissions and the projected costs to reduce or offset new GHG emissions into the analysis and decision making for significant CBJ actions and projects over \$1 million.
- Strengthen the 2022-2023 modeling efforts by establishing a way CBJ can track the amount of fossil fuel used locally for transportation, heating and other uses. Knowing the amount of energy use and GHG associated with different activities will help focus policy and budget decisions on actions that produce the best results.
- Readjust the JCAIP and JRES goals and create interim targets for renewable energy and GHG emissions.
- Update the 2022 community energy profile and GHG emission inventory no later than 2027.

B. Accelerate Energy Efficiency and Electrification in Juneau Buildings

Undertake CBJ assembly actions to:

- Adopt a CBJ policy of building decarbonization, and lead by example.⁴

³ JCOS previously identified GHG emissions and the relative proportions of energy provided by fossil fuels and renewable sources, as initial sustainability indicators.

⁴ The report "[Model Government Zero Emissions Buildings Policy](#)", released May 2022, provides "plug-and-play" policy language for jurisdictions considering taking a lead-by-example approach to building decarbonization to show what's possible.

- Encourage (or require) lower GHG emissions through updated building codes to incorporate current energy efficiency standards: 2021 International Energy Conservation Code (IECC) and ASHRAE Standard 90.1-2019. Consider a “stretch” code as a starting point. Consider requiring heat pumps in new construction or major renovations.
- Continue to support local efforts to upgrade the energy efficiency and heating systems of housing to enhance the affordability for lower income households.
- Provide encouragement to homeowners to install heat pumps and energy efficiency upgrades by offering financing incentives via on-bill financing, LIDs, etc.
- Establish financing options, such as “C-PACE” (Commercial Property Assessed Clean Energy), for commercial and multi-family building owners to install energy efficiency, heat pump systems, and climate resilience upgrades. Build on the experience of the Anchorage C-PACE program.
- Investigate district heating for the Civic Center and thereby provide momentum to encourage nearby federal and state facilities to support the project.
- Investigate federal funding (ARP/ESSER) for air quality/energy efficiency upgrades in Juneau schools.

C. Accelerate the Electrification of Transportation in Juneau

Particular areas where CBJ could facilitate the transition to EVs include:

- Adopt a CBJ policy of support for electrification of transportation.
- Continue to install EV charging infrastructure.
- Lead by example by continuing to replace CBJ’s fleet with electric vehicles and prepare a fleet transition plan to facilitate federal funding opportunities.
- Collaborate with agencies and other interested parties to create a program for maintenance and repairs to existing public EV chargers.
- Collaborate on a community strategy to electrify transportation. Identify CBJ’s role as a catalyst to overcome barriers and accelerate EV adoption. Consider actions:
 - Finance EV charging infrastructure renovations for multi-family rental and condominium housing through LIDs, C-PACE, property tax deferments, etc.
 - Amend CBJ codes to incentivize EV charging infrastructure in parking lots of new commercial developments and to require EV chargers as a feature of new single and multi-family housing construction.

- Coordinate with private businesses and government agencies to electrify vehicle fleets, including taxis, vans, and school buses.
- Provide waterfront electrification for EV charging infrastructure and work with the tourism industry to identify and implement incentives to assist in converting their fleets to electric buses, vans and vehicles.
- Actively engage with the Alaska Energy Authority on State planning and funding for EV charging infrastructure in Southeast Alaska and on the Haines and Alaska Highways.

D. New Renewable Energy Supplies & CBJ's Role

- Establish a dialog with the AEL&P, the Regulatory Commission of Alaska, and the Alaska Legislature with the intent of having the utility prepare and share a plan with the public for meeting the longer-term energy needs of the community.
- Seek independent, expert analysis of community power needs and rate agreements favorable to the community, as warranted.
- Provide letters of support, as appropriate, to private utilities seeking funding, tax credits, etc. under recent federal legislation.

E. Community Sustainability

- Construct a municipal composting facility as an essential foundation to a community-wide effort to divert organics from the Juneau landfill and Juneau's wastewater treatment facilities. Based on the outcomes of the current zero waste planning project, implement other actions within a 5–10-year timeframe to reduce waste, divert waste, enhance local resource recovery businesses, and begin planning for a new landfill.
- Identify vulnerabilities in CBJ's infrastructure to climate change (e.g., stormwater management, landslide abatement, etc.). Prepare a community hazards mitigation plan or resilience strategy to facilitate federal funding opportunities.
- Advocate for and collaborate on local and state workforce training for construction/utility trades to meet demands for energy efficiency and climate resilience upgrades by residents, businesses, and agencies.

Table 1. Climate and Sustainability 5-10 Year Action Plan

	Examples	
Category	Track Community's Progress on Climate/Energy Goals	Accelerate the Electrification of Transportation in Juneau
Action	Continue to track and annually report CBJ facility energy performance	Collaborate on community strategy to electrify transportation
Responsible Parties	CBJ Maintenance and CBJ Finance	JCOS, CBJ, JVEA, State & federal agencies, tours vehicles, etc.
Time Frame	Ongoing	12-18 mos.
Funding	CIP	in-kind by participants

Appendix: Documents with Background Information

A. Tracking Community Progress on Climate and Energy Goals

B. Accelerating Energy Efficiency and Electrification in Buildings

<https://www.buildinggreen.com/news-analysis/once-lifetime-opportunity-green-public-schools>

C. Accelerating the Electrification of Transportation in Juneau

- For an overview of the opportunities for electrification of school buses: <https://cleantechnica.com/2022/08/09/electric-school-buses-win-big-in-usa/>; and technical assistance: <https://cleantechnica.com/2022/07/27/electric-school-buses-technical-help-video-series-for-k-12-schools/>.
- A new \$5 billion federal funding school bus program: www.epa.gov/cleanschoolbus.
- US fleets want to go electric. Here's how they can do it.: <https://www.pwc.com/us/en/industries/industrial-products/library/building-electric-fleets.html>
- EV Funding and Financing Guide: How to Amp Up Transportation Transformation: A Guidebook for Funding and Financing Electrification: <https://www.electrificationcoalition.org/resource/ev-funding-and-financing-guide/>
- Electric Vehicle Fleets: <https://www.electrificationcoalition.org/work/electric-vehicle-fleets>
- Electric Vehicles for Federal Fleets: <https://www.energy.gov/eere/femp/electric-vehicles-federal-fleets>



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October 27, 2022

Ms. Paige Lieberman
LGAC Designated Federal Officer
Via E-mail: LGAC@epa.gov

Subject: Nomination of Denise Koch to the EPA Local Government Advisory Committee or Small Communities Advisory Subcommittee

As chair of the Juneau Commission on Sustainability (JCOS), I wholeheartedly support the nomination of Denise Koch to either the EPA Local Government Advisory Committee or the Small Communities Advisory Subcommittee. JCOS, comprised of Juneau citizens appointed by the Juneau Assembly, coordinates and promotes sustainability initiatives in the City and Borough of Juneau (CBJ) as well as among Juneau residents. I know Denise Koch in her capacity as the CBJ Liaison to JCOS as well as having hired and supervised her at the Alaska Department of Environmental Conservation (DEC) from January 2002 to June 2004 in her role as lead of Alaska's Cruise Ship Program at DEC.

As EPA is specifically looking for participation from Alaska, Ms. Koch would bring more than two decades of experience in Alaska in both government and environmental work. She also has an educational background in environmental science and public health, and currently works in local government as the CBJ Deputy Director of Engineering & Public Works. In this role, she oversees the drinking water and wastewater utility, works on infrastructure enhancements, serves as CBJ's in-house resource on PFAS, and is the CBJ sustainability lead.

Ms. Koch's position in local government, Alaskan perspective, environmental background and experience in the committees' focus areas would serve the EPA committees as well as bring benefit to Alaska local governments. I believe that she would bring value to both EPA and Alaska on either of these committees.

Regards,

Gretchen Keiser, Chair
Juneau Commission on Sustainability