Puget Sound Regional Emissions Analysis

The King County Climate Data Co-operative is leading a team (see list of partners and consultants on the following page) to conduct a first-of-its-kind comprehensive update of the region's greenhouse gas (GHG) emissions. The analysis will provide fresh insight into the region's key carbon emissions sources and pathways for achieving equitable reductions. The project was launched in summer 2021 and will be completed in 2022.

Project Overview

Geographic-Plus Inventory	 The geographic-plus inventory and analysis will model GHG emissions released due to community activities such as energy use, transportation, and waste disposal. This geographic-plus inventory will include: A 2019 inventory for King, Kitsap, Snohomish, and Pierce counties, as well as for King County cities and a 2020 inventory for King County. A contribution analysis that explains drivers of past emissions trends for King and Pierce counties. A wedge analysis tool that models pathways for reducing emissions and achieving carbon neutrality for King County and its cities. Guidance for cities to perform inventories of their government operations emissions. 	
Communitywide Consumption Inventory	 The consumption-based inventory accounts for the GHG emissions associated with the goods and services consumed within the community, no matter where the goods and emissions were produced. This is particularly important to consider in a more circular economy (information on the following page). New consumption inventories will be developed for King, Kitsap, Snohomish, and Pierce counties for 2007-2019 and will include: A web dashboard with interactive data visualizations. Neighborhood- and demographic-scale consumption emission insights. Consistency with a just transition and circular economy approach. 	
Government Operations Consumption Inventory	The government operations consumption inventory estimates GHG emissions associated with the goods and services purchased by public agencies in target communities for their government operations. This project will include a 2019 inventory update for King County government operations.	
Consumption Inventory Wedge Analysis	The consumption inventory wedge analysis will identify scenarios and pathways for minimizing consumption-based emissions across King, Kitsap, Snohomish, and Pierce Counties, as well as for King County government operations.	

Key Project Elements





A **geographic inventory** includes emissions associated with activities that occur inside a jurisdiction "plus" all electricity GHG emissions, even if the electricity is generated outside the jurisdiction.

A **consumption-based inventory** includes embodied emissions associated with production, transportation, use and disposal of goods, food, and services consumed in a jurisdiction.

A **government operations inventory** includes emissions from government-owned and managed assets and activities.

Circular economy

Transitioning to a circular economy is a crucial step in addressing our consumption emissions. A circular economy minimizes waste and keeps materials and goods in use longer, thereby reducing emissions and regenerating natural systems. This includes but goes beyond a commitment to reduce, reuse, and recycle. It also includes making improvements during the design and production phases, guiding purchasing decisions, and transforming how products are treated at their end of use.

Social equity

People of color have been disproportionately exposed to environmental pollutants and traditionally excluded from conversations around environmental pollution. King County strives for a just transition for all towards an environmentally sustainable economy that is well managed and contributes to the goals of decent work for all, social inclusion, and the eradication of poverty. Thus, this project includes the following social equity elements:

Equity in Process

- Dedicated equity & evaluation consultant to guide the project and ensure accountability.
- Publicly accessible project meetings and communications.

Equity in Outcomes

- Disaggregated emissions data analysis to measure and define inequities.
- Neighborhood-scale consumption estimates to assess emissions through a racial, socioeconomic, and just transition lens.
- Social equity as a project guiding principle and evaluation criterion.

Project Team

Project lead: King County			
Participating Agencies	Consultant Team		
Puget Sound Clean Air Agency	Cascadia Consulting Group (prime consultant)		
Puget Sound Regional Council	Medley and Todd-Roberson Consulting		
King County -Cities Climate Collaboration (K4C)	EcoDataLab		
Snohomish County	Stockholm Environmental Institute		
Kitsap County	Kim Lundgren Associates		
Pierce County	Starcrest Consulting Group		
City of Seattle	Fehr & Peers		
Seattle Public Utilities			

For more information about this project, contact <u>matt.kuharic@kingcounty.gov</u> or <u>andysmith@kingcounty.gov</u> (for consumption related elements)