Washington's Clean Energy Transformation



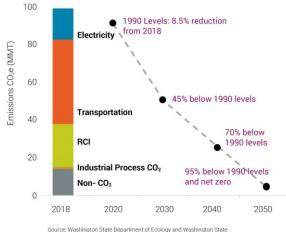
Glenn Blackmon, PhD director, energy policy office

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We strengthen communities



Meeting State Emissions Reduction Limits



Source: Washington State Department of Ecology and Washington State. Appendix A – Deep Decarbonization Pathways Modeling Technical Report, December 11, 2020 (p. 15).

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Clean Energy Transformation Act (2019)

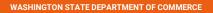
- Clean
- Affordable
- Reliable
- Equitable



CETA's three clean electricity standards

Applies to all electric utilities serving retail customers in the state

- 2025: Eliminate coal from retail portfolios
- 2030: Greenhouse gas neutral standard
 - Use electricity from renewable or nonemitting sources in an amount equal to <u>80</u>% of retail WA load
 - Alternative compliance options for up to 20%
- 2045: 100% renewable or non-emitting retail electricity supply





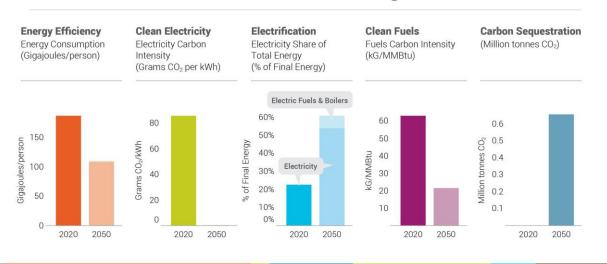


Climate Commitment Act (2021)

- Covers about 70% of state's greenhouse gas emissions
- Large emitters and fuel suppliers must obtain allowances to pollute
- Allowances decrease year by year
- Proceeds from allowance sales are invested in emissions reduction programs, transportation budget, and overburdened communities



Five Decarbonization Strategies



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Implications for Washington State

To meet the state's energy transformation vision

- Deep energy efficiency to reduce energy use
- Clean electricity grid by 2030
- Electrifying as many energy end uses as practical
 - Transportation
 - Buildings
- Building clean generating capacity and transmission grid
- Increasing economic justice

Strategy development and implementation

<u>Clean buildings</u>

- Accelerate use of high efficiency heat pumps
- Leverage federal incentives and tax credits

• Transportation electrification

- · Incentives for electric vehicles
- Investments in vehicle charging facilities
- Green hydrogen and fuel opportunities
 - Replace fossil-based hydrogen in industry, agriculture
 - Make synthetic fuels for aviation, maritime
- <u>Siting and planning improvements</u>

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Strategy development and implementation

- Develop climate-aware industrial policy
 - Convert to clean electricity and hydrogen
 - Develop workforce to support clean energy transformation
- Monitor emerging technologies
 - Power transmission systems
 - · Offshore wind and geothermal
 - Fusion energy and advanced nuclear reactors
 - Energy storage systems
 - Carbon dioxide removal

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Funding opportunities



Close to \$1 billion in funding available for technical assistance, planning, deployment and more

- Clean transportation
- Building, industry, aviation and maritime decarbonization
- · Clean energy projects led by and benefitting frontline communities

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- Tribal-led clean energy development
- · Solar energy and storage technology deployment
- Electric grid modernization and innovation
- Clean energy project siting and permitting

Upcoming funding opportunities

- Closed June 14: Clean energy projects community level
 <u>https://deptofcommerce.app.box.com/s/ypl4u26v7lkn330t3csu979izcny5y79</u>
- Clean transportation
 - EV rebates for income qualified, \$45 million opening August 2024 <u>https://www.commerce.wa.gov/growing-the-economy/energy/electric-vehicles/ev-instant-rebate-program/</u>
- Building decarbonization
 - Energy efficiency upgrades for communities, households, tribes, small businesses
 - Home Electrification & Appliance Rebates (HEAR): <u>https://www.commerce.wa.gov/program-index/home-electrification-and-appliance-rebate-hear-program/</u>
 - Residential weatherization serving income qualified households: <u>https://www.commerce.wa.gov/growing-the-economy/energy/weatherization-and-energy-efficiency/</u>
- Clean Energy Ambassadors, Clean Energy Community Grants Jan 2025
- Residential and Community Solar for income qualified Fall 2025







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- Sign up for email GovDelivery updates https://www.commerce.wa.gov/growingthe-economy/energy/
- Learn more about Washington Climate Action: <u>https://climate.wa.gov/</u>





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Thank you!



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