A Summary of Washington State and Federal Historic Climate-Related Building Decarbonization Legislation and the Beneficial Impact on the Building Sector of the Methow Valley-prepared by the Resilient Methow Climate Action Implementation Hub

1. Methow Valley Climate Action Plan (CAP): One of the goals of the CAP is to reduce emissions from commercial buildings and households, and make them more energy efficient.
2. In Washington, homes and commercial buildings have been the fastest growing source of carbon pollution. Buildings represent approximately one-fifth of Washington’s greenhouse gas emissions. The greatest portion of the building sector’s emissions come from the direct combustion of natural gas and other fossil fuels in buildings for space heating, water heating and cooking.
3. Climate-related Legislation in Washington
4. To meet Washington’s greenhouse gas reduction limits, emissions from gas in buildings must decline 14% by 2030 and continue to decline at an increasing rate through 2050. To meet the 2030 limits, high efficiency electric strategies will need to be implemented at every available opportunity. Ideally, this would mean every time fossil fuel or electric resistance equipment is scheduled for renewal, it would be replaced with high efficiency electric equipment. All new construction would need to be designed and constructed to meet low-energy, zero-carbon standards.
5. New building codes support transition from fossil fuels to electricity.
* In April, 2022, the Washington State Building Code Council approved a new mandate (WSR 22-02-076) that places significant restrictions on the use of natural gas in new commercial buildings, and called for transition to appliances and HVAC (heating, ventilation, and air conditioning) equipment that can be powered by electricity, with restrictions beginning July 1. 2023.
* The mandate requires commercial buildings and multifamily buildings four stories and taller to be built with high efficiency electric heat pumps. Exempted are large commercial buildings in Eastern Washington, which can use gas heating as a backup option, especially when extreme cold temperatures occur.
* The mandate also requires that heat pumps be installed to take care of 50% (or more) of a building’s water heating needs, but exempts hospitals, research facilities, and other buildings with “specific needs” that cannot be served by heat pumps.
* The new building code is projected to cut more than a million tons of carbon dioxide from being released into the atmosphere.
* The State Building Code Council is also considering a proposal to build new homes cleaner, healthier, and cooler by requiring high efficiency appliances like heat pumps and heat pump hot water heaters, as well as better ventilation in kitchens with gas stoves. Clean energy cooling in buildings will be essential to keeping vulnerable people safe during increasing heat waves. This is especially important for homes that would not be able to afford air conditioning and for people who are bedridden and often bear the greatest risk of heat-related health impacts.
1. The Clean Buildings Act
* Effective June 9, 2022, SB 5722 added another category of buildings to the Clean Buildings Act, which passed in 2019 as HB 1257.
* The Clean Buildings Act set energy management and building performance standards (codified at RCW 19.27A), for commercial buildings 50,000 sq ft and larger.
* Under SB 5722, the Washington State Department of Commerce is tasked with adopting these building performance standards to “tier 2” covered buildings – which includes multifamily, non-residential, hotel, motel and dormitory floor areas – that are greater than 20,000 sq ft and less than 50,000 sq ft. It also requires building owners to report compliance with these new rules beginning July 7, 2027.
1. Updating Appliance Efficiency Standards
* Washington House Bill 1619 (2022) establishes new efficiency standards for air purifiers, commercial ovens and other appliances.
1. Clean Energy Fund Building Electrification Grant Program
* The Washington State Department of Commerce will fund projects that “deploy and demonstrate grid-enabled, high efficiency, all electric buildings.” A total of $9.7 million is available for distribution and eligible applicants include businesses, nonprofit organizations, local governments, Tribal governments, retail electric utilities and individual owners of multifamily residential or commercial buildings.
* Applicants can request grants from $50,000 up to a maximum of $1 million for their project.
* For grant information, contact Aaron Dumas at CEF@commerce.wa.gov.
1. Incentives offered by the Okanogan County PUD and the Okanogan County Electric Cooperative
* The Okanogan County PUD offers incentives for smart thermostats, heat pump water heaters, doors, windows, insultation, ductless heat pumps and NEEM homes.
* The Okanogan County Electric Cooperative offers rebates for ductless heat pumps.
1. Climate-related Federal Legislation
2. The Inflation Reduction Act
* The Inflation Reduction Act is the most significant legislation In US history to tackle the climate crisis. It will lower energy costs for households and businesses and deliver a clean and healthy future for our children and grandchildren. The energy costs savings will beneficially impact the Methow Valley community.
* Lower energy costs: The Inflation Reduction Act will make it more affordable for Methow Valley families to purchase energy efficient appliances, and save money on utility bills each month, through:
* Rebates covering 50-100% of the cost of installing new electric appliances, including super-efficient heat pumps, water heaters, clothes dryers, stoves and ovens.
* Rebates for households to make repairs and improvements in single-family and multi-family homes to increase energy efficiency. Such improvements include weatherization, insulation, lighting and windows.
* Tax credits covering 30% of the costs to install solar panels and battery storage systems, make home improvements that reduce energy leakage, or upgrade heating and cooling equipment. No income limits apply. For solar, uptake projections estimate that over 160,000 additional Washington households will install rooftop solar panels as a result.
* Tax credits covering 30% of the cost of community solar projects – owned by local businesses that sign up families to save on their electric bills- with additional bonus credits of 20% for the projects at affordable housing properties and 10% for projects in low-income communities.
* Cleaner Air: The Inflation Reduction Act will significantly reduce pollution, resulting in 100,000 fewer asthma attacks in America in 2030, and position the US to achieve President Biden’s climate goals. Lowering greenhouse gas emissions will not only avoid costly climate impacts from more extreme weather, but also improve local air quality, preventing premature deaths and reducing air pollution. In addition to reducing pollution across the economy, the Act will benefit communities most in need of cleaner air, with investments for cleaner buses and trucks, and a Clean Energy and Sustainability Accelerator that will prioritize emissions, reducing projects in disadvantaged communities.
* Resilient Communities: The Inflation Reduction Act will upgrade affordable housing including projects that boost resilience in the face of intensifying extreme weather. In the Methow Valley, people who live in affordable housing units are eligible for upgrades, as well as clean energy and electrification. A new Neighborhood Access and Equity Grant Program includes support for planning to protect against extreme heat.
* Good Paying Jobs: The Inflation Reduction Act will provide good paying jobs by investing $5.3 billion in large-scale clean power generation and storage in Washington between now and 2030. It provides a historic set of tax credits that will create jobs across solar, wind, storage and other clean energy industries.
* Small Businesses : Commercial building owners can receive a tax credit up to $5 per sq ft to support energy efficiency improvements that deliver lower utility bills. Other programs that will benefit small businesses include tax credits covering 30% of the costs of installing low-cost solar power and of purchasing electric trucks and vans for commercial fleets.
1. Bipartisan Infrastructure Law.
2. The Bipartisan Infrastructure Law (BIL) enacted into law in November 2021, provides investments in energy modernization and building decarbonization.
3. The BIL provides $64 billion to modernize and expand the national grid. It also provides $3.5 billion for home and business weatherization assistance programs.
4. Another $550 million is available to implement clean energy projects through the Energy Efficiency and Conservation Block Grant Program.
5. Another section of the BIL known as the Energy Efficiency Materials Pilot Program involves $50 million to help nonprofits improve the energy efficiency of their facilities.
6. For a deeper dive, following are links to additional building and household energy savings resources, including grant opportunities:
7. Your savings calculator by Rewiring America. A calculator on how much a household will receive under the Inflation Reduction Act. <https://www.rewiringamerica.org/app/ira-calculator>
8. Bipartisan Infrastructure Investment and Jobs Act Summary by Senator Maria Cantwell. A comprehensive summary of how the Act will benefit Washington. <https://www.cantwell.senate.gov/news/press-releases/cantwell-outlines-big-wins-for-washington-states-infrastructure-salmon-economy->
9. Clean Energy Fund. The Clean Energy Fund program funds the development, demonstration and deployment of clean energy technology in Washington. <https://www.commerce.wa.gov/growing-the-economy/energy/clean-energy-fund/>
10. Washington’s Home Rehabilitation Program. The HRLP provides deferred loans to rural, low-income households that need repairs and improvements on their primary residence for health, safety, or durability. <https://www.commerce.wa.gov/growing-the-economy/energy/weatherization-and-energy-efficiency/rural-rehab/>
11. Washington’s Solar Plus Storage for Resilient Communities. The Solar Plus Storage for Resilient Communities Program funds solar and battery back-up power so community buildings can provide essential services when the power goes out. <https://www.commerce.wa.gov/growing-the-economy/energy/solar-plus-storage/>
12. Energy Retrofits for Public Buildings. This program provides funding for public entities to make energy updates to public buildings and facilities. <https://www.commerce.wa.gov/growing-the-economy/energy/energy-retrofits-for-public-buildings/>
13. Weatherization Assistance Program (WAP). WAP is a federal program to reduce weatherization costs for low-income households. <https://www.energy.gov/eere/wap/weatherization-assistance-program>
14. Weatherization Plus Health (Wx+H). Wx+H provides additional funding for low-income housing and health services. <https://www.commerce.wa.gov/growing-the-economy/energy/weatherization-and-energy-efficiency/matchmaker/weatherization-plus-health-wxh/>
15. Low-Income Energy Efficiency State and Tribal Grant Program. This Bonneville Power Administration program is a weatherization assistance grant program provided to low-income residents located in the BPA’s service area. <https://www.bpa.gov/energy-and-services/efficiency/low-income-energy-efficiency>
16. Community Energy Efficiency Program (CEEP). This program provides energy efficient upgrades for hard to reach households. <https://energy.wsu.edu/BuildingEfficiency/CommunityEEProgram.aspx>
17. Low-Income Home Energy Assistance Program (LIHEAP). Low-income households receive LIHEAP assistance for energy bills. <https://www.commerce.wa.gov/growing-the-economy/energy/low-income-home-energy-assistance/>
18. Rural Energy Assistance Grant Program (REAP). REAP provides grant assistance to farmers or small business owners to invest in renewable energy. <https://www.rd.usda.gov/programs-services/energy-programs/rural-energy-america-program-renewable-energy-systems-energy-efficiency-improvement-guaranteed-loans/wa>
19. Sustainable Energy Trust. This program provides low-income loans to Tribes and nonprofit organizations for affordable housing. <https://www.wshfc.org/energy/index.htm>
20. Community-Defined Decarbonization: Reflecting Rural and Tribal Desires for an Equitable Clean Energy Transition in Washington. This is a recent report prepared by Washington’s Clean Energy Transition Institute. <https://www.cleanenergytransition.org/projects/community-defined-decarbonization>
21. Evergreen Action Explains the Climate Impact of the Inflation Reduction Act. This is an excellent primer on the major components of the Inflation Reduction Act. <https://www.evergreenaction.com/blog/evergreen-explains-the-climate-impact-of-the-inflation-reduction-act>
22. Washington State Energy office. The Washington State Energy office provides energy policy support, analysis and information to the state and provides energy grants to Washington state entities. <https://www.commerce.wa.gov/growing-the-economy/energy/>
23. Implementing the Inflation Reduction Act: A Roadmap for State Electricity Policy. Energy Innovation Policy and Technology LLC prepared a series of research notes to detail the IRA’s provisions across the electricity, buildings, and transportation sectors. <https://energyinnovation.org/wp-content/uploads/2022/10/Implementing-the-Inflation-Reduction-Act-A-Roadmap-For-State-Policy.pdf>