



Zero Waste of Resources Task Force: Re+ strategies and actions to consider for the regional plan to meet the Zero Waste of Resources (ZWoR) Code.

Introduction

King County's [2019 Comprehensive Solid Waste Management Plan](#) established a clear goal of Zero Waste of Resources by 2030. The goal was defined as “*eliminating the disposal of materials with economic value*”, which corresponds to reducing 70% of what is currently sent to the landfill by 2030 through a combination of efforts in the following order of priority:

- a. Waste prevention and reuse,
- b. Product stewardship,
- c. Recycling and composting, and
- d. Beneficial use.

Framework structure

This document presents a framework and draft list of actions for a plan to achieve the Zero Waste of Resources by 2030 goal. The plan has been named the **Re+ Plan** and will detail projects and programs that will help the King County Solid Waste Division and its partners to achieve this goal.

The actions framework is structured as follows:

- **Goal:** Zero Waste of Resources by 2030 meaning reducing 70% of what is currently sent to the landfill by 2030.
- **Strategies:** High level themes that allow the goal to be achieved and that define the Re+ Plan with supporting actions.
- **Actions:** Actions are targeted, specific, and time-based to implement strategies and could include: projects, programs, studies, infrastructure improvements and regulations. King County and its partners commit to pursuing the actions together to achieve the goal. Besides their contribution to achieving the Zero Waste of Resources goal, each action will be evaluated on their costs and their contribution to climate and equity and social justice objectives.
- **Guiding principles:** Principles that underpin all strategies and actions:
 1. The region delivers Re+ actions collectively, prioritizing integration and outcomes consistent with regional and state-wide initiatives such as the King County Strategic Climate Action Plan, King County-Cities Climate Collaborative (K4C), King County Clean Water Healthy Habitat agenda, the State Solid and Hazardous Waste Plan and the Washington State Recycling Development Center.
 2. Through the transition to a more circular economy, directly address equity and accessibility issues in all planning decisions.
 3. Ensure that when taking a systems approach and when approaching planning decisions the needs of all residents are placed at the center of the process, recognizing the voices of Black, Indigenous, and People of Color (BIPOC) and those who have been historically excluded are heard and reflected.
 4. The region ensures material management jobs are green jobs, and workers are encouraged to take advantage of the clean circular economy roles of the future.



5. Measure and track the benefits and impacts of planned actions to climate, human health, equity, toxics and the environment, and incorporate performance in county plans and goals.
6. The region prioritizes material and product categories with the biggest potential positive impacts (plastic, paper and organics including wood) for the 2021/22 biennium but recognizes that future/biennial updates to the Re+ plan, starting in 2023/24 biennium, need to expand to cover all relevant materials – such as textiles, mattresses and carpet.

The Actions presented in the tables below are Actions for the short and medium-term (2021 – 2024). The focus is on materials that represent the majority of recoverable materials that are currently sent to landfill: paper, plastic, food, yard waste and wood.

This framework and set of actions, developed with input from the Task Force, is intended to inform the development of the Re+ plan. It will be used as the starting point for discussions between King County SWD, the community and the two advisory groups established via King County and Washington State Code – MSWAC and SWAC - over the next 6 months. The Re+ plan will be developed considering this set of actions and the discussions from the next phase of advisory group and community consultation. The aim is to have Re+ be published by the end of 2021.

Strategies and Actions

Resources and action at all levels			
Strategy 1: The region and all responsible parties prioritize and implement actions that deliver the zero-waste goal and move toward a more circular economy.			
Action item summary and key elements	Who are responsible partners and implementors	Start	Milestone/ Reporting
<p>Action 1.1: All jurisdictions and relevant partners allocate resources to develop and deliver Re+ actions, including:</p> <ul style="list-style-type: none"> • SWD develops a systematic approach for agreeing to and implementing key actions with regional jurisdictions- including other Counties. • King County Cities commit to specific actions to achieve diversion and reuse goals in their communities and the region, including actions involving multi-jurisdictional collaboration. • Working within existing partnerships, such as through the King County - Cities Climate Collaboration (K4C) initiative, to pool resources to implement Re+ recycling programs and policies as appropriate. 	<p>King County/ KC SWD/ KC Cities/Seattle/ Waste Management companies /Community Partners</p>	<p>2021</p>	<p>2022 Action agreements or goals agreed</p>



<ul style="list-style-type: none"> • SWD provides technical assistance to Cities to support implementation of Re+ actions. 			
<p>Action 1.2: Implement zero waste best practices that focus on priority materials (paper, plastics, and organics) and reflect these practices in all local government funded activities, including facility management, contract management, event management. For example, by 2025:</p> <ul style="list-style-type: none"> • Third party zero waste certification and verification programs • Minimize the use of single-use cups, containers, and other products at local government facilities, including administration buildings, city hall, courthouses, schools, stadiums, etc. • Electronic invoicing and contracts • Require public agencies to procure products made with postconsumer recycled materials, including targets and approved products list. Supporting tools could include model policy language, technical assistance, model technical specifications, contracting opportunities, and purchaser training. 	King County /KC Procurement & Payables/ KC SWD/ KC Cities / Seattle / Facility managers / Service providers	2021	Number of facilities / organizations that have implemented a zero waste program
<p>Action 1.3: Conduct a study to determine the best method to scale-up and fund waste prevention activities throughout the region, such as repair events, fix-it cafes, tool libraries, makerspaces, FabLabs, techshops, and hackerspaces.</p>	NGOs, King County / KC Cities / Colleges / High Schools / Community Partners	2022	Study completed by end 2022 with clear recommendations for how to proceed.
<p>Action 1.4: Update City and County Recycling Contracts and Codes to prioritize domestic sorting and processing of recyclables and require documentation of the chain of custody from sorting facilities to legitimate end markets.</p>	KC SWD/ KC Cities	2022	Number of contracts with updated language
<p>Action 1.5: Establish a system for measuring, reporting and verifying recycling and their end markets. Potentially coordinate with Oregon Dept of Environmental Quality and Washington Dept of Ecology to develop and implement a regional Certification Program for MRFs to standardize:</p> <ul style="list-style-type: none"> • Performance measures to promote material sorting/handling consistency across the region • End-markets standards to improve marketability • End-market standards and reporting requirements to improve environmental and social sustainability 	KC SWD/ KC Cities/KC-Seattle Health/ Ecology / Seattle/Community Partners / Private Sector/ngos	2021	Regular reporting of key indicators for real recycling by 2024



<ul style="list-style-type: none"> Use of full/life-cycle analysis in decision making. 			
<p>Action 1.6: Adopt and implement appropriate outcome-based goals and targets to drive action on zero waste for each waste material category, that could include:</p> <ul style="list-style-type: none"> Interim steps to no food waste in landfill by 2030 Biennium material MSW goals declining over time – for priority materials Job creation and community engagement goals Climate-based material-specific goals 	KC SWD/ KC Cities/KC-Seattle Health/ Ecology / Community Partners / Private Sector	2021	<p>2021 Consider partner-specific goals and targets</p> <p>2022 Public jurisdictions commit to goals</p> <p>2023 Begin reporting</p>

System-wide approach			
Strategy 2: A regional system-wide approach that is collaboration-based & recognizes where action is needed from design through end of use.			
Action item summary and key elements	Who are responsible partners and implementors	Start	Milestone/ Reporting
<p>Action 2.1: Develop, test, nurture, and scale-up reuse and refill initiatives/systems, through partnerships, including:</p> <ul style="list-style-type: none"> Local reuse of packaging of grocery and product delivery Refill programs for beverage sectors, such as beer/cider Local reuse of single-use packaging and food service products such as cups and food containers Regional / local reuse of pallets and other tertiary packaging 	KC SWD/ KC DNRP/ KC Cities/ Seattle/ food rescue organizations/ food service/ businesses/ retailers/ Ecology/ universities/ environmental groups and communities	2022	First pilot by 2022
<p>Action 2.2: Create a grant and resource hub that supports the implementation of Re+ actions. The funding and technical assistance should be aligned with the waste management hierarchy and circular economy principles to encourage cities, businesses, and communities to implement Re+ actions.</p>	KC SWD/ KC Cities / Seattle	2022	Annual Reporting on how grants are spent and the impacts



A more circular economy			
Strategy 3: Moving toward a more circular economy where the region seizes the opportunity for climate and environmental stewardship and ensures a just equitable transition where all people thrive.			
Action item summary and key elements	Who are responsible partners and implementors	Start	Milestone/ Reporting
<p>Action 3.1: Create harmonized regional messaging coordinated through the regional Recycle Right Communications Consortium. Develop and fund innovative communication and inclusive outreach methods to engage residents, businesses and communities to support and contribute to achieving the Zero Waste of Resources goal. This could include:</p> <ul style="list-style-type: none"> • Conduct surveys to gauge public knowledge and attitudes about consumption and waste. • Harmonized regional messaging to reduce contamination (contributing to King County’s Contamination Reduction Outreach Plan (CROP)) • Culturally relevant messaging • Social marketing campaigns that influence behavior and encourages conscious consumption and waste prevention • Using cart tagging to combat contamination • Expanding food waste prevention education for residents through the Food: Too Good to Waste program 	<p>KC SWD/ KC Cities/ Seattle/ Waste Management Companies / Community Partners / KC Library System/ngos</p>	<p>2022</p>	<p>Regular report out on campaign efficacy through the regional communication consortium</p>
<p>Action 3.2: Create a just transition¹ to a more responsible circular economy and maximize green job growth focusing on supporting BIPOC and entrepreneurs from underserved communities by:</p> <ul style="list-style-type: none"> • Community-centered prevention and reuse systems • Improving material management on-the-job training and opportunities 	<p>KC SWD/ KC DNRP/ KC Cities/ Seattle/ WA State Departments /Community Partners</p>	<p>2021/22</p>	<p>Develop action-specific monitoring, reporting and verification approach for inclusion.</p>

¹ Just transition background can be found in the [King County Strategic Climate Action Plan](#) and [climate justice alliance](#). A just transition for all towards an environmentally sustainable economy needs to be well managed and contribute to the goals of decent work for all, social inclusion and the eradication of poverty ([ILO, 2015](#)).



<ul style="list-style-type: none"> • Support BIPOC-led business development and low-cost financing • Promoting community participation in WA work on industrial symbiosis for materials • Promote opportunities and remove barriers to BIPOC- owned business involvement in the collection and processing of unpainted/ untreated salvaged wood 			
<p>Action 3.3: Expand King County’s Waste Reduction and Recycling (WRR) school education & Green Schools Programs to all King County schools and communities by 2025. Provide educational outreach, grants, and technical assistance to support circular economy, reuse, recycling and waste prevention. For example, expanding durables to replace single-use items like milk cartons or EPS trays.</p>	<p>KC SWD/ school districts/ KC Cities / Community partners / KC Library System / PTAs / NGOs</p>	<p>2022</p>	<p>Number of schools that participate in the WRR & Green Schools Programs</p>
<p>Action 3.4: Develop and work with regional partners on a competitive circular economy innovation platform that combines public funding (grants) with technical assistance to incentivize regional behavior change and deploy infrastructure opportunities for the prevention, reuse, and recycling of plastic, paper (fiber), organics, wood, glass and metal.</p>	<p>KC SWD/ KC Cities/ Seattle / Private Sector / Community Partners</p>	<p>2021</p>	<p>By 2022 launch program, grant metric reporting [annually/end of grant]</p>
<p>Action 3.5: Optimize the design and operation of the King County transfer station system for Re+. Determine whether material diversion and reuse could be increased at King County facilities via policy or additional material processing. Options would be consistent with the waste management hierarchy and promote a circular economy.</p>	<p>KC SWD / Private Sector</p>	<p>2022</p>	<p>2022 – take decision on research and analysis/study</p> <p>2023 – Conduct study and research - TBD</p> <p>2024+ Consistent with Re+, set out system changes - TBD</p>



Infrastructure & innovation			
Strategy 4: The region delivers zero waste/Re+ infrastructure & innovation where technology solutions can handle increased diversion and supporting unconventional solutions.			
Action item summary and key elements	Who are responsible partners and implementors	Start	Milestone/ Reporting
<p>Action 4.1: Increase regional organic processing by recruiting and incentivizing new public-private partnerships to build new capacity, and leverage the existing regional infrastructure, including:</p> <ul style="list-style-type: none"> • Anaerobic Digestion, both large scale and distributed • Codigestion • Composting • Wood collection & processing • Emerging technologies 	KC SWD/ KC Cities/ Seattle/ Waste Management Companies / Organics Processing Companies / Private Sector / Community Partners	2021	2024 – aim to have new technology approved.
<p>Action 4.2: Reduce contamination through incentivizing innovative technologies and infrastructure upgrades including:</p> <ul style="list-style-type: none"> • Optical sorters and cameras trained on incoming vehicles to identify contaminated loads and sources of frequently contaminated loads. • Artificial intelligence-based methods to identify contamination, and • Technologies for managing residuals such as secondary MRFs or separation technology. • Technology and approaches for managing new innovations in product labelling. 	KC SWD/ KC Cities / Waste Management Companies / Private Sector / Community Partners	2021/22	<p>2021/22 Community and business outreach</p> <p>2021/22 reflect in developing regional support (Actions 4.1 & 3.4)</p>

Policy and legislation			
Strategy 5: The region embraces zero waste/Re+ policy and legislation, recognizing governments have a leading role working in partnership with the private sector in creating and harmonizing standards and approaches.			
Action item summary and key elements	Who are responsible partners and implementors	Start	Milestone/ Reporting
<p>Action 5.1*: Implement source-separation requirements for non-residential generators beginning in 2024. Materials covered by a source-separation requirement will depend on market conditions and processing capacity, but may include food scraps, food-soiled paper, and cardboard.</p>	KC SWD/ KC Cities / Waste Management Companies / Community partners / Private Sector	2024	Begin changes in 2024



<p>Action 5.2*: Implement source-separation requirements for residential generators beginning in 2024. Materials covered by a source-separation requirement will depend on market conditions and processing capacity, but may include food scraps and food-soiled paper.</p>	<p>KC SWD/ KC Cities /Waste Management Companies / Community partners / Private Sector</p>	<p>2022</p>	<p>Additional analysis/ research in 2022</p>
<p>Action 5.3*: Update minimum service level standards to include organics collection, for single-family residents for all cities and unincorporated areas of King County. Cities to determine appropriate rate structure for implementation in their service areas.</p>	<p>KC SWD/KC Cities / Waste Management Companies / Community partners / Private Sector</p>	<p>2023</p>	<p>Unincorp. King County: 2023; cities as contracts allow</p>
<p>Action 5.4*: Assess options to make changes to residential curbside collection to increase material diversion including every-other-week garbage collection by 2024 forward (as city contracts allow), in collaboration with cities and communities.</p>	<p>KC SWD/KC Cities / Waste Management Companies / Community partners / Private Sector</p>	<p>2022</p>	<p>Additional analysis/ research in 2022</p>
<p>Action 5.5: Develop and advocate for policies, legislation, and initiatives to reduce food waste and increase food rescue at the local and state level. Examples include:</p> <ul style="list-style-type: none"> • Use Food Well Washington Plan Work with regional and Federal partners through the Pacific Coast Collaborative. 	<p>KC SWD/ KC Cities/ Seattle/ WA State / Waste Management Companies / Community partners / Private Sector</p>	<p>2021</p>	<p>Various</p>
<p>Action 5.6: Develop and advocate for policies, legislation, and initiatives to increase organics collection, processing and management at the local and state level. Examples include:</p> <ul style="list-style-type: none"> • State-wide organics targets and goals • State-wide support to set up organic market development support • State-wide grants and funding for local government organics processing and landfill upgrades • Co-ordinated action on education, outreach and technology to reduce contamination 	<p>KC SWD/ KC Cities/ Seattle/ WA State / Waste Management Companies / Community partners / Private Sector</p>	<p>2021</p>	<p>Additional coordination and work in 2022 legislative session</p>
<p>Action 5.7: Support national efforts and industry initiatives that boost reuse and recycling, and works upstream to design packaging consistent with circular economy principles and waste reduction. Examples include:</p> <ul style="list-style-type: none"> • Sustainable Packaging Coalition • US Plastics Pact • Wrap Recycling Action Program (WRAP) program 	<p>KC SWD/ WA Cities and Counties / WA State Departments / Private Sector</p>	<p>2021</p>	<p>2022 – review role of partnerships following Re+ launch</p>
<p>Action 5.8: Develop and advocate for statewide extended producer responsibility (EPR) policies for</p>	<p>KC SWD/ WA Cities and Counties / Dept. of</p>	<p>2021</p>	<p>EPR legislation passed in 2022/</p>



<p>packaging and paper products that have mandatory requirements for recycling, use of recycled materials, and source reduction plans to achieve reuse and refill targets. In future years, consider how to expand EPR to other product categories such as mattresses, textiles and carpet.</p>	<p>Ecology/ Waste management companies/ Unions/ Producers/ Community Partners</p>		<p>producers reporting 2026. Consider additional product categories for 2023/24 biennium work.</p>
<p>Action 5.9: Develop, coordinate and advocate for relevant federal, state-wide legislation and local ordinances that seek to deliver our Re+ goal.</p>	<p>KC SWD/ Cities and Counties across WA/ Dept. of Ecology/ Waste management companies/ Food service businesses/ Producers/ Local communities/ Community Partners / ngos</p>	<p>2021</p>	<p>EPR legislation passed in 2022 with producers reporting annually beginning 2026.</p>
<p>Action 5.10: Enact deconstruction ordinances in cities and unincorporated county areas to promote greater reuse and recycling of salvaged wood and other materials and advocate for stronger action at the state level.</p>	<p>KC SWD / KC Cities / Community Partners</p>	<p>2021-22</p>	<p>Annual</p>

*Actions 5.1 – 5.4 would include customer education and outreach prior to any collection changes, as well as throughout to manage and monitor quality of materials collected. Ensure outreach and engagement with historically excluded community members, particularly for BIPOC members and to reflect ADA needs.

Re+ actions cheat sheet (next page)

The table below is meant to provide a guide of how proposed actions could be impactful against multiple dimensions: materials covered, value chain stage and jurisdictional roles. Actual impacts will need to be assessed against how actions are agreed, resourced and delivered.

● Significant potential impacts or relevance

○ Some potential impacts or relevance

		Dimensions of impacts							Role	
		Food, yard and wood	Plastic & Paper	Climate	Upstream & prevention	Collection & Processing	Markets & Circularity	Equity & Community	City of Seattle	King County system Cities
		High diversion	High diversion	High GHG reduction	Higher relevance	Higher relevance	Higher relevance	Strong ESJ Impacts	Significant role	Significant role
		Moderate diversion	Moderate diversion	Some GHG reduction	Moderate relevance	Moderate relevance	Moderate relevance	Moderate ESJ Impacts	Moderate role	Moderate role
Strategy 1 Resources at all levels	1.1: All jurisdictions and relevant partners allocate resources for Re+	●	●	●	●	●	●	○		●
	1.2: Implement zero waste operational best practices at public agencies that focus on priority materials	●	●	○	●		●	○	○	●
	1.3 Waste prevention study and funding for prevention activities.	●	●	●	●	○	●	●		●
	1.4 Update City and County recycling contracts and codes for domestic processing and chain of custody.		●			●	●	●		●
	1.5 Establish a system for measuring, reporting and verifying recycling and their end markets.		●			●	●	○	●	●
	1.6 Goals and targets for waste material categories	●	●	○	●	●	●	●	○	●
Strategy 2 System-wide approach	2.1 Scale up reuse and refill initiatives/systems through partnerships		●	●	●	○	●	●	●	●
	2.2 Create grant fund and resource hub for community, stakeholders and jurisdictions on zero waste and circular economy	○	○		●	●	●	●	●	●
Strategy 3 A more circular economy	3.1 Create and fund harmonized inclusive regional messaging and develop innovative outreach methods to encourage behavior change	●	●		●	●	●	●	●	●
	3.2 Ensuring just-transition and green jobs are developed through Re+	○	○	○	●	●	○	●	○	●
	3.3 Expand Green Schools program to all King County communities	●	●	●	●	●	○	●		●
	3.4 Develop competitive circular economy innovation platform combining public funding and technical assistance	●	●	○	●	●	●	●	○	○
	3.5 Research opportunities to better utilize the transfer station network for Re+	●	●	○	○	●	○	○		
Strategy 4 Infrastructure & Innovation	4.1 Increase organic processing capacity by recruiting and incentivizing new infrastructure and technologies through public-private partnerships.	●		●		●	●	○	○	○
	4.2 Reduce contamination through innovative technologies and infrastructure upgrades in regional material processing infrastructure.		●	○		●	●	●	○	○
Strategy 5 Policy & Legislation	5.1 Implement source-separation requirements for non-residential generators	●	●	●		●	●	●		●
	5.2 Implement source-separation requirements for residential generators	●	●	●		●	●	●		●
	5.3 Update minimum service levels for organics collection	●		●		●	●	●		●
	5.4 Assess every-other-week residential curbside collection	●	○			●		●		●
	5.5 Develop and advocate for statewide policies to reduce food waste	●		●	●	●	●	●	●	●
	5.6 Develop and advocate for policies and funding for organics at WA State level	●		●	○	●	●	○	●	●
	5.7 Support national and industry efforts on upstream packaging design	○	●	●	●		●		●	
	5.8 Develop and advocate for action at federal, WA State level, and local ordinances to support Re+	○	●	●	●	●	●	○	●	●
	5.9 Develop and advocate for statewide EPR legislation for residential packaging and paper products		●	○	●	●	○	●	●	●
	5.10 Enact deconstruction ordinances for salvaged wood and other materials at local and state levels	●		●	○	●	●	○	○	●