



OLYMPIA CITY HALL

# Climate Action Update

Olympia Planning Commission  
November 15, 2021

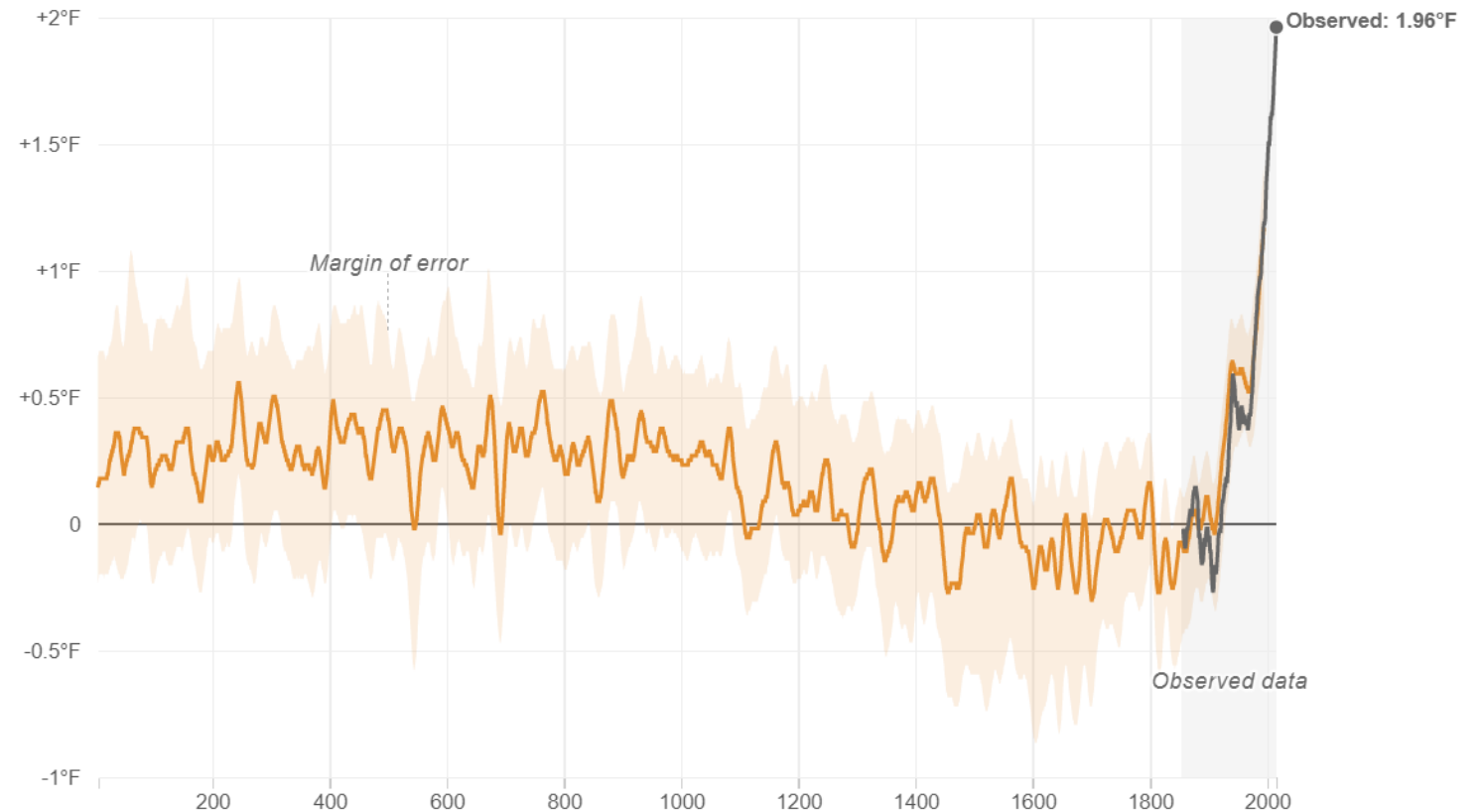
# IPCC Report

Intergovernmental Panel on Climate Change  
Sixth Assessment: Physical Science Report

# Humans have caused rapid and widespread warming.

## Global Temperatures Are Rising Quickly

Global temperatures have risen almost 2 degrees Fahrenheit, compared with the period from 1850-1900. **Observed temperatures** (1850-2020) are directly measured, and **reconstructed temperatures** (of the last nearly 2,000 years) are taken from physical records such as trees, caves and ice.



Source: IPCC Summary for Policymakers from Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

Credit: Ruth Talbot/NPR

# Climate change is already impacting every region on Earth.

## Extreme Heat Waves Are Hitting More Often

In the past, a 1-in-50 year extreme heat wave would have a 2% likelihood of happening every year. As the climate warms, that kind of heat wave is likely to occur much more often.

■ Extreme heat wave event

### PAST (1850-1900)

0°F (0°C) ■ 1 time

### PRESENT

1.8°F (1°C) ■ 4.8 times

### FUTURE GLOBAL WARMING LEVELS

2.7°F (1.5°C) ■ 8.6 times

3.6°F (2°C) ■ 13.9 times

5.4°F (3°C) ■ 27.4 times

7.2°F (4°C) ■ 39.2 times

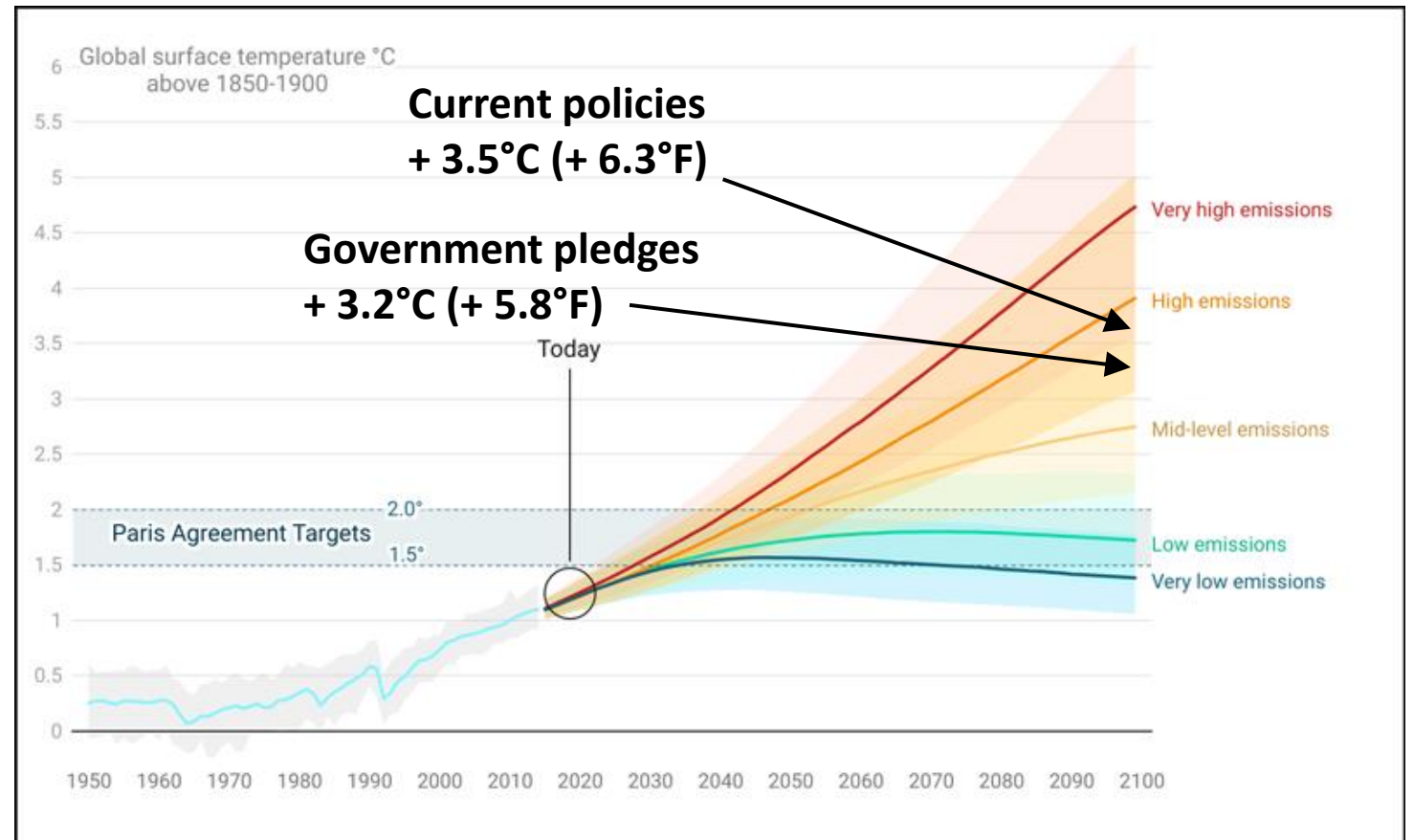
Source: IPCC Summary for Policymakers from Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

Credit: Ruth Talbot/NPR



# Future Climate Pathways

Limiting global warming to 1.5 degrees C by the end of the century is still within reach, but requires transformational change.



Credit: Jenessa Duncombe. Source: IPCC (2021)

# Thurston Climate Mitigation Plan

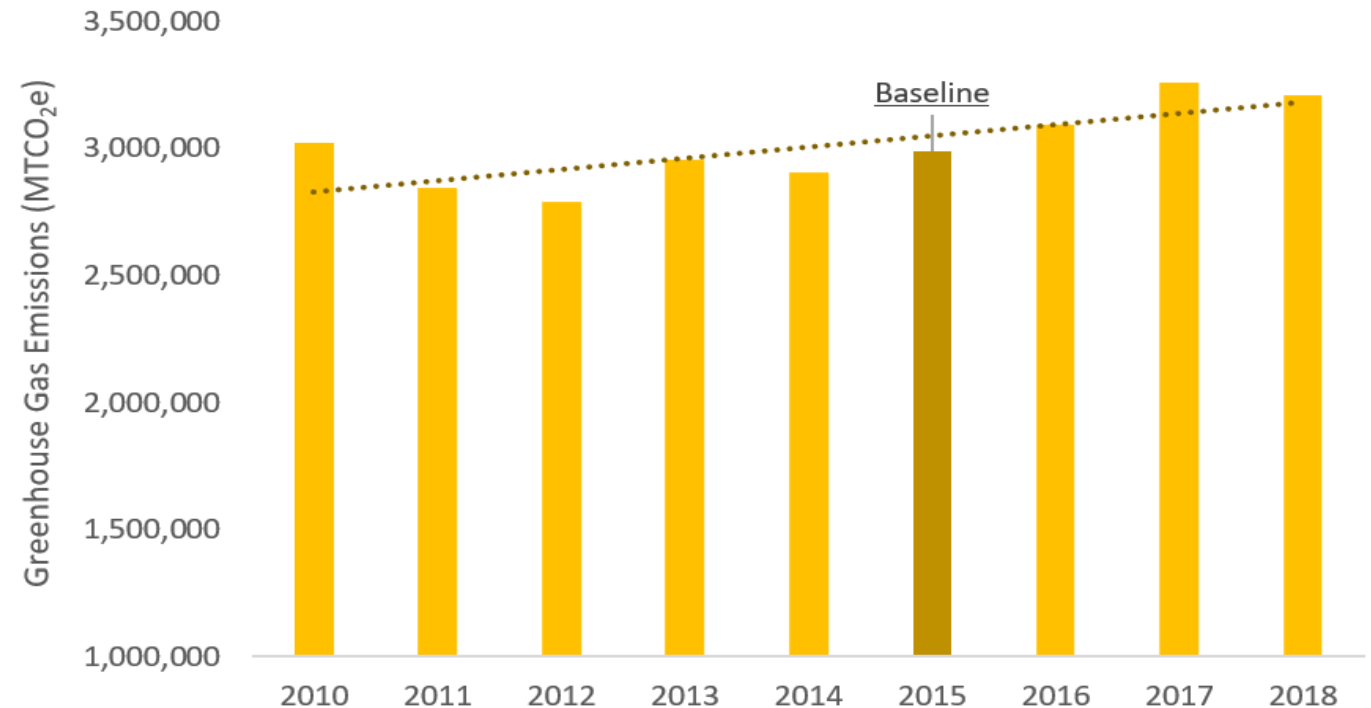
Regional framework for climate action.

# Thurston County Greenhouse Gas Emissions

**Total 2018  
Emissions:**

**3.2 million**

metric tons of carbon  
dioxide equivalent  
(MTCO<sub>2</sub>e)

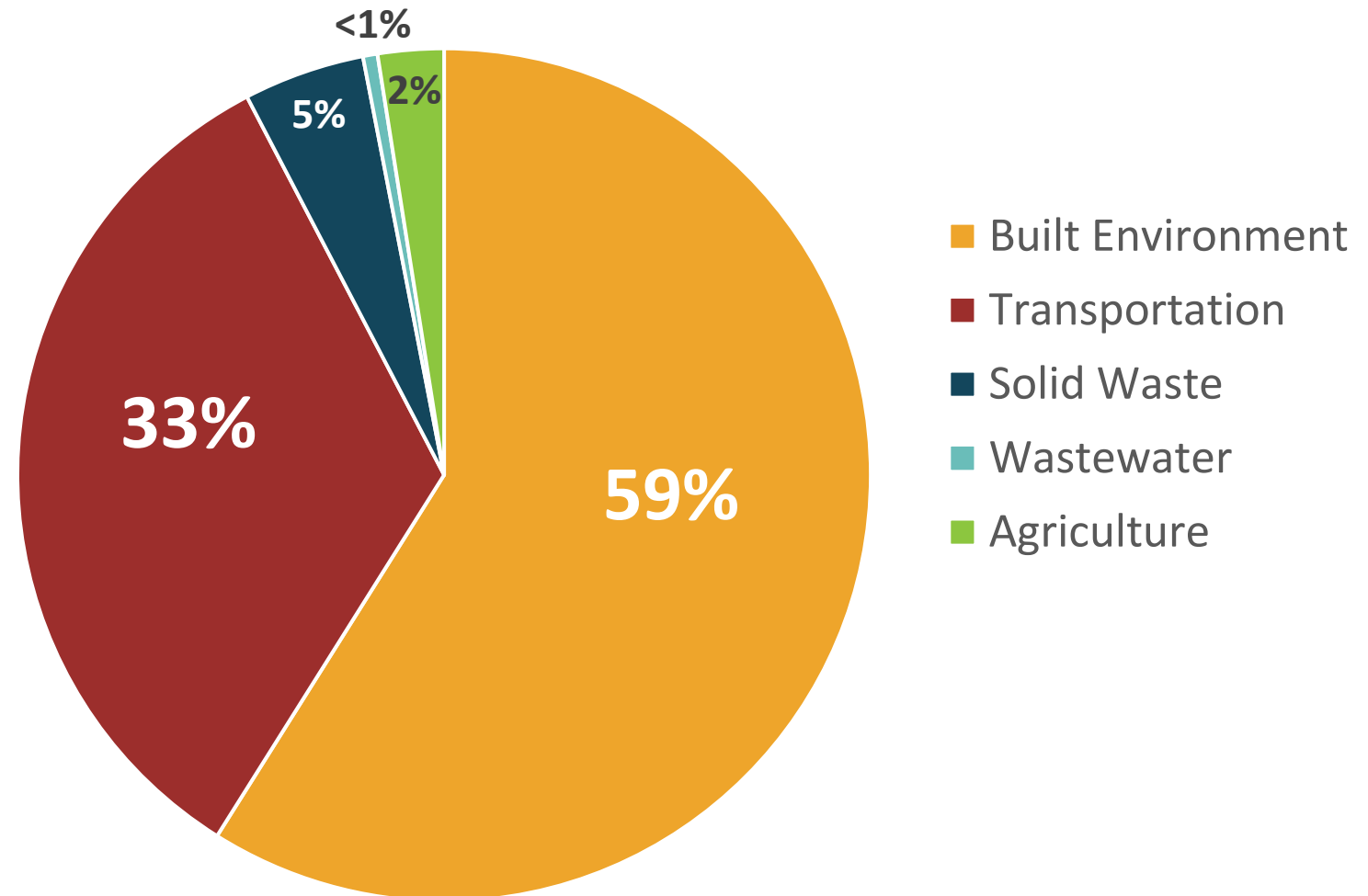


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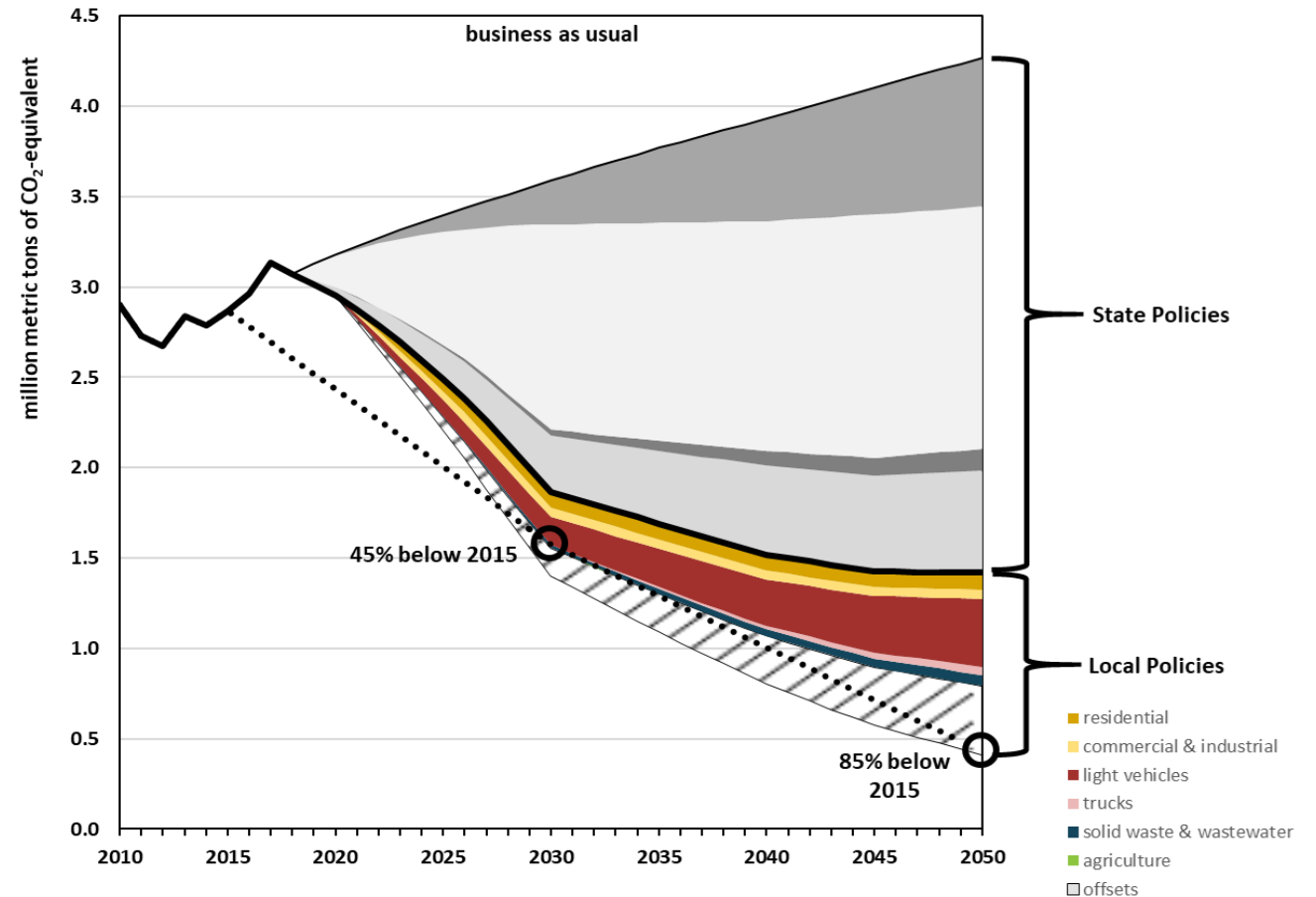


# Adopted Regional Emissions Targets

**Reduce  
emissions:**

**45%** below 2015  
levels by 2030

**85%** below 2015  
levels by 2050



# Climate Mitigation Framework

## Equitable distribution of costs and benefits

### Green our Grid

- Support state-level action to generate electricity with 100% renewable sources
- Increase energy efficiency of homes and businesses
- Make it easier to install renewables on homes and businesses

### Shift Energy Sources

- Switch more appliances, heaters, and vehicles to electricity
- Make it easier to charge electric vehicles in homes and around town

### Live Lighter

- Create denser urban neighborhoods where more people can opt to drive less
- Make it easier to telework, walk, bicycle, and ride transit
- Reduce food and other waste

### Store Carbon

- Plant trees and preserve tree canopy
- Preserve farmland and increase regenerative agriculture practices
- Preserve and enhance prairies

### Build Local Capacity & Resilience

- Provide coordinated leadership on climate action
- Monitor greenhouse gases and assess progress
- Develop expertise in climate-forward practices
- Factor climate impacts into funding and decisions
- Support the development of a green economy
- Further understand and address social equity issues related to climate change

# BUILDINGS AND ENERGY

## Energy Efficiency

- Prioritize high-efficiency building envelopes.
- Increase efficiency of appliances.

## Building Electrification

- Phase out fossil fuels for heating and cooking.

## On-site Solar

- Increase the production of local solar energy.

# TRANSPORTATION AND LAND USE

## Reduce vehicle miles traveled (VMT)

- Set land use policies that support increased urban density and efficient transportation networks.
- Increase the use of public transit and active forms of travel such as walking and biking.

## Vehicle Electrification

- Increase the adoption of electric vehicles.
- Increase the availability of EV charging infrastructure.

# CARBON SEQUESTRATION

## Forest and Ecosystem Management

- Protect and restore existing forests, prairies, and marine ecosystems.
- Increase forest cover where it is ecologically appropriate.

## Regenerative Agriculture

- Increase agricultural practices that sequester carbon.

## Forest GHG Accounting

- Calculate annual GHG emissions and removals from forests and trees

**"...the City commits to working with the youth of Olympia on the collective actions and strategies necessary to achieve a goal of net zero emissions by 2040."**



# Next Steps

## **Cities Race to Zero Pledge**

- Reach net-zero emissions by 2040, in line with global efforts to limit warming to 1.5° C.
- Set an interim target, which reflects a fair share of the 50% global reduction in CO2 by 2030.

## **Adopt a Climate and Equity Lens**

- Develop and adopt a climate and climate equity lens for policy, planning, and funding decisions.

## **Mainstream Climate Action**

- Establish cross-departmental Climate Action Team.
- Identify opportunities for climate action within all city programs and departments.

## **Regional Coordination**

- Support regional coordination and implementation of the Thurston Climate Mitigation Plan.

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