

# HOUSE BILL REPORT

## ESSB 6001

---

**As Reported by House Committee On:**  
Technology, Energy & Communications  
Appropriations

**Title:** An act relating to mitigating the impacts of climate change.

**Brief Description:** Mitigating the impacts of climate change.

**Sponsors:** Senate Committee on Water, Energy & Telecommunications (originally sponsored by Senators Pridemore, Poulsen, Rockefeller, Brown, Eide, Oemig, Hargrove, Marr, Fraser, Kohl-Welles, Keiser, Regala, Franklin, Fairley, Jacobsen, Shin, Haugen, Berkey, Spanel, Kline and Weinstein).

**Brief History:**

**Committee Activity:**

Technology, Energy & Communications: 3/27/07, 3/30/07 [DPA];  
Appropriations: 3/31/07 [DPA(APP w/o TEC)s].

**Brief Summary of Engrossed Substitute Bill  
(As Amended by House Committee)**

- Establishes state goals to reduce greenhouse gases emissions.
- Establishes a greenhouse gases emissions performance standard for electric utilities operating in the state.
- Requires the Utilities and Transportation Commission to adopt policies to allow investor-owned utilities to receive a 2 percent rate of return on common equity for investments in distributed generation or energy efficiency improvements.
- Authorizes the Department of General Administration to purchase 100 plug-in hybrid vehicles when commercially available.
- Authorizes municipal electric utilities and public utility districts to mitigate the environmental impacts of their utility operations and power purchases.
- Creates the Office of Washington State Climatologist.

---

*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.*

---

## HOUSE COMMITTEE ON TECHNOLOGY, ENERGY & COMMUNICATIONS

**Majority Report:** Do pass as amended. Signed by 6 members: Representatives Morris, Chair; McCoy, Vice Chair; Hudgins, Hurst, Takko and VanDeWege.

**Minority Report:** Do not pass. Signed by 4 members: Representatives Crouse, Ranking Minority Member; McCune, Assistant Ranking Minority Member; Ericksen and Hankins.

**Staff:** Scott Richards (786-7156).

### **Background:**

#### Climate Change and Greenhouse Gases (GHGs)

The term "climate change" refers to any significant change in measures of climate, such as temperature, which last for decades or longer. Climate change may result from natural causes or human activities. The National Academy of Sciences, the Inter-Governmental Panel on Climate Change, and the U.S. Climate Change Science Program have concluded that human activities, such as GHGs production, are the likely cause of climate change during the last several decades.

#### **GHGs Emissions Targets**

According to the Pew Center on Global Climate Change, 12 states have set GHGs emissions targets, including Arizona, California, New Mexico, and Oregon. Most of the targets have been set by agencies or by executive order and typically use a 1990 baseline to measure reductions. The targets are usually characterized as "goals."

#### **Governor Gregoire's Executive Order Setting GHGs Emissions Goals**

On February 7, 2007, the Governor issued an executive order establishing goals for GHGs reductions, for increasing clean energy sector jobs, and for reducing expenditures on imported fuel. The executive order also directs the Department of Ecology (DOE) and the Department of Community, Trade and Economic Development (DCTED) to lead stakeholders in a process that will consider a full-range of policies and strategies to achieve the emissions goals.

#### **GHGs Emission Performance Standards**

In 2006, the California Legislature enacted a law to require that all new long-term commitments for baseload generation to serve California consumers be with power plants that have emissions no greater than a combined cycle gas turbine plant. The law prohibits electric utilities from making or renewing contracts of five years or longer for the purchase of baseload generation that does not comply with the GHGs emission performance standard established by the California Public Utilities Commission (PUC). In January 2007, the PUC adopted GHGs Emissions Performance Standards of 1,100 pounds of carbon dioxide per megawatt-hour.

---

### **Summary of Amended Bill:**

#### **GHGs Emissions Goals**

### **Overall GHGs Emissions Reduction Goals**

Overall GHGs emissions reduction goals are established for Washington. These goals are:

- by 2020, reduce overall GHGs emissions in the state to 1990 levels, which equals 78.5 million metric tons of carbon dioxide equivalent emissions;
- by 2035, reduce overall GHGs emissions in the state to 25 percent below 1990 levels, which equals 58.88 million metric tons of carbon dioxide equivalent emissions; and
- by 2050, the state will do its part to reach global climate stabilization levels by reducing overall emissions to 50 percent below 1990 levels, which equals 39.25 million metric tons of carbon dioxide equivalent emissions, or 70 percent below the state's expected emissions that year.

### **Clean Energy Sector Job Growth and Imported Fuel Expenditures Goals**

There are additional goals related to clean energy sector job growth and imported fuel expenditures. These goals are:

- by 2020, increase the number of clean energy sector jobs to 25,000 from the 8,400 jobs the state had in 2004; and
- by 2020, reduce expenditures by 20 percent on fuel imported into the state by developing Washington resources and supporting efficient energy use.

### **GHGs Emissions Reduction Goals for the Electricity Generation Sector**

The following GHGs emissions reduction goals with respect to electricity generation are established. These goals are:

- by 2020, reduce GHGs emissions in the state to 1990 levels, which equals 7.43 million metric tons of carbon dioxide equivalent emissions;
- by 2035, reduce GHGs emissions in the state to 25 percent below 1990 levels, which equals 5.57 million metric tons of carbon dioxide equivalent emissions; and
- by 2050, the state will do its part to reach global climate stabilization levels by reducing emissions to 50 percent below 1990 levels, which equals 3.72 million metric tons of carbon dioxide equivalent emissions, or 70 percent below the state's expected emissions that year.

### **Reporting of GHGs Emissions**

Beginning in 2010, the DOE and the DCTED shall report to the Governor and the appropriate committees of the Senate and House of Representatives the total GHGs emissions for the preceding two years, and totals in each major source sector.

### **GHGs Emissions Performance Standard**

Beginning July 1, 2008, the GHGs emissions performance standard for all baseload electric generation for which electric utilities enter into long-term financial commitments on or after such date is the lower of:

- 1,100 pounds of GHGs per megawatt-hour; or
- the average available GHGs emissions output as determined by the DCTED.

The Energy Policy Division of the DCTED shall survey combined-cycle natural gas thermal electric generation turbines available for sale in the United States and determine an average

rate of emission of GHGs for these turbines. The DCTED shall report the results of its survey to the Legislature on a biennial basis, starting June 30, 2008.

"Baseload electric generation" means electric generation from a power plant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent.

A "long-term financial commitment" means:

- either a new ownership interest in baseload electric generation or an upgrade to a baseload electric generation facility; or
- a new or renewed contract for baseload electric generation with a term of five or more years for the provision of retail power or wholesale power to end-use customers in this state.

### **Determining GHGs Emissions Rates**

In determining the rate of emissions of GHGs for baseload generation, the net emissions resulting from the production of electricity by the baseload electric generation must be included. "Net emissions" means the formula for calculating total carbon dioxide emissions as determined according to Chapter 173-407 Washington Administrative Code (WAC) as it existed on July 1, 2007. Chapter 173-407 WAC relates to the Carbon Dioxide Mitigation Program for fossil-fueled thermal electric generating facilities.

### **Baseload Electric Generation Facilities in Operation**

All baseload electric generation facilities in operation as of June 30, 2008, are deemed to be in compliance with the GHGs emissions performance standard until the facilities are the subject of long-term financial commitments, even if an electric utilities actual emissions are higher than the GHGs emissions performance standard.

### **Long-term Investments in Baseload Electric Generation**

Electric utilities may not make or renew long-term investments in baseload electric generation that do not comply with the performance standard. All such investments must be reviewed by the Washington Utilities and Transportation Commission (WUTC), or by the governing board of a consumer-owned utility, whichever is appropriate. The WUTC or governing board may exempt a utility from the performance standard for such things as unanticipated electric system reliability needs, catastrophic events, or significant financial harm arising from unforeseen circumstances.

### **Renewable Resources**

All electric generating facilities or power plants powered by renewable resources, as defined in statute relating to electric utility resource plans (19.280.020 RCW), including hydroelectric generation, are deemed to be in compliance with the GHGs emissions performance standard established under this section.

### **Carbon Dioxide Sequestration**

Carbon dioxide that is sequestered to prevent releases into the atmosphere may not be counted as net emissions of the power plant in determining compliance with the GHGs emissions performance standard.

## **Consultation**

In adopting and implementing the GHGs emissions performance standard, the DOE, in consultation with WUTC and various other stakeholders, shall consider the effects of the GHGs emissions performance standard on system reliability and overall costs to electricity customers.

In developing and implementing the GHGs emissions performance standard, the DOE shall, with assistance of the WUTC, the DCTED Energy Policy Division, and electric utilities, address electricity from unspecified sources.

## **Climate Change Challenge Stakeholder Group**

The Climate Change Challenge Stakeholder Group (Group) is required to develop and present policy recommendations to the Governor and the Legislature by December 1, 2007, on the following matters:

- what policies must be put in place in order for the state to meet the GHGs emissions reduction standards;
- whether existing mechanisms for carbon sequestration under the state's Carbon Dioxide Mitigation Program and its related rules are sufficient;
- a transition plan for phasing out the Carbon Dioxide Mitigation Program as a means of achieving the goals of this act;
- a process for replacing the highest emitting thermal electric plants that have exceeded their expected useful life with newer technologies that have lower GHGs emission levels; and
- methods to utilize indigenous resources, such as landfill gas, geothermal resources, and other assets that might reduce GHGs emissions.

The Group is defined as the consultation group established by Executive Order 07-02 to consider and recommend policies for the state to adopt to achieve GHGs emissions reduction goals.

## **Authorizing Investor-Owned Utilities to Seek Determinations by the WUTC**

Before making decisions to acquire electric generation or to purchase electricity that complies with the performance standards, investor-owned electric utilities may seek determinations from the WUTC, which must determine the need and the appropriateness of a proposed resource. The WUTC must consider such factors as the utility's forecasted loads and power plant technology. In addition, the WUTC must provide for the recovery of prudently incurred costs of these resources, among other things. Furthermore, the utilities may defer costs associated with the long-term commitments.

## **Enforcing the Performance Standards**

The WUTC enforces any requirements with respect to investor-owned utilities. For consumer-owned utilities, the State Auditor is responsible for auditing their compliance, while the Attorney General is responsible for enforcing that compliance. The WUTC must adopt rules to carry out its assigned duties by December 31, 2008.

## **Findings**

Various legislative findings are made, including the unequivocal evidence of the warming climate, the encouragement of environmentally sound energy resources, and the reduction of future reliability problems in electricity supplies.

### **Carbon Dioxide Mitigation Program (Chapter 80.70 RCW)**

The Carbon Dioxide Mitigation Program statute is amended to eliminate the current carbon dioxide mitigation rate of 20 percent and replace it with the GHGs emissions performance standard. The GHGs emissions performance standard is applied to the formula for calculating the mitigation payment for a cogeneration plant. Also, it is applied to the formula for calculating the lump sum mitigation payment option. The Carbon Dioxide Mitigation Program requirements are extended to long-term financial commitments for baseload generation located outside the state.

### **Amended Bill Compared to Engrossed Substitute Bill:**

#### **GHGs Emissions Goals**

The GHGs emissions goals is revised to establish an overall GHGs emissions reduction goal for the state. The amount of each goal is provided in million metric tons.

GHGs emissions reduction goals are created with respect to electricity generation in the state are added. The amount of each goal is provided in million metric tons.

#### **GHGs Emissions Performance Standard**

The GHGs emissions performance standard is revised.

The rate of emissions of GHGs emissions for a commercially-available combined-cycle natural gas thermal electric generation facility that provides baseload generation is removed from the GHG emissions performance standard and replaced with the average available GHGs emissions output.

A definition for "average available GHGs emissions output" is provided. It means the average GHGs emissions from combined-cycle natural gas thermal electric generation turbines available for sale in the United States as surveyed and reported by the Energy Policy Division of the DCTED.

The DCTED is required to survey and report to the Governor and the Legislature biennially the average rate of emissions for combined-cycle natural gas thermal electric generation facilities for sale in the United States and determine an average rate of emissions for GHGs for these facilities.

A definition for "net emissions" is provided. It means the formula for calculating total carbon dioxide emissions as determined according to Chapter 173-407 WAC as it existed on July 1, 2007.

The requirement that carbon dioxide be injected permanently in geological formations is eliminated. Carbon dioxide that is sequestered to prevent releases into the atmosphere may not be counted as net emissions of the power plant in determining compliance with the greenhouse gases emissions performance standard.

Provisions requiring the DOE to establish an output-based methodology for a cogeneration facility is eliminated.

The definition of "renewable resources" is amended to reflect the definition found in statute related to electric utility resource plans.

The definition of "commercially available combined-cycle natural gas thermal electric generation facility that provides baseload generation" is deleted.

Provisions requiring the DOE to adopt rules to enforce the GHGs emissions performance standard and procedures to verify the emissions of GHGs from any baseload electric generation is eliminated.

Provisions requiring the WUTC to adopt policies allowing an additional rate of return for investor-owned electric utility to encourage investments in distributed generation and certain energy efficiency measures is deleted.

### **Climate Change Challenge Stakeholder Group (Group)**

A definition for the Group is provided.

The Group is required to develop and present policy recommendations to the Governor and the Legislature by December 1, 2007.

The Group shall determine the following:

- what policies must be put in place in order for the state to meet the GHGs emissions reduction standards;
- whether existing mechanisms for carbon sequestration under the state's carbon dioxide mitigation program and its related rules are sufficient;
- a transition plan for phasing out the Carbon Dioxide Mitigation Program as a means of achieving the goals of this act;
- a process for replacing the highest emitting thermal electric plants that have exceeded their expected useful life with newer technologies that have lower GHGs emission levels; and
- methods to utilize indigenous resources, such as landfill gas, geothermal resources, and other assets that might reduce GHGs emissions.

---

**Appropriation:** None.

**Fiscal Note:** Available.

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

### **Staff Summary of Public Testimony:**

(In support) Climate change may be the greatest environmental challenge of our age. This is not an attempt to address global warming; this is to address climate change. Many other states

on the West Coast are moving forward on this issue. This bill helps us put pressure on the federal government to move towards a national solution. Our snowpack has reduced considerably over the last several years. There is less water in the summer when we need it. Climate change is already having a significant impact on our economy and our environment.

Electrification is part of the solution for ports in order to reduce our emissions, but in order for it to be an effective solution, we need clean, efficient sources of electricity.

We support the greenhouse gas emissions performance standard. We think it is economically critical to pass this legislation at this time. The potential environmental consequences in delaying are substantial. This region will be dramatically altered if we don't take action soon. This is a critical first step. We must reduce greenhouse gas emissions. We need to send the message that only the cleanest, more efficient sources of energy will be used in our state going forward. This will help us compete in the global marketplace, as we continue to reduce our dependence on fossil fuels. The greenhouse gas emissions performance standard is essentially a technology performance standard. Without this standard, a single coal plant would add as much to our emission inventory as a million cars. This bill is not a cap and trade bill. Carbon sequestration is a promising technology, and this bill recognizes sequestration, provided that the sequestration is proven. We support the Governor's executive order and strongly believe that the 2008 legislative session will have an ambitious climate change agenda. This bill is a risk mitigation tool for Washington. We are opening the door to newer, cleaner technologies, paving the way to a carbonless future.

Our utility appreciates having regulatory certainty in terms of what types of resources will be allowable in the future. We support this because it is a technology standard. It supports the development of lower-carbon technologies. This lays the foundation for the types of energy investments the state will make over the next 30 to 50 years. The bill's performance standard changes our regulatory paradigm; it shifts from a least cost standard to an environmental standard. Absent clear direction, regulatory uncertainties will drive upward our costs. This bill provides financial incentives to invest in new energy efficiency technologies. As part of a start-up company looking to attract investors, this is the kind of strong signal to the marketplace that this is the place to invest in clean energy.

Birds are important to Washington's economy as well as ecology. They are an ecological barometer and a critical component of our ecosystem which help to manage insects that affect the health of our forest and agricultural industries. Nature tourism is more than a billion dollar industry in the state. Climate change is affecting those birds.

This bill seeks to arrest the possibility of new emissions from the electrical sector as we move on to the stakeholder process and start figuring out a way to dig us out of this hole. The evidence supporting climate change is very convincing. Just because you aren't sure of the weatherman's prediction of rain doesn't mean you leave your umbrella at home.

(With concerns) We have a significant concern about how it might treat an integrated-gasification project. We are looking at developing one of these projects in the state. This balance between the environment, reliability, and price is an important consideration. We



believe it is crucial to develop carbon sequestration, but we are concerned about being able to sequester within five years. This bill deals with electricity, which is only a part of the climate change issue for Washington.

We were very close to supporting this bill coming out of the Senate. Part of that fairness doctrine was the incentives. In the original bill we had a 2 percent tax credit for public utilities making the same investments as the investor-owned utilities that was taken out of the bill. We could support the bill if integrated-gasification combined cycles (IGCC) had better treatment and the incentives were there.

We do not need legislation to proceed with the development of an IGCC facility in Washington, but if the bill is not crafted carefully, it could prevent the development of IGCCs in this state. We think a technology-neutral approach is best. We believe that the Energy Facility Site Evaluation Council should retain its "one-stop-shop" integrity and the DOE should drive the state's carbon sequestration expertise.

(Opposed) We believe this bill is premature and that the stakeholder process should proceed first and that it is the appropriate venue to discuss what are the best policies for Washington.

This bill allows utilities to charge an extra 2 percent from its customers for these measures. This will have a negative impact on our industry. The business community was not included in the stakeholder process. This bill fails to recognize the rulemaking activities underway according to Initiative 937 and the Governor's stakeholder process, which is just getting started. This bill focuses almost exclusively on electric energy, even though we have a very clean, hydro-based system. We would like to see more focus on the transportation standard. This makes significant changes to energy policy for investor-owned utilities. The bill grants pre-approval by the WUTC; deferred accounting by the WUTC, and it provides a 2 percent return on investment.

**Persons Testifying:** (In support) Senator Pridemore, prime sponsor; Alec Fiskien; Marian Wineman, Washington League of Women Voters; Patty Glick, National Wildlife Federation; K.C. Golden, Climate Solutions; Sara Patton, Northwest Energy Coalition; Craig Engelking, Sierra Club; Kyle L. Davis, PacifiCorp; Brian Grunkemeyer; Peggy Duxbury, Seattle City Light; Kevin Raymond, Pacific Forest Trust, Earth Ministry, and Washington Biodiesel; Bruce Folsom, Avista Utilities; Ken Johnson, Puget Sound Energy; Robert Kahn, Northwest and Intermountain Power Producers Coalition; Heath Packard, Audubon; Bill LaBorde, WashPIRG; David Goldberg, Mithun, Incorporated; Heather Melton, Clark County Conservation Voters and Sierra Club; and Tim Newcomb, Net Green.

(With concerns) Jack Baker, Energy Northwest; Dave Warren, Washington Public Utility District Association; Kent Lopez, Washington Rural Electric Cooperative Association; and Dave Arbaugh, United Power.

(Opposed) Llewellyn Matthews, Northwest Pulp and Paper Association; Tim Boyd, Industrial Customers of Northwest Utilities, Boise Cascade, and Washington State Potato Commission; and Grant Nelson, Association of Washington Business.

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

---

## HOUSE COMMITTEE ON APPROPRIATIONS

**Majority Report:** Do pass as amended by Committee on Appropriations and without amendment by Committee on Technology, Energy & Communications. Signed by 24 members: Representatives Sommers, Chair; Dunshee, Vice Chair; Anderson, Cody, Conway, Darneille, Ericks, Fromhold, Grant, Haigh, Hunt, Hunter, Kagi, Kenney, Kessler, Linville, McDermott, McIntire, Morrell, Pettigrew, Priest, Schual-Berke, Seaquist and P. Sullivan.

**Minority Report:** Do not pass. Signed by 7 members: Representatives Alexander, Ranking Minority Member; Bailey, Assistant Ranking Minority Member; Haler, Assistant Ranking Minority Member; Buri, Chandler, Dunn and Kretz.

**Staff:** Alicia Dunkin (786-7178).

### **Summary of Recommendation of Committee On Appropriations Compared to Recommendation of Committee On Technology, Energy & Communications:**

The provisions of the underlying bill are stricken. The striking amendment adds intent language, which describes actions Washington has taken to reduce its greenhouse gases emissions. Two new charges are added for the Climate Change Challenge Stakeholder Group to be convened by the Governor according to Executive Order No. 07-02:

- (1) identify economic and regulatory incentives to encourage the replacement of the highest emitting thermal electric plants in the state with newer technologies with lower greenhouse gases emissions levels; and
- (2) identify methods to use indigenous resources, such as landfill gas and thermal resources, that reduce greenhouse gases emissions.

The following definitions are added or modified:

- (1) The amended bill defines "injected permanently," for the purposes of the carbon sequestration provisions of the bill, to mean the carbon dioxide injected into a geological formation that will remain in the formation with only de minimus leakage.
- (2) The definition of "output-based methodology" is expanded by defining what net emissions refers to. "Net" emissions are defined as the difference between the heat energy dedicated to power production and the electrical equivalent of useful thermal energy employed for purposes other than generating electricity.

The Department of Ecology (DOE) is required to consult with the Energy Policy Division of the Department of Community, Trade and Economic Development in developing and implementing the greenhouse gases emissions performance standard.

It is clarified that carbon dioxide emissions may be sequestered by other means (besides permanent injection into a geological formation), provided that it has been approved by the DOE. If the means of sequestration is approved, those carbon dioxide emissions shall not be

counted as emissions for purposes of applying the greenhouse gases emissions performance standard.

The amended bill adds that the DOE shall determine whether a proposed carbon sequestration plan will provide safe, reliable, and permanent protection against greenhouse gases entering into the atmosphere.

The amended bill also clarifies that for facilities under the Energy Facility and Site Evaluation Council's (EFSEC) jurisdiction, the EFSEC shall contract with DOE for review of the carbon sequestration plan, and that the EFSEC will consider the adequacy of the carbon sequestration plan and make findings in its recommendations to the Governor regarding the proposal.

The date by which the Washington Utilities and Transportation Commission must complete its rules is pushed back by six months to December 31, 2008.

Consumer-owned utilities are allowed to claim an annual public utility tax (PUT) credit equal to 2 percent of investments in distributed generation or energy efficiency improvements. The total amount of credit for all consumer-owned utilities is limited to \$1 million per calendar year.

The authority for counties to engage in greenhouse gases mitigation activities is removed. What a municipal utility or public utility district is allowed to mitigate as part of its utility operation is broadened. The authority for counties to engage in greenhouse gases mitigation activities is removed and what a municipal utility or public utility district is allowed to mitigate as part of its utility operation is broadened. Electric generating facilities that use fuels which are a byproduct of a pulping or wood manufacturing process are deemed to be in compliance with the greenhouse gases emissions performance standard. Technical changes are made.

**Appropriation:** None.

**Fiscal Note:** Available.

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

**Staff Summary of Public Testimony:**

(In support) We support the bill that left the Senate because it was carefully negotiated and agreed upon by all parties and we oppose the striking amendment that passed the House policy committee. Even though there is currently a task force working on this we need this bill because the world is moving forward and growing in population and this bill would prevent future growth in green house gas emissions and would provide a PUT credit that we support.

(With concerns) We support the bill as passed by the Senate but not the striking amendment by the House Technology Committee. We support the sections in the Senate bill to reverse the results of the *Okeson v. City of Seattle*, the technical amendments related to the Governor's executive order, the goals that were added, and the PUT credit language.

(Opposed) This bill is a year premature, the Governor established a stakeholder process that met yesterday, which is funded within existing resources, and we believe that in 2008 we can come back with a better package. The bill focuses on electric energy generators and puts pressure on electric energy to the point that rates will go up and shift the burden to rate payers, including state agencies. The pulp and paper mill industry had declined mainly because of increasing energy costs. There is nothing in this bill that we can't do a year from now.

**Persons Testifying:** (In support) Miguel Perez-Gibson, Audubon Washington and Northwest Energy Coalition.

(With concerns) Ken Johnson, Puget Sound Energy; Collins Sprague, Avista Corporation; Craig Engelking, Sierra Club; and Kathleen Collins, PacifiCorp.

(Opposed) Tim Boyd, Boise Cascade and Industrial Customers of Northwest Utilities; and Bill Stauffacher, American Forest and Paper Association.

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