

CONFRONTING CLIMATE CHANGE

WHAT DOES IT MEAN FOR KING COUNTY? WHAT IS KING COUNTY DOING ABOUT IT?

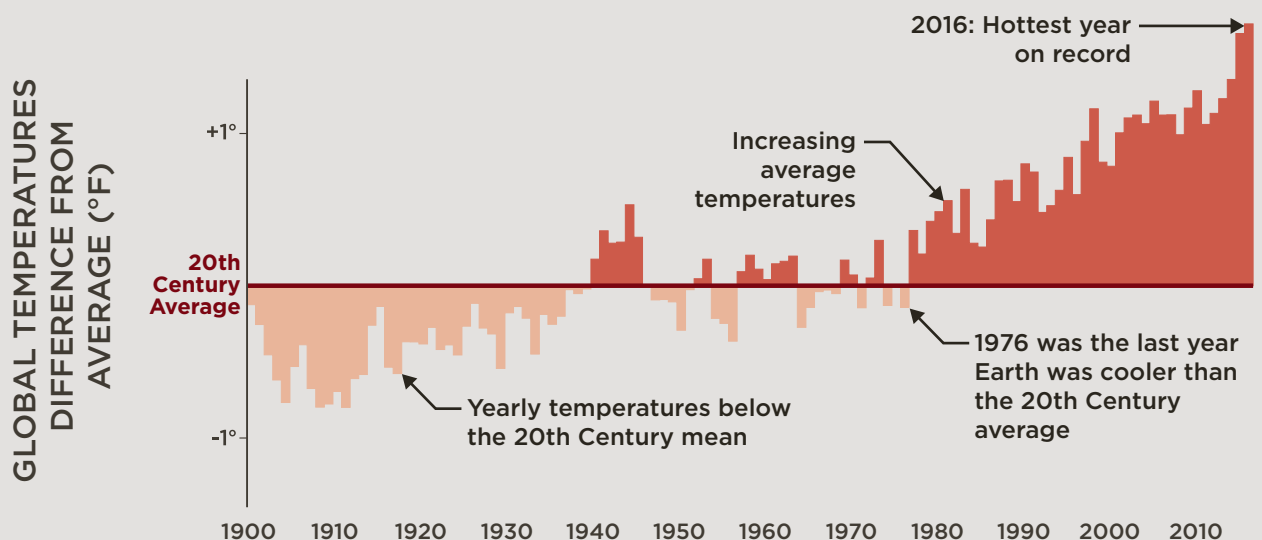
WHAT'S THE PROBLEM?

Increased greenhouse gases are warming our planet and changing the chemistry of our oceans.



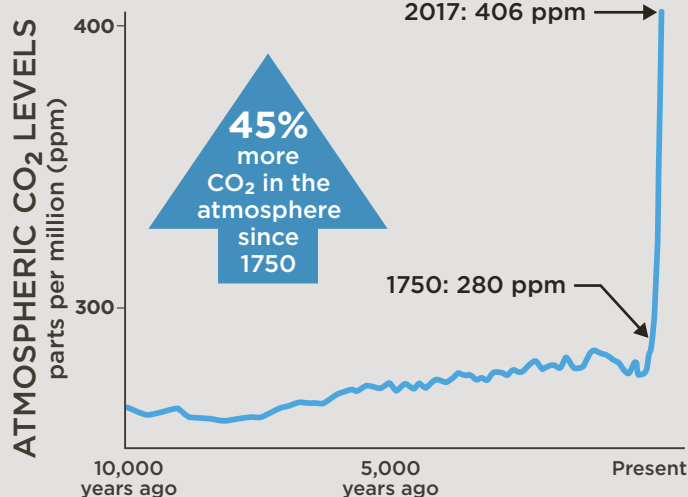
WHAT IS HAPPENING ON A GLOBAL SCALE?

AVERAGE TEMPERATURE IS RISING.

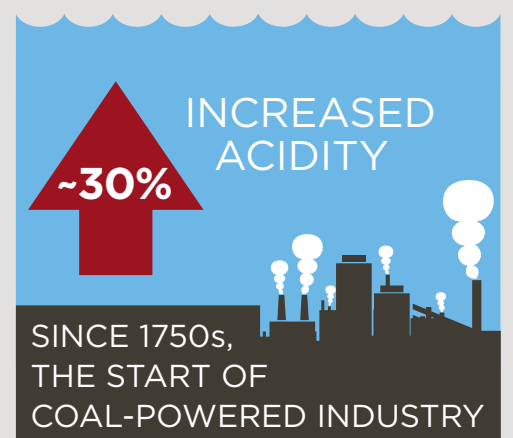


CARBON DIOXIDE (CO₂) LEVELS ARE THE HIGHEST IN THE LAST 800,000+ YEARS.

ISING CO₂ LEVELS ARE CHANGING THE CHEMISTRY OF THE OCEANS.



OCEAN WATER



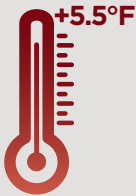


HOW DOES A CHANGING CLIMATE AFFECT OUR REGION?

CHANGES ARE ALREADY AFFECTING OUR ENVIRONMENT, ECONOMY, AND HUMAN HEALTH. THE CHOICES WE MAKE TODAY ABOUT REDUCING GREENHOUSE GASES WILL AFFECT THE SEVERITY OF FUTURE IMPACTS.

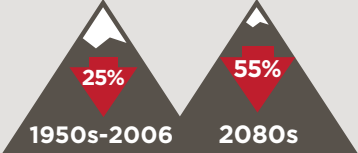
INCREASED HEAT

Average annual air temperature in the Puget Sound region is increasing (+1.3°F, 1895-2014), and is projected to be 5.5°F warmer in the 2050s.

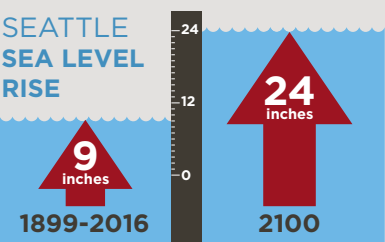


LESS SNOW

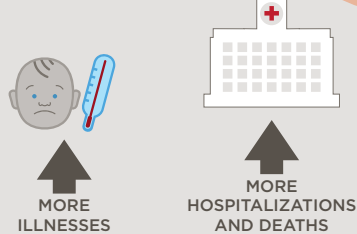
AVERAGE CASCADE SNOWPACK



RISING SEA LEVEL



PUBLIC HEALTH IMPACTS DUE TO HEAT



HEAVY RAIN EVENTS ARE INCREASING

By the 2080s, our heaviest rain events are expected to be 22% heavier.



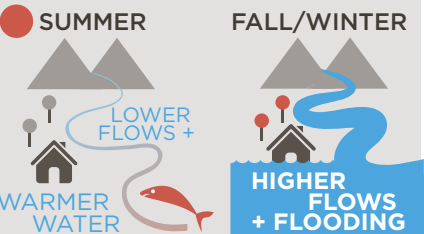
MORE FREQUENT COASTAL FLOODING



INCREASED WILDFIRE THREAT



EXTREME RIVER CONDITIONS



INCREASED COSTS TO SHELLFISH GROWERS





A GLIMPSE OF THE FUTURE?

RECENT YEARS OFFER A PREVIEW OF FUTURE CONDITIONS IF NO ACTION IS TAKEN.

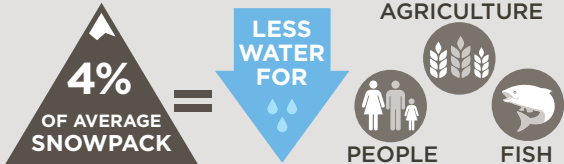
FLOODING



JANUARY 2015:
Warm storms bring torrential rain and flooding.

RECORD LOW SNOWPACK

SPRING 2015: Record low snowpack in the Central Cascades.



RECORD TEMPERATURES

2015: Hottest year on record for Washington State.



SUMMER 2017:
Hottest and driest summer on record for Seattle.

RECORD WILDFIRES



2014 & 2015:
Low snow and high summer temperatures lead to record fires. More than 1 million acres burned in 2015.

LANDSLIDE RISKS

WINTER 2017:
Wettest winter on record creates flooding and landslide hazards throughout the Puget Sound region.



POOR AIR QUALITY

SUMMER 2017:
Northwest forest fires create unprecedented summer air quality problems in the Puget Sound region.



MORE FOOD-BORNE ILLNESSES

SUMMER 2017:
More than 50 people sickened by *Vibrio*, a bacterial illness in shellfish associated with warmer temperatures.



WHAT IS THE RISK FOR OUR REGION NOW AND IN THE FUTURE?

IF WE DON'T ACT NOW, THE COSTS AND CONSEQUENCES WILL GROW.

ENVIRONMENT



Increasing stress for salmon.



Impacts on forests from insects, disease and fire.



Changes in habitat important to local species.



More harmful algal blooms in lakes and Puget Sound.

ECONOMY



Greater risks to homes, businesses, and infrastructure from increased coastal and river flooding.

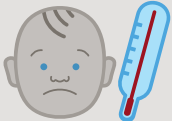


Marine-based economies suffer as fish and shellfish diminish.



Increased summer drought stress.

HEALTH



Health impacts from heat exposure.



Changes in illnesses carried by ticks and mosquitos.



Increased risks for people with asthma and heart illness due to more summer air pollution.



Greater risk of injury and property damage from more extreme weather events.



WHY ACT NOW ON CLIMATE CHANGE?

REDUCING CARBON POLLUTION AND PREPARING FOR CLIMATE IMPACTS MAKES OUR COMMUNITIES HEALTHIER AND MORE RESILIENT.

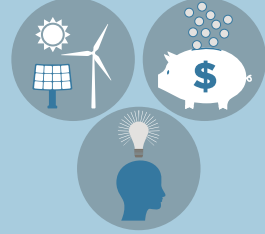
Increasing regional mobility options reduces pollution and improves quality of life.



Conserving resources and reducing waste saves money now and in the future.



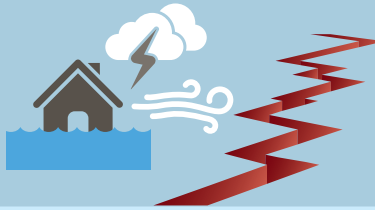
Investing in a clean energy future promotes innovation and economic benefits.



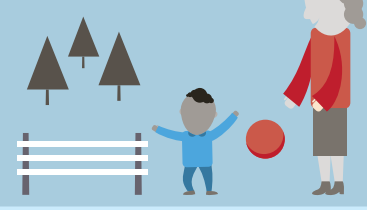
Building green makes our homes and workplaces healthier and reduces utility costs.



Preparing for climate change makes us more resilient to today's extreme weather events and other emergencies.



Addressing climate change has benefits for health outcomes, our environment, and air quality.



WHAT IS KING COUNTY GOVERNMENT DOING ABOUT CLIMATE CHANGE?

KING COUNTY IS COMMITTED TO AMBITIOUS CLIMATE ACTION THAT IS FOCUSED ON:



REDUCING CARBON POLLUTION: RECENT ACCOMPLISHMENTS

TRANSIT

In 2016, the Puget Sound Metro area had the highest rate of increase in transit ridership among the 100 largest metro areas in the country.

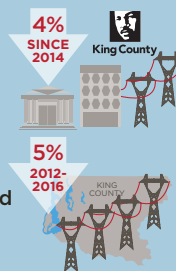


125.4 MILLION

**PASSENGER BOARDINGS
ON METRO TRANSIT IN 2016**

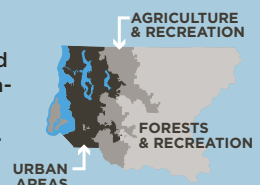
ENERGY EFFICIENCY AND GREEN BUILDING

- King County has reduced energy use in its buildings by 4% since 2014.
- Countywide, energy use in buildings decreased 5% between 2012 and 2016.



SMART GROWTH, FORESTS, FARMS

Every year since 2011, at least 97% of new growth and development has occurred in cities and urban areas, reducing sprawl and transportation emissions.



CLEAN ENERGY FUTURE

King County has committed to purchasing clean wind electricity to power nearly all its buildings and facilities in PSE service territory beginning in 2019, reducing direct greenhouse gas emissions from energy by 20%.



WASTE PREVENTION AND RECYCLING

More than half of all materials disposed of in King County are now recycled. Additionally, King County purchases 100% recycled content paper and has reduced consumption by 25%.



REDUCING CARBON POLLUTION: UP NEXT

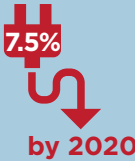
TRANSIT

- Metro Transit will acquire at least 120 all electric zero-emission buses by the end of 2020 and prioritize deployment to communities most vulnerable to air pollution.
- King County will convert the entire bus fleet to zero emissions technology by as soon as 2034.



ENERGY EFFICIENCY AND GREEN BUILDING

- Develop at least 10 net zero energy or Living Building Challenge government sponsored green building projects by 2020.
- Partner with cities and the construction community to update energy and green building development codes.
- Reduce energy use in County facilities by 7.5% by 2020, compared to 2014.



SMART GROWTH, FORESTS, FARMS

- Permanently conserve remaining high-priority farm, forest, and other open spaces throughout King County within 30 years.
- Plant at least one million trees in King County in cooperation with public, private and community partners.



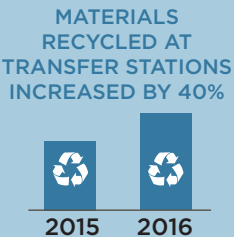
CLEAN ENERGY FUTURE

In partnership with the King County-Cities Climate Collaboration, the utilities, and others, research and develop a plan to achieve a countywide 90% renewable electricity target.



WASTE PREVENTION AND RECYCLING

Continue to increase recycling towards a 70% target, including by implementing a separation requirement for cardboard, metal, and yard and wood waste at King County Transfer Stations.



PREPARING FOR CLIMATE IMPACTS

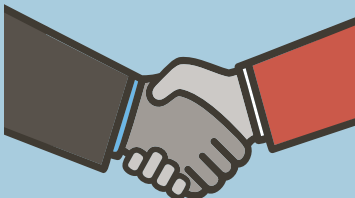
RESILIENT COUNTY OPERATIONS, FACILITIES

King County is planning for climate change impacts on wastewater, stormwater, transportation, emergency management, public health, flood risk reduction, and salmon recovery.



STRENGTHENING REGIONAL RESILIENCE

King County is working with local cities, organizations, communities and partners to improve regional coordination on climate change preparedness.



ENHANCING REGIONAL UNDERSTANDING

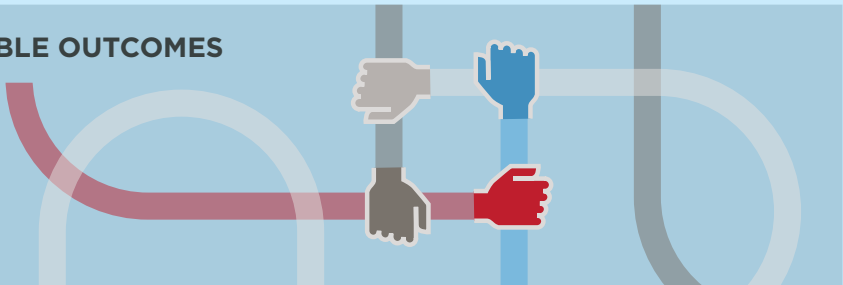
King County is partnering with researchers, local communities, state agencies, and others to address key information gaps related to climate preparedness goals.



ENGAGING COMMUNITIES AND PARTNERS

WORKING TOWARDS EQUITABLE OUTCOMES

King County is building strategic partnerships to ensure that County actions on climate change reflect the needs, priorities, and solutions of communities who are most disproportionately impacted by climate change.



HOW CAN EACH OF US TAKE ACTION?

SIMPLE CHOICES IN OUR DAILY LIVES CAN MAKE A DIFFERENCE.

GREEN UP YOUR TRAVEL



Public transit, carpooling, biking, or walking reduces emissions and roadway congestion.

PLANT & PROTECT TREES



Healthy forests, parks, and natural areas help keep our air and water clean and reduce carbon pollution.

CUT FOOD WASTE & SAVE



Look for smart ways to shop, store, and cook food to reduce food waste.

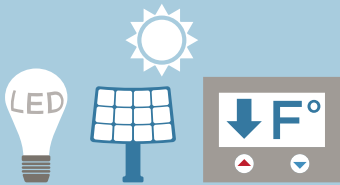
BUY WISELY & RECYCLE MORE

Recycle everything possible and buy products that are long-lasting, energy efficient, reusable, and have less packaging to prevent waste in the first place.



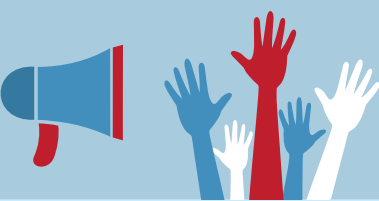
REDUCE ENERGY USE

Using LED lightbulbs and other energy saving steps reduces utility bills and environmental impact.



SPEAK UP!

Help shape community action on climate change. Provide your input on climate actions.



Want to learn more? Visit: kingcounty.gov/climate & kingcounty.gov/beinggreen
For detailed source information, go to: kingcounty.gov/exec/climatechange/sources