

# Proposed Washington State Scenario Options

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#	Scenario	Description	Implementation
1	Reference	Business as usual evolution of the energy system through 2050, assuming current policy is implemented.	<ul style="list-style-type: none"> <li>No emissions constraints beyond those that exist already in states within the WECC.</li> <li>Existing policy achieved, such as CETA in Washington.</li> </ul>
2	Central	Case to which all others are compared, including relatively unconstrained technology availability in-state and out of state, aggressive electrification, and no reductions in service demands.	<ul style="list-style-type: none"> <li>Aggressive on efficiency and electrification – what is achievable?</li> <li>WECC states, non-NW: existing clean energy policy, NW: 80% below 1990 by 2050 target from NWDDP</li> <li>Service demands remain business as usual through 2050</li> <li>All resource options permitted for electricity and fuels production, including nuclear</li> <li>Fuels trading between states, including pipeline construction</li> <li>DOE Billion Ton study for biomass availability, with review of available WA biomass studies</li> <li>Transmission expansion between states permitted</li> <li>Load management through dispatch of new flexible load technologies</li> </ul>
3	Low electrification and efficiency in buildings and industry	Investigates the challenges of reaching decarbonization targets with slower action in buildings and industry. Determines alternative investments needed in such a scenario, showing the cost impact to get to the 2050 goals with lower efficiency and electrification in buildings and industry.	<ul style="list-style-type: none"> <li>Central Case but the transition to efficiency and electrification in buildings happens at a slower rate and less efficiency and electrification are achieved by 2050</li> </ul>
4	Low electrification in transportation	Investigates the challenges of reaching decarbonization targets with reduced levels of transportation electrification. Will show cost impact of alternative investments needed when primary fuels remain in the economy in larger quantities.	<ul style="list-style-type: none"> <li>Central Case but transportation retains a higher proportion of gasoline and diesel burning vehicles</li> </ul>
5	Behavioral changes (Previously called “Changes in service demand”)	While the Central Case conservatively assumes service demands follow a business-as-usual path, service demands may be changed either through decarbonization measures, or for other reasons. VMT reductions are an example that reduce energy demand at the same time as providing other ancillary benefits. This scenario investigates the impact on decarbonization costs of lower service demands.	<ul style="list-style-type: none"> <li>Central Case but with reductions in vehicle miles traveled to reflect shifts in usage of different forms of transportation, and reductions in service demand in other end uses reflecting customer behavior changes</li> </ul>
6	Constrained renewables and transmission	Difficulty permitting new renewable energy sites and new transmission corridors that limit both in-state resource potential and imports into the state. If Washington were to face challenges in expanding both renewable and transmission capacity, how would investments and cost of decarbonization be impacted?	<ul style="list-style-type: none"> <li>Central Case but with reduced resource potential and tighter caps on installation rates, and limited opportunities for expanding interties</li> </ul>