

# HOUSE BILL REPORT

## E2SHB 2311

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### As Passed Legislature

**Title:** An act relating to amending state greenhouse gas emission limits for consistency with the most recent assessment of climate change science.

**Brief Description:** Amending state greenhouse gas emission limits for consistency with the most recent assessment of climate change science.

**Sponsors:** House Committee on Appropriations (originally sponsored by Representatives Slatter, Fitzgibbon, Callan, Chapman, Orwall, Ramel, Tarleton, Valdez, Duerr, Frame, Bergquist, Davis, Tharinger, Fey, Ormsby, Macri, Wylie, Doglio, Cody, Kloba, Goodman, Hudgins and Pollet; by request of Governor Inslee).

**Brief History:**

**Committee Activity:**

Environment & Energy: 1/14/20, 1/23/20 [DPS];  
Appropriations: 2/3/20, 2/8/20 [DP2S(w/o sub ENVI)].

**Floor Activity:**

Passed House: 2/16/20, 55-41.  
Passed Senate: 3/5/20, 28-21.  
Passed Legislature.

**Brief Summary of Engrossed Second Substitute Bill**

- Modifies state anthropogenic greenhouse gas emissions reduction targets and state government greenhouse gas emissions reduction targets.
- Establishes a net-zero greenhouse gas emissions target for 2050 for state government, and for the state as a whole.
- Directs the departments of Ecology and Commerce to include certain additional information in their biennial greenhouse gas emissions report to the Governor and the Legislature, including the quantity of greenhouse gas emissions from wildfires in the state and the quantity of greenhouse gas emissions from key sectors of the economy.
- Requires state agencies to report on their short-term and long-term strategies for meeting greenhouse gas emissions reduction targets.
- Establishes that it is the policy of the state to promote the removal of excess carbon from the atmosphere through carbon sequestration activities.

*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

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## HOUSE COMMITTEE ON ENVIRONMENT & ENERGY

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass. Signed by 7 members: Representatives Fitzgibbon, Chair; Lekanoff, Vice Chair; Doglio, Fey, Mead, Robinson and Shewmake.

**Minority Report:** Do not pass. Signed by 4 members: Representatives DeBolt, Ranking Minority Member; Dye, Assistant Ranking Minority Member; Boehnke and Goehner.

**Staff:** Robert Hatfield (786-7117).

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## HOUSE COMMITTEE ON APPROPRIATIONS

**Majority Report:** The second substitute bill be substituted therefor and the second substitute bill do pass and do not pass the substitute bill by Committee on Environment & Energy. Signed by 18 members: Representatives Ormsby, Chair; Robinson, 1st Vice Chair; Bergquist, 2nd Vice Chair; Chopp, Cody, Dolan, Fitzgibbon, Hansen, Hudgins, Kilduff, Macri, Pettigrew, Pollet, Ryu, Senn, Sullivan, Tarleton and Tharinger.

**Minority Report:** Do not pass. Signed by 13 members: Representatives Stokesbary, Ranking Minority Member; MacEwen, Assistant Ranking Minority Member; Rude, Assistant Ranking Minority Member; Caldier, Chandler, Dye, Hoff, Kraft, Mosbrucker, Schmick, Steele, Sutherland and Ybarra.

**Staff:** Dan Jones (786-7118).

### **Background:**

The United States Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) identify carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride as greenhouse gases because of their capacity to trap heat in the Earth's atmosphere. Under the federal Clean Air Act, greenhouse gases are regulated as an air pollutant and are subject to several air regulations administered by the EPA. At the state level, greenhouse gases are regulated by Ecology under the state Clean Air Act.

In 2008 Washington enacted legislation that set a series of limits on the emission of greenhouse gases within the state. Ecology is responsible for monitoring and tracking the state's progress toward the emission limits.

The state's current limits on the emission of greenhouse gases are:

- By 2020, overall greenhouse gas emissions in the state must be reduced to 1990 levels.
- By 2035, overall greenhouse gas emissions in the state must be reduced to 25 percent below 1990 levels.
- By 2050, overall greenhouse gas emissions in the state must be reduced to 50 percent below 1990 levels or 70 percent below the state's expected emissions for that year.

The same legislation also established limits on the emission of greenhouse gases from state agencies, as follows:

- By 2020, reduce emissions by 15 percent from 2005 emission levels.
- By 2035, reduce emissions to 36 percent below 2005 levels.
- By 2050, reduce emissions by the greater of 57.5 percent below 2005 levels, or 70 percent below the expected state government emissions for that year.

As part of the 2008 legislation, Ecology and the Department of Commerce are required to submit a biennial report on the state's greenhouse gas emissions. The 2008 legislation also required Ecology to consult with the Climate Impacts Group at the University of Washington within 18 months of each global or national assessment of climate change science, and to provide a report to the Legislature summarizing that science and making recommendations regarding whether the state's greenhouse gas emissions reduction requirements need to be updated.

Ecology's most recent such report was issued in 2019 and recommended the following greenhouse gas emissions limits:

- By 2020, reduce overall emissions of greenhouse gases in the state to 1990 levels.
- By 2030, reduce overall greenhouse gas emissions in the state to 45 percent below 1990 levels.
- By 2040, reduce overall greenhouse gas emissions in the state to 70 percent below 1990 levels.
- By 2050, reduce overall greenhouse gas emissions in the state to 95 percent below 1990 levels and achieve net-zero greenhouse gas emissions in the state.

### **Summary of Engrossed Second Substitute Bill:**

#### Greenhouse Gas Emissions Reductions.

Washington must limit anthropogenic emissions of greenhouse gases to achieve the following reductions for the state:

- By 2020, reduce overall emissions of greenhouse gases in the state to 1990 levels, or 90.5 million metric tons.
- By 2030, reduce greenhouse gas emissions to 45 percent below 1990 levels, or 50 million metric tons.
- By 2040, reduce overall emissions of greenhouse gases in the state to 70 percent below 1990 levels, or 27 million metric tons.
- By 2050, reduce overall emissions of greenhouse gases in the state to 95 percent below 1990 levels, or 5 million metric tons, and achieve net-zero greenhouse gas emissions.

State agencies must achieve the following greenhouse gas emissions reductions:

- By 2020, reduce greenhouse gas emissions by 15 percent from 2005 emission levels, or 805,000 metric tons.
- By 2030, reduce greenhouse gas emissions to 45 percent below 2005 levels, or 521,000 metric tons.
- By 2040, reduce greenhouse gas emissions to 70 percent below 2005 levels, or 284,000 metric tons.

- By 2050, reduce overall greenhouse gas emissions to 95 percent below 2005 levels, or 47,000 metric tons, and achieve net-zero greenhouse gas emissions by state government as a whole.

Nothing in the greenhouse gas emissions targets creates any new or additional regulatory authority for any state agency, as those authorities existed prior to January 1, 2019.

#### Reporting Requirements.

The greenhouse gas emissions reporting conducted by the Department of Commerce (Commerce) and the Department of Ecology (Ecology) should include statewide emissions, including emissions from key sectors of the economy, including electricity, transportation, buildings, manufacturing, and agriculture. The reporting must also include greenhouse gas emissions from wildfires, developed in consultation with the Department of Natural Resources.

By June 1 of each even-numbered year beginning in 2022, state agencies must report to Ecology, and to the State Efficiency and Environmental Performance Office at Commerce, the following:

- the actions planned for the next two biennia to meet emissions reduction targets;
- the actions taken to date to meet emissions reduction targets; and
- the agency's long-term strategy for meeting emissions reduction targets.

Ecology and Commerce must compile the agency reports described above and, by December 1 of each even-numbered year beginning in 2022, provide a consolidated report to the appropriate committees of the Legislature that includes recommendations for budgetary and other actions that will assist the state agencies in achieving the greenhouse gas emissions reduction targets.

#### Carbon Sequestration.

It is established as the policy of the state to promote the removal of excess carbon from the atmosphere through carbon sequestration activities, in amounts necessary to meet the state's greenhouse gas emissions reduction targets. All agencies of state government must seek all practicable opportunities to cost-effectively maximize carbon sequestration in their nonland management agency operations, contracting, and grant-making activities.

"Carbon sequestration" is defined to mean the process of capturing and storing atmospheric carbon dioxide through biologic, chemical, geologic, or physical processes.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony** (Environment & Energy):

(In support) The greenhouse gas emission limits established in 2008 have never been updated. The latest research shows that quicker and deeper emissions cuts are critical. A December 2019 Department of Ecology (Ecology) report recommended more aggressive emissions limits and carbon neutrality. Washington is not alone in taking action on this issue; hundreds of other local and state governments are looking at the same climate research and coming to the same conclusion. As a result, many other state, local, and national governments have committed to significant reductions. The limits in the bill are very much in line with both the scientific consensus and with the limits that have been adopted around the world. The targets are achievable. There have been dramatic reductions in the emissions of air pollutants over the past 30 years, and Washington can apply that same resourcefulness to the challenge of carbon emissions.

Climate change poses a strong threat to the ability of the Department of Natural Resources to carry out its mission and responsibilities. It is vitally important to explore the role of carbon sequestration in reducing carbon levels. It would be good to amend the bill to add state lands to the carbon sequestration efforts addressed in the bill.

This is a science-based bill; it is time for these emissions reduction numbers to be updated. This bill represents a clear next step to build on past legislative efforts. When the limits were established in 2008 they were already out of date; it is high time to update the limits. With regard to the concept of consumption-based emissions, there are ways to improve the bill to address that issue and to broaden the bill beyond just emissions in the state.

Sequestration is the practice of removing carbon from atmosphere by increasing carbon storage in soils, waterways, and elsewhere. Reducing tilling allows more carbon to stay in the soil. This bill does not reduce the need to decarbonize the economy; the state needs to both decarbonize and reduce its greenhouse gas emissions. Washington has huge potential to do carbon sequestration, and it is necessary to take advantage of this potential. About one-third of global emissions can be addressed through carbon sequestration. In Washington about 200 million tons of carbon can be sequestered. This bill is the first and most fundamental statement about carbon sequestration being part of the solution to get to net-zero carbon emissions and beyond.

Climate policy must be based on science. The emissions reduction targets do not provide a road map of how they are to be achieved. As Washington pursues climate action, it is important not to put a disproportionate burden on workers and less-advantaged communities. It is important not to outsource pollution, but scaling back our state's ambition is not the way to address that; this can be addressed through consumption-based emissions calculations. Washington is already experiencing the impacts of climate change in the form of hotter and smokier summers and reduced snowpack in the winter. King County has already adopted greenhouse gas emissions reduction targets.

The targets in Ecology's 2019 report correspond with the emissions reduction targets set in this bill. Updated progress reporting will include emissions from key sectors of the economy, in order to help the state understand where progress is happening and where improvements are needed.

It is important scientifically and politically to recognize the role of sequestration and the role that communities can play in the greenhouse gas emissions reduction efforts. There are some concerns about the way that sequestration is incorporated into the bill. The sequestration language should be simplified, or detail should be added in order to specify what method agencies should use to calculate sequestration values.

The Legislature has a duty to keep current with recent developments; in this case, that means keeping greenhouse gas emissions standards relevant to today's challenges. Science and technology have evolved continuously, and much has changed since 2008. The state needs deep investment in healthier landscapes. The state must set timely, effective climate pollution limits that are based in the current science, just as the state would in any other field. China is investing heavily in both electric rail and in electric cars.

Karma is the sum of a person's actions in this and previous states of existence. Karma is also the law of cause and effect. The law of karma can be applied to the realities of carbon pollution and its impacts on our state and on our planet. No decision on our climate is without consequence. At our current rate of emissions and resource extraction, we are dooming ourselves. But we are not helpless. We have science, and the science is telling us all to push harder and work more efficiently to reduce and eliminate Washington's carbon pollution by or before the outlined targets. This bill presents Washington the incredible opportunity to protect our natural landscapes and accelerate the transition to equitable and accessible renewable energy, all while growing our economy, improving our quality of life, and safeguarding the health of our communities. Swift, science-based climate action and leadership is imperative.

There are some questions concerning some of the sequestration language. Under the current method of calculating greenhouse gas emissions, if a product is produced within the state, it counts as an emission within the state, but if it is produced outside of the state and consumed within the state, it is not counted as an emission. Taking a different way of looking at greenhouse gas emissions, such as by looking at carbon intensity or at the units of greenhouse gas emissions per unit of the economy, would be helpful.

(Opposed) There are considerable concerns regarding this bill. There need to be responsible pathways toward achieving these reductions, and those pathways are not in the bill. Washington has become a much more efficient state regarding greenhouse gas emissions, but those efficiencies have not been enough. Last year, transportation accounted for 44 percent of Washington's emissions. Achieving the first benchmark of this bill—a 45 percent reduction in emissions relative to 1990 levels by 2030—would be the equivalent of removing every car, truck, train, and plane in operation. The 95 percent reduction goals in the bill are considerably higher than anywhere else in the world. Washington continues to add more people each year, and this bill will place Washington businesses at a monumental competitive disadvantage relative to businesses in other states. These goals should be aspirational, not statutory. There should continue to be legislative oversight over Ecology's implementation of the policy. The baseline years for the statewide emissions reductions and the state government emissions reductions should be made the same.

The bill sets up a regulatory atmosphere that increases the prospect of leakage; because it is more stringent than limits in surrounding jurisdictions, it tends to encourage the exporting of

jobs and emissions to other states. The bill should specify that it does not create any additional regulatory authority regarding greenhouse gas emissions. It is unclear whether wildfires count toward the reduction targets. The bill should clarify that the targets apply to anthropogenic emissions. Emissions are generally measured on a point-source basis, but electricity is measured on a consumption basis. The two baseline years in the bill—1990 and 2005—should be brought together. There is a concern that removal of language related to statutory authority may increase administrative authority related to greenhouse gas emissions.

(Other) Ecology consulted with the Climate Impacts Group at the University of Washington when it produced its December 2019 report. The Climate Impacts Group summarized the primary findings of recent global and national climate assessments and their implications for the state. Recent science at the global and national levels show that human-caused climate change is underway and that the impacts are accelerating. The 2015–2019 period was the warmest five-year period on record. The planet has experienced a warming of 1.1 degrees Celsius since preindustrial times. Washington has already warmed about 1 degree. Last year's report from the Intergovernmental Panel on Climate Change shows that every bit of global warming matters. An increase in temperature between 1.5 degrees and 2.0 degrees means that two billion more people will be exposed to heat stress. In Washington, warming means more stress to communities and economies, including more stress to transportation, agriculture, and other sectors. If emissions continue on their current pathway, the average year in Washington will be warmer than the warmest year of the past century. Reports show that steep near-term reductions are needed, and they need to happen well before 2030.

**Staff Summary of Public Testimony (Appropriations):**

(In support) The greenhouse gas reduction targets passed by the Legislature in 2008 are outdated, and it is time to update them. The new targets in this bill are science-based, achievable, and can help align future budget and policy decisions. The new "net-zero" emissions target acknowledges the importance of actions with a positive impact on greenhouse gas emissions. The language promoting carbon sequestration would not only remove carbon from the atmosphere, but lift up communities dependent on natural resources. Although there are costs for state agencies to implement the bill, there will also be financial benefits in the future from reduced climate change impacts.

(Opposed) None.

**Persons Testifying (Environment & Energy):** (In support) Representative Slatter, prime sponsor; Clifford Traisman, Washington Environmental Council and Washington Conservation Voters; Leah Missik, Climate Solutions; Mo McBroom, The Nature Conservancy; Jess Koski, Washington Blue/Green Alliance; Ari Simmons, Sunrise Olympia; Celia Jackson, King County; Stu Clark, Department of Ecology; Greg Rock, Carbon Washington; Elyette Weinstein; Dan Stonington, Department of Natural Resources; and Isaac Kastama, Low Carbon Prosperity Institute.

(Opposed) Peter Godlewski, Association of Washington Business; and John Rothlin, Avista Corporation.

(Other) Amy Snover, University of Washington Climate Impacts Group.

**Persons Testifying** (Appropriations): Clifford Traisman, Washington Conservation Voters and Washington Environmental Council; Justin Allegro, The Nature Conservancy; and Phyllis Farrell, League of Women Voters.

**Persons Signed In To Testify But Not Testifying** (Environment & Energy): None.

**Persons Signed In To Testify But Not Testifying** (Appropriations): None.