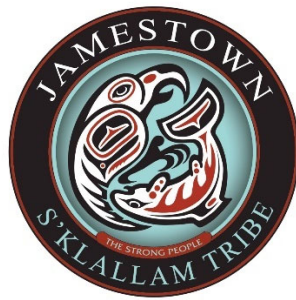




Jamestown S'Klallam Tribe

Carbon Neutral Plan 2022



Prepared by Cascadia Consulting Group, Inc.



Acknowledgements

Jamestown S’Klallam Tribe thanks its Carbon Neutral Advisory Committee for their input, feedback and collaboration throughout the Carbon Neutral Plan development process. Additionally, the [North Olympic Development Council \(NODC\)](#) funded technical support from Cascadia Consulting Group (CCG). CCG staff has been critical in getting this work completed within the timeframe allotted for this project.

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Carbon Neutral Plan

Overview

Since time immemorial, the Jamestown S’Klallam Tribe (JSKT) has lived and cared for the land and waters of the Olympic Peninsula of Washington State. Rooted in a deep understanding and knowledge of place, the Tribe continues to restore, maintain and protect resource-rich ecosystems.

Through time, our Tribe has successfully adapted to past climate and societal changes, yet the rapid pace and large magnitude of the current and coming climate impacts requires further strategic and collaborative planning and action.



Elaine Grinnell

“Our people want unhindered and unlimited access to their natural resources. Climate change is threatening our lifeways and resources. We must act now to protect and preserve culturally important resources and assets, ensuring continued economic growth, and promoting long-term community vitality.”

- From Tribal Climate Camp presentation 2022.

This plan conveys Jamestown S’Klallam Tribe values and knowledge through its multidisciplinary approach to creating climate solutions. This approach includes understanding from both western sciences and invaluable Indigenous perspectives. The plan was developed to align with achieving the following goal ([Jamestown S’Klallam Tribe Carbon Neutral Advisory Committee](#)):

Net zero emissions by 2032.



RESPONDING TO CLIMATE CHANGE FOR OUR SEVEN GENERATIONS

Jamestown S’Klallam Tribe is committed to building collective power and increasing Tribal capacity to defend and protect land and environment for the next seven generations.

WHAT’S AT STAKE?

- Losing our clean, cool water and the habitat it provides to aquatic life
- Losing our forest and forest species to drought and/or wildfires
- Losing our ability to live off the land
- Losing access to energy supplies

This plan is a roadmap for addressing climate change, and should be implemented immediately.

“Ignoring climate change would go against our sacred duty from Creator, to steward the land and care for our brothers and sisters in creation.”

- From Tribal Climate Camp presentation 2022.

WHY CARBON NEUTRAL

We recognize that we stand on the shoulders of ancestral strength, ingenuity, and resilience. Aligning with this thinking, the Tribe set a progressive goal of becoming carbon neutral by 2032. We define **carbon neutral** as no net release of carbon dioxide to the atmosphere. This means balancing out our total carbon emissions with the removal of carbon from the atmosphere (carbon sequestration). (For more definitions, see [Appendix A: Glossary](#)).

In addition to achieving carbon neutrality by 2032, we hope to:

- Make response to climate change a Jamestown S’Klallam Tribal-wide priority.
- Find ways that all age levels can participate in climate change solutions.
- Celebrate and share Indigenous, solutions-based strategies and actions for climate change through partnership and collaboration.
- Support Tribal sovereignty, community health and resiliency, and the natural environment.



Loni Greninger

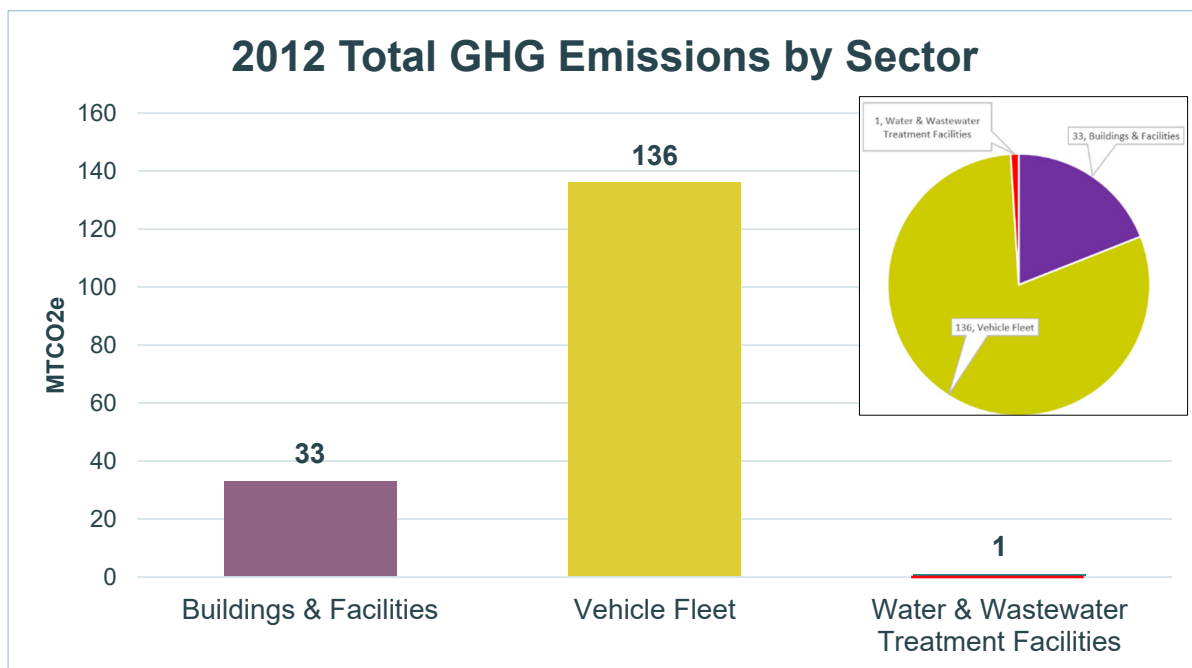


Greenhouse Gas (GHG) Emissions Inventories

In order to reach carbon neutrality, it is critical to assess Jamestown S’Klallam Tribe’s current emissions sources. We updated our 2012 emissions estimate by conducting a 2021 GHG emission inventory for Jamestown S’Klallam Tribal government operations. The update included emissions from energy usage in our buildings, fuels for our fleets, and external emissions from wastewater and water usage. Additionally, we estimated emissions from employee commute and solid waste facilities. The inventories are discussed and represented in the figures below. (Please note the scale differences among included charts).

2012 GHG EMISSIONS INVENTORY

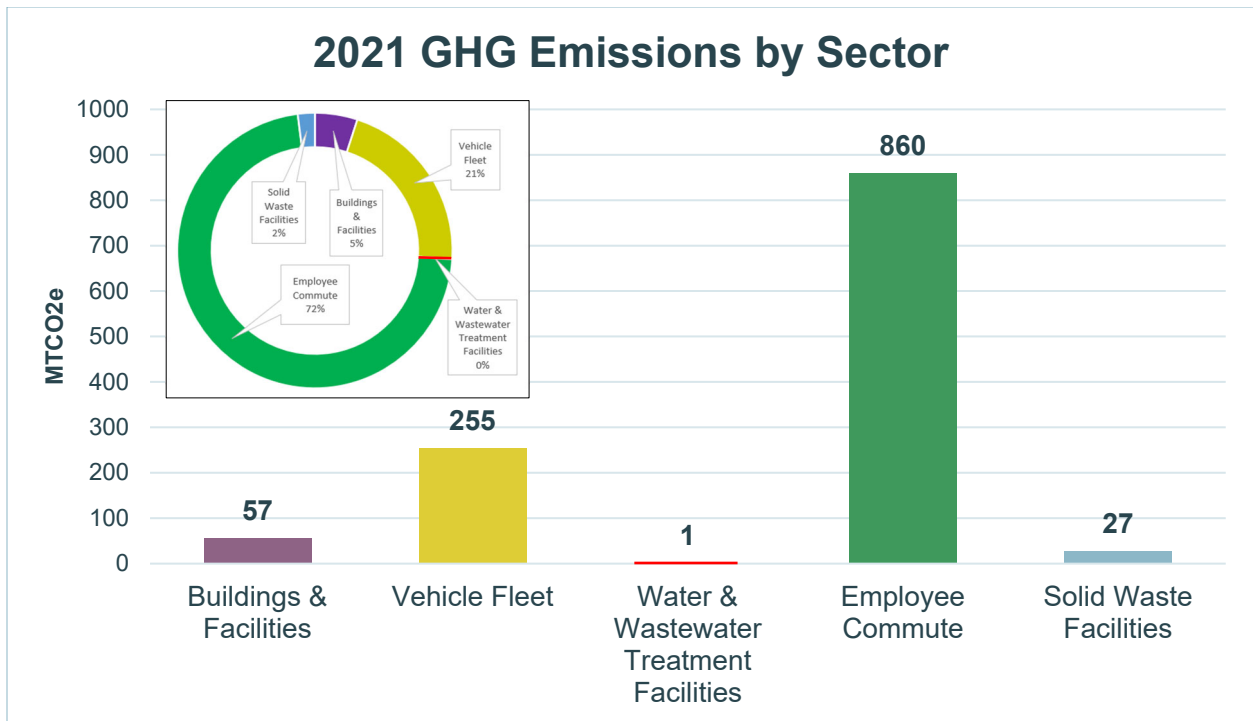
In 2012, Jamestown S’Klallam Tribal government operations emitted a **total of 170 metric tons of carbon dioxide (MTCO₂e)**. (Note that assessments of solid waste and employee commute were not included in the 2012 GHG Emissions Inventory).



2021 GHG EMISSIONS INVENTORY

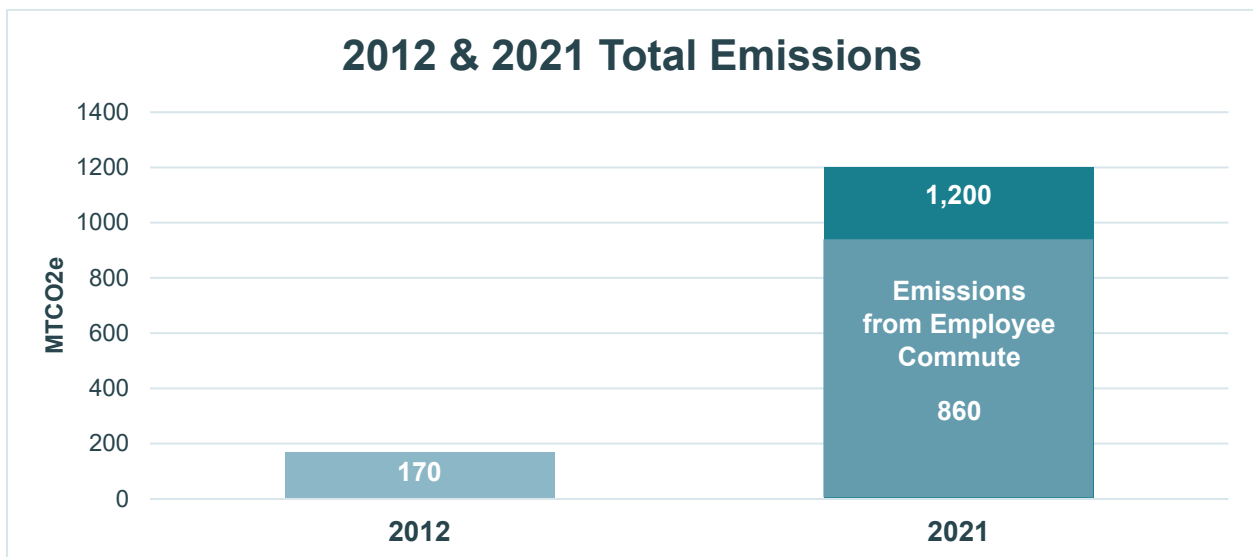
In 2021, Jamestown S’Klallam Tribal government operations emitted a **total of 1,200 MTCO₂e**. The updated inventory includes two addition sectors, Employee Commute and Solid Waste Facilities.



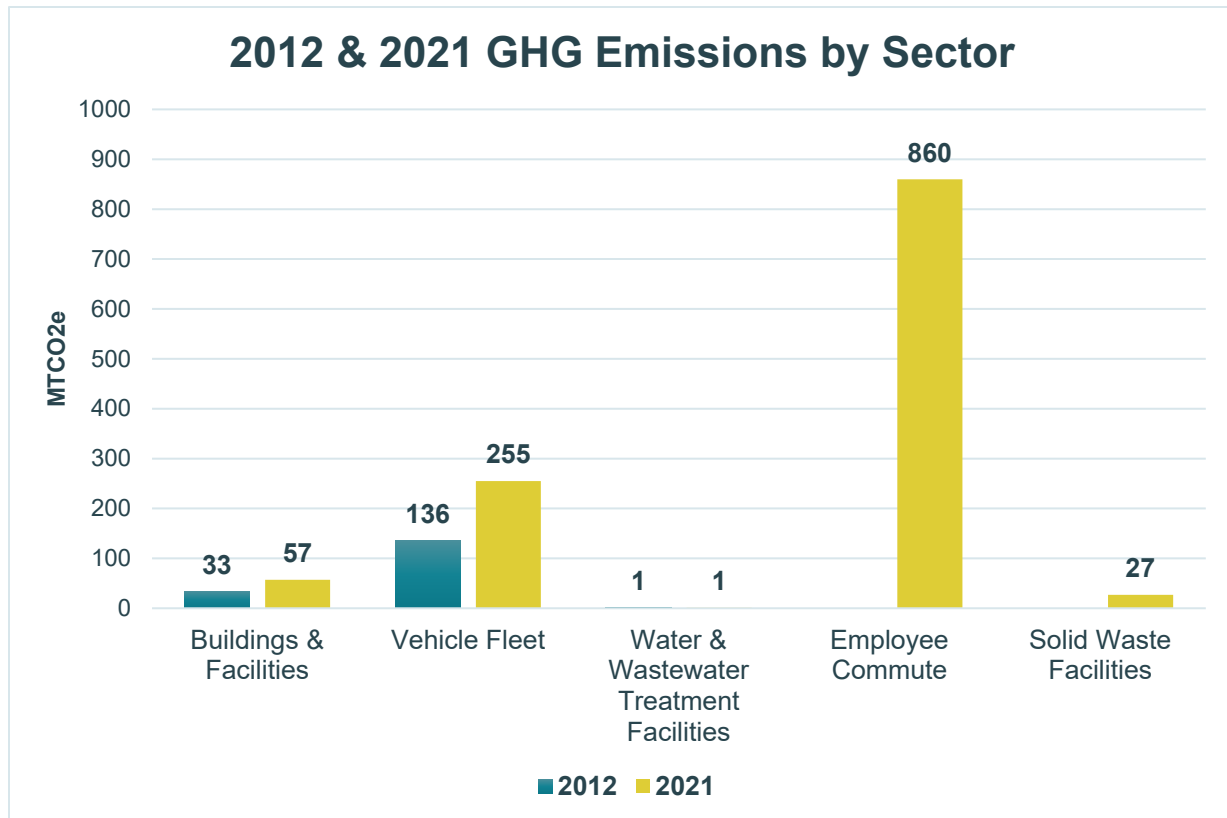


2012 AND 2021 GHG EMISSIONS INVENTORY COMPARISONS

Between 2012 and 2021, Jamestown S'Klallam's Tribal government operational emissions grew from 170 MTCO₂e to 1,200 MTCO₂e, an **increase of 1,030 MTCO₂e**. Note that during this timeframe there was also a significant increase in Tribal government programs, facilities, and number of Tribal employees contributing to the increased emissions.



The overall increase in GHG emissions between 2012 and 2021 takes into account all sectors analyzed in 2012, plus the additional sectors of Employee Commute (contributing 860 MTCO₂e, if all employees drive to/from work) and Solid Waste Facilities (contributing 27 MTCO₂e) in 2021. The critical role that employee commute played in 2021 emissions is specifically notable in the chart below. Employee commute was not considered in the 2012 GHG emissions inventory but will be considered in future emissions inventories.



Carbon Neutral Plan

As GHG emissions continue to rise, more than ever governments have a critical role to play in addressing climate change impacts and reducing emissions. In this Carbon Neutral Plan, we outline clear and impactful strategies and actions that facilitate a transition to a carbon-neutral, climate-resilient, and sustainable Jamestown S’Klallam Tribal operations. Through our collaborative process, we have rooted this plan in Jamestown S’Klallam Tribe’s priorities and values. Guided by GHG inventory results and Carbon Neutral Advisory Committee discussions, we have set timeline metrics to meet our forecasted reduction goals.

This plan serves as our roadmap to carbon neutrality by 2032.



Focus Areas

Six key focus areas emerged and are summarized below, based on our carbon neutrality strategy and action development and GHG Emissions Inventory results. The Jamestown S’Klallam [Natural Resources Environmental Planning Program](#) will be the lead Department for coordination and implementation of the Carbon Neutral Plan. Since the focus areas apply to many Tribal departments, we have outlined those (and/or their leads) which need to work closely with the Climate Coordinator on planning and implementation. The Department/Leads were identified through one-on-one discussions with members of the Carbon Neutral Advisory Committee and members of each department.

Focus Area	Goal	Leads for Climate Coordinator
Communication & Education	Increase understanding for all Tribal staff and citizens of climate change, its impacts, and how they can participate.	<ul style="list-style-type: none"> • Communications & Publication Specialist • Social & Community Services <ul style="list-style-type: none"> ○ Primary: Director, Deputy and Planner ○ Secondary: Youth, Elders, and Culture Supervisors • Transportation Planner • Economic Development Authority Operations Manager • Community Education Partners
Transportation & Fleets	Reduce greenhouse gas emissions from employee commute and Tribal fleet.	<ul style="list-style-type: none"> • Tribal Transportation Program Manager • Senior Construction Manager, Facilities Manager • Healing Clinic Transportation Manager • Human Resources • Social & Community Services: Director, Deputy, and Planner • JKT Development: Office Manager
Buildings & Energy	Make all Tribal-owned buildings energy-efficient and/or energy-neutral.	<ul style="list-style-type: none"> • Building Division: Senior Construction Manager, Facilities and Utilities Managers • Chief Financial Officer • Social & Community Services: Director, Deputy, Planner, and Housing Program Manager • Health Department Facilities Manager



Focus Area	Goal	Leads for Climate Coordinator
		<ul style="list-style-type: none"> • Economic Development Authority Operations Manager • Community Partners: <ul style="list-style-type: none"> ○ Clallam PUD
Water & Wastewater	Reduce water consumption, reduce energy-use for water and wastewater, and ensure a dependable water supply.	<ul style="list-style-type: none"> • Tribal Utilities Manager • Senior Construction Manager • Facilities Manager • Social & Community Services: Director, Deputy, Planner, and Housing Program Manager • Community Partners: <ul style="list-style-type: none"> ○ City of Sequim ○ Clallam PUD ○ Conservation District/ Community Conservation Partners
Food Systems & Solid Waste	Protect food sovereignty, expand food programs, and reduce solid waste.	<ul style="list-style-type: none"> • Social & Community Services: Director, Traditional Foods Program, and Planner • Environmental Planning Program • Building Division: Senior Construction Manager, Facilities Manager
Capacities & Processes	Expand Tribal capacities to address climate change.	<ul style="list-style-type: none"> • Tribal Council • Executive Committee • Administration Leadership and Staff • Climate Coordinator will work with all Departments • Planning Director • Building Division • GIS Specialist to support all focus areas



Strategies & Actions

In the below tables, we outline what strategies and actions will get us to carbon neutrality by 2032. Actions are arranged by Focus Area and listed in order of priority based on Multi-criteria Analysis ([MCA](#)) [priority score](#) results and Carbon Neutral Advisory Committee discussion and feedback (see [Appendix C](#) for more details). The time frame shows when we might begin each action. The separate timeline table shows the proposed schedule and length of time it might take to complete each action.

Communications & Education

GOAL: Increase understanding for all Tribal staff and citizens of climate change, its impacts, and how they can participate.

ID #	Action Short Name	Action Description	Time frame
Communications & Education Strategy 1: Develop and provide climate change educational resources and ways to take action for staff, departments, and all Tribal citizens.			
CE1	Develop and Implement a Climate Communications and Engagement Plan	<p>Develop a Climate Communications and Engagement Plan with an emphasis on the link between climate and Jamestown S’Klallam Tribe’s cultural values. The Plan should include both internal communications for staff and external communications for all Tribal citizens and community partners.</p> <ul style="list-style-type: none"> • <u>Internal Staff, Committee and Leadership Communications:</u> Develop newsletter for internal use, sharing how departments are working to reduce emissions and address climate change. Develop communications for Committees and Leadership to foster continued engagement by sharing progress toward carbon neutral goals, how climate impacts will affect Jamestown’s work, and ways to take action. • <u>Community:</u> Provide climate information and resources through newsletters, websites, social media, videos, General Citizenship meetings, and resource fairs. Share Climate 101 resources (see below). • <u>Youth:</u> Educate youth by partnering with local schools on climate curriculum. 	Now



ID #	Action Short Name	Action Description	Time frame
		<ul style="list-style-type: none"> <u>Develop Climate 101 Resources</u>: Create Climate 101 education and incentive resources to share with Tribal citizens. Resources will be developed to be simple, include glossary of terms, and highly visual. Resources could include incentives, resources for how to participate, what individual actions individuals can take, and, if possible, the feasibility or costs of actions. 	
Communications & Education Strategy 2: Create shared learning opportunities and foster dialogue to better understand climate change impacts and experiences of Tribal citizens.			
CE2	Tribal community discussions	<p>Better understand Tribal community priorities for climate change by holding Tribal community discussions (in-person and virtual). Information may update and improve the current plan.</p> <ul style="list-style-type: none"> Gather information and preferences from Tribal citizens regarding what actions and programs they would like to prioritize regarding climate change, and what solutions would be most accessible and equitable for all Tribal citizens. Gather and meet with Elders to document stories of land changes and impacts of climate change experienced over time. Leverage existing youth programs to engage and involve youth around climate action, such as creating educational resources for the community around climate change (e.g., video). 	Now
CE3	Provide technical assessments and assistance	Provide technical assessments and assistance to Tribal Citizens and staff (e.g., suitability of home for solar, Electronic Vehicle (EV) charging, guidance during purchases of EVs or solar, host EV ride-n-drive sessions, electric lawn-care equipment demonstrations).	1 – 2 years



ID #	Action Short Name	Action Description	Time frame
CE4	Draw inspiration from others	<p>Remain current on news and resources for climate resilience planning for Tribes, such as Pacific Northwest TCC Project through University of Oregon monthly newsletter articles, meeting notifications, scholarship and grant opportunities.</p> <ul style="list-style-type: none"> Continue to research, connect with, and draw inspiration from other Tribes pursuing similar work (e.g., Puyallup's Climate Crisis resolution, Blue Lake, Justice 40) Connect with and learn from other Tribes working on similar projects and goals (e.g., The Nez Pierce Tribe's solar business). 	Now

Transportation & Fleets

GOAL: Reduce greenhouse gas emissions from employee commute and Tribal fleet.

GHG Emissions to offset: 1,115 MTCO₂e (from 2021 Inventory)

ID #	Action Short Name	Action Description	Time frame
Transportation & Fleets Strategy 1: Transition Tribal fleet to electric vehicles, expand EV charging station accessibility, and plan for future industry innovation and opportunities.			
T1	Transition fleet vehicles to all electric	<ul style="list-style-type: none"> For Tribal-owned fleet vehicles, retire old and under-used combustion engine vehicles (vans, buses, etc.), and replace them with electric/hydrogen vehicles. For leased Tribal fleet vehicles, examine lease periods, and request hybrid electric for immediate lease renewals. Transition fleet vehicles to electric in tandem with expanding Tribal EV charging station capacity. Continue to monitor availability of hydrogen fuel cell vehicles and regional fueling stations. 	1 – 5 years
T2	Plan for and expand EV charging station availability	Develop an EV Charging implementation plan for expanding EV charging stations at current and new Tribal facilities and in collaboration with other jurisdictions.	Now



ID #	Action Short Name	Action Description	Time frame
		<ul style="list-style-type: none"> • Seek technical assistance from Washington Department of Ecology (ECY) for assessment of energy system capacities. • Prioritize EV charging station installation and availability for Tribal Fleet electric vehicles. • Install EV charging stations at Tribal buildings, such as the library. • Continue to expand EV charging stations to level 2 and 3 chargers where possible. • Develop EV charging station code for new construction. • Install EV charging equipment at Tribal housing. • Perform electrical service equipment upgrades to make Tribal buildings and homes EV-ready and Solar-ready (see B8). 	
T3	Support EV/hydrogen purchases	Provide resources and informal peer events to share information about the benefits of purchasing an EV. Explore options for providing incentives for Tribal citizens to purchase an EV/hydrogen in place of a petroleum fueled vehicle.	Now
T4	Explore electric marine fleet options	Explore grants for Tribal fleet and fishers to add electric/hybrid boats.	3 – 5 years
Transportation & Fleets Strategy 2: Gather information on Tribal staff commute behaviors to develop programs and incentives to encourage Tribal staff to reduce the number of vehicle trips.			
T5	Conduct an employee commute survey	Conduct an employee survey regarding commute behaviors; include questions about interest and existing barriers for participating in different trip reduction programs and public transit.	Now
T6	Encourage and incentivize trip reduction	<p>Encourage staff to reduce trips (both commute and work-related) through encouraging telecommuting, trip reduction programs, and resources for public transit.</p> <ul style="list-style-type: none"> • Develop and offer resources and events for employees to learn more about ways and incentives to reduce trips. 	Now



ID #	Action Short Name	Action Description	Time frame
		<ul style="list-style-type: none"> • Provide incentives (based on commute survey results) and support for telecommuting, when possible, aligned with departmental policies for in-person days. • Promote and incentivize employee use of the Clallam County Transportation Van Pool program. • Establish a car-sharing program for Tribal employees. Supplement Clallam County Bus lines with JSKT transit vans. • Provide public transit incentives and investigate grant opportunities for transit electrification. Support expanding Route 50 and add bus shelters. 	
T7	Encourage bicycle purchases	Implement a subsidized bicycle purchase program for Tribal Citizens and employees.	1 – 2 years

Buildings & Energy

GOAL: Make all Tribal-owned buildings energy-efficient and/or energy neutral.

GHG Emissions to offset: 57 MTCO₂e (from 2021 Inventory)

ID #	Action Short Name	Action Description	Time frame
Buildings & Energy Strategy 1: Promote and install energy efficiency design and infrastructure in Tribal facilities so that Tribal facilities use less energy and become more resilient to climate change.			
B1	Conduct an energy audit and develop a facilities energy management plan	Develop a facilities energy management plan for all Tribal facilities. This includes: <ul style="list-style-type: none"> • Conduct professional energy audits on all Tribal buildings. Offer audits to interested Tribal Citizens free of charge. • Implement an energy tracking and management system for Tribal buildings. • Look into megapacks to store energy, such as those used at other Tribes' facilities to reduce costs and increase resiliency to climate change. 	Now



ID #	Action Short Name	Action Description	Time frame
B2	Install energy-efficient technologies and components	<p>Improve energy efficiency in all Tribal facilities and Tribal housing. Energy efficiency actions are beneficial for reducing greenhouse gas emissions and making buildings more affordable and comfortable. Examples include:</p> <ul style="list-style-type: none"> • Install energy-efficient lighting and automatic light sensors. This includes retrofitting light fixtures and/or replacing bulbs with LEDs. • Install energy efficient and water-smart appliances in Tribal offices and kitchens in Tribal buildings and Tribal housing. Including heat pumps, heat pump water heaters, heat pump dryers, energy efficient lighting, and water-saving fixtures (see also W2 for water efficient landscaping efforts). • Install building/office occupancy sensors in Tribal buildings and Tribal housing • Develop and implement a weatherization program for Tribal buildings and Tribal housing, and seek opportunities to perform “deep” retrofits of buildings before or between occupancy. • Where appropriate, install or improve building insulation (energy efficient windows) in Tribal properties. • Install smart appliances, load control and load shifting devices, and automatic lighting and water sensors. • Help connect Tribal citizens to rebates available for energy-saving updates. 	Now
B3	Upgrade heating and cooling for in-area Tribal homes with a priority for Elders, special needs, and families with children	<p>Work in collaboration with EPA and HUD to upgrade fireplaces and wood stoves, and retrofit all Elders’ homes with ductless heat pumps and cooling upgrades.</p> <ul style="list-style-type: none"> • Plan for funding assistance if there are increased electric bill costs due to the upgrades. • For Elders with wood heat, ensure heat pumps do not cause backdraft of unvented woodstoves and fireplaces. 	1 – 2 years



ID #	Action Short Name	Action Description	Time frame
		<ul style="list-style-type: none"> Recognize that maintaining redundant heat/cooking options (wood & electric) improves resilience. 	
B4	Promote low-GHG building materials and low energy use design	<ul style="list-style-type: none"> For new buildings, encourage designs that reduce the use of building materials that have high GHG emissions when produced, transported, or installed. Work with indigenous suppliers to find alternatives for low-GHG building materials. Develop and construct affordable passive house model home for Tribal housing. 	1 – 2 years
B5	Review construction codes	Review Tribal construction standards and codes for opportunities to go beyond Washington State construction codes for sustainable, low energy use design and mitigation for carbon emissions of construction, maintenance, and usage. Develop in tandem with promoting low-GHG building materials and low energy use design.	1 – 2 years
B6	Review other Tribal entities for carbon neutral opportunities	Review Enterprises, Resort, and clinic GHG emissions (potentially conduct inventory), and investigate opportunities for energy-efficiency upgrades where applicable.	Now
Buildings & Energy Strategy 2: Promote, use, and generate clean energy sources to establish local control over energy and to use cleaner energy sources.			
B7	Purchase clean energy and develop a clean energy plan	Enroll/purchase 100% clean energy for JSKT facilities and develop an energy plan for renewable energy and technologies that are appropriate for our area (geothermal, tidal, hydrogen, solar, etc.).	Now
B8	Install solar panels	<p>Install renewable energy and energy storage on or near all new buildings to promote grid resiliency and energy independence.</p> <ul style="list-style-type: none"> Learn from solar panel installation in preparation for Tribal solar business. Upgrade electrical service equipment on existing buildings and homes to be Solar-ready and EV-ready (see also T2). 	Now



ID #	Action Short Name	Action Description	Time frame
B9	Begin a solar business for grid resiliency	Research and begin a solar business for clean energy sources for Tribal facilities and citizens. Purchase and deploy mobile resilience hub trailers. Develop fixed resilience hubs in Blyn, Jamestown, Sequim, etc. Develop and implement microgrids to expand community resilience.	1 – 2 years
B10	Reduce diesel and propane use	Better understand propane and diesel use and encourage alternative energy sources. Install energy storage (batteries, H2-fuel cells) to provide backup power/emergency power, to reduce the usage of fossil fuel generators.	Now
B11	Transition maintenance tools to electric	Review current market options and technologies for transitioning Tribal-owned maintenance tools to electric. Through procurement language, contract with local landscaping companies who use electric maintenance tools and environmentally-conscious practices.	1 – 2 years

Water & Wastewater

GOAL: Reduce water consumption, reduce energy-use for water and wastewater, and ensure a dependable water supply.

GHG Emissions to offset: 1 MTCO₂e

ID #	Action Short Name	Action Description	Time frame
Water & Wastewater Strategy 1: Conserve water, and reduce water use through water efficiency improvements, natural landscaping, and opportunities for collection systems at Tribal facilities.			
W1	Conduct a water use inventory and develop a water conservation plan	Conduct a water use inventory through metering usage for Tribal facilities and irrigation systems. Based on water use inventory results, develop a water protection and conservation plan that includes the reduction of toxic substances used by Tribal facilities. Continue to monitor for water usage.	Now
W2	Install water-saving appliances/ technology	Install water-saving toilets, shower heads, energy- and water-efficient hot water tanks, automatic sensors in hand basins in Tribal buildings and Tribal housing. Increase efficiency of existing irrigation delivery.	Now



ID #	Action Short Name	Action Description	Time frame
W3	Implement a natural landscaping policy	Plant native plants and edible landscaping, develop rain harvest systems, and implement natural landscaping (reduce lawns) for all current and new Tribal facilities to reduce water usage. If contracted, include this requirement in procurement language. Use gray water where possible. Reduce gas-powered equipment (see B-11).	Now
W4	Install solar at wastewater treatment facility	Work in collaboration with the City of Sequim to install solar at the wastewater treatment facility.	5 years

Food Systems & Solid Waste

GOAL: Protect food sovereignty, expand food programs, and reduce solid waste.

GHG Emissions to offset: 27 MTCO₂e (from 2021 Inventory)

ID #	Action Short Name	Action Description	Time frame
Food Systems & Solid Waste Strategy 1: Invest in Tribal food production through expanding traditional food production capacity, increasing food independence and stabilizing food sources.			
F1	Expand and monitor traditional food production capacity	<ul style="list-style-type: none"> • Conduct an inventory of traditional foods and wildlife. • Enhance and improve current traditional food habitats and conduct prairie maintenance. • Begin a food forest on Tribal lands and begin to gather traditional foods all year round. • Expand the number of different traditional foods gathered. • Map, monitor and track traditional foods and sources to assess impacts from climate change on food sources (i.e., pests). Help transition to abundant species. 	Now
F2	Expand food capacity and independence	Develop and implement a plan to increase food capacity and security, increase food independence and preservation working through traditional foods department programs.	Now



ID #	Action Short Name	Action Description	Time frame
F3	Invest in expanding traditional foods gathering and agricultural capacity	Invest in Jamestown's food production and contribute to the local food economy through: <ul style="list-style-type: none"> • Support local farms through food purchases for Tribal facilities and Tribal Citizens (local Community Supported Agriculture (CSA) boxes). • Evaluate existing parcels (5 – 10 acres) to grow food for the resort and for the Tribal community or, if necessary, purchase a farm for this purpose. • Establish a JSKT CSA program. • Purchase agricultural land and actively produce, use, sell, and share locally grown agricultural products. Prioritize use of conservation and best agricultural practices to sequester carbon in soils. • Consider co-locating agricultural and solar facilities as a multi-benefit, multi-revenue project (see emerging research on "Agrologic"). 	1 – 2 years
F4	Conduct a pollinator inventory	Conduct a pollinator inventory for impacts due to temperature shifts and toxins from agriculture and Tribal facilities (fertilizers, weed spray, etc.). Include pest management.	1 – 2 years
Food Systems & Solid Waste Strategy 2: Reduce solid and food related waste at Tribal facilities and expand waste services at Tribal facilities.			
F5	Conduct a solid waste audit and develop a waste reduction plan	Conduct a solid waste audit at all Tribal facilities. Develop a waste reduction plan for Tribal facilities following the results of the Tribal Waste Audit (F1). Within this plan, explore: <ul style="list-style-type: none"> • Focus on ways to reduce, recycle and reuse. • Explore green certifications for Tribal enterprises, such as green hotel certification. • Look for ways to incorporate reusables. 	Now
F6	Develop a food recovery program	Develop a food circularity/food rescue program to get food that is not eaten from enterprise facilities to those in need.	1 – 2 years



ID #	Action Short Name	Action Description	Time frame
F7	Bring all Tribal facilities up to the same waste services	<p>Bring all Tribal facilities up to the same waste services (garbage, recycling, composting) to be a leader in waste recovery (glass, plastics, and cardboard).</p> <ul style="list-style-type: none"> • Enroll Tribal facilities in County recycling and composting services (County has more composting options, e.g., they can compost meat, packages). • Add composting service for hotel and resort facilities. • Add recycling service for Casino. • Encourage compostable carryout containers at Tribal facilities. 	Now
F8	Install a biodigester	Buy and install a biodigester for Tribal facilities.	1 – 2 years

Capacity & Processes

GOAL: Expand Tribal capacities to address climate change.

ID #	Action Short Name	Action Description	Time frame
Capacity & Processes Strategy 1: Establish dedicated staff time and committees to advance carbon neutral goals and climate resiliency.			
C1	Incorporate Climate Change into Council processes	<p>Incorporate Climate Change into Council processes by:</p> <ul style="list-style-type: none"> • A Council declaration of a climate crisis, and forthcoming work by the Tribe to be carbon neutral. • Add a climate change representative to the executive committee. • Add Climate Change as a dedicated item on Council retreat agenda. • Council to establish a vision, mission, and direction for each department to move towards carbon neutral. 	Now



ID #	Action Short Name	Action Description	Time frame
C2	Expand climate staff capacity	<p>Add a dedicated Tribal staff person to focus on climate resiliency and actions to keep departments accountable and momentum towards carbon neutral goals. This position would:</p> <ul style="list-style-type: none"> • Monitor and manage carbon neutral strategies and actions across departments. • Develop and manage climate resources and communications. • Monitor and track metrics towards carbon neutral goals. • Engage Jamestown S’Klallam Tribal staff and Council around climate change. • Identify funding to support adding staff capacity to implement climate resiliency and carbon neutral work and program development. 	Now
C3	Expand Tribal voices politically	Support the election of Tribal voices in leadership for local, state, and federal positions and presence in climate conversations. Develop and share resources and information about who is running and what they stand for from Affiliated Tribes of Northwest Indians (ATNI) and National Congress of American Indians (NCAI), Pacific Northwest Tribal Climate Change Network (PNTCC) through University of Oregon, National Indian Carbon Coalition, and Northwest Indian Fisheries Commission.	Now
C4	Dedicate staff time to work towards carbon neutral	Work with Tribal departments to identify priorities, opportunities for efficiencies within and across departments, and key staff to set aside time to work on carbon neutral strategies and actions. Work in collaboration with Council to begin to develop specific department deliverables.	Now
C5	Engage in Committee work	<p>Create and convene the following committees:</p> <ul style="list-style-type: none"> • Create an Energy Task Force/Committee/Office of Energy. • Consider forming a Youth Tribal Council for climate work. • Work with existing regional coalitions to address climate change. • Look into ways to participate on other regional climate committees and boards to meet common goals. 	1 – 2 years



ID #	Action Short Name	Action Description	Time frame
C6	Fossil fuel free investments & retirement options	Develop and provide options for fossil-free retirement or carbon neutral funds for Tribal employees.	1 – 2 years
Capacity & Processes Strategy 2: Establish research, policy review, and ongoing monitoring of GHG emissions to track progress towards goals.			
C7	Co-management of lands	Conserve 30% of lands by 2030 for traditional JSKT Usual and Accustomed lands through both co-management and collaborative land management. Provide education about the critical importance of co-management of lands.	Now
C8	Continue to enhance capacity to address climate change	Develop climate adaptation strategies for essential services and infrastructure.	Now
C9	Conduct community emissions inventory	Review emissions from Tribal enterprises GHG inventory (e.g., casino, hotel, golf course, etc.). Partner with Sequim to understand community emissions.	1 – 2 years
C10	Update and maintain policies	Update Tribal Environmental Policy Act (TEPA) to include carbon impact and level of mitigation.	1 – 2 years
C11	Monitor emissions and energy use	Implement and use dashboards to track and monitor emissions and all energy use.	1 – 2 years



Timeline

To reach our carbon-neutral goal, we propose the following timeline for strategy and action implementation. This schedule is adaptive and will be expanded upon by responsible departments and staff.

#	Action	Proposed Schedule																																														
		2023				2024				2025				2026				2027				2028				2029				2030				2031				2032										
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4											
Communications & Education Strategy 1: Develop and provide climate change educational resources and ways to take action for staff, departments, and all Tribal citizens.																																																
C E 1	Develop and Implement a Climate communications and engagement Plan																																															
C E 2	Tribal community discussions																																															
Communications & Education Strategy 2: Create shared learning opportunities and foster dialogue to better understand climate change impacts and experiences from Tribal citizens.																																																
C E 3	Provide technical assessments and assistance																																															
C E 4	Draw Inspiration from others																																															
Transportation & Fleets Strategy 1: Transition Tribal fleet to electric vehicles, expand EV charging station accessibility, and plan for future industry innovation and opportunities.																																																
T 1	Transition fleet																																															



#	Action	Proposed Schedule																																							
		2023				2024				2025				2026				2027				2028				2029				2030				2031				2032			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
	vehicles to electric																																								
T 2	Plan for and expand EV charging station availability																																								
T 3	Support EV purchases																																								
T 4	Explore electric marine fleet options																																								
Transportation & Fleets Strategy 2: Gather information on Tribal staff commute behaviors to develop programs and incentives to encourage Tribal staff to reduce the number of vehicle trips,																																									
T 5	Conduct an employee commute survey																																								
T 6	Encourage trip reduction																																								
T 7	Encourage bicycle purchases																																								
Buildings & Energy Strategy 1: Promote and install energy efficiency design and infrastructure in Tribal facilities so that Tribal facilities use less energy and become more resilient to climate change.																																									
B 1	Conduct an energy audit and develop a facilities energy management plan																																								



#	Action	Proposed Schedule																																							
		2023				2024				2025				2026				2027				2028				2029				2030				2031				2032			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
B 2	Install energy-efficient technologies and components																																								
B 3	Upgrade Elders heating and cooling																																								
B 4	Promote low-GHG building materials and low energy use design																																								
B 5	Review construction codes																																								
B 6	Review other Tribal entities for carbon neutral opportunities																																								
Buildings & Energy Strategy 2: Promote, use, and generate clean energy sources to establish local control over energy and to use cleaner energy sources.																																									
B 7	Purchase clean energy and develop a clean energy plan																																								



#	Action	Proposed Schedule																																							
		2023				2024				2025				2026				2027				2028				2029				2030				2031				2032			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
B 8	Install solar panels																																								
B 9	Begin a solar business for grid resiliency																																								
B 10	Reduce diesel and propane use																																								
B 11	Transition maintenance tools to electric																																								
Water & Wastewater Strategy 1: Conserve water, and reduce water use through water efficiency improvements, natural landscaping, and opportunities for collection systems at Tribal facilities.																																									
W 1	Conduct a water use inventory and develop a water conservation plan																																								
W 2	Install water-saving improvements																																								
W 3	Implement a natural landscaping policy																																								
W 4	Install solar at wastewater																																								



#	Action	Proposed Schedule																																							
		2023				2024				2025				2026				2027				2028				2029				2030				2031				2032			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
	treatment facility																																								
Food Systems & Solid Waste Strategy 1: Invest in Tribal food production through expanding traditional food production capacity, increasing food independence and stabilizing food sources.																																									
F 1	Expand and monitor traditional food production capacity																																								
F 2	Expand food capacity and independence																																								
F 3	Invest in expanding traditional foods gathering and agricultural capacity																																								
F 4	Conduct a pollinator inventory																																								
Food Systems & Solid Waste Strategy 2: Reduce solid and food related waste at Tribal facilities, and expand waste services at Tribal facilities.																																									
F 5	Conduct a solid waste audit and develop a waste																																								



#	Action	Proposed Schedule																																							
		2023				2024				2025				2026				2027				2028				2029				2030				2031				2032			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
	reduction plan																																								
F 6	Develop food recovery program																																								
F 7	Bring all Tribal facilities up to the same waste services																																								
F 8	Install a biodigester																																								
Capacity & Processes Strategy 1: Establish dedicated staff time and committees to advance carbon neutral goals and climate resiliency.																																									
C 1	Incorporate Climate Change into Council processes																																								
C 2	Expand climate staff capacity																																								
C 3	Expand Tribal voices politically																																								
C 4	Dedicate staff time to work towards carbon neutral																																								



#	Action	Proposed Schedule																																							
		2023				2024				2025				2026				2027				2028				2029				2030				2031				2032			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
C 5	Engage in Committee work																																								
C 6	Fossil fuel free investments and retirement options																																								
Capacity & Processes Strategy 2: Establish research, policy review, and ongoing monitoring of GHG emissions to track progress towards goals.																																									
C 7	Co-manage-ment of lands																																								
C 8	Continue to enhance capacity to address climate change																																								
C 9	Conduct community emissions inventory																																								
C 10	Update and maintain policies																																								
C 11	Monitor emissions and energy use																																								



Conclusion

This 2022 Carbon Neutral Plan identifies strategies and actions to address the Tribe’s carbon emission from our Tribal government operations. Our goal, **becoming carbon neutral by 2032**, seeks to reduce the Tribe’s impact on our environment and strives to protect and preserve culturally important Jamestown S’Klallam Tribe resources, while promoting long-term community health, vitality, and resilience.

This plan builds on work already underway and continues to involve multiple Tribal departments. The proposed strategies and actions have been vetted by our Carbon Neutral Advisory Committee, and the timelines are expected to be flexible as we move toward our goal. This plan requires collective action from our leadership, departments, and community members so that we may protect our resources for the next seven generations.



Appendix A: Glossary

Carbon Neutral	No net release of carbon dioxide into the atmosphere. This includes balancing emissions of carbon dioxide with its removal (carbon offsets) or by eliminating emissions altogether.
Clean energy	Energy that comes from sustainable, renewable sources. Renewable energy sources include solar, wind, geothermal and hydropower.
Climate impacts	Consequences of climate change –both expected and realized –for humans and natural systems. Includes sea-level rise, wildfires, coastal flooding, and more.
Climate resilience	The capacity to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.
Greenhouse gas (GHG)	Gases that trap heat in the atmosphere, include carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), and fluorinated gases.
Low GHG-building materials	Materials with low-GHG building materials, are those which use less energy in their production, assembly, and transportation processes. Essentially, the emissions associated with the construction of a building rather than when it is in use (operational carbon).
Low-impact development (LID)	Systems and practices that use or mimic natural processes to manage stormwater runoff. Water is infiltrated into the ground or stored onsite to protect water quality and minimize flooding.
Multi-modal transportation	Accessible transportation through a variety of travel modes, typically pedestrian, bicycle, public transit, and automobile modes, but may also include water and air transport modes.
Metric tons of Carbon Dioxide MTCO₂e	Refers to “metric tons of carbon dioxide equivalent,” which is the standard unit of measurement for total greenhouse gas emissions. One MTCO ₂ e is equivalent to emissions released from an average gasoline-powered passenger vehicle driving 2,482 miles ¹ .
Transit-oriented development (TOD)	Walkable, pedestrian-oriented, and densely compacted mixed-use (commercial, residential, entertainment) development centered around or located near public transit stations.

¹ [EPA: Greenhouse Gas Equivalencies Calculator](#)



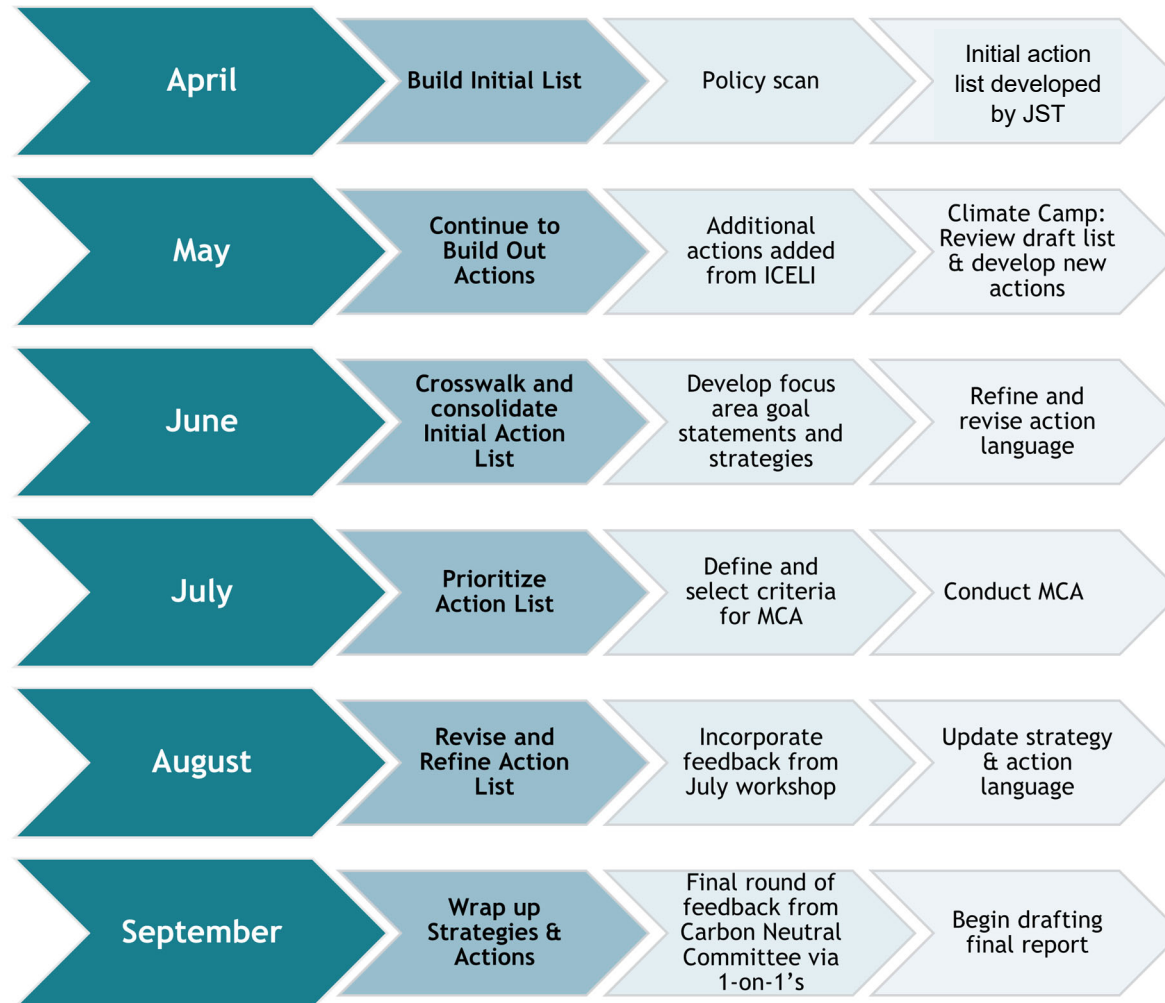
Washington State Building Code	Performance standards and requirements in Washington State for construction and construction materials, consistent with accepted standards of engineering, fire and life safety. It comprises several different codes and is largely based on national model codes that are amended for the state level.
Weatherization	The practice of protecting a building or home—both interior and exterior—from the elements including sun, rain, snow, and wind, resulting in increased and optimized energy efficiency.
Zero waste²	Reduce the waste that goes to landfills and incinerators to as little as possible (zero is the goal), and redesign products, packaging and other items so that they can be reused or otherwise avoid the landfill.

² [*EPA: How Communities have defined Zero Waste*](#)



Appendix B – Our Process to Create This Plan

2022 Planning Process Timeline



We began strategy and action development with a policy scan based on relevance to the Tribe, regional priorities, and key emissions sectors identified in the 2012 GHG Emissions Inventory. We reviewed other key policy and strategy documents from neighboring jurisdictions, Tribal governments, and other guidance documents, for actions that could drive reductions in emissions in our existing government operations.

The majority of potential actions originated from [Tribal Climate Camp](#) in Anchorage, Alaska in May 2022. Listening to what other Tribes are experiencing and how other Tribes are currently dealing with climate impacts was highly informative and led the Tribal representatives attending this camp to generate a presentation outlining the initial list of actions and strategies reviewed by the Carbon Neutral Advisory Committee.

CARBON NEUTRAL ADVISORY COMMITTEE

For this Carbon Neutral planning process, Jamestown S’Klallam Tribe established a Carbon Neutral Advisory Committee to provide input and guide strategy and action development. Committee participants included representatives from various Tribal departments, as well as Tribal Citizens. Each committee member was provided a one-hour Introduction to Climate Change presentation and attended two workshops to refine and revise strategies and actions. Workshop summaries are located in [Appendix C](#).

PRIORITIZING STRATEGIES AND ACTIONS







Next, we began narrowing down and organizing the list of potential actions. Focus areas started to emerge based on actions, and we began prioritizing actions based on impact and Jamestown S’Klallam Tribe values. We used a multi-criteria analysis tool, workshop discussions, and one-on-one meetings to arrive at our final strategy and action list.

Multi-criteria analysis (MCA)

A multi-criteria analysis (MCA) is a tool to help prioritize a large list of actions according to identified community values and other key criteria. The MCA assigns qualitative numerical scores to each evaluated action and criterion to arrive at an overall priority score for each action. We conducted an MCA to help further refine the list of draft strategies and actions.



Jamestown S’Klallam Tribe selected the following six criteria for the MCA of the draft actions. Each sub-criterion is evaluated on a 1 (low) to 5 (high) scale. Based on feedback gathered from the June workshop and submitted by the Carbon Neutral Advisory Committee members, the criteria were assigned the following weights:

Criterion		Weight	Definition/Sub-criteria
Equity		25%	Does the action reduce vulnerability for all populations (e.g., Elders, youth)? Are benefits distributed equitably across the Tribal community?
Co-benefits		25%	Does the action support Tribal sovereignty, community health and resiliency, and the natural environment ?
GHG Emissions Impact		15%	What is the scope and likelihood that the action will reduce GHG emissions or enhance resiliency ? By when? Can impact be measured and tracked?
Resilience Impact		15%	Relative ability to protect and sustain Tribal members, culture, and resources, etc. and adapt and survive amongst extreme events (public health crisis, extreme weather events, economic downturns, etc.)
Cost		10%	What is the cost, not just monetary , to the community and Tribe?
Feasibility		10%	What is the Tribe's level of control over implementation ? Are there regulatory, political, or technological constraints related to action implementation? Is the action adaptable to new technologies?

Once criteria were defined for the MCA, the Carbon Neutral Advisory Committee used the MCA in each of the focus areas to prioritize the strategies and actions to best fit Tribal needs. MCA scores for actions are included in [Appendix C: Workshop Summaries](#). Additional MCA background and expanded criteria definitions and rankings are included in [Appendix D: Multi-Criteria Analysis](#).



Appendix C - Workshop Summaries

Carbon Neutral Strategies & Actions: June Workshop Summary

Jamestown S’Klallam Tribe Carbon Neutral Advisory Committee

Thursday, June 30, 2022 from 2 – 4 pm via Zoom

Attendees: 15 committee members

Overview

The Jamestown S’Klallam Tribe’s Carbon Neutral Advisory Committee met for its first workshop to discussion strategies and actions for the Carbon Neutral Plan. Rochelle and Joe gave a context setting presentation, followed by timeline overview and an introduction of the focus areas and strategies. We spent the next 80 minutes in three facilitated break out rooms, discussing each of the six focus areas, strategies, and actions.

In the breakout rooms, we focused on the following discussion questions:

- Are there any actions that really jump out at you as a **must-have**?
- Are there crucial actions **missing** and/or do you have **new ideas** not currently reflected in this list?
- Do you have any **concerns** about these actions or feel that edits need to be made to them?
- Are there **considerations** we need to make for this strategy/action **for youth and Elders**, or others, who may be especially impacted?

Our discussions reviewed the current list of potential strategies and actions, generated new action ideas, and identified what would, or would not work for the Tribe. We all reconvened as a full group and shared key takeaways from each of the breakout rooms. Lastly, we introduced the criteria developed for the multi-criteria analysis (MCA). Participants were invited to share their thoughts on criteria weights.



NEXT STEPS

The following tables contain consolidated comments and feedback from all of the breakout rooms at the workshop. Next, we will review all the consolidated comments and incorporate edits to the actions based on this feedback. This updated strategy and action list will then be used for the multi-criteria analysis.

Focus Areas

	Focus Area	Goal
1	Communications & Education	Increase understanding for all Tribal members of climate change, its impacts, and how they can participate.
2	Transportation & Fleets	Reduce greenhouse gas emissions from employee commute and Tribal fleet.
3	Buildings & Energy	Make all Tribal-owned buildings energy-efficient and/or energy neutral.
4	Water & Wastewater	Reduce water consumption, reduce energy-use for water and wastewater, and ensure a dependable water supply.
5	Food Systems & Solid Waste	Protect food sovereignty, expand food programs, and reduce solid waste.
6	Capacities & Processes	Expand tribal capacities to address climate change.

Overall comments:

- Rather than use “Tribal member” use “Tribal Citizen” throughout the actions
- For EACH of the focus areas maybe introduce how cultural values and equity connect to all the actions in this focus area (and then specifically connected to actions leave there as well).

COMMUNICATIONS & EDUCATION

GOAL: Increase understanding for all Tribal members of climate change, its impacts, and know how they can participate.

ID #	Action Short Name	Action Description	Timeframe
	Communications & Education Strategy 1: Develop and provide climate change education resources for staff and Tribal members.		



ID #	Action Short Name	Action Description	Timeframe
CE1	Create Climate 101 resources	Create Climate 101 resources for Elders’ Lunches and community presentations. Use incentives (raffles, giveaways) to encourage participation in community presentations.	Immediate
CE1 comments	<ul style="list-style-type: none"> For the climate 101 resources <ul style="list-style-type: none"> Provide additional links Have the action items included in that resource A lot of information can be overwhelming <ul style="list-style-type: none"> Change the language where it’s a bit more understandable, especially for Elders Intro to climate change All new language > lots of terminology Visual changes to share the bigger impacts (especially if there are local examples) Graphs and charts How does this affect me? How does it affect my family, grandkids? Show graphs for how it would look like for the 7th generation <ul style="list-style-type: none"> Robert has some slides that are good examples Climate 101: currently baseline understanding of what we have right now and what is achievable—how frequently do we update? We don’t want to overwhelm people but we don’t want it to drop off—we need consistency <ul style="list-style-type: none"> We already have newsletters, so this could be included in these—simple steps we all can take Also opportunities for self-assessments. Some high schools are doing this in environmental science classes For equity consideration -- Maybe initially PROVIDE folks with things (like reusable bags; options that aren’t disposable plates, water bottles, etc.)-- New Action: Ask people to bring to bring reusables to meetings (water bottles) 		
CE2	Develop and Implement Communication and Engagement Plan	Develop a Jamestown S’Klallam Tribe Communications and Engagement Plan for climate change, including internal staff and leadership communications to Council highlighting sector impacts and external communications to Tribal members.	1 – 2 years



ID #	Action Short Name	Action Description	Timeframe
		<ul style="list-style-type: none"> Internal Staff and Leadership: Develop newsletter for internal use, sharing how departments are working to reduce emissions and fight climate change. Community and Staff: Educate citizens and staff through newsletters, social media, videos, General Citizenship meetings, and resource fairs. Community: Create a free, Climate Action resource packet that outlines three actions every age group can take to help reduce climate impacts. Youth: Educate youth by partnering with local schools on climate curriculum 	
CE2 Comments		<ul style="list-style-type: none"> Incentives could be part of the education and communication strategy We will need a strategy that's assigned to communicate what and when. This is important so need to make sure there is STAFF, support and a plan! Must Have: Whatever communication and education program we come up with must always point back to the value system in Jamestown S'Klallam culture (e.g., language program connection). Add this into the strategies so it's more direct. 	
Communications & Education Strategy 2: Create shared learning opportunities to better understand climate change impacts and experiences from Tribal members.			
CE3	Gather Youth & Elder Stories	Gather and meet with Elders to document stories of land changes and impacts of climate change experienced over time. Engage and involve youth to create educational resources for the community around climate change (e.g., video).	Immediate
CE3 Comments		<ul style="list-style-type: none"> It would be great to have youth create TikToks! Have some fun with it. Great youth programs already—our kids could go into Sequim school districts. And another opportunity to learn from Elders Education is a must have—broad education support K-12 and through college and beyond (Tribe has a robust education program). Education has allowed us to be aware of this issue. So very supportive of climate education 	
CE4	Draw Inspiration from Others	Stay on top of news and resources for climate resilience planning for Tribes, such as Pacific Northwest TCC Project through U of O monthly	Immediate



ID #	Action Short Name	Action Description	Timeframe
		newsletter articles, meeting notifications, scholarship, and grant opportunities. Continue to research, connect with, and draw inspiration from other Tribes pursuing similar work (e.g., Puyallup's Climate Crisis resolution, Blue Lake, Justice 40)	
CE5	Survey the community	Understand community priorities for climate change by surveying the community on what they would like to prioritize regarding climate change.	1 – 2 years
CE5 Comments	<ul style="list-style-type: none"> • Instead of SURVEY: Tribal communities are very surveyed. It might be a deal-breaker. Move this to "Discussion". Could have round tables/community meetings. Community discussions is a more culturally relevant way to do this. May have place based and virtual because we have Tribal Citizens who live elsewhere too. • Missing: The equity perspective—could be missing from these education actions. Maybe analyzing that deeply, so the community survey could look at that. (e.g., what can ppl afford; think of solutions that no matter what families can contribute and participate in the solution). 		

General comments – Communications & Education

- Getting our committees educated and involved in some way
 - Presentations
 - How it will affect their bodies of work
 - Things that they can do
- Regarding the pace of change: reminding how things were done before. We take electricity for granted.
- Pretty good list overall.
- Must do: Education has to be first. Climate change and response across the Tribe is new, having everyone's buy-in. (Limitations, the Natural Resources Dept has been leading but doesn't have the full capacity to manage this work, been focused on natural systems resilience).



TRANSPORTATION & FLEETS

GOAL: Reduce greenhouse gas emissions from employee commute and Tribal fleet.

ID #	Action Short Name	Action Description	Timeframe
Transportation & Fleets Strategy 1: Replace gas powered vehicles in Tribal fleet with electric vehicles and provide EV charging stations at Tribal facilities so that access is widely available.			
T1	Expand EV Charging Station Capacity	Install EV charging stations at Tribal buildings, such as the library. Continue to expand EV charging stations to level 2 and 3 chargers where possible.	Immediate
T1 Comments	<ul style="list-style-type: none"> Develop an implementation plan for EV charging (overall plan, not only opportunistic). So overall plan for where charging should/could be to look at it holistically. Could do immediately: Codify EV policy once it's permitted. E.g., x amount of EV chargers for all new buildings, new buildings are all electric and EV ready. Everything under the Tribe's jurisdiction where we apply code. Shouldn't cost extra, need to have EV implementation plan/policy (guidance on how many, where, when) City of Port Angeles has added to their code, building a new residential/multifamily some of these things are required (EVs). So if the Tribe builds new housing would have EV which can remove at least one barrier. Some codes can be incentive based, some are mandatory. Level 2 chargers is spot-on for what we need (the goal); if we want to add a goal of assisting the public, we could go the Level 3 route (but there is so much more infrastructure required here) Opportunity for rooftop solar to support EVs and build up the grid [+1 on this] 		
T2	Replace old fleet vehicles with EV	Retire old and under-used combustion engine Tribal fleet vehicles and replace them with electric vehicles.	1 – 2 years
T2 Comments	<ul style="list-style-type: none"> Get rid of old cars action—probably needs a cost benefit analysis. There might be good reasons to transition now, even before the fleet/cars are older. Vehicle fleet is almost all leased so it would be pretty simple to make the change (5-year leases)—time to lease something different! <ul style="list-style-type: none"> 100-120 vehicles <ul style="list-style-type: none"> Less than 10 hybrid (?) Electricity demand: if charging during non-peak hours, less impact. Part of this would be understanding vehicle use and how/how often/when vehicles get used. 		



T3	Explore electric marine fleet options	Explore grants to for Tribal fleet and fishers to add electric/hybrid boats.	1 – 2 years
T3 Comments	<ul style="list-style-type: none">1-2 years is not a realistic timeframe. Longer goal—3-10 years? (PNNL is adding a boat charging station, not sure about access). State Ferry system is starting to move but more than 1-2 years		
T4	Support EV purchases	Explore and develop incentives for Tribal members to purchase EV cars.	1 – 2 years
T4 Comments	<ul style="list-style-type: none">Education on how EV work and doing a little bit of ‘myth-busting’. So education on EV so that folks know (for example) that you can go a long distance, etc. (maybe include in Education/Comms broadly)There’s an outreach AND technical support aspect that’s important, especially if it can be peer to peer. There are ppl who drive EVs so sharing some of those stories through the newsletter, community discussions, etc. This would show people that there are others/neighbors doing this and that if folks want to make the change they have ppl to talk to. (maybe include in Education/Comms broadly)Incentives for Tribal members to purchase EVs would be great		
Transportation & Fleets Strategy 2: Encourage Tribal staff to reduce the number of vehicle trips through telecommuting, carpooling, use of public transit, and bicycling.			
T5	Encourage trip reduction	Encourage staff to reduce trips (both commute and work-related) through encouraging telecommuting, trip reduction programs, and resources for public transit. <ul style="list-style-type: none">1. Provide incentives and support for telecommuting when possible.2. Promote and incentivize employee use of the Clallam County Transportation Van Pool program.3. Establish a car sharing program for Tribal employees. Supplement Clallam County Bus lines with JSKT transit vans.	Immediate Immediate 1-2 years 1-2 years
T5 Comments	<ul style="list-style-type: none">For the employee telecommute language, we need to make sure it’s consistent to departmental policies. So “aligned with departmental policies for in-person days” (something like that)For people who can’t afford some of these changes, how can they also participate in solutions. How do we make sure we don’t shame people in the language.		



T6 [CCG]	Conduct an employee commute survey	Conduct an employee survey regarding commute behaviors, include questions about interest in participating in different programs (use examples from CCG).	Immediate (b/t next inventory)
T6 Comments	<ul style="list-style-type: none"> • Will be interesting to see the employee commute results • Concern about this employee commute survey b/c with Covid it might skew the results. Rather than survey maybe have data on what ppl are doing—actual behavior. • Survey to see what people need to buy in to alternative transportation = important. To help figure out where we need to start to get people onboard. <ul style="list-style-type: none"> ○ 7 Cedars: losing employees to other locations where employees don't need a car. They are doing a survey ○ There was a survey done for client navigation (?) – only 4 times per day is a barrier ○ Hard to make appointments • Changes to employee commute should be top of the list—how do we make the most environmental option the most comfortable? 		
T7	Encourage bicycle purchases	Implement a subsidized bicycle purchase for citizens and employees	1 – 2 years
T7 Comments	<ul style="list-style-type: none"> • Discovery trail is an asset (biking) 		

General Comments – Transportation & Fleets

- Make a cost or economic argument (price tag) to some of these actions. So what is the economic argument for the different actions. E.g., education, EV will save people \$\$\$. So the cost argument as part of education and promoting actions.
- Cultural values, so however we communicate about transportation should be linked back to cultural values.
- We can do some fine-tuning and emphasis on these strategies & actions.
- Third goal to add = be prepared for autonomous vehicle impacts (which will change—and screw up—the landscape. And will make reaching climate goals harder: higher VMT than we've ever seen)

Bus/public transit-related comments

- Bus stop electricity is low-hanging fruit through transportation funding
- Route 50—considering dropping fares to remove one more barrier to increase bus use (sometimes empty buses)
 - Can this bus be switched to EV?



- Getting from campus to campus in a way that doesn't require gas—could use a small electric bus (South to north campus)
 - Could be partnered with resort
- From Zoom chat: as an additional thought - the little electric bus the resort has (or one like it) is it possible to replace the center 2 routes of route 50 with more frequent routes with an electric vehicle. Or have a 'dial a ride' style option. In lieu of contracting out that service- expanding it as part of our own transportation offerings.

BUILDINGS & ENERGY

GOAL: Make all Tribal-owned buildings energy-efficient and/or energy neutral.

ID #	Action Short Name	Action Description	Timeframe
Buildings & Energy Strategy 1: Promote and install energy efficiency design and infrastructure in Tribal facilities so that Tribal facilities use less energy and become more resilient to climate change.			
B1	Install energy-efficient components	<p>Improve energy efficiency in all Tribal facilities and Tribal housing. Energy efficiency actions are beneficial for saving money and making buildings more comfortable.</p> <ol style="list-style-type: none"> 1. Install energy-efficient lighting and automatic light sensors. This includes retrofitting light fixtures and/or replacing bulbs with LEDs. 2. Install energy-efficient heat pumps in all buildings. 3. Install water-saving plumbing as buildings are renovated. 4. Design and use natural landscaping for Tribal facilities to reduce emissions. 5. Develop and implement a weatherization program for Tribal buildings and Tribal housing. 6. Install energy efficient appliances in Tribal offices, kitchens, laundries and cafeterias in Tribal buildings and Tribal housing 7. Install building/office occupancy sensors in Tribal buildings and Tribal housing 8. Install or improve building insulation (including double-glazed windows) in Tribal properties 	Immediate



ID #	Action Short Name	Action Description	Timeframe
B1 Comments	<ul style="list-style-type: none"> • Citizens will need to buy-in, only for govt? how can we get citizen buy in <ul style="list-style-type: none"> ○ Staffing is another way to help share resources to citizens, what can we provide as tribal gov't to citizens, what assistance can we provide to citizens as well ○ Citizens can get state incentives > can help connect home owners to some of those resources ○ More political pressure on state officials to move this way, how are they helping citizens apply for rebates and incentives for this type of work ○ Looking for grants • Engaging citizens: helping them replace anything, i.e. propane stoves • A lot of smaller actions that would help tribal citizens make the changes in their homes and would add up • B1-7: maybe a safety issue in an elder's home. Not safe to have them in the dark 		
B2	Review other Tribal entities for carbon neutral opportunities	Review Enterprises, Resort, and clinic GHG emissions (potentially conduct inventory), and investigate opportunities for energy-efficiency	Immediate
B2 Comments	<ul style="list-style-type: none"> • Tribes generate income through gaming. And gaming and lights go hand in hand- to acknowledge where energy is being used and why it's being used in that way. And the casino generates a lot of revenue for Tribal Citizens. Just big picture to think about why we use energy. So we are sensitive to these goals and the importance when we engage. May not be a good way to make a casino carbon neutral(?) When we think about carbon neutral and enterprises (beyond government ops), would purchasing offsets be a valid option? (Considerations for Action B2) 		
B3	Conduct an energy audit and develop a facilities energy management plan	Develop a facilities energy management plan for all Tribal facilities. This includes <ol style="list-style-type: none"> 1. Conduct an energy audit of all Tribal facilities. 2. Implement an energy tracking and management system for Tribal buildings. 3. Use megapacks to store energy. Other Tribes are using these for all their facilities to reduce costs and increase resiliency to climate change. 	Immediate – 2 years



ID #	Action Short Name	Action Description	Timeframe
B4	Update construction codes	Update Tribal construction standards and codes to include LEED certification/living buildings, green roofs where suitable, passive home-design, and mitigation for carbon emissions of construction, maintenance, and usage of Tribal facilities.	1 – 2 years
B4 Comments	<ul style="list-style-type: none"> Look at this immediately, start researching and having implemented in 1-2 years <ul style="list-style-type: none"> This will be a large project, need to get it to Council Any new construction should be looking at that now Passive house consultants Grants for future construction EDIT: Move timeframe up Passive solar building – reducing energy consumption before lights even go on! 		
B5	Retrofit fireplaces	Replace or retrofit all fireplaces in Elders' homes with heat pumps.	1 – 2 years
B5 Comments	<ul style="list-style-type: none"> We want ppl to be able to survive in a snowstorm when power is out. So we can replace baseboards with heat pump. Doesn't make sense to remove the fireplaces, the power goes out it's a safety issue. Woodstoves are a good back-up, make it so they don't have to use it when they don't want to or can't. One of the reasons Elders prefer fireplaces right now, is because wood is free. If we can give them energy efficient heat pumps and bring costs down. 		
B6	Promote low-GHG building materials	For new buildings, encourage designs that reduce the use of building materials with high embodied carbon or high GHG emissions when produced, transported, or installed. Work with suppliers to find alternatives for low GHG building materials.	1 – 2 years
Buildings & Energy Strategy 2: Promote and install alternative energy sources to establish local control over energy and to use cleaner energy sources.			
B7	Purchase clean energy and develop a clean energy plan	Enroll/purchase 100% clean energy for JSKT facilities and develop an energy plan for renewable energy and technologies that are appropriate for our area (geothermal, tidal, solar, etc.).	Immediate
B8 [CCG]	Reduce propane use	Better understand propane use and encourage alternative energy sources	Immediate
B8 Comments	<ul style="list-style-type: none"> Propane use, separate area? Traditional foods generator runs off propane, kicks on occasionally <ul style="list-style-type: none"> Propane tank refill recently at the traditional foods buildings Look into generator use at varying facilities 		



ID #	Action Short Name	Action Description	Timeframe
		○ All the cooking facilities are propane	
B9	Install solar panels	Install solar panels and energy storage on all new buildings to promote grid resiliency and energy independence.	1 – 2 years
B9 Comments	<ul style="list-style-type: none"> • Are we looking to generate energy for the community or just for individual buildings? <ul style="list-style-type: none"> ○ Hansi has some solar panels and know what is available ○ Makes a positive statement for the community as a model example 		
B10	Begin a solar business	Research and begin a solar business for clean energy sources.	5 years
B10 Comments	<ul style="list-style-type: none"> • Move up in priority and timeframe <ul style="list-style-type: none"> ○ Should do before installation of solar on tribal facilities • Support for solar actions and solar business especially! 		

General Comments – Buildings & Energy

- Another issue with lights, we have a large Holiday light show.
- Things we have already done: Already have dramatically reduced the amount of energy that the light show uses.
- New Action: Ground maintenance—we use gas powered tools for all of that. Need to electrify OFF-ROAD 'vehicles'-- does it go here, natural systems, vehicles? Most folks who do the maintenance are contractors and not Tribal employees, so is there a need to incentivize them to use electric tools (Tribal government maintains 50 acres of lawn) so maybe this is 5 years from now we work on this action. B/c the lawnmowers aren't there yet for battery powered.
- **New Action:** Tribes that have added to their contractual/procurement plans to try to both work LOCAL and with companies that have environmental consciousness/climate policies in mind already (e.g., building a new playground and the company had environmentally conscious materials choices)
- Native plants is a big one for landscaping. Focusing on minimal irrigation.

WATER & WASTEWATER

GOAL: Reduce water consumption, reduce energy-use for water and wastewater, and ensure a dependable water supply.



ID #	Action Short Name	Action Description	Timeframe
Water & Wastewater Strategy 1: Reduce water use through design and capture and reuse systems at Tribal facilities.			
W1	Install water-saving improvements	Install water-saving toilets, shower heads, automatic sensors in hand basins in Tribal buildings and Tribal housing.	Immediate
W1 Comments	<ul style="list-style-type: none"> Hot water tanks, a way to adjust hot water tank settings for less energy use and how fast water comes out? <ul style="list-style-type: none"> Helpful for citizens to help conserve water Instant hot, not wasting water on waiting to get hot W1: Tribal buildings have restrooms are now all touchless (mostly a covid response). (not in housing yet). 		
W2	Implement a natural landscaping policy	Design and use natural landscaping for Tribal facilities to reduce water usage.	Immediate
W2 Comments	<ul style="list-style-type: none"> Really important to get started on soon <ul style="list-style-type: none"> Opportunity to provide resources to citizens on how they could implement Tie to new construction code updates to include/incorporate New action: Rain harvest systems (natural landscaping), gray water recycling, add onto buildings/construction projects <ul style="list-style-type: none"> Looked at gray water for the hotel Purple piping looked into that, expense might be too high for impact In Hawaii, almost all homes have ways to collecting rainwater and using it > look into options for conservation No catch system at the garden Drain collection from buildings Make them look cute! 		
W3	Develop a water conservation and protection plan	Develop a water protection and conservation plan that includes the reduction of toxic substances used by Tribal facilities.	1 – 2 years
W4	Install solar at wastewater treatment facility	Work in collaboration with the City of Sequim to install solar at the wastewater treatment facility.	5 years



General Comments – Water & Wastewater

- Start with a water use inventory to better understand usage
- **New ACTION:** Meter water usage at every building and every irrigation system so we can measure consumption. Immediate. Pre-cursor to other actions. Actively working on this, can’t quantify benefit until we know what we are using.
- Connectivity of Sophus well is with JCL and Sequim Bay tributaries. Outside of zone of influence for Dungeness River and tributaries.
- Wastewater question: connection to city of Sequim—90% of septic’s are now connected to City of Sequim. So it’s changed the impact, that was a big update.

FOOD SYSTEMS & SOLID WASTE

GOAL: Protect food sovereignty, expand food programs, and reduce solid waste.

ID #	Action Short Name	Action Description	Timeframe
Food Systems & Solid Waste Strategy 1: Increase land dedicated to food production and expand traditional food sources.			
F1	Begin developing food capacity	Begin planning for development of food capacity/sources (farms) for emergencies and food sovereignty.	Immediate
F1 Comments	<ul style="list-style-type: none"> • Food independence • Building food security/capacity is a must-have • Has the Tribe thought about food preservation? Key piece of food security <ul style="list-style-type: none"> ○ Can we expand on traditional foods program in that respect? ○ Training opportunity too. Training the next generation in food preservation 		
F2	Buy a farm	Buy a farm to grow food for the resort and for the Tribal community.	1 – 2 years
F2 Comments	<ul style="list-style-type: none"> • Roughly 20 farms located nearby, varying in size (Nash’s is the biggest hundred + acres, more around 5-10 acres, smaller community gardens/mom-pop farms ~acre) <ul style="list-style-type: none"> ○ Hawk at Jamestown working on this idea > 5 -10 acres, self-sufficient by selling food to the public and providing food to tribal citizens 		



	<ul style="list-style-type: none">○ How to operationalize this? Nash's farm > Jamestown as a partner, if they aren't using some of their land○ 5 – 10 acres puts out a lot of food! Potential location at Knutson farm road property○ Employees would want to buy into it, a Jamestown CSA○ Shellfish garden, provide more shellfish and salmon to citizens, protein side of this<ul style="list-style-type: none">▪ Land to raise something on▪ Bigger than just vegetable-side of things○ Fruit trees, traditional plants• Buying a farm: costs of land and operating a farm—what does the cost look like with using local stores?• F2 action: buy a farm is short-sighted; this should be “invest in farming in the local area”—this captures more options. Buying farms doesn't necessarily mean supporting local farmers or promoting jobs. Who is going to take over some of the existing farms in our community?<ul style="list-style-type: none">○ Adding things here and there when possible—on a smaller level (e.g., add 10 chickens here)—community opportunity and chance for connections○ Food sovereignty on an individual level (if people have eggs and carrots in the backyard!)		
F3	Conduct a pollinator inventory	Conduct a pollinator inventory for impacts due to temperature shifts and toxins from agriculture.	1 – 2 years
F3 Comments	<ul style="list-style-type: none">• Pollinator corridors: figuring out if we have them and inventory of food sources		
F4	Inventory and monitor traditional food sources	Conduct an inventory of traditional foods and wildlife. Begin to map, monitor and track traditional foods and sources to assess impacts from climate change on food sources (i.e., pests).	1 – 2 years
F5	Gather and expand traditional foods resources	Begin a food forest on Tribal lands and begin to gather traditional foods all year round. Expand the number of different traditional foods gathered.	1 – 2 years
F5 Comments	<ul style="list-style-type: none">• Prairies maintenance: how can we approach this—supporting conservation, farms, prairies?<ul style="list-style-type: none">○ Great points		
Food Systems & Solid Waste Strategy 2: Reduce solid and food related waste at Tribal facilities and expand composting options.			
F6	Conduct a solid waste audit	Conduct a waste audit at all Tribal facilities.	Immediate



F6 Comments	<ul style="list-style-type: none"> Look into ways to help reduce waste within Hotel operations (in rooms) SCS: have someone sorting waste right now for proper collection on their own time 		
F7	Add composting service	Add composting service for hotel and resort facilities and compost with County for more composting options (e.g., can compost meat, packages). Encourage compostable carryout containers.	Immediate
F7 Comments	<ul style="list-style-type: none"> EDIT: Include recycling and reuse <ul style="list-style-type: none"> Casino isn't recycling (glass or plastic) Bring all facilities up to the same No curbside glass recycling in Sequim > could Jamestown be the glass recycling collection site for this this side of Sequim Earlier on have been conversations on starting a tribal-wide composting program F7: waste from facilities Composting question: are there emissions associated with composting? <ul style="list-style-type: none"> Yes, but it's fewer emissions than burned Composting all output from Tribal government or all Tribal services? <ul style="list-style-type: none"> Right now, this is just for government, but this can lead into all Tribal entities Volume of composting? <ul style="list-style-type: none"> Initial action might be figuring this out—food waste stream and trash waste stream Food waste is often recapturable in a farm as feed for farm animals—farm can provide immediate use of food waste (and then we get a resource from the animals) 		
F8 [CCG]	Develop food recovery program	Develop a food circularity/food rescue program to get food that is not eaten from enterprise facilities to those in need.	1 – 2 years
F8 Comments	<ul style="list-style-type: none"> Food recovery program: started at the beginning of the pandemic > redirect good food to people who need it 		
F9	Install a biodigester	Buy and install a biodigester for Tribal facilities.	1 – 2 years
F9 Comments	<ul style="list-style-type: none"> Biodigester: drain field for liquids and it runs into ground. Anerobic digester produces compost. Takes food scraps into compost at a fast rate into a more liquid state <ul style="list-style-type: none"> Garden currently composting > have a small compost pile 		

General Comments – Food Systems & Solid Waste

- Green hotel certification to reduce waste? Look into this!
 - Pandemic has had positive energy/consumption use for hotel



- 2-night stay doesn't *need* a cleaning >
- Incentive if you don't have your room cleaned
- Need to add something about supporting local farms
 - Engage stores to help them use more local foods or at least label local foods
 - Gift cards to local food places
- Hiring composting service vs purchasing food digester?
 - Digester happens on your land, composting services take the food elsewhere
- Ornamental landscaping vs edible landscaping?
- Native landscaping – water conservation plus food security and options

CAPACITY & PROCESSES

GOAL: Expand tribal capacities to address climate change.

ID #	Action Short Name	Action Description	Timeframe
Capacity & Processes Strategy 1: Establish dedicated staff time and committees to advance climate mitigation and adaptation goals.			
C1	Add a Climate Change representative	Add a climate change representative to the executive committee, add to Council retreat agenda, and begin to develop specific department deliverables.	Immediate
C1 Comments	<ul style="list-style-type: none"> • Good place to start: Climate Crisis declaration from Council <ul style="list-style-type: none"> ○ Could kick off the plan, here are the steps we are going to be taking to continue to survive and thrive here ○ Opportunity at next general Council meeting 		
C2	Dedicate time to work towards carbon neutral	Set aside staff time to work towards carbon neutral goals/actions, and Tribal Council to establish a vision, mission, and direction for each department to move towards carbon neutral.	Immediate
C2 Comments	<ul style="list-style-type: none"> • Priorities—best way to develop efficiency—different across departments. Be mindful with how we can make easy adjustments. • For each department, thinking through and deciding on who would be a good fit for doing this work (time and staff capacity can be hard) 		



ID #	Action Short Name	Action Description	Timeframe
C3	Engage in Committee work	Create and convene the following committees: <ul style="list-style-type: none"> • Create an Energy Task Force/Committee/Office of Energy • Consider forming a Youth Tribal Council for climate work • Work with existing regional coalitions to address climate change • Consider having Tribal Council pass a Crisis Climate Change resolution 	Immediate
C3 Comments	<ul style="list-style-type: none"> • Being a good partner with regional committees and boards etc.—how can we partner with them and help each other with common goals? 		
C4	Expand staff capacity	Add climate resilience focused Tribal staff. <ul style="list-style-type: none"> • Create a position for a Tribal utility/energy staff member to manage energy efficiency programs • Create a position for a climate resilience staff member • Consider adding an agricultural department or adding agriculture to the climate resilience focused Tribal staff team. 	Immediate
C4 Comments	<ul style="list-style-type: none"> • A dedicated person, who can focus on this, how to translate to their departments? <ul style="list-style-type: none"> ○ Departments at capacity, someone needs to be monitoring > finding that balance ○ Having someone to hold us accountable, spearhead and think outside the box ○ Helping facilitate a lot of these conversations i.e. between Casino and County, education for employees and citizens ○ Making sure that each department is meeting their goals and helping with that • Nutritional foods has wanted to do traditional foods assessment > hasn't had the capacity to yet, additional staff could help with that • Great opportunity for grant funding applications—to provide 1-2 staff positions to really focus on this area. Also a good opportunity to get Elders and youth involved—education and implementation. Elders and youth being able to work together. <ul style="list-style-type: none"> ○ Agreed, and this might be tough. What incentives can we use for both of these groups? Is there funding available for these incentives? ○ Currently going for a grant! 😊 		









ID #	Action Short Name	Action Description	Timeframe
C5	Expand Tribal voices	Support the election Tribal voices in leadership for local, state, and federal positions	Immediate
C6	Fossil fuel free investments & retirement options	Develop and provide options for fossil-free retirement or carbon neutral funds for Tribal employees.	1 – 2 years
C6 Comments	<ul style="list-style-type: none">• Possible to completely divert retirement funds from fossil fuels? Some socially-responsible funds available now, look into this. Can be an option for sure• C6: HR benefits type item: North Olympic land trust: 60% of working capital into investments. They decided to not invest in fossil fuel-free...so they could make more revenue to serve their mission, community, and retirees. There are different viewpoints on this.		
Capacity & Processes Strategy 2: Establish research, policy review, and ongoing monitoring of GHG emissions to track progress towards goals.			
C8	Co-management of lands	Conserve 30% of lands by 2030 for traditional JTSK U & A lands through both co-management and collaborative land management	Immediate
C9 [CCG]	Conduct community emissions inventory	Review emissions from Tribal enterprises GHG inventory (e.g., casino, hotel, golf course, etc.). Partner with Sequim to understand community emissions.	1 – 2 years
C10	Monitor emissions and energy use	Implement and use dashboards to track and monitor emissions and all energy use.	1 – 2 years
C10 Comments	<ul style="list-style-type: none">• A good place to start!<ul style="list-style-type: none">○ Continue to incentivize to move forward > see the difference		
C11	Update and maintain policies	Update TEPA (Tribal Environmental Policy Act): to include carbon impact and level of mitigation.	1 – 2 years
C12	Continue to enhance capacity to address climate change	Develop climate adaptation strategies for essential services and infrastructure.	1 – 2 years

General Comments – Capacity & Processes

- Impressed with the start of this process—kicked off so strong! Capacity building



PROPOSED EVALUATION CRITERIA FOR ACTIONS

Criterion		Weight	Definition/Sub-criteria
GHG Emissions Impact			What is the scope and likelihood that the action will reduce GHG emissions or enhance resiliency? By when? Can impact be measured and tracked?
Resilience Impact			Relative ability to protect and sustain Tribal members, culture and resources, etc. and adapt and survive amongst extreme events (public health crisis, extreme weather events, economic downturns, etc.)
Cost			What is the cost, not just monetary , to the community and Tribe?
Feasibility			What is the Tribe's level of control over implementation? Are there regulatory, political, or technological constraints related to action implementation? Is the action adaptable to new technologies?
Equity			Does the action reduce vulnerability for all populations (e.g., Elders, youth)? Are benefits distributed equitably across the Tribal community?
Co-benefits			Does the action support self-determination, tribal sovereignty , health & community resiliency, food sovereignty, and the natural environment?

Carbon Neutral Strategies & Actions: July Workshop Summary

Jamestown S’Klallam Tribe Carbon Neutral Advisory Committee

Thursday, July 21. 2022 from 1- 3 pm via Zoom

Attendees: 16 committee members



Overview

The Jamestown S’Klallam Tribe’s Carbon Neutral Advisory Committee met for its second workshop to discuss strategies and actions for the Carbon Neutral Plan. We began by reviewing how feedback from Workshop 1 had been reviewed and incorporated into the new updated strategy and action list. Next, we shared the updated multi-criteria analysis (MCA) criterion, selected weights for each, and ended with a brief recap of the MCA priority scoring process.

We spent the majority of the meeting in an MCA priority score ranking activity and discussion. We conducted the activity and discussion for all 6 focus areas, following the below activity flow:



1. Share out MCA priority score for actions by strategy (~3 mins)
2. Open PolLEV ranking activity (~3 – 5 mins)
 - a. Everyone will be able to individually re-arrange priority ranking of actions
 - b. Co-benefits, Equity, GHG emissions impact, Resilience impact, Cost, Feasibility
3. Discuss live results (~5 mins)
 - a. Did the ranking from the priority score resonate with you? Why or why not?
 - b. Why did you rank an action higher? Lower?

This activity helped to gauge Committee support and energy around action priorities, as well as revise action language and brainstorm new ideas to expand actions.





NEXT STEPS

Next, we will review and incorporate feedback gathered to the action language, timeframes, and priority ranking. We will share the finalized action list with the Committee for final comments. This action list will build the foundation of the Carbon Neutral Plan, which will be drafted in September and circulated back to Committee in October.

JAMESTOWN S’KLALLAM’S MCA

Criterion		Weight	Definition/Sub-criteria
Equity		25%	Does the action reduce vulnerability for all populations (e.g., Elders, youth)? Are benefits distributed equitably across the Tribal community?
Co-benefits		25%	Does the action support 1) tribal sovereignty, 2) community health and resiliency, and 3) the natural environment ?



GHG Emissions Impact		15%	What is the scope and likelihood that the action will reduce GHG emissions or enhance resiliency ? By when? Can impact be measured and tracked?
Resilience Impact		15%	Relative ability to protect and sustain Tribal members, culture, and resources, etc. and adapt and survive amongst extreme events (public health crisis, extreme weather events, economic downturns, etc.)
Cost		10%	What is the cost, not just monetary , to the community and Tribe?
Feasibility		10%	What is the Tribe's level of control over implementation ? Are there regulatory, political, or technological constraints related to action implementation? Is the action adaptable to new technologies?
DISCUSSION NOTES: <ul style="list-style-type: none"> Linda asked “I am wondering if everyone ranked on the same scale? in the email I received 1 = high importance?” – Sissi confirmed that Linda used 1-5 ranking correctly when ranking the criteria initially and that this is different (ranking the specific strategies vs ranking criteria) 			

Ranking Activity Notes

COMMUNICATIONS & EDUCATION

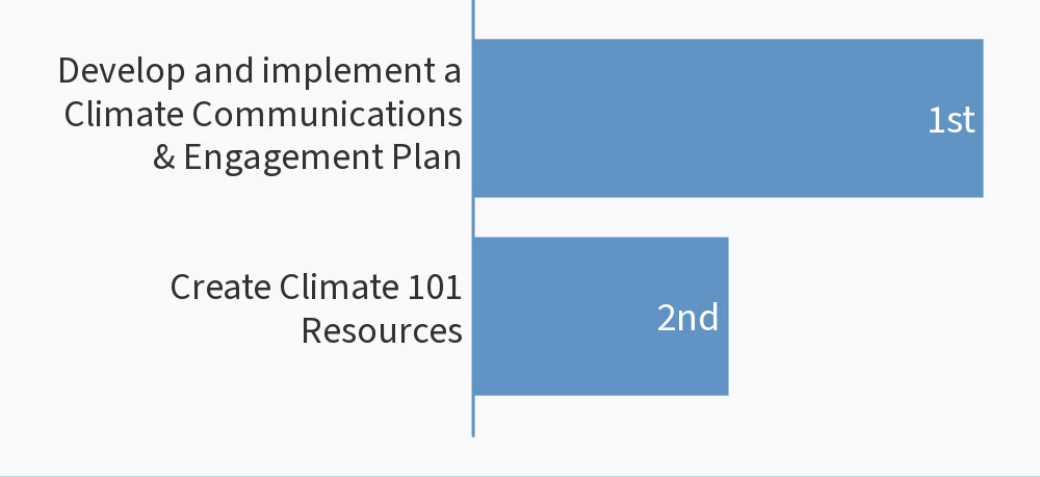
GOAL: Increase understanding for all Tribal citizens of climate change, its impacts, and know how they can participate.

ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
Communications & Education Strategy 1: Develop and provide climate change educational resources and ways to take action for staff, departments, and all Tribal citizens.				



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
CE1 New	Create Climate 101 resources	<p>Create Climate 101 education and incentive resources to share with tribal citizens. Resources will be developed to be simple, include glossary of terms, and highly visual.</p> <p>Resources to include:</p> <ul style="list-style-type: none"> • Incentives (raffles, giveaways, free reusable items) to encourage participation • Additional links and resources on how to participate and the small actions we can all take • Update resources in tandem with Carbon Neutral Plan updates 	Immediate	3.42
CE2 New	Develop and Implement a Climate communications and engagement Plan	<p>Develop a Climate Communications and Engagement plan, with an emphasis on the link between climate and the value system in Jamestown S'Klallam culture. The Plan should include both internal communications for staff and external communications for all Tribal citizens.</p> <ul style="list-style-type: none"> • <u>Internal Staff, Committee and Leadership Communications:</u> Develop newsletter for internal use, sharing how departments are working to reduce emissions and fight climate change. Develop communications for Committees and Leadership to foster continued engagement by sharing progress toward carbon neutral goals, how climate impacts will affect Jamestown's bodies of work, and ways to take action. • <u>Community:</u> Provide climate information and resources through newsletters, website, social media, videos, General Citizenship meetings, and resource fairs. Share Climate 101 resources developed in CE1. • <u>Youth:</u> Educate youth by partnering with local schools on climate curriculum. 	Immediate	3.23

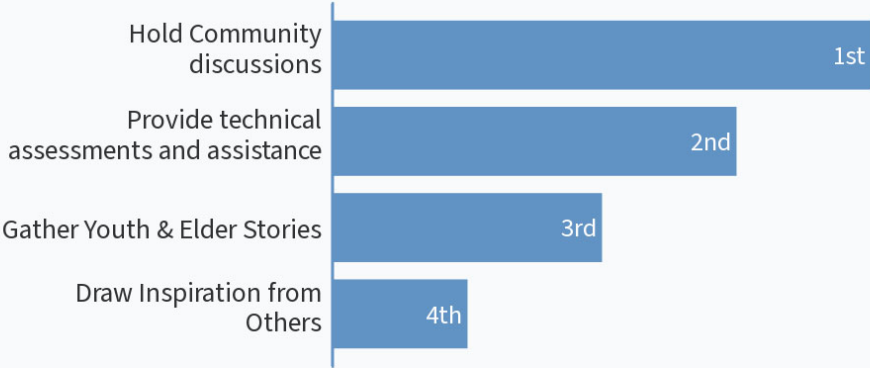


ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
		<p>Communications & Education: Strategy 1</p>  <p>Develop and implement a Climate Communications & Engagement Plan</p> <p>Create Climate 101 Resources</p>		
<p>DISCUSSION NOTES:</p> <ul style="list-style-type: none"> • Could these be connected, where the communications plan includes the 101 resources. People think these are linked, they have to have the plan before you use the resources. • Sissi brought up that we may want to follow up to hear people's quant scores (3, 4, 5, etc.) • Climate 101 is more important because people know how big of a difference it can make in your individual life • Climate Comms and engagement plan could absorb/include Climate 101 Resources (101 resources can be a part of Comm & engagement plan) • They are linked – we need the resources to develop comms & engagement plan • Maybe they need to happen at the same time • A revision could be to link these actions together (e.g., comm plan needs to happen with 101 resources) <p>Communications & Education Strategy 2: Create shared learning opportunities and foster dialogue to better understand climate change impacts and experiences from Tribal citizens.</p>				



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
CE5 New	Hold community discussions	Better understand community priorities for climate change by holding community discussions (in-person and virtual). Gather information and preferences from Tribal citizens regarding what actions and programs they would like to prioritize regarding climate change, and what solutions would be most accessible and equitable for all Tribal citizens.	1 – 2 years	4.12
CE3 New	Gather Youth & Elder Stories	Gather and meet with Elders to document stories of land changes and impacts of climate change experienced over time. Leverage existing youth programs to engage and involve youth around climate action, such as creating educational resources for the community around climate change (e.g., video).	Immediate	3.95
CE4	Draw Inspiration from Others	Stay on top of news and resources for climate resilience planning for Tribes, such as Pacific Northwest TCC Project through U of O monthly newsletter articles, meeting notifications, scholarship, and grant opportunities. Continue to research, connect with, and draw inspiration from other Tribes pursuing similar work (e.g., Puyallup's Climate Crisis resolution, Blue Lake, Justice 40)	Immediate	3.33
CE6 New	Provide technical assessments and assistance	Provide assessments and technical assistance to Tribal Citizens (e.g., suitability of home for solar, EV charging, guidance during purchases of EVs or solar, host EV ride-n-drive sessions, electric lawn-care equipment demonstrations).	1 – 2 years	3.12



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score										
		<div><h3>Communications & Education: Strategy 2</h3><table><thead><tr><th>Action</th><th>Rank</th></tr></thead><tbody><tr><td>Hold Community discussions</td><td>1st</td></tr><tr><td>Provide technical assessments and assistance</td><td>2nd</td></tr><tr><td>Gather Youth & Elder Stories</td><td>3rd</td></tr><tr><td>Draw Inspiration from Others</td><td>4th</td></tr></tbody></table></div>	Action	Rank	Hold Community discussions	1st	Provide technical assessments and assistance	2nd	Gather Youth & Elder Stories	3rd	Draw Inspiration from Others	4th		
Action	Rank													
Hold Community discussions	1st													
Provide technical assessments and assistance	2nd													
Gather Youth & Elder Stories	3rd													
Draw Inspiration from Others	4th													
DISCUSSION NOTES: <ul style="list-style-type: none">• Why would we not be immediately starting with holding community discussions? This would help with getting youth and Elder stories<ul style="list-style-type: none">○ Timeline currently says 1-2 years, but seems like it should be immediate○ These two actions could also be linked into one○ They are complementary○ There is some benefit to these being separate – gathering Elder stories could be more one-on-one whereas community discussions could be more of a group exercise○ Elder stories are an important component of the community discussion○ Needs to be called “Tribal community discussion” to differentiate from future discussions with larger community – which would be totally different• Technical assessments should go above drawing inspiration from others• CE5: Rename action to "Hold Tribal Community Discussion"<ul style="list-style-type: none">○ Some people might not be comfortable sharing in a group, so following up individual with people separate○ Link with Youth and Elder discussions!!! These could be linked together as one action.														



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
		<ul style="list-style-type: none"> ○ We could call out documenting youth + elder stories as it's own sub-action. Possibly one on one ○ This could be immediate 		

TRANSPORTATION & FLEETS

GOAL: Reduce greenhouse gas emissions from employee commute and Tribal fleet.

ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
Transportation & Fleets Strategy 1: Transition Tribal fleet to electric vehicles, expand EV charging station accessibility, and plan for future industry innovation and opportunities.				
T2 New	Transition fleet vehicles to electric	Retire old and under-used combustion engine Tribal fleet vehicles that are owned by the Tribe and replace them with electric vehicles. For leased Tribal fleet vehicles, examine lease periods and request electric for lease renewals.	1 – 2 years	3.33
T1 New	Plan for and expand EV charging station availability	Develop an EV Charging implementation plan for expanding EV charging stations at current and new Tribal facilities. <ul style="list-style-type: none"> • See technical assistance from DOE for assessment of energy system capacities. • Install EV charging stations at Tribal buildings, such as the library. • Continue to expand EV charging stations to level 2 and 3 chargers where possible. Develop EV charging station code for new construction.	Immediate	3
T4 New	Support EV purchases	Provide resources and informal peer events to share information about the benefits of purchasing an EV. Explore options for providing incentives for Tribal citizens to purchase EVs.	1 – 2 years	2.95

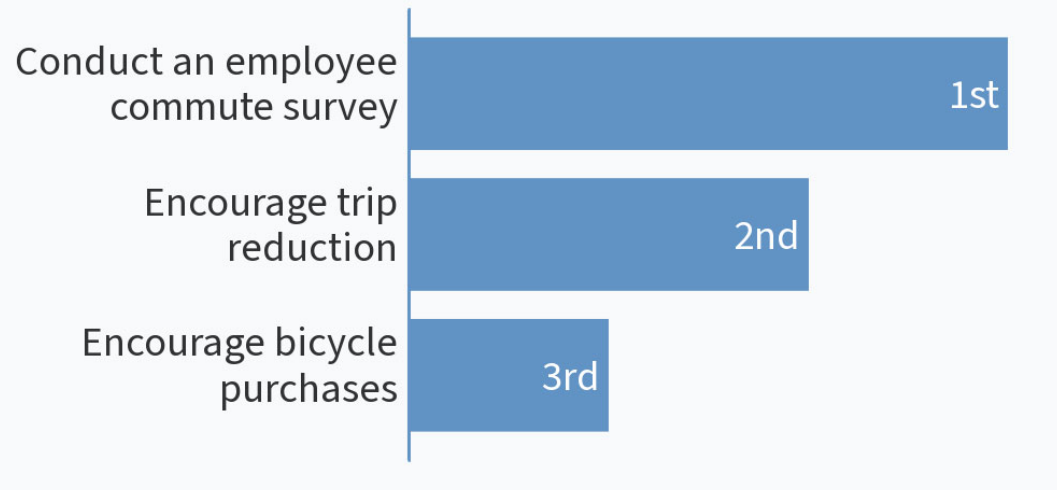


ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
T3 New	Explore electric marine fleet options	Explore grants to for Tribal fleet and fishers to add electric/hybrid boats.	3 – 5 years	2.75
<div><div>Transportation & Fleets: Strategy 1</div><div><div>Transition fleet vehicles to electric</div><div>1st</div></div><div><div>Plan for and expand EV charging station availability</div><div>2nd</div></div><div><div>Support EV purchases</div><div>3rd</div></div><div><div>Explore electric marine fleet options</div><div>4th</div></div></div>				
<div>DISCUSSION NOTES:</div> <div><div>Transitioning fleet to electric is still such a huge priority but we also need to have places to charge before we transition</div><div><div>Both need to happen at the same time—transitioning fleet and expanding EV charging</div><div>These should be linked</div><div>Sissi noted that others are also adding charging infrastructure – this could be incorporated into action language too (expand capacity in collaboration with other jurisdictions, etc.)</div></div></div>				
<div>Transportation & Fleets Strategy 2: Gather information on Tribal staff commute behaviors to develop programs and incentives to encourage Tribal staff to reduce the number of vehicle trips</div>				



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
T7	Encourage bicycle purchases	Implement a subsidized bicycle purchase program for Tribal citizens and employees.	1 – 2 years	3.87
T5 New	Encourage trip reduction	<p>Encourage staff to reduce trips (both commute and work-related) through encouraging telecommuting, trip reduction programs, and resources for public transit.</p> <ol style="list-style-type: none"> 1. Provide incentives and support for telecommuting when possible, aligned with departmental policies for in-person days. 2. Promote and incentivize employee use of the Clallam County Transportation Van Pool program. 3. Establish a car sharing program for Tribal employees. Supplement Clallam County Bus lines with JSKT transit vans. 4. Provide public transit incentives, and look into grant opportunities for transit electrification. 	<p>Immediate</p> <p>Immediate</p> <p>1-2 years</p> <p>1-2 years</p>	3.18
T6 New	Conduct an employee commute survey	Conduct an employee survey regarding commute behaviors, include questions about interest and barriers for in participating in different trip reduction programs (use examples from CCG).	Immediate (b/t next inventory)	2.78



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
		<p>Transportation & Fleets: Strategy 2</p>  <p>Conduct an employee commute survey 1st</p> <p>Encourage trip reduction 2nd</p> <p>Encourage bicycle purchases 3rd</p>		
<p>DISCUSSION NOTES:</p> <ul style="list-style-type: none"> Propose that the survey is #1 priority so we can better understand what kinds of incentives staff would want (+1 from someone else) <ul style="list-style-type: none"> Bikes might be more difficult due to weather and distance, etc. We are also talking about a large Elder population Trip reduction should also think about public transit (better bus access etc.) - and access to Tribal resources by Tribal citizens <ul style="list-style-type: none"> We could expand action language to include events, resources access, etc. in regards to trip reduction Bus and transit can take a very long time, depending where you live – vanpools and WFH are really exciting – commute survey results can feed into commute trip reduction measures Survey should ask about existing barriers – what is keeping folk from using available public transportation? Recommend moving T6 first T7: Elders likely wouldn't access bikes, recommend moving last 				



BUILDINGS & ENERGY

GOAL: Make all Tribal-owned buildings energy-efficient and/or energy neutral.

ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
Buildings & Energy Strategy 1: Promote and install energy efficiency design and infrastructure in Tribal facilities so that Tribal facilities use less energy and become more resilient to climate change.				
B5 New	Upgrade Elders heating	Upgrade fireplaces and wood stoves to more efficient low-polluting models. Retrofit all Elders’ homes with heat pumps. For Elders with wood heat ensure heat pumps do not cause backdraft of unvented woodstoves and fireplaces. Heat pumps allow for reduced use of wood. Maintaining redundant heat/cooking options (wood & electric) improves resilience.	1 – 2 years	3.92
B4 New	Update construction codes	Update Tribal construction standards and codes to include LEED certification/living buildings, green roofs where suitable, passive home-design, and mitigation for carbon emissions of construction, maintenance, and usage of Tribal facilities.	Immediate	3.82



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
B1 New	Install energy-efficient technologies and components	<p>Improve energy efficiency in all Tribal facilities and Tribal housing. Energy efficiency actions are beneficial for reducing greenhouse gas emissions and making buildings more affordable and comfortable. Examples include:</p> <ol style="list-style-type: none"> 1. Install energy-efficient lighting and automatic light sensors. This includes retrofitting light fixtures and/or replacing bulbs with LEDs. 2. Install energy-efficient heat pumps in all buildings. 3. Install water-saving plumbing as buildings are renovated. 4. Install energy efficient and water-smart appliances in Tribal offices, kitchens, laundries and cafeterias in Tribal buildings and Tribal housing. Including heat pumps, heat pump water heaters, heat pump dryers, energy efficient lighting, and water-saving fixtures. (see also W2 for water efficient landscaping efforts). 5. Install building/office occupancy sensors in Tribal buildings and Tribal housing 6. Develop and implement a weatherization program for Tribal buildings and Tribal housing. 7. Where appropriate install or improve building insulation (energy efficient windows) in Tribal properties. 8. Install smart appliances, load control and load shifting devices, and automatic lighting and water sensors. 9. Help connect Tribal citizens to rebates available for energy-saving updates. 	Immediate	3.63
B6 New	Promote low-GHG building	For new buildings, encourage designs that reduce the use of building materials with high embodied carbon or high GHG	1 – 2 years	3.43



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
	materials and low energy use design	emissions when produced, transported, or installed. Work with suppliers to find alternatives for low GHG building materials. Develop and construct affordable passive house model home for tribal housing.		
B3 New	Conduct an energy audit and develop a facilities energy management plan	Develop a facilities energy management plan for all Tribal facilities. This includes <ol style="list-style-type: none"> 1. Conduct professional energy audits on all tribal buildings. Offer audits to interested Tribal Citizens free of charge. 2. Implement an energy tracking and management system for Tribal buildings. 3. Look into megapacks to store energy. Other Tribes are using these for all their facilities to reduce costs and increase resiliency to climate change. 	Immediate (before B1)	3.42
B2 New	Review other Tribal entities for carbon neutral opportunities	Review Enterprises, Resort, and clinic GHG emissions (potentially conduct inventory), and look into opportunities for energy-efficiency upgrades where applicable.	Immediate	3.17



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score														
<div><h3>Buildings & Energy: Strategy 1</h3><table><thead><tr><th>Action Description</th><th>Rank</th></tr></thead><tbody><tr><td>Conduct an energy audit and develop a facilities energy management plan</td><td>1st</td></tr><tr><td>Install energy-efficient technologies and components</td><td>2nd</td></tr><tr><td>Upgrade Elders heating</td><td>3rd</td></tr><tr><td>Promote low-GHG building materials and low energy use design</td><td>4th</td></tr><tr><td>Update construction codes</td><td>5th</td></tr><tr><td>Review other Tribal entities for carbon neutral opportunities</td><td>6th</td></tr></tbody></table></div>					Action Description	Rank	Conduct an energy audit and develop a facilities energy management plan	1st	Install energy-efficient technologies and components	2nd	Upgrade Elders heating	3rd	Promote low-GHG building materials and low energy use design	4th	Update construction codes	5th	Review other Tribal entities for carbon neutral opportunities	6th
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<div><h4>DISCUSSION NOTES:</h4><ul style="list-style-type: none">• Question on when the power goes out? Upgrading wood stoves as backups• There have been EPA air quality programs that would fund part of all of Tribal upgrades for heating – we could offset costs or potentially pay for the whole thing through EPA (can add this to action)• Looking into cooling upgrades as well as heating – we are about to have a heat wave• Who will pay the electricity bill for Elders when electricity bill goes up?<ul style="list-style-type: none">○ One person shared that their bills went down because heat pumps are really efficient○ There is a potential conflict with the fact that some Elders rely entirely on wood heating (and currently get that wood for free) so we need to think about some kind of funding or assistance• Construction code went down – we already built to WA energy codes – only thing we can do is increase our expectations (?)<ul style="list-style-type: none">○ Some people ranked construction codes lower due to lack of knowledge</div>																		

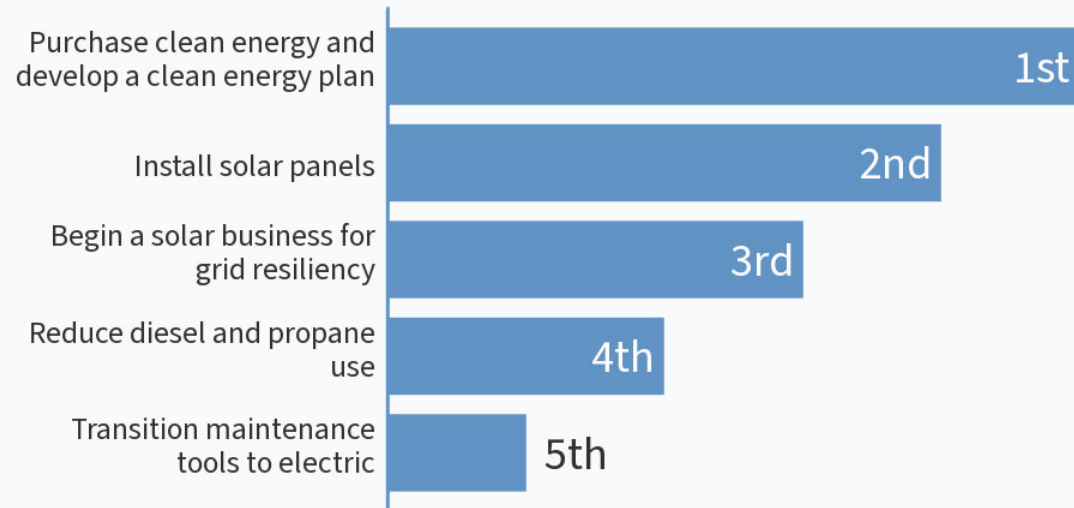


ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
		<ul style="list-style-type: none"> ○ As we promote low GHG building design, this goes hand-in-hand with construction codes. We can develop our codes to be more ambitious than WA state's • Audit is important to understand the baseline and what needs to happen • B5: There have been EPA programs that bring woodstoves up to these standards. Add to this action "Utilize this program" In housing, looking to install ductless heat-pumps to install into Elders homes. So this is happening. <ul style="list-style-type: none"> ○ HUD has program for ductless heat pumps too. ○ Question from Liz: Who will pay electrical bill for Elders when they switch from wood? ○ Elders get wood for free, but if they use the heat-pump, they move to electricity. So add to action subsidizing bill for those who need/convert from all wood ○ Replacing the baseboard heating with heat pumps energy bill will go down • B4: Kirk (in charge of construction codes) said they are already updated to Washington state standards, he still rated this high. Others thought this could get combined with "install energy-efficient technologies and components" 		
Buildings & Energy Strategy 2: Promote, use, and generate clean energy sources to establish local control over energy and to use cleaner energy sources.				
B7	Purchase clean energy and develop a clean energy plan	Enroll/purchase 100% clean energy for JSKT facilities and develop an energy plan for renewable energy and technologies that are appropriate for our area (geothermal, tidal, solar, etc.).	Immediate	3.87
B10 New	Begin a solar business for grid resiliency	Research and begin a solar business for clean energy sources for Tribal facilities and citizens. Purchase and deploy mobile resilience hub trailers. Develop fixed resilience hubs in Blyn, Jamestown, Sequim, etc. Develop and implement microgrids to expand community resilience.	1 – 2 years	3.82
B11 New	Transition maintenance tools to electric	Through procurement language, contract with local landscaping companies who use electric maintenance tools and environmentally conscious practices.	Immediate	3.72
B9 New	Install solar panels	Install renewable energy and energy storage on or near all new buildings to promote grid resiliency and energy independence. Action to follow B10 action.	1 – 2 years	3.03



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
B8 New	Reduce diesel and propane use	Better understand propane and diesel use and encourage alternative energy sources. Install energy storage (batteries, H2-fuel cells) to provide backup power, emergency power, to reduce the usage of fossil fuel generators.	Immediate	2.80

Buildings & Energy: Strategy 2



DISCUSSION NOTES:

- If we begin by having someone else install solar, we can learn from that experience – and then work into getting a business (which might take longer)
 - Nez Pierce already started a business, add to action to connect/learn from them.
- B11: Maintenance tools
 - What percent of our current maintenance tools are gas vs electric?
 - Lawn/landscaping/maintenance is mostly gas – the tech isn’t quite there yet with the batteries
 - Can broaden this strategy to include individual tools



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
		<ul style="list-style-type: none"> ○ Can adjust the timeline if the technology isn’t ready for the action to be immediate ○ Jacobsons, Mean Green Growers – there are a couple options available right now – prices ~\$3,500 ○ Could add to action “review current market options” ○ Have we also looked at actions that reduce the need for maintenance tools (like less lawns that need maintenance?) ○ Adjust timeline b/c technology isn't here yet. ALSO add tribal owned equipment to this... ALSO, housing has purchased some electric equipment, but easier to do on a residential scale. Also add: Review current market options technologies/options 		

WATER & WASTEWATER

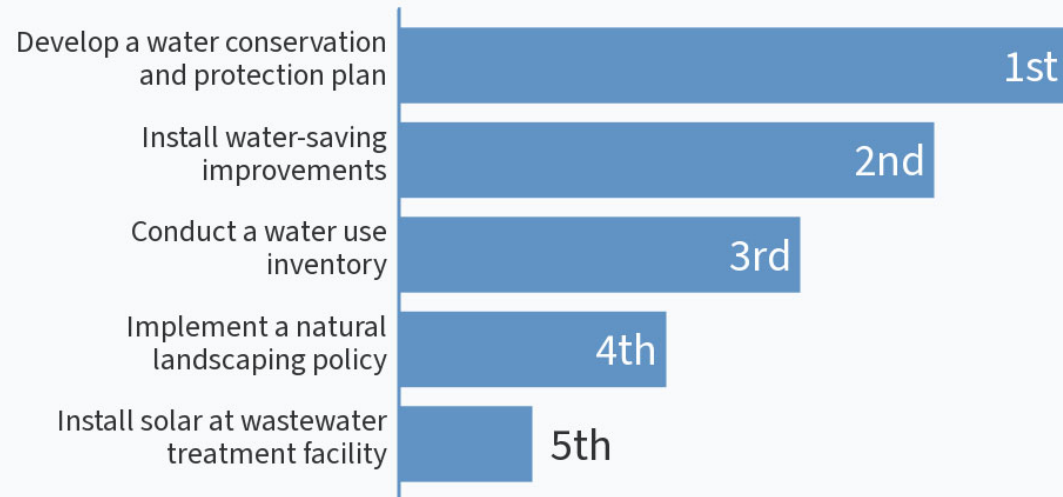
GOAL: Reduce water consumption, reduce energy-use for water and wastewater, and ensure a dependable water supply.

ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
Water & Wastewater Strategy 1: Conserve water, and reduce water use through water efficiency improvements, natural landscaping, and opportunities for collection systems at Tribal facilities.				
W1 New	Install water-saving improvements	Install water-saving toilets, shower heads, energy- and water-efficient hot water tanks, automatic sensors in hand basins in Tribal buildings and Tribal housing. Increase efficiency of existing irrigation delivery.	Immediate	3.7
W3	Develop a water conservation and protection plan	Develop a water protection and conservation plan that includes the reduction of toxic substances used by Tribal facilities.	1 – 2 years	3.5
W2 New	Implement a natural landscaping policy	Plant native plants, develop rain harvest systems, and implement natural landscaping for all current and new Tribal facilities to reduce water usage. If contracted, include this requirement in procurement language.	Immediate	3.3



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
W5 New	Conduct a water use inventory	Conduct a water use inventory through metering usage at Tribal facilities and irrigation systems. Continue to monitor and track water usage.	Immediate	3.27
W4	Install solar at wastewater treatment facility	Work in collaboration with the City of Sequim to install solar at the wastewater treatment facility.	5 years	3.07

Water & Wastewater: Strategy 1



DISCUSSION NOTES:

- Natural landscaping policy
 - Language could be expanded/specified here – could reduce need for landscaping tools
- Conducting a water use inventory – could this be part of developing water conservation protection plan?
 - Consider combining or linking these
 - Can you develop an effective water conservation plan if you don't know what your water use is?



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
		<ul style="list-style-type: none"> ▪ They do go together, but you can protect wells etc. in addition to how we use water • Connect action W3 to W5 		

FOOD SYSTEMS & SOLID WASTE

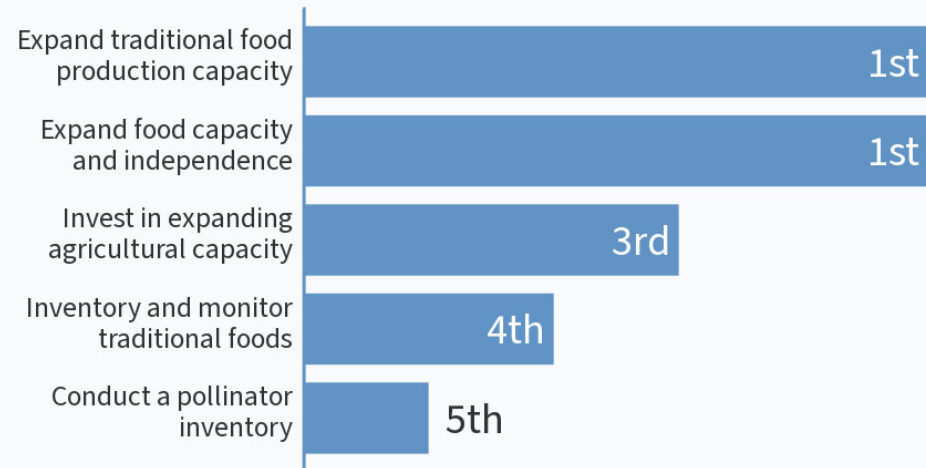
GOAL: Protect food sovereignty, expand food programs, and reduce solid waste.

ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
Food Systems & Solid Waste Strategy 1: Invest in Tribal food production through expanding traditional food production capacity, increasing food independence and stabilizing food sources.				
F5 New	Expand traditional food production capacity	Enhance and improve current traditional food habitats and conduct prairie maintenance. Begin a food forest on Tribal lands and begin to gather traditional foods all year round. Expand the number of different traditional foods gathered.	1 – 2 years	4
F1 New	Expand food capacity and independence	Develop and implement a plan to increased food capacity and security, increase food independence and preservation working through traditional foods department programs.	Immediate	3.85
F4	Inventory and monitor traditional foods	Conduct an inventory of traditional foods and wildlife. Begin to map, monitor and track traditional foods and sources to assess impacts from climate change on food sources (i.e., pests).	1 – 2 years	3.83
F2 New	Invest in expanding agricultural capacity	Invest in Jamestown's food production and contribute to the local food economy through: <ul style="list-style-type: none"> • Support local farms through food purchases for Tribal facilities • Buy a farm (5 – 10 acres) to grow food for the resort and for the Tribal community. 	1 – 2 years	3.42



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
		<ul style="list-style-type: none"> Establish a JSKT CSA program. 		
F3	Conduct a pollinator inventory	Conduct a pollinator inventory for impacts due to temperature shifts and toxins from agriculture.	1 – 2 years	3.18

Food Systems & Solid Waste: Strategy 1



NOTES:

- “These are all 5s!”
- With our current traditional foods program, a lot of this is doable and sustainable – this is a good opportunity to implement more of these actions
- They all go hand in hand – top 3 are all especially linked

Food Systems & Solid Waste Strategy 2: Reduce solid and food related waste at Tribal facilities and expand waste services at Tribal facilities.



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
F8	Develop food recovery program	Develop a food circularity/food rescue program to get food that is not eaten from enterprise facilities to those in need.	1 – 2 years	3.98
F10 New	Develop a waste reduction plan	Develop a waste reduction plan for Tribal facilities following the results of the Tribal Waste Audit (F1). Within this plan, explore: <ul style="list-style-type: none"> • Focus on ways to reuse as well as reduce. • Explore green certifications for Tribal enterprises, such as a green hotel certification. Look for ways to incorporate reusables.	Immediate	3.12
F7 New	Bring all Tribal facilities up to the same waste services	Bring all Tribal facilities up to the same waste services (garbage, recycling, composting). <ul style="list-style-type: none"> • Enroll Tribal facilities in County recycling and composting services (County has more composting options e.g., can compost meat, packages). • Add composting service for hotel and resort facilities. • Add recycling service for Casino • Encourage compostable carryout containers at Tribal facilities. 	Immediate	3.03
F9	Install a biodigester	Buy and install a biodigester for Tribal facilities.	1 – 2 years	2.92
F6	Conduct a solid waste audit	<ul style="list-style-type: none"> • Conduct a waste audit at all Tribal facilities. 	Immediate	2.55



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
<div><div><div><div><div><div></div><div>Food Systems & Solid Waste: Strategy 2</div></div></div><div><div><div><div><div>Develop a waste reduction plan</div><div>1st</div></div><div><div>Conduct a solid waste audit</div><div>2nd</div></div><div><div>Develop a food recovery program</div><div>3rd</div></div><div><div>Bring all Tribal facilities up to the same waste services</div><div>4th</div></div><div><div>Install a biodigester</div><div>5th</div></div></div></div></div></div></div></div>				
<div><div>DISCUSSION NOTES:</div><div><div>• Another situation where we could combine waste audit with waste reduction plan</div><div>• Combine F6 with waste reduction plan</div></div></div>				

CAPACITY & PROCESSES

GOAL: Expand tribal capacities to address climate change.

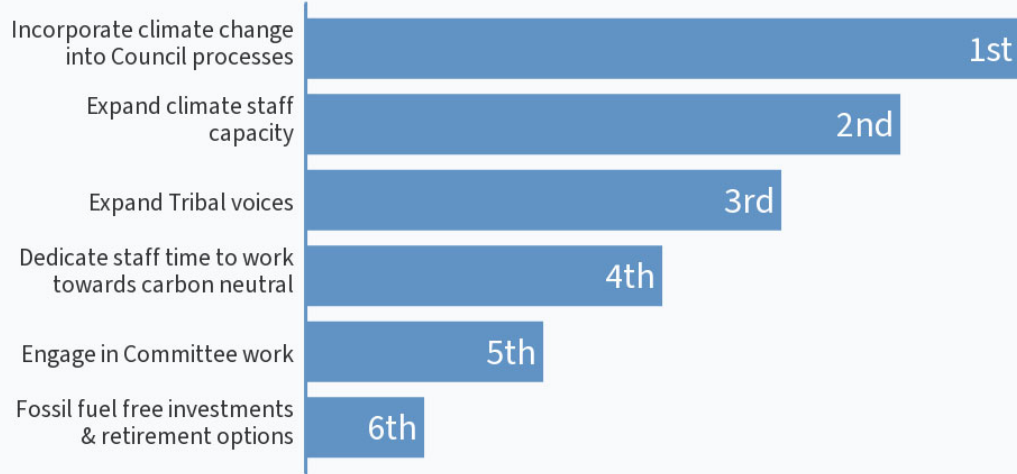


ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
Capacity & Processes Strategy 1: Establish dedicated staff time and committees to advance carbon neutral goals and climate resiliency.				
C1 New	Incorporate Climate Change into Council processes	Incorporate Climate Change into Council processes by: <ul style="list-style-type: none"> • A Council declaration of a climate crisis, and forthcoming work by the Tribe to be carbon neutral. • Add a climate change representative to the executive committee. • Add to Council retreat agenda. • Council to establish a vision, mission, and direction for each department to move towards carbon neutral. 	Immediate	4.40
C4 New	Expand climate staff capacity	Add a dedicated Tribal staff person to focus on climate resiliency and actions to keep departments accountable and momentum towards carbon neutral goals. This position would: <ul style="list-style-type: none"> • Monitor and manage carbon neutral strategies and actions across departments • Develop and manage climate resources and communications • Monitor and track metrics towards carbon neutral goals • Engage JTSK staff and Council around climate change • Identify funding to support adding staff capacity to implement climate resiliency and carbon neutral work and program development 	Immediate	4.07
C5	Expand Tribal voices	Support the election Tribal voices in leadership for local, state, and federal positions	Immediate	3.82



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
C3 New	Engage in Committee work	<p>Create and convene the following committees:</p> <ul style="list-style-type: none"> • Create an Energy Task Force/Committee/Office of Energy • Consider forming a Youth Tribal Council for climate work • Work with existing regional coalitions to address climate change <p>Look into ways to participate on other regional climate committees and boards to meet common goals</p>	1 – 2 years	3.77
C2 New	Dedicate staff time to work towards carbon neutral	Work with Tribal departments to identify priorities, opportunities for efficiency for across departments, and key staff to set aside time to work on carbon neutral strategies and actions. Work in collaboration with Council to begin to develop specific department deliverables.	Immediate	3.42
C6	Fossil fuel free investments & retirement options	Develop and provide options for fossil-free retirement or carbon neutral funds for Tribal employees.	1 – 2 years	3.22



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score														
		<div><h3>Capacity & Processes: Strategy 1</h3><table><thead><tr><th>Action Description</th><th>Priority Score</th></tr></thead><tbody><tr><td>Incorporate climate change into Council processes</td><td>1st</td></tr><tr><td>Expand climate staff capacity</td><td>2nd</td></tr><tr><td>Expand Tribal voices</td><td>3rd</td></tr><tr><td>Dedicate staff time to work towards carbon neutral</td><td>4th</td></tr><tr><td>Engage in Committee work</td><td>5th</td></tr><tr><td>Fossil fuel free investments & retirement options</td><td>6th</td></tr></tbody></table></div>	Action Description	Priority Score	Incorporate climate change into Council processes	1st	Expand climate staff capacity	2nd	Expand Tribal voices	3rd	Dedicate staff time to work towards carbon neutral	4th	Engage in Committee work	5th	Fossil fuel free investments & retirement options	6th		
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Expand climate staff capacity	2nd																	
Expand Tribal voices	3rd																	
Dedicate staff time to work towards carbon neutral	4th																	
Engage in Committee work	5th																	
Fossil fuel free investments & retirement options	6th																	
<div><h4>DISCUSSION NOTES:</h4><ul style="list-style-type: none">• Question: expanding climate staff capacity and dedicating staff time to work on carbon neutrality – difference?<ul style="list-style-type: none">◦ Expanding staff capacity is hiring someone, and the other is identifying people to build climate into their work• Expand Tribal voices – can change action language to clarify “politically” – could expand the language to include sharing information about who is running and what they stand for<ul style="list-style-type: none">◦ ATNI and NCAI have been working on this (add this to the action language)◦ Pacific Northwest TCC Project through U of O monthly newsletter articles◦ National Indian carbon coalition◦ NW Indian Fisheries Commission• Expand staff capacity as #1 because we need someone to be able to actually take on the work (that Council approves)</div>																		



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
Capacity & Processes Strategy 2: Establish research, policy review, and ongoing monitoring of GHG emissions to track progress towards goals.				
C7	Co-management of lands	Conserve 30% of lands by 2030 for traditional JTSK U & A lands through both co-management and collaborative land management	Immediate	3.67
C11	Continue to enhance capacity to address climate change	Develop climate adaptation strategies for essential services and infrastructure.	1 – 2 years	3.67
C10	Update and maintain policies	Update TEPA (Tribal Environmental Policy Act): to include carbon impact and level of mitigation.	1 – 2 years	3.73
C9	Monitor emissions and energy use	Implement and use dashboards to track and monitor emissions and all energy use.	1 – 2 years	3.22
C8	Conduct community emissions inventory	Review emissions from Tribal enterprises GHG inventory (e.g., casino, hotel, golf course, etc.). Partner with Sequim to understand community emissions.	1 – 2 years	3.13



ID #	Action Short Name	Action Description	Timeframe	MCA Priority Score
		Capacity & Processes: Strategy 2		
		Continue to enhance capacity to address climate change	1st	
		Co-management of lands	2nd	
		Conduct community emissions inventory	3rd	
		Update and maintain policies	4th	
		Monitor emissions and energy use	5th	
DISCUSSION NOTES: <ul style="list-style-type: none"> Co-management of lands <ul style="list-style-type: none"> This is really important. We could add to the action – educate on the importance of this Without proper co-management of lands, none of the other work will function as well as it could 				



Appendix D: Multi-Criteria Analysis

Multi-Criteria Analysis Approach

Cascadia will lead a qualitative multi-criteria analysis (MCA) of the draft actions for the Advisory Group to review and prioritize. The MCA assigns qualitative numerical scores to each evaluated action and criterion to arrive at an overall priority score for each action.

This memo provides an overview of the proposed MCA approach. It includes:

- An overview of the **evaluation steps** for the multi-criteria analysis.
- Detailed descriptions of the **evaluation criteria**, including sub-criteria definitions and criteria weights (if desired).

MCA EVALUATION STEPS

Briefly, the steps are:






1. To arrive at a priority score, **each criterion** is clearly **defined** and assigned a **weight**. All criteria can also be weighted equally. The weighting will be determined by Tribal staff and input from the Advisory Group.
2. Cascadia develops **qualitative score matrices** to allow for a consistent, objective ranking process. We assign scores for each action based on the criteria definitions and professional judgement drawing from available literature, peer government case studies, our knowledge of local context, and consultant experience. Each criterion is evaluated on a 1 (low) to 5 (high) scale.
3. Cascadia uses priority scores to arrive at a **ranking of actions** for further discussion. Prioritization will ultimately be guided by the Carbon Neutral Advisory Committee and Tribal staff; the MCA is used to help guide that discussion.




Jamestown S’Klallam Tribe’s Evaluation Criteria

SUMMARY

Cascadia has proposed the following criteria to evaluate the draft strategies supporting Jamestown S’Klallam Tribe’s net carbon neutral planning for government operations. Each sub-criterion is evaluated on a 1 (low) to 5 (high) scale. We will be assigning weights based on the discussion by the Carbon Neutral Advisory Committee members after the June workshop.

Criterion	Weight	Definition/Sub-criteria	Scale
GHG Emissions Impact 		What is the scope and likelihood that the action will reduce GHG emissions or enhance resiliency ? By when? Can impact be measured and tracked?	1 = Very Low; Low GHG emission reductions 5 = Very High; High GHG emission reductions Regulatory and infrastructure projects that <i>directly</i> reduce emissions
Resilience Impact 		Relative ability to protect and sustain Tribal members, culture, and resources, etc. and adapt and survive amongst extreme events (public health crisis, extreme weather events, economic downturns, etc.)	1 = Low Resiliency Impact; Addresses low climate risk for community 5 = High Resiliency Impact; Addresses high climate risk for community
Cost 		What is the cost, not just monetary , to the community and Tribe?	1 = High cost; Significant costs across the entire community, major infrastructure project 5 = Low cost; Minimal to no additional investment needed
Feasibility 		What is the Tribe's level of control over implementation ? Are there regulatory, political, or technological constraints related to action implementation? Is the action adaptable to new technologies?	1 = Very high barriers; Action currently unviable given current regulations 5 = Very low barriers; Minimal to no challenges anticipated
Equity 		Does the action reduce vulnerability for all populations (e.g., Elders, youth)? Are benefits distributed equitably across the Tribal community?	1 = Very low; <i>All</i> benefits and costs are not distributed fairly and are perpetuating inequities 5 = Very high; <i>Most or all</i> benefits are distributed fairly to those experiencing



				inequities, all members of the community receive benefits
Co-benefits			Does the action support tribal sovereignty, community health and resiliency, and the natural environment ?	1 = Very low; Potential to generate co-benefits for tribal sovereignty, community health and resiliency, and the natural environment is low 5 = Very high; High potential to generate many co-benefits for tribal sovereignty, community health and resiliency, and the natural environment

Note: The default is to assign each criteria equal weight. We can get input from the Carbon Neutral Advisory Committee if any of these criteria are more important than others.

GHG EMISSIONS IMPACT

This criterion evaluates impact according to whether the action is focused on the Tribal government operation’s highest-emissions sources, how broadly the action would affect the community, how likely is it that the impact will be realized, the timeline of that impact, and the ease of measuring and tracking the impact.

EMISSIONS REDUCTION IMPACT

1	Very Low - VOLUNTARY strategies (e.g., education/outreach, planning, assessments) that INDIRECTLY reduce emissions; limited ability to scale (i.e., very low impact/reductions); will be difficult to measure/track impact.
2	Low – non-monetary incentives, regulation, or capital project that DIRECTLY reduce emissions; VOLUNTARY with ability to scale (i.e., low impact/reductions); may be difficult to measure/track the impact.
3	Moderate – VOLUNTARY programs that DIRECTLY reduce emissions, but with FINANCIAL INCENTIVES (i.e., moderate impact/reductions); likely able to measure/track impact.
4	High - REGULATORY/INFRASTRUCTURE projects that DIRECTLY reduce emissions, but with limited reach/scaling by any year, or with broad reach/scale that will be realized AFTER 2030 (if primarily mitigation, i.e., high impact/reductions); will be able to measure/track impact.
5	Very High - REGULATORY/INFRASTRUCTURE projects that DIRECTLY reduce emissions it broad reach/scale in any year (if primarily adaptation) or that will be realized BY 2030 (if primarily mitigation, i.e., very high impact/reductions); will be able to measure/track impact.



CLIMATE RESILIENCE IMPACT

This criterion evaluates impact according to whether the action is focused on the Tribe’s greatest climate risks, how broadly the action would affect the community, and how likely it is that the impact will be realized. We will use the Tribe’s climate impacts assessments to identify climate risks.

CLIMATE RESILIENCE IMPACT

1	Addresses a very minor need - very low climate risk for community – or may be a voluntary action that indirectly enhances resilience. May have limited ability to scale.
2	Addresses a minor need - low climate risk for community (extreme heat or extreme cold) – or may be a voluntary action with ability to scale.
3	Addresses an average need - average climate risk for community (wildfire, grid resilience, supply chain; risks to part of the economy, i.e., disruption to people’s ability to provide goods and services). May be a voluntary or indirect program with incentives.
4	Addresses a higher-than-average need - high climate risk for community (flooding, advances ability to prepare for climate impacts (e.g., ed/outreach), plan that prioritizes managed retreat in flood areas; risks to most of economy, i.e., disruption to Tribe’s ability to provide services). May have a long timeframe or limited reach.
5	Addresses a very major need - very high climate risk for community (shoreline change, build or provide access to in-home cooling or cooling centers, air filtration options; risks to entire economy, i.e., disruption to Tribe’s ability to provide services). Will be realized by 2030 and will have broad reach across the community.

COST

The cost criterion focuses on financial costs.

COST TO TRIBAL GOVERNMENT AND/OR COMMUNITY

1	High to very high – MAJOR INFRASTRUCTURE/capital improvement project; generally >\$10 million; and/or SIGNIFICANT costs across the ENTIRE community
2	High – MODERATE INFRASTRUCTURE projects and large programs; generally \$1-10 million; and/or SIGNIFICANT costs to SOME in the community
3	Moderate – SMALL INFRASTRUCTURE projects and LARGER PLANS, policies, and small programs; \$100K-1 million; and/or MODERATE costs across the community



4	Low – SIMPLE policy changes, studies, and small plans; <\$100K; and/or MINIMAL costs across the community
5	Very low – planning strategy or MINIMAL TO NO TRIBAL GOVERNMENT INVESTMENT; Tribal government may already be working on it; and/or will NOT present any additional costs to the community; may save money.

FEASIBILITY

The feasibility criteria assess the degree of Tribe’s control over an action’s strategy success and the likely regulatory, political, and technological constraints to implementation. Political constraints are specific to those that are *not* covered by the Community Support criteria, which focuses on support from the Tribal Advisory Committee perspectives. Political constraints assessed as part of Feasibility include the level of Tribal Council support and direction, Tribal staff support and capacity, alignment or reinforcement of other regional policies, plans, programs, and initiatives (including opportunities for shared implementation), whether funding or other needed resources from state and federal entities is easily acquired, and whether the outcome of a legislative process may affect the feasibility of a strategy.

FEASIBILITY	
1	Very high barriers – action currently UNVIABLE given current regulations, politics, and/or technologies and anticipated opportunity windows. If encountered, challenges are VERY DIFFICULT or IMPOSSIBLE to overcome and/or unable to adapt to new technologies.
2	High – action LIKELY to encounter challenges given current regulations, politics, and/or technologies and anticipated opportunity windows. If encountered, challenges are DIFFICULT to overcome and/or difficult to adapt to new technologies.
3	Moderate – action MAY encounter challenges given current regulations, politics, and/or technologies and anticipated opportunity windows. If encountered, challenges are MODERATELY DIFFICULT to overcome and/or moderately difficult to adapt to new technologies.
4	Low – action UNLIKELY to encounter challenges given current regulations, politics, and/or technologies and anticipated opportunity windows. If encountered, some or most challenges are RELATIVELY EASY to overcome and/or are relatively easy to adapt to new technologies.
5	Very low barriers – MINIMAL to NO challenges anticipated given current regulations, politics, and/or technologies and anticipated opportunity windows. If encountered, most challenges are EASILY overcome and/or easily adaptive to new technologies.



EQUITY

The proposed equity criterion focuses on reducing climate risks, age and income inequities, and distributive justice.

EQUITY	
1	Very low - ALL benefits and costs are accruing to different sectors of the community and are perpetuating inequities
2	Low - SOME benefits and costs are accruing to different sectors of the community and are perpetuating inequities
3	Moderate/neutral - action DOES NOT distribute benefits and costs in the community in a way that perpetuates inequities
4	High - MOST benefits are accruing to the sectors of the community that face inequities; other sectors of the community may accrue benefits as well
5	Very high – MOST or ALL benefits are accruing to the sectors of the community that face inequities; other sectors of the community accrue benefits as well

CO-BENEFITS

Many actions will have benefits beyond greenhouse gas emissions reduction or building climate resilience. Based on the Tribal lead’s input, we have prioritized health and community resiliency, healthy natural systems, and food sovereignty for evaluation in the MCA:

- **Health & community resiliency:** Even prior to the COVID-19 pandemic, health and community resiliency is a commonly evaluated co-benefit in climate action planning processes. To avoid double-counting, the equity components of health are addressed in the equity criteria.
- **Natural environment:** Healthy natural systems includes the processes and functions that sustain health species, habitats, and ecosystems. Critical and high-priority ecosystems, habitats, and species in Renton include but are not limited to salmon and their habitat, and kelp, eelgrass, and other seagrasses and their habitat.
- **Food sovereignty:** Actions can support the right of Tribal members to healthy and cultural food produced through sustainable methods, and the right for the Tribe to define their own food and food systems.

	Health & Community Resiliency	Supports the natural environment	Food Sovereignty
1	Very low – NO to MINIMAL support for health & community resiliency and may	Very low – NO to MINIMAL support for healthy natural systems and may negatively affect natural systems.	Very low – NO to MINIMAL support for food sovereignty.



	Health & Community Resiliency	Supports the natural environment	Food Sovereignty
	negatively affect health & community resiliency.		
2	Low – Benefits health & community resiliency of SOME, but the benefits are likely short-term (i.e., <1 month).	Low – INDIRECTLY supports healthy natural systems of any size or priority; benefits expected to last <5 years and/or be limited in reach/scale	Low – INDIRECTLY supports food sovereignty; may be limited in reach/scale
3	Moderate – Benefits health & community resiliency of SOME for some time (i.e., 1 month to a few years) or benefits health & community resiliency of a SIGNIFICANT portion of the population, but the benefits are likely short-term (i.e., <1 month)	Moderate – DIRECTLY supports SOME healthy natural systems, which may or may not be deemed critical or high-priority in a plan or directive; benefits expected to be short-term (i.e., 5-10 years) and/or limited in reach/scale	Moderate – DIRECTLY supports SOME food sovereignty, which may not be critical or high-priority.
4	High – Persistently benefits health & community resiliency of SOME (i.e., 5+ years) or benefits health & community resiliency of a SIGNIFICANT portion of the population for some time (i.e., 1 month to a few years).	High – SIGNIFICANTLY and DIRECTLY supports SOME healthy natural systems, a few of which are deemed CRITICAL or HIGH-PRIORITY in a plan or directive; benefits expected to be short-term (i.e., 5-10 years) but broad in reach/scale	High – SIGNIFICANTLY and DIRECTLY supports SOME food sovereignty in areas that are deemed CRITICAL or HIGH-PRIORITY.
5	Very high – Persistently benefits health & community resiliency of a SIGNIFICANT portion of the population (i.e., >5 years).	Very high – SIGNIFICANTLY and DIRECTLY supports MANY healthy natural systems or SIGNIFICANTLY and DIRECTLY supports CRITICAL or HIGH-PRIORITY healthy natural systems of any size; benefits expected to persist (i.e., >10 years) and be broad in reach/scale	Very high – SIGNIFICANTLY and DIRECTLY supports food sovereignty for MANY community members or SIGNIFICANTLY and DIRECTLY supports food sovereignty for CRITICAL or HIGH-PRIORITY communities.

