Clean Energy Transition Institute

- Jefferson County/Port Townsend Climate Action Committee—February 24, 2021

Agenda

- About me and the Clean Energy Transition Institute
- Overview of Washington 2021 State Energy Strategy
- Transportation Options and Opportunities
- Enabling Energy Independence
- Decarbonizing Buildings with an Equity Focus
- Universal Free Broadband

Clean Energy Transition Institute

- Independent, nonpartisan Northwest research and analysis nonprofit organization
- **Mission:** To accelerate the transition to a clean energy economy in the Northwest by advancing equitable economic deep decarbonization strategies
  - Data, analytics, best practices, specific to the Northwest
  - Unbiased information clearinghouse for policymakers
  - Systemic approach to provide informed, economy-wide, low-carbon solutions
  - Convene stakeholders to debate and choose solutions

Transforming Washington's Energy System

- Washington State's Priorities
  - Equity, affordability, reliability, competitiveness
- Building on a foundation of past studies and efforts in other states
- Transformational rather than incremental change
- Aggressive action needed across all energy sectors

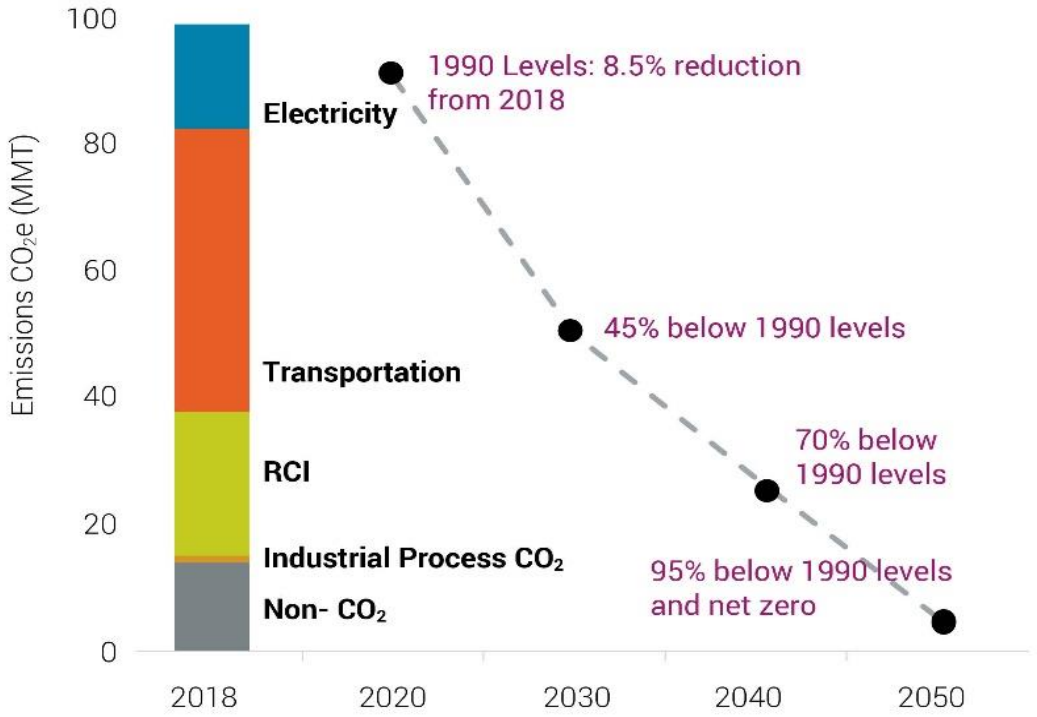
Washington State Emission Targets:

- ***2020: 1990 levels***
- ***2030: 45% below 1990***
- ***2040: 70% below 1990***
- ***2050: 95% below 1990***
- ***2050: Net zero***

The 2030 Challenge: 53% Reduction in Emissions

WASHINGTON STATE 2030-2050 GREENHOUSE GAS EMISSION LIMITS

(Assumes residual 5% of 1990 emissions remaining in 2050 will be offset by biological or geological sequestration)



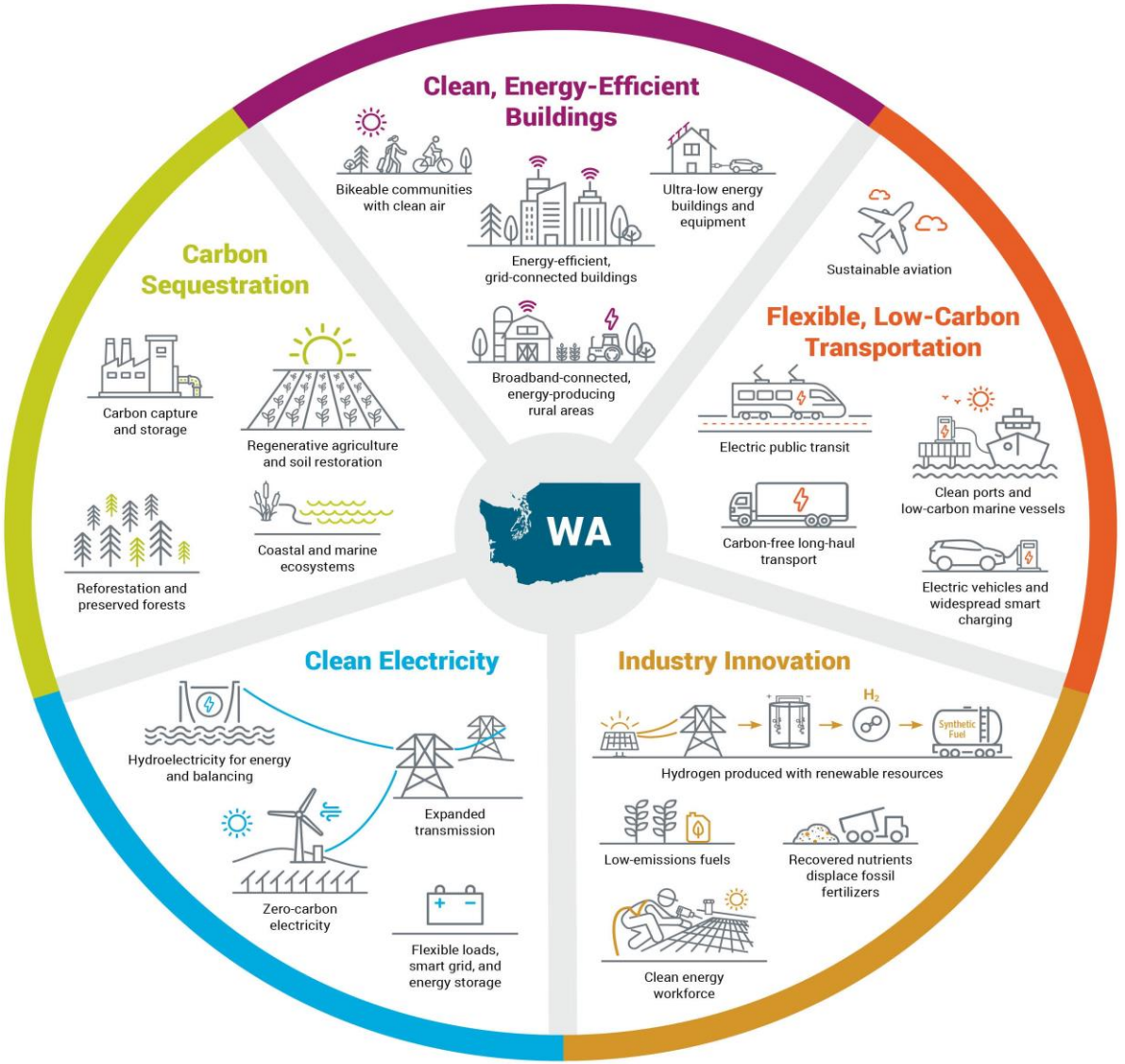
Source: Washington State Department of Ecology and Washington State.[29]

Appendix A – Deep Decarbonization Pathways Modeling Technical Report, December 11, 2020 (p. 15).

Implications for Washington State

- **To Meet the State's 2030 GHG Targets**
  - Deep energy efficiency to reduce energy use
  - Clean electricity grid by 2030
  - Electrifying as many energy end uses as practical
  - Accelerating clean fuels industry critical
  - Regional approach required

Washington's 2050 Net-Zero Vision



100% Clean Electricity, Smart Grid Power Transition

- Enhance reliability and resource adequacy of the electricity grid
- Accelerate new renewables and transmission expansion
- Deploy flexible solutions and smart grid technology to manage load
- Develop market mechanisms for clean power
- Ensure effective implementation of the Clean Energy Transformation Act

Efficient, Equitable Mobility and Clean Fuels

- Move people and goods more efficiently and equitably
- Reduce the need for travel
- Improve fuel economy for all vehicles, planes, ships
- Shift to clean fuels and electrify where possible
- Enact a low-carbon fuel standard

Transportation Options and Opportunities

- Transportation efficiency-two basic ways
  - Reduce the need for travel; avoid trips altogether
  - Shift travel to more efficient modes
- Goal: Many transportation options that do not prioritize single occupancy vehicles
  - Public transit universal need across the state
  - Expand and enhance vanpools, ridesharing
  - Encourage transition to EVs
- EV Infrastructure investment
  - Required for rural communities

Clean Electricity Fueling High-Efficiency Buildings

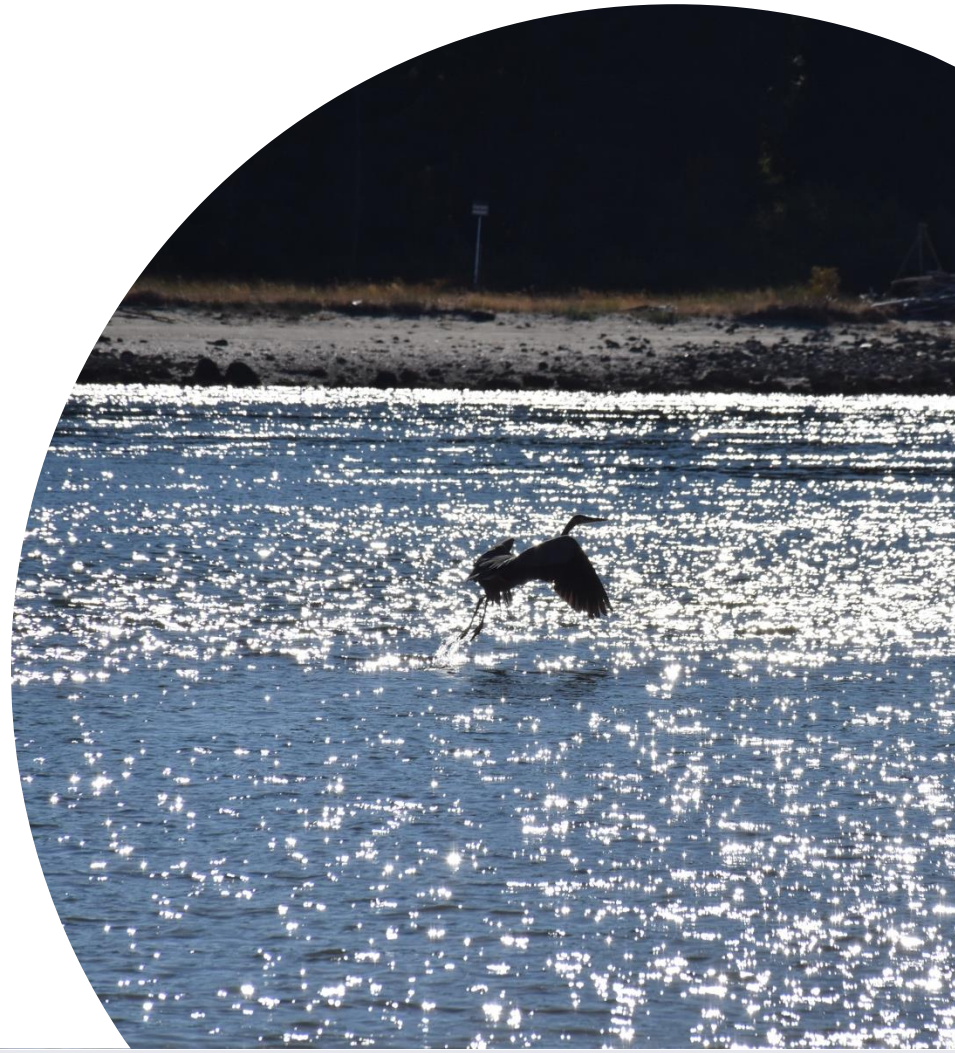
- Shift from fossil fuels to electricity to power commercial and residential buildings
- Accelerate the path to zero-energy buildings
- Weatherize and retrofit existing building stock
- Reform existing programs, codes, and standards

Excel in Building a Clean Energy Economy

- Develop and implement clean energy industrial policy
- Accelerate research and development
- Develop a clean energy workforce
- Produce clean fuels and hydrogen
- Improve data and analytical capabilities

Enable Energy Independence

- **Recommendation**: Ensure decarbonization for rural public buildings through funding allocations
- Need to expand scope and funding scale for home rehabilitation revolving loan program for low-income, owner-occupied households in rural communities
- Lack of access to energy assistance and weatherization programs
- Grants for resilience hubs in rural areas; http://resilience-hub.org/
- Support for agrivoltaics



Priority Recommendation: Universal Broadband

- In the **top three** of the seven major recommendations: “Universal Broadband as a Foundation for Energy Transition”
  - “Enhancing resilience in rural Washington by strengthening the electric grid to deliver clean energy and using universal broadband access to support a smart grid and remote work”
- Multiple examples of value of universal, reliable Internet access
  - Work from remote locations; reduces travel
  - Enable energy efficiency & access to clean energy

Decarbonizing Buildings with Equity

- Understand the barriers to decarbonization in rural and tribal communities
- Explore the potential for distributed energy resources
- Analyze the public health implications of aging infrastructure & gas/propane cooking
- Opportunities for equitable economic development
- Co-design pilot project with community partners

Decarbonizing Buildings with Equity - Approach

PROCEDURAL

- Create processes that are transparent, fair and inclusive in developing and implementing any program, plan or policy
- Ensure that all people are treated openly and fairly
- Increase the civic engagement opportunities of communities that are disproportionately impacted by climate change

DISTRIBUTIONAL

- Fairly distribute resources, benefits and burdens
- Prioritize resources for communities that experience the greatest inequities, disproportionate impacts and have the greatest unmet needs

STRUCTURAL

- Make a commitment to correct past harms and prevent future unintended consequences
- Address the underlying structural and institutional systems that are the root causes of social and racial inequities

Clean Energy Transition Institute

Thank you very much!

eileen@cleanenergytransition.org
aditi@cleanenergytransition.org
https://www.cleanenergytransition.org