

CLIMATE CHANGE Advisory committee special Meeting Monday, february 24, 2020 6:30 – 8:30 PM City Hall Council conference room 280 Madison Avenue North Bainbridge Island, wa 98110

AGENDA

MEMBERS:JENS BOEMERLARA HANSENDAVID MCCAUGHEY (CO-CHAIR)DERIK BROEKHOFFGARY LAGERLOEFNORA FERM NICKUMMICHAEL COX (CO-CHAIR)JULIE MATTHEWSDEBORAH RUDNICK

LIAISONS: JOE DEETS KIRSTEN HYTOPOULOS

6:30: CALL MEETING TO ORDER/ROLL CALL/ACCEPT OF MODIFY AGENDA/CONFLICT OF INTEREST DISCLOSURE

6:35: APPROVE JANUARY 27th minutes

6:40: PUBLIC COMMENT

6:50: UPDATES

- CLIMATE EMERGENCY RESOLUTION (ATTACHED)
- ACTION ITEMS AND QUESTIONS FROM FEBRUARY 3rd Joint Study Session with UAC and CCAC with PSE (Attached)
 - NEXT CCAC: WEDNESDAY MARCH 18th

7:10: CLIMATE ACTION PLAN DISCUSSION

- PATH TO GET 90% GHG REDUCTIONS BY 2040 (ATTACHED)
- RANKINGS OF ACTIONS (ATTACHED)
- INDIVIDUAL ACTIONS (ATTACHED)

8:15: OTHER BUSINESS 8:30: Adjourn

MATERIALS

- 1. JANUARY MINUTES
- 2. CLIMATE EMERGENCY RESOLUTION
- 3. PSE ACTION ITEMS AND QUESTIONS
- 4. PATH TO 90% GHG REDUCTIONS BY 2040
- 5. RANKING OF ACTIONS
- 6. INDIVIDUAL ACTIONS

CLIMATE CHANGE ADVISORY COMMITTEE

Regular Meeting

Monday, January 27, 2020

MINUTES

<u>Present</u>: Committee members Jens Boemer, Derik Broekhoff, Michael Cox, Lara Hansen, Gary Lagerloef, Julie Matthews, David McCaughey, Nora Ferm Nickum, Deborah Rudnick; Council Liaisons Joe Deets and Kirsten Hytopoulos <u>City staff</u>: Ellen Schroer, Deputy City Manager <u>Public/guests/observers</u>: Gloria Sayler, Rick Freeman, Ron Peltier, Maradel Gale

City Council Member Rasham Nassar

- I. The meeting was called to order at 6:30 pm.
 - Conflict of interest disclosure: Jens Boemer reminded everyone of his standard statement (see past meeting minutes) his company works with PSE in various ways.
- 2. Minutes from the previous meeting (December 18, 2019) were approved.
- 3. Public Comment
 - No public comment.
- 4. Updates
 - Monday, Feb. 3: Joint Study Session—UAC and CCAC with Puget Sound Energy
 - We appreciate PSE being willing to participate in an evening meeting with us. This will be a dialogue. The goals of the meeting are to share information, get updates on PSE's plans, ask questions of PSE's subject matter experts, and discuss draft Climate Action Plan strategies.
 - This meeting is open to public observers. There will be a public comment period at the end.
 - Monday, Feb. 24: Next Climate Change Advisory Committee meeting, 6:30-8:30 pm.
 - Committee Co-Chairs: Michael Cox and David McCaughey will continue as co-chairs.
 - Two Task Forces are being formed, applications due Jan. 31:
 - Green Building Task Force
 - Sustainable Transportation Community Task Force
 - Carbon offsets for police station
 - The City Council is looking at how to make the police station energy efficient and sustainable, and whether to do that through upgrades and/or carbon offsets. The City could set an example with this building.
 - Discussion:
 - It would be nice to know what the energy footprint was of the older police and court buildings.
 - The City could potentially do both upgrades and offsets.
 - A key rule of thumb is not to use offsets to justify higher carbon infrastructure investments. They should come at the end, after investing in infrastructure that is low carbon, rather than locking in high carbon infrastructure.
 - It could be hard to renovate this building later, because it will be in operation 24/7.
 - Some of the systems are not otherwise old enough for replacement yet.
 - Buying offsets is not a one-time cost.
 - The current cost of offsets is a false economy the price doesn't reflect a world that is taking climate change seriously, which we are.

- It's hard to find high-quality carbon offsets.
- There could be an investment in reducing fossil carbon in another City facility for the same amount of money or the same greenhouse gas emissions reductions.
- It is important for the City to lead by example and walk the talk. Investing in energy efficiency rather than buying offsets is consistent with our Climate Action Plan and the importance of addressing climate change by taking *real* action.
- <u>Recommendation</u>: The Committee recommends that the Council invest in energy efficiency upgrades over carbon offsets. The Committee recommends that the City considers the most environmentally friendly way and timing for disposing of the existing system.
- Climate Emergency Declaration
 - The draft resolution aims to define the notion of a "climate lens" and ensure that decisions are consistent with our stated climate goals and processes. It officially recognizes the severity of climate impacts.
 - The Committee supports the intent of this resolution and will follow up with suggested text adjustments. We will discuss the revised draft at the next CCAC meeting and send on to the City Council.
 - We also discussed that the City could potentially institute an internal climate pricing policy. Other local governments are doing this.
- 5. Climate Action Plan discussion included:
 - Criteria for prioritizing actions. Nora, Lara, Mike, and possibly Julie will develop criteria we can all use to prioritize the actions in our sections.
 - Being sure to include water-related actions in all relevant sections.
 - Considering how we will track progress over time with regard to the transportation sector in particular. Gary will develop some goals and actions for section 2 of the CAP. These will outline actions to collect more local data for the transportation section of Inventory.
 - Incorporating verification metrics into the plan.
 - Potential online community action survey (like Jefferson County has done) to track actions and changes at the household level.
 - Having ambitious energy-related goals, not using state goals as a ceiling.
 - Proposed schedule:
 - Everyone will have updated their sections no later than Feb. 10.
 - Mike will work with Ellen to figure out a schedule for City Staff review prior to sending to City Council.
 - Hopefully, at our Feb. 24 meeting, we can approve draft plan for City staff review, and then review City staff comments at our March meeting.
- 6. Other Business
 - On the next City Council agenda, opportunity for public comment: Kitsap Economic Development Alliance's joint letter with organizations from other counties critical of clean fuel standards in Puget Sound. The City pays into the Alliance.
 - Next Movie that Matters: From the Ashes (about coal), Feb. 6 at the library. The one after that is March 5.
- 7. The meeting was adjourned at 8:35 pm.

RESOLUTION NO. 2020-XX

A **RESOLUTION** of the City Council of Bainbridge Island, Washington, hereby declaring the existence of a Climate Emergency, reaffirming the City's commitment to Climate Action, and to establish a program and procedures to ensure future City plans and City approved projects and actions are evaluated consistent with its adopted climate goals and policies.

WHEREAS, in April 2016, world leaders from 197 countries from around the globe recognized the threat of climate change, that it is caused by human related greenhouse gas emissions, and the need to urgently combat it by adopting the Paris Climate Agreement, and working to limit global temperature increase to no more than 1.5°Celsius from pre-industrial levels; and

WHEREAS, on September 12, 2017, the Bainbridge Island City Council adopted Resolution No. 2017-20, affirming the City of Bainbridge Island's commitment to meet or exceed the greenhouse gas goals established in the Paris Climate Agreement; and

WHEREAS, in 2018, the United Nations' Intergovernmental Panel on Climate Change ("IPCC") warned that it would not be possible to meet the 1.5°Celsius goal unless global greenhouse gases were reduced 45 percent below 2010 levels by 2030 and reaching net zero by 2050, requiring an unprecedented transformation of every sector of the global economy over the next 11 years; and

WHEREAS, global temperatures having increased approximately 1.1°C above preindustrial levels, causing overall climate disruption and global warming, resulting in higher temperatures, altered precipitation patterns, rising seas and acidified oceans, which in turn are causing increased and more intense wildfires, floods, loss of habitat, new ranges for diseases and pests, adverse human health effects, economic hardship, homelessness, species extinctions, food and potable water shortages, droughts, and extreme weather; and

WHEREAS, the Ninth Circuit Court of Appeals recently recognized that climate change is occurring at a rapidly increasing rate and that our elected officials have a moral responsibility to seek solutions; and

WHEREAS, Bainbridge Island is an island surrounded by a sea, which is predicted to rise significantly in the coming years due to climate change; and

WHEREAS, Bainbridge Island's Comprehensive Plan, which serves as the City's Sustainability Plan, calls for the protection of the Island's finite environmental resources, the reduction of greenhouse gas emissions and adaptation to the effects of climate change; and

WHEREAS, in 2017 the City Council took a step towards implementing the goals and policies contained in the Comprehensive Plan by creating a Climate Change Advisory Committee to assist in implementing the Comprehensive Plan's climate related goals, including a reduction of our Island's greenhouse gas emissions and an increase in our Island's adaptation to the effects of climate change; and

WHEREAS, at its annual retreat in January of 2019 the City declared the creation and implementation of a Climate Action Plan one of its highest priorities for the coming year; and

WHEREAS, the City's Climate Change Advisory Committee is working on developing a Climate Action Plan and strives to present a draft plan to the City Council in late spring 2020; and

WHEREAS, the City is working to develop a Sustainable Transportation Plan, to promote a shift in transportation modes, with an overall goal of a net reduction in transportation related greenhouse gas emissions, as well as a host of additional related benefits; and

WHEREAS, the City will appoint a Green Building Task Force to develop a green building program where buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by efficiently using energy, water and other resources; and

WHEREAS, despite the current climate-related planning there are additional short-term actions that should be taken to advance progress on the overall goals of climate change mitigation and adaption even prior to final adoption and implementation of the City's climate-related plans; and

WHEREAS, the longer we delay taking action to reduce greenhouse gas emissions, the greater the threat posed by climate change to current and future-generations, and the more costly it will be to protect and maintain our community and natural environment; and

WHEREAS, the longer we delay taking action to prepare for and respond to climate change effects, the fewer options we will have and the more expensive those options are likely to be to adapt to climate change; and

WHEREAS, the City of Bainbridge Island takes pride in being a model City for progressive environmental legislation and sustainability, and has demonstrated itself to be a leader in this front through numerous adopted Ordinances and Resolutions; and

WHEREAS, on September 20, 2019, the City's youth and young adults joined with their companions around the world to call for a global climate strike and greater, more urgent climate leadership from their elected officials and public institutions.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BAINBRIDGE ISLAND DOES RESOLVE AS FOLLOWS:

Section 1. The City declares that our Island, region, state, nation, and the natural world are experiencing a Climate Emergency. The City Council hereby expresses a renewed commitment to ensure its actions and decisions going forward are in line with reducing the impact of that emergency;

Section 2. The City commits to take immediate actions to safeguard against the current, inevitable and potential consequences of climate change and to encourage the full participation of the entire Bainbridge community in climate mitigation and adaptation efforts;

Section 3. The City commits to developing a procedure and process whereby the City's plans and City approved projects will be evaluated through a "Climate Lens", such as through a Climate Change Mitigation and Adaptation Certification, or similar process, prior to approval to ensure they are consistent with the City's adopted climate goals and policies to reduce greenhouse gas emissions and reduce our vulnerability to climate change;

Section 4. The City commits to educating Island residents and the business community about the Climate Emergency and organizing and advocating for climate emergency mobilization efforts at the local, regional, state, national, and global levels to provide maximum protection for the Island as well as all the people and species of the world; and

Section 5. The City commits to calling on higher levels of government to provide financial and regulatory assistance to support the City's efforts to end Island-wide greenhouse gas emissions as quickly as possible and respond to this Climate Emergency.

PASSED by the City Council this _____ day of _____, 2020.

APPROVED by the Mayor this _____ day of _____, 2020.

By: _____, Mayor

ATTEST/AUTHENTICATE:

By: _____ Christine Brown, City Clerk

FILED WITH THE CITY CLERK: PASSED BY THE CITY COUNCIL: RESOLUTION NO.

2020-___

February 3rd CCAC/UAC/PSE Meeting: Next Steps

The Bainbridge Island Climate Change Advisory Committee (CCAC) and Utility Advisory Committee (UAC) had a meeting with Puget Sound Energy (PSE) on Monday February 3rd. The purpose of the meeting was to discuss issues that are important for the Climate Change Advisory Committee (CCAC) to understand as they develop the Climate Action Plan (CAP) and for the UAC as do their work.

The meeting was attended by seven representatives from the CCAC, two representatives from the UAC, and six representatives from PSE. There were also three Bainbridge Island City Council members present. There was discussion on five topics with 10 minutes of opportunity for public comments. Based on the discussions at the meeting, we are proposing several next steps.

1. Meet to discuss the possibility of using Green Power funds for Island projects

- Several committee and City Council members expressed a desire to explore the possibility of using the funds that Islanders contribute to PSE's Green Power or the development of new Island-wide programs to fund renewable energy projects on Bainbridge Island.
- In line with social equity requirements set forth in WA State's new Clean Energy Transformation Act (CETA), equity in these programs will be of importance to gain Island residents' support.

Next Steps/Timeline

- Convene an in-person meeting with select CCAC members, City Council CCAC liaisons, and PSE representatives to discuss.
- A goal is to convene meeting for early March on Bainbridge Island.

2. Work with PSE to establish a robust Energy Conservation and Demand Response Program on Bainbridge Island

- PSE has indicated they will be launching a new energy conservation and demand response program on Bainbridge Island.
- The goal is to decrease demand by 3.3 MW. This would require engaging a sizeable portion of the Community.
- We would like to work with PSE to prompt the program across the Island via our different organizations and partner with the City to meet the challenge of reducing demand.

Next Steps/Timeline

- Hold a public meeting with CCAC, UAC, and PSE after PSE has developed contracts with organizations that will be performing the work for PSE.
- The purpose of the public meeting is to provide information to the Committees and public on the program and strategize how to prompt the program.
- Prior to the meeting, CCAC/UAC representatives would meet with PSE to organize the public meeting hopefully in late February or early March.
- A goal would be to have the public meeting in early-May.

- 3. Explore battery storage strategies for the Island including how to ensure the 12 emergency hubs have power during emergencies
 - We discussed briefly the idea of "micro-grids" and touched on battery storage and PSE's plans to have up to 3 MW of power for peak loads and emergencies in batteries.
 - We would like to explore the possibility of additional battery storage potential, possibly decentralized, and how this could work in conjunction with Bainbridge Island Prepares.

Next Steps/Timeline

- Convene a meeting with CCAC members, Bainbridge Prepares personal, and PSE representatives to discuss battery storage technology and how we can work together to ensure the 12 emergency hubs have power generation capabilities.
- A goal would be to have an in-person meeting by the middle of March.
- We would discuss this topic at a public meeting in early May.

4. Solar for homes and EV charging stations

- We talked briefly about these topics at meeting but we would like to talk in more detail at the next public meeting.
- We would like to learn about any programs where PSE can assist homeowners to obtain solar for their homes.
- We are also interested in exploring any programs where PSE could finance the installation of EV chargers.

Next Steps/Timeline

- Convene a meeting with CCAC members and PSE representatives to these issues and whether there is a potential for further discussions at a public meeting discussed above for early to mod-April.
- A goal would be to have an in-person meeting by early March.
- We would discuss this topic at the public meeting in early May.

5. PSE Follow-up Questions (we can add more)

- Does PSE intend to continue and intensify their green power, solar choice, and local generation programs in the context of CETA to (partly) achieve CETA, or will these efforts continue as they are *in addition* to CETA?
- Do current UTC rules allow for IOUs to develop and administrate voluntary programs like the FIT or "donor models" for parts of their service territory?
- May CETA change any of these rules in the future?
- Would such voluntary program contribute to PSE's IRP or be in addition to it?
- What is the total PSE turnover for BI residents and businesses?
- What surcharge (in % on absolute \$\$) would be needed to provide meaningful financial incentives for local renewables generation on the island?
- How could this longer-term target impact PSE's shorter-term target to increase reliability by deployment of a centralized vs. decentralized battery solution?

BI: Path to Reduce GHG Emissions 90% by 2040 Compared to 2014 (2/18/2020)

<u>2014 GHG Emissions</u>: 214K MTCO2e <u>2040 GHG Emission target</u>: 21K MTCO2e <u>Estimated Population Growth for BI by 2040</u>: 5600 people¹ (~1%/year) <u>Estimated GHG Emissions Increase</u>: 54K MTCO2e (5600 X 9.4 MTCO2e/capita)

Anticipated Reductions Due to State or Local legislation/Policy

| Year | GHG (MTCO2e) | Comments |
|------|--------------|---|
| 2014 | 214K | Baseline |
| 2022 | 200K | Electrify ferry per WSF workplan (14K reduction) |
| 2028 | 187K | State Phase out HFCs per 2019 Legislation (13K reduction) |
| 2030 | 99K | 80% PSE carbon free per 2019 Legislation, green building program, local |
| | | generation and energy conservation (88K reduction) |
| 2035 | 93K | Phasing out propane per CAP (6K reduction) |
| 2040 | 71K | 100% PSE carbon free per 2019 Legislation, green building, local |
| | | generation, and energy conservation (22K reduction) |

Path to get 50K Additional GHG Reductions Needed to Meet 21K Target

Assumptions

- Total growth in GHG emissions stable (Estimated additional 54K MTCO2e by population growth).
- State and Local legislation/policy is implemented.
- Innovations in air travel occur.
- Large shift to electric cars and infrastructure and improvements in public transportation.

| Area | Current GHG (MTCO2e) | Potential Reductions | Comments |
|----------------------|-------------------------|-------------------------|--|
| On-Road Passenger | 27K | 14K | 50% reduction due to shift to electric cars and buses and more public transportation |
| Air Travel | 24K | 12K | 50% reductions due to fuel shift, more efficient planes, and reduction in travel |
| Off Road | 9К | 4K | 50% reduction due to requirement all yard/garden equipment electric and increases in efficiency. |
| Solid Waste | 8K | 4К | 50% reduction in waste and capture of methane from WWTP and landfill |
| Septic Tanks | 2К | None | Would need to provide sewer service. |
| Agriculture | 0.4K | None | Would need to reduce animals. |
| Total | 71K | 34K (need 50K) | Gap of 16K to meet target of 21K |

¹ Countywide Population and Housing Growth. Kitsap 2035

https://www.kitsapgov.com/dcd/PEP%20Documents/BLR_2014_3%20Countywide%20Population%20and%20Hous ing%20Growth.pdf

| Climate Action Plan: Crite | ria for Ranking Action Febru | ary 18th, 2020 | | | |
|---|---|--|--|---|-----|
| After ranking actions we w | will discuss how we want to | put actions into bins (high, media | um, or low) | | |
| The first scoring criteria is | evaluating the potential for | r reducing GHG emissions and/or | reducing vulnerability. | | |
| *Populations of concern (from | US Global Change Research Cent | ter: Climate change is already causing a | nd is expected to continue to cause | a range of health impacts that vary | |
| across different population gro | oups in the United States. The vul | nerability of any given group is a function | on of its sensitivity to climate change | e related health risks, its exposure to | |
| those risks, and its capacity for | responding to or coping with clir | nate variability and change. Vulnerable | groups of people, described here as | s populations of concern, include those | |
| with low income, some commu | unities of color, immigrant groups | s (including those with limited English p | roficiency), Indigenous peoples, chile | dren and pregnant women, older | |
| adults, vulnerable occupationa | l groups, persons with disabilities | s, and persons with preexisting or chror | nic medical conditions. | 1 | |
| | | | Bating Description | | |
| Scoring Criteria | Criteria Description | High | Medium | Low | الا |
| Scoring Criteria | Citteria Description | (5 points) | (3 points) | (0 point) | |
| GHG emissions reduction (mitigation) and/or reduces vulnerability to climate change (adaptation) | Potential for action to reduce GHG emissions (mitigation) and/or potential for action to reduce vulnerability to effects of climate change (adaptation) | Will result in a direct, quantifiable, and significant/meaningful reduction in GHG emissions and/or will result in a direct, measurable reduction in vulnerability | Resulting GHG emissions expected to be moderate, but it cannot be quantified and/or will result in a possible reduction in vulnerability | GHG emissions reduction cannot be assured, is unlikely to occur, will be minimal, or unknown and/or adaptation cannot be assured, unlikely to occur, will be a small change, or unknown | |
| Implementable | Action is both technically and logistically feasible and has been implemented in other jurisdictions | Successful examples of implementation of this action exist or a clearly defined implementation plan is in place | There is potential to implement this action (it is possible) and a plan can be created to do it, but no one has done it yet | Vague or non-existent understanding of how action can be implemented. | |
| Duration of benefits | The length of time over which the benefits of the action will persist | Will have direct benefits that persist for greater than ten years. | Will have direct benefits that are likely to last less than 10 years. | The direct benefits of this action can only be sustained with continued funding or may detrimental over the long term. | |
| Equity | The action will contribute to or support social justice, equity, diversity and inclusion within our community | Will directly support populations of concern* (e.g., low income, children and pregnant women, older adults, some communities of color) in our community to reduce GHG emissions, improve their ability to adapt to climate change impacts, and will not have an inequitable burden. | Will not increase the burden or erect barriers for populations of concern in our community to reduce GHG emissions or adapt to climate change | Will cause inequitable burdens to populations of concern in our community and will not directly support populations of concern. | |
| Multi-solving | Action is also a solution to another issue (e.g., air pollution reduction; economic opportunities; improved transit; preserve natural resources). | Will result in actions with significant benefits to meeting another community goal in addition to climate change. | Minor benefits to meeting another community goals in addition to climate change. | Benefit to meeting other community goals unlikely or unknown | |

Section 2: GHG Inventory

| Action Number | Brief Description | GHG emissions reduction | Reduces vulnerability to climate change | Implementable | Duration of benefits | Equity | Multi-solving | Total Points | Com |
|------------------------|---|----------------------------|---|---------------|-------------------------|--------|---------------|--------------|--------------------------------------|
| | | | | | | | | | I'm not sure there for many of these |
| Goal A Strategy A.1 | Implement a greenhouse gas emission (GGE) tracking plan Evaluate and select software tools that engage community data input to measure and monitor GGE community wide. | | | | | | | | |
| 2. A.1.a | Generate a plan with COBI to track GGEI using at least two different protocols. | 5 | 5 | 3 | 5 | 5 | 5 | 28 | |
| 2. A.1.0 | | 3 | 3 | 5 | 3 | 5 | 5 | 24 | |
| 2. A.1.c | Customize tool as needed B ustomize tool as needed 🖬 | 5 | 5 | 5 | 5 | 3 | 3 | 26 | |
| 2. A.1.d | 2021: Implement communitywide use; Assess 2021 annual emissions results and compare with 2018 Cascadia GGEI | 5 | 5 | 5 | 5 | 5 | 3 | 28 | |
| Strategy A.2 | Compile annual GGEI reports for public release | 5 | 3 | 5 | 5 | 4 | 4 | 26 | |
| Goal B | Develop a validation and verification (V&V) strategy to track reduction targets | | | | | | | | |
| Strategy B.1 | Focus on Community GGE categories that currently are based on regional models in the 2018 GGEI. | | | | | | | | |
| 2. B.1.a | Using results of Actions 2.A.1.x above, conduct a systematic comparison of results using different GGEI models. | 5 | 3 | 4 | 5 | 3 | 5 | 25 | |
| 2. B.1.b | 2020: Assess motorized transportation and air travel, prepare a brief summary report. | 5 | 3 | 4 | 3 | 3 | 5 | 23 | |
| 2. B.1.c | 2021: Develop a protocol for measurement uncertainty | 4 | 3 | 4 | 5 | 3 | 3 | 22 | |
| 2. B.1.d | 2022-2040: Do V&V assessments of any future updates to regional consumption-based models | 4 | 3 | 4 | 3 | 3 | 4 | 21 | |
| Goal C | Re-evaluate the forest sequestration analysis (V&V) | | | | | | | | |
| Strategy C.1 | Explore more rigorous analysis methods, including some localized on-the-ground research and tree inventory. | | | | | | | | |
| | Approach academia for consultation to plan more rigorous analysis methods, including some localized on-the-ground research and tree | | | | | | | | |
| | inventory. Collaborations may include student apprenticeships, student thesis research opportunities, or collaborative research grant | | | | | | | | |
| 2. C.1.a | proposals. | 4 | 5 | 4 | 4 | 3 | 5 | 25 | |
| 2. C.1.b | 2021: Field studies and data analysis | 5 | 4 | 5 | 4 | 3 | 5 | 26 | |
| | 2022-2025: Broaden sequestration to include agriculture lands, shorelines and open meadows/parks, with ongoing academic collaboration, | | | | | | | | |
| 2. C.1.c | Friends of the Farms, and other Island environmental groups. | 5 | 4 | 4 | 5 | 4 | 4 | 26 | |

ments

e should be rankings e in Column D.

| Section 3: Energy | | | | | | | | | |
|------------------------|--|----------------------------|-----------------------|------------------------------------|----------------------|--------|---------------|--------------|--|
| Action Number | Brief Description | GHG emissions reduction | Reduces vulnerability | to climate change Implementable | Duration of benefits | Equity | Multi-solving | Total Points | Comments |
| Goal A Strategy A.1 | Increase energy conservation and efficiency across all energy sectors Promote energy efficiency through existing and potentially newly funded City programs. | | | | | | | | |
| 3.A.1.a | Use high-performance retrofit technologies in City projects | | | | | | | | |
| 3.A.1.b | Create a matrix of incentives for building owners to increase energy efficiency | | | | | | | | |
| 3.A.1.c | Work with PSE and partnering to increase access to energy conservation and efficiency programs | | | | | | | Also | in Buildings 5.A.3.b |
| Strategy A.2 | Establish a Bainbridge Island Green Energy and Building Fund Green Green Green and Building Eurol that an article in antime to building under a calidate and drivers to increase a lastification councils. | | | | | | | Also | in Buildings A.4 |
| 3.A.Z.a | Create a new Green Energy and Building Fund that can provide incentives to building owners, residents and drivers to increase electrification conversions. | | | | | | | i nis | is what the strategy is |
| Goal B | Eliminate carbon-based energy sources from all energy sectors | | | | | | | | |
| 3 B 1 a | Partner with energy providers and local businesses on programs that will reduce carbon-based energy sources. Work collaboratively with DSE to move towards a 100% carbon-free electrical cumply, neferably songer than the WA State mandated enak | | | | | | | | |
| 3.B.1.b | work consolvatively with role to move coverage a power sector and power provide the sector and the work state manuated goals. Explore on portunities to work with PSF and local banks/or end to create local renewable energy projects | | | | | | | See | ms similar to 3 C 1 a |
| 3.B.1.c | Develop local policies that incentivize renewable energy adoption and passive PV solar or other technologies. | | | | | | | | |
| 3.B.1.d | Establish a policy that prohibits propane and heating oil as an energy source for new development, and develop incentives to replace propane | | | | | | | Also | in Buildings 5.A.1.c, 5.A.2.b, and 5.A.3.a |
| Strategy B.2 | Partner with neighboring municipal and tribal communities on programs that will reduce emissions. | | | | | | | | |
| 3.B.2.a | Develop and hold trainings to help contractors implement the fuel-switches from carbon-based to electrification of building stock. | | | | | | | | |
| 3.B.2.b | Collaborate with neighboring and tribal communities to learn about more sufficient-living practices over efficient living styles. | | | | | | | | |
| Goal C | Create energy self-sufficiency for emergency preparedness and increase energy infrastructure reliability and resilience in light of changing climate. | | | | | | | | |
| Strategy C.1 | Create microgrid for critical infrastructure within community energy resources | | | | | | | | |
| 3.C.1.a | Work with PSE to develop a local program to encourage homeowners to acquire customer-owned generation. | | | | | | | | |
| 3.C.1.b | Research and develop microgrids for community emergency preparedness centers | | | | | | | Also | in 8.C2.d |
| 3.C.1.c | Research the community's willingness to underground Transmission and/or Distribution while also providing walking biking corridors for safety and mobility | | | | | | | | |
| 3.C.1.d | Work with WSF to install charging infrastructure at the ferry | | | | | | | Also | in Transportation 4C.3.a |
| 3.C.1.e | Investigate partnerships with adjacent communities to COBI to coordinate and utilize similar technologies and information sharing | | | | | | | | |
| Strategy C.2 | Large scale neighborhood microgrids with distributed energy resources | | | | | | | - | |
| 3.L.2.a | research and develop large scale neighborhoods microgrids with customer-based and or utility scale storage and co-locating combined CHP near pool | | | | | | | Con | 10INEG 3.C.2.a, D, and C |

| Action Number | Brief Description | GHG emissions reduction | Reduces vulnerability to climate chang | Implementable | Duration of benefits | Equity | Multi-solving | Total Points | Comments |
|---------------|---|-------------------------|--|---------------|----------------------|--------|---------------|--------------|----------|
| Goal A | Reduce motorized vehicle miles traveled per capita | | | | | | | | |
| Strategy A.1 | Develop interconnected network of infrastructure | | | | | | | | |
| 4.1.A.a | Implement the Island-wide transportation plan's non-motorized components | 5 | 3 | 5 | 5 | 5 | 5 | 28 | |
| Strategy A.2 | Promote mixed-use development | | | | | | | | |
| 4.2.A.a | Incorporate non-motorized transportation options into all new development | 3 | 3 | 5 | 5 | 3 | 3 | 22 | |
| Goal B | Increase use of public Transportation | | | | | | | | |
| Strategy B.1 | Work with Kitsap Transit to increase current transit and expand service | | | | | | | | |
| 4.B.1.a | Work with Kitsap Transit to develop a marketing/outreach/educational program | 1 | 1 | 5 | 1 | 5 | 5 | 18 | |
| Strategy B.2 | Encourage greater use of school buses and carpooling for student transportation. | | | | | | | | |
| 4.B.2.a | Work with school district to discourage drop-offs/pick-ups, encourage car-pooling, and promote use of school buses. | 1 | 1 | 5 | 3 | 3 | 5 | 18 | |
| Strategy B.3 | Prioritize transit-oriented new development. | | | | | | | | |
| 4.B.3.a | Require all new development to accommodate non-motorized and public transit transportation options | 3 | 3 | 5 | 5 | 3 | 3 | 22 | |
| Goal C | Increase access to and use of electric mobility options and support the development of electric ferries. | | | | | | | | |
| Strategy C.1 | Convert municipal vehicle fleet. | | | | | | | | |
| 4.C.1.a | Transition City fleet to electric vehicles | 5 | 1 | 3 | 5 | 0 | 3 | 17 | |
| Strategy C.2 | Develop infrastructure to support electric vehicles. | | | | | | | | |
| 4.C.2.a | All new development be EV charge-ready. | 3 | 1 | 5 | 5 | 3 | 3 | 20 | |
| 4.C.2.b | Install charging stations in commercial centers | 3 | 1 | 5 | 5 | 3 | 3 | 20 | |
| Strategy C.3 | Support, as needed, efforts to electrify ferry vessels. | | | | | | | | |
| 4.C.3.a | Coordinate with WSF, PSE, and other entities as necessary to establishing charging infrastructure | 1 | 1 | 5 | 5 | 3 | 3 | 18 | |

Section 4: Transportation

Section 5: Buildings

| Action Number | Brief Description | GHG emissions reduction | Reduces vulnerability to climate change | Implementable | Duration of benefits | Equity | Multi-solving | Total Points | Comments |
|---------------|---|-------------------------|--|---------------|----------------------|--------|---------------|--------------|----------|
| Goal A | Reduce GHG from all municipal, commercial, industrial and residential buildings | | | | | | | | |
| Strategy A.1 | Require green building for municipal buildings | | | | | | | | |
| 5.A.1.a | Adopt Green Building Task Force Recommendations | 5 | | 5 | 5 | 0 | 5 | 20 | |
| 5.A.1.c | Prohibit propane and fuel oil | 5 | | 5 | 5 | 0 | 5 | 20 | |
| Strategy A.2 | Require green building for commerical, industrial and residential | | | | | | | | |
| 5.A.2.e | Adopt Green Building Task Force recommendations | 5 | | 5 | 5 | 0 | 5 | 20 | |
| 5.A.2.b | Prohibit propane and fuel oil | 5 | | 5 | 5 | 0 | 5 | 20 | |
| Strategy A.3 | Programs to assist building owners | | | | | | | | |
| 5.A.3.a | Incentives for existing owners to replace propane | 5 | | 5 | 3 | 3 | 3 | 19 | |
| 5.A.3.b | Raise awareness of PSE energy conservation programs and expand programs | 5 | | 3 | 5 | 3 | 3 | 19 | |
| Strategy A.4 | Establish a Green Energy and Building Fund | | | | | | | | |
| 5.A.3.a | Fund to assist in residental audits, energy conservation, and transition to all electric | 5 | | 5 | 5 | 3 | 3 | 21 | |
| Goal B | Establish procedures to ensure buildings and infrastructure are resilient to climate change impacts | | | | | | | | |
| Strategy B.1 | Identify and mitigate city assets at risk from sea level rise | | | | | | | | |
| 5.B.1.a | Conduct analysis of city assets, pioritize vulnerable assets, and integrate in City Planning | | 5 | 5 | 5 | 0 | 3 | 18 | |
| Strategy B.2 | Assist homeowners identify risks from sea level rise | | | | | | | | |
| 5.B.2.a | Integrate sea level analysis in permitting and hold workshops | | 5 | 5 | 5 | 0 | 3 | 18 | |

Section 6: Natural Environment

| Action | | G emissions reduction | luces vulnerability to 1ate change | olementable | ation of benefits | iity | lti-solving | al Points | |
|--------------|---|-----------------------|---------------------------------------|-------------|-------------------|------|-------------|--------------|----------|
| Number | Brief Description | HB | clin Red | ď | Dur | Equ | μ | Tot | Comments |
| Goal A | Steward Bainbridge Island's natural resources to function as healthy, resilient ecosystems that can continue to serve multiple ecological functions | | | | | | | | |
| Strategy A.1 | Steward Bainbridge Island's natural areas using the best scientific knowledge available. | | | | | | | | |
| 6A1a | Best data to inform natural area management | | 3 | 3 | 5 | 0 | 5 | 16 | |
| 6A1b | Invasive species plan | | 5 | 3 | 5 | 0 | 5 | 18 | |
| 6A1c | Use CCAC for land acquisition and development | | 5 | 5 | 5 | 5 | 5 | 25 Checklist | |
| Goal B | Manage forested areas for healthy soil and ecosystems that are resilient to climate change | | | | | | | | |
| Strategy B.1 | Proactively manage Bainbridge forests for anticipated vegetational composition shifts expected under climate change. | | | | | | | | |
| 6B1a/2 | Preferred plant species list | | 5 | 5 | 5 | 0 | 5 | 20 | |
| Strategy B.2 | Mitigate wildfire and forest disease risk through proactive forest management | | | | | | | | |
| 6B2a2 | Stocking densities and evaluation | | 5 | 3 | 5 | 0 | 5 | 18 | |
| 6B2b | Wildfire risk reduction | | 5 | 5 | 5 | 3 | 5 | 23 | |
| Goal C | Protect and maintain the integrity of our Island's surface and groundwater resources in the face of climate change | | | | | | | | |
| Strategy C.1 | Maximize protections for intact hydrologic processes including aquifer recharge and stormwater runoff. | | | | | | | | |
| 6C1a | Increase water conservation/efficiency in codes | | 3 | 5 | 5 | 3 | 5 | 21 | |
| 6C1b | CAO enforcement | | 3 | 5 | 5 | 0 | 5 | 18 | |
| 6C1clll | Support surface water monitoring and integrate climate parameters | | 3 | 5 | 5 | 3 | 5 | 21 | |
| Strategy C.2 | Identify and implement targets that will balance aquifer discharge and recharge, incorporating climate change projections. | | | | | | | | |
| 6C2all | Groundwater management plan development and implementation | | 5 | 3 | 5 | 3 | 5 | 21 | |
| Goal D | Steward our Island's shorelines to allow for resilience in the face of climate impacts including sea level rise. | | | | | | | | |
| Strategy D.1 | Incorporate sea level rise and other ocean climate impacts into the shoreline master program and other shoreline management planning decisions | | | | | | | | |
| 6D1all | Sea level rise integration into SMP | | 5 | 5 | 5 | 3 | 3 | 21 | |
| 6D1b | Ecosystem values in SLR planning and community conversations | | 3 | 3 | 5 | 0 | 5 | 16 | |
| Goal E | Support an agricultural system that prioritizes climate change resilience, local food production, and ecosystem services | | | | | | | | |
| Strategy E.1 | Identify community goals for local food production and consumption | | | | | | | | |
| 6E1al8 | Targets for local food production on public farmland | 3 | 3 | 3 | 5 | 3 | 5 | 19 | |
| 6E1b | Community targets for local food production® | 3 | 3 | 3 | 5 | 3 | 5 | 19 | |
| Strategy E.2 | Maximize opportunities for agricultural practices that mitigate climate change. | | | | | | | | |
| 6E2a | Support local agriculture with city code | 3 | 3 | 5 | 5 | 3 | 5 | 21 | |
| 6E2b | Water budgeting for agricultural land use | 3 | 3 | 3 | 5 | 3 | 5 | 19 | |
| 6E2cm | Support carbon storage and hydrologic integrity of agricultural soils | 3 | 3 3 | 3 | 3 | 0 | 5 | 17 | |
| Strategy E.3 | Improve manure management to reduce emissions associated with livestock waste and fertilizer delivery. | | | | | | | | |
| 6E3a | Require manure management for all permitted agricultural activities. | | 3 | 5 | 5 | 0 | 5 | 18 | |
| | | | | _ | | ~ | | | |

Section 7: Waste Reduction

| Section 7: Waste | Reduction | | | | | | |
|----------------------|--|---|---------------|----------------------|--------|---------------|--|
| Action Number | Brief Description | GHG emissions reduction Reduces vulnerability to climate change | Implementable | Duration of benefits | Equity | Multi-solving | រ ចុក្ខ ចុក្ខ Comments |
| Goal A | Reduce Island residential, commercial, and industrial waste generation | | | | | | |
| Strategy A.1 | Promote sustainable consumption within City operations | | | | | | |
| 7A1b | Centralize purchasing within city to increase adherence to sustainable procurement | 3 | 5 | 5 | 0 | 3 | 16 |
| 7A2a | Ordinance to reduce single-use plastics | 3 | 5 | 5 | 0 | 5 | 18 |
| 7A2b | Support hydration station installation | 1 | 3 | 5 | 5 | 5 | 19 |
| | in community | | | | | | co-benefits include reduced plastic waste and improving access to water, including to vulnerable |
| | | | | | | | communities because offers a free resource |
| Strategy A.3 | Reduce food waste by both commercial entities and residents | , | , | F | e. | , | 10 |
| 7A38 | Educate and support rood waste reduction | 3 | 3 | 5 | 2 | 3 | 19 |
| 7A30 | increase collection and distribution of excess food | 1 | 5 | 5 | 2 | 3 | 19 |
| Goal B | Increase diversion of waste from the landfill | | | | | | |
| Strategy B.1 | Increase composting within City facilities. | | | | | | |
| 781a | Pair and provide clear signage for compost and recycling at City facilities | 1 | 5 | 5 | 0 | 0 | 11 |
| Strategy B.2 782a | Expand residential and commercial recycling and composting participation. Offer curbside compost pickup for all commercial facilities as a weekly service and require participation | 5 | 3 | 5 | 0 | 5 | 18 co-benefits should include decreased costs associated with diversion to green waste |
| Strategy B.3 | Require waste diversion at City-permitted special events | 5 | 5 | 5 | 0 | 5 | To concerns should mentice decreases costs associated with direction to green water |
| 7B3a | Require events fund and provide composting and recycling | 3 | 3 | 5 | 0 | 3 | 14 |
| Goal C | Ontimize collection and disposal sustants to minimize accordiouse are emissions | | | | | | |
| Strategy C.1 | Reduce GHG emissions associated with disposal of WWTP biosolids | | | | | | |
| 7C1a | Reduce GHGs associated with WWTP biosolids | 5 | 1 | 5 | 0 | 5 | 16 co-benefits could include electricity or nutrient generation |
| Strategy C.2 | Reduce GHG emissions associated with off-island transportation of green waste. | | | | | | |
| 7C2a | Increase local processing of green waste | 5 | 3 | 5 | 0 | 5 | 18 |
| Goal D | Ensure that any new waste related infrastructure is not sited in current or future hazard areas | | | | | | |
| Strategy D.1 | Consider projected climate change impacts and factor into site selection for waste-related infrastructure. | | | | | | |
| 7D1a | Use Climate Certification to evaluate any new waste related infrastructure | 5 | 5 | 5 | 3 | 3 | 21 Checklist |

| | | | limate change | | | | | |
|---------------|---|-------------------------|----------------------------|---------------|----------------------|--------|---------------|---|
| Action Numbe | r Brief Description | GHG emissions reduction | Reduces vulnerability to c | Implementable | Duration of benefits | Equity | Multi-solving | tor Jej Comments |
| Goal A | Increase community awareness and knowledge about climate change | | | | | | | |
| Strategy A.1. | Provide accessible information throughout the community | | | | | | | |
| 8.A.1.a. | Climate webpage and widespread CAP avaiability | 3 | | 5 | 5 | 5 | 5 | 23 * (currently identified as priority action) |
| 8.A.1.b. | Semi-annual CC public events | 3 | | 3 | 5 | 5 | 5 | 21 |
| 8.A.1.c. | Support other CC forums | 1 | | 3 | 5 | 5 | 5 | 19 |
| | Create tool to evaluate COBI assest's vulnerability, hold public mtgs about it; incorp vulunerability | | | | | | | this doesn't seem to go in CE- at least |
| 8.A.1.d. | evaluation into COBI decisionmaking | 5 | | 3 | 5 | 3 | 5 | 21 creating the tool and evaluation part of it- |
| Strategy A.2. | Increase community knowledge of how to reduce individual impact. | | | | | | | |
| 8.A.2.a. | CC tip of the month | 3 | | 5 | 5 | 5 | 5 | 23 * |
| 8.A.2.b. | CC week as part of Earth Month | 3 | | 3 | 5 | 5 | 5 | 21 |
| 8.A.2.c. | Neighborhood mtgs to discuss CC | 3 | | 3 | 5 | 5 | 5 | 21 |
| Goal B | Inspire action across community and partner locally and regionally | | | | | | | |
| Strategy B.1. | COBI partners with local and regional organizations on mitigation and adaptation actions. | | | | | | | |
| 8.B.1a | Declare climate emergency | 0 | | 5 | 5 | 5 | 5 | 20 * |
| 8.B.1.b. | Partner with other regional jurisdictions | 3 | | 3 | 5 | 5 | 3 | 19 * |
| 8.B.1.c. | Coordinate w/ other Advisory Committees and taxing entities | 3 | | 3 | 5 | 3 | 5 | 17 |
| 8.B.1.d. | Partner w/ BISD re GHG inverntory and ICLEI resources | 3 | | 3 | 5 | 3 | 5 | 19 This could maybe go in the GHG section |
| 8.B.1.e. | Collaborate/support other CC community groups | 3 | | 3 | 5 | 5 | 5 | 21 |
| Strategy B.2. | COBI inspires Bainbridge community members to take meaningful individual action. | | | | | | | |
| 8.B.2.a. | Host hands-on demonstrations and community projects | 3 | | 3 | 5 | 5 | 5 | 21 * |
| Goal C | Empower and prepare COBI and community for impacts and emergencies | | | | | | | |
| Strategy C.1. | Ensure the City is empowered and has the necessary authority and capability/capacity. | | | | | | | |
| 8.C.1.a. | Review/revise legal authorities | 5 | | 3 | 5 | 5 | 5 | 23 * this action is necessary for rest of CAP to work |
| 8.C.1.b. | Include CC actions in budget | 5 | | 3 | 0 | 3 | 5 | 16 work, needs continued funding |
| 8.C.1.c. | Hire City Climate Mitigation/Adaption Officer | 5 | | 3 | 0 | 3 | 5 | 16 * needs continued funding |
| Strategy C.2. | adapt to climate change impacts and emergencies. | | | | | | | |
| 8.C.2.a. | Establish community recharging centers | 5 | | 3 | 5 | 5 | 5 | 23 * |
| 8.C.2.b. | Include CC in emergency preparedness workshops | 3 | | 3 | 5 | 5 | 5 | 21 thought is an important thing to do |
| 8.C.2.c. | Develop food resilence network | 5 | | 3 | 5 | 5 | 5 | 23 |
| 8.C.2.d. | Develop neighborhood microgrids | | 3 | 3 | 5 | 5 | 5 | 21 |
| | | | | | | | | |

Individual Actions- What can I do to make a difference?

Participate in community citizen climate action

- 1. Attend community discussions, forums, and events.
- 2. Let City Council members know what I think should be prioritized.
- 3. Talk with neighbors about climate resilience and reducing emissions.
- 4. Get my schools, faith groups, and community groups involved in climate action.

Reduce My Energy Use

- 1. Get an energy audit to find ways to increase energy efficiency at home and at work. Learn about rebates. Call PSE Energy Advisor at 1 800 562-1483.
- 2. Install energy conserving appliances and fixtures, such as on-demand tankless water heaters, Energy Star appliances, and LED light bulbs.
- 3. Install energy efficient electric heat pumps, water heaters, dryers, stoves, and more.
- 4. Voice support for City policies and proposed code changes that reduce greenhouse gas emissions and help address climate change related issues.
- 5. Install solar power and storage at my home—or sign up for the_____ program to use my roof for solar.
- 6. Replace a wood-burning fireplace with gas or electric. Install alternatives to air conditioning when renovating my home.
- 7. Use energy efficient holiday lights and reduce the amount of time they are on.
- 8. Use local, sustainable, carbon neutral building materials whenever possible.
- 9. When purchasing or building a new home think about a smaller home.
- 10. Use a clothes line instead of a dryer when possible.
- 11. Think about signing up for Green Power or Solar Choice.
- 12. Improve insulation throughout my house or commercial building.

Reduce My Waste

1. Reduce the amount of food my household wastes.

- 2. Compost organic waste in my backyard or use Bainbridge Disposal compost pick-up service.
- 3. Review and follow Bainbridge Disposal guidelines for what is recyclable, and use that information to guide packaging choices when possible.
- 4. Fix things that are broken instead of buying new. Fix-it-Fairs are coming to Kitsap County!
- 5. Use the Hazardous Products Center and bulky item pick-up programs to properly dispose of old refrigerators, e-waste, and air-conditioning units.
- 6. Talk with my contractor about alternatives to traditional building demolition, such as relocation, deconstruction, and salvage.
- Borrow or reuse instead of buying new, using organizations such as Bainbridge freecycle, BI Online Yard Sale, Buy Nothing Bainbridge, Rotary Auction, The Bainbridge Library of Things (coming soon!).
- 8. Shop locally and support local businesses to reduce your transportation footprint.
- 9. Support efforts to reduce and limit single-use disposable plastics.
- 10. Plant a garden, and/or encourage the creation of community gardens on public and private lands including school campuses, City lands, and church properties.
- 11. Bring my own coffee cups and grocery bags.
- 12. Think about the amount of packaging when making purchases. Reuse packaging and wrapping paper.

Reduce My Water Use and Take Steps to Protect Our Natural Resources

- 1. Conduct a water audit at my home, and replace inefficient toilets and fixtures.
- 2. Set a goal of reducing my household's water use by 15%.
- 3. Consider efficient alternatives to traditional water heaters, like tankless water heaters, electric heat pump water heaters, or solar thermal hot water heaters.
- 4. Install a rain barrel to harvest rainwater for outdoor use.
- 5. Explore brown water reuse/recapture.
- 6. Use local sustainable building materials.
- 7. When landscaping use low impact, water efficient, native plants.

- 8. Avoid adding/creating impermeable surfaces around my house.
- 9. Support City policies that encourage creative solutions to water conservation, such as green building code that allows for greywater reuse or alternatives to traditional sewering.

Reduce My Personal Vehicle Travel

- 1. Increase the number of trips I make by transit, carpooling, walking, or biking.
- 2. Try out an electric bike for my commute.
- 3. Organize a "walking school-bus" to walk a group of kids to school, seek out carpools for getting to after-school activities, discourage parent drop off and pickup where possible, and encourage high school students to use the school bus.
- 4. Delay my next purchase of a new vehicle, if it's possible to get more life out of my current car.
- 5. When I decide to make a vehicle purchase, investigate electric vehicles and hybrids.
- 6. Support centrally located development that creates vibrant, higher density, mixed-use areas to reduce the need for driving.
- 7. Make commuting by bike or walking a part of my regular routine; have flashlights, reflective gear, and raingear handy.