EXECUTIVE SUMMARY

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Purpose and overview

Washington residents are experiencing the harmful impacts of climate change, such as extreme heat, less water availability, and more wildfire risk. To reduce the state's contribution of pollution causing these harmful impacts, the state has set ambitious, science-based legal limits on greenhouse gas emissions.

Washington already has a strong set of policies to advance climate action. However, the state can and must do more. The Comprehensive Climate Action Plan (CCAP) is designed to meet this need and be a far-reaching, implementable, equitable, and thorough roadmap to ensure a sustainable future for our state.

The CCAP identifies opportunities across all sectors of the economy to further reduce emissions and provide direct benefits to communities and businesses such as cleaner air, healthier communities, boosting the economy, and protecting vulnerable populations.

This plan was written by the Washington State Departments of Commerce and Ecology and reflects direct feedback from impacted communities, Tribes, businesses, workers, subject matter experts, and more. Developing the CCAP required extraordinary collaboration and cooperation and enacting it will too. By working together, state government — along with partners and communities across the state — can advance an affordable, reliable, and equitable future, while mitigating our state's contribution to climate change.

The CCAP includes:

- **Key priorities and recommendations for decision-makers:** High-level recommendations and specific priority actions to make the biggest climate impact in the near future.
- **Where we are now: the Washington climate context:** An overview of the current climate landscape in Washington, including existing policies, plans, laws, and climate science up to this point.
- **Greenhouse gas emissions projections:** Modeled projections of different pathways to achieve greenhouse gas reduction limits through 2050.
- **Greenhouse gas reduction plan:** A comprehensive greenhouse gas reduction plan that lays out various ways (consisting of 36 strategies and 135 measures) to reduce emissions and invest in communities across all parts of Washington and the economy. This is the bulk of the CCAP.
- **Benefits and impacts analysis of climate actions**: Air quality, health, and economic impacts of actions proposed in the CCAP.
- **Workforce planning analysis:** Describes the state workforce ecosystem, workforce needs to implement the CCAP, and opportunities to grow high-quality, green jobs.
- **Next steps:** For implementation and tracking progress.

Key takeaways

The CCAP is a comprehensive assessment of Washington's climate landscape. This plan brings together decades of existing climate action and planning efforts across the state. It builds off this foundation and – with extensive analysis, collaboration and engagement – assesses where we are now, where we need to go, and how we can get there. The points below summarize the report's main findings and provide context for state climate policy:

- **Washington is a climate innovator and must do more.** Many of the measures in this plan are already in place. Even with this foundation, to meet our greenhouse gas reduction limits we need to expand successful programs, encourage private investment in clean technologies, and create new policies and programs when needed.
- **Climate action directly benefits communities and households.** This plan offers a Washington-scale blueprint for combating global climate change while providing immediate community benefits, such as energy cost savings, increased public health and safety, and healthier ecosystems.

- **Environmental justice and equity are essential.** This includes building on the requirements of the Healthy Environment for All Act by ensuring the benefits of future climate action are equitably distributed.
- **Expanding clean energy production and improving energy efficiency remain affordable and effective strategies.** This will require Washington to harness a diverse portfolio of affordable clean energy resources to ensure a reliable electric grid and improve when and how we use energy.
- **Workforce development goes hand-in-hand with effective climate action.** The measures proposed in this plan will drive demand for new jobs and a highly trained workforce. Meeting this demand will require strategic collaboration with labor groups and sustained investments in workforce development.
- **State climate action is not one-size-fits-all.** As we implement new measures, continued collaboration with communities across the state is necessary to account for differences in population density, climate, local sources of greenhouse gas emissions, and community preferences.
- **Washington must continue to lead.** Climate change is a global problem, and we need more governments to take action. Washington's success has a strong influence on progress in other jurisdictions.

Key recommendations

This plan is intended to help policy- and decision-makers identify actions to achieve statutory greenhouse gas emission reduction limits while providing direct benefits to communities. With input from partners and the public, we prioritized measures[1] that cost-effectively cut the most emissions, provide direct community and environmental benefits, and can be realistically carried out by the state. Priorities for each sector were grouped thematically into seven overarching recommendations:

Build out transmission and in-state clean energy resources.

Transmission holds the greatest potential and remains the biggest bottleneck to clean, reliable, and affordable electricity. New and expanded sources of clean, reliable, and affordable electricity are also needed to power many of the measures recommended throughout the plan.

- **Electric power:** Upgrade existing transmission lines and improve transmission and clean energy siting and permitting.
- **Electric power:** Develop and adopt emerging technology like geothermal energy and virtual power plants.

Meet growing energy needs through a combination of electrification and clean fuels.

To meet demands for new clean energy, electrify where possible and continue to develop clean fuels where electrification is not feasible.

- **Transportation**: Expand electric vehicle charging infrastructure and clean transportation fuels in Washington.
- **Buildings**: Boost incentives to electrify buildings and remove fossil fuels from publicly owned district energy systems.
- **Industry:** Encourage hydrogen investments for strategic end-uses.

[1] See the **Key priorities and recommendations for decision-makers** section of the CCAP for a full list

Maximize conservation to save money, resources and reduce emissions.

Conservation of energy, materials, and other resources is necessary to reach the state's emissions mandates. These measures also reduce costs and overall demand for new resources.

- **Transportation**: Improve transportation efficiency through land use planning and expanding public transit.
- **Buildings:** Incentivize energy efficiency improvements in large commercial buildings and single- and multi-family homes.
- **Industry:** Expand voluntary efficiency audits and implementation incentives for industrial facilities.
- **Agriculture:** Expand tools for farmers to enhance fertilizer and irrigation efficiency and invest in local food systems.
- **Waste and materials management:** Reduce carbon footprint through environmentally preferable government purchasing, reuse, and repair.

Advance carbon dioxide removal through natural and technological solutions.

Cost-effective carbon removal will be necessary to close gaps in emissions reduction mandates. Many solutions are technologically feasible now and can be implemented through state action in the near term.

- **Agriculture:** Establish programs that support management practices to store carbon in soil and vegetation on farms.
- **Natural and working lands**: Manage forests for wildfire resilience and carbon storage, and plant climate-adapted vegetation in developed areas.
- **Natural and working lands/Industry:** Develop guidelines for carbon dioxide removal.

Use existing authority and fill gaps in regulatory environment for emissions reductions.

Washington has a foundation of existing laws that can be utilized to further advance climate action. Some sources of carbon emissions are not currently regulated by state policies and could be addressed with future legislative/regulatory action.

- **Transportation**: Implement zero-emission vehicle standards.
- **Industry:** Develop guidance for further aligning environmental review with climate laws.
- **Waste and materials management:** Expand extended producer responsibility and require environmental product declarations on carbon-intensive materials.

Support climate action from other governments and the private sector.

Washington can empower Tribal, regional, and local governments, as well as private sector climate actions, through a combination of incentives, policies, and technical assistance.

- **Transportation**: Advance policies and incentives to decarbonize local transportation systems.
- **Agriculture:** Expand tools, assistance and incentives for farmers to adopt climate-smart agricultural practices.
- **Natural and working lands:** Avoid forest and wetland conversion through land-use planning and stronger zoning laws.
- **Waste and materials management:** Reduce landfill emissions by funding and implementing food and organics management systems.
- **Economy-wide**: Support the Washington Green Bank to develop clean energy financing solutions.

Build processes for continued climate planning and improved data analysis.

Climate action is rapidly developing. New developments in funding opportunities, technology advancements, and state and federal budgetary outcomes require up-to-date plans to prioritize future climate actions. Improved data collection and analysis are also required to better understand and track the outcomes of climate policies as they are implemented.

- **Natural and working lands:** Define "net zero" and establish monitoring, reporting, and verification protocols for carbon dioxide removal to ensure accurate accounting.
- **Waste and materials management:** Improve data on the carbon footprint of materials and products to make better choices around consumption.
- **Economy-wide:** Support ongoing Comprehensive Climate Action Plan updates.

Benefits, impacts, and expected outcomes

While current policies reduce most of Washington's greenhouse gas emissions, it's unlikely that limits will be met without additional action. **The CCAP identifies pathways to fill the remaining gaps and advance action in ways that will save Washingtonians money, provide additional benefits to communities, and grow the economy**. The climate actions proposed in the CCAP have wide-ranging community and ecological benefits, including: cleaner air, water, and soil; lower energy and transportation costs; economic development and job growth; and new community and ecological services. Specifically:

- **Acting on climate in the near term avoids significant costs in the long term.**
  - Emissions reductions under the CCAP, consistent with the required greenhouse gas emissions reduction limits, would avoid social costs (i.e., damages caused by climate change to agriculture, property, human health, etc.) of approximately $10 billion per year in 2030, rising to nearly $35 billion per year in 2050, when compared to 2024 emission projections.
  - Modeling shows that implementation of a suite of measures consistent with those included in the CCAP could result in cumulative capital and operational cost savings of nearly $17 billion by 2050.

- **Clean vehicles and home energy upgrades can save households additional money.** Modeling shows that by implementing measures included in the CCAP, all households with cars are likely to save money by adopting electric vehicles and most types of households are likely to save money through home electrification and efficiency upgrades.
- **Reducing climate pollution, especially from burning fossil fuels, leads to healthier communities. Implementation of the CCAP would lead to:**
  - Reduced harmful co-pollutant emissions from fossil fuel combustion, especially near industrial facilities and transportation corridors.
  - Improved indoor air pollution, as well as improved access to heating and cooling from building electrification and efficiency improvements.
  - Reduced risk of wildfire, which lowers greenhouse gas emissions but also protects communities from fire and smoke.
- **New and existing climate actions will spur job creation**. Implementation of a suite of measures consistent with those included in the CCAP is projected to:
  - Create 18,500 jobs by 2035 and over 38,000 jobs by 2050. Most growth would come from developing clean electricity infrastructure and electric vehicle infrastructure, especially in the construction sector.
  - Increase annual labor income by $44.4 billion total across all industries from 2026 to 2050, with the largest growth for construction, professional services, utilities, and transportation industries.
- **Total economic output is projected to grow $4.8 billion by 2035 and $10.3 billion by 2050** if actions are taken that are representative of what is proposed in the CCAP.

Vision for climate action in Washington

Washington has a longstanding commitment to climate action and leadership. Swift, comprehensive action to reduce climate pollution is not optional in Washington; it is the law.

This plan outlines a strategic path forward. While it focuses on state-level actions, successfully achieving our emission limits requires coordinated engagement across all levels of government, the private sector, communities and individuals. Many of the strategies presented here are adaptable to other jurisdictions and can be supported not only through public funding, but through private or philanthropic funding as well.

Immediate acceleration of existing solutions is necessary to remain on track to meet the state's 2030 emissions limit. Several priority measures have been identified throughout

the plan that build upon existing work and can be implemented within the next few years. This plan also recognizes that, to achieve net-zero emissions by 2050, implementation of new solutions must be phased and responsive to available resources, technologies, and political will.

Climate change is already impacting Washington. The focus of this plan is emissions reductions, but climate adaptation must proceed in parallel to minimize future harms (for additional detail on adaptation strategies, see Washington's Climate Resilience Strategy). As responsible global citizens, we have a duty to act — both to protect our own residents and to contribute to broader global efforts.

This plan envisions a future where every household and business has access to abundant and affordable clean energy, where everyone enjoys clean air and water and where all communities are protected from the disproportionate effects of climate change.