Council Meeting Date: January 25, 2021 **Agenda Item:** 9(a)

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of the King County Climate Action Toolkit
DEPARTMENT:	Recreation, Cultural and Community Services
PRESENTED BY:	Autumn Salamack, Environmental Services Coordinator
ACTION:	____ Ordinance ____ Resolution ___ Motion _X__ Discussion ____ Public Hearing

PROBLEM/ISSUE STATEMENT:

In acknowledgment of the fact that, globally, cities account for 70% of greenhouse gas emissions, King County and the King County-Cities Climate Collaboration recently created a Climate Action Toolkit to help local jurisdictions create tailored climate action plans to reduce communitywide greenhouse gas emissions. City staff provided input in the development of the Climate Action Toolkit and plan to utilize it for the next update of the City's 2013 Climate Action Plan. Tonight, Rachel Brombaugh, Director of Climate and Energy Initiatives with King County, will present an overview of the new King County Climate Action Toolkit.

RESOURCE/FINANCIAL IMPACT:

The Climate Action Toolkit is available at no cost to all 39 cities in King County.

RECOMMENDATION

No action is required by the Council tonight as this is a Discussion Item only.

Approved By: City Manager ***DT*** City Attorney ***MK***

BACKGROUND

In October 2019, three members of the King County Council introduced proposals to expand the County's efforts to reduce greenhouse gas emissions and help other cities do the same. In acknowledgment of the fact that, globally, cities account for 70% of greenhouse gas emissions, the proposals supported efforts to reduce communitywide greenhouse gas emissions within cities and support green job development, especially for communities of color. One motion directed the Executive to create a Climate Action Toolkit for use in partnering with local jurisdictions to help them create tailored climate action plans to reduce greenhouse gas emissions in their communities.

The Climate Action Toolkit (Toolkit) was developed in partnership with the King County-Cities Climate Collaboration, known as the K4C, an alliance of King County, the Port of Seattle, and 16 cities representing 80 percent of King County's 2.25 million residents working to advance climate action at a region-wide scale. The City has been a member of the K4C since 2011 and signed the updated K4C Joint County-City Climate Commitments in 2019, joining the County and other cities in committing to reduce community greenhouse gas emissions 80% by 2050. The staff report for an April 6, 2020 resolution expressing the City's support for the updated 2019 K4C Joint County-City Climate Commitments can be found at the following link: http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2020/staffreport040620-7a.pdf.

The Toolkit was developed in alignment with both King County's proposed 2020 Strategic Climate Action Plan Update and the K4C Joint Action Commitments to ensure that local governments are moving in a shared direction and towards similar regional goals. The Toolkit also reflects countywide carbon emission goals of 50 percent reduction by 2030 and 80 percent reduction by 2050 against a 2007 baseline adopted in 2014 by all 39 cities in King County through the Growth Management Planning Council.

The consultant team leading development of the Toolkit conducted extensive outreach to ensure the final product was useful to urban, suburban, and rural cities, providing the tools needed to best serve each type of community. Outreach included stakeholder workshops with climate justice and environmental advocacy organizations; frontline community leaders; labor, city and state agencies; residents; utilities; and business representatives. The consultant team also hosted a youth workshop to gather recommendations on ways to engage young people in climate action planning as part of the public outreach.

DISCUSSION

The Toolkit provides local governments with practical guidance on how to reduce greenhouse gas emissions for both government operations and communitywide, spur the growth of an equitable clean energy economy, and preserve our natural environment. The Toolkit is available at no cost to all 39 cities in the County. It is designed to be a flexible guide for cities in all stages of climate planning to help develop customized climate strategies. Specifically, the Toolkit can help:

- identify resources for cities to conduct greenhouse gas emissions inventories;
- provide strategies for different sectors, including transportation and land use, and buildings, that can be adapted to each cities' unique characteristics; and
- provide clear directions and a range of actions and policies that can be used by any city, even those that have limited financial or staff capacity to develop and implement plans.

The toolkit provides a combination of attainable solutions, including options and ideas for programming, policies, advocacy, and capital investment to guide local government action on climate change. Helpful indicators, example goals, recommended actions, questions for consideration, and ranking tools are offered to inform and customize local commitments, decisions, and actions to each unique community. The Toolkit also includes a publicly available Climate Action Analysis Tool to help weigh various considerations in climate decision-making. Using the Climate Action Analysis Tool, local governments can rank and score potential actions to develop prioritized actions based on criteria such as cost savings, emission reductions, and equity and inclusion benefits.

In addition to technical assistance, the Toolkit offers guides for equitable community engagement, with an emphasis on frontline communities that are disproportionately impacted by climate change. The Toolkit and the Climate Action Analysis Tool are available for download at the following link: https://kingcounty.gov/services/environment/climate/actions-strategies/initiatives-programs/climate-action-toolkit.aspx.

Use of the Toolkit in Shoreline

City staff plan to utilize the Toolkit during the next update to the 2013 Climate Action Plan, scheduled to begin this year. City staff have also met with the Shoreline "Climate Guide" from the League of Women Voters of Seattle-King County (LWV). The LWV Environmental Committee is interested in working with local jurisdictions to promote use of the Toolkit and assist with community engagement in climate action planning efforts. LWV is establishing a local Climate Guide in cities throughout the County to participate in this effort.

COUNCIL GOAL(S) ADDRESSED

This project addresses City Council Goal #2: Continue to deliver highly-valued public services through management of the City's infrastructure and stewardship of the natural environment.

RESOURCE/FINANCIAL IMPACT

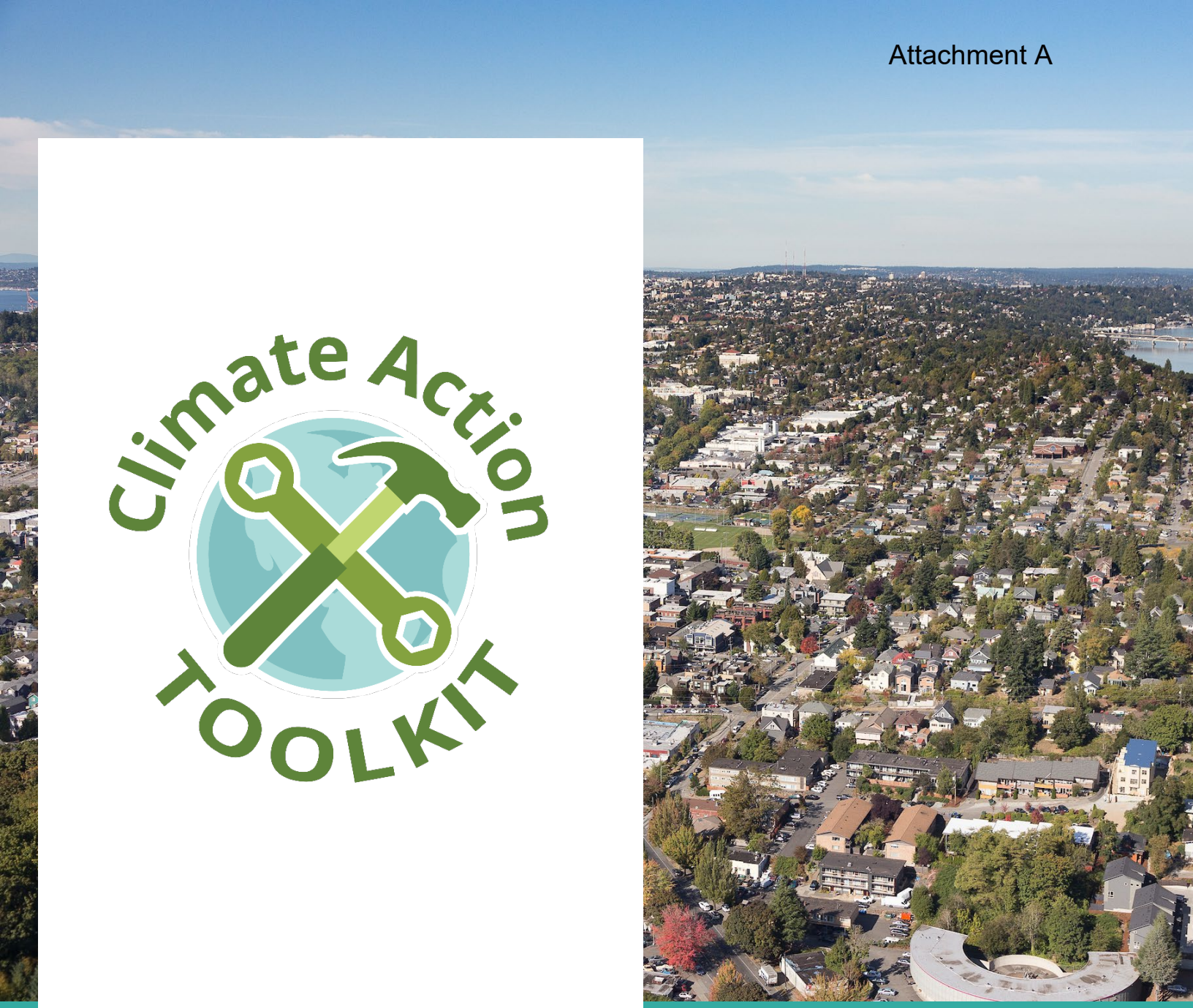
The Climate Action Toolkit is available at no cost to all 39 cities in King County.

RECOMMENDATION

No action is required by the Council tonight as this is a Discussion Item only.

ATTACHMENTS

Attachment A: Climate Action Toolkit



Climate Action Toolkit

A Partnership Between King County and the King County-Cities Climate Collaboration

King County

Contents

Report created by Sustainable Business Consulting with the support of the organizations listed in Appendix D.

Section 1

INTRODUCTION

Section 1

Introduction

Climate change is a paramount challenge of this generation and has consequences for our environment, community, economy, and public health. Climate change magnifies current and historical inequities, putting those communities with the fewest resources at the highest risk from the impacts, including extreme heat, poor quality air, and flooding.

The recent disparate impacts of the COVID – 19 pandemic on communities across the region highlight the urgent need to partner with communities to develop the skills, resources, and capacity to both prepare for climate change and benefit from a transition to a clean energy economy.

The King County Growth Management Planning Council, a formal body of elected officials from across King County, set out to address climate change and adopted a target to reduce countywide greenhouse gas (GHG) emissions on July 23, 2014 by 50% by 2030 and 80% by 2050, from a 2007 baseline.

Solutions are attainable, and this toolkit provides ideas to guide your local government to act on climate change.

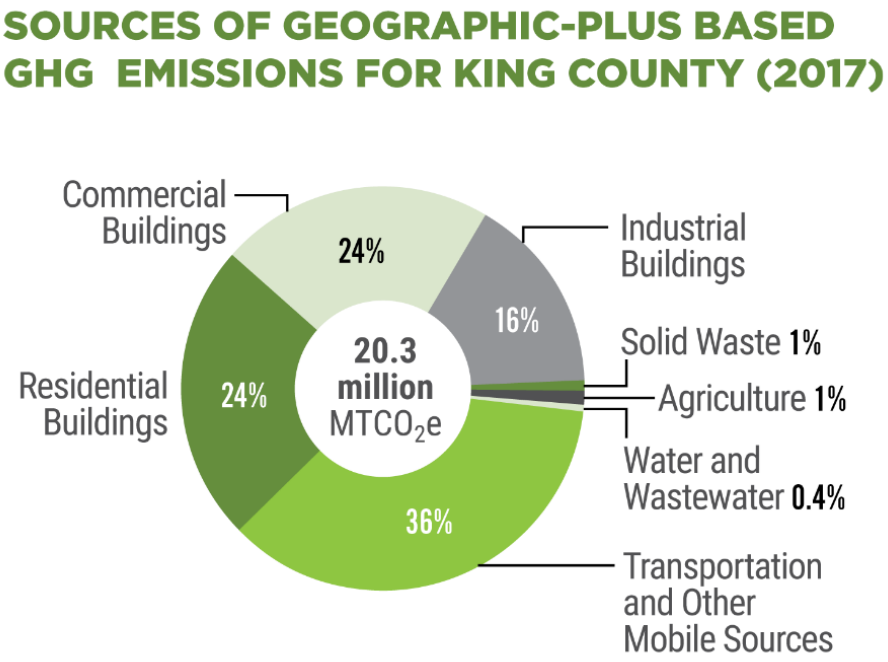
To meet these emissions reduction targets, a number of individual, institutional, and policy changes are needed. These actions also provide an opportunity to address issues of equity and justice, mobility, resiliency, and economic recovery in communities.

This toolkit provides a combination of attainable solutions, including options and ideas for programming, policies, advocacy, and capital investment to guide local government to act on climate change. Helpful indicators, example goals, recommended actions, questions for consideration, and ranking tools are offered along the way to inform and customize local government commitments, decisions, and actions to each unique community.

Alignment with King County's 2020 Strategic Climate Action Plan and the K4C Joint Commitments

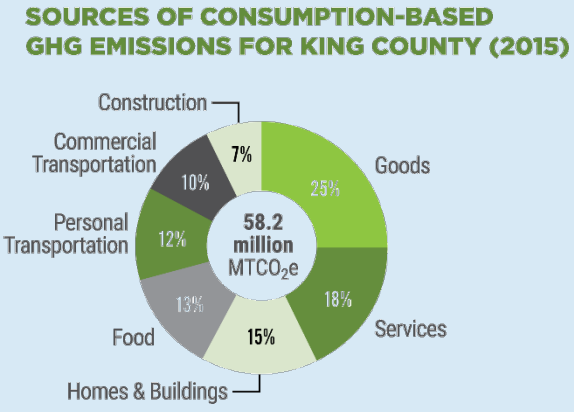
This toolkit was developed in alignment with King County's 2020 Strategic Climate Action Plan Update and the King County-Cities Climate Collaboration (K4C) Joint Action Commitments to ensure that local governments are moving in a shared direction and towards similar regional goals.

The graphic below shows the 2017 primary sources of emissions throughout the County. While each local jurisdiction will need to take slightly different actions based upon its geographic makeup, size, condition of its building stock, and access to public transportation, this inventory highlights where the County's emissions come from.

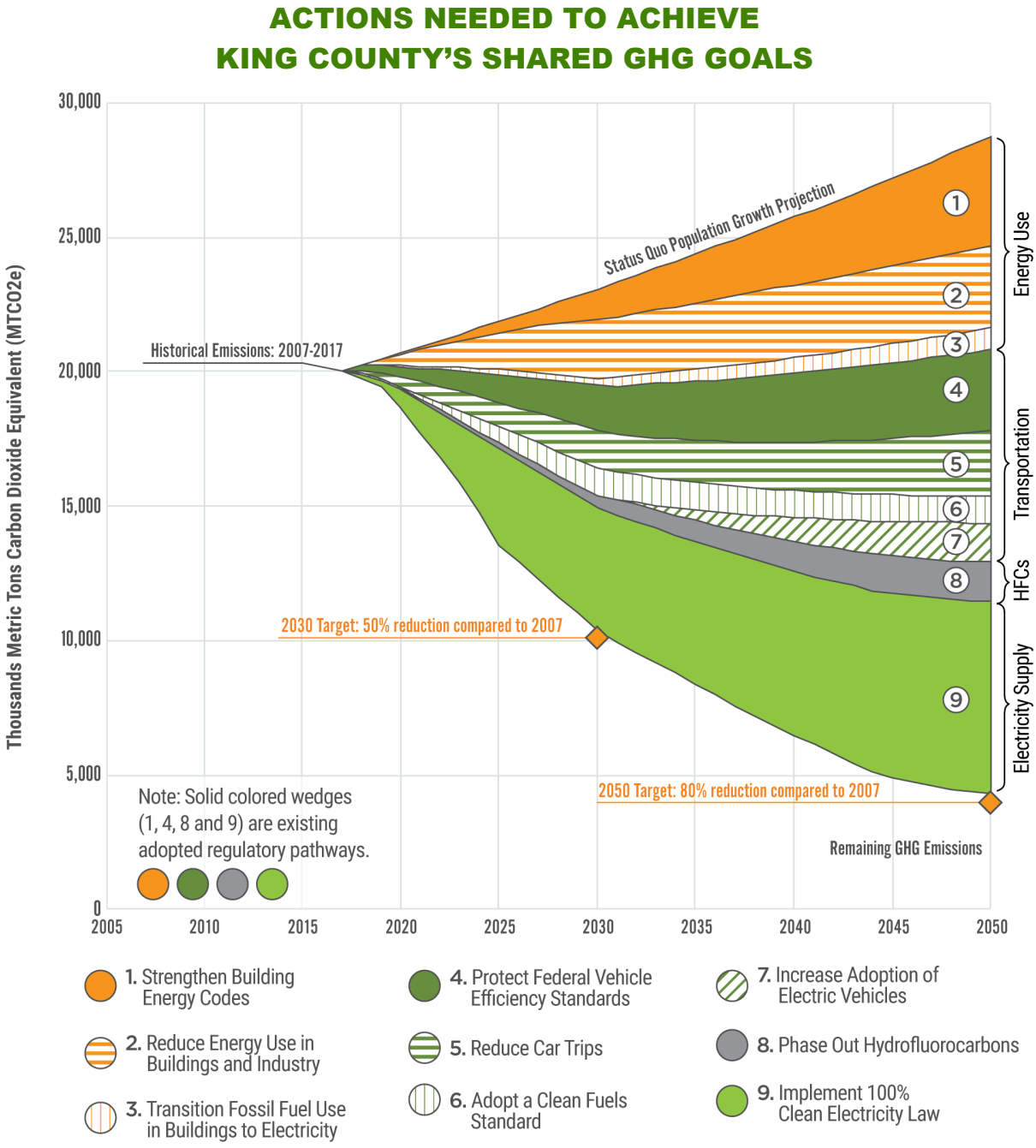


Consumption-Based Methodology GHG Emissions for King County:

Another perspective on GHG emissions is a consumption-based analysis. Under this methodology, more than half of emissions attributed to King County are associated with the production of goods, food, and services that occur largely outside of the county's sphere of influence. Efforts to influence behavior around consumption and waste will complement efforts to reduce emissions from buildings, energy, and transportation and have a high impact.



While the idea of a 50% reduction by 2030 and an 80% reduction by 2050 may seem overwhelming, this wedge analysis of countywide emissions developed in 2019 provides a roadmap for how King County, in partnership with local jurisdictions, businesses, residents, and the State of Washington can reach those targets. There is no easy solution, and it will take comprehensive action in multiple areas to get there, but there is a path.



Building Resilient Communities through Climate Action

By integrating climate-related resiliency into planning and decision making, cities can hedge against the growing impacts climate change has on our communities. The COVID-19 pandemic has illustrated the need to institutionalize resiliency and equip our cities with the ability to adapt and recover when faced with crises. Climate change is no exception and its effects exacerbate the underlying environmental, health and safety challenges our cities already face, all of which jeopardize the well-being of our natural environment, infrastructure, economy, and residents, particularly those who have experienced past and current inequities. This toolkit leans into those challenges head-on and focuses on GHG reduction measures that have additional co-benefits to the community including equity and justice, economic recovery, mobility, and community resiliency.

While the social and economic impacts of the COVID-19 pandemic are not fully known at the release of this Toolkit, basic lessons to dealing with a crisis include:

- **Acting boldly and comprehensively** in response to global challenges is important and possible – as work from home and virtual meetings became the norm overnight to address COVID-19.
- **Efficient, effective, and equitable use of limited financial resources** is necessary, and it is imperative to build these decision-making factors into policy.
- **Systemic and structural changes are urgently needed** to build community resiliency and ensure the health and economic well-being of ALL people, especially people of color and those living with low incomes.
- The **power of collective action**, sharing resources, data, and best practices of basing decisions on the latest science can work, and it is how we will reduce the impacts of climate change.
- Solving complex problems requires **governmental leadership**, especially at the local level. Governments must make decisions that impact the well-being of residents but also show leadership by example.

Integrating climate change considerations into decision making will improve our region's resiliency against extreme weather events, resource scarcities, and the rising cost of living (food, energy, etc.). Furthermore, taking actions that reflect equitable solutions will supplement efforts and resources around protecting our most vulnerable community members and frontline communities, better enabling them to adapt to changing conditions.

> **KEY TERM:** ***Frontline Communities****: The communities that often experience the earliest and most acute impacts of climate change, face historic and current inequities, and have limited resources and/or capacity to adapt.*

Further information and guidance on climate resilience can be found through the Puget Sound Climate Preparedness Collaborative which represents over 21 local public, tribal, and private institutions working to accelerate climate change preparedness and resiliency in our region.

Actions that support Resiliency and Economic Growth will be indicated in the Action Tables under Section 8.

Section 2

CREATING A CLIMATE ACTION PLAN

Section 2

Creating a Climate Action Plan

1. Understand Your Local Community Emissions
2. Determine Your Community's Level of Commitment
3. Develop a Climate Action Strategy Targeted to Your Community
4. Identify & Implement Climate Reduction Actions
5. Measure and Report Progress

Steps for Creating a Climate Action Plan:

1 Understand Your Community's Emissions / Jump to Section

Before beginning any planning around climate action, you first need to understand where your community's largest contributors of emissions are, both from a full community-scale perspective and what is owned and operated by your local government. For example, King County's largest emission source is buildings. Once you understand your community's emissions, you can align your efforts with what will be the most impactful at reducing emissions.

Timeframe: 1 month if using a similar sized city's GHG inventory as proxy. 2-6 months if you need to calculate your city's GHG inventory on your own, which often requires the resources of a staff member or consultant.

2 Determine Your Community's Level of Commitment / Jump to Section

Once you know the source of your largest impacts and have an idea of what opportunities for GHG reductions are, your local government should determine the level of commitment it is willing to make given the constraints discovered in the first step. Commitments should be made in the form of specific climate-related goals to achieve emissions reductions. When creating goals, each city should consider their unique community's traits such as geography, density, public transportation, age of building stock, as well as level of control, resources required, leadership buy-in, and community influence.

Timeframe: 2-3 months, depending on whose sign off is needed.

3 Develop a Climate Action Strategy Tailored to Your Community / Jump to Section

Once you have local leadership buy-in on your climate-related goals, the next step is to create an action plan. Conduct community engagement [jump to section], ensuring that you are effectively engaging with residents, organizations, and businesses – especially those who historically have less access to leadership – to gain feedback and buy-in from your community. First, build equity and social justice into your plan, then ensure that the actions included in the plan address your city's largest areas of impact.

Remember, the plan can always be updated, it is not set in stone! Allow flexibility to adjust and pivot alongside the rapidly changing landscape as you learn more about what works and what does not.

Timeframe: 3-6 months, depending on depth of stakeholder engagement and level of intricacy of the strategy.

4 Identify & Implement Emissions Reduction Actions / Jump to Section

Now it is time to set that plan in motion. This is where most of your time and efforts will be spent – but you will not have to recreate the wheel. Many local governments within King County have already had success implementing climate change action and are eager to share with others. Determine the actions your local government wants to commit to and create an implementation plan that includes accountability measures, resource requirements and potential budget needs. Be sure to communicate progress with stakeholders and set expectations appropriately.

Timeframe: 2-3 months for implementation planning. Each action will take varying levels of effort to implement.

5 Measure & Report Progress / Jump to Section

What gets measured, gets managed – *and funded*! It is critical to measure and report progress on emissions reductions *and* the associated co-benefits to secure future funding for climate change action. If you can show that 'W' many living-wage jobs were created, 'X' dollars were saved, air quality increased by 'Y%' and 'Z' dozen low-income community housing developments were built because of your program, resources will come easier to you. Set up tracking systems before you begin a program or change a policy to ensure the ability to track success. Also make sure to agree to a baseline up front so you know what you are measuring against.

Timeframe: Tracking success metrics should be an on-going task, but for GHG inventories specifically, these are typically done on 2-, 3-, or 5-year intervals.

Engaging Local Community Leaders

Another critical factor is gaining community buy-in, especially from frontline communities. There are many resources out there to help you engage meaningfully with community members, give them a seat at the decision-making table and get their buy-in right from the beginning of the process. Initial and consistent engagement is key to success.
See the section below on Community Outreach and Engagement for more information and best practices for this type of engagement. While not all community members will participate, deeper engagement with the ones that do will result in higher returns.

Aligning with Existing Programs

Instead of keeping your climate change efforts in a silo, integrate and align them with existing efforts and priorities. This will increase buy-in and expand funding possibilities. This type of integrated climate change planning approach will be more effective than building a climate change strategy outside of the core operations of your local government. Below are a few high-level examples of where climate action can be integrated with other efforts.

Samples of Existing Efforts	How to Integrate into Existing Program
Economic Recovery & Growth Strategies	Prioritize recovery strategies that put climate and equity at the center. Use as an opportunity to identify cost savings through efficiency and create family-wage jobs, training opportunities, and entrepreneurship.
Equity & Justice Work	Consider how to bring climate into the conversation as it disproportionately impacts marginalized communities in systems such as: *low air quality, food deserts, heat islands, housing affordability, lack of open space, access to public transit options, high heating and energy costs, longer commutes.*
Land Use Planning	Prioritize preserving natural and forested lands, natural resilient systems, and focus on dense and transit-oriented development.
Capital Planning	Include climate change considerations as a requirement in decision-making criteria. Mandate using full lifecycle costs of major capital projects, including embodied carbon (i.e. the emissions related to the production and transport of materials).

Additional Tips for Integrating Climate Action:

- **Make taking action easy** by focusing on tangible reductions that are achievable within a manageable timeframe and pursue pertinent advocacy opportunities and legislative positions.
- **Identify cost saving actions** that also deliver emissions reductions.
- **Collaborate and build partnerships** by including members of frontline communities in efforts.
- **Underscore actions that contribute to economic recovery and resilience** and support existing priorities.
- **Communicate clear, predictable outcomes** for all recommended actions (wherever possible).
- **Begin with quick wins**, prove the benefits, and celebrate what climate action allowed the community to achieve. Remember to tie in community health and social benefit factors as well.

Section 3

PRIORITY ACTIONS

Section 3

Priority Actions

This toolkit is not a one-size-fits-all approach but is intended to provide local government staff or leadership with a variety of potential actions, considerations, and implementation resources to help your community take action on climate change. This toolkit is designed to help each local government discover, evaluate, and determine their own course of action in support of the emission reduction targets agreed to by the Growth Management Planning Council.

The Top Ten lists below give you a brief, high level understanding of the priority actions that can be taken to achieve the established goals, and Section 8 of this toolkit provides a more detailed list of the actions that can be taken around transportation, energy, green building, waste/consumption, and forestry/agriculture.

These actions were developed using a collection of local and national sources focused on government-led emissions reduction but tailored to the unique landscape of King County (i.e. regulatory environment, demographics, utility mix). The top actions were determined based on stakeholder feedback, researched best practices, and by applying the indicators created for this Toolkit (see Section 8).

Top Ten Actions to Reduce **Community-Wide** Emissions *(GHGs associated with activities in your community)*

1. Improve **energy efficiency** in existing buildings and homes
2. Develop strong **building, energy, and water codes** for low/zero carbon buildings
3. Educate residents about tools and resources to **reduce carbon and save money** through energy, water, and waste conservation
4. Make it easier for commercial and residential buildings to source/install **renewable energy**
5. Expand access to **safe, efficient transit** and multi-modal transportation options
6. Develop dense, mixed-use, **compact communities**
7. Expand green spaces and tree canopies to increase **carbon sequestration** potential and enhance resilience
8. Partner to **electrify or move to zero-emission fleets** (school buses, first responder vehicles, buses, ferries, commercial)
9. Incentivize **responsible purchasing** and promote zero waste policies and actions throughout the community.
10. Require proper disposal and encourage recycling & reuse of **Organic** as well as **Construction & Demolition wastes**

Top Ten Actions to Reduce **Government Operation** Emissions *(GHGs associated with city operated activities)*

1. Identify **cost saving opportunities** through energy, water, and waste conservation
2. Improve **building efficiency** in both existing and new government facilities (utilize green building certification frameworks)
3. Set policies to require **climate-friendly procurement,** travel, contracting, etc.
4. Develop **renewable energy** on facilities and government-owned land
5. **Speak out** about climate issues to regional/state/federal agencies and legislators
6. **Formalize & integrate** climate and equity considerations into all decision-making criteria
7. Incent staff to reduce **single-occupancy vehicle** commuting behavior through carpooling, transit, and improved work-from-home scheduling
8. **Strive for a zero-emission fleet through electrification and use of renewable fuels**
9. Improve **stormwater management** to expand biogas generation and use natural systems to improve resiliency
10. Increase **carbon sequestering green spaces** through urban forestry and effective land use & building code, including compost use

Key Considerations for Choosing Actions

Understand Your Local Community

When choosing which actions to take, it is important to weigh several considerations to determine which ones will give you the most emissions reduction on your investment. These considerations may include but are not limited to:

Relative density of your jurisdiction (e.g. public transport options, available undeveloped land, single or multi-family homes, etc.).

Types of buildings/operations within your jurisdiction (e.g. residential, commercial, agricultural, age and/or condition of existing building stock (25, 50, 75 or 100 yrs.?), etc.).

Interests and demographics of your residents (e.g. marginalized populations, high-efficiency modern homes, community-oriented sharing economy, ability to invest upfront costs, etc.).

Capacity for action (e.g. resources available, government and community support, etc.).

Considerations such as these are critical to climate action planning, as they will further refine which actions are most relevant to your unique community. The table below offers a few ways to help describe your community and enable local governments to tailor a climate change strategy unique to their situation.

Identifying Characteristics	Main Source of Emissions	Actions to Focus On
Heavy agriculture	Activities associated with farmlands and likely older buildings with inefficient energy use	Carbon sequestering farming practices, on-site renewable energy, fuel-switching and retro-fitting older buildings
Dense city, high public transport use	High rise buildings and the high volume of traffic coming into/out of the city	Building efficiency, permeable pavement, green roofs, first-/last-mile transport options
Bedroom community, high commuter population	Commuters leaving and returning	Effective public transport, telecommute options, promote dense centers, electrifying vehicles
Residents with strong Environmental Focus	Your residents will play a big role in determining what they are capable of and willing to do	Farmers markets, public transport, 10-minute walkable communities, community solar options

Section 8: Top Actions for Each Category *shares the top actions in more detail for the following categories:*

- *Transportation & Land Use*
- *Energy Use & Infrastructure*
- *Green Building*
- *Consumption & Waste*
- *Forests & Agriculture*

Equity and Environmental Justice Considerations

When developing an equitable climate action strategy, you must first understand how climate change impacts frontline communities, then ask several key questions to guarantee that the solutions presented are equitable.

1) How Climate Impacts Frontline Communities

- Frontline communities have **higher exposure** to climate-related poor air quality and conditions such as nearby major highways, diesel particulate matter, industrial centers, waste disposal centers, energy generation and distribution sites, and urban heat island effects – all of which affect health conditions and life expectancy.
- Frontline communities are often lower-income and reside in older or lower-efficiency homes, which can present a **higher barrier** to taking action on climate change (e.g. they already face higher utility bills, food insecurity, and cannot afford higher upfront costs for efficiency upgrades). Over time, this leads to displacement. See Puget Sound Regional Council's (PSRC) Opportunity Map and Displacement Risk Map for more information.
- Frontline communities often make up large percentages of the agricultural economic sector, an industry that will be **largely impacted** by climate change as well as policy efforts to improve land conservation (likely raising operating costs).

2) Key Questions to Ask

- **Who is involved in the decision-making process and who has historically been left out?** Oftentimes, frontline residents are left out of the conversation because public input strategies are not developed to overcome their barriers (language access, working multiple jobs, etc.).
- **How might marginalized communities benefit from local government action on climate** in their area (e.g. greater access to safe and efficient public transport or reduced heat island effect from expanded canopy cover)?
- **Who benefits from this action and who is disproportionately impacted?** May be direct (e.g. increase costs of groceries, residential waste fees) or indirect (rising housing & commercial property values lead to gentrification).
- **What jobs may be created/lost from this action?** What jobs may be displaced, and whose jobs are lost? What demographics make up those jobs)?
- **Which actions are no or low-cost** (e.g. work from home strategies), *or* how could we develop financing partnerships to make this action no or low-cost for low-income communities (e.g. deep incentives for energy efficiency improvements)?

Local governments can reference King County's Community Engagement Guide to support these efforts.
Actions that support Climate Justice & Equity efforts will be indicated in the Action Tables under Section 8.

Return on Climate Action Analysis Tool

To further support your local government's ability to determine the best actions that fit its unique characteristics, King County has developed a publicly available tool to help weigh various considerations in climate decision-making.

Using the Climate Action Analysis Tool, local governments can rank and score potential actions to better understand how each effort will affect their communities. The tool will provide cities with a prioritized list of actions based on the various indicators and the overall scores received, such as top actions for cost savings, emission reductions, equity and inclusion, etc.

Section 4

DEVELOPING GOALS

Section 4

Developing Goals

Creating goals is an essential step for any community as it develops its climate action plan. Strong goals will focus your efforts and resources, help you clearly communicate intentions (both internally and externally), define accountability, and ensure that everyone is on the same page. This section will break down the goal-setting process, demonstrate best practices when setting climate goals, and share examples from local cities to help get you started.

Goal-Setting Process

Tips for Setting Goals: Do This… Not That!

DO… Create SMART goals to bolster accountability ***S**pecific, **M**easurable, **A**ssignable, **R**elevant, **T**ime-based*	**DO NOT**… Create general statements or goals without clear direction
DO… Set goals to tackle your biggest sources of emissions	**DO NOT** … Create goals that focus on areas of low impact
DO… Choose goals that support other city efforts already in place (i.e. job creation, econ. development)	**DO NOT** … Set goals that directly/indirectly oppose other city high priority efforts
DO… Choose goals that are within your direct control or influence	**DO NOT** … Leave the success of your goals entirely up to other organizations, entities, or residents
DO… Build in flexibility, so you can revise your goals once the barriers & opportunities are fully understood	**DO NOT** … Shy away from setting a goal in fear that you will not be able to reach it

Example Goals

If you do not know where to start, both the King County Strategic Climate Action Plan and the K4C Joint Commitments offer guidance on how to align with countywide emissions goals. Many cities have adopted King County's emissions goals (shown below) and its newest goal of zero waste of resources by 2030 as part of their Comprehensive Plans.

Existing King County Emissions Goals	Proposed King County Emissions Goals
These countywide goals were stronger than Washington State emission targets until state legislators passed stronger targets in the 2020 session. In 2014, the King County Growth Management Planning Council, a formal body of elected officials from across King County, voted to adopt a shared target to reduce countywide emissions **25% by 2020, 50% by 2030, and 80% by 2050** as compared to a 2007 baseline**.**	*The 2020 King County Strategic Climate Action Plan advances a priority action to work with partners to chart pathways to align with the current state targets and best available science.* The new statewide emission reduction goals are for a **45% reduction by 2030, 70% by 2040, and 95% by 2050** against a 1990 baseline with a net zero emissions goal in 2050.

The table below offers examples and commentary on climate goals set by local cities for illustrative purposes.

	City	Goal	Why this Goal is Relevant
Transportation	**Bellevue**	50% of vehicles registered by 2050 are electric. source	Bellevue has a large commuter population that contributes significantly to emissions.
	Burien	Reduce single occupancy vehicle trips in the Urban Center to 60%. source	This goal addresses multiple climate targets, including increasing green space and developing new bike and pedestrian pathways.
	Kirkland	Electrify 100% of fleet vehicles by 2030. source	This goal nearly eliminates the impact of the City of Kirkland's fleet.
Energy	**Seattle**	Reduce residential building energy use by 20% by 2030. source	Seattle has some of the oldest residential building stock in the County so this goal will support large reductions.
	Bellevue	Achieve 100% renewable energy by 2030 [gov operations] and by 2045 [community wide]. source	The timeline encourages earlier targets for operations within their control, while allowing time to meet targets outside of their control (community renewables).
	Kirkland	Join PSE's Green Direct program for all municipal operations. source	This will 'green' its electricity supply and nearly eliminate the carbon impact of its operational electricity use.
Buildings	**Shoreline**	Increase the number of green residential units in the community to over 700 by 2030. source	This is a measurable goal that will have an indirect positive impact on other city decisions as well, such as zoning and permitting.
Waste	**Burien**	Achieve recycling rates of: 95% for residential, 75% for multifamily, 65% for commercial sector. source	Increasing recycling efforts will reduce emissions associated with landfilling and influence behavior around consumption.
Forests	**Redmond**	Ensure no net loss of shoreline ecological functions.* source **definition*	This goal will support multiple climate targets (e.g. resiliency, sequestration potential, green space, etc.).

Section 5

IMPLEMENTING CLIMATE ACTION

Section 5

Implementing Climate Action

The implementation plan is what brings goals and strategy to life. In this section, we will discuss several key aspects for successful implementation including overcoming barriers, tips for securing funding, and ways to align with existing city efforts in other areas. Lastly, we will share lessons learned from a few local governments to show what has been successful and why and help avoid recreating the wheel.

Tips for Successful Implementation

1. **Set clear, measurable goals** and establish a metric tracking system early on to report on progress.
2. **Align your efforts** with existing government efforts on economic development, jobs, mobility, community health, equity & justice, and land use efforts.
3. **Make sure there is buy-in from senior leadership** and that resources are allocated for this work.
4. **Start with easy, cost-saving measures** to build momentum.
5. **Assign a dedicated staff member** to manage progress on climate efforts OR a green team, with multiple cross-divisional people responsible for climate action.
6. **Set accountability measures** (employee KPIs, etc.) that provide benefits for achieving goals and consequences for not meeting them.
7. **Measure and report progress regularly** – award/publicly recognize high performance.

To integrate climate action, local governments must develop and adopt a transparent and inclusive decision-making framework that is used at every level to evaluate projects, policies, and actions. This type of framework should balance economic prosperity, climate, equity, and community health and resilience goals. King County has several examples of building decision making frameworks that consider climate change such as the Sustainable Purchasing Guidelines.

Overcoming Common Barriers

Expect barriers and hiccups along the way. Whether you are just getting started or have a plan in place, expect some variation of the common barriers below. This toolkit offers tips for overcoming these barriers and realizes that each local government will need to tailor its solutions to its own unique challenges.

Barrier	Reason for Barrier	How to Overcome
Lack of resources	Climate action is seen as a separate budget that lacks resources.	Align with other existing efforts; pursue projects with other departments that also help them meet their goals; achieve quick wins that save money; seek grant opportunities.
Lack of support, or competing priorities	Not seen as an urgent priority, keeps getting pushed to the back burner by more “pressing” issues.	Find ways in which actions accelerate progress on other priority areas. Make the case with clear, low cost, and decisive opportunities.

Silos	Climate action not integrated across departments; employees do not understand how climate is related to their daily work.	Set regular cross-departmental meetings to educate and discuss co-benefits of action; implement accountability measures.
No dedicated staff	Lack of financial resources to add new staff; Uncertainty around the payback of assigning an FTE.	Join the K4C to gain support from surrounding cities; utilize interns or student teams where appropriate to do the research and discrete projects; leverage resources and lessons learned from other successful cities; utilize temporary staffing assignments.

Opportunities to Secure Funding

Funding is always a challenge, especially during uncertain times. Below are a few examples of organizations that provide grants or funding for climate action. Please see Appendix A for the full list of organizations at the regional, state, and federal level that are known to offer funding support for climate action.

Geographic Reach	Organization	Type of Funding
Regional	King County	Conservation Futures (CFT) (Grant) C-FRED program (Loan)
State	WA Department of Commerce	Clean Energy Fund (Grant) Energy Efficiency and Solar Grants (Grant) Building Infrastructure (Loan)
	Access Washington	Agriculture, Planning, Rural and Urban Forests, Waste Management, Systems Infrastructure (Grants and Loans)
	LOCAL Program	Local Government Efficiency (Loan)
	WA Dept of Ecology	Air & Climate, Water & Shorelines, Waste & Toxics (Grants and Loans)
National	Database of State Incentives for Renewables & Efficiency (DSIRE)	Renewable Energy, Energy Efficiency, Green Building (Grants, Loans, Rebates, Tax Credits)
	EPA Smart Growth	Green Infrastructure, Energy, Environmental Justice, Conservation, Rural and Agricultural, Transportation (Grants)
	ICLEI Climate Finance	Transformative Actions Program (TAP) (Financing)

It is also worth noting other creative solutions for gaining funding and resources.

- **Contract with an energy services company** (see link to WA State list) can result in more efficient facilities that save money which can cover the cost of any debt service.
- **Partner with neighboring or K4C-member cities** to activate regional collaborations with joint resources. Consider partnerships with tribal governments as well.
- **Advance public-private partnerships** with businesses for mutually beneficial projects.
- **Partner with schools or universities** for research or additional bandwidth.
- **Work alongside environmental and socially conscious non-profits** to amplify efforts on these issues.

Actions Taken by Local Governments

Below is a brief snapshot of several climate actions taken by local governments within King County. These cities are leading by example on climate through their purchasing power and local jurisdiction authority. The information is illustrative and intended to provide guidance for those going through this process by sharing knowledge on what K4C partner cities have done, so that people know where they can turn to if they have a questions or would like to borrow existing resources rather than recreating their own.

Sample Actions Taken by Cities:

City	Government Operation Emissions							
	Conducted GHG inventory	Established GHG reduction goal of 80%+ by 2050	Greened City Hall	Begun Transition to EV Fleet	Signed up for PSE's Green Direct program	Benchmarking energy savings	Switched all streetlights to LEDs	Established a zero-waste goal
Seattle	x	x	x	x	x	x	x	x
Snoqualmie	x	x	x	x	x		x	
Bellevue	x	x	x	x	x	x	x	x
Kirkland	x	x	x	x	x	x	x	
Shoreline	x	x	x	x				x
Redmond	x	x	x	x	x	x	x	
Issaquah	x	x	x	x	x		x	
Renton	x	x						
Kenmore	x	x	x	x				
Burien	x	x	x				x	

City	Community-Wide Emissions								
	Expanded Transit Efficiency & Access	Began Energy Benchmarking	Developed a Climate Action Plan	Collaborates w/ a Resident-Led Climate Advocacy Group	Reduced Fees for Green Buildings	Hosted a Solarize Campaign* *Program Details	Required Compost in Restaurants	Required EV Charging in all Apartments	Reduced Garbage Pickup to Bi-Weekly
Seattle	x	x	x	x	x	x	x	x	
Snoqualmie	x		x	x		x			
Bellevue	x	x	x			x			
Kirkland	x	x	x	x					
Shoreline	x		x		x	x			
Redmond	x	x	x						
Issaquah	x			x		x	x		
Renton								x	x
Kenmore				x	x				

King County North Utility Maintenance Facility

Section 6

COMMUNITY OUTREACH AND ENGAGEMENT

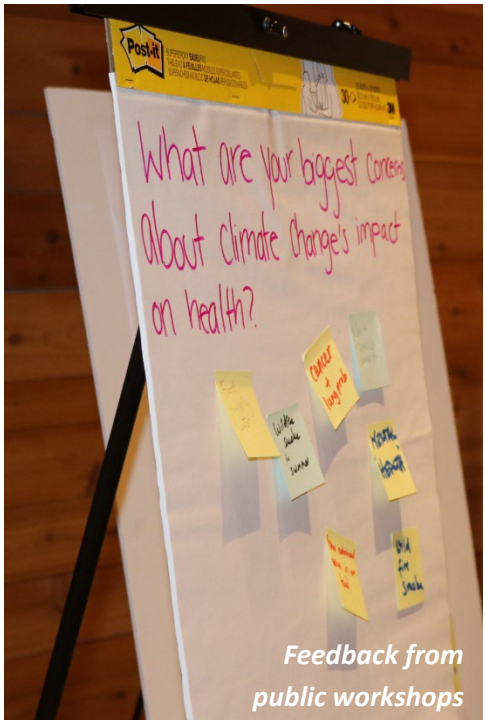
Section 6

Community Outreach and Engagement

Key pillars of a successful climate action plan are effective communication, outreach, and engagement during both development and implementation. This section explores best practices and general tips for community outreach both virtually and in person. Specifically, it covers topics such as the benefits of community outreach, different ways to do it, best practices, and the importance of reaching out to communities that typically do not have a seat at the table.

When to Conduct Community Outreach and Engagement

There are two distinct times when community outreach is critically important to your climate efforts: during **Planning,** and at **Implementation.**



Feedback from public workshops

1. Benefits of Community Engagement during the Climate Planning Stage

When developing a climate action strategy, it is imperative to reach out to a diverse set of stakeholders in your community, including residents, business leaders, youth, and minority communities. Benefits include:

- Policies become more equitable and inclusive when an intentional effort is made to engage all community members.
- Decisions that include many perspectives are statistically proven to be more successful over the long-term.
- Involving the community also builds social capital, cohesive networks, and can lead to government savings as the solutions are often more effective.
- Stakeholder input provides a better understanding of what will work, what will not, and what your community truly cares about so that you can focus on the things that matter most.

2. Benefits of Community Engagement during the Implementation Stage

When implementing a new program to support your climate goals, thoughtful engagement with the communities in your city will increase and accelerate your success. Ideally, these communities would have already had a chance to help shape the program on the front end, but the focus of this engagement is to:

(a) Provide education and solutions that are tailored to the needs of the community
(b) Listen and adapt to real-time feedback of what works and what does not

By engaging in a way that shows mutual respect and understanding, you can adjust programs to fit the needs of your community, who will in turn be more apt to engage with the program and help you achieve the results you are looking for. The key here is helping them understand how their engagement in the program can alleviate their unique challenges (cost savings, healthier communities) and then provide easy and cost-effective ways to do what you are asking of them. The strategies shared in this section apply to both the development and implementation stages of community engagement.

Methods for Conducting Community Outreach

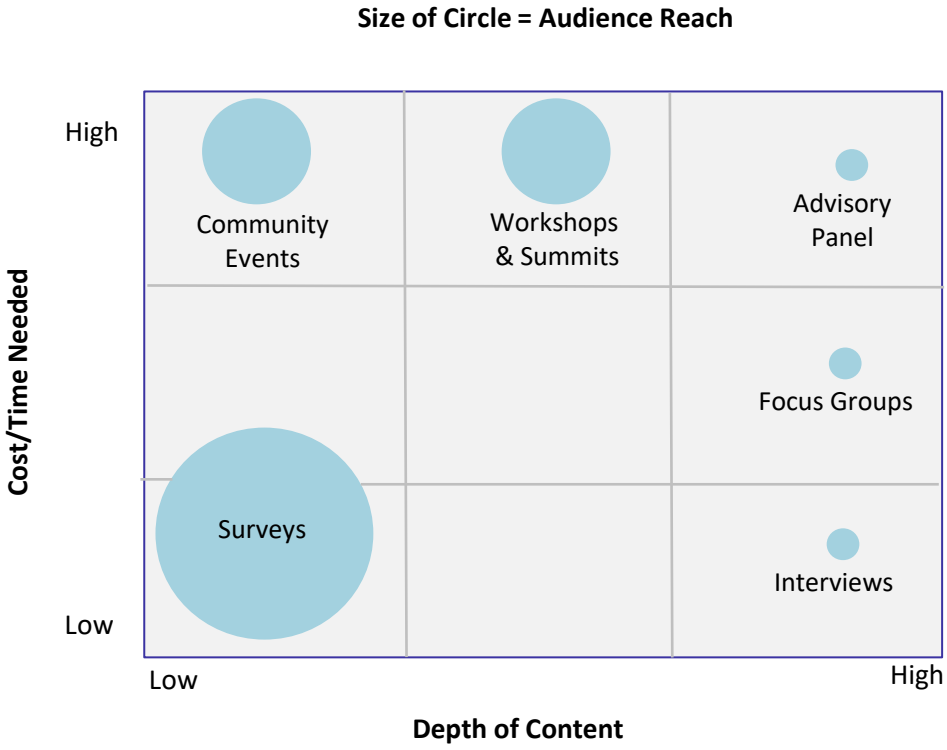
There are several effective ways of performing community outreach that range in cost/time, magnitude of reach, and quality of input. It is important to utilize multiple strategies when conducting community engagement to diversify the responses and feedback you collect. The rise of virtual gatherings and online input may allow a larger number of people to provide input into climate decisions, but at the same time may deny participation from residents without access to the internet.

Below are a few strategies that have been effective in engaging community members on climate. Note that many of the costs and resources required for in-person meetings (as described below) are eliminated if you opt for virtual meetings instead.

Comparison of Stakeholder Engagement Types

Type of Engagement	PROS	CONS
Surveys • Online or mail surveys • Website comment box (allows residents to submit open-ended responses)	Large reach; inexpensive if done online (mailing is more expensive); easy to generate and tabulate results	No face-to-face interaction; hard to understand context behind answers; one-way conversation; online accessibility is not universal; language barriers may impact participation
Focus Groups • Town halls (both in-person and virtual) • City Council meetings	Ability to interact with participants and understand context of statements; leaders can emerge; trust can be built	Need diverse group in room and a trained facilitator; can accidentally get 'group think'; difficult to repeat and scale; Can be hard to collate ideas and responses
Interviews • Virtual • In-person • Phone	Can do a deep dive with knowledge brokers; get more 'unfiltered' responses when 1-on-1; often leads to more interviews	Can be time consuming; Hard to collate all ideas and responses; may miss key stakeholders/demographic groups with less access or contact with agency
Workshops/Summits • Community members • Stakeholders • Sustainability leaders • Institutional leaders	Effective way to bring everyone together in one place; teams can be formed; larger purpose can be seen through camaraderie; accountability is enforced	Can be expensive and extremely time-consuming for staff and attendees; difficult finding a common time and meeting place
Advisory Panel • Diverse, volunteer-based community organization to provide guidance/advisory	Provides path for community representation; Encourages deeper buy-in and innovative ideas	Difficult to achieve diverse representation that characterizes all local communities; requires regular meetings, clear expectations, and governance structure
Community Events • Tabling at community fairs and public events • Host pop-up events in local neighborhoods and decentralized locations	Engages atypical participants; high visibility; shows willingness to meet residents where they are	Responses and engagement will be brief; events often held outside of working hours

Matrix of Stakeholder Engagement



Tips for Community Engagement

King County hosted climate workshops in October 2019

- Be transparent, seek to build relationships and trust
- Set measurable objectives
- Intentionally consider all stakeholders, and engage each in multiple ways
- Understand the distribution of impacts (positive & negative) for the topic at hand
- Train all staff on effective & inclusive community engagement best practices
- Consider the needs of your audience – Translators (for live events or materials)? Time of day? Childcare?
- Spread the word – work with schools and community groups, use local and social media, and have an accessible website
- Adjust based on the feedback received – do not just put it on a shelf
- Engagement is continuous – develop a plan, follow up, and maintain the relationship

Ongoing Engagement

The above-mentioned strategies are to be used during active engagement with community members. It is important to also utilize ongoing engagement strategies such as dedicated webpages, social media promotion, and printed fliers or handouts available at city locations. The strategies are particularly effective with younger generation residents, who look to online resources first and respond more to short video clips and infographics that grab their attention.

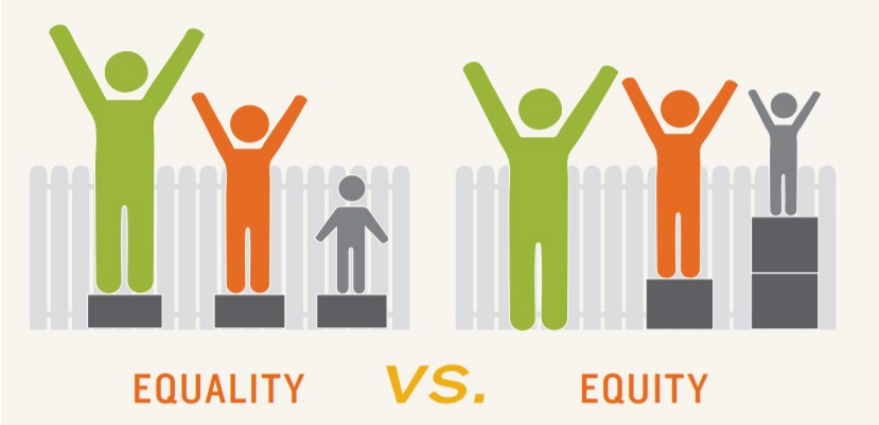
Equitable Community Engagement

Though climate action and social justice are traditionally thought to be separate entities, the two are intertwined and cannot be separated. Climate change impacts certain communities in a disproportionate manner, and lower-income and minority populations have less capacity to mitigate, adapt to, and react to changing conditions. Their voices are often the least heard even though they may be the most valuable ones to add because they are the ones most vulnerable to climate impacts.

Develop a strategy to foster ongoing and deep community engagement with communities of color, minority communities, and low-income populations to advise on equitable policy development, program design, and implementation of climate-related actions. Some of these strategies may include providing childcare, holding meetings at different times of the day to accommodate work schedules, or providing translators and/or materials in predominant languages in that community.

Understand Equity vs. Equality

Why strive for *equity* over *equality*? What is the difference? *Equality* leads to all parties starting from the same place, as shown in the graphic below. However, some face bigger obstacles than others. *Equity* solves this, by starting all parties the same distance away from the goal, regardless of their circumstances or obstacles. It is the fair treatment, access, opportunity, and advancement for all people, while striving to eliminate barriers that have prevented the full participation of some groups.

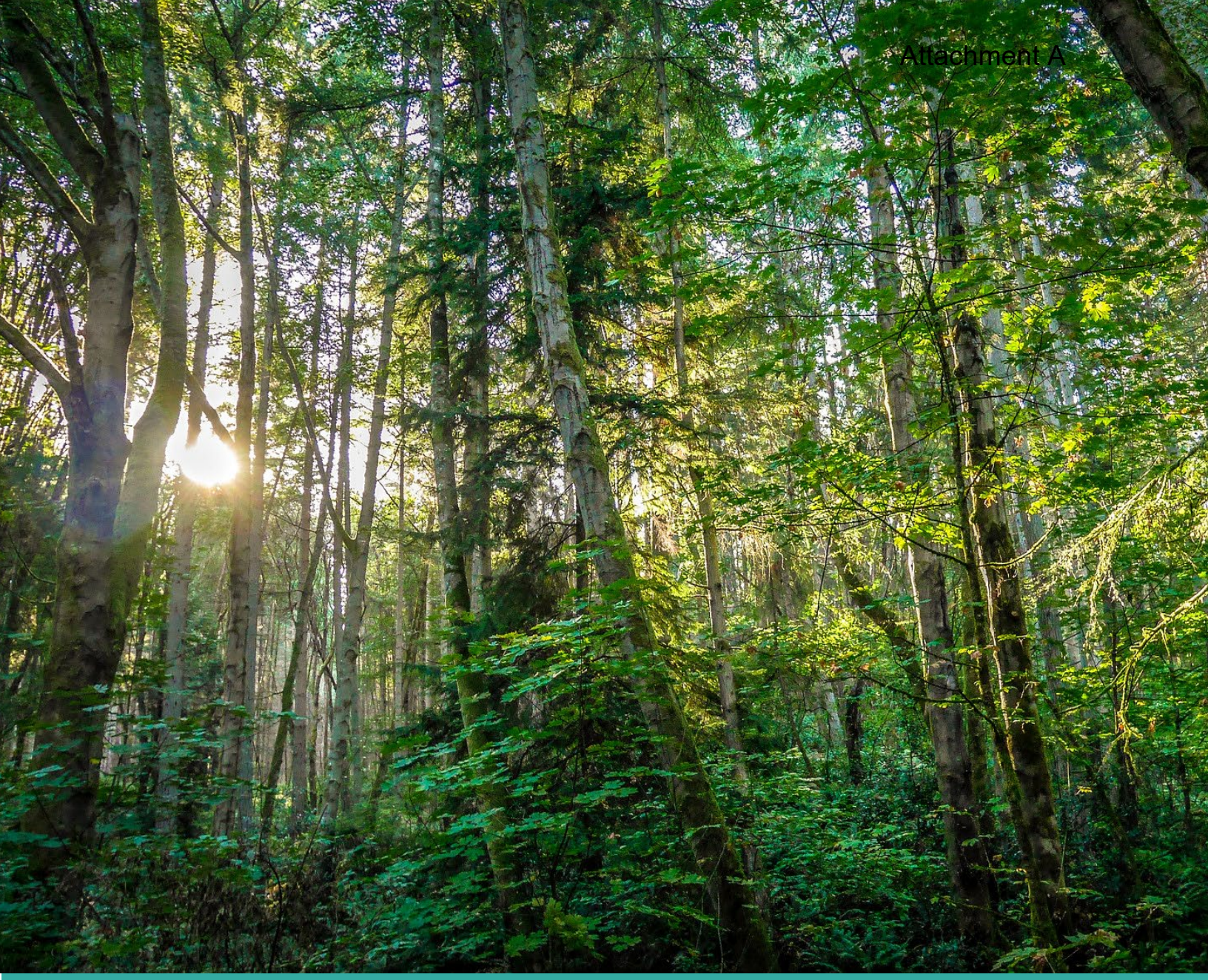


Race Equity and Inclusion Action Guide, The Annie E. Casey Foundation

By engaging marginalized communities, you will uncover equitable solutions rather than traditional ones that may not consider equity impacts. Equitable solutions will consider root causes of marginalization and work to mitigate or reverse any further disproportionate and negative impact on these communities. They will focus on removing barriers that have previously disabled these communities from engaging in climate action and will improve your success rate of program implementation.

Things to Consider When Performing Equitable Community Outreach

	General Outreach	Frontline Community Outreach
Online Engagement	Online engagement has become far more common in recent years. Online engagement can increase participation due to accessibility (vs. having to drive to a meeting, take time off work or find childcare).	Keep in mind, however, that many individuals in lower-income communities do not have access to online services. This method must be paired with other efforts to hear from all groups.
Advocacy Group Partnerships	Each community has different ethnic populations and faces different environmental issues. Identify advocacy groups that align with the communities you are working with and ask for their advice and input throughout the decision-making process.	Frontline community groups may not have expendable time or resources to seek you out and offer their input – you must seek them out. This starts with identifying existing groups, travelling to their area, and adjusting your schedule to meet their needs. You may also consider compensating individuals for their time as additional incentive.
Business Community	Decisions made by businesses are often some of the most impactful in terms of emissions. Partnering with businesses to adopt climate strategies is an effective way to have a large impact.	Minority-owned small businesses and organizations are often the backbone of frontline communities. Meeting the needs of these leaders through intentional outreach will contribute to understanding the needs of the greater community.
Subject Matter Experts	Seek out the guidance of subject matter experts to help shape goals. Getting a full picture of the situation from experienced individuals allows you to make equally ambitious but reasonable goals with a better understanding of what it will take to reach them.	Experts on diversity, equity, and inclusion as well as environmental justice can provide insight on your specific action item or situation. Refer to the Climate & Equity Community Taskforce as an example of this.



Section 7

CALCULATING A GREENHOUSE GAS (GHG) INVENTORY

Section 7

Calculating a Greenhouse Gas (GHG) Inventory

Why Perform a GHG Inventory?

A greenhouse gas (GHG) inventory enables a quantitative understanding of the city's emissions profile and is critical to informing climate-related actions, goals, and targets.

A GHG inventory:

- ✓ Helps decision makers understand **where their community or government operations emissions come from.**
- ✓ **Identifies specific sources of high emissions** to focus on, based on a sector's percentage of the overall community emission profile.
- ✓ **Informs implementation** and the setting of reduction targets.
- ✓ Strengthens a city's climate action plan by **prioritizing areas for action.**
- ✓ Sets a **baseline** to track performance over time.

This last point is important. Being able to track performance over time and establishing monitoring systems enables you to communicate progress quickly and intuitively over time while also providing a platform that demonstrate you have the necessary mechanisms to achieve your commitments.

If You Do Not Have an Inventory:

For local governments who do not currently have a GHG inventory, there are two choices:

1. Use one of the tools listed in Appendix B to calculate your first GHG Inventory (more accurate).
2. Use a similar city or the County's GHG Inventory as a proxy (less resources needed).

Conducting a GHG inventory requires a dedicated amount of time and resources. Many cities choose to hire a consultant or a temporary staffer (such as an intern) to help manage the process as it can take three to six months to complete your first GHG inventory, while others allocate existing staff to complete it. Moreover, cities are free to choose how often they report. Some report annually, every other year, or even every 5 years. For cities with limited resources, they can use a similar jurisdiction's GHG footprint as a proxy to understand where to focus its efforts.

When using a proxy GHG footprint, ensure the size, population, available resources, source of energy (i.e. utility provider), and resource needs of the proxy city aligns with your own. It is worth noting that this option does not allow you to accurately track progress against your emissions or show numerical returns on investment. For a list of which local cities you could use as a proxy, see the section below titled: Case Studies of GHG Inventories.

What is included in a GHG Inventory?

If you are unfamiliar with what a GHG inventory is or what is included, see below. All GHG inventories have key components that provide a consistent and comparable framework for reporting on emissions.

Boundary	Sources of Emissions	GHGs Captured	Time Period
• Community-wide emissions: all activities that occur within your city limits • Government operation emissions: all activities that occur under the local government's owned or operated activities *NOTE: Government operation emissions are a subset of community-wide emissions.*	• Energy (Commercial, residential, industrial) • Transportation • Waste treatment and disposal • Water treatment • Agriculture, land use and forestry • Emissions occurring outside the geographic boundary of the city or its operations (such as purchasing, travel, waste processing, etc.)	The Kyoto protocol requires the accounting and reporting of seven major Greenhouse Gases below: - Carbon dioxide - Methane - Nitrous oxide - Hydrofluorocarbons - Perfluorocarbons - Sulfur hexafluoride - Nitrogen trifluoride	• Continuous period of 12 months – calendar year or financial year • Inventories may be conducted annually or on a regular cadence such as every two years or five years

Tips for Ensuring Data Quality & Reliability

Data collection and screening is a vital step in GHG inventory development. Below are a few tips to ensure high quality data:

- ✓ **Communicate with individuals responsible for managing or tracking data across the areas listed above**. Educate them on what specific data points you need, why you need it, and disclose that you will be asking for this data on a regular basis. This will help them develop a process and even spreadsheets to help facilitate data capture.

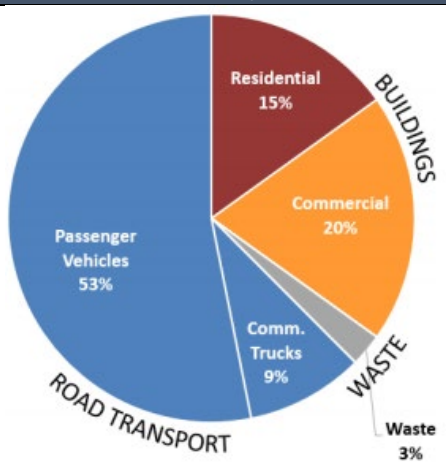
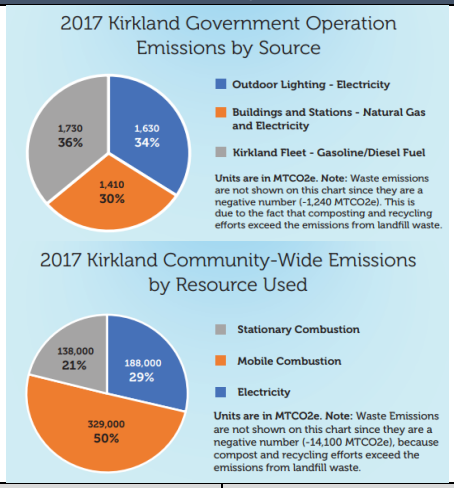
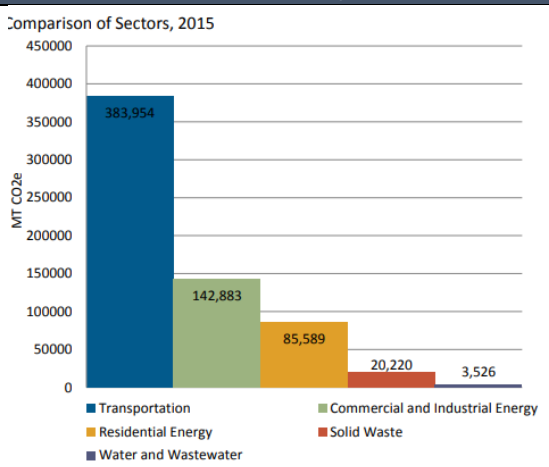
- ✓ **Provide training for data owners.** This will ensure efficient and accurate collection on the front end, so valuable time is not wasted verifying inaccurate data. This is especially important because staff turnover often has an impact on data accuracy. This will enable clear documentation for each data point.

- ✓ **Prioritize data accuracy for the largest categories.** These will likely be energy and transportation and will have the greatest potential for GHG reduction and cost savings but will depend upon your local government's GHG inventory.

- ✓ **The first GHG Inventory process will likely require some estimations.** The data you need may not be available or easily reported. Estimations and proxy data (i.e. using a similar facility's data as a substitution) are a normal part of the process, so use these strategies when attempting your first GHG Inventory. Be sure to record clear documentation of where each data point was sourced, how it was estimated, and what proxies were used to make future reporting easier and more accurate.

Case Studies of GHG Inventories

Below are three representative examples of GHG inventories. Other King County cities that have completed GHG inventories include Snoqualmie, Bellevue, Shoreline, Redmond, Issaquah, Renton, and Kenmore.

City	Seattle, WA	Kirkland, WA		San Leandro, CA
Inventory Chart				
Boundary	Community-Wide	Government Operation	Community-Wide	Community-Wide (includes Gov. Operations)
Base Year	2008	2005	2005	2005
Frequency	Every 3 years	Annually	Every 3 years	Every 5 years
Emissions Sources Covered	- Building Energy Use (Electricity, Natural Gas) - Emissions from passenger vehicles & commercial trucks - Waste Management	- Energy Use (Electricity, Natural Gas) - Gasoline and Diesel (for Vehicles)	- Energy Use (Electricity, Natural Gas) - Gasoline and Diesel (for Vehicles) - Waste	- Residential, commercial and Industrial Energy Use (Electricity, Natural Gas) - Passenger Vehicles, Mass transit - Solid Waste - Water and Wastewater
Goals	- 58% reduction by 2030 - Carbon neutral by 2050	- 20% below 2005 by 2020 - 80% below 2005 by 2050	- 20% below 2005 by 2020 - 80% below 2005 by 2050	- 25% below 2005 levels by 2020 - 40% below 2005 levels by 2030 - 80% below 2005 levels by 2050
Progress	5% Reduction from base year in 2016	-30.8% from base year	-21.4% from base year	-20% from base year as reported for 2015
Tool Used	ICLEI-USA's U.S. Community Protocol and the Global Protocol for Community Scale GHG Emission Inventories (GPC)	ICLEI USA's ClearPath software		ICLEI USA's ClearPath software
Source	Source	Source		Source

Section 8

TOP ACTIONS FOR EACH CATEGORY

Section 8

How to Read the Action Tables

The actions presented in this toolkit are oriented around five categories and two sources of emissions:

Five Categories of Actions:

Transportation & Land Use

Energy Use & Infrastructure

Green Building

Consumption & Waste

Forestry & Agriculture

Two Sources of Emissions:

Community-Wide Emissions
Emissions caused by activities within your community *(i.e. residential/commercial buildings, commuting, industry/manufacturing, agriculture, etc.)*

Government Operation Emissions
Emissions caused by city-owned and operated facilities, services, and activities
(i.e. buildings, fleet, commuting, business travel, purchasing, etc.)

Within each category, the actions presented will be sorted into four types:

- Policy Changes
- Programs/Actions
- Advocacy & Partnership
- Capital Investments

Each suggested action offers additional indicators to aid in decision-making, namely: resources required, reduction potential, and co-benefits. These will help local governments determine which actions make the most sense for their unique community.

As you will see, the proposed actions tend to orbit around a key theme: incentivize and promote the emissions-reducing behavior you want, while disincentivizing and demoting the behaviors that increase emissions. This is a good rule of thumb to utilize while developing your climate action plan.

Indicators to Consider When Identifying Actions for Your Local Government

(1) **Resources Required** – Relative cost and staff time associated with *the city's* implementation of the action. This indicator *does not* reflect the cost burdens that may be passed onto the "end user" as a result of the action.

(2) **Emissions Reduction Potential** – Impact potential as determined by comparing to King County's GHG emissions inventory. It is assumed that most cities will also identify buildings and transportation as their largest sources of emissions. Therefore, actions that affect the County's largest sources of emissions (energy, transportation) will have a higher emissions reduction potential.

Note: Government and Community-wide will be evaluated on their own respective scales due to their difference in magnitude. Community-scale reductions will always exceed reductions made at government operations.

(3) **Co-Benefits** – Additional benefits associated with the suggested action.

- *Cost Savings* – Relative ability to reduce costs (to the city, homeowners, businesses, etc.).
- *Economic Recovery & Growth* – Relative ability to retain or create jobs and attract industries.
- *Resiliency* – Relative ability to adapt and survive against extreme events (e.g., public health crisis, extreme weather events, or economic downturns).
- *Climate Justice & Equity* – Relative ability to influence/support the creation of equitable communities (e.g. affordability, health, and distributed economic opportunity).
- *Mobility* – Relative ability to influence/support accessibility, efficiency, and opportunities for people to move throughout a city.
- *Public Health* – Relative ability to influence/support the health and well-being of *all* residents.
- *Natural Environment* – Relative ability to positively influence/support undeveloped land (e.g., forests, wetlands, and habitats).

It is also important to note that some actions will align more closely with your local jurisdiction than others. Refer to the section Key Considerations for Choosing Actions for tips on aligning your top actions.

ACTIONS: Transportation & Land Use

The core objectives under the transportation category are to reduce vehicle miles traveled, improve fuel efficiency, enhance safe and effective public transportation, and transition to lower-emission vehicles such as electric vehicles (EVs). While our local communities recover from COVID-19, efforts in telecommute strategies and non-motorized corridors (i.e. converting streets to pedestrian only) may be greatly optimized while public health concerns about mass transit remain.

Related K4C Joint Commitments:	*Transportation & Land Use:* Align planning for employment, affordable housing, and mobility taking into consideration impacts to GHG emissions. Increase transit service and mobility with a goal of reducing countywide driving per capita by 20% by 2030 and 50% by 2050, compared to 2017 levels, understanding that different areas of the county have varying levels of transit access. *Clean Fuels & Electric Vehicles:* (1) Protect Federal Vehicle Efficiency Standards. (2) Adopt a regional or statewide Clean Fuels Standard that reduces transportation fuel emissions intensities by at least 20% by 2030, compared to 2017 levels. (3) Increase use of electric vehicles such that 100% of light duty vehicles, and at least 60% of medium duty, and 40% of heavy-duty vehicles are electric by 2050.

Below are the top actions in Transportation & Land Use for both community-wide emissions and government operations. For a full list of actions, see the Transportation section in Appendix A (link).

*Actions to Reduce **Community-Wide** Transportation Emissions*

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Alter **zoning and planning policies*** to: - Uphold the **Growth Management Act** to support mixed use and compact centers (also referred to as ten-minute communities where work, shopping, schools, and play are within ten minutes of where people live). - Utilize **equitable transit-oriented development (ETOD)** planning and investments to increase neighborhood density and use of public transit.	Med	High	Mobility, Climate Justice & Equity, Public Health

- **Prioritize transit accessibility** in geographic areas that have: high density; a high proportion of low-income people, people of color, people with disabilities; have limited mid-day and evening transit service to schools, jobs, and child care centers. - Use regulatory and voluntary tools to promote **affordable and accessible housing** development along existing and planned high capacity transit lines, frequent transit routes and in opportunity areas identified by the King County Housing Authority. - Integrate **Transportation Demand Management (TDM)** [definition] standards into Comprehensive Plan code changes for institutional and commercial development. - Consider evaluating urban areas that should **require high density units** and prioritize infill development to prevent sprawl. *Resource: PSRC's Regional Transportation Plan* **Consider the potential displacement effects of all policies and plans by identifying community-centered anti-displacement strategies and resources.*			
Use incentives to **encourage purchase of electric vehicles** (such as: sales tax rebates, incentivize dealerships, car rental agency incentives for EVs). Consider stronger incentives for low-income residents.	Med	Med	Cost Savings, Public Health
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Encourage and incentivize employers to offer **work from home and flexible work schedules**.	Low	High	Economic Recovery & Growth, Cost Savings, Resiliency, Public Health
Increase network of **safe bike lanes, boulevards, trails**; wider sidewalks; convenient transit stops; effective traffic signals.	High	Low	Mobility, Public Health
Dedicate right of way lanes for public transit (particularly Rapid Ride) and non-motorized transportation (biking).	Med	Med	Mobility
Expand incentives for **EV charging** for multi-family homes, major employers, and parking garages. Consider requiring EV infrastructure in all new commercial and multi-family construction. Allow regulation for EV charging in apartment buildings.	Med	Med	Mobility, Climate Justice & Equity
Educate freight operators & drivers on **fuel efficiency actions** such as: turn off their trucks/container delivery trucks/garbage trucks when parked and enforce a "non-idling"	Low	Low	Cost Savings, Climate Justice & Equity, Public Health

policy. Prioritize reducing **diesel particulate matter** on projects near disproportionally impacted populations and that advance environmental justice.			
Improve the **efficiency of freight movement** within and throughout the region (e.g. implement truck priority and smart pedestrian crossing technologies at traffic signals on key routes, develop freight consolidation centers, provide real-time traffic data/ information for logistics companies to plan around and alleviate congestion).	Med	Med	Cost Savings, Resiliency, Public Health
ADVOCACY/PARTNERSHIP	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Support **equitable travel demand management policies** at the County & State level: - Charge zones on main highways/roads + higher fees during peak hours - Charge tolls for passing into a central city + higher fees during peak hours - Charge vehicles per VMT (*Case Study: My OReGo, Oregon's opt-in VMT tax*) Consider sliding scale pricing based on level of income to ensure equitable outcomes.	Low	Med	Economic Recovery & Growth
Partner with public transport services, frontline community organizations, and strategic surrounding jurisdictions to **pilot new routes and diverse transit options** to improve efficiency, reliability, and service areas with a priority/focus on transit-dependent residents and low-income areas. Advocate at the state level for **continued funding** of Metro, METRO CONNECTS, Sound Transit and supporting services and infrastructure. *Resources: Vision 2050, Regional Transportation Plan, Transportation Improvement Program, KC Metro's Mobility Equity Cabinet*	Low	Med	Climate Justice & Equity, Mobility, Resiliency
Support the PSRC's Vision 2050 goal for 65% of population growth and 75% of employment growth to be **within walking distance of high-capacity transit**.	Med	High	Climate Justice & Equity, Mobility
Support a stronger regional or statewide Clean Fuels Standard that gradually reduces the pollutants and emissions from vehicles through transition to biofuels and electrification.	Low	High	Public Health
Partner with school districts to **electrify school buses and shuttles**.	Low	Med	Cost Savings, Public Health
Work with businesses to **incentivize transition to low-carbon or electric vehicles, esp.**: - Delivery vehicles and warehouse equipment and machinery. - Vehicle miles traveled (VMT) intensive services (home health, cleaners, landscapers)	Med	Med	Cost Savings, Public Health

*Actions to Reduce **Government Operation***
Transportation Emissions

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Update the city's **telecommuting policy** to foster increased utilization of this commute option whenever it meets city business needs.	Low	Med	Cost Savings, Public Health
Allow multiple teleconferencing options to employees and city stakeholders and offer **virtual options for all meetings by default**.	Low	Med	Cost Savings, Resiliency
Adopt a **business travel policy** to limit unnecessary air travel and inter-/intra-city travel (utilize teleconferencing instead); explore carbon offsets for remaining necessary travel.	Low	High	Cost Savings, Economic Recovery & Growth
Define and implement a **green vehicle selection process** and green fleet resources such as EPA's SmartWay Designation for new or vehicle replacements. Prioritize retiring fleet vehicles older than 10 years old and vehicles where an electric vehicle or hybrid replacement is available with a goal to reduce fleet emissions 45% by 2025.	High	Med	Cost Savings, Public Health
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Use fleet management and GPS tracking technology such as Telematics to **measure and manage fleet miles**. Identify **common routes/trips** and evaluate effectiveness or necessity of routes. Phase out or eliminate fleet vehicles that travel less than 200 miles per month.	Med	Med	Cost Savings
Train fleet drivers and employees **on best practices for fuel efficiency** such as: - Steady braking and acceleration - Removing excess weight such as bike/roof racks and unnecessary weight in trunks Encourage maintenance staff to utilize practices such as: checking for optimal tire pressure, maintaining air filters, using optimal air conditioning.	Low	Low	Cost Savings, Public Health
CAPITAL INVESTMENTS	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Install **electric car charging stations** in key city owned/operated parking facilities and public lands (public park parking lots, etc.).	Med	Low	Mobility

ACTIONS: Energy Use & Infrastructure

The core objectives under the Energy Use & Infrastructure category are to 1) reduce energy demand through efficiency and building upgrades, and then 2) transition to renewables to eliminate fossil fuel use wherever possible. The most impactful opportunities will be partnering to fund these improvements for low income residents and incentivizing businesses/commercial buildings to make these improvements in existing building stock.

In 2019, Governor Inslee signed into law the Clean Energy Transformation Act, establishing the framework for a 100% clean electricity supply. The Governor also signed the Clean Buildings Act, establishing energy efficiency standards for all commercial buildings over 50,000. The K4C was active in support of this legislation, and share the below action commitments on supply and efficiency:

Related K4C Joint Commitments:	*Energy Supply:* Implement the Washington State Clean Energy Transformation Act, which phases out coalfired electricity sources by 2025 and requires 80% carbon neutral electricity by 2030, and 100% clean electricity by 2045; limit construction of new natural gas based electricity power plants, and seek to establish a more resilient energy system.
	Energy Efficiency: Reduce energy use in all existing buildings 25% by 2030 and 45% by 2050 compared to 2017. Strengthen conservation, and use of renewable natural gas, and support the transition to electrical systems to reduce natural gas and other fossil fuel use in existing buildings by at least 20% by 2030 and 80% by 2050.

Below are the top actions in Energy Use & Infrastructure for both community-wide emissions and government operations. For a full list of actions, see the Energy section in Appendix A (link).

*Actions to Reduce **Community-Wide** Energy Use & Infrastructure Emissions*

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Remove barriers for installing **residential & small business renewable energy** systems, as well as community solar (streamline permitting, lower fees, etc.). The SolSmart program provides guidance and recognition.	Low	Med	Economic Recovery & Growth, Resiliency, Public Health
Require **building energy performance disclosure*** and benchmarking from all privately-owned commercial buildings by 2030 (at a minimum, any multi-family or non-residential over 20,000 sq. ft) and set a maximum target for energy per sq. ft. by a determined year.	Low	High	Resiliency, Cost Savings

**Existing policy requires benchmarking of building over 50,000 sq. ft by 2026. Incentives available for buildings that adopt early.*			
Mandate **proper use, monitoring, and disposal of refrigerants*** in commercial and residential buildings. **Refrigerants such as HFCs are found in air conditioners, heat pumps, refrigerators.*	Low	Med	Cost Savings, Economic Recovery & Growth, Public Health
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Support increased awareness of **incentives available for early action** under the Clean Buildings Act which requires commercial & multi-family buildings over 50,000 sf to conduct audits and perform **deep EE design and retrofits** to meet goals. Prioritize low- and no-cost **home retrofit packages** for low-income and marginalized communities.	Med	High	Cost Savings, Climate Justice & Equity, Resiliency
Incentivize a full transition to **electric or solar thermal heating/cooling and electric water heating** (solar or heat pumps) for existing commercial and residential buildings by a determined year (e.g. 2040). Strategies include adding permit fees for natural gas units while providing property tax exemptions for electric units. Provide funding (rebates and incentives) to prioritize inefficient low-income housing.	Med	Med	Cost Savings, Public Health, Climate Justice & Equity, Economic Recovery & Growth, Resiliency
Encourage businesses, large energy users, and residents to enroll in **Puget Sound Energy's (PSE)** Green Power Program *(only applicable to PSE customers).*	Low	High	Public Health
ADVOCACY/PARTNERSHIP	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Advocate for a **market-based price on carbon** that fits the needs of your local government and enables a portion of the revenue to be reinvested in climate action.	Med	High	Economic Recovery & Growth
Establish long-term partnerships with contractors and utilities to **coordinate equitable access** for residents and businesses to resources such as: - Energy-efficiency resources and incentives - Financial assistance and alternative financing - Outreach and education Support use of tools and strategies to engage impacted communities and ensure economic, social and environmental benefits are shared with marginalized communities. Offer resources in all relevant languages and articulate the connections between energy, climate change, and equity to expand frontline community members' knowledge.	Med	High	Cost Savings, Economic Recovery & Growth, Climate Justice & Equity

ADVOCACY/PARTNERSHIP CONTINUED	Resources Required	Emissions Reduction	Co-Benefits
Partner with utilities to promote **existing energy incentive programs** in the residential sector. These programs help reduce upfront costs for investing in more efficient equipment and home improvements. *Resource: Puget Sound Energy Rebates, Seattle City Light Incentives*			
Partner with utilities and contractors to help **businesses and school districts improve efficiency and upgrade equipment** that improves affordability, comfort, indoor air quality and energy efficiency in all commercial/multi-family buildings and schools.	Low	Med	Cost Savings, Economic Recovery & Growth, Resiliency
Support the development of **community solar projects*** that benefit all residents, particularly communities of color, low-income populations, and members of limited-English-speaking communities. **Community solar projects typically build large solar facilities and let residents purchase a portion of the energy generated, improving solar access for all residents (especially those in rental housing).* *Resource: Spark Northwest (also supports Solarize Campaigns)*	Low	Med	Economic Recovery & Growth, Climate Justice & Equity, Resiliency
Continue to support development of **local and regional biogas resources**, including anaerobic digestion of food scraps, while minimizing disproportionate impacts on low-income populations and communities of color by engaging with frontline community groups and using best available data. Emphasis on restaurants, cafeterias, educational/corporate campuses, food banks and other food handling facilities.	Low	Low	Cost Savings, Climate Justice & Equity, Economic Recovery & Growth, Resiliency

*Actions to Reduce **Government Operation***
Energy Use & Infrastructure Emissions

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Establish a **purchasing policy** to require any capital upgrade projects to consider the most efficient equipment available within reasonable cost. *Resources: King County Sustainable Purchasing Guide, King County Recommended Ecolabels*	Low	Low	Cost Savings
Incorporate **total cost of ownership** into energy purchasing decisions to factor in both capital and operational costs. Require use of an **Embodied Carbon Calculator** for all public projects and government-operated development. *Resource: EC3 Embodied Carbon in Construction Calculator*	Med	Med	Cost Savings
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Overall Management			
Create an **energy task force** to identify all opportunities to save money through smarter actions internally. Share **energy management practices** with all departments.	Med	Med	Cost Savings
Conduct **energy audits** in all city owned and operated buildings, partner with the local utility and private contractors.	Low	Med	Cost Savings
Establish **energy consumption baseline** for all owned & leased buildings and develop energy reduction goals and targets (utilize Energy Star score from EPA's Portfolio Manager).	Med	Low	Cost Savings
Join **Puget Sound Energy's (PSE) Green Power Program**. *Only available to PSE customers.*	Low	High	Climate Justice & Equity
Heating & Cooling			
Work with **facility managers to ensure regular HVAC maintenance**, cleaning of air ducts, evaporator and condenser coils on heat pumps, air-conditioners, or chillers are conducted in a timely manner – quarterly or seasonally. Specifically ensure: - Schedule HVAC system setbacks in all owned and leased buildings to turn off overnight and on weekends - Encourage staff to lower shades in the summer to reduce A/C demand - Visually inspect insulation on all piping, ducting and equipment for damage - Check for air leakages in window/door frames or cracked seals. - Shorten the preventive maintenance intervals specifically for HVAC systems	Low	Med	Cost Savings, Resiliency

ACTIONS/PROGRAMMING CONTINUED	Resources Required	Emissions Reduction	Co-Benefits
Enable **consistent power management settings** across workgroup for all computers and related devices: - Monitor shut-off enabled after ten minutes of inactivity - Sleep mode enabled after 20 minutes of inactivity - Hibernate mode enabled after 45 minutes of inactivity - Sleep/energy-saver mode enabled on all copiers/ printers - Install energy saving software that puts computers into sleep mode, but can turn on when IT downloads security patches and updates overnight	Low	Low	Cost Savings
CAPITAL INVESTMENTS	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Make energy efficiency improvements to upgrade equipment or improve building envelope/insulation/weatherization. **Utilize King County's C-FRED program low-interest loan funds**, pursue state grants in coordination with an energy services contractor, or leverage Department of Commerce grant programs. High efficiency options include: - Replace HVAC systems operating over 10-15 year period or systems using R-22 refrigerant with Ammonia based refrigerants - Replace windows with multi-pane energy efficient windows - Update to programmable thermostats with energy management software - Install Variable Frequency Drives (VFD) for HVAC, fans and pumps systems to draw energy based on occupancy	Med	Med	Cost Savings
Implement retro commissioning (improving the efficiency of existing equipment/systems) that improves affordability, comfort, indoor air quality and energy efficiency in all owned & operated buildings.	Med	Med	Cost Savings, Resiliency
Install **motion sensors** for all indoor lighting in owned buildings and **automatic timers** on all equipment and appliances that can be turned off at night rather than standby.	Low	Low	Cost Savings

ACTIONS: Green Building

The core objective under this category is to update existing building stock to the most efficient technology available and mandate new buildings to be built to high efficiency standards – this includes both equipment and building materials (taking into consideration embodied carbon). These actions will both reduce energy and water demand and improve the health/living conditions of occupants. Alongside recent updates to the state energy code addressing new construction, the most impactful opportunities will be retrofitting old buildings, installing Building Automation Systems, and improving Construction and Demolition waste diversion.

While reducing the energy use of buildings is the priority, it is important to remember that creating potable water and processing wastewater both require tremendous energy, therefore reducing demand for and investing in the operational efficiency of municipal systems will also yield GHG savings.

Related K4C Joint Commitment:	*Energy Code:* Implement Washington State Energy Code* which requires new buildings constructed to move incrementally towards stronger efficiency performance including 70% energy reduction and net-zero GHG emissions in new buildings by 2031. *This is a state requirement.

Below are the top actions in Green Building for both community-wide emissions and government operations. For a full list of actions, see the Green Building section in Appendix A (link).

*Actions to Reduce **Community-Wide** Green Building Emissions*

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Adopt local amendments to the **WA State Building Code Council** that go above and beyond the WA State Energy Code to mandate advanced energy performance standards and low carbon design for new and renovated commercial and multi-family buildings. Incentivize similar goals for residential (cities do not have jurisdiction over residential code). For example: - Require **electric heating/cooling** and electric water heat pumps in all new builds or renovations (no new natural gas)	Low	High	Cost Savings, Economic Recovery & Growth, Resiliency

- Require new buildings be **solar ready and EV charging ready** (consider including buildings undergoing deep retrofits as this is another good time to make changes) - Require adequate room for three separate collection **waste bins** - Incentivize development of rooftop and parking lot **rain gardens & rain walls** - Allow for **water/wastewater reuse** (including reusing greywater*) - Rainwater catchment systems (cheap, easy to install) for landscape irrigation, etc. - Ban installation of **septic tanks where not connected to public sewer systems** - Incentivize 1.28 gpf or lower **toilets** and 1 pint for urinals - Strengthen standards to **nationally recognized codes** for wildfire and flood risk areas **Greywater is gently used potable water, such as from washing machines, sinks, and showers that can be reused for non-potable water uses such as toilets and landscaping.*			
Provide incentives for the **development of LEED** or other high-performance certified commercial buildings (e.g. expedited permitting, tax credits, and permit fee reductions/waivers) with a goal to achieve net zero GHG in new buildings by 2031. *Resources: Getting started with LEED and Built Green*	Med	Med	Cost Savings, Resiliency, Public Health
Adopt policies that require owners of buildings over a certain size (such as 50,000 sq. ft) to **manage their own stormwater runoff**. Consider requiring **permeable pavement** by a target year.	Low	Med	Resiliency, Natural Environment
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Utilize current science, best practices, and updated maps of **urban heat islands** and vulnerable populations to help inform decisions and priorities about projects and programs that help to cool the urban environment. Incentivize solutions that reduce heat islands including **tree canopy, green roof rain gardens, white roofs, and less parking**.	Med	Med	Cost Savings, Resiliency, Climate Justice & Equity, Public Health, Natural Environment
Reward building owners* for achieving high performing energy and water efficiency standards for industrial, commercial, multi-family, and residential buildings. **Rewards may include recognition, benefits through fee structure, expedited permitting, financial awards, etc.*	Med	Med	Cost Savings, Climate Justice & Equity
Utilize educational campaigns to encourage **low-impact, drought-resistant landscape development and design** for residential and commercial property to lower demand on stormwater systems and improve soil sequestration.	Low	Low	Cost Savings, Resiliency, Natural Environment

ADVOCACY/PARTNERSHIP	Resources Required	Emissions Reduction	Co-Benefits
Join the **Regional Code Collaboration** and K4C to actively participate in revising the **Washington building code** to incorporate performance that targets net-zero energy and strengthen building and residential energy codes.	Low	High	Resiliency
Partner with **housing authorities and other affordable housing providers** to educate and encourage retrofits to existing, old building stock. Use meaningful, inclusive, and community-driven approaches to develop implementation strategies that serve low- and no-income people, BIPOC, immigrants and refugees, people with disabilities, and limited-English-speaking communities in ways that work for them.	Low	Med	Cost Savings, Climate Justice & Equity, Economic Recovery & Growth, Resiliency
Work with **landscape companies** to educate and incentivize smart irrigation management and technology, including greywater use for subsurface irrigation.	Low	Med	Cost Savings, Resiliency, Natural Environment
Support development of a **C-PACER*** program in King County. **The Commercial Property Assessed Clean Energy and Resiliency (C-PACER) program, or House Bill 2405, was signed into law June 2020. PACER programs enable the financing of building improvements, such as energy efficiency upgrades, renewable energy improvements, water conservation, and resiliency retrofits to address vulnerabilities to earthquakes and other natural disasters.*	Med	High	Cost Savings, Economic Recovery & Growth, Climate Justice & Equity

*Actions to Reduce **Government Operation***
Green Building Emissions

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Require construction of new government buildings to meet highly efficient, **net zero carbon standards** by a determined date using standards such as LEED Zero. Adopt or replicate King County's Equity and Social Justice requirements into green building policies.	High	Med	Resiliency, Climate Justice & Equity, Public Health
Adopt **King County's Construction & Demolition waste diversion requirements**.* Utilize financial levers such as: added fees, reduced fees, expedited permitting, diversion credits, etc. Prioritize contractors who use **salvaged/recycled materials**. **Minimum of 80% Diversion currently, 85% in 2025, and Zero Waste of Resources by 2030.*	Med	Med	Economic Recovery & Growth, Natural Environment
Support policies, tools and programs to reduce construction-related emissions, **including sourcing low embodied carbon materials** such as cross laminated timber* (CLT) for all building projects when available and within a specified cost margin. **CLT has lower embodied carbon as compared to concrete and steel. Is only applicable in heavy timber-framed construction.* *Resource: EC3 Embodied Carbon in Construction Calculator*	Med	Med	Resiliency, Natural Environment
Require **permeable pavement** for all new construction & remodels to reduce stormwater runoff and costs. Determine a minimum percent of stormwater that should be managed with **impervious surfaces, Salmon-Safe standards,** and sustainable stormwater strategies by 2030.	Low	Med	Cost Savings, Resiliency, Natural Environment
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Establish an **energy & water baseline** for government operations and develop reduction goals and targets.	Med	Low	Cost Savings
Pilot programs on government-owned property or joint developments that meet the criteria of **Living Building Challenge** and **Living Community Challenge** standards. *Case Study: zHome in Issaquah*	Med	Low	Resiliency, Public Health

ACTIONS/PROGRAMMING CONTINUED	Resources Required	Emissions Reduction	Co-Benefits
Identify costs of **landscape maintenance** (water, service crew, etc.) and work with landscapers to transition to **native, drought-tolerant landscapes** and use smart infrastructure* when needed during first establishment phase. Intention is to keep valuable partners but educate and transition them to new practices. **Smart infrastructure: drip irrigation and smart controllers that integrate rain sensors.*	Low	Med	Cost Savings, Resiliency
Install **rain gardens and rain catchment systems** to reduce stormwater runoff. Collected rainwater can be used for landscape maintenance.	Med	Low	Cost Savings, Resiliency
CAPITAL INVESTMENTS	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Adopt **Building Automation Systems (BAS)*** for all new construction and upgrade system controls for existing buildings. *Examples of BAS: motion sensor lighting, temperature sensors, ventilation controls, etc.	Med	Med	Cost Savings
Install technology such as infrared cameras to **track methane and refrigerant leaks** in high-risk buildings (landfill processing plants, cement producers, agricultural facilities).	Med	Med	Cost Savings, Resiliency

Does your city manage its own municipal water system? Here are some additional ways to reduce the demand on your systems and improve their efficiency:

- Work with **golf courses, water parks, and laundromats** to reduce water use and utilize recycled water when safe to reduce demand on systems.
- Make improvements for **treating sewage & sludge** and install organic processing technologies (such as anaerobic digesters) to optimize use for energy generation and phosphate recovery.
- Dedicate stormwater funds to maintain a **sustainable source of funding for natural solutions** to stormwater management.

ACTIONS: Consumption & Waste

The core objectives under the Consumption & Waste category are to alter the consumption habits of businesses and residents and to reduce waste generation. As demonstrated by the King County Consumption Based GHG Inventory, the embodied carbon emissions of the products we purchase have a significant impact on our climate. Reducing consumption and improving waste diversion not only supports emissions reductions but will also lead to cost savings in the disposal, sorting, and handling of this waste as well.

Local governments have authority over the availability of residential and commercial recycling and composting. Local governments can also encourage and invest in distributed waste management (i.e. anaerobic digestion technology) as well as platforms that incentivize industrial waste reuse and sharing economy principles.

Related K4C Joint Commitment:	*Consumption & Materials Management:* Achieve a 70% curbside recycling rate countywide; by 2030, achieve zero waste of resources for materials that have economic value for reuse, resale, and recycling.

Below are the top actions in Consumption & Waste for both community-wide emissions and government operations. For a full list of actions, see the Consumption & Waste section in Appendix A (link).

*Actions to Reduce **Community-Wide** Consumption & Waste Emissions*

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Mandate recycling and composting & enforce segregation/sorting* by an identified year (especially for multi-family buildings and commercial properties where contamination is high). Use education and incentives to guide building owners, operators and residents to achieve the goal. *Partner with waste haulers who know which routes have the most contamination	Med	Med	Economic Recovery & Growth
By 2030 achieve **Zero Waste of Resources that have economic value** (across all generated sources including commercial, households, construction etc.) in line with King County's waste diversion policy.* *Includes milestones of 85% diversion by 2025	Med	High	Cost Savings, Economic Recovery & Growth, Natural Environment

POLICIES CONTINUED	Resources Required	Emissions Reduction	Co-Benefits
Adopt policies consistent with the **Responsible Recycling Task Force** to deliver a more harmonious and effective regional recycling system.	Low	Med	Cost Savings, Economic Recovery & Growth, Resiliency
Adjust zoning requirements, lower barriers, and increase incentives for **industrial centers** to more easily **share/reuse/recycle waste** (metal/cardboard/plastics, heat, water, etc.) – often referred to as industrial symbiosis or eco-parks.	Low	High	Cost Savings, Economic Recovery & Growth, Resiliency
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Provide incentives (tax breaks, stipends, etc.) for businesses that **purchase locally made, low-carbon, and/or sustainable materials and equipment** to offset potentially higher costs.	Med	Med	Economic Recovery & Growth
Develop an educational campaign to help consumers consider and evaluate the **total life cycle** of common goods and purchases (includes production, packaging, shipping, end of life recycling, etc.).	Med	Low	Natural Environment
Increase **education and awareness of waste diversion opportunities** for common residential waste products that have significant climate benefits such as food waste. - Ensure **equitable access** to waste education through multi-lingual and targeted campaigns for multi-family renters/landlords, large families, and limited English proficiency. Consider co-creating culturally relevant signage with community members. - Provide **online and print resources** to help businesses and residents identify organizations that will take used furniture, equipment, and other household items. Prioritize large businesses and multi-family units. - Share and disseminate resources through **trusted community partners**.	Med	Low	Cost Savings, Economic Recovery & Growth, Climate Justice & Equity
Partner with frontline communities to **support a regenerative and sustainable local zero waste food economy** that prioritizes the physical and economic vitality of communities, health of food ecosystems, and well-being of food/farmworkers.	Med	High	Cost Savings, Economic Recovery & Growth, Resiliency, Climate Justice & Equity
Work with local businesses and industries to create a **waste exchange system** for items that typically end up in the waste stream. Conduct a **waste stream mapping exercise** with large businesses to find reuse/repurpose opportunities.	Low	Medium	Cost Savings, Economic Recovery & Growth, Resiliency, Natural Environment

ADVOCACY/PARTNERSHIP	Resources Required	Emissions Reduction	Co-Benefits
Partner with **schools to develop curriculum** around sustainable practices, from proper waste segregation to resource conservation and best practices for emissions reductions.	Low	Med	Cost savings
Work with waste utilities to expand separation and processing of **organic waste** (includes waste to-energy from methane capture, biogas, plasma gasification, etc.) and make storage and pickup available to all sectors.	Low	Medium	Cost savings, Economic Recovery & Growth
Develop awareness campaign and support pilot projects for **small scale distributed organic processing facilities** (including anaerobic digestion) for organic waste in key industries (near restaurant hubs, hospitals, educational/corporate campuses, food banks, detention centers).	Low	Medium	Cost Savings, Economic Recovery & Growth, Resiliency

*Actions to Reduce **Government Operation***
Consumption & Waste Emissions

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Adopt a **sustainable purchasing policy**. Buy products with environmental standards and certifications. These products are identifiable by their certification mark or "ecolabels" (e.g., Energy Star, EPEAT, Green Seal). Additional considerations: - Include a clause for choosing ground vs. two-day shipping when possible - Choose products that have less packaging - Opt for bulk serving sizes vs. single serve (e.g. creamer, sugar, condiments, etc.) *Resources: King County Sustainable Purchasing Guide, King County Recommended Ecolabels*	Medium	Medium	Cost Savings
Switch to digital for all internal and external paper uses when feasible. - Internal: HR paperwork, meetings, presentations, reports, invoices, etc. - External: Invoices, payments, contracts, digital signatures, etc.	Low	Low	Cost Savings
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Conduct a **waste stream audit*** to determine annual landfill waste generated vs. waste diverted (recycling and composting) by total volume and costs. Then act upon the data to improve waste diversion (may include clear signage, changes to purchasing, etc.). **Waste stream hauler may be able to give you this information if requested*	Low	Low	Cost Savings
Identify partners that will purchase or receive (as donation) **salvaged materials*, furniture, and equipment** from renovated buildings or whenever there is furniture turnover (new office chair, etc.) **Salvaged materials may include: brass fixtures, steel piping, furniture, etc.*	Med	High	Cost Savings, Natural Environment, Economic Recovery & Growth

ACTIONS: Forests & Agriculture

The core objectives under the Forests & Agriculture category are to (1) ensure responsible and resilient land use practices, (2) expand green spaces, and (3) let natural systems reduce the impacts on land and climate as the County continues to grow.

Local governments can develop strategies that increase tree canopy cover and improve the resiliency and health of natural green spaces. They can also advocate for stronger agricultural practices that improve soil sequestration and reduce chemical use.

Related K4C Joint Commitment:	*Forests & Farming*: Reduce sprawl and associated transportation related GHG emissions and sequester biological carbon by focusing growth in urban centers and protecting and restoring forests and farms.

Below are the top actions in Forests & Agriculture for both community-wide emissions and government operations. For a full list of actions, see the Forests & Agriculture section in Appendix A (link).

*Actions to Reduce **Community-Wide** Forests & Agriculture Emissions*

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Require developers to **replace the sequestration equivalent** of any trees removed from the land. Take into consideration tree age, diameter size (relative to a specific height), species diversity and distribution.	Med	Med	Natural Environment, Resiliency, Public Health
Require and promote urban design and redevelopment approaches that **incorporate natural systems and green infrastructure** into site improvements, urban parks, rights of way, green corridors, and other infrastructure facilities. Collaborate authentically with frontline communities that are in the greatest need of green infrastructure to develop equitable strategies for implementation. *Resource: Regional Open Space Conservation Plan*	Med	High	Economic Recovery & Growth, Resiliency, Climate Justice & Equity, Natural Environment
Utilize and expand **Transfer of Development Rights (TDR)** initiatives that focus development within urban and developed areas.	Low	Med	Natural Environment, Resiliency, Climate Justice & Equity

ACTIONS/PROGRAMMING	Resources Required	Emissions Reduction	Co-Benefits
Continue to utilize and pilot **Urban Forest Carbon Offset** projects. Sustain and grow King County's Forest Carbon Program so it contributes substantively toward acquisition costs.	Low	Med	Economic Recovery & Growth, Resiliency, Natural Environment
Incentivize **alternative silvicultural* practices** of both public and private lands to enhance carbon sequestration potential (KC Forest Carbon Program, Public Benefit Rating System). **Silviculture is the practice of managing the growth and composition of forest vegetation*	Med	Med	Resiliency, Natural Environment, Public Health
Develop a plan to **increase tree canopy** within the city. Prioritize areas subjected to high urban heat island effect. Consider engaging residents on open space restoration efforts through Forterra's Green Cities program. *Case Study: Redmond Strategic Plan*	Med	High	Resiliency, Natural Environment, Public Health, Climate Justice & Equity
Support and contribute to King County's Goals to **Plant/Protect/Prepare 3 million trees*** **Goal is to plant 500,000 trees by 2025, protect 6,500 acres of open space by 2025, and prepare for climate change by doubling rate of restoration to 200 acres/year*	High	High	Resiliency, Natural Environment, Public Health
ADVOCACY/PARTNERSHIP	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Partner with King Conservation District to expand forest and farm stewardship through their incentives, grants, and farm management planning programs.	Med	Med	Natural Environment, Climate Justice & Equity
Advocate for more stringent conservation laws around **agricultural practices and farmlands** to improve the sequestration potential of the land. Partner with farmers to enhance dialogue and remove barriers for **high carbon sequestering land use*** and maintenance. **Public Benefit Rating System / Current Use Taxation Program*	Med	Med	Resiliency, Natural Environment, Climate Justice & Equity

*Actions to Reduce **Government Operation***

Forests & Agriculture Emissions

POLICIES	Resources Required	Emissions Reduction	Co-Benefits
Incorporate **environmental justice criteria** and priorities into zoning, land use planning, permitting policies, and development of new projects. Address disparities in public health impacts using best available data.	Low	Low	Natural Environment, Climate Justice & Equity, Resiliency
Protect and enhance **local natural resources** (water bodies, flood plains, healthy soils, natural areas, vegetated areas and corridors) **that provide multiple benefits*** (carbon capture; reduce flood, landslide, stormwater and heat island impacts; cool and purify water and air; and improve public health and biodiversity).	Med	High	Resiliency, Natural Environment, Public Health
ACTIONS/PROGRAMMING	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Create **stewardship plans** for all city-owned/managed farmland and forested sites above an appropriate threshold.	Low	Med	Natural Environment, Economic Recovery & Growth
CAPITAL INVESTMENTS	**Resources Required**	**Emissions Reduction**	**Co-Benefits**
Evaluate the **sequestration potential** of existing public lands and invest in changes/recommendations that enable high sequestration levels (carbon sinks), particularly mature, temperate conifer forest land.	Med	High	Resiliency, Natural Environment

Section 9

CONCLUSION

Section 9

Conclusion

The impacts of climate change are already affecting our region, with extreme heat waves, heavier rainfall, and wildfire smoke leading to increased health disparities and risks to community safety. Local governments must engage in decisive, consistent, and collective action when approaching issues of such scale and importance to the well-being of residents. This Toolkit provides a path for action that all cities can leverage to contribute to the region's collective efforts of meeting the shared countywide GHG reduction goals.

By pursuing and implementing the policy changes, programs, and investments recommended in this Toolkit in an equitable manner, cities can:

- Slow the impacts of climate change on our communities, especially those disproportionately impacted
- Reduce economic, environmental, and social vulnerabilities
- Expand living wage jobs and stimulate economic growth for local and small businesses
- Improve our region's air and water quality
- Lessen our impact on the natural environment
- Preserve and protect open spaces that sequester carbon and contribute to quality of life
- Increase mobility through thoughtful land use and development, and increased options to travel, including transit, walking, and biking.

Acting on climate change does not mean recreating the wheel. Many cities in King County have already taken substantial action, and many others are just beginning their journey. There are lessons learned, best practices, and existing materials already available to help your city take action and advance our region's efforts on climate change. In addition to this Toolkit, there are many local, state, and national organizations and well-researched resources to help support your city's climate action journey. These have been collated in Appendix C. The King County-Cities Climate Collaboration also shares knowledge and resources to reach the shared countywide emission reduction targets.

Decisive, urgent actions are necessary to help curb the effects of climate change. Acknowledging that each city has a unique emissions profile and limited resources with which to affect a plan, the guidance provided in this Toolkit will help each city to customize their contributions for maximum impact, ultimately achieving our countywide goals.

Section 10

APPENDIX

Section 10

Appendix

Use the below links to help you navigate through the Appendix.

Appendix A: Funding Opportunities

Geographic Reach	Organization	Type of Funding ** Current as of July 2020. These links are subject to change.*	
Regional	Forterra Strong Communities Fund	A social investment fund dedicated to keeping our region inclusive and welcoming to all -- secures properties for community space, affordable housing and small businesses in areas under intense development pressure	
	King County	C-FRED program Conservation Futures (CFT) WaterWorks	
	Georgetown Climate Center	Information and resources on Local, State, Federal, Government, and Private funding and financing options Urban Heat Adaptation	
	Community Development Block Grant (CDBG) Programs	The CDBG Program provides annual grants on a formula basis to states, cities, and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for low- and moderate-income persons	
	RCAC Environmental Infrastructure Loan Program	Rural Community Assistance Corporation helps create, improve or expand the supply of safe drinking water, waste disposal systems and other facilities that serve communities in the rural West. Feasibility Loan Application & Checklist	
	Tribal Climate Change Funding Guide	Up-to-date information on grants, programs and plans that may assist tribes in addressing climate change through a broad range of sectors	
State	Department of Commerce	Various proposal requests	Clean Energy Fund Building Infrastructure Energy Efficiency and Solar Grants
	Access Washington Grants and Loans	Agriculture and Farmland Protection Clean Air Conservation and Restoration Environmental Education and Outreach Flood Prevention and Recovery Invasive Species	Planning Recreation Rural and Urban Forests Waste Management and Toxic Control Water, Sewer, and Transportation Infrastructure

	WA Dept of Ecology Grants & Loans	Air & Climate Water & Shorelines	Spills & Cleanup Waste & Toxics
	LOCAL Program	Local Government Efficiency (Loan)	
	WA Corporate Giving Programs	A list of corporations that have either direct giving programs, foundations, sponsorship programs, in-kind donations, product donations, volunteer programs, or matching gift programs	
	University of Washington	Grants for Sustainability (required to have student involvement) Corporate and Foundation Funding Opportunities	
	Solar Washington	Northwest Energy Efficiency Council Tool Lending Library University of Washington Clean Energy Institute	
National	Database of State Incentives for Renewables & Efficiency (DSIRE)	Renewable Energy, Energy Efficiency, Green Building, and more	
	USDA Natural Resources Conservation Service	Agricultural Management Assistance Program Conservation Innovation Grants	Conservation Stewardship Program Environmental Quality Incentives Program
	Federal Emergency Management Agency (FEMA) *under Dept of Homeland Security*	Preparedness Grants Hazard Mitigation Grant Program (HMGP)	Pre-Disaster Mitigation Grant Program (PDM) Flood Mitigation Assistance Grant Program (FMA)
	EDA Funding Opportunities	Economic development programs, natural disaster relief, public works and economic adjustment assistance	
	ICLEI Climate Finance	Transformative Actions Program (TAP)	
	EPA Research Grants	Air Research Grants Climate Change Research Grants Ecosystems Research Grants Health Research Grants	Safer Chemicals Research Grants Sustainability Research Grants Water Research Grants Specific EPA Grant Programs
	EPA Smart Growth Grants and other Funding	Green Infrastructure Affordable Housing and Community Development Brownfields (additional funds) Energy Environmental Justice Foundations General Smart Growth or Environmental	Historic Preservation Land Preservation and Conservation Rural and Agricultural U.S. Department of Agriculture: Transportation (includes trails, bike, pedestrian) Water Quality, Wetlands, and Coasts

Appendix B: Resources to Help Calculate a GHG Inventory

The below tools and resources will help you calculate a GHG Inventory:

Tools to Help You Calculate Emissions	• *ICLEI: Local Governments for Sustainability* is an international network of regional governments committed to sustainability development and action. It represents over 100+ countries to promote local action for sustainability and also offers tools, resources that drive local action and policy development. ICLEI USA specifically serves US local governments to pursue sustainability and GHG reduction. ○ Clear Path is ICLEI's tool for US cities and provides an online software tool at: https://icleiusa.org/clearpath/ • *C-40*: A climate leadership group that comprises a network of the world's megacities committed to addressing climate change both locally and globally. They provide GHG Inventory calculation support through their Measurement & Planning program here: https://www.c40.org/programmes
Tool for Calculating Gov. Operations Emissions Only	▪ *EPA simplified GHG emissions calculator (SGEC)* is designed to develop an annual GHG inventory based on the EPA Climate Leaders Greenhouse Gas Inventory Protocol and is tailored for organizational operations. Preferable for cities who are just getting started on their GHG inventory calculation and have limited resources. This tool supports GHG inventory compilation at an operations level and is not suitable for community-wide GHG inventories. It is a free online resource. https://www.epa.gov/file/simplified-ghg-emissions-calculator
Globally Recognized Framework to 'Do It Yourself'	• *Global Protocol for Community Scale GHG Emission Inventories (GPC)*: A global framework for cities and local governments, providing a robust, transparent and globally accepted set of principles and guidelines to support measurement, monitoring and reporting of a city's GHG inventory. The tools by both ICLEI and C-40 follow the GPC framework and the framework was developed jointly by the GHG Protocol (by WRI[1]), ICLEI and C-40. https://ghgprotocol.org/greenhouse-gas-protocol-accounting-reporting-standard-cities

[1] World Resources Institute: WRI is a global research organization. The GHG Protocol is a partnership of businesses, non-governmental organizations, governments, and others convened by WRI and the World Business Council for Sustainable Development to develop internationally-accepted GHG accounting and reporting standards and tools.

Appendix C: Additional Resources

The below resources are available to local governments for guidance, support, and resources to help you reach your climate goals.

Organization	Brief Overview	Specific resources
King County	King County is the 12th most populous county in the US, and is committed to taking bold action on climate change by reducing greenhouse gas emissions, preparing for climate impacts, and strengthening communities across the region. www.kingcounty.gov	Climate Action • King County-Cities Climate Collaboration (K4C) • Strategic Climate Action Plan (SCAP) • King County Renewable Electricity Transition Pathways • Case studies from K4C partners • GHG Emissions in King County: 2017 Inventory Update, Contribution Analysis, and Wedge Analysis • Sustainable Purchasing Guide • Blueprint for Addressing Climate Health Community Outreach and Equity • Equity and Social Justice Strategic Plan 2016-2022
Seattle	The City of Seattle released a climate action plan to be a national leader in fighting climate change. It is a set of short- and long-term actions that provide a roadmap for our city to act in the absence of federal leadership, particularly on leading contributors of greenhouse gases: transportation and buildings. www.seattle.gov	Climate Action • Getting to Zero: A Pathway to a Carbon Neutral Seattle (2011) • Seattle Climate Action (2018)
ICLEI Local Governments for Sustainability USA	ICLEI - Local Governments for Sustainability is a global network of local governments dedicated to sustainability, resilience, and climate action, with more than 1,500 cities, towns, and counties around the globe. ICLEI provides resources and technical guidance to help local and regional authorities reach their goals and connects leaders to share solutions and accelerate progress. www.ICLEIUSA.org	Climate Action • Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments (2007) • Localizing the Paris Agreement: A Guide for Local Government Action in Support of the US Nationally Determined Contribution • Toward 1.5 Degrees (2016) • Measuring Up: How US Cities are Accelerating Progress Toward National Climate Goals (2015) • What's Driving Changes in Local GHG Emissions? Results from Contribution Analysis (2018) Community Outreach and Equity • Climate Equity • Five Milestones Framework • Communication Guidance for City and Community Leaders

Organization	Brief Overview	Specific resources

USDN urban sustainability directors network	The Urban Sustainability Directors Network (USDN) is a peer-to-peer network of local government processionals. www.usdn.org	• Carbon Neutral Cities Alliance: Framework for Long-Term Deep Carbon Reduction Planning
		  ○ Tips and best practices on implementation
		  ○ Further resources and tools
		• Sustainable Procurement Playbook for Cities
		  ○ Aimed at strengthening sustainable purchasing efforts

climate solutions accelerating the transition to our clean energy future	Climate solutions is a Northwest-based clean energy economy nonprofit. www.climatesolutions.org	• Resources on specific subject areas • Financing towards a clean energy economy
CAN CLIMATE ACTION NETWORK USCAN CLIMATE ACTION NETWORK	Climate Action Network (CAN) works to promote government and individual action to limit human-induced climate change to ecologically sustainable levels. There are both CAN International and US Climate Action Networks. www.usclimatenetwork.org/	• US CAN Strategic Plan 2017-2022

UNIVERSITY of WASHINGTON
CLIMATE IMPACTS GROUP
	The UW Climate Impacts Group supports the development of climate resilience by advancing understanding and awareness of climate risks and working closely with public and private entities to apply this information as they act to shape society's future. cig.uw.edu	• No Time to Waste: The IPCC's Special Report on Global Warming of 1.5°C and Implications for WA State
		• UW Climate Impacts Group Analysis Tools
		  ○ Sea level rise in WA
		  ○ Tribal climate projections
		  ○ Temperature/precipitation trends
		  ○ Change in climate in the NW
		  ○ Change in heavy rains in western WA
		  ○ Wildlife impact in WA/BC region

PugetSoundSage Growing communities where all families thrive.	Puget Sound SAGE combines research, innovative public policy and organizing to ensure all people have an affordable place to live, a good job, a clean environment, and access to public transportation. https://www.pugetsoundsage.org/	• Powering the Transition • Equitable Development • Healthy Environment

Organization	Brief Overview	Specific resources

FRONT AND CENTERED	Front and Centered is a WA State coalition of communities on the frontlines of economic and environmental change, including over 60 grassroots organizations based in and led by communities of color. frontandcentered.org	• WA Environmental Health Disparities Map
		  ○ Actual map found here
		• Research
		  ○ Case Studies of Community of Color Based Organizations Pursuit of Solar Energy
		  ○ Listening Sessions on Solar Power

got green	Got Green fights for transformative change by building community power in South Seattle. gotgreenseattle.org	• Our People, Our Planet, Our Power: Community Led Research in South Settle ○ Results and conclusions from survey and community engagement on climate change action

C40 CITIES CLIMATE LEADERSHIP GROUP	C40 is a network of nearly 100 cities committed to climate action. Representing 1/12 of the world's population and 1/4 of the global economy, mayors of C40 cities deliver on ambitious climate goals. www.c40.org	Climate Action
		• Climate Action Planning Framework (2020)
		  ○ Key components and detailed framework
		• Deadline 2020
		  ○ Aligning with the Paris agreement
		Community Outreach and Equity
		• Delivering inclusive climate action
		  ○ Inclusive Community Engagement: Executive Guide
		  ○ Inclusive Planning: Executive Guide
		  ○ Equitable Impacts: Executive Guide

	Building Certifications: Various green certification systems for buildings and communities. See right:	• LEED for Cities ○ Tools and Resources (scroll down page) • Passive Solar Home Design • International Living Future Institute • Shift Zero
U.S. Climate Resilience Toolkit	US Climate Resilience Toolkit enables decision-makers to take action using data-driven tools, information, and subject-matter expertise. toolkit.climate.gov	• Steps to resilience • Case studies across the US
ROCKY MOUNTAIN INSTITUTE	Rocky Mountain Institute helps to accelerates the adoption of market-based solutions that cost-effectively shift from fossil fuels to efficiency and renewable energy. www.rmi.org	• Transforming Energy, Securing Communities • Community Energy Resource Guide
solutionsgateway Climate, Energy, and Finance Solutions	The Solutions Gateway is an online resource for local governments to find low emissions development solutions for their cities. http://www.solutions-gateway.org/	• Sourcebook

Organization	Brief Overview	Specific resources
carbonn Climate Registry	The Carbonn Climate Registry is a unified reporting system for local and regional governments worldwide to report efforts to reduce greenhouse gas emissions and build resilience to climate change. https://carbonn.org/	• 5-year overview report (2010-2015) • User manual
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY	The Environmental Protection Agency is an independent executive agency of the US federal government, responsible for the protection of human and environmental health. https://www.epa.gov/	• SMM Prioritization Tools ○ Life cycle-based tools that offer a starting place to establish priorities for environmental improvement.
West Coast Climate Forum	The West Coast Climate & Materials Management Forum is a collaboration of state, local, and tribal governments that develop strategies to reduce greenhouse gas emissions throughout the life cycle of materials. https://westcoastclimateforum.com/	• Climate Friendly Purchasing Toolkit ○ Targeting Tools (how to complete a supply chain GHG inventory, trends analysis) ○ Sector-Specific Strategies

Appendix D: Community Engagement

The development of the Climate Action Toolkit would not have been possible without the insights and engagement of several key individuals, cities, and organizations. A few have been named below:

County/Cities

- King County
- King County-Cities Climate Collaboration (K4C) Steering Committee
- City of Bellevue
- City of Black Diamond
- City of Burien
- City of Issaquah
- City of Kenmore
- City of Kirkland
- City of Mercer Island
- City of Normandy Park
- City of Olympia
- City of Renton
- City of Seattle
- City of Shoreline
- City of Snoqualmie

Organizations

- 350 Seattle
- Clean Energy Transition Institute
- Climate Solutions
- CREA Affiliates
- Earth Ministry
- Emerald Cities
- Friends of Urban Forests
- Front & Centered
- King County Climate Equity Community Task Force
- Laborers Local 242
- Lake Forest Park Citizens Commission
- League of Women Voters
- MEETS Coalition
- Native Organizers Alliance
- Northwest Energy Coalition
- Northwest Energy Efficiency Council
- People for Climate Action
- Port of Seattle
- Public Geology
- Puget Sound SAGE
- Re-ThinkGreen.com
- Scarabs: The Bug Society
- Seattle 2030 District
- Seattle City Light
- Sierra Club
- Sound Transit
- South Seattle Climate Action Network
- Union of Concerned Scientists
- Vashon Climate Action Group
- Washington Environmental Council
- Washington State Department of Commerce

Businesses

- Envirometrics
- Hargis Engineers
- Johnson Controls, Inc.
- Lightstone Consulting
- Lombard Consulting
- McKinstry
- Miller Hull
- Puget Sound Energy
- Ridolfi Associates
- Safeco Insurance
- Sazan Group
- Sustainable Business Consulting
- University Mechanical Contractors
- WholeWater Solutions

This list does not include organizations and individuals who contributed anonymously through the Public Input Tool.

Appendix E: Additional Actions

TRANSPORTATION & LAND USE

Actions to Address COMMUNITY-WIDE EMISSIONS from Transportation

COMMUNITY - POLICIES
Reduce Vehicle Miles Traveled
Implement **parking restrictions** (reduce total parking spaces to encourage alternative transit). Consider no net growth in parking.
Adopt a drive alone reduction strategy that **'caps' single occupancy vehicles** (SOV) at a maximum of 60% during high peak hours.
Enhance Public Transport
Eliminate single family zoning in areas near transit hubs and **increase affordable, dense housing near transit hubs** and commercial centers.
In the update of the individual city **Transportation System Plan**, incorporate: • Transportation-related carbon reduction and vehicle-miles-traveled reduction targets • A policy that supports criteria on climate, equity, economic benefit, health, safety and cost effectiveness for project evaluation, development and funding decisions and for performance monitoring • Improved city level of service standards to reflect bicycle, pedestrian and transit needs and urban congestion thresholds
Advance Vehicle Efficiency & Electrification
Require parking lots to convert at least two spaces (or 2% of parking) to **preferred designated parking for EVs** and carpool.
Include **EV charging infrastructure** in Growth Management Act implementation.
Support adoption of a **road usage and fuel efficiency charge** as a long-term replacement for declining gas tax revenue.
Establish **taxes/fees on fossil-fuel vehicle purchases** (either at purchase and/or registration). Consider adverse effects on low-income residents.
Adopt mandates for **transitioning delivery vans**, work trucks, and heavy-duty vehicles (includes waste collection trucks) to electric.
Use incentives to **encourage purchase of e-bikes**. Incentives include: rebates, incentives for bike shops, etc.
COMMUNITY - ACTIONS/PROGRAMMING
Reduce Vehicle Miles Traveled
Advance **employee shuttle services** for all major employers to reduce single occupancy vehicles.
Support **rideshare and carshare infrastructure (particularly EV cars & charging)** through various financial levers to attract companies and reduce costs for passengers. See City of Seattle's Car Share permitting examples.
Introduce permitting for **bikeshare** programs. See City of Seattle's Bike Share permitting examples.
Encourage/incentivize **cargo bikes for last mile deliveries** (provide rebates and tax incentives for purchase and use of cargo bikes for restaurants).

COMMUNITY - ACTIONS/PROGRAMMING Continued
Support and promote **pay-as-you-drive insurance**.
Transform **surplus lands** into high-density, mixed use compact communities.
Enhance Public Transport
Increase number of **park & rides** as well as safe, efficient non-motorized pathways to get to them (biking/walking) and safe bike storage.
Improve **transit options for first/last miles**. Pilot in neighborhoods that rely heavily on transit and have lower access to reliable public transport. Consider Transportation Network Companies (TNC) or shuttle services included in the cost of fare. Improve non-motorized pathways to allow riders to safely access transit hubs.
Work with transit agencies to increase **frequency and reliability** of public transport, and support expanded geographic coverage.
Encourage building and parking lot owners to increase the **price of parking** or charge daily rates to reduce single occupancy vehicle commuting.
Encourage employers to **subsidize transit passes** (ORCA cards) and provide safe bike storage onsite.
Create an online application that offers **subsidized bus passes to youth** (under 18).
Advance Vehicle Efficiency & Electrification
Develop an education campaign to share useful **fuel efficiency tips** with residents such as: • Check optimal tire pressure, maintain air filters, optimal air conditioning • Steady braking and acceleration • Removing excess weight such as bike or roof racks and unnecessary weight in storage trunks
Encourage **van pools, supporting EVs** where models exist (King County van pool programs).
Support the transition to energy-efficient (electric where available) **construction equipment and machinery** in industrial and commercial sectors.
Provide incentives and rebates for **electric-powered landscaping equipment**.
Freight System Improvement
Encourage and help transition of freight from **road to rail**.
COMMUNITY - ADVOCACY/PARTNERSHIP
Reduce Vehicle Miles Traveled
Support accessible and efficient **public transit for all communities**, especially frontline communities.
Partner with businesses to provide incentives for financially supporting employees to **relocate closer to work**.
Advocate or partner with businesses to **encourage less business travel**. Consider extending to the broader public.
Enhance Public Transport
Support legislation to **electrify Washington state ferries**.
Work with regional partners to continue to advocate for **high speed rail, trolley, and streetcar initiatives**. Collaborate and participate in alignment planning to improve regional connections to Vancouver B.C. to the north and Portland to the south.
Continue to support **Safe Routes to Schools** programs to enable more students to have safe biking and pedestrian access to school.

COMMUNITY - ADVOCACY/PARTNERSHIP Continued
Advance Vehicle Efficiency & Electrification
Metro & Transit Providers
Support public transit services initiatives to transition fleets to **100% electric**.
Partner with hospitals, fire departments, etc. to transition all **first responder fleet vehicles to electric**.
Statewide Regulation
Support state legislative efforts that expand the **availability of EVs and charging infrastructure** through education, grants and incentives.
Pursue strategies at the local and state level to reduce the air quality impacts from **black carbon sources** such as diesel engines and wood stoves. Prioritize reducing diesel particulate matter on projects near sensitive populations and that advance environmental justice.
Advocate for use of **R99 or R99 blended fuel** with 20 percent cooking oil biodiesel (B99) with certified carbon intensity pathways verification and no feedstock containing palm oils.

Actions to Address GOVERNMENT-OWNED EMISSIONS from Transportation

GOV OPS - POLICIES
Advance Vehicle Efficiency & Electrification
Use **environmentally friendly** air travel, hotel, and car rental provider by default. Travel agencies may be able to support this.
Require government maintenance staff to utilize **electric-powered landscaping** equipment such as Greenworks or to switch from 2-stroke to 4-stroke motors.
Incorporate EV charging needs in the **Emergency Fuel Contingency Plan**.
GOV OPS - ACTIONS/PROGRAMMING
Reduce Vehicle Miles Traveled
Continue to utilize **video and/or web conferencing capabilities** for all non-essential in-person meetings and train staff on advanced functions of online meeting platforms to leverage these tools to their maximum benefit.
Determine meetings that are **essential for travel** vs. could be conducted virtually. Transition any staff professional development and **training programs to online** to reduce need for travel.
Utilize TripPool or create an equivalent **internal carpooling 'match' platform** (for both commuting and business travel i.e. offsite and staff meetings) and incentivize those who carpool.
Encourage more **employees to bike** with a bike team, bike to work competitions, or company-wide 'bike to work' day. Provide secure bike racks and storage facilities at city facilities.
Fleet Management
Evaluate department use vehicles that are considered **"take-home" vehicles** and identify which vehicles or groups of vehicles can be eliminated from the take-home pool. Evaluate switching out low MPG vehicles for high MPG where possible.
Provide quarterly **fleet target reports** to city departments showing their progress on meeting fuel reductions targets. Include vehicle efficiency reports to departments identifying vehicles that operate out of normal MPG efficiency for a class of vehicle.
Advance Vehicle Efficiency
Have city staff turn off their trucks/container delivery trucks/garbage trucks when parked and enforce a **"no-idling" policy**.
Utilize **car sharing and fuel-efficient car rentals** (hybrids, electric) for day use rather than old fleet vehicles.
Use Washington State Department of Enterprise Services state contract system or use external resources (Sourcewell, NASPO Valuepoint) to source request for proposals for **electric or high efficiency vehicles**.
Enhance Public Transport
Offer city staff **ORCA cards** or other mobility options such as carshare/carpooling that reduce single car commuting.

GOV OPS - CAPITAL INVESTMENTS
Advance Vehicle Efficiency & Electrification
Install **electric vehicle chargers** in facilities for fleet and employee personal car use.
Update fleet that is **older than 10 years** or does not meet EPA emission standards regulations with fuel efficient vehicles and/or electric where feasible. Consider electric or compressed natural gas (CNG). Pilot electric and hybrid vehicles that do not yet meet operational or cost criteria for general implementation.
Install **contingency generators** for EV charging sites (check with emergency management teams to determine best locations).

ENERGY USE & EFFICIENCY

Actions to Address COMMUNITY-WIDE EMISSIONS from Energy

COMMUNITY - POLICIES
Energy Efficiency
Adopt and implement a policy for residential energy **efficiency disclosure** at point of sale. Partner with utilities to provide an energy assessment scorecard and incentives available for retrofit.
Require **individual meters** to be installed in all new buildings or significant retrofits (particularly multi-family units and commercial rental properties) to provide a more advanced understanding of energy use by floor/unit.
Encourage **efficiency evaluations** and plans to be developed when a building installs solar. This insures the solar can cover a larger portion of the building's energy use due to less energy being needed.
Electrification
Reduce **permitting barriers** to transition from natural gas to electric and **tax fuel oil** use to incentivize the transition to electric heating systems.
Support **financing repayment structures** that encourage landowners to invest in efficiency measures even if the payback is longer than their term such as on bill financing or PACE financing.
Renewable Energy
Waive all **permit fees** for installation of two-way meters to encourage the addition of solar more easily.
Lower barriers (permitting, land use regulation, etc.) for **district energy systems** that, for example, allow buildings to share excess heat such as a data center sending excess heat into nearby office buildings.
Require onsite or offsite **renewable energy** to cover a minimum percentage of a commercial or multi-family building's energy footprint by 2035.
COMMUNITY - ACTIONS/PROGRAMMING
Energy Efficiency
Support state requirement that commercial buildings over 50,000 sq ft to conduct **energy audits** to identify low and no-cost improvements for efficiency. Offer technical assistance or incentives to spur action.
Establish a **Clean Energy Assistance Fund** with private finance partners to help low income building owners invest in energy efficiency, clean fuel switching, and renewable energy.
Work with utilities to offer **incentives** for renter energy efficiency in multi-family buildings.
Reward energy efficiency above an identified "average" amount for residential, multi-family, commercials, industrial, etc.
Partner with utilities to provide incentives for **upgrading equipment** to make the more efficient equipment cost competitive. Focus on providing heavy subsidies for properties owned or occupied by persons with low incomes.
Provide **training to building operators** and incentives for those who exceed conservation targets.

COMMUNITY - ACTIONS/PROGRAMMING Continued
Electrification
Incentivize the purchase of **efficient electric appliances** (vs. gas). Provide funding to low income residents to reduce financial barriers.
Renewable Energy
Encourage residents and businesses to participate in **utility green power programs**. Seattle City Light / Puget Sound Energy
Host a **Solarize campaign** to encourage the adoption of distributed solar generation.
Encourage **procurement of renewable energy** through on-site and off-site, generation. Consider purchasing Renewable Energy Credits (RECs) if not feasible.
Encourage **combined heat and power systems**, district energy, and micro-grids (attract investments to scale, reduce regulatory barriers, lower property taxes, etc.)
COMMUNITY - ADVOCACY/PARTNERSHIPS
Energy Efficiency
Partnership
Work with utilities and the Utilities and Transportation Commission to increase **demand response incentives** for managing peak load and encouraging efficiency upgrades. Consider opportunities to incentivize load-shifting through incentives, rebates, and rate structures.
Partner with utilities and contractors to provide more complete **home retrofit assessments and packages** for easy upgrade of residential and multi-family buildings (particularly for old building stock in low income neighborhoods).
Support **neighborhood efforts**, including eco-districts, to improve energy performance of buildings.
Education
Educate contractors and construction employers to build/retrofit to green standards. Build these partnerships to grow demand and increase number of retrofits to be completed in one year.
Continue to partner with colleges and **technical schools** to advance energy efficient building operators and contracting skills.
Create interagency initiatives to **support workforce development**. Build upon existing social equity contracting programs to strengthen the **capacity of firms** owned by people of color and nonprofits serving underrepresented and under-served adults and youth to help **implement energy-saving actions**.
Hold **city-funded classes, videos, and/or materials** to help residents learn ways to save money by upgrading their homes. Provide "packages" to show what to do, which city-approved contractors can do it, and what rebates/subsidies/incentives exist.
Work with **historic building owners** to install energy/water upgrades while preserving the existing building. This also reduces construction waste.
Electrification
Continue to support development, policy, and expansion of low-carbon **district heating and cooling systems**.
Support state legislation that advances conversion to **clean energy sources** in the built environment.
Support proposals at the **State Building Code Council** that advance high efficiency standards and renewable energy readiness.
Advocate for science-based comprehensive federal, regional, and state **limits on carbon** and other pollutants.

COMMUNITY - ADVOCACY/PARTNERSHIPS Continued
Renewable Energy
Transition Utility Energy Mix
Enable **smart grid infrastructure** to reliably and cost effectively accommodate renewable energy for building operations.
Stay informed on proposed clean energy policy through the **State Policy Opportunity Tracker (SPOT for Clean Energy)**.
Distributed Energy Generation
Support regional and state policy that advances feasibility of **district energy**.
Partner with data centers and other energy-intensive commercial buildings to **recapture heat** and manage electricity.
Partner with utilities to reduce costs and time for **establishing interconnection** with renewable systems.

Actions to Address GOVERNMENT-OWNED EMISSIONS from Energy

GOV OPS - POLICIES
Energy Efficiency
Include a Low Carbon or Green Business Practices requirement in **Contractor Agreements** and Leases.
Mandate use of electric powered **landscaping equipment** for all government owned land (parks, etc.).
Restrict personal items, including refrigerators, coffee machines, space heaters, and cooling fans.
Renewable Energy
Establish an internal **Revolving Loan Fund (RLF)** or Clean Energy Fund to capture savings from efficiency upgrades and fund new renewable projects.
GOV OPS - ACTIONS/PROGRAMMING
Energy Efficiency
Overall Management
Educate employees and building occupants about how their **behaviors affect energy** use. ENERGY STAR has plenty of materials to help in the communications toolkit. Reward energy-efficient behaviors and habits to engage employees in saving energy.
Lighting
Implement **energy-efficient outdoor lighting**, including LED and multi-zone dimming, motion sensing technologies when appropriate. Use Dark Sky Association best practices when possible.
Minimize use of overhead lighting by installing **desk lighting** and keeping **blinds open** to a comfortable level to allow natural light.
Ensure maintenance teams dust off lights regularly and use light switch stickers as reminders for lights that may be **turned off when not in use**.
Update **existing windows** with solar control films, exterior blinds, or overhangs.
Heating & Cooling
Seal and insulate all air ducts and exposed hot water piping.
Monitor and manage **freon/refrigerant leakage**.
Electronics Energy Use
Use **smart power strips** that allow linked appliances to be turned off overnight/on weekends. Evaluate all electronics and appliances to determine which items can be managed this way (microwaves, coffee machines, copiers, etc.).
Renewable Energy
Aim to **procure 100% renewable energy** from resources on public property or through a utility program. Investigate third-party ownership and alternate financing models to expand the number of solar electric or solar water heating systems at city-owned facilities.
Optimize and expand use of **biogas** at existing wastewater treatment plants.

GOV OPS - CAPITAL INVESTMENTS
Energy Efficiency
Convert **streetlights to LEDs**.
When replacing water pumps, water treatment and other energy-intensive operations, **upgrade to most efficient technologies** in all owned/operated facilities by 2025.
When making equipment replacements, **upgrade to the most efficient chillers**, boilers, heating, ventilation, and air conditioning units to maximize energy savings. Seek incentives from utilities to reduce upfront cost.
Renewable Energy
Develop on-**site renewable energy generation** in owned/leased spaces where feasible.
Install **solar canopies** over mid- to large sized government-owned parking lots as a demonstration project and to supply renewable energy to the associated building.

GREEN BUILDING

Actions to Address COMMUNITY-WIDE EMISSIONS from Buildings

COMMUNITY - POLICIES
General Building
Develop comprehensive housing policy to require **high density housing** within .25 miles of public transit hubs. Adopt zoning codes that require green buildings in certain areas to promote eco-districts.
Increase height and floor area incentives to encourage **dense building development**. Consider increasing incentives near transit hubs and existing population centers.
Incentivize more use of **cross-laminate timber** (CLT) and FSC certified wood products in new builds (vs. steel and concrete).
Require parking lots, sidewalks, and other asphalt areas to utilize **porous pavement** for reducing stormwater runoff.
Mandate **full-cost accounting** (i.e. lifetime operating costs vs. initial capital investment) in all retrofits and new construction.
Water Use Reduction & Management
Promote and expand rebates via the **Saving Water Partnership** where available.
Incentivize installation of water management and **automation technology** for commercial and multi-family housing units.
Adopt mandate, ordinance, or policy to require use of **greywater in cooling towers** (as opposed to potable water) for new construction.
Lower permitting barriers for building owners to install **composting** toilets. Prioritize for Accessory Dwelling Units (AUDs).
Conduct **Temporary Construction Dewatering** Triple Bottom Line analysis to determine policy options to reduce tensions between water resources management and compact growth.
COMMUNITY - ACTIONS/PROGRAMMING
General Building
Encourage installation of **solar canopies** over open-space parking lots. Prioritize universities, shopping centers, event venues, etc. that have large open lots.
Continue to work with regional and state partners to promote **space-efficient housing options** such as Accessory Dwelling Units (ADUs). Review possible barriers and disincentives and identify any needed changes.
Water Use Reduction & Management
Advance the **water efficiency audits** and incentives from utilities to encourage transition to better behavior and upgraded technology/equipment.
Encourage businesses to use **WaterSense certifications** to compare water use when purchasing ice makers, dishwashers, reverse osmosis units, coolers, and cleaning equipment.
Support residential and commercial **drip irrigation systems**.
Encourage Rainwise or other programs that reduce **water use in landscaping**.
Support and advance the removal of existing **septic tanks**.

COMMUNITY - ADVOCACY/PARTNERSHIP
General Building
Support the **Clean Buildings Bill** and encourage early implementation.
Support the **upgrade of all schools and libraries** to solar windows, solar rooftop arrays, efficient building envelopes and circulation (for heating/cooling), and smart irrigation with rainwater catchment systems.
Water Use Reduction & Management
Advocate and support strategies presented by the **Cascade Water Alliance**, where available.
Advocate for city wide adoption of **Salmon Safe standards**.

Actions to Address GOVERNMENT-OWNED EMISSIONS from Buildings

GOV OPS - POLICIES
General Building
Require new buildings to be solar ready and wired for **fully electric** heating/cooling and water heating needs.
Adopt **Integrated Waste Management Design** for all new construction sites.
Require accounting for life cycle emissions of building materials. Use the Builders for Climate Action **Material Emissions Calculator** or the Carbon Leadership Forum EC3 tool.
Water Use Reduction & Management
Adopt strategies for **automation of the water supply system** for efficient operation and management. Conduct regular water audits.
Protect and restore streams, marshes, wetlands and floodplains. Reduce paved surfaces, utilize green infrastructure, update stormwater plans, manuals and drainage rules and prepare to manage increased stormwater runoff. Prioritize areas prone to negative salmon impacts during construction and development such as Bear Creek and the Sammamish River.
Increase the **resilience of natural systems** to respond to increased temperatures, drought conditions and shifts in seasonal precipitation by mandating the prioritization of natural resource areas, especially urban streams, cooler by increasing the width of vegetated areas along streams, marshes, riparian zones, and wetlands and maintaining upland tree canopy.
GOV OPS - ACTIONS/PROGRAMMING
General Building
Register and certify owned/operated buildings above 5,000 square feet (465 square meters) to **LEED**, **EDGE** or an equivalent high performance green building rating system.
Water Use Reduction & Management
Building/Landscape Water Use
Transition all government building landscaping to **drought-resistant** and native plants to reduce water use and improve the quality of soil.
Perform **regular water audits** to address water use inventory, prevent leakages and improve efficiencies.
Establish a guiding framework for **water efficiency best practices** for city properties. Consider suggestions from LEED or alternative certifications.
Office Water Use
Remind employees/visitors to **turn off water** when lathering during washes or when not in use.
Install **sensor faucets** in all kitchens and bathrooms.
Run **dishwashers** in facilities only when with a full load.
Consider and **compare water use** when purchasing ice makers, dishwashers, reverse osmosis units, coolers, and cleaning equipment. Use WaterSense certifications to determine efficiency.
Ensure decorative fountains are designed as a **closed-loop system**. Second best is to install timers and use only during daylight or work hours.

Wastewater & Stormwater Management
Track water/ greywater and wastewater annual **utility performance** and report water consumption by use type – such as building domestic use, landscaping etc.
Establish **water quality monitoring** and reporting for all city operations.
GOV OPS - CAPITAL INVESTMENTS
Operations
Introduce **smart metering systems** for all city owned/operated facilities.
Invest in **quality insulation technology** depending on building size and type. Use insulation with 75% recycled content, without formaldehyde or other Volatile Organic Compound such as loose fill cellulose, fiberglass or spray urethane foam.
Invest in **high quality air purifiers** in spaces with high occupancy to maintain indoor air quality and remove common indoor air pollutants such as allergens, VOCs, dust and biological contaminants.
Water Use Reduction & Management
Install faucet motion sensors, **low flow** aerators and low flow toilets, waterless urinals in all owned/operated buildings.
Install **water filters** to encourage refillable bottles with tap water.
Upgrade all **pumps** used in water supply, drainage, and wastewater treatment.
Adopt and install **water automation technology** to improve water management.
Pilot the installation of **composting toilets** in public parks.
Potable Water
Increase the **resilience** of the area's water supply to drier summers by expanding the capacity of the groundwater systems while mitigating heavier rainfalls in winter with adequate drainage, retention, and water penetration.
Water **treatment facilities** must demonstrate compliance with U.S. EPA's 2018 edition of the Drinking Water Standards and Health Advisories Tables within the last year for drinking water rules on chemical and microbial contaminants in drinking water pipes or comply with local, state, or national equivalent.
Wastewater & Stormwater Management
Make investments to **retrofit/improve low-performing water treatment** facilities to upgrade to the highest standards in water treatment, bioretention and filtration technology that uses water efficiently and produces high density sludge.
All centralized or decentralized wastewater treatment systems and wastewater discharged to surface water must comply with **U.S. EPA's National Pollutant Discharge Elimination System** (NPDES) permit program of Clean Water Act (CWA).

CONSUMPTION & WASTE

Actions to Address COMMUNITY-WIDE EMISSIONS from Waste & Consumption

COMMUNITY - POLICIES
Reduce Consumption & Generation of Waste
Adopt **specific product bans** (straws, plastic shopping bags, plastic water bottles, Styrofoam takeout containers) and mandate compostable or reusable alternatives. *Exception: in cases of public health and safety when it is required.*
Implement **bottle recycling & rebate programs** to incent proper recycling of glass and valuable plastics.
Utilize financial levers to encourage less waste and **better waste diversion** for residential and commercial. Examples include: • Adopt pay-as-you-throw policies • Lower property taxes for less waste • Enforce container limits • Increase penalties for failing to divert recyclable goods at commercial/industrial facilities.
Develop policy that encourages the procurement of **reused/salvaged materials** or materials with recycled content.
Require a minimum percentage of **recycled concrete** in new commercial and multifamily buildings and asphalt in new streets/parking.
Adopt policies for **prioritizing remodels** vs. tear down and rebuild (in construction).
Mandate a **Manufacturer's** Extended Producer Responsibility policy to all companies in city to encourage refurbishment, remanufacturing, and recycling.
Place a **tax on plastic** to capture costs of waste processing and environmental impact.
Waste Management
Ensure **waste provider contracts** meet standards of sorting and material recovery.
Mandate a 35% minimum recovery rate for all **C&D waste** whether new, renovation, repair, or demolition.
Mandate **regional zero food waste** by 2030 – keep organics out of landfill, improve infrastructure to handle compost.
Mandate the donation of **excess and unused food waste** (prioritize catering, events, hospitals, hotels, etc. Identify and adjust laws or policies that discourage food donation (within health and safety boundaries).
Reuse and Remanufacturing
Expand capacity for **proper disassembly and recycling of electric vehicles** (incentivize supply chain development locally and abroad).
Mandate that new products manufactured within jurisdiction boundaries contain at least **20% recycled material** by 2030.
COMMUNITY - ACTIONS/PROGRAMMING
Reduce Consumption & Generation of Waste
Educate and promote **sustainable office management and purchasing policies**, such as: • Reusable kitchenware for all businesses (flatware, cups/mugs, etc.)

• Non-toxic cleaning/sanitation supplies (buy bulk when possible to reduce waste) • Purchase remanufactured ink and toner cartridges • Choose low-VOC paint and furniture and buy refurbished or reupholstered when possible • Choose tile carpeting vs. wall-to-wall to avoid replacing the entire carpet when removing scuff marks and stains Reference the King County Sustainable Purchasing Policy here.
Develop **awareness campaign** around impacts of 2-day shipping and encourage residents and businesses to choose ground when possible. Consider promoting "shopping or shipping day" where all orders come on one day to streamline freight movement.
Include **healthy, low-carbon food choices** and food waste in public and business outreach efforts. Work with partners to support efforts to encourage plant-based diets, including Meatless Monday campaigns.
Support year-round **farmers markets**, Community Sourced Agriculture, pea patches, community gardens, etc. to support **food resilience and reduce transport**.
Support and expand neighborhood **food buying clubs and co-ops** to support access and affordability of healthier, low-carbon, less-processed diets with less packaging. See resources in King County's Local Food Initiative.
Promote equitable educational opportunities for residents to **gain skills** in organic gardening, fruit production, food preservation and cooking and affordable, local, healthy eating.
Waste Management – Recycling/Composting
Support the **collection of e-waste from** residents and businesses. Consider offering collection bins in government buildings.
Present **clear signage** by all recycling, composting, trash and other bins in city buildings or owned land on waste segregation with appropriate translations where necessary.
Reuse and Remanufacturing
Encourage **tool rental libraries** and other sharing economy businesses. Consider offering government land for storage and facilities that promote sharing economy.
Provide technical assistance and educational resources to contractors to meet the **county's Construction & Demolition debris requirements** (prioritize salvage and reuse). Share resources such as the King County Industrial Material Exchange.
Support **King County Fix-it Fairs** to engage underserved residents in carbon reduction activities. Provide materials and resources in commonly spoken languages of those neighborhoods and include a track of Spanish-language or other relevant language workshops at one of the fairs each year.
COMMUNITY - ADVOCACY/PARTNERSHIPS
Reduce Consumption & Generation of Waste
Support enactment of **extended producer responsibility** and product stewardship policies and regulations.
Partner with online retailers, recyclers, etc. to **enforce packaging limits** and take responsibility for hard to recycle goods and packaging.
Partner with **grocery stores to reduce packaging waste** and capture stock room plastics/packaging for reuse.
Pilot new processes at grocery stores that allow customers to **bring their own containers for all bulk items, produce, meats, etc**.

COMMUNITY - ADVOCACY/PARTNERSHIPS Continued
Partner with **Schools and School Districts** to promote healthy, low-carbon purchasing habits.
Host **neighborhood/beach clean ups** and water pollution prevention awareness campaigns.
Waste Management – Recycling/Composting
Waste Management Utilities
Engage with **waste utilities** to reduce materials sent to landfill through combination of incentives, education, and policy. Consider combining an energy efficiency campaign at the same time in partnership with 'waste less.'
Work with waste utilities to develop/expand **material recovery facilities** in central locations.
Partner with waste utilities to install **bin RFID tagging** to track waste contributors and manage e-waste.
Partner with waste utilities to **identify commercial garbage loads** with high levels of recyclable material and reach out to those communities.
Partner with waste utilities at transfer stations to **develop signage** that clearly shows how to segregate materials and what can be recycled.
Education Campaigns
Work with community partners to **provide residential homes with kitchen food waste bins** to collect and promote campaign around food waste composting in yard carts.
Partner with **schools to educate kids on proper waste segregation** and how to handle common household yard and kitchen waste.
Reuse and Remanufacturing
Partner with **Cedar Grove** to expand organic waste processing and make collection easier city-wide.
Partner with waste utilities to capture and manage **methane gas release** emitted from landfills and composting operations.
Advocate for a more robust and stringent supply chain for **proper handling of electric vehicle (EV) waste**.

Actions to Address GOVERNMENT OPERATION EMISSIONS from Waste & Consumption

GOV OPS - POLICIES
Waste Management
Mandate that waste be **sorted and segregated**. Sorting must be done into minimum of four categories – organic, recyclables, landfill, and electronic waste (e-waste). Consider a waste recycling goal of 70% or greater by 2025.
Create an **e-waste recycling policy** and program such as e-Stewards. Consumers have free access to recycling through the state's e-cycle program.
Ensure **responsible disposal** of equipment that uses HFCs.
Include recycling & composting requirements on all new building and facility **lease negotiations and renewals**.
Waste Reduction
Increase **material salvage** by at least 30% by 2030 for city-owned full and partial building demolitions.
Adopt **specific product or material bans** based on waste audit results to significantly advance progress towards waste reduction goals.
Hold annual sustainability events like **Earth Day/Earth Month** or Green Office Day to educate employees and reinforce commitment to sustainable behavior.
Paper & Packaging
Eliminate **individual printing** for internal meetings and require all internal presentations/ documents to be electronic.
Require all printing/copying be **double-sided** – automatically set default.
Switch invoicing and payments to **Electronic Fund Transfer**.
Buy paper made with 30%-100% **recycled content** that is also **forest certified** (SFI, FSC, PEFC) for office printing, copying, notes etc.
Buy **unbleached or non-chlorine** bleached paper products, unless necessary.
Purchase envelopes that do not have a **plastic window**, as they are easier to recycle.
Limit or ban use of **disposable coffee pod containers**. Purchase reusable K-Cup pods and coffee grounds instead.
Eliminate individually packaged food options for **catering** and require reusable and compostable packaging.
Consumption
Rent or share infrequently used tools, utensils, and equipment instead of purchasing them.
Use **rechargeable batteries** instead of disposable.
Purchase **remanufactured ink and toner cartridges** to not only save money, but to avoid waste and the environmental impact of the manufacturing process, and recycle them at the end of life.
Use **non-toxic and environmentally preferable** soaps, cleaning & sanitation supplies (look for eco-labels (Safer Choice, GreenSeal), recyclable packaging etc.).
Use **reusable cleaning products** such as: disinfectant spray and a sponge over disposable sanitation wipes; dishtowels and microfiber cloths to clean instead of paper towels.

GOV OPS - POLICIES Continued
Buy reusable, **high-quality refurbished** items as a first option, and buy recyclable, products with recycled content or compostable products as a second option.
Ban purchase of single use plastics. *Exception: when needed in the case of public health and safety.*
Purchase **locally sourced and seasonal food** for catered meetings, requiring reusable or compostable packaging and identify "right size" of attendees to avoid over-ordering. Avoid packaged meals.
When buying or replacing furniture, consider **material composition** and buy reclaimed, recycled material, and low VOC items. Utilize BIFMA or Cradle 2 Cradle platforms to identify products.
When switching carpets, use **carpet tiles** instead of wall-to-wall carpets as they result in considerably less waste as well as cost and time during installation. Consider looking for Cradle 2 Cradle or NSF product labels when purchasing carpet tiles.
Purchase **low-embodied carbon building materials** (i.e. concrete, steel, asphalt) in capital projects.
Accelerate **phase out of HFCs** with purchasing and use policies.
Buy or lease **computer equipment** (i.e. imaging equipment, laptops, monitors and servers) with EPEAT certification to reduce energy use and use the most sustainable products. Leasing services can be a good option for ensuring product takeback and recycling of equipment.
GOV OPS - ACTIONS/PROGRAMMING
Waste Management
Establish waste generation **baseline** and develop waste reduction **goals and targets**. Introduce education campaigns as needed.
Establish target dates to standardize waste management and recycling **best practices** at facilities.
Establish **recycling hubs** for specialty recycling items such as Styrofoam, plastic films, batteries, electronic waste, CFL lightbulbs, etc.
Remove single garbage cans at desks to save on plastic lining and time and eliminate plastic liners for recycling bins.
Present **clear signage** by all recycling, composting, trash and other bins on waste segregation with appropriate translations where necessary.
Waste Reduction
Find **community non-profits** to donate or sell furniture, equipment, etc. rather than throwing them out.
Create new **waste reduction framework** with actions focused on preventing waste, Extended Producer Responsibility for end of use, reuse of goods and recycling materials into new products.
Develop strategy to cut back in consumption of **top 5 non-recyclable** and other landfill waste stream items identified in waste audit.
Paper & Packaging
Sign up to stop receiving **junk paper mail**.
Educate staff on which documents can be **recycled vs. shredded**.
Eliminate sending physical mail where **electronic mail** could save cost and paper.
Have **e-file clean-up** for 30 minutes 2x year, so that employees eliminate drafts, graphics, ppts, etc. that unnecessarily take up cloud storage space.

GOV OPS - ACTIONS/PROGRAMMING Continued
Consumption
Use and maintain a comprehensive inventory of **office equipment** and consumables to avoid over purchasing.
Create a template for the "**waste costs**" of common things, to show true costs of meetings, bottled water, etc. so purchasing decisions can be well informed.
Designate a supply space for shared and reusable **office supplies** so that people do not hoard supplies in their desks (file folders, binders, pens, staplers, paper clips, etc.).
Provide **durable and reusable** plates, bowls and flatware to eliminate the use of disposable ones in offices with dishwashers.
GOV OPS - CAPITAL INVESTMENTS
Waste Management
Contract waste management services to develop and implement comprehensive **Waste Management Strategies** for regular Operations and Maintenance of all city owned/operated buildings.
Install **air hand dryers** in bathrooms instead of using paper towels.

FORESTS & AGRICULTURE

Actions to Address COMMUNITY-WIDE EMISSIONS from Forests & Agriculture

COMMUNITY - POLICIES
Resource Conservation
Disincentivize **dangerous herbicides** while incentivizing environmentally friendly options.
Educate land owners on **forest stewardship practices** and incent through reduced property taxes or other benefits.
Adopt or enforce an ordinance requiring control of the top **three most damaging invasive species** or enact a preferred plant ordinance for private and public landscaping. Consider including as a required action at the sale of a building or land. Promote control programs such as: Integrated Pest Management, Protect the Best, Early Detection and Rapid Response and public and private invasive species control.
Adopt a **5-year natural resource conservation and restoration plan** that maintains a determined minimum percent of jurisdictional land as undeveloped.
Enforce the **Urban Growth Area boundary** that preserves open land by concentrating development in urban and suburban areas.
Require developers to **track and report tree removal** to enable the city to effectively manage canopy cover.
Adopt policies to **protect urban trees**. Consider requiring arborists to make decision on tree removal requests, rather than the development agencies.
Support King County's **Land Conservation Initiative**, which aims to permanently protect all remaining high-priority lands within 30 years.
Planning & Development
Require all new neighborhood developments to be built with a **minimum percentage of tree canopy coverage**. Prioritize populations with high risk of heat exposure. Consider a canopy coverage goal by 2030.
Adopt a **park/open space plan** to promote network of public spaces & parks for non-motorized transport while protecting natural resources.
Ban future or further development in **high risk zones** (e.g. flood plains).
Strengthen, revise codes, and enforce codes for **critical geographic areas** including, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, unstable slopes, and associated areas and ecosystems.
Do not develop or permit any development within limits specified below except for minor improvements or comply with equivalent local or national regulations. • **Shorelines and coastal areas**: Within 200 feet (61 meters) from normal high tide line • **Floodplains, rivers and streams**: A flood hazard area shown on a legally adopted flood hazard map or otherwise legally designated by the local jurisdiction or the state or entirely outside any floodplain subject to a 1% or greater chance of flooding in any given year • **Wetlands**: Within 50 feet (15 meters) of a wetland, except for minor improvements • **Water bodies**: Within 100 feet (30 meters) of a water body which is greater than 50 contiguous acres (20 hectares) and within 50 feet (15 meters) for waterbodies less than 50 contiguous acres (20 hectares)

COMMUNITY - ACTIONS/PROGRAMMING
Resource Conservation
Incentivize **tree preservation on private land**. Consider increasing costs for removal or other financial levers.
Lead implementation of priority actions identified in King County's **30-Year Forest Plan** (to be released 2021).
Planning & Development
Work to transition **unused parking lots** to high density, low income housing OR urban green spaces.
Develop a multi-partner, fully integrated program to support **immigrant and refugee farmers'** transition to high performing agricultural practices and protect them from fees or taxes.
Support the development of **interurban farms and greenhouses** run by community members to bring healthy, fresh and local food to residents. Pilot these programs in low-income and frontline communities to increase food security and access to healthy food.
COMMUNITY - ADVOCACY/PARTNERSHIPS
Resource Conservation
Partner with King County to implement and advance the Department of Natural Resources guidelines for **forest stewardship and planning**.
Support efforts to **restore Conservation Futures Tax** to a $0.0625 effective rate.
Partner with experts and farmers to develop and expand **alternative dairy feed stocks** (e.g. kelp in estuaries to sequester methane).
Planning & Development
Explore options for **public and private partnerships** to help reduce or share the cost of tree planting and maintenance.
Support development of **climate adaptation strategies** in partnership with the county, indigenous populations/tribal partners, and local communities.
Advocate for **strong regional action** on forest and land conservation, including the requirement for all forest and farmland use proposals to address climate.
Support and advocate for **regional planning and state initiatives** that protect forests and farmland.
Support and advocate for **local implementation** of the King County Land Conservation Initiative and Open Space Equity Cabinet recommendations as well as the **King County Community Wildfire Protection Plan**.

Actions to Address GOVERNMENT OPERATION EMISSIONS from Forests & Agriculture

GOV OPS - POLICIES
Resource Conservation
Limit **invasive species** and require removal at all city facilities. Alternatively, conserve any locally or regionally significant habitat (containing native vegetation and species) present within city-owned spaces.
Planning & Development
Adopt policy that ensures city development **does not disturb prime farmland**, unique farmland, or farmland of statewide or local importance as defined by the U.S. Code of Federal Regulations, Title 7, Volume 6, Parts 400 to 699, Section 657.5 and identified in a state Natural Resources Conservation Service soil survey (or local equivalent for cities or communities outside the U.S.).
If a city-owned/operated site has any **threatened or endangered species** or ecological communities, as identified during the ecosystem assessment, comply with an approved habitat conservation plan under the U.S. Endangered Species Act (or local equivalent for cities or communities outside the U.S.) for each identified species or ecological community.
GOV OPS - ACTIONS/PROGRAMMING
Resource Conservation
Increase the number of **healthy streams**. Consider using the B-IBI Index to ensure at least 35% of streams meet compliance regulations.
Planning & Development
Create a plan that seeks to **restore forests and natural areas** on city-owned or managed properties.
GOV OPS - CAPITAL INVESTMENTS
Resource Conservation
Restore degraded vegetation, habitats, and aquatic ecosystems within the area, identified during the Ecosystem Assessment. Restoration strategies must be developed based on Society for Ecological Restoration Science & Policy Working Group. 2002, The SER Primer on Ecological Restoration, Section 3, Attributes of Restored Ecosystems.
Planning & Development
Acquire a target number of projects for **public open space benefits** in equity areas and to provide enhanced land access opportunities for underserved communities. Prioritize high risk areas to reduce vulnerability to the threats of climate change.

Climate Action Toolkit

A Partnership Between King County and the King County-Cities Climate Collaboration

King County