Climate Action Task Force Supplemental Handout

Updates on Implementation of 2010 Climate Action Plan

Initiative	CAP Page	Department	2021 Updates
Energy Efficient Affordable Housing Funding	49	Building	SCLT houses, independent project on land donated by city, utilizes highest energy efficency measures. Most residential building that happens these days happens w/ highest energy standards already, even though it is not in code (various funding, like USDA RD loans, require it, contractors comply anyways)
Home Rehabilitation Loan Program Adjustment	50	Building	Not pursued.
Green Building Education	49	Building	The Sitka Building Department collaborates with builders, designers, and building science professionals to provide bi-annual construction education seminars, these seminars highlight the latest building practices including energy efficient construction techniques.
Right Size City Vehicle Fleet	31	City Administrator	Not pursued.
Commuter Transit Reimbursement Program	35	City Administrator	Not pursued.
Conversion to Energy Efficient Streetlights (150 MI bulbs)	27	Electric	Completed!
Diesel Generator Replacement	26	Electric	Completed! Diesel generators (n=3) were replaced after 2010.
Energy and Fuel Saving Behavior Audits	45	Electric	The Electric Department does not normally perform energy audits for city buildings. We have in the past identified potential candidates for fuel oil to electric heat conversion.
City Bldg. - Add Electric Heat	23	Electric Public Works	2 city buildings have electric boilers with interruptible rates. The city has identified 5 other buildings to convert to electric boiler/interruptible rate systems with a projected savings of 10%. The five buildings that the electric department has considered for heating upgrades are: The Airport, Fire Hall, Jarvis Offices, Animal Shelter, and the Wastewater

			Treatment Plant. The Wastewater Treatment Plant interruptible boiler installation is nearing completion.
Employee Incentive Program for Saving Energy and Fuel	46	Finance	Not pursued.
Increase Fuel Efficiency	33	Fleet Manager	Central Garages vehicle matrix has us replacing our vehicles every fifteen years, one hundred thousand miles or when they become a maintenance or safety problem. By doing this it also lowers our carbon footprint one by vehicles meet more stringent emissions regulation and they are more efficient in the amount of fuel they burn. Also, we have replaced some of our older equipment and this new equipment meets California emission standards which is also reducing CBS's carbon imprint.
Reduce Vehicle Idling	34	Fleet Manager	Health Summit had anti-idling campaign in 2018. Signs were printed and distributed in front of buildings throughout town. No ordinances regarding idling.
Hybrid & Electric Vehicle Replacement	32	Fleet Manager	This has not been done. There are known issues to consider, and we expect more opportunity to resolve these as the technology develops, becomes affordable and widespread. Public Works Response: The cost of developing charging stations is an issue to bear the cost of installing them when so few vehicles we have would be able to switch to electric. Most of our light duty vehicles are pick-ups and the green technology is not there for pick-ups right now and the projected cost for these vehicles is more than double what we can buy a gasoline driven pick-up. This is new technology, and our mechanics would have to be trained to maintain and repair these vehicles.
Maintain Parks with non-chemical inputs	40	Parks and Recreation	Since 2017 a reduction from the 2010 in location of fertilizing and lime based off a retraction plan with introduction of meadow mixes in some locations. Chemicals are still imported and used in grounds maintenance.

Adjust New Development Zoning	52	Planning	Some progress here. compact development: Lot sizes were reduced to 6000 sq ft, tiny home code established, PUDs like SCLT established with more on the way. Mixed-use zoning kind of backfired; residential creep into commercial areas led to situation of lack of much commercial land. Currently working on zoning use tables, could offer opportunity for more little stores in neighborhoods/increase walkability
Adjust Code for Solar Panels	53	Planning	Not pursued. Planning department response: Most properties that utilize solar panels are on island properties, and roof mounting has not been much of an issue from a zoning code perspective.
City Bldg. Energy Audit Initatives	20, App. A	Public Works	Siemens conducted energy audits on some city buildings between 2013 and 2015 when it submitted a response to a ity RFP, but don't know which buildings or results. Perhaps this is basis for ETIPP info that 5 City buildings need electric boilers
Materials Reuse Center	38	Public Works	has been explored before in 2011 by Sitka Community Development Corporation (developed into SCLT); land was being explored out at GPIP. Hard to staff and low turnover of stuff led to closure of center.
Curbside Recycling	37	Public Works	Does not exist. Recycling program is currently managed by waste vendor.
Ban Yard Waste from Garbage	40	Public Works	Not pursued. Staff mentioned difficulty in enforcment.
Municipal Composting	39	Public Works	did not happen. Past composting efforts had rat problems and there have been bear concerns. Need to help either private businesses fill niche (provide subsidized land?) or purchase equipment.
Enforce/Strengthen Secondary Heat Source Requirement	51	Public Works Building Inspector	The requirement for a secondary heat source was revoked.
Adjust Contract Bidding	50	Public Works	CBS will specify all items that will be included in the rehabilitation of a building. This occurs during the design phase of a project with a focus on energy efficient projects with longer lifecycles.
Energy/Fuel Conservation Training	44	Recycling	Not pursued.
Energy Effiicient Remodel of Pacific High School	28	School District	Remodel completed in 2014. Uses air source heat pump for heating. There probably is more that could be done, heat pump water heat, etc.

Serve Locally Caught Fish in Schools	42	School District	In non-pandemic years, nonprofits, fishermen, fish processors, and the school collaborate to serve locally caught and donated salmon and rockfish in all Sitka schools.
Compost School Food Waste	42	School District	Composting at schools has been attempted. Rat infestation and problems with decomposition (did not reach industrial level of heat needed). Schools have expressed interest in purchasing an industrial composter to do this.
Schools - Add Electric Heat	24	School District Electric	Per ETIPP proposal, all 4 schools have electric boilers/heat pumps with interruptible rates.
Blatchley M.S. Energy Audit Initatives	21, App. A	School District Public Works	The Electric department worked with Blatchley middle school to install the electric interruptible boiler circa 2015. We are currently unaware of any initiatives that resulted from an energy audit.

Grant Opportunities

We are currently aware of two different ways to reduce the costs for improving energy efficiency of commercial and school buildings.

C-PACE is a program authorized by the AK legislature in 2017 that any municipality conducting property assessments can use to allow commercial entities to finance energy improvements without upfront capital costs. Anchorage launched a program on April 1, structured to be revenue-neutral for the city. More information can be found here: https://akcpace.wordpress.com/what_-is-c-pace/

An energy services company (ESCO) can conduct building audits, help obtain financing, and conduct upgrades with no up-front capital costs to the City. The energy savings pay for the work over several years. Mt. Edgecombe High School used this mechanism to accomplish upgrades in 2013-2014 by Siemens, one of 3 ESCO contractors approved by the state.

Anchorage sought targeted grant funding that has paid for a Sustainability Coordinator position to track opportunities that align departmental and community efforts to achieve common goals, including the procurement of funds.

Local Policy Opportunities

Both the Electric Department and the Planning Department expressed an interest in collaborating on co-crafted policy. We asked 2 questions to city staff (below) and have included their responses in red.

1) **Do CBS staff have any suggestions for initiatives, policies, code changes, or programs that could save the city money, increase efficient use of our hydropower resources, result in reducing our CO2 emissions, and/or increase the resiliency of our community?**

a) Organized/city-wide composting initiative and/or initiatives to reduce food waste
b) Community greenhouse/gardening
c) Electric vehicle charging stations
d) Emissions standards for vehicles
e) Walkability/bike-ability improvements
f) Incentive programs for residential installation and use of dog/pet septic systems (such as these: https://doggiedooley.com/), reducing dog/pet waste in the solid waste system
g) Fix It Fairs/Repair Fairs – community gatherings with handymen, tailors/seamstresses/upholstery, welders/carpenters, hardware specialists, etc., to repair broken items that would otherwise be thrown away
h) Land banking – monetizing municipal lands that are not prime for development for use as wetlands banks and/or carbon credits

2) **Does staff have any ideas or suggestions for where the CATF could add capacity, look for grants or funding resources, or suggest policy or code changes to the assembly that could be helpful to carry these ideas forward?**
   a) **Recycling needs a front-end person/line of control** to direct or distribute items so the most value can be achieved with least amount of contamination. Ideally all trash and recycling should be centralized in same location. Doing so has cost upfront but would allow for a better shipped product with less local handling and transport.
   b) **Business case and impact study analysis:** There often is a strong business case (i.e. savings, efficiencies, return on investment, etc. for CBS) to be made in deciding to make our policies/buying decisions/operations greener, but it can be difficult to find the time and data necessary to put together a business case to justify the change. Having more support available to do that type of analysis would be very helpful. Further, it would be helpful for us to have a better understanding of the environmental impact of certain actions – for example, since we can no longer recycle mixed paper, from an environmental perspective, is it better to incinerate these materials versus shipping them to a landfill? Better understanding of the full life cycle impact of goods and materials would aid decision-making.

Upcoming State and Federal Policy Opportunities

What is a Green Bank? A green bank is a financial institution, typically public or quasi-public, that uses innovative financing techniques and market development tools in partnership with the private sector to accelerate deployment of clean energy technologies. Green banks work with existing financial institutions to leverage public dollars to create more incentive for private investments.

State - SB123: Energy Independence Program and Fund

- Governor Dunleavy has introduced a bill, SB123, that would create a State green bank in Alaska, providing affordable financing for weatherization/energy improvements. This bill is necessary for us to take advantage of the green bank/funding that is being proposed at a national level (via HR806, below).

Federal - HR806 Clean Energy and Sustainability Accelerator Act

- This bill would create a national Green Bank and a $100 billion Fund to help capitalize state green banks. Alaska could receive as much as 130 million from this effort, according to Alaska Public Media. Representative Don Young is a co-sponsor of this bill.
- More information: https://www.alaskapublic.org/2021/04/12/green-bank-for-sustainable-energy-projects-find-favor-with-dunleavy-and-young/

Federal - HR 2307: Energy Innovation and Carbon Dividend Act

- HR 2307 is the Energy Innovation and Carbon Dividend Act. The Sitka Assembly passed a resolution supporting carbon fee and dividend in February 2018 before legislation had been introduced in the Congress. The jist of this bill, which has more co-sponsors than any other fee and dividend bill is that a gradually increasing fee would be placed on fossil fuel producers at the source of production (mine, well head, refinery). The fees would go to the U.S. Treasury for distribution to all households on an equal basis determined by the number of adults and children. About ⅔ of households would break even or receive more money that they would spend on increased prices entailed by the increased fossil fuels costs embodied in purchased products. A border tariff would motivate other countries without comparable carbon pricing to take similar action. This bill would initiate payment for the societal costs of fossil fuels resulting in carbon dioxide emissions that contribute to global warming while creating jobs, improving health from air pollution, and lowering emissions by 40% by 2030, without affecting GDP.

Support for creating a Federal Clean Energy Standard

- The Biden administration strongly supports the creation of a Clean Energy Standard (CES) as a cost-effective pathway to reduce emissions. CES is a mandatory national goal to force power plant carbon releases to zero on a timetable that would enable the U.S. economy to reach net-zero carbon emissions by no later than 2050.
- Essentially, a CES requires more electricity, over time, to be generated from renewable energy rather than fossil fuels. A CES broadens the list of energy resources (to include hydropower and nuclear, in addition to wind and solar) that are eligible under the standard.
- More information can be found here: https://www.npr.org/2021/04/14/987099796/how-does-the-biden-administration-plan-to-reach-its-clean-energy-goal

Municipal greenhouse gas emissions documentation

To determine the city's greenhouse gas (GHG) emissions, the CATF requested city data for the purchase of diesel, unleaded, and fuel oil for 2021. These fuels are used for transportation and building heat. The city also provided a number for all gallons of fuel procured for the school district. It was assumed that these were used for heating the school buildings, as the school buses are contracted and that fuel consumption is not purchased by the city. Finally, the city's portion of emissions due to the electric department's diesel generation is assumed to be 15% of the electricity generated by diesel.

Year 2021's numbers may be different than other years due to COVID, and should be compared to future years as the numbers are available.

The emissions for each fuel type are estimated using the EPA's GHG Emission Factors Hub, which provides GHG emissions calculations for typical sources. This calculation does not include any estimate of GHG emissions for wastewater or solid waste, as was the case in the 2006 report.

Emission Source	Fuel in Gallons	kg CO2/ gallon	kg CO2	percentage to city	Total Tons CO2
Diesel Used for Electricity Generation	14838	10.21	151495.98	0.15	22.724397
Unleaded fuel for vehicles	31362.523	8.78	275362.9519	1	275.3629519
Diesel equipment fuel	2459	10.21	25106.39	1	25.10639
Diesel highway fuel	17703	10.21	180747.63	1	180.74763
Heating Oil	36609	11.27	412583.43	1	412.58343
School District Fuels	17966	11.27	202476.82	1	202.47682

Sector	Tons CO2	Percentage
Vehicles	481.2169719	43.00%
Buildings	615.06025	54.97%
Electricity	22.724397	2.03%

Sitka Climate Action Task Force Final Report: August 20, 2022

Summary: This report is intended to provide a summary of the activities of the Climate Action Task Force from our convening in February 2021 to August 2022. The City and Borough of Sitka Assembly is considering an ordinance that would create a long-term Sustainability Commission that will continue to pursue emissions reductions, climate change mitigation and adaptation, and other sustainability initiatives. During the discussion at the first reading of the ordinance on July
26, 2022, Mayor Eisenbeiz requested a report from the CATF as part of wrapping up the task force's work. Due to the nature of climate change, we are unable to call the work of the task force 'finished'; rather, this is an ongoing, long-term crisis that our community (and world) will be dealing with the impacts of for generations to come. In the interest of continuing the municipality's work to address the impacts of climate change and take action to mitigate and adapt to them, the Climate Action Task Force recommends instituting a permanent body, i.e. a Sustainability Commission, to address these ongoing impacts and opportunities that arise. The intent to turn the Climate Action Task Force into a more permanent body was incorporated into the resolution that created the task force, Res. 2020-29A, and was presumably the intent of the assembly at the time that they passed the resolution.

The CATF convened for its first meeting in February 2021. The focus of the CATF in 2021 was gathering information and building relationships and trust with the CBS assembly and city staff. The first part of our information gathering looked at climate action across other Alaskan communities and communities across the US to find frameworks and ideas that we could model the task force's work after. We reached out to Juneau's Commission on Sustainability and have kept up semi-regular communications with them, as well as with the Alaska Municipal Climate Network, which is a group of municipal professionals and elected officials across the state that work on climate change adaptation and mitigation efforts. The AMCN meets monthly in the fall - spring to share learning and grant opportunities and hear about case studies and climate work being done across the state.

Next, we revisited the 2010 Climate Action Plan to see what worked, what did not, and why. We provided the assembly with an update on how that report was used and implemented. We reported on progress that had been made to the assembly during a joint work session on May 25th, 2021. (see appendix A: CALT Handout to Accompany Presentation). Throughout this process, we worked with city staff and community members to identify items that had been completed, how the work had been carried forward, what challenges had arisen, and why suggested actions were not pursued.

Also at this joint work session, we identified some priority goals and work areas for the next year. The accomplishments under these priority work areas are detailed below. The task force also assisted with development of job description for a sustainability coordinator, and language for a sustainability commission ordinance that could carry on the work of the task force.

- Priority: GHG Inventory
    - Updated the greenhouse gas emissions inventory for CBS (Appendix B: Description of city GHG emissions)

    - Made recommendations on priorities for GHG reductions for CBS (vehicle fleet transition schedule; remaining city buildings electrified; pursuing installation of highly efficient heating infrastructure)
- Priority: Sustainable Tourism
    - Provided climate-focused feedback on short-term tourism plan
    - Research and outreach conducted regarding dock electrification
    - Provided a forum for community members to discuss impacts and concerns
- Priority: EVs/City Infrastructure
    - Researched and determined funding opportunities for purchasing EV charging infrastructure
    - Engaged in community outreach to assess interested parties for hosting the infrastructure
    - Assisted the Electric Department in submitting an RFI to the Alaska Energy Authority for the distribution of electric vehicle infrastructure formula funding from the Bipartisan Infrastructure Law
    - Supported grant applications through assistance with the decarbonization resolution
    - Continuously monitoring, researching, and engaging in discussions with representatives from appropriate agencies about accessing funding for electric vehicle charging infrastructure and electric vehicle conversions (busses)
    - Reported on further opportunities for policy advocacy and engagement
    - Made recommendations on grants to support renewable energy development; forwarded on to the Electric Department which further assessed the possibilities of applying for the USDA Rural Energy Pilot Program
    - Assisted with resolution for decarbonizing municipal operations
    - Put together a preliminary report on EV charging opportunities and infrastructure
    - Learned about and researched on-bill financing

Substantial progress was made on several of the priority work areas in the past year, and task force members have put countless hours of research and effort into addressing the climate emergency. The work continues, and a plethora of opportunities have opened up through new federal legislation for communities to tackle climate change, increase community resiliency, build up renewable energy infrastructure, and create more sustainable solid waste management practices and associated facilities. The city has repeatedly demonstrated its commitment to being a leader in climate action by passing resolutions, forming this task force, and most recently advertising and budgeting for a sustainability coordinator. According to members of the previous 2009-2010 Task Force, the main reason why the action plan was not implemented is because the task force disbanded after it completed the report, and there was no permanent body to follow up, provide accountability, and assist with implementation. The current assembly has the opportunity to ensure that Sitka's climate and sustainability legacy is continued by creating a permanent body that can continue working on this range of issues for years to come. The CATF stands ready to help this transition and continue our work in this new body.