# Juneau Renewable Energy Strategy

**Annex 1 - Public comments** 







From: Doug Woodby <doug.woodby@gmail.com>

Sent: Monday, October 31, 2016 7:36 PM

To: Juneau Energy Plan

Subject:Comment on Energy Plan: Do a Lot

This letter is in support of the "Do a Lot" future path for Juneau's efforts to reduce our community's use of fossil fuels. This is the responsible choice for future generations, and is the choice that will make Juneau one of the most desirable communities in the nation.

Doug Woodby 3240 Nowell Avenue 99801

From: Alec Mesdag <Alec.Mesdag@aelp.com> Sent: Monday, October 31, 2016 5:23 PM

To: Juneau Energy Plan Subject:JCEP Comments

Attachments: 20161031-AELP Comments-JCEP.pdf

Please see attached. (Attachment is on next pages)

Alec Mesdag Director of Energy Services

Alaska Electric Light & Power 5601 Tonsgard Court Juneau, AK 99801

907.463.6303 – Direct 907.723.2624 – Mobile



#### ALASKA ELECTRIC LIGHT AND POWER COMPANY

(907) 586-2222 FAX (907) 463-3304 612 W. Willoughby Ave., Juneau, AK 99801-1798

October 31, 2016

Juneau Commission on Sustainability 155 S Seward Street Juneau, Alaska 99801

**Dear Commission Members:** 

The Juneau Community Energy Plan (JCEP) v 3.26 attempts to "define goals for Juneau's energy future," and "to develop strategies and policies to achieve those goals." As the JCEP itself is a suggested action of the Juneau Climate Action Plan (JCAP), the report identifies goals to reduce energy derived from fossil fuels, thereby working toward the GHG reduction targets of the JCAP. However, in attempting to identify a path to achieve those goals, the Priority Actions listed in the report were chosen without analysis of the economic viability of those actions, nor of their impact on the community.

To identify the Priority Actions, a list of measures taken from the JCAP were rated by Juneau Commission on Sustainability (JCOS) members based on six evaluation criteria. Three of the six criteria – return on investment, reduced vulnerability, and energy savings within reasonable timeframe – require quantitative metrics for proper assessment. Because no quantitative metrics were provided, JCOS members were forced to make evaluations without the analysis necessary to understand the implications of their evaluations. Also, as return on investment on an energy project requires savings within a reasonable timeframe, including "savings within a reasonable timeframe" as a separate evaluation criterion allows misconceptions to become amplified in the results.

A core tenet of the Priority Actions is the replacement of carbon-emitting energy sources with hydroelectricity. Juneau did not save the best hydro resources for last, meaning new hydro plants will share existing risks for interruption, if not increase those risks. Mitigating interruptions requires backup generators close to Juneau, and as electric loads increase, the need for backup generation increases. Diesel generators will remain the primary source of redundancy for the foreseeable future, and the cost of their construction should factor into the economic evaluation of community-scale fuel switching.

The attached comments intend to provide additional information to help improve the quality of the report. Until the plan includes an evaluation of the financial and logistical viability of the listed Priority Actions, including an evaluation of community impacts as a result of pursuing the report's recommendations, the JCEP cannot be considered a "plan" but rather a statement of climate goals for Juneau's energy sector.

Sincerely,

VP & Director of Energy Services

#### DRAFT Juneau Community Energy Plan – Executive Summary Comments

- 1. The second paragraph of Page 1 makes two characterizations of fuel cost. Electricity is referred to as "economical" and fossil fuels as "typically expensive." These statements lack context. Today, if comparing the cost to heat with an electric boiler versus an oil boiler, fossils fuels are the economical choice. If comparing the cost to drive a vehicle with electricity versus gasoline, fossil fuels are expensive. Fuel cost is not a standalone metric.
- 2. The first paragraph on Page 3 states that the JEDC Renewable Energy Cluster Working Group (RE Working Group) is "developing concepts for a Juneau District Heating." The RE Working Group has a district heating action initiative that has been inactive for the last two years. An RE Working Group participant and current JCOS member is exploring the use of seawater heat pumps to supply a district heating system in downtown Juneau. The RE Working Group has received periodic updates about that effort but has taken no direct action on behalf of the project.
- 3. By identifying "supporting the electrification of mining operations" as a priority action, the executive summary incorrectly implies that the mines located in Juneau do not have electricity. A more accurate description of this strategy is to construct new hydroelectric resources and transmission infrastructure to displace diesel generation at mines currently served by diesel generators.
- 4. The executive summary states on page 3 that "Expansion of hydropower resources is the most obvious opportunity for increasing the supply of renewable energy in Juneau...Other possibilities include development of biomass, tidal, wind, and solar resources, although these appear to be considerably more expensive than hydropower or fossil fuels." These statements oversimplify economics surrounding energy production, delivery, and consumption. At various scales and under various conditions, any of the fuels that "appear to be considerably more expensive than hydropower or fossil fuels" can appear to be significantly less expensive than hydropower or fossil fuels. Blanket statements about the costs of various fuels are not terribly useful because the efficiency of energy conversion from one form to another, the transportation from source to end use, and many other factors influence the cost of energy.
- 5. Priority Strategy #2 is titled, "Increase use of electricity by cruise ships." The wording of this priority strategy is poorly chosen, and I assume the intent of this is to suggest increased use of hydroelectric energy while at port in Juneau. Ultimately, this is an action that can have value to the community and our hydroelectric supply, as the ability to sell surplus, interruptible energy to cruise ships can enable greater utilization of hydroelectric infrastructure. However, making this a priority strategy for CBJ is not likely the right path to go about this because the tools CBJ has at its disposal to implement this strategy are unclear and potentially counterproductive. There are significant technical issues associated with connecting too much cruise ship load in our small, isolated electric grid, and it may be some time before we can find cost-effective solutions for those technical limitations. Also, the "hotel" loads of cruise ships that visit Juneau represent only about 20% of their total loads while underway. This means that, while not as greatly influencing their emissions while at port, the greater environmental good would be to encourage the cruise industry to continue to implement emissions reduction technologies, which appears to be a major component of the industry's current strategy to lower their environmental impact globally.
- 6. Priority Strategy #6 calls for the community to "Reduce space heating dependency on fossil fuels."

  This very large goal should include a number of independently suggested measures, such as Priority Strategy #4. In terms of potential to be served at least in part by renewable energy and potential to

- increase efficiency, the use of heating districts could prove to be a useful strategy for achieving a reduction in space heating dependency on fossil fuels.
- 7. The inclusion of Priority Strategy #8: While there is merit to pursuing opportunities to offset diesel electricity generation, as done with the interruptible supply of electricity delivered to Greens Creek, choosing to supply either mine operating within the borough with an uninterruptible supply of hydroelectricity leaves the community vulnerable to the type of commodity risk identified as one major reason for avoiding fossil fuels. Hydroelectric costs are largely fixed, so the loss of revenue from a mine that ceases or greatly decreases its scale of operation creates a revenue hole that must be filled by the customers who remain in the system.

#### DRAFT Juneau Community Energy Plan – Plan Comments

- Perhaps the most glaring omission from the document is a substantive discussion of the Southeast Integrated Resource Plan (SEIRP) produced by AEA in 2012 and updated in 2016. As this regional energy planning document includes Juneau, it seems an imperative that Juneau's energy plan acknowledge the findings of that plan and its recommendations.
- 2. Section 2.2.5 "Self-generating users" on Page 19: This section references two types of industrial customers, mines and seafood processors, suggesting these industrial customers could be anchor tenants for new electric generation facilities. A major factor for determining whether a particular load can serve as an anchor tenant assuming that means a load that enables a new project the anchor load must remain in operation to purchase energy until such time as the revenue the anchor load provides is no longer necessary or the energy can be marketed elsewhere. If a mine or seafood processor cannot satisfactorily demonstrate they will remain in steady, financially sound operation for the duration required, they represent a risk to the financial success of the new generation facility.
- 3. Also in Section 2.2.5 on Page 19: The comment about wheeling appears to inaccurately describe the customer value of wheeling. An IPP wanting to wheel through the system is simply paying for their use of the system. Some of that use increases utilization and therefore offsets a cost to customers, and some impacts represent an increase in cost to customers that are merely offset by the wheeling charges. Some impact may not be able to be offset, like the potential decrease in reliability if, for example, increased loads reduce redundancy in sections of parallel transmission.
- 4. Top of Page 28: The first sentence states, "Supplying non-firm customers and potential demand such as the Kensington Mine (currently outside the AEL&P service area) could be considered as unmet demand..." Typically, "unmet" demand would be a situation where no capacity exists for a load, but all the loads listed currently have electricity supplied either from AEL&P on an interruptible basis or from their own generation. These loads may be unserved by hydro generation, either infrequently, as is the case with interruptible customers, or all the time, as in the case of Kensington, but they are not "unmet." The statement that these loads may sometimes or all the time use "...much more expensive diesel generated electricity" lacks context. If more affordable electricity sources of any kind were available, renewable or not, those entities would have great incentive to use the lowest-cost resource. Consider that a number of communities in SE Alaska use diesel generation. They do not use diesel generation because they have a preference for non-renewable sources of electricity. Those communities use diesel generation because local hydro projects are not cost justified relative to burning diesel.

- 5. Content on Page 28: This is a paragraph that is trying to describe unmet demand, cost of energy, impact of converting interruptible load to firm load, difference between IPP and utility delivered energy, wheeling charges, and transmission regulation. That's a lot to squeeze into a single paragraph.
- 6. "Timing the construction of new hydroelectric projects" on page 30: The sentence that states, "However, the Lake Dorothy Phase I supply would be hindered by Lake Dorothy Phase II so the net increase in hydroelectric capacity will be less than 80 GWh," is misleading. Average annual energy generated at Lake Dorothy following the construction of Phase II of that project would be 169 GWh, which is slightly more than double the average output of the facility currently.
- 7. "The role of private energy suppliers" on Page 31: The first sentence states, "In addition to local electric utilities, private energy suppliers also exist." There are no Qualifying Facilities in operation on Juneau's electric system.
- 8. Last paragraph on Page 31: A good way to describe avoided cost is this: if someone delivered energy to AEL&P for free, what costs would AEL&P no longer incur as a result of that delivery? The paragraph on page 31 states, "In the case of the existing supply situation in Juneau, this would see a QF having to sell its electricity at a cost that was less than using diesel generators." A couple things are wrong with that description. For one, AEL&P's avoided cost is the fuel cost of diesel generation only during those times when AEL&P is able to shut off, or avoid, diesel generation because of purchases from a QF, and those purchases from a QF would be at the same cost as burning diesel providing no savings to customers. If firm loads were growing to the point where it made sense to build a new generation plant or purchase from a QF, the avoided cost would be the cost of energy produced by a new plant, which AEL&P could avoid building by purchasing from a QF. For example, if the construction of a hydro facility at Sheep Creek were immediately necessary, and energy from a QF were available, the avoided cost would be the projected cost of the Sheep Creek project, not the cost of diesel. In practice, QFs only lower costs for customers when the QF and utility negotiate for a price lower than the utility's avoided cost. Otherwise, the extent to which a QF can beat the utility's avoided cost is simply retained by the QF. The RCA would only review the purchase price from a QF to ensure the cost was not higher than the utility's avoided cost, not to ensure that customers rates would not increase. Purchased power costs are passed on to utility customers, so if the purchase price from a QF is higher than the utility's existing average price of generation, then increasing purchases result in an increase in rates, but the increase would theoretically be the same whether the utility purchased from the QF or self-generated.
- 9. Last sentence on Page 34: Avista explored a number of mechanisms for helping to fund customer conversions without adding rate pressure to the proposed natural gas utility. One of those proposed options would have seen Avista create a fund to offset customer conversion costs, for which Avista would be eventually repaid through a CBJ property tax abatement. That suggestion was poorly received and is not currently being considered.
- 10. Footnote 48 on Page 39: Net metering is when the serving utility provides a 1:1 kilowatt-hour credit for energy delivered to the system through a customer meter. The customer typically cannot receive credit for more than they consume on their meter on an annual basis. There is no exchange of money for the value of the energy produced by a customer-owned renewable energy source with net-metering, it is a form of energy trading. What the footnote describes is more akin to a feed-intariff, which is when the metered output of a customer array is purchased at a set price by the serving utility.

From: Kathrin McCarthy < kwmccarthy@alaska.edu>

Sent: Monday, October 31, 2016 4:58 PM

To: Juneau Energy Plan

Subject:comments to energy plan draft

Attachments: Dear Juneau Sustanibilty Folks.docx

Here are our comments to the energy plan. (Comments are below) Dear Juneau Sustanibilty Folks:

I'm writing today in support of the "Do a Lot" option. That means 80 percent renewable energy by 2045. I believe this time frame should be sped up to provide be using a minimu of 80 % renewable energy much sooner that 2045. I am not infavor of converting heating in homes and electrical generation at the back up stations to natural gas. While it is a cleaner form of fossil fuel, it continues to have the serious problem of methane production from burning and leakage.

We are really fortunate to have local, renewable options for meeting most of our energy needs, using proven technologies that we already have here in town examples are ground source heat pump at Auke Bay School and sea water heat source energy at the Ted Stevens NOAA laboratory, Juneau Airport and Diamond Park Swimming pool. Yes, many of our friends have ground source or outside air heat pump technology in their homes. An yes the carbon foot print in these cases is much less and the heating bills are much less.

A major energy cost and carbon polluter is transportation. Because Juneau has one of the highest rates of electric vehicle ownership in the country (per capita) because our geography is perfect for EVs, we should be upgrading to electric buses, taxis and cruise ship docks, that would be a huge improvement in our energy use. I am really upset when I at a stoplight and the tour bus in front of me or at my side is spewing heavy duties fumes from their diesel engines. It would also save money since driving an EV in Juneau costs less per mile than driving a gas engine. These upgrades reduce greenhouse gases, save money and provide jobs for local residents. Of course, there is an up-front cost to greening our infrastructure and that is a legitimate concern in this time of budget crisis. But you don't change everything at once. You prioritize your list (as the energy plan has done) and start at the beginning. Then you use the money you save to make the next improvements.

When the school district hired an energy coordinator, they saved half a million dollars. And for the same cost as a monitor heater, an air source heat pump eliminates your fuel bill and is three times more efficient than electric baseboard heat. In fact, I once had a local business owner track me down after hearing me on the radio to tell me how much he was saving since he'd installed heat pumps in his building. He was ecstatic! That's why we've seen over 150 homes converted to heat pumps in the last year alone. It's good for business.

There is also a cost to not upgrading. I shudder to think of what ocean acidification is doing to our fisheries, the No. 1 employer in the state. As more fossil fuel carbons are absorbed by our oceans the acidification problem becomes more critical.

Juneau has the potential to be an oasis of fresh water, cool temps and relative stability going forward. Dominick Della Salla, a scientist for the Geos Group, calls the Tongass "a liferaft for biodiversity." We need to view our forest as a giant carbon sequestration plant and oxygen producer rather than logs for export.

We can look at this as a disaster, or we can realize that Juneau has the opportunity to be a leader in creating a vibrant, innovative, healthy future. The "do the most" priorities laid out in the energy plan would put us on the right track.

I also agree with the suggestion that Juneau city and borough initiate a work group to engage our local citizens to actually grow more of our own food. Without shipping from all over the globe, again, cost and emissions would both go down

Act now and lets get more sustainable and clean energy actually a reality in our little town.

Sincerely, Kathrin W. McCarthy Paul J. McCarthy 414 3<sup>rd</sup> St. Juneau Ak. 907-635-0051

From: duff.mitchell@juneauhydro.com Sent: Monday, October 31, 2016 4:18 PM

To: Juneau Energy Plan

Subject:Juneau Hydropower Inc and Juneau District Heating Comments on CBJ Draft Energy Plan Attachments: JHI and JDH CBJ Energy Plan comments Oct 31.pdf

JCOS Commissioners,

Please find attached the comments from Juneau Hydropower, Inc. and Juneau District Heating. (Attached document below) regards,

Duff
Duff W. Mitchell
Managing Director
Office Phone 907-789-2775
Cell Phone 907-723-2481



Juneau Hydropower, Inc. PO Box 22775 Juneau, AK 99802 www. juneauhydro.com Telephone: (907) 789-2775 Fax: (907) 375-2973

October 30, 2016

CBJ Energy Plan 155 S. Seward St. Juneau, AK 99801

Comments submitted via email: juneauenergyplan@juneau.org

Dear CBJ Juneau Commission on Sustainability, Mayor Koelsch and CBJ Assembly,

Juneau Hydropower is comprised of the soon to be constructed Sweetheart Lake Hydroelectric Facility and our subsidiary, Juneau District Heating. We have been privately investing our time, talent and money at home. Our efforts to develop cleaner and lower cost energy solutions will benefits our citizens, our Juneau employer industries and in doing so, will help Juneau position itself as a cost-effective Capital City.

Preparing, planning and taking action-steps to transform Juneau to 80% renewable by 2045 based on the draft CBJ Energy Plan (a strategic plan) provides widespread community economic and sustainability benefits. This clean, sustainable and smart direction for Juneau's energy needs and supply is supported by Juneau Hydropower and Juneau District Heating as we internally work to better the lives of our community citizens by "doing".

It is indeed challenging for any community to become 100% independent on locally sustainable energy sources due to the limitation of local renewable energy resource availability. Many communities have declared that they will become 100% sustainable with renewable energy. It is easier to declare than it is to become a fully sustainable community. This is not the case for Juneau. Juneau has the resource base, the leadership, widespread community support, the ability and economic means to transform and therefore has the responsibility to lower energy and heating costs for our Juneau community citizens in a sustainable manner. The Good Book says that to whom much is given, much is required. Juneau has been given much, the natural beauty and bountiful renewable energy resources surrounding Juneau is unprecedented and is the envy of less endowed communities. Therefore, transformation to a renewable energy basis for our community is not only realistic, doable, but required. The transformation to locally produced renewable energy resources not only makes our community resilient, and self-sufficient, but it is responsible. Transformation to a long term sustainable energy future as outlined in the CBJ Energy Plan provides economic benefits through the creation of local and sustainable jobs where our Juneau energy dollars stay and circulate within our local economy.

The Draft CBJ Energy Plan is a strategic plan in that it identifies "strategies". Strategic plans identify goals and strategies. The next step for our community is a tactical plan that identifies specific pathways and actions, invigorates private capital investment and establishes milestones to achieve the strategic plan. The CBJ Draft Energy Plan lays an energy policy foundation of

community strategies. Tactical execution and implementation actions of the plan will involve continual public and community involvement. The community outreach on this plan has drawn large community interest and support.

The overarching strategies of the CBJ Energy Plan are well thought out and lead our community toward a more robust and economically diverse energy future but also preserves the natural beauty and bounty of our community for generations to come. Juneau has been and continues to be a leader of sustainable and renewable energy developments. Our vast integration of geothermal heat pumps at our Juneau International Airport, our schools and the increasing adoption of air source heat pumps is already transformational. The electrification of the Franklin Dock for visiting Princess Cruise Line vessels was a "world's first". The seawater heat pump heating system at the NOAA Ted Stevens Marine Research Facility has led the nation in seawater heat pump technology deployment. Juneau has and continues to provide sustainable leadership at a national level. Juneau has quickly become a nationally leading Electric Vehicle community with many new EV's coming to Juneau every month. The CBJ Draft Energy Plan puts into policy what we are already doing and where we are going.

Our draft CBJ Energy Plan is the strategic plan and road map strategies necessary to develop a more detailed tactical plan. Therefore, the plan as written is an essential requirement in transitioning Juneau toward a sustainable, clean and smart energy future...all based on Juneau community values. The Do a Lot" alternative provides a crucial and a credible direction forward to propel Juneau as an innovative and leading edge energy, technology and model sustainable community. The CBJ Energy plan differentiates Juneau as a leader and helps our industries market our community based on our Juneau energy policy leadership, community values, innovation and natural resources. The passage of the CBJ Energy Plan provides a community policy document that serves as a catalyst for future federal, state and foundation grants/loan type funding requiring demonstrated community support and policy.

Juneau Hydropower, Inc. and Juneau District Heating support the "Do A Lot" Alternative that transforms Juneau from a fossil fuel dependent community to a lower cost, sustainable and renewable energy community for electricity, heating, transportation, industry and economic development.

Thank You,

D. Keith Comstock President and CEO From: Karla Hart <alaskabirder@gmail.com> Sent: Monday, October 31, 2016 3:29 PM

To: Juneau Energy Plan

**Subject:Comments** 

I support the work of many of my friends and concur with these comments:

We would like to take the opportunity to weigh in and express our views on the draft Energy Plan and ask for implementation for the "Do a Lot" alternative and seek that Juneau become 80% renewable by 2045 using the strategies identified in the Draft Energy Plan. The Draft Energy Plan wisely implements strategies to preserve Juneau for future generations by transforming our economy now.

- 1 Support energy efficiency measures for all buildings
- 2 Increase use of electricity by cruise ships
- 3 Adopt energy efficiency best practices for the CBJ organization
- 4 Explore and implement district heating for downtown core, and other suitable areas, preferably using renewable energy
- 5 Reduce dependence of transportation system on fossil fuels
- 6 Reduce space heating dependency on fossil fuels
- 7 Enhance land use regulations supporting energy efficient, compact, mixed use developments
- 8 Support electrification of mining operations using renewable energy

We look forward to the passage and implementation of the CBJ Energy Plan under the Do A Lot alternative.

Karla Hart

Dear Tim,

Please accept these late comments on the energy plan.

There seems to be a very high focus on electrification as a means to reduce the GHG emission in Juneau while other strategies are missing. I am interested in seeing more discussion and analysis on diverting waste from the landfill to achieve GHG emissions. By increasing recycling community wide and establishing a composting program, we can divert up to 70% of our waste stream. Landfill decomposition produces GHG's, so by diverting the waste to beneficial reuses we are reducing GHG emissions.

Thanks, Michele Elfers CBJ RecycleWorks Manager 586-0931

JuneauFrom: Energy Plan webpage comment Sent: Monday, October 31, 2016 2:17 PM

To: Juneau Energy Plan

#### Subject: Juneau Community Energy Plan Comment

Please consider the following comments on, and suggestions for incorporation into, the Draft JCEP: GENERAL COMMENTS: In general, the draft represents many hours of thoughtful work on behalf of the people of the CBJ. I appreciate that immensely and in particular appreciate the efforts to clarify the JCEP's relationship to, and overlap with, the earlier JCAP. The only general weakness I perceive in the Draft is a failure to acknowledge the potential powers, i.e. "Implementation Tools", that our citizens could exercise through public or cooperative ownership of critical energy infrastructure and energy-consuming public services. While the CBJ's current public-private ownership mix of public services may appear to be cast in stone, it is the result of historic choices and opportunities missed or taken. The public should be kept reminded of this as action options for future energy supply and consumption are considered. SUGGESTIONS: Section 5.2 (p. 55) Implementation Tools Add a bulleted item such as "Ownership Structure - CBJ could encourage and assist the creation of energy generation or consumer cooperatives or CBJ-owned entities." Add to the end of bulleted item "Incentive/Financing" "... , or discourage an undesirable activity through taxation or other disincentives." Section 5.4 (p.56) Consider adding a bulleted item such as "Advise and assist in CBJ's recommendations to the Alaska Utilities Commission [Regulatory Commission of Alaska] and other regulatory bodies." Figure 30: Priority Strategy Implementation Activities: bulleted item #4: Consider inserting after "business models" the words "... to include private, public, or consumer cooperative owned..." Consider changing the last sentence to read "Identify economic and equity advantages and disadvantages." Figure 30, bulleted item #8: - Add to the end of the sentence "..., over the projected operating mine life." Thank you for this opportunity to comment. John Dunker paigedunker@alaska.net

From: Alaska CAN! via ActionNetwork.org <info@actionnetwork.org>

Sent: Monday, October 31, 2016 2:02 PM

To: Juneau Energy Plan

Subject:Juneau Assembly, 80% Renewable by 2045!

Attachments: cbj-energy-plan\_signatures\_201610311001.pdf

Juneau Assembly,

37 people have signed a petition on Action Network telling you to 80% Renewable by 2045!.

Here is the petition they signed:

Dear CBJ Assembly Members,

We are writing today in support of 80% Renewable Energy by 2045. That is the "Do a Lot" option in the draft Juneau Energy Plan.

Specifically, we support the electrification of Juneau's transportation. That goes for cars, buses, taxis, and cruise ships. We also support the transition to heat pumps and district heating instead of oil or natural gas.

Please follow the priorities listed in the plan. Support these goals by hiring an Energy Coordinator (a job that we know would pay for itself in cost savings); and by including them in ordinances and codes so that they will have a timeline and teeth for implementation.

We cannot afford the "Business as Usual" scenario. Thank you for being proactive in tackling this challenge.

Sincerely,

You can view each petition signer and the comments they left you below.

Thank you,

Alaska CAN!

1. An anonymous signer (zip code: 99801)

2. Alaska CAN! (zip code: 99801)

3. Karla Hart (zip code: 99801)

4. Elaine Schroeder (zip code: 99801)

5. Britta Tonnessen (zip code: 99801)

6. Chilton Bowman (zip code: 99801)

7. Doug Woodby (zip code: 99801)

#### 8. Elisabeth Genaux (zip code: 99801)

#### 9. John Nagel (zip code: 99801)

I think Juneau could make the transition by 2030. Especially in ground transportation. We have the hydro infrastructure in place for electricity. As for heating, heat pumps in most places are the way to go. We really don't need(accept perhaps as backup) anything petroleum based for electrical generation.

10. Gretchen Keiser (zip code: 99802)

#### **11. Gary Miller** (zip code: 99801-8211)

Juneau is being hit by climate change. Our spruce trees have spruce mite and only cold weather kills them. We also have arctic communities facing rising oceans and polar bears and walruses that don't have the sea ice they need.

Every community in America should be doing its part and renewable energy will help. That includes Juneau.

12. Helena Fagan (zip code: 99801)

13. Jamie Bursell (zip code: 99801)

#### 14. Jeannette Cook (zip code: 99801)

I support doing a lot to reduce fossil fuels. Natural gas is not an adequate substitute and we as a community should also be pursuing non-fossil fuel and gearing toward the lowest carbon footprint options. Phasing in natural gas will only create another problem that will need phased out in the next couple of decades.

Thank you for all your work!

#### **15. John Neary** (zip code: 99801)

Juneau has abundant hydropower....let's use it! Electrify our transit, our heating, and set the bar high. Let's strive for 80%.

16. Jeff Redmond (zip code: 99824)

17. Katy Nalven (zip code: 99801)

18. Linda Buckley (zip code: 99802)

19. Mary Ann Dlugosch (zip code: 99801)

20. Margo Waring (zip code: 99801)

#### 21. Mark Miller (zip code: 99801)

I spent a month in Germany and Austria this summer. All the trains and buses are electric. Sustainable energy and conservation is evident everywhere. America is far behind this progress.

Juneau needs to take a leading role by better insulating more homes, promoting heat pumps and stimulating energy innovation.

Sincerely, Mark Miller

- 22. Maryann Ray (zip code: 99801)
- 23. Marsha Buck (zip code: 99801)

#### 24. Morgan Michels (zip code: 99801)

The priorities in the Juneau Energy Plan have immense implications for this community. Specifically, electric forms of transportation make sense in Juneau. We have a set amount of road to drive and hydroelectric power already that makes it so simple for us to limit our emissions. Thanks for taking the time to listen to the community and take action, your dedication and service are so important in facing these challenges.

25. Lin Davis (zip code: 99801)

Let's show the country we can do renewables quickly.

- 26. Mollie Dwyer (zip code: 99821)
- 27. mary willson (zip code: 99801)
- 28. Gretchyn O'Donnell (zip code: 99801)
- 29. Patricia OBrien (zip code: 99803)
- 30. Kristen Lyda Rees (zip code: 99801)
- 31. Sara Willson (zip code: 99801)

Let's DO the work to implement this - no more studies, drafts, committees!

- 32. John S. Sonin (zip code: 99801)
- 33. Lucy Squibb (zip code: 99821)
- 34. Susan Clark (zip code: 99801-1535)

Please help us move off of oil dependence. Thank you.

From: Juneau Chamber < jcc@alaskan.com> Sent: Monday, October 31, 2016 1:34 PM

To: Borough Assembly Cc: Rorie Watt; Ken Koelsch

Subject: Juneau Chamber of Commerce - Comment on Energy Plan

### [Attachment below]

Craig E. Dahl, Executive Director Juneau Chamber of Commerce 9301 Glacier Hwy, Suite 110 Juneau, AK 99801

907- 463- 3844 (Office) 907- 957- 4331 (Cell) 907- 463- 3849 (FAX)



## The Juneau Chamber of Commerce

9301 Glacier Hwy, Suite 110 • Juneau AK 99801

# Board Members Eric Eriksen, President

Dan Fabrello, Past President Bruce Denton, Treasurer Huna Totem Corp. Mike Satre, Secretary Juneau Empire Lance Stevens Alaska USA FCU Max Mertz Elgee Rehfeld Mertz Bill Peters, Bruce Abel Don Abel Building Supply Travis McCain Hayden Garrison Charlie Williams Linda Thomas Alaskan Brewing Co Erica Simpson Richar d Burns Dan Bruce

# Baxter, Bruce & Sullivan Benefactor Members

Alaska Airlines
Alaska Communications
Alaska Marine Lines
Exxon Mobil
Fred Meyer
Huna Totem Corp.
Juneau Empire
Juneau Radio Center
Northrim Bank
Sealaska

#### Platinum Members

Alaska USA FCU Alaskan Brewing Company Alaska Litho Allen Marine Bartlett Regional Hospital BP Alaska CBJ (Manager's Office) Capital Office Systems Chad Erickson State Farm Chatham Electric Coastal Helicopters Coeur Alaska, Inc. ConocoPhillips Coogan Construction Delta Western Elgee Rehfeld & Mertz First Bank First National Bank of Alaska GCI Goldbelt, Inc. Hecla Greens Creek Mining Key Bank SEARHC Shattuck & Grummett Samson Tug & Barge Sportsman's Warehouse Taku Glacier Lodge Taku Oil True North FCU Wells Fargo Bank of Alaska

October 31, 2016

Honorable Mayor Ken Koelsch And Assembly Members City and Borough of Juneau 155 S. Seward Juneau, Alaska 99801

Re: Energy Plan

Dear Mayor Koelsch and Members of the Assembly:

The Juneau Chamber of Commerce Resource & Infrastructure Committee reviewed the Community Energy Plan and developed a series of comments and concerns with the existing document. The committee's work was subsequently reviewed and approved by the Chamber Board of Directors. This letter summarizes these findings.

In its current state, the Juneau Community Energy Plan is a plan in name only. The document's shortcomings include the lack of clearly defined goals and insufficient research to support recommended actions. These issues appear to result from the decision to use the Juneau Climate Action Plan as the document's foundation, coupled with the Juneau Commission on Sustainability's unsubstantiated perceptions of the value of actions recommended by the Climate Action Plan.

The document names two optional goals, either reduce greenhouse gases by 25% or reduce greenhouse gases by 80%. The authors state that since a correlation exists between energy consumption and emissions, a climate goal equals an energy goal. If this is true, then a contracting economy equals progress, and a growing economy equals a step backwards. The fact that the Juneau Commission of Sustainability did not recognize this implication of their goals undermines their credibility in overseeing the creation of an energy plan.

The Juneau Chamber of Commerce understands the value of low and stable energy costs, as well as a reliable supply of energy capable of accommodating growth in our local economy. We also recognize the need to work with, and not against, the interests of affected partners in order to achieve results. This document lacks any of the financial analysis necessary to distinguish between dreams and feasible goals, and the authors of this

document did not seek input from many businesses at risk of significant harm if its recommendations are pursued. For example, we have specific concerns with the following:

Energy Efficiency Measures for All Buildings: Improving energy efficiency should remain a goal to the extent that a particular measure or mandate can provide a demonstrable economic benefit. Toward that end, if CBJ wishes to set an efficiency mandate through code requirements or a similar path, they should first demonstrate the benefit with cost-testing methods. Efficiency efforts should not exacerbate known issues, such as Juneau's housing crisis.

Hiring of an Energy Manager: Given the variety and complexity of CBJ building types and systems, hiring a single energy manager will likely not yield the best possible long-term results. Instead of creating a new position, CBJ should work with an energy management firm with the in-house resources to address the breadth of opportunities in CBJ. This type of contract work can vary in scale over time to appropriately reflect the potential for diminishing returns.

Increasing Use of Electricity by Cruise Ships: The CBJ Greenhouse Gas Inventory excludes emissions by cruise ships, so increasing hydroelectric supply to cruise ships will not directly address the emissions goals in this document. In addition, there are technical limitations in the electric system which will make it very difficult to provide power to additional ships, making the one year goal unachievable. Rather than taking action to force the cruise industry to divert capital investment toward a strategy that will only offset emissions for hotel loads while in port at a limited number of locations, CBJ should support the cruise industry's intent to invest over \$1 billion in emissions reduction technologies that will reduce emissions while at port and underway. The global reductions in emissions as a result of this approach will greatly exceed the maximum potential reduction in emissions possible by electrifying additional docks in Juneau.

<u>Uninterruptible Mine Electrification</u>: Due to the remote location of the two producing mines, truly uninterruptible electrification will never be achieved. Therefore the mines will always have to maintain backup diesel generation facilities for use when power cannot be delivered. The plan also needs to recognize that if the goals of increasing the use of hydropower are achieved in the Juneau urban area, sufficient surplus power may not be available for sale to the existing electrified mine and that the reductions in GHG emissions will simply be offset by increased diesel use at the mine. Reductions in sales to a large industrial surplus customer will result in an increase in rates to the firm commercial and residential customers in Juneau.

<u>Public Process</u>: The Sustainability Commission, according to the CBJ website, met at least eight times during 2016 prior to releasing the document. Minutes for only three of those meetings are available, and these only in draft form. It is impossible, therefore, for the public to adequately evaluate the Sustainability Commission's deliberations and decision-making that led to the development and release of the document. This raises serious concerns about transparency, the sufficiency of the Commission's process, whether appropriate CBJ policies for open meetings were followed, and whether any potential conflicts of interest were adequately disclosed. We believe that any action relative to the document should be suspended until, and if, these concerns can be addressed.

We believe that there are enough inconsistencies in the assumptions and conclusions in this document, that it not be adopted as a "Plan", and instead accept it as a report needing further technical and financial justifications to support the assertions.

Respectfully Submitted

Craig E. Dahl, Executive Director Juneau Chamber of Commerce

From: Erich Schaal <erich\_870@hotmail.com> Sent: Monday, October 31, 2016 1:37 PM

To: Tim Felstead

Subject:Juneau Community Energy Plan Comments

Attachments: Juneau Community Energy Plan Comments.pdf

Dear Mr. Felstead,

Please find attached my personal comments on the Juneau Community Energy Plan.

Theses comments are in my own and separate from my position with CBJ. [Attachment below]

Sincerely

Erich Schaal

Juneau Community Energy Plan Comments

Erich Schaal

4945 Hummingbird Lane

Juneau, AK 99801

Dear Mr. Felstead and the JCOS committee,

Please find below my personal comments on the Juneau Community Energy Plan.

**Priority Strategies:** 

- 1. I agree that updates to the building code are warranted for energy improvements. I suggest JCOS work with CDD to provide easy to understand guidelines for developers and homeowners explaining how to meet any new requirements.
- 2. This particular strategy is misguided and the 1 year time frame to implement is naive and unworkable. The technical requirements for building a shore tie power connection system that can accommodate a myriad of different size and classes of vessels makes it extremely difficult. This complexity requires all the parties involved to be vested in the project and so far it appears AEL&P and the cruise industry are not there yet. If Juneau's sole power provider says we lack the necessary capacity and the cruise industry cannot provide a plan to power all their ships, there is little the community can do in 1 year.

In addition, when one looks at the length of time cruise ships are in port, approx. 8-10hrs per day, most of the emissions produced while sailing within SE Alaska will not be affected. The ships produce vastly greater amounts of CO2 while traveling between destinations and only run generators while in port. It would have a greater impact to look at systems, such as emission scrubbers, that are reducing emissions at all times.

- 3. I support this strategy. Many CBJ departments are housed in leased properties that are poorly built and maintained. It would have a tremendous effect on the city to house employees in energy efficient and healthy buildings meeting current LEED standards. The assembly will have to stand with resolve when private building owners cry foul as they lose lease revenue while the shift takes place. I believe this is one reason there has been little movement in this area of improvement.
- 4. A new district heating system will require several anchor users to get the ball rolling. I recommend we construct a new City Hall, built to LEED Gold or Platinum standards, and it could serve as one of those anchor users. It would also support #3 above.
- 5. Why is this so far out in the future at 10 years? New fleet vehicles are purchased every year, why would CBJ wait to investigate where electric vehicles could be used today?

6. I agree that the community should look at alternative forms of heating systems wherever possible. Homes with access to the water could use geothermal systems that don't require drilling wells or building extensive loop systems in the uplands.

Furthermore, Juneau has abundant biomass opportunities that have not been realized. Currently homes only use Juneau's biomass in the form of cord wood burned in wood stoves. Many residents spend their free time driving around with their chainsaws looking for down trees that are easy to access so they can cut and split their own firewood. There is no more sustainable heating fuel than this. Unfortunately, the Mendenhall Valley air quality issues have greatly diminished this option for close to 13,000 residents (according to figure 10) during the coldest months of the year.

In order to make use of local biomass and still meet the stricter emissions requirements within the Mendenhall Valley, the City should partner with the US Forest Service to expand and develop biomass heating systems that burn wood chips or wood pellets. There is a wood pellet mill in Ketchikan, but it cannot produce wood pellets any more affordable than those produced in Oregon or Washington and shipped up by retailers in Juneau. The major issue is the shipping costs for bulk materials, not to mention the emissions created in shipping them.

In order to be most sustainable and affordable, these fuels must be processed in Juneau. Each year brush cutting operations by DOT and AEL&P produce hundreds of tons of biomass waste that could be used in efficient wood chip boilers. These chips are currently left on the side of the road to decompose or given to locals for use a mulch. Several other SE communities have wood chip boilers that burn locally produced biomass.

CBJ is the largest non-federal landowner in the borough and it should lead the way in making biomass available for wood chipping or pelletizing by private industry. This will take leadership and direction from the CBJ Lands Department as well as with the Assembly. Most residents have not seen logging in and around Juneau for half a century but it doesn't have to be ugly or unsightly. There are several tracts of CBJ land that were logged many years ago and have regrown with thick, spindly spruce trees that are unhealthy and overcrowded. These areas include Pederson Hill, Mendenhall Peninsula and the area between the Consolidated Public Works Building and Fred Meyer's. These areas could be selectively thinned, not clear cut, and produce a vast quantity of high quality chips and leave the land in much better shape for future.

These chips can be processed in town to create heating fuel for high efficient home boilers that are available today from several certified manufacturers.

#### 7. No comments.

8. Why is this 5 years out if #2 has a 1 year timeline? The mining companies either want hydroelectricity or they don't. It won't take them long to make a business decision.

General comments: I recommend that we focus on our local resources first and not forms of energy that must be shipped in from outside. These are improved and expanded hydroelectricity, biomass, geothermal, tidal and wind energy, in that order.

We can make Juneau stronger and more sustainable if we can build on our local resources and strengths. We have an abundance of rain, trees, and water that should receive our first attention. We should seek out experts to help us turn our resources into useful forms of energy while also working to build more efficient and healthy buildings. The City should lead the way by addressing multiple buildings that are highly inefficient and unhealthy work spaces.

Sincerely,

Erich Schaal

From: Uyanga Mendbayar < umendbayar@alaska.edu>

Sent: Monday, October 31, 2016 11:40 AM

To: Juneau Energy Plan Subject:Comment on JCEP

Attachments: Comment for JCEP Angie.docx

Hi there,

Attached, [Attachment below] please find my comment on JCEP. Thank you for all that JCOS is doing for Juneau!

Myself and many other climate change activist would be more than happy to collaborate on putting the energy plan into practice.

Happy Halloween!

Angie

Re: Comment to the Juneau Community Energy Plan (JCEP)

Dear Sirs,

I am a member of the Alaska state chapter of the Interfaith Power & Light (IPL), a national climate action group that focuses on the moral implications of climate change. Members of the Juneau IPL group have discussed about JCEP at several meetings. First of all, we are very grateful for Juneau Committee On Sustainability (JCOS) for taking such a pragmatic approach by organizing public energy meetings and getting public comments in order to go forward with the community energy plan.

The Alaska IPL group is committed to advocating the "Do a Lot"–80% reduction in GHG by 2045— version of the plan. Our group and other local climate change activists would be more than happy to support JCOS in any way possible in order to reach the goal of 80% reduction. As members of the community, we can reach out to both the local government and other members of our community to promote sustainability.

Our IPL group is currently working with around ten congregations and faith groups in Juneau. At the same time, we are also working to sign up more congregations. Our objectives include,

but are not limited to: 1) improve energy efficiency of church and monastery buildings 2) encourage more sustainable practices in churches and monasteries 3) educate the congregants in sustainable living.

I believe Juneau is a fairly dense, small-size community, thus it will be a perfect model to lead as a sustainable community. Moreover, renewable energy is not only reliable, but also its technology is advancing everyday, making it more affordable. Therefore, Juneau should shift towards the futuristic, economic, and sustainable technologies to decrease our dependence on volatile and destructive fossil fuels.

Please keep us posted as you move forward with the energy plan. You can email me at <a href="mailto:umendbayar@alaska.edu">umendbayar@alaska.edu</a>, and I will spread the word out. Let us collaborate as effective as possible to make the capital city of Alaska one of the world-leading sustainable community! Sincerely,

Uyanga (Angie) Mendbayar

M. Yuma

From: Lin Davis <molin@gci.net>

Sent: Monday, October 31, 2016 10:53 AM

To: Juneau Energy Plan

Subject:Feedback on CBJ Draft Energy Plan

#### Dear CBJ:

Thank you for the opportunity to comment.

I prefer the "Do a Lot" Alternative that seeks 80% renewable energy by 2045. And as someone who use the bus as much as possible rather than our car, I especially support Strategy #5: "Reduce dependence of transportation system on fossil fuels. 10 years ago we got rid of our 2nd car, and I was able to take the express bus to my job at the Juneau Job Center. I'm glad Capital Transit has purchased 2 electric buses and forward to all the ways electric transportation will transform Juneau.

With downtown district heating, cruise ship and mining operations transition to electricity, energy efficiency measures for all buildings, Juneau can show the rest of the country how quickly and effectively we can be renewable.

We live in West Juneau and have neighbors with solar panels and a heat pump. Their energy efficient practices are so inspiring. A couple trips to Europe have shown me how much more progress the EU has made in not using fossil fuels.

Thank you for all the hard planning work, and here's a shout-out to all CBJ energy systems transitioning quickly to electric, hydro and non fossil fuel applications.

Lin Davis Maureen Longworth 3099 Nowell Ave Juneau, AK 99801 586-4111

From: Danielle Redmond <a href="mailto:com">dmbredmond@gmail.com</a>

Sent: Monday, October 31, 2016 10:16 AM

To: Juneau Energy Plan Subject:Energy plan comments

Attachments: Energy Plan Comments DBR.pdf

Dear JCOS and Juneau Assembly,

Thanks so much for all the work that has gone into the draft energy plan. I look forward to seeing a robust plan approved and hope that it will be followed up with strong action. Please find my comments for the draft energy plan attached. [Attachment below] Best Regards,

Danielle Redmond

# I am writing today in support of the "Do a Lot!" option in the Juneau Energy Plan. I want to see Juneau at 80% renewable energy by 2045.

Dear Juneau Commission on Sustainability,

Thank you for taking the time to produce this draft energy plan. As a Juneau resident and the mother of 2 small children, it is extremely important to me that we take the long view and put our community on track to thrive well into the future.

#### Government has a duty to administer responsibly and justly.

The recommendations set forth in this energy plan have to be evaluated in their larger historical context. These are not aesthetic decisions. Climate change poses an existential threat under the "business as usual" scenario.

Energy use and city planning have real-world consequences that impact not just our own community but the entire globe. For example, Bloomberg featured this headline on Aug. 29, 2016: "The Toughest Question in Climate Change: Who Gets Saved?" The story was about an island on the Gulf Coast and Newtok, Alaska, and how both places are in danger as a result of outside actions.<sup>1</sup>

There is a growing awareness that government agencies have a duty to administer in ways that preserve the climate.

#### The good news

The good news is that Juneau has abundant natural resources and many good options for meeting our needs in clean, renewable, responsible ways.

While only 20% of our energy currently comes from hydropower, heat pumps, district heating, and electric transportation (not to mention basic efficiency & weatherization) have enormous potential to improve those statistics! These are proven technologies that we already have in town.

To put it bluntly, we've got a ton of low-hanging fruit in terms of efficiency and renewable energy.

<sup>&</sup>lt;sup>1</sup> <u>https://www.bloomberg.com/view/articles/2016-08-29/the-toughest-question-in-climate-change-who-gets-saved</u>

#### Cost

There is an up-front cost to greening our infrastructure and that is a very real concern in this time of budget crisis. But **once implemented**, **these changes result in significant cost savings**.

For example, when the school district hired an energy coordinator, they saved half a million dollars. EV owners have found these cars far more affordable to drive. And for the same cost as a monitor heater, an air source heat pump eliminates your fuel bill, and is 3x more efficient than electric baseboard heat. I once had a local business owner track me down after hearing me on the radio to tell me how much he was saving since he'd installed heat pumps in his building. He was ecstatic! Which is why we've seen over 150 homes converted to heat pumps in the last year as well. It makes economic and environmental sense.

#### There is also a cost to *not* upgrading.

We can't afford the "business as usual" option. Ocean acidification alone, and its impact on our fisheries, should be of enormous concern. Couple that with wildfires, melting permafrost, and coastal erosion, and the numbers get big fast. In fact, the cost to relocate Shishmaref, a single Arctic village, has been estimated at \$180 million dollars.<sup>2</sup> One report recently found that climate change will cost the Millennial generation \$8.8 Trillion.<sup>3</sup>

Focusing on the State of Alaska, a 2007 ISER report found: "Our preliminary estimate using these models is that the public infrastructure at risk, or vulnerable, after accounting for likely adaptations, is in the range of \$3.6 to \$6.1 billion for the period 2006 to 2030 and from \$5.6 to \$6.7 billion, for the longer planning horizon to 2080. Without adaptations, the long-run costs could be billions of dollars higher." That ISER report included some useful charts which can be found in the pdf linked below.

This report was written almost 10 years ago, before Gov. Parnell disbanded the climate commission that Gov. Palin had set up. The adaptations accounted for in their calculations likely did not happen, making this a very conservative estimate.

<sup>&</sup>lt;sup>2</sup> https://www.theguardian.com/us-news/2016/aug/18/alaska-shishmaref-vote-move-coastalerosion-rising-sea-levels

https://nextcity.org/daily/entry/report-climate-change-cost-millennials-trillions

<sup>4</sup> http://www.iser.uaa.alaska.edu/Publications/JunelCICLE.pdf

<sup>&</sup>lt;sup>5</sup> https://accap.uaf.edu/sites/default/files/TNC Climate Costs November 2007.pdf

### <u>Implementation</u>

How are we going to get there?

- · Start with the priorities listed in the report.
- Create an Energy Coordinator position at CBJ to bottom-line these tasks. This job pays for itself, as the school district has already found.
- Create a revolving loan fund for heat pumps and other efficiency upgrades, as was done to solve the airplane noise issue a few years ago.
- Use building codes to require energy efficiency in new construction.
  - Support efforts to build a "tiny home park" for efficient and affordable housing.
- Codify the energy plan into ordinances that give it some teeth and set a timeline for implementation.

#### **Home Heating**

- Incentivize heat pumps, efficiency, and weatherization.
- District heating loops could be used not only in downtown but also Douglas, Salmon Creek, Lemon Creek, and the Mendenhall Valley.
- Do <u>not</u> invest city resources in natural gas. Reject the request by AEL&P/Avista for a tax abatement. Natural gas is bad for the environment and human health. New studies from Harvard, Cornell, and Stanford show that natural gas releases far more methane than previously thought, making it as bad for the climate as coal or oil, particularly when used for the purpose of heating.<sup>6</sup>

#### Transportation: Cars, Buses, and Boats

- Continue to support the electric vehicles. As you probably know, Juneau has one of the highest rates of EV ownership in the nation! Let's keep the momentum growing!
- Electrify the Capital Transit fleet.
- · Electrify the cruise ship docks.
- Provide incentives for the tourism industry to use electric buses.
- Provide incentives for electric taxis.

#### Food

Growing local produce is a lot of bang for your sustainability buck.

- It lowers shipping cost & emissions.
- It creates local resilience in the face of drought & disaster elsewhere.
- It provides fresher, healthier food.

<sup>&</sup>lt;sup>6</sup> http://www.alaskaclimateaction.org/natural gas greenhouse footprint

 It's something that most people support whether they care about climate change or not. For example, the Harvest Fest at the Community Garden in the valley brings together people from across the political spectrum.

What can we do to promote more produce in CBJ? More community gardens? Incentives for a larger commercial venture?

Here is a great article & video by ADN about a man growing produce in Nome.<sup>7</sup>

### **Sharing Ideas**

Many other cities have also been tackling these issues. Here are just a few examples of what other cities are doing.

- This is a great compilation of resources from the State of Alaska Regional Affairs Division.<sup>8</sup>
- This English village has quietly reduced its greenhouse gas footprint by 24% over the last 10 years.<sup>9</sup>
- Vancouver, B.C. will require zero emissions from any new buildings by 2030, based on a policy approved July 13, 2016.<sup>10</sup>
- Portland is now generating hydropower from its water system in the pipes! Not only is this technically innovative, it shows how public/private partnerships can work for progress.<sup>11</sup>
- Rekjavik, Iceland plans to reduce its greenhouse gas emissions to zero by 2040 by reversing urban sprawl and promoting walking, cycling and public transport.<sup>12</sup>

<sup>&</sup>lt;sup>7</sup> http://www.adn.com/rural-alaska/article/farmer-western-alaska-tills-tundra-green-riches/2015/06/21/

<sup>8</sup> https://www.commerce.alaska.gov/web/dcra/ClimateChange.aspx

 $<sup>^9 \ \</sup>underline{\text{http://www.nytimes.com/2016/08/22/science/english-village-becomes-climate-leader-by-quietly-cleaning-up-its-own-patch.html?emc=eta1\&\ r=2$ 

<sup>&</sup>lt;sup>10</sup> http://www.greentechmedia.com/articles/read/vancouver-leapfrogs-energy-efficiency-adopts-zero-emissions-building-plan

<sup>&</sup>lt;sup>11</sup> http://www.opb.org/news/article/portland-now-generating-hydropower-in-its-water-pipes/

<sup>&</sup>lt;sup>12</sup> https://www.theguardian.com/sustainable-business/2016/oct/03/reykjavik-geothermal-city-carbon-neutral-climate

#### In Conclusion

Juneau has the potential to be an oasis of fresh water, cool temps, and relative stability compared to many parts of the world going forward. Dominick Della Salla, a scientist for the Geos Group, has gone so far as to call the Tongass "a life raft for biodiversity." So we can look at this as a disaster or we can realize that Juneau has the opportunity to be a leader in creating a vibrant, innovative, healthy future.

Thank you for working on this.

Sincerely, Danielle Redmond

From: Duff Mitchell <duff.mitchell@yahoo.com> Sent: Monday, October 31, 2016 9:00 AM

To: Juneau Energy Plan

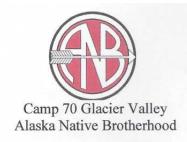
Cc: Marcelo Quinto; Marcelo Quinto; Paul Moran

Subject:ANB Camp 70 Glacier Valley Comments on the CBJ Draft Energy Plan Attachments: ANB Camp 70 CBJ Energy Plan comments 10-31-16.pdf

#### JCOS,

Please find attached [Attachment below] comments from the ANB Camp 70 Glacier Valley signed by Camp 70 President, Marcelo Quinto. President Quinto handed me the copy of the ANB letter and asked me to timely file the camp comments on behalf of the Juneau Glacier Valley Camp. Mr. Marcelo Quinto and Mr. Paul Moran (Secretary) are CC on this correspondence.

Duff



October 31, 2016

Ken Koelsch, Mayor Rorie Watt, City Manager City and Borough of Juneau 155 South Seward Street Juneau, AK 99801

ANB Camp 70 Glacier Valley comments on CBJ Draft Energy Plan

Dear Mayor Koelsch and City Manager Watt,

The Alaska Native Brotherhood Camp #70 Glacier Valley Camp consists of ANB members throughout the Juneau area. The Alaska Native Brotherhood and Sisterhood were founded in Sitka in 1912.

We would like to take the opportunity to weigh in and express our views on the draft Energy Plan and ask for implementation for the "Do a Lot" alternative and seek that Juneau become 80% renewable by 2045 using the strategies identified in the Draft Energy Plan. Our Native peoples have inhabited this beautiful area since time immemorial. The Draft Energy Plan wisely implements strategies to preserve Juneau for future generations.

- 1 Support energy efficiency measures for all buildings
- 2 Increase use of electricity by cruise ships
- 3 Adopt energy efficiency best practices for the CBJ organization
- 4 Explore and implement district heating for downtown core, and other suitable areas, preferably using renewable energy
- 5 Reduce dependence of transportation system on fossil fuels
- 6 Reduce space heating dependency on fossil fuels
- 7 Enhance land use regulations supporting energy efficient, compact, mixed use developments
- 8 Support electrification of mining operations using renewable energy

ANB Camp 70 looks forward to the passage and implementation of the CBJ Energy Plan under the Do a lot alternative.

Regards,

Marcelo Quinto

President

ANB Camp 70 Glacier Valley

2551 Vista Dr. C202 Juneau, Alaska 99801 From: Patricia O'Brien <patriciaobrien@gci.net> Sent: Monday, October 31, 2016 4:21 AM

To: Juneau Energy Plan Subject:Comments on energy plan

- 1 Support energy efficiency measures for all buildings
- 2 Increase use of electricity by cruise ships
- 3 Adopt energy efficiency best practices for the CBJ organization
- 4 Explore and implement district heating for downtown core, and other suitable areas, preferably using renewable energy
- 5 Reduce dependence of transportation system on fossil fuels
- 6 Reduce space heating dependency on fossil fuels
- 7 Enhance land use regulations supporting energy efficient, compact, mixed use developments
- 8 Support electrification of mining operations using renewable energy

Patricia OBrien (907) 789-9405

From: Gretchen Keiser < gekeiser@gmail.com> Sent: Sunday, October 30, 2016 9:33 PM

To: Juneau Energy Plan Subject:Draft Energy Plan

Assembly Members, City Manager, Sustainability Committee:

I wholeheartedly endorse the Juneau Energy Plan! It lays out a series of strategies that we as a community need to engage in to lessen our dependence on fossil fuels. It will take time, public-private partnerships & effort, money and commitment in the near term, but the long term cost savings and sustainability benefits are clear. Juneau has the wherewithal and community smarts to push a "Do a Lot" Alternative.

We have to chip away at several areas. The strategies that make a lot of sense to me include:

- \* energy efficiency measures and best practices in CBJ buildings and operations
- \* district heating for downtown core and other suitable areas, preferably with hydropower
- \* reduced use of fossil fuels for transportation through encouragement of electric vehicles
- \* land use regulations that support compact, mixed use development
- \* economies of scale & benefits by support of industry use (mining, cruise ships) of renewable energy sources.

Thank you for your attention to this important, far-reaching issue that underlies the continued prosperity and livability of Juneau.

Sincerely, Gretchen Keiser 3271 Nowell Ave 907-723-4003

From: Energy Plan webpage comment Sent: Sunday, October 30, 2016 7:53 PM

To: Juneau Energy Plan

Subject:Juneau Community Energy Plan Comment

I urge the CBJ to adopt the most ambitious of the goals outlined in the Draft Juneau Community Energy Plan: 80% reduction of greenhouse gas emissions by 2045 (Beyond JCAP). CBJ should be a leader in reducing use of fossil fuels and maintaining the wonderful environment and quality of life we enjoy now. We need to do more than the 2010 JCAP proposes, for ourselves and future generations. Thanks for the work done by the report's authors and the commission on sustainability - and for the invitation to submit comments. Susan Cox Navecox@gci.net 789-1436

From: Jon Pond <jpgk@gci.net>

Sent: Sunday, October 30, 2016 7:52 PM

To: Juneau Energy Plan

Subject: Excited by the possible expansion of renewable energy

Whatever you can do to decrease our dependence on fossil fuels would be a great asset to this community.

Thanks for making Juneau cleaner and healthier!

Gladi Kulp

From: malia mcinerney <maliamcinerney@hotmail.com>

Sent: Sunday, October 30, 2016 6:21 PM

To: Juneau Energy Plan

Subject:energy plan

To Whom It May Concern,

I am writing to express my support for taking considerable action on sustainability issues in Juneau. We live in an ideal place to position ourselves as a leading community in energy efficiency.

I'd like do see more use of electric power, and more more efficient electric power in public and private buildings. Part of this should include cruise ships that have an impact on the surrounding environment.

I drive an electric car and heat my house with electric energy with no less convenience or cost than if I were depending on fuel. In fact, I save quite a bit of money.

One more measure that I'd like to see approached is with new development. I spent my summer in the Portland area with friends who are living in newly developed mixed housing that is designed for sustainability. There are wonderful models already in place that Juneau can emulate.

Thank you for your consideration,

Malia McInerney

From: ssog@alaska.net

Sent: Sunday, October 30, 2016 5:05 PM

To: Juneau Energy Plan

Subject:Our Future

Dear City Council and City Planners,

I will make this short. Please work to make Juneau a carbon free energy leader. We are blessed with plentiful hydro energy that can make Juneau a place where people can do business without worrying about creating more carbon in the atmosphere. We have so much to gain by being on the cutting edge of this momentous change that must happen soon, if civilization is to continue as we know it. This sounds like hyberbole, but if sadly, it is not. Let Juneau be a beacon for other communities in Alaska, and around the world. We have everything to gain, and nothing at all to lose.

Thank you,

Suzanne Cohen 725 5th Street Juneau, AK 99801

From: Energy Plan webpage comment Sent: Sunday, October 30, 2016 5:04 PM

To: Juneau Energy Plan

Dear Sirs, I am writing to urge you to choose the "Do Alot" option that will reduce Juneau's fossil fuel energy footprint by 80%. I do so for various reasons: First, because climate change threatens our society with catastrophic changes and vast human suffering, and we have a moral obligation to act to stop it. Second, because I have children and I do not want them to inherit a denuded, degraded world. Third, because I think it will be a positive step for Juneau. With some up-front investment, Juneau as a city and Juneau-ites individually can save much money by switching to efficient renewable energy. I also think it will be positive because Juneau will show the world that it is moving confidently into the future. Many Alaskans realize that the oil era in Alaska, like the gold era and the fur era before it, is drawing to a close. While many in our state (and our legislature) cling to the idea of king oil, in order to flourish as a state we will need new ideas and new ways of working. A community's actions determine what kind of people it will attract and what kind of businesses will develop. Investment in clean energy and conservation will help attract people with fresh ideas which can bring further economic development to our city. Please do the moral thing and push our community to do the utmost to reduce move past greenhouse gasses. Stuart Cohen Co-Chair, Interfaith Power and Light 725 5th St Juneau 99801

From: L and F Dameron <loganjuneau@gci.net>

Sent: Sunday, October 30, 2016 3:15 PM

To: Juneau Energy Plan

Subject:Residential air-source heat pumps

We support the Do-A-Lot option.

We need more information on installing a residential air-source heat pump system to replace our current Toyo heater. The City should sponsor information sessions that would provide names of dealers/installers and would encourage feedback from residents who have installed the systems. There has been much publicity and also several gatherings for users of electric vehicles. We need the same for those interested in converting to air-source heat pumps.

Another topic of interest is on-demand water heaters.

Thank you.

Logan and Fran Dameron

From: Energy Plan webpage comment Sent: Sunday, October 30, 2016 2:10 PM

To: Juneau Energy Plan

Subject:Juneau Community Energy Plan Comment

Hello: First off, great job on the vision, this plan and the draft/executive summary. My husband and I were unable to make any of the meetings. We live in a small, older ranch style home in the valley. In October 2014, after much research, we started our AHFC Energy Audit retrofit for our home and put in a Daiken air source heat pump. We have been off of fossil fuel now for about 18 months and are tracking

energy usage, humidity and energy costs. Our home is tight and toasty. Going in to the audit we rated a 3.5\* and by the time we finished we got a 5.5\* energy rating. We are so happy we didn't replace our boiler with a NEW BOILER requiring fossil fuel. We hope to become more involved in Energy Sustainability issues in Juneau (I have lived here since 1973 and my husband moved here in 2001) and we appreciate being part of the solution. It was NOT an easy road, nor was it inexpensive in terms of time and money - but so worth it. We would be happy to be a home that is on a list of "success stories" for residents who are considering heat pumps. We will try to be more involved with the process down the road...but as you can see, we've been busy in the trenches! Kind Regards, Mary DeSmet & Greg Burger 8760 Dudley Street Juneau, AK 99801 789-3933

From: wleighty@ptialaska.net

Sent: Sunday, October 30, 2016 11:36 AM

To: Juneau Energy Plan

Subject:Comment on Juneau Community Energy Plan

October 30, 2016

RE: Juneau Community Energy Plan

Please support the adopted Juneau Climate Action Plan by adopting an Energy Plan that supports renewable energy development, and reduces GHG emissions by 80% by 2045, the most ambitious goal suggested by the Draft Juneau Community Energy Plan.

I support and encourage 'Next Steps' such as:

- 1. \*Review and update building codes for new residential and commercial buildings for energy efficiency; implement policy options for providing and utilizing weatherization programs to retrofit existing buildings for safety and energy improvements.
- 2. \*Prioritizing use of existing Head Tax money to fund capital and O&M projects that reduce GHG emissions.
- 3. \*Review existing energy audits on CBJ buildings. Where CBJ buildings have been retrofitted with energy efficienct systems, budget CBJ money for 'recommissioning' to ensure efficient operations continue to return the expected savings and GHG emissions reductions.
- 4. \*Actively evaluate using a CBJ Centralized Fleet pros and cons.
- 5. \*Utilize the urban service boundary to focus new development in compact, more affordable, and energy efficient configuration. (I'm taking this opportunity to call attention to this concept, policy in Title 49 and the CBJ Comprehensive Plan)

Thanks to CBJ personnel and the Juneau Commission on Sustainability for sponsoring a considerable number of public meetings on the draft Energy Plan, and on other specific energy topics. Well done.

Sincerely,

Nancy Waterman, 586-1426

From: Mike <tibbles@alaska.net>

Sent: Friday, October 28, 2016 1:34 PM

To: Tim Felstead
Cc: Lanie Downs
Subject:FW: Draft JCEP

Attachments: CLIA Alaska Comments on Draft JCEP Oct 28.pdf

11111,
--------

Attached [Attachment below] is a PDF document of our public comments regarding the Draft Juneau Community Energy Plan.

Thank you,

Mike Tibbles CLIA Alaska



October 28, 2016

Tim Felstead City and Borough of Juneau 155 S Seward Street Juneau, AK 99801

Dear Mr. Felstead:

Please accept the following public comments in response to the Draft Juneau Community Energy Plan (JCEP).

CLIA Alaska has serious concerns with the JCEP and recommends the CBJ not adopt the report in its current form. At a minimum, provisions relating to cruise vessels should be removed. The report fails to recognize the significant investment the cruise industry has made in environmental programs, the recommendations are not consistent with the development of new technology, the goal established for cruise ships is completely arbitrary and not based upon any cost/benefit analysis, and the suggestion of higher passenger entry fees raises significant legal issues.

The report contains flaws and should not be considered a plan. For example, it establishes a priority strategy of increasing the use of local electricity by cruise ships, but both the goal and the one-year timeframe to implement this goal are unachievable. Large cruise ships draw approximately 10 to 12 MW at the dock for hotel power alone. Making additional power available in this magnitude is very speculative at this point, and at best would take years to connect just one more vessel. While the report may leave the impression that all ships in Juneau could be on shore power, no source of 30-36 MW is even contemplated. If the report included a cost/benefit analysis for its priority objectives, as it should, it would clearly indicate that generating this much power for a seasonal customer is not economically feasible. Therefore, the attached JCOS suggestion that all cruise ships visiting Juneau be required to have shore power connections is illogical. At a time when the CBJ is completing a new dock to accommodate more types of vessels, the draft document suggests that some of those vessels may not be welcome. This policy is contradictory and short-sighted.

There is a long history regarding the subject of emissions within the cruise industry, which would have been beneficial and informed the drafters of the report, as well as the public. Providing shore power in Juneau was a significant accomplishment for both the community and the industry. Ships burning 2.5% sulfur could turn their engines off at the dock. However, much has changed. The United States, through the International Maritime



Organization(IMO), adopted the North America Emission Control Area (NAECA) which established very strict fuel guidelines. The new requirements allow for .1% sulfur to be used within 200 miles of shore. These requirements significantly increased the cost of Alaska cruises and put Alaska at a competitive disadvantage to other destinations. As other jurisdictions looked to establish their own standards, the playing field was leveled somewhat; but the industry knew focusing on the type of fuel purchased was not the only solution. A significant investment in alternative technology to meet the new standards is being made by the industry. In fact, the industry has committed \$1 billion in advanced emissions systems and new fuel technologies.

One of the new technologies currently being installed on cruise ships is Exhaust Gas Cleaning Systems. This technology has proven to reduce up to 98 percent of sulfur and was approved by the U.S. Environmental Protection Agency as an alternative compliance method. There is still much work to be done in fine tuning the systems; however, the results have been very impressive in not only reducing sulfur oxides, but carbon and other particulate matter as well.

Another significant investment in new technology is the development of Liquefied Natural Gas (LNG) fueled cruise ships. The industry has committed more than \$8 billion to construct highly advanced LNG powered ships that will lower emissions and operate at a higher efficiency. The goal of the JCEP to increase use of electricity by cruise ships is inconsistent with the direction and investment being made by the industry.

The energy report also fails to analyze the environmental impact of its recommendation to increase electricity use by cruise ships. As previously mentioned, current emission standards are already significantly reducing cruise ship emissions. As the technology is installed and operational in more and more vessels going forward, the benefits will be even greater. The report failed to provide any comparison between running new technologies 24/7 versus the environmental benefit of limited hours of shore power in just one port. Starting up a cold engine and maneuvering in the harbor can produce some of the most visible smoke from ships. Advancing cruise ship technology will address these issues, where shore power alone will not.

The industry is supportive of hydropower where it makes sense. Itineraries that include multiple port calls with surplus power make the return on the investment required to connect a ship, more economic. However, the priority and focus of industry efforts to reduce emissions goes beyond that. Specifically, in Alaska, even if the energy report were to lay out a strategy on how Juneau could make an additional 30 – 36 MW available to cruise ships, no other port in Alaska is offering shore power. This makes the expansion of shore power in Juneau an impractical solution at this time and we recommend the CBJ not expend any funds toward the goal of increasing use of electricity by cruise ships.



It is important to address the issue of "cost recovery" as suggested in the document. The report accurately reflects the shore power purchased currently by cruise ships is done through an interruptible power agreement, similar to the Greens Creek Mine. The charge is higher than residential rates and the report correctly points out that residential customers are in effect subsidized and pay lower rates due to the power purchased by the two interruptible entities. It is not clear whether the report is suggesting an increase in cruise ship passenger entry fees to support potential electrical connections at the dock, or whether it implies passenger fees could be a source of funds beyond the dock. Either way, the suggestion to increase passenger fees raises significant U.S. Constitutional issues.

As you know, the industry is challenging the legality of the use of millions of dollars in passenger fees to fund the man-made island near the Douglas Bridge. Suggesting an increase in fees is objectionable, especially considering projects funded such as the island provide no benefit or service directly to the vessel AND passenger, as required under federal law. Further, to suggest the industry spend more at a time when they have already committed \$1 billion to new emission technologies undercuts the significant investments being made.

On a general note, it is important to highlight that the cruise industry is very aligned with the goals of improving efficiencies and reducing environmental impacts. A few examples of energy efficiency innovations by CLIA Cruise Line Members include:

- Use of LED lighting that use 80 percent less energy
- Energy efficient engines to consume less fuel and reduce emissions
- Special paint coatings for ship hulls that can reduce fuel consumption by up to five percent
  - Solar panels that can capture clean energy for shipboard use
  - Installation of tinted windows, higher efficiency appliances, and HVAC systems and windows that capture and recycle heat
  - · Reuse of engine waste heat
  - · Advanced wastewater purification systems
  - Optimized itineraries affecting speed, routes, and distances traveled to significantly reduce fuel consumption

Numerous ports have recognized these and other efforts as environmental excellence. The Port of Seattle is just one example where cruise lines have worked closely with a port as partners, achieving mutual goals in environmental stewardship. Several of CLIA's Cruise Line Members were recognized in 2016 by the Port of Seattle with its Green Gateway Award for environmental initiatives going above and beyond regulatory requirements. This



type of industry and community cooperation is much more effective than establishing arbitrary goals and standards.

When developing environmental policies, it is important to remember that cruise ships are part of a comprehensive system of regulation, enforcement, and inspection that includes local, state, and national laws, flag state regulation, international laws (e.g. IMO), and classification societies. Much has changed since shore power was installed at the Franklin Dock in Juneau.

Never has there been so much global focus on responsible marine environmental stewardship. In December 2015, government leaders and representatives emerging from meetings in Paris announced a breakthrough with a global commitment to reducing environmental pollution. The maritime community, represented globally through the IMO, is the only sector to have already applied stringent requirements to reduce emissions from the global maritime fleet. The industry actively supported the development and implementation of these measures, including a mandatory 30 percent reduction in carbon emission rates by 2025 for new ships. This was the first ever global and legally binding greenhouse gas reduction regime for an entire international industry sector and, for the cruise industry, added to steps that cruise lines are already taking to reduce their carbon footprints.

I realize these comments are lengthy but it is important to provide a thorough overview of the industry's environmental commitment, as well as convey the complexity and dynamic nature of air quality issues within our industry. It is critical that priorities be established through a cooperative effort in which all parties are fully informed of the costs and potential benefits of all proposals under consideration. Unfortunately, the lack of a collaborative approach has led to recommendations which are not realistic, are void of economic impact analysis, provide misleading environmental benefit information, and raise significant legal liability issues. Given the above omissions, I request the cruise ship provisions be removed.

Thank you for the opportunity to comment.

Mike Tibbles CLIA Alaska From: Energy Plan webpage comment Sent: Friday, October 28, 2016 11:52 AM

To: Juneau Energy Plan

Subject:Juneau Community Energy Plan Comment

I'm writing in support of the "Do a Lot" option. That means 80 percent renewable energy by 2045. The good news is that we have local, renewable options for meeting most of our energy needs, using proven technologies that we already have here in town. Climate change is already harming our environment here in SE: spruce aphids browning trees, pink salmon depletion, drastically curtailed downhill and nordic skiing just to name a few. We should aim to do even more than "do a lot" because the physics of climate disruption does not care about convenience, economics or politics. Net zero carbon should be our goal as aoon as possible. Elaine Schroeder, b-eschroeder@gci.net, Juneau

From: Energy Plan webpage comment Sent: Monday, October 24, 2016 1:18 PM

To: Juneau Energy Plan

Subject:Juneau Community Energy Plan Comment

This is not a plan but a wish list. There is no economic or need analysis to support any of the plan components. There seems to be little concern for the downstream user cost or long term economic impact on the community. subsidised emerging technologies is not planning but instead is a play list to stopping responsible proven technologies that provide real economic value today and into the future. Where is LNG in this draft statement. How about mother fuels that do not reduce inipendant travel i.e. natural gas busses.

From: john sonin <sojohn61@hotmail.com> Sent: Thursday, October 13, 2016 8:18 AM

To: Juneau Energy Plan Subject: A Great Solution

Has the Commission considered this option as a means to lower emissions, costs, and usage?

John S. Sonin, Juneau

907-586-8212

### The Office

October 10, 2016

Almost everyone enjoys a bank holiday. A three-day weekend means more time to spend with family and friends, to go out and explore the world, and to relax from the pressures of working life. Imagine if, rather than a few times a year, we had a three-day weekend every week. This isn't just a nice idea. Beyond the possibilities for leisure, three-day weekends might also be

one of the easiest steps we could take to radically reduce our environmental impact—and future-proof our economy.

A reduction in working hours generally correlates with marked reductions in energy consumption, as economists David Rosnick and Mark Weisbrot <a href="https://have.argued">have argued</a>. In fact, if Americans simply followed European levels of working hours, for example, they would see an estimated 20% reduction in energy use—and hence in carbon emissions. With a four-day week, huge amounts of commuting to and from work could be avoided, and electricity used running an office could be saved. At a point when we need to massively cut back our carbon outputs, instituting a three-day weekend could be the simplest and most elegant way to make our economy <a href="mailto:more environmentally friendly">more environmentally friendly</a>.

From: duff.mitchell@juneauhydro.com

Sent: Monday, September 26, 2016 4:39 PM

To: Juneau Energy Plan

Subject:71 signatures in support of the Draft Energy Plan

Attachments: EV round up petition for Juneau Draft Energy Plan.pdf

Signatures from the National Drive Electric Week September 10, 2016 EV round up held at Sandy Beach supporting the draft energy plan and strongly support Strategy #5 to reduce transportation dependency on fossil fuels. [Attachment below] Duff W. Mitchell

Cell Phone 907-723-2481



### September 10, 2016

calls for the reduction of dependence on fossil fuels for Juneau's transportation. We support the electrification transformation of the Juneau's transportation sector. WE, the undersigned support the Draft Juneau Energy Plan and would like to draw attention to and strongly support Strategy #5 of the plan that

- Explore active transportation and opportunities to support electric vehicles Consider parking policies to support electric vehicles
- Assess centralized fleets for CBJ including appropriate vehicle choice (including electric vehicles)

1. Obristine Niemi 616 Alta et Duglas 99824  2 MARTIN NIEMY 616 ANTACT DOBGLAS, AK, 99824 MORATINI NOIM  3. Pube - Reich 23824 Claim King 97824 MORATINI NOIM  4. Any Lingua 3445 fiance due Timeau 99801  5. Jacque Parissonal Coo Front St. 45 Dougles 97824 Jacque Talucum  6. Laura Damesen 6720 Sherri 5t. Suneau 99801 Jacun Talucum  7. Music I veo et 1706 Escape Hung Tolles ANKE BAY 99821  8. Monus Tolles PO Box 210165 ANKE BAY 99821  9. Elaura Tolles I 1706 I 2160 ANKE BAY 99821  10. 201 Hung Tolles I 18445 A. Lenc Leop Rd Timeau 99801  11. WMC Men Tolles I 1845 A. Lenc Leop Rd Timeau 99801  12. Robort Laura 227 7th Jerosau & 1850 Field Manual Extension 1850 Field Field Manual Extension 1850 Field Field Manual Extension 1850 Field Fie	Printed Name Address Signature
--	--------------------------------

### September 10, 2016

transportation sector. calls for the reduction of dependence on fossil fuels for Juneau's transportation. We support the electrification transformation of the Juneau's WE, the undersigned support the Draft Juneau Energy Plan and would like to draw attention to and strongly support Strategy #5 of the plan that

- Explore active transportation and opportunities to support electric vehicles Consider parking policies to support electric vehicles
- Assess centralized fleets for CBJ including appropriate vehicle choice (including electric vehicles)

12. MITCHELL SHARMAN	11. Smy Skilland	10. Con asmon	9. GEORGE PARTLOW	"Ciertan biser	" Walk Morley	6. Davielle Redmond	5. ED MAYER	4. Willie Andor	3. Rick Haile	2 Scott Marnon 4	"Jecenial Germain Se	Printed Name
Poby 20185 June 29802	4477 Abby Ween	(25 Tray Am 750)	POB 240557 Douglas (800 St Anns Av #3)	14030 No Bonglas	9128 N Douglas	1746 Scand St. Douglas	2526 TESCIN ST.	8443 K. Mhor W St	9084 MINEL C++.	432 Gold	8430Valley Blud	Address
Muth Shand	Soffin	10 x	) Shemowshitantlow	Whiteser	Mud	Parellen	The Char	130 1160	Rif China	いまく	assenial Germain	Signature

### September 10, 2016

WE, the undersigned support the Draft Juneau Energy Plan and would like to draw attention to and strongly support Strategy #5 of the plan that calls for the reduction of dependence on fossil fuels for Juneau's transportation. We support the electrification transformation of the Juneau's transportation sector.

## Strategy #5 Reduce dependence of transportation system on fossil fuels

1	Explore active transportation and opportunities to support electric vehicles
í	×
5	0
2.	0
2	0
)	~
	×
•	4
2	<
-	0
5	=
2	tive tra
5	3
,	S
	S
١.	4
	7
1	4
	portation and
	Š
	0
	Ħ
	ō
	0
-	×
	ŏ
-	ŏ
ĕ	1
-	C
	⊇.
	=:
	Œ
Ė	-
•	0
	S
Ĝ,	$\subseteq$
	$\frac{9}{2}$
	8
	$\leq$
	_
	0
	0
	()
	三.
	0
	<
	0
	7
	0
	0
	S

Consider parking policies to support electric vehicles
Assess centralized fleets for CBJ including appropriate vehicle choice (including electric vehicles)

12.	11.	10.	9.	.∞	.7	6.	, <sup>57</sup>	4.	۳.	2	Ŀ	Pri
Grus	5	TI	6	M	1	S	P	Z	4	7	2	Printed Name
ans.	re l	2	Six W	S	9	ecn		2,	8	2	E	ame
N	NN.	0		25	-		2	arest	Lyon	2 -	1	
me	3	Q W	Rous	10	5	n	Muchba	,	2	2	20	
dall	7	Fran Dameron	5	3/6	_	Pasar	6	Cawas		6	Chuck Beown	
,	1/2	07		3.7		١		5	ŭ	9		
ž	_			1	k 2				70	m .	200	Address
	- 11346. Now Level school will 99801	6721 Sherri St	1370 Fr. Az Cauch	+ 1370 Fitz Cove Rd	the correspond			18005 P+ Stacker	570 Seder Sheet	JOYANNE Bloom 883 Besin Rd	Poby 33197	ess
	6	-	OF	30	上			N	to	W)	29	
	5	She	2	2				+	0	2.2	7	
	3	177	2	Core	20008 20008			St	6	R		
	3	5	C	B	202			3	1		2/1	
	Sp.	7	23	•	J.	J		2	Ta		WNRU,	
(	产		_	Juc		LANGSU		2	Juneau	•	a,	
	Ù	Tun	22	10866 mm	7	N			-		~	
	n n	p a u		286	4	0		72801	08.66	99801	59603	
	N.	Tuneau AK 9980/ Lagner	JUNEAU AK 98801 C	10	99	13861		9	<i>o</i> ~	601	20	
	8	19	36		10866	191						
=	20	199	& A	$^{\setminus}$	$\overline{\wedge}$	100	offe	3		1		
		4	1	A	4	Se de	11	SA.		W		Sigr
Page 1	2	ane	4	11	1	1		K	Y	10		Signature
	2		5	1		M		1	1	}		
UA	6	6	8	c/	M	1		1	1			
X		1	!!		) 4				. 1		l	
1	2	Ž.		16	/	ļ						
	-											

September 10, 2016

calls for the reduction of dependence on fossil fuels for Juneau's transportation. We support the electrification transformation of the Juneau's WE, the undersigned support the Draft Juneau Energy Plan and would like to draw attention to and strongly support Strategy #5 of the plan that transportation sector.

- Explore active transportation and opportunities to support electric vehicles Consider parking policies to support electric vehicles
- Assess centralized fleets for CBJ including appropriate vehicle choice (including electric vehicles)

		1. Chris Course	10. EstELA Brunque	RICHARD FARNIELL 800 F'ST. JUNEAU	& Lannit Monk	· Bullie Solve	· Pecificalett	. Angre Mendbayar 3550 Park Place	7.	3. ghad Linkburg	Mandadison 8	1. Dave Woodhy 3	Printed Name A
	121 Vicked Am Ave June	RO Box 22878 Chargen	P.O. Box 22578 Junear	BOO'F'ST.,JUNEAU	9560 N. Douslas	7	1931 Lemone 4	350 Park Place	+8 DDA 14481	2496 Industrial	ison 8128 Pueutral dr. INIL	3240 Nowell Myre, Toron	Address
11/1	Ash o	The Market	Gospel h. Brusene	Michael M. Fourell	Jame Muss	Rolling Said	Bear Vine	M. young	and lim sal	and Ihr	Malmalisa	Mujor	Signature

### September 10, 2016

transportation sector. calls for the reduction of dependence on fossil fuels for Juneau's transportation. We support the electrification transformation of the Juneau's WE, the undersigned support the Draft Juneau Energy Plan and would like to draw attention to and strongly support Strategy #5 of the plan that

- Explore active transportation and opportunities to support electric vehicles
- Consider parking policies to support electric vehicles
- Assess centralized fleets for CBJ including appropriate vehicle choice (including electric vehicles)

12. Careful Mitchell	9. Kathys CBaus	" Ddotte Edgar	5. Kle Cuzzort	4. Mary Dat Schilly	1. Uichelle Ridgwy
5146 Horrer Now M	or 999 Mendenhall Peu R	108 6th ST	9719 Trappers Ln Junean	4435 M. Douglas Hung	130×30/16
Sunear (AK 9980) Boy Che	Jonalez 2880	South Ed	10801 Since (1081)	Juneau 99801 Wamp	Awle Bry 99821 Intelled
	1 Yic	Con	and C	pat schilly	

### September 10, 2016

calls for the reduction of dependence on fossil fuels for Juneau's transportation. We support the electrification transformation of the Juneau's WE, the undersigned support the Draft Juneau Energy Plan and would like to draw attention to and strongly support Strategy #5 of the plan that transportation sector.

- Explore active transportation and opportunities to support electric vehicles Consider parking policies to support electric vehicles Assess centralized fleets for CBJ including appropriate vehicle choice (including electric vehicles)

12.	11.	10.	9.	8.	7.	6.	5.	4.	3.	5	1.	Prin
	Sam	Kenneth	end.	thun	大户	Wich	10/	No.	Paper	ELi	Me	Printed Name
	m	149	r .		Ce	las	m	22,	sond	NA r	12/1	ne
	Saha	Lander	2	the	8	FUE	M	2	Jon	i E	DIR.	
	アン	der	n Thous lo	C	Lace Satron	6. Michael Everson	5. John Everson	4. Patricia Everson	3. Raymond Jendison	1EXS	3	
		611	irski		כן	1	200	Š		MO	1230	,
	90	3289	Co	200	2	590	65	29	8128	l	6/6	Address
	2606	\$6376 4th St Apt 316	3276 Bones An	1 px 21938	2328 Meadlow (in Juneau AK 9480)	6590 Glacier Huy 1847 Vincar, AK 99801 Tillen	6590 Charter Hughest 47 Juno 9780	PDB 31463 Junea 99803	8128 Pinewood Orive Juneau, AK 99801	2 SELINA V. EVERSON 2571-4 Rougher Henry	1. AMOUNT 101Ker 1336 Glasser Ave #301 Junion ALGER	
	70	2	Rope	38	3	ier h	Incica	37K	sand ,	4	Anct	
	22	5+ /	W K		Sode	July "	They	W	Prive	and	1301	
	02	9p+	n	имаи	(3)	6.44	6074	Jim Jim	B	Res 1	Jun	
	2	210	Ma	R	5	Vine	7 0/11	sac 9	eau, h	Lane	aw D	
	Dun		24	2	me	res A	26 21	386	1× 9%		REFER	
	Pirenes In Juneay AK		May 4K 998C		au	1663	100	1	1081	mee.	5	
	T	1	100/	$\uparrow$	AK.	Sel -	A	1	M	Y	4	
	1	Me		alora	1480		The	10	D	Och	the	
	8		1	1		R	R	3	, /1	ine	theresore	Sign
,	16			toha	10	a	18	18		S	de	Signature
	hom	1	1	×	A	The state of the s	ae			Cline Ja Euros	, (	
	12				1 Salary	1	C	Wenor		ross		
										1		

From: Dick Farnell < dickfarnell@hotmail.com> Sent: Monday, September 19, 2016 9:38 AM

To: Juneau Energy Plan

Subject:Comments on Draft Juneau Energy Plan

Attachments: Comments on Draft Juneau Community Energy Plan.docx

Attached are my comments on the Draft Juneau Energy Plan.

Thanks for creating this as a major focus for Juneau!! Dick Farnell

### Comments on Draft Juneau Community Energy Plan, June 2016

September 19, 2016 Comments From:

> Dick Farnell P.O. Box 21756 Juneau, AK 99802 928-606-9071 dickfarnell@hotmail.com

### A. District Heating

Explore how District Heating could be retrofitted on existing dwellings in core areas, specifically to Parkshore Condominiums (90 dwelling units) which sits adjacent to the Willoughby commercial area. Parkshore units heat with individual highly inefficient forced air electric blower units. Exploration of District Heating for the Willoughby district should include methods to retrofit these dwelling units (similarity of construction of these 90 units would provide a significant economy of scale for applicable electric heating technologies).

### B. Transportation

1. With 43% of Juneau's energy use in the transportation sector, and a linear geographic population distribution), it is imperative that Juneau implement some form of electric mass transit. This might have the form of a light rail, but there could be cheaper options – Example: rubber tired vehicles that use Egan Drive as a corridor but act as express vehicles between nodes [maybe this could be called 'fancy buses']. Instead of gnashing teeth over downtown parking, implementing a rapid electric mass transit system could satisfy node-to-node transportation needs simply by upgrading bus sophistication and installing a few Park and Ride facilities. The critical key for capturing ridership on these systems would be that they would have to meet consumer convenience expectations, so departure times would have to be more frequent than every half-hour, as well as convenience of pick-up & drop-off locations; secondary circulator vehicles may be needed to increase the convenience factor.

[In other words, an electric mass transit system doesn't have to be a high dollar system, and a cheap review of use of lower cost systems in other U.S. communities could easily be done]

- 2. To encourage ownership of electric vehicles the City should:
  - implement a tax rebate system for electric vehicle purchase

- vastly increase charging stations within the Borough, possibly partnering with businesses for charging station installation (which would provide incentive for electric vehicle owners to shop at that business)
- CBJ assistance with technical training of electric vehicle maintenance technicians (through partnering with new or existing vehicle maintenance shops and UAS technology center)

From: Carl Uchytil

Sent: Thursday, September 01, 2016 10:38 AM

To: Juneau Energy Plan

Subject: Feedback - Juneau Community Energy Plan

Please see attached. [Attachment below]

Carl Uchytil, PE Port Director City and Borough of Juneau 155 South Seward Street Juneau, Alaska 99801

Phone: 907-586-0294 Fax: 907-586-0295

E-Mail: Carl.Uchytil@Juneau.org<mailto:Carl.Uchytil@Juneau.org>

http://www.juneau.org/harbors/



### Port of Juneau

City & Borough of Juneau • Docks & Harbors 155 S. Seward Street • Juneau, AK 99801 (907) 586-0292 Phone • (907) 586-0295 Fax

From: Carl Uchytil, P.E.

Port Director

**To**: Steve Behnke

Chairman, Juneau Commission on Sustainability (JCOS)

Date: August 31th, 2016

**Re:** JUNEAU COMMUNITY ENERGY PLAN - COMMENTS

1. The Docks & Harbors Board has reviewed the draft Juneau Community Energy Plan. The following comments are submitted:

#	Strategy	Responsibility	Timeframe to implement	Next Steps/Issues to be addressed
2	Increase use of electricity by cruise ships	CBJ Docks and Harbors Local Electric Utilities, Cruise industry	1 year	<ul> <li>New dock has conduit, but no cabling connection infrastructure included</li> <li>Clarify ownership and operation of electric infrastructure</li> <li>Cost recovery opportunity through increased head tax to visitors</li> <li>Concerns about current capacity of existing hydropower to service additional vessels in a cost effective way</li> <li>Develop preliminary design and assess ownership and operational model.</li> </ul>

- The number 2 Strategy of "Increased Use of Electricity by Cruise Ships" in one-year is not achievable. Franklin Dock already provides power to its customers to the maximum extent practicable within Juneau.
- The new cruise ship dock project is entering the second and final phase. The Port Director has repeatedly
  stated that it is Docks & Harbors position to wait for sufficient electrical capacity from the local utility
  company before investing in the necessary shore-side infrastructure. Docks & Harbors has never prioritized
  electrification of the new cruise ship benth project to be ready upon completion of the new cruise ship
  benths.
- Docks & Harbors does not support and would oppose additional cost recovery through increase head tax to visitors.

- Goal T-6: Reduce emissions associated with marine transportation. Estimate: 22% decrease in marine emissions; potential GHG reduction 15,700 MTCO2e.
  - Strategy T6-A. Work with recreational and commercial boaters to reduce emissions and energy use associated with marine transportation.

Long-Term Actions	Responsible Party	2015 Progress:	GHG Savings	Bang for buck	Resilience	Significant energy savings	Implemented by/with CBJ	Energy savings vs timeframe	Score
Require all cruise ships and other large commercial ships to have the capacity to plug in to Juneau's electric energy supply when in port.	State and local governments/ Cruise Ship Companies		Υ	Υ	Υ	Υ	Υ	Y	6
Mandate new commercial docks to provide electric plug-ins for cruise ships and other commercial vessels, and require that ships use electric power whenever it is available.	СВЈ		Y	Y	Y	Y	Y	Y	6

- Docks & Harbors does not concur with the scoring of 6.
  - o GHG Savings: The Holland America cruise ship AMSTERDAM departs 4 pm on Sundays, cruises SE Alaska returning 7 am the following Sunday for a total of 159 hours. The AMSTERDAM will spend 8 hours in Juneau. Assuming it takes 1 hour to hook up & 1 hour to disconnect, less than 3.77% of the GHG Saving can trip can potentially be reduced. This assumes the vessels burns the same on propulsion fuel as it does for hotel services. More realistically this percent is much less, perhaps on the order of 1% GHG Savings, when compared over the length of the cruise.
    - (https://www.alaskacruises.com/itineraries/7-night-roundtrip-seattle-cruise\_amsterdam\_8-7-2016.html)
  - o Bang for the Buck. Docks & Harbor provided a report to the Assembly indicating that the cost to bring electrical power to each of the new cruise ship docks is approximately \$12.5M each. This excludes the cost to the local utility for their investment. How is this cost effective?
  - Significant Energy Savings. There is no energy savings, only energy source avoidance. The ship will consume power whether it is generated on board or through the local utility.
  - Implemented by/with CBJ. This should not be a mandate; rather, CBJ should work with cruise lines to ensure service is provided based on demand.
  - Energy Savings vs. Timeline. It is unclear how this would generate a "yes" response? It presumes that the cost of power generation for local power is much less than generated onboard. Does it take into account the infrastructure investment necessary in Juneau as well as on the ship? The timeline remains ambiguous as to when sufficient power is available from the local utility as well as when funding can be made available.

From: John Neary < john.neary99@gmail.com> Sent: Wednesday, August 31, 2016 8:44 PM

To: Juneau Energy Plan Subject:comment on energy plan

### Hello,

I suggest the CBJ adopt the "80% by 2045" option for our Energy Plan. I've read much of the plan, attended meetings, talked to colleagues and conclude this is the correct approach. It may seem ambitious but it's not unreasonable. We have uniquely dependable supplies of hydropower around Juneau to use and the challenge is to use them to their highest potential, recognizing that the biggest challenge is winter heating loads. Let's expand our capacity, increase the summer load of electric-dependent transit and interruptible customers, and let's not let the current low cost of fossil fuels change our vision of the future. There are many reasons to be ambitious and I suggest the most compelling is to set the trajectory of Juneau's energy future on dependable, renewable hydropower, not fossil fuels. Our atmosphere requires this, our economy will eventually flourish from it, and innovative electric energy projects will result. Let's be ambitious.

cheers

John Neary 17735 Pt. Stephens Rd.

Juneau, AK 99801From: Energy Plan webpage comment

Sent: Wednesday, August 31, 2016 4:24 PM

To: Juneau Energy Plan

Subject:Juneau Community Energy Plan Comment

Thank you for the work you have put into preparing the draft Juneau community energy Plan, and for the opportunity to comment on it. I hope you will urge the Assembly to adopt the "Do A Lot" option. It seems clear that the best climate science to date implies that emissions reductions to keep the global temperature rise to less that 1.5C above pre-industrial levels is the only way to avoid catastrophic impacts on civilization. At the same time the economic benefits of reducing Juneau's dependence on imported fossil fuels for heating and transportation needs are clear. One thing that seems to need more "fleshing out" is the exact nature of the job a CBJ Energy Manager would be expected to do. Is this person simply to initiate and monitor programs to introduce more energy efficiency and new technologies in those areas over which CBJ has direct control, such as the city buildings, public transportation and other city vehicles, zoning policy, etc.? (This appears to be what the School District manager position did/does). Is it to educate, motivate, and monitor the private sector, so that business owners take similar steps? Or is it to be an advocate reaching out to the public generally (e.g. educating homeowners on their options for converting to ground source heat pumps, and electric vehicles, using public transportation more, etc.? That last option would seem to be necessary if we are to go down the "Do A Lot" road! And it implies a fulltime position rather than just "part of a person". Since you make a convincing argument that the po! sition would "pay for itself" through energy savings as well as pursuing outside sources of income such as grants, this should not be a hard concept to sell. You have made it clear that the JCEP is a policy document, not an implementation plan, so this is just the beginning. Good luck as you continue on the path to advocate for Assembly action to ensure that Juneau has a sustainable future! George Partlow POB 240557 Douglas AK 99824-0557 928-581-8146 (cell)

From: Karen Wilson <kwilson@wileng.net> Sent: Wednesday, August 31, 2016 4:01 PM

To: Juneau Energy Plan

Cc: Jeff Wilson Subject:80%!

I will keep it simple: We absolutely support going for 80% renewable energy by 2045. Our survival as a world depends on communities like ours doing the right thing.

Thank you for all you are doing!

Karen & Jeff Wilson

From: Alicia Norton <alicianorton514@gmail.com>

Sent: Tuesday, August 23, 2016 4:19 PM

To: Juneau Energy Plan

Yeah. We should do a lot.

--

Alicia

From: john sonin <sojohn61@hotmail.com> Sent: Tuesday, August 23, 2016 2:25 PM

To: Juneau Energy Plan Subject:Fierce Urgency

Folks,

Please do all you can to waylay our city, our State, our Nation (up-until the last five or so years, anyway!) slow-burning, percolating, civil-suicide! Support policy to maximize energy conservation with the most expedient haste feasible...ignoring the need to minimize costs for some delusion of 'business-sense' in the face of any investment level, that will better the chances our children will find fulfillment in Earth's future!

John S. Sonin

329 Fifth Street, #1

Juneau, AK 99801

From: Energy Plan webpage comment Sent: Tuesday, August 23, 2016 12:20 PM

To: Juneau Energy Plan

Subject:Juneau Community Energy Plan Comment

Hello, Salt Lake City has a goal of 100% clean energy by 2032. Each situation is a bit different but the "Do a Lot" plan for an 80% reduction in GHG for Juneau by 2045 is the most responsible route that we can take for our capital city. Let's go for it! Sally Willson

From: Mark Miller <markjpmiller@gmail.com> Sent: Tuesday, August 23, 2016 11:54 AM

To: Juneau Energy Plan

Subject:Sustainable energy comment.

Hi:

I just returned from a tour of Austria and Germany where I depended heavily on public transportation. All of the trains and most city buses operate very economically on sustainable wind, solar and hydro electric sources. The absence of dirty diesel was refreshing. Juneau is in a perfect position to move further from fossil fuels to sustainable hydro power. While we protect our local environment we can be a model to inform millions of tourists about sustainable clean energy as well. Please make clean, sustainable energy for Juneau a priority.

Thanks, Mark Miller

From: Energy Plan webpage comment Sent: Sunday, August 14, 2016 8:45 AM

To: Juneau Energy Plan

Subject: Juneau Community Energy Plan Comment

Now i didnt read the whole plan, but i did read the executive summary. It seems to me that in the near future, adding new power generation seems unlikely due to budgets, fuel supply (LNG, Sunshine, Land for wind turbines) i do like how the report does line out energy efficiancy of exisisting structure, just my 2 cents of what id like to see done: Better thermal insulation in buildings More efficiant lighting buildings, vehicles, street lights etc. with new LED lights etc. On ships ive worked on we dumped our deep fryer oil into our main fuel tanks, its not much but diesels will burn used veggie, or any deep fryer etc. City vehicles left at idle all the time drives me nuts. Boiler/Furnace efficiancy upgrades for buildings. Water use in restrooms, anr other places may not be Energy use but still costs money. Most of these things can be done on the short term, and in reality even if we had all the power generation available to us as say a much larger city, it does no good if we dont squeeze every bit of efficiancy out if it, so i feel we should start with our effenciancy.