



JUNEAU COMMISSION ON SUSTAINABILITY ANNUAL REPORT JUNE 2015 - MAY 2016

This report summarizes the Juneau Commission on Sustainability activities from June 2015 through May 2016.

OVERVIEW

In 2007, the City and Borough of Juneau Assembly established the Juneau Commission on Sustainability to research and advise the CBJ on community sustainability. The Commission's mission is to promote the economic, social, environmental, and governmental well-being of Juneau and all its inhabitants, now and in the future.

The commission's powers and duties are to:

- coordinate, propose, and promote sustainability initiatives among residents, businesses, government, and non-governmental agencies and education organizations through education and outreach programs;
- make recommendations to the Juneau Assembly and CBJ Boards and Commissions on policies and programs that promote sustainability;
- research and apply for grants or other funds or CIPs from public or private agencies for the purpose of carrying out any of the provisions or purposes of the resolution establishing the commission;
- serve as an advisory group to the CBJ in reducing greenhouse gas emissions to target levels as adopted by the CBJ Assembly and;
- act as liaison between the public and the CBJ Assembly on sustainability related issues.

The governing legislation for the Juneau Commission on Sustainability is City and Borough of Juneau Resolution 2401am, July 9, 2007. The mission of the former Juneau Energy Advisory Committee was folded into the policy and purpose of the Commission. Resolution 2401am also repealed Resolution 2376 relating to the Juneau Energy Advisory committee. The Commission's 2010 sunset date was removed by CBJ Resolution 2528, May 19, 2010.

ORGANIZATION

I. Membership

The eleven member Commission is comprised of nine public members appointed by the Assembly, one member of the Assembly and one member of the Planning Commission. The Commission is supported by a CBJ staff liaison. The Commission's membership reflects environmental, social, economic, and governmental perspectives unified by the common interests of sustainability.

The membership structure of the Commission was altered from February 05, 2015 through CBJ Resolution 2755 which re-established the Commission and repealed the previous establishing Resolution 2718 (which in turn had previously repealed Resolution 2528). Planning Commission members and Assembly Liaison Members are now considered non-voting members and do not count towards a quorum.

Current members are:

Member	Term Expires	Member	Term Expires
<i>Steve Behnke</i>	6/30/2018, Chair	<i>Duff Mitchell</i>	6/30/2016, Vice Chair
<i>Clint Gundelfinger</i>	6/30/2017	<i>Kate Bevegni</i>	6/30/2016, Secretary
<i>Greg Smith</i>	6/30/2018, Secretary	<i>John Smith</i>	6/30/2016
<i>Darrell Wetherall</i>	6/30/2018	<i>Percy Frisby</i>	Planning Commission Liaison
<i>VACANT</i>		<i>VACANT</i>	
<i>Kate Troll</i>	CBJ Assembly Liaison	<i>Beth McKibben</i>	CBJ Staff Liaison
<i>Tim Felstead</i>	CBJ Staff Liaison		

Others who served on the Commission during the past year included:

Public - Robert Deering, Amy Skilbred, Sara Truit
Planning Commission - Benjamin Haight

Persons who previously served on the Commission include:

Public: Carol Anderson, Nathan Arentsen, Bob Bellagh, Sandy Boyce, Alida Bus, Amy Condra, Susan Ely, Catherine Fritz, Dave Hanna, Scott Jackson, Jonathan Kamler, Linda Kruger, Sarah Lewis, Sean Lynch, Greg McEwen, Sally Schlichting, Eva Varadi Bornstein, Nancy Waterman, Rick Wolk, Gayle Wood, Lisa Weissler, Jeni Lefing, Lauren Heine

Assembly Liaison: Bob Doll, Karen Crane, Mary Becker, Jerry Nankervis

Planning Commission Liaison: Dan Miller, Nancy Waterman, Nicole Grewe

CBJ Staff Liaison: Maria Gladziszewski

Previous chairs include: Gayle Wood, Sarah Lewis, Sandy Boyce, Sean Lynch, Alida Bus, Nancy Waterman, Kate Troll, Lisa Weissler

II. Meetings and Subcommittees

The Commission holds a regular meeting on the second Wednesday of each month. Subcommittees meet at monthly work sessions, usually the fourth Wednesday of each month. For the time period covered by this report, the Commission held eleven regular commission meetings and eight work sessions. The Commission holds an annual retreat in January to identify goals and strategies for the calendar year. Out of each retreat, subcommittees are formed to take action on the priorities identified.

Based on the January 2016 retreat, the Commission currently has the following subcommittees:

- Energy
- Solid Waste
- Sustainability Awareness/Promotion/Outreach
- Food Security

Past subcommittees include: Climate Action Plan Implementation (2012), Sustainability Indicators (2012, 2011, 2010), Initiatives (2012), Energy (2014, 2015), Energy/Green House Gas (2011, 2010, 2009), Food Security (2011, 2010, 2009), Solid Waste (2014, 2015), Sustainability Chapter/Comprehensive Plan Update (2014), Built Environment, City Operations, and Transportation; Outreach/Accountability(2014,2015).

A Commission member serves as a liaison with the CBJ Green Team.

ACCOMPLISHMENTS FOR 2015-2016

I. Energy

CBJ Energy Plan

The Juneau Climate Action & Implementation Plan (JCAP), which was adopted by the Assembly in 2011, establishes a community-wide emissions reduction target of 25% by the year 2032 and sets out a range of actions for accomplishing this goal. One recommendation of the JCAP was that the CBJ should develop an energy plan that “would identify and evaluate the technical and economic feasibility of renewable energy sources (including hydroelectric, biomass, solar, tidal, and wind) that will be available to meet the community’s future need” (Juneau Climate action Plan – November 2011, Executive Summary, page V). At its January 2013 annual retreat, the Commission decided to make the development of the energy plan a top priority for the year. In January 2014, the CBJ City Manager approved \$40,000 to contract for an energy plan and requested that the JCOS develop a draft scope of work for the plan. Professional consulting services provider Stantec was contracted and began working with the JCOS on the Juneau Energy Plan. The JCOS has continued to make the development of the energy plan a high priority action. Since the contract with Stantec began the JCOS has hosted multiple regular and work session meetings with Stantec to provide information and input on the development of the Juneau Energy Plan and working in collaboration with the CBJ has provided feedback and recommendations on the various phases of draft plan documents including the most recent work on the final draft of the Juneau Energy Plan, which is anticipated to be presented to the Assembly COW in June, 2016.

Airport Sustainability Plan

JCOS contributed to development of the Juneau Airport Sustainability Plan. A JCOS representative continued to attend Airport Sustainability Plan meetings and JCOS continued to ask questions and receive input from Sheinberg Associates. JCOS sent a letter providing comments on and questions regarding the plan.

Electric Vehicles

JCOS participated in the 2015 Earth Day activities at the Mendenhall Glacier Visitor Center with JCOS handouts containing electric vehicle information. Juneau Hydropower, Inc. supplied two electric vehicles for display and to allow Juneau residents to look at and ask questions about electric vehicles.

JCOS participated with other entities to enter electric vehicles in the 4th of July Parade. The parade entry had several different types of electrical vehicles including Nissan Leafs, Fords

and Chevrolets. In addition, Gastineau Guiding entered three electric trikes. Candy, float preparation as well as speaker and sound system rental was paid for by Juneau Hydropower. NOAA provided an electrical vehicle charger that was mounted on a truck flat bed provided by Chatham Electric. The parade entry won First Place for Vehicle Category in this past year's parade.

A smaller contingent of vehicles with the float participated in the Douglas Parade for the first time.

Building Energy Efficiency

JCOS continued its discussion with Charlie Ford (CBJ Building Official) and the Building Code Advisory Committee (BCAC) addressing CBJ Building Codes from an energy efficiency viewpoint. It was decided that to move forward with the development of building energy efficiency codes and implementation the JCOS should utilize the Juneau Energy Plan after it is finalized.

CBJ Bus Procurement

JCOS sent a letter to the City Manager's Office regarding the bid contract for CBJ buses requesting that the current RFP be opened for all bus providers (not merely diesel) in order for electric vehicle buses to be considered.

JCOS also suggested that Energy/Climate Change should be considered within CBJ's wider procurement policy.

CBJ recently submitted an application for grant funding for electric buses through the federally funded Low/No program. JCOS provided a letter highlighting how such vehicles strongly align with the JCAP and Comprehensive Plan goals.

CBJ Land Management Plan

JCOS reviewed the CBJ Land Management Plan and provided input regarding the use of sustainability language within the plan. JCOS encouraged CBJ land disposals to be developed to the maximum density practical and encouraged developments which placed an designed with emphasis on non-motorized transportation and transit.

CBJ Capital Improvement Program

JCOS reviewed the FY17-2022 CBJ Capital Improvement Plan (CIP) and provided input regarding the use of sustainability language within the plan. A letter was sent to CBJ Public Works regarding incorporating references to the Juneau Climate Action Plan CIP project descriptions that come before the Assembly. It was also suggested that initial proposals

from departments should incorporate a review of climate change impacts.

II. Solid Waste

Hosted discussions/presentations with Michelle Elfers (CBJ Engineering Department) regarding current CBJ recycling status and initiatives and regarding the bio-solids situation and provided feedback and recommendations.

III. Outreach/Accountability

Website

With cooperation from CBJ, continued to refine and update the Sustainable Juneau website (<http://www.juneau.org/sustainability/>), and to post current events and activities on Facebook (<https://www.facebook.com/SustainableJuneau>). One of the top actions in the Juneau Climate Action Plan is the development of a website that “provides information on energy conservation and energy efficiency and connects residents and business owners to local services and expertise.”

Events

See above entry regarding Electric vehicles in the Energy section.

Sustainability sessions lunchtime presentations:

John Neary/Alec Mesdag – Mendenhall Glacier Visitor Center Low Carbon Initiatives/Juneau Electric Vehicles

Greg Fisk - EV Downtown Circulator.

Green Team

JCOS has a liaison to the CBJ Green Team and the JCOS representative has been to the Green Team meetings whenever possible. The CBJ Green team has been meeting regularly to try and raise awareness within CBJ of the Juneau Climate Action Plan (JCAP) this includes presentations to departments and divisions within CBJ. Often it is found that CBJ is working deliver energy improvements but these are rarely reported back to JCOS.

PROGRESS ON IMPLEMENTING THE 2011 JUNEAU CLIMATE ACTION PLAN: A 5 YEAR REVIEW

In November, 2011, the CBJ Assembly adopted the Juneau Climate Action and Implementation Plan (JCAP) (Resolution 2593). Developed under contract with Sheinberg & Associates, with oversight by the Juneau Commission on Sustainability, it identified significant sources of GHG emissions in the community, a goal for reduction, and a wide menu of implementation actions.

The plan set a goal of reducing Juneau's GHG emissions by 25% over 20 years, by 2032. This goal was in line with commitments being made at that time by a number of other cities, states, and countries.

The JCAP identified a wide range of possible implementation measures, including both direct actions for the CBJ, and indirect measures to influence other government agencies, businesses, and households to help reduce GHG emissions. It also identified a set of "top actions" that could be carried out over a five year period. It did not commit the CBJ to completing all recommended actions, but rather to working toward GHG emission reduction targets.

Five years have passed since the JCAP was adopted. So how have we been doing in implementing it?

First of all, we don't know the bottom line. The CBJ has not yet updated the 2007 and 2010 energy use and GHG emission inventories.

Some of the data needed to update the inventory has been compiled for 2013 in preparation for the Juneau Energy Plan. However, a key piece needed for the update has not been available because some fuel oil companies in Juneau did not cooperate in providing data on fuel sales.

Implementation of "Top Actions"

- *"Support existing state and federal weatherization programs. Provide new local programs for weatherization, energy efficient upgrades, and new renewable energy system for commercial, rental housing, or multi-family buildings."*

No progress by CBJ. The state's weatherization and energy audit programs are ending due to budget cuts.

- *"Update the local building code to increase energy efficiency requirements for all"*

new commercial and residential buildings."

The JCOS has recommended this action to the CBJ Building Code Review Committee. Discussions are ongoing.

- *"Encourage federal, state, and local government agencies to conserve energy... and take a leadership role in reducing local energy use."*

Little or no formal progress by CBJ. The JCOS has developed a website with information on energy issues.

- *"Partner with the University and non-profits to develop local professional expertise in weatherization, energy efficiency, and energy saving technology. Develop this as a growth sector for community."*

No progress by CBJ.

- *"Support energy efficiency and renewable energy pilot projects in Juneau."*

Limited formal progress by CBJ. JCOS members and staff liaisons participate in the JEDC Renewable Energy Cluster. In general, the CBJ Assembly is supportive of such initiatives.

- *"Inform residents of existing incentives for and energy cost savings related to energy efficient vehicles. Provide local incentives for the purchase of fuel efficient vehicles."*

Some progress through the efforts of the Renewable Energy Cluster, coordinated by the JEDC, with cooperation between CBJ, AEL&P, Juneau Hydropower, and other groups.

- *"Evaluate the 2008 Transit Development Plan to determine which actions will garner the greatest reductions in GHG emissions and energy use. The plan recommends that CBJ consider limiting future fleet purchase to alternative fuel vehicles such as hybrid-electric vehicles."*

Limited progress. CBJ starting an evaluation of electric buses and has applied for grant funding for two electric buses for Juneau's Capital Transit system

- *"Improve the Cross-Juneau Bikeway as described in the 2009 Juneau Non-Motorized Transportation Plan."*

Little or no progress. The Juneau Rides organization has produced a cycle map of Juneau which it distributes to the public.

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- *"Coordinate with the Juneau Commission on Sustainability and the CBJ Green Team to implement a public outreach and education campaign, to educate local businesses and homeowners on the potential benefits and savings from energy conservation and efficiency."*

Limited progress. Some efforts by JCOS, through development of its website, participation in events such as Earth Day at the Visitor Center, and hosting several Sustainability Sessions.

- *"Allocate CBJ staff and resources to implement the Climate Action Plan."*

CBJ committed funds and staff time to development of the Juneau Energy Plan (see below). CBJ staff, through the CBJ Green Team, with assistance from JCOS, have conducted a series of information sessions and discussions on the JCAP with most CBJ departments.

- *"Develop an Energy Plan for Juneau, to identify and evaluate the feasibility of renewable energy sources to meet the community's future needs."*

In progress, through CBJ contract, with JCOS providing input and oversight. Draft plan in preparation.

Examples of other implementation actions taken by the CBJ:

- *"Strategy U2-A. Implement the recommendations of the 2008 energy audit to reduce energy use and emissions related to the existing water system."*

The Water Department has invested in more energy efficient pumps, and incorporated other energy efficiency measures in recent years.

- *"Strategy U4-A. Install energy efficient street lamps."*

This appears to be regularly being done by CBJ departments; CIP requests for street work often include requests for new LED lighting.

A number of other measures that reduce energy use and save money have probably been accomplished within the CBJ, but are not accounted for because there is no systematic process for tracking or reporting on them. There should be a list examples of capital improvements that improve energy efficiency: building renovations, etc. City has invested in ground source heat pumps for many major buildings including the Juneau International Airport, Mendenhall Valley Public Library, Dimond Park Aquatic Center and Auke Bay Elementary School.

Fortunately, additional factors are working in favor of the plan's goals. Energy efficiency technology has advanced, and costs for it have declined, since the plan was adopted. This includes areas such as LED lighting, air-source heat pumps, and electric vehicles. Additional related initiatives include USFS plans for development at the Mendenhall Visitor Center, and for the Juneau Ocean Center.

LED's have continued to fall in price, and appear to be having a significant impact on energy consumption in Juneau. For example, AEL&P report that a conversion of airport lights to LED's produced a notable reduction in community electricity load. The CBJ is regularly installing LED's in new and replacement street lighting.

Improvements in heat pump technology, and more local experience with them appear to be resulting in increasing numbers of installations. Air source heat pumps seem to be increasingly common for multi-family developments, and numerous residential installations have occurred in recent years.

The number of electric vehicles is increasing in Juneau. The EV initiative of the JEDC Renewables Cluster has resulted in increased information, and in placement of charging stations has helped encourage their use.

Recommendations

- Update the Juneau energy use and GHG emissions inventory with 2015 data. A revised approach to capturing fuel sales data from local companies may be required.
- Update the 2007 Juneau Climate Change – Predicted Impacts Report with current temperature and precipitation predictions based on the latest models.
- Establish a system for energy use and GHG emission tracking and reporting for all CBJ Departments. Many improvements are being made, and costs reduced, but there is no system for tracking them.
- Review and update Juneau's climate action goals. In the past 5 years the science has become clearer that GHG emissions must be reduced almost completely by 2050 in order to prevent significant negative impacts from climate change, including substantial sea level rises, extreme weather events, etc. The CBJ should consider adopting a goal of reducing GHG emissions by 50% by 2035, and 80-100% by 2050.
- Provide dedicated staff support for implementation of the Juneau Climate Action

and Implementation Plan, and the Juneau Community Energy Plan.

- Consider use of consultant to identify potential energy savings and monitor progress. This model has already been successfully implemented by Juneau School District.

DIRECTION FOR 2016 – 2017

The Commission is focusing its attention during 2016-2017 on these priorities:

I. Energy

- Juneau Energy Plan publication and adoption.
- Identify and develop input and revisions concerning building energy efficiency codes.
- Keep apprised of any energy utility developments.
- Accountability/environmental management/implementation within CBJ.

II. Solid Waste

- Biosolids
- Composting

III. Sustainability Awareness/Promotion/Outreach

- Sustainability speaker series including potential for video of presentations to be available via the JCOS website and other digital platforms.

IV. Food

- Understanding any current restrictions on local agricultural production (local, state, and federal).
- Development of a Food Security Committee.