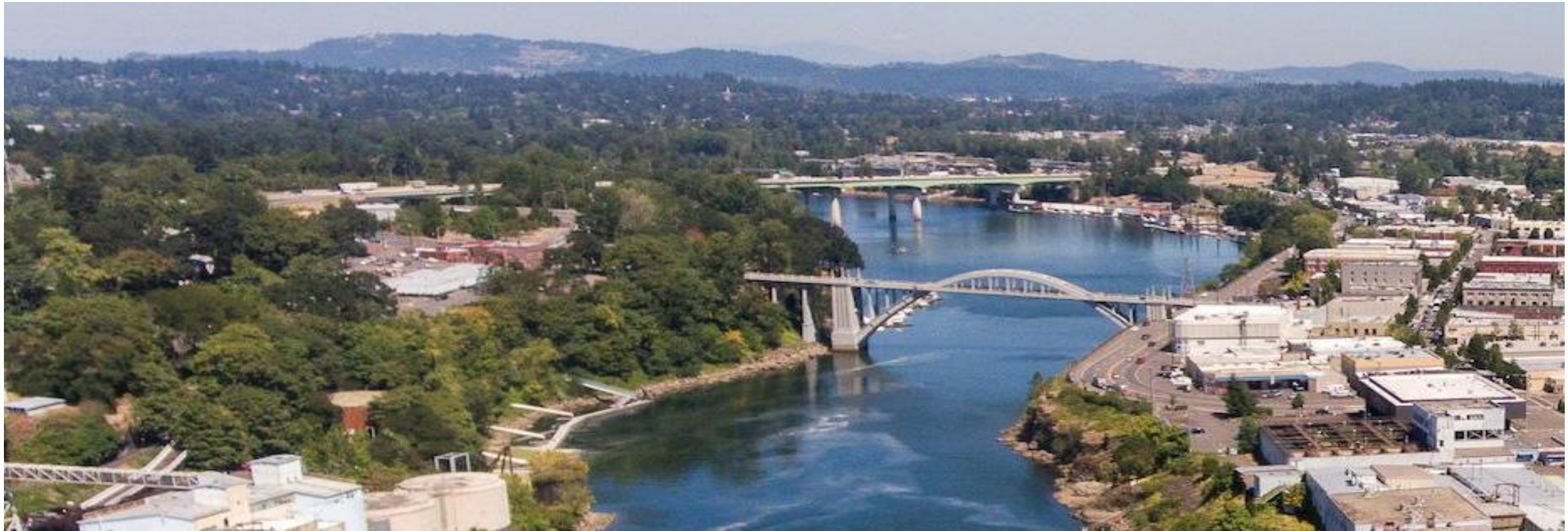
CLIMATE ACTION PLAN

ACHIEVING CARBON NEUTRALITY BY 2050

CLACKAMAS COUNTY

Spring 2022



AGENDA

- County goal
- Why?
- Process and timeline
- How Clackamas County is contributing to climate change
- Target action categories
- Working together / next steps

Performance Objective:

Honor, Utilize, Promote and Invest in Our Natural Resources

GOAL:

By 2023, the Climate Action Plan is adopted for our community with specific recommendations to reach the goal of being carbon neutral by 2050

PERFORMANCE CLACKAMAS STRATEGIC PLAN:
Approved by the Board of County Commissioners, March 2021

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By 2023, the Climate Action Plan is **adopted** for our **community** with **specific recommendations** to reach the goal of being **carbon neutral by 2050**

- **Adopted**: Endorsed by the Board of County Commissioners
- **Our community**: The entire county including county government operations
- **Specific recommendations**: Areas of action that must be accomplished to reach the overall goal
- **Carbon neutral**: The county as a whole no longer contributes to the build-up of greenhouse gases
- **By 2050**: Recognizing that sooner would be better for the county and the environment

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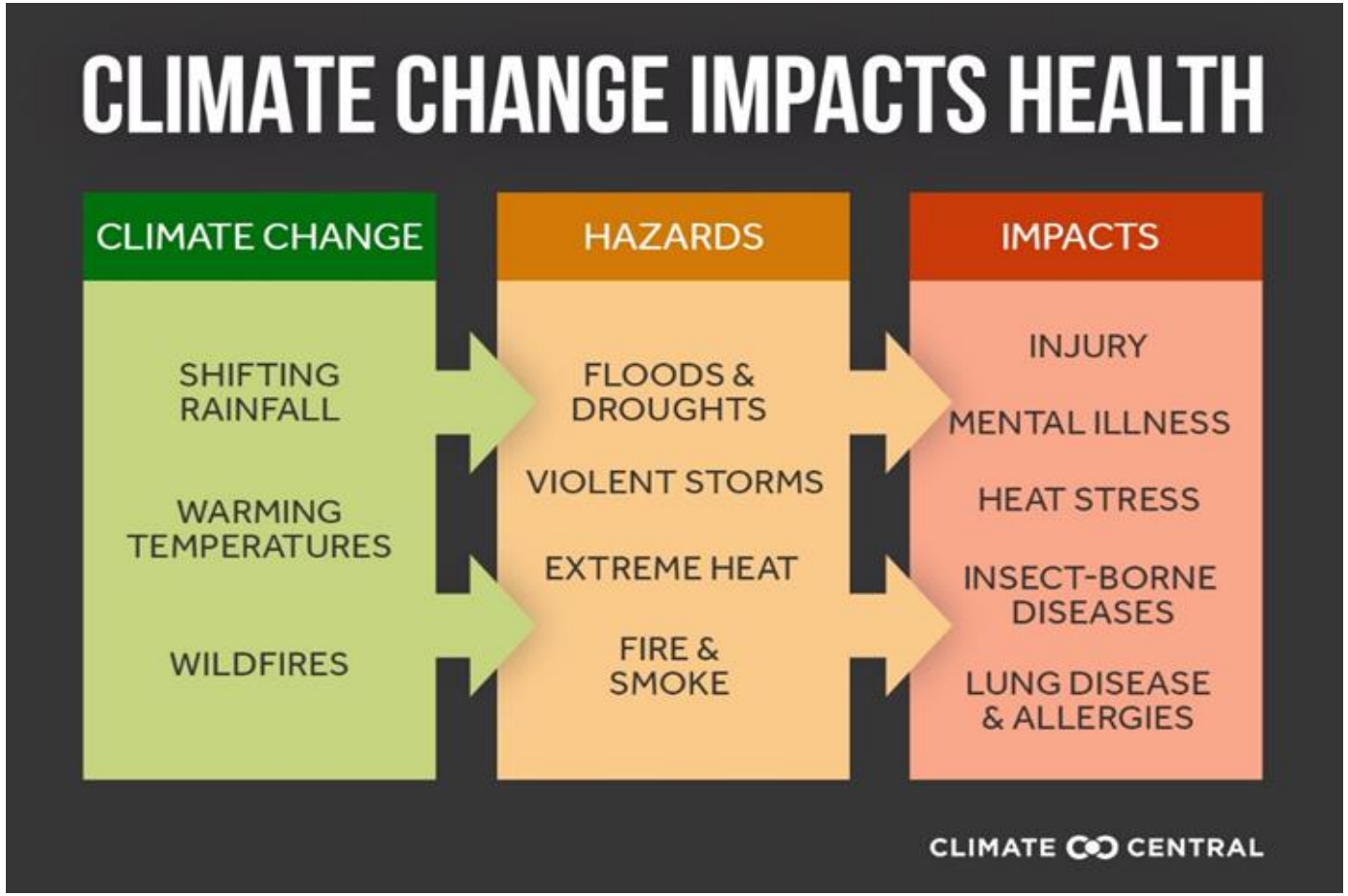
WHY: PUBLIC HEALTH



- *It is hard to overstate the interconnections between climate change, health and equity.*
- *Predominant climate change impacts influencing health include extreme heat, drought, wildfires, air quality, allergens, sea level rise, storms and flooding and nutrition and food security*
- *Action to address climate change has the potential for huge health benefits.*

Climate Change, Health, and Equity: American Public Health Association, https://www.apha.org/topics-and-issues/climate-change/guide

WHY: EQUITY

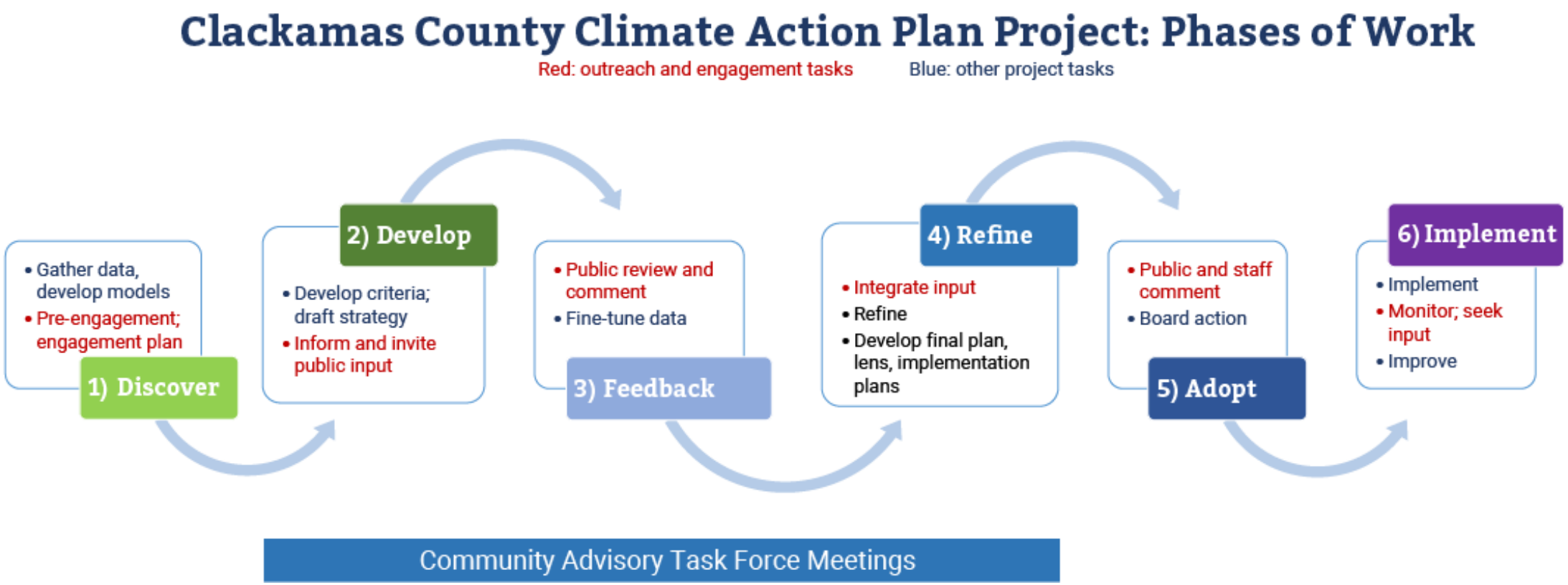
Certain populations — such as children, older adults, people living with disabilities and chronic illnesses, communities of color, the unsheltered and outdoor workers — are disproportionately affected by climate pollution and climate change, whether because they are inherently more vulnerable or because their resilience has been hampered by a history of disinvestment and systemic racism.

American Public Health Association, https://nphw.org/Themes-and-Facts/2022-Climate-Change

LOCAL SIGNS OF CLIMATE CHANGE IMPACTS

- Wildfires
- Severe ice storm
- Heat domes

PROCESS AND TIMELINE



GREENHOUSE GAS INVENTORY (GHG)

- Measured the carbon footprint for the Clackamas County community as a whole
- Major foundation for the climate action plan
- Conducted in 2018
- Emissions sources measured:
  - Buildings
  - Transportation
  - Waste
  - Industry and Refrigerants
  - Household consumption of goods and food
  - Air travel (from airports outside boundary)
  - Upstream energy production

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GHG INVENTORY RESULTS OVERVIEW

*GHG is measured as **MT CO_2e***

- **M**etric **T**ons of **C**arbon **D**ioxide **E**quivalent using global warming potential (GWP)

- Total emissions in Clackamas County: 7,161,020 MT CO_2e

  Total emissions without imported emissions: 3,795,112 MT CO_2e

- Average emissions per person
  - Clackamas County: 9.1 MT CO_2e
  - US average: 16.5 MT CO_2e
  - Global average: 5.0 MT CO_2e

- The most meaningful benchmark is against self over time

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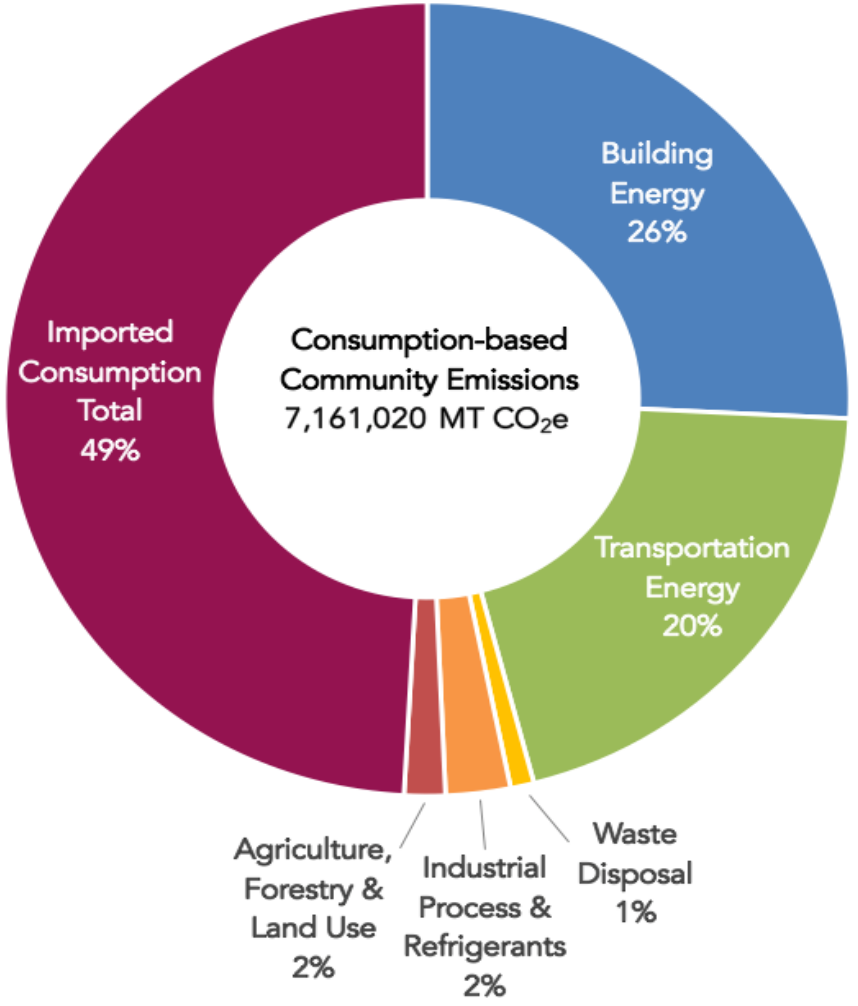
GHG INVENTORY RESULTS

Sources of GHG in Clackamas County

- Small portions: waste after its thrown away, refrigeration and other chemical processes of industry, and agriculture, forestry, and land use
- 25+%: heating, cooling, and powering buildings
- 20%: vehicles transporting goods and people
- Almost 50%: things we buy (imported consumption)



TARGET ACTIONS TO BECOME CARBON NEUTRAL

Actions are needed across all sectors of the community for the county to reach carbon neutrality. Currently we are focusing on five major categories:

1. **Buildings and Energy Generation** - our built environment, and the energy we use to light, heat, cool and operate it
2. **Transportation and Land Use** - how we get people and goods from one place to another; how and where we build the places in which we live, work, shop and play
3. **Water and Wastewater** - the water we consume or use, and how we treat the polluted form of water generated from rainwater runoff and human activities
4. **Consumption / Waste** - materials we obtain, use and throw away
5. **Carbon Sequestration** - the process of capturing and storing carbon dioxide

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1. BUILDINGS AND ENERGY GENERATION

- Our built environment, and the energy we use to light, heat, cool and operate it
- Emissions from the energy used inside all types of buildings - from homes to schools to offices and industrial warehouses -- to:
  - heat and cool space
  - run appliances and equipment
  - operate machinery
- Reducing these emissions requires using less energy, making better use of energy, and switching to non-emitting energy sources for our heating and cooling needs.

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2. TRANSPORTATION AND LAND USE

- How people and goods travel; how and where we build places to live, work, shop, play
- Reducing emissions means fewer trips in cars and trucks that use fossil fuels; instead:
  - Walking
  - Biking
  - Switching to zero-emission vehicles and using low-emission transit (buses, light rail)
  - Making transit more accessible to more people
- Reducing emissions can be supported by neighborhoods that have different types of buildings and services nearby to reduce the need for long journeys

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3. CONSUMPTION AND WASTE

- The things we buy, use, and throw away contribute half of our total community emissions.
- This includes all emissions from:
  - growing, mining, or collecting the raw materials
  - energy to manufacture the product and its packaging
  - transportation to move pieces and final products around
  - the final disposal
- We can make a difference through:
  - what we choose to buy
  - how we take care of what we buy
  - what we do with things after we are done with them

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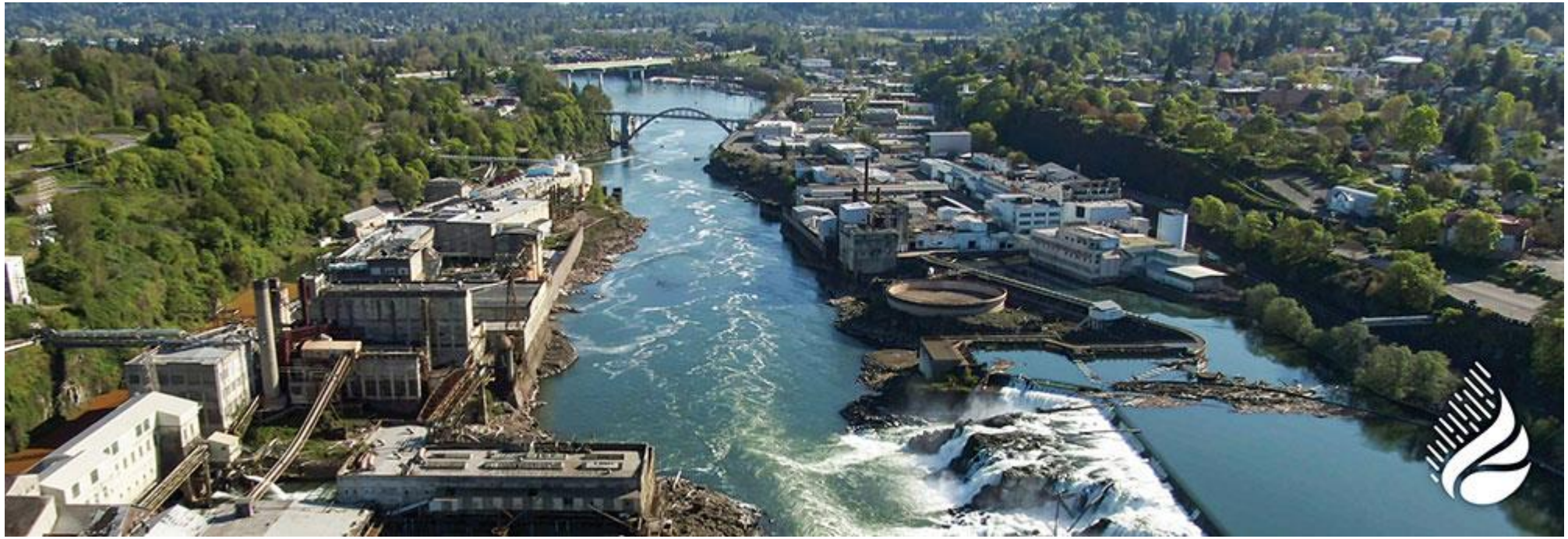
4. WATER AND WASTEWATER

- The water we consume or use
- How we treat polluted water generated from rainwater runoff and human activities



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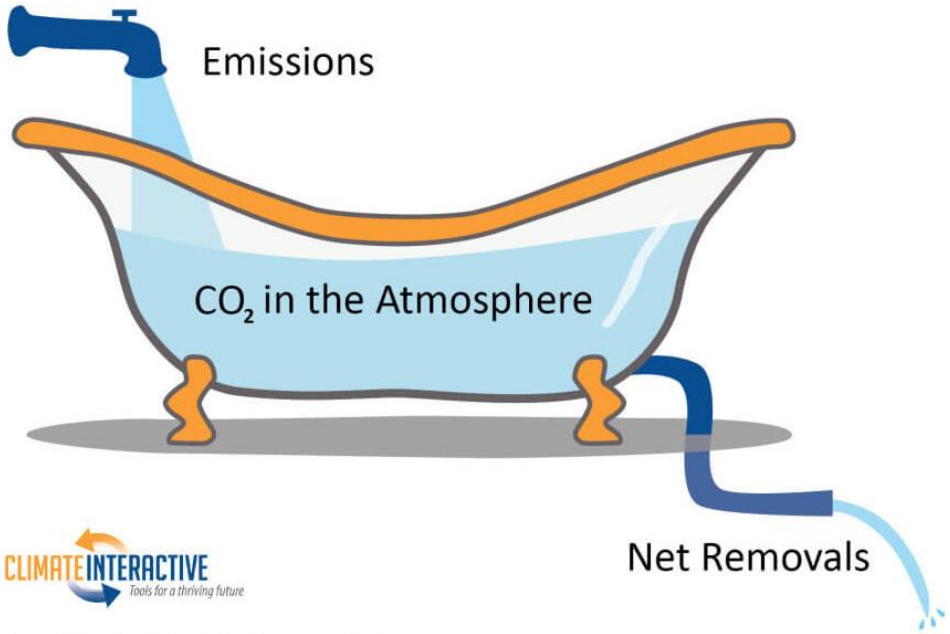
5. CARBON SEQUESTRATION

- The process of capturing and storing atmospheric carbon dioxide (CO_2)
- Removing carbon from the air and storing it in a form that's stable and won't easily return to the atmosphere.
- Less carbon in the atmosphere will reduce the greenhouse effect and lessen the impacts of climate change.



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BE PART OF THE SOLUTION

What we offer you

- The chance to comment on climate actions
  - Take the survey: www.clackamas.us
  - Send us an email: climate@clackamas.us
    - Questions and comments
    - Ask to receive project updates by email
- The chance to learn more about climate action in Clackamas County
  - Check out our website
  - Stay tuned for community conversations
  - Project updates by email

What we ask from you

- Click on the Climate Action Plan survey at www.clackamas.us
  - Open through June 30
  - You can choose to reply to questions on topics of most interest to you
  - Results will help shape the climate action plan
- Ask friends, neighbors and family to take the survey
- Learn more about our project
- Let us know your questions and suggestions

NEXT STEPS

- Additional modeling and research from consultants
- Incorporate public and Community Advisory Task Force input into a draft plan
- Back to the public to let us know if we're going in the right direction
- Board of County Commissioners review and action
  - Climate action plan
  - Implementation guide
- Climate lens
- First 2-year implementation plan

THANK YOU!

- Take the **Climate Action Plan Survey:** www.clackamas.us
- Learn more: www.clackamas.us/sustainability/climateaction
- Contact us to receive project updates: climate@clackamas.us