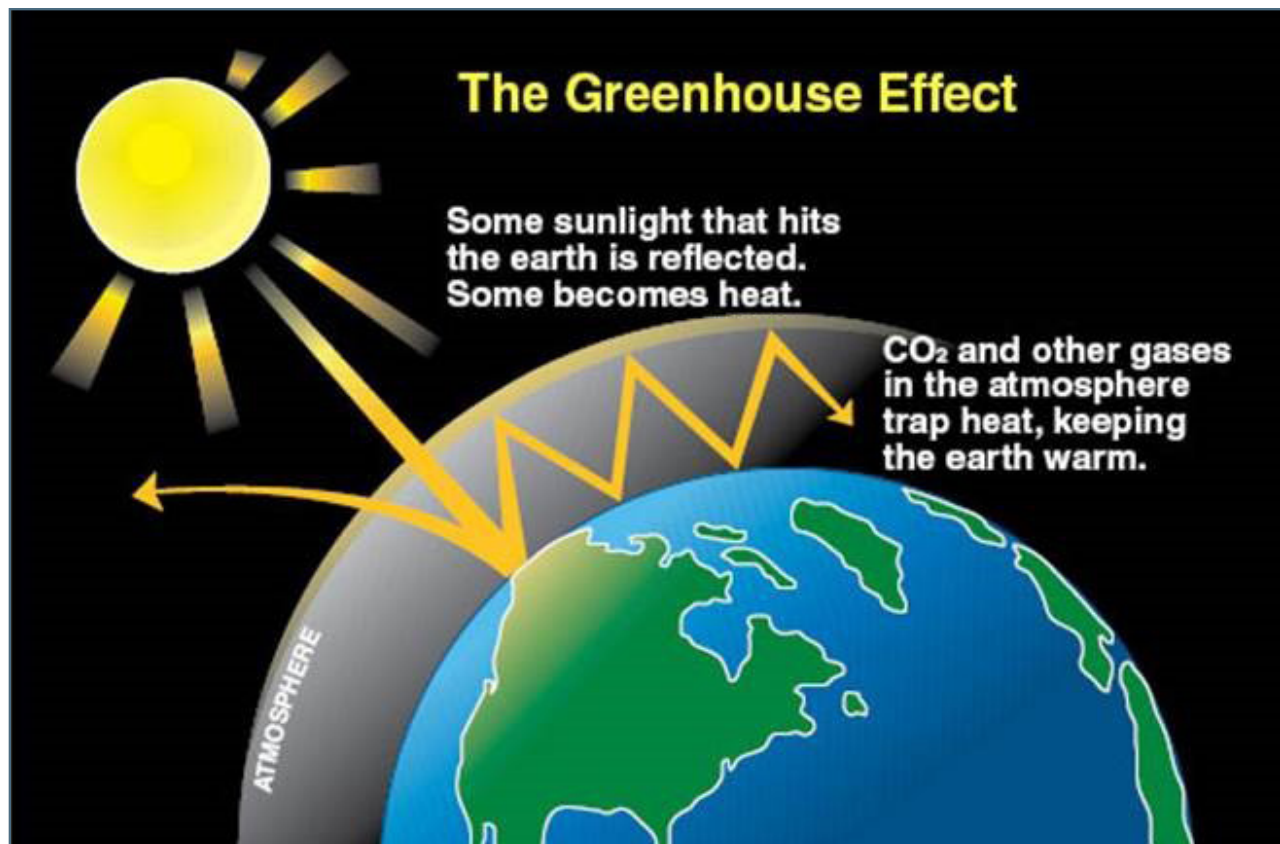


Greenhouse Gas Emissions Fact Sheet

Greenhouse gases include carbon dioxide and other heat-trapping gases. Greenhouse gases are air pollutants that warm the Earth and cause climate change. The possible impacts in Washington State from rising levels of greenhouse gas emissions could include rising sea levels, melting snow and ice, more extreme heat events like fires and droughts, and more extreme storms, rainfall, and floods. These pose significant risks to human health, forests, fish and wildlife, agriculture, freshwater supplies, coastlines, and other natural resources that are vital to Washington State's economy, environment, and quality of life. Communities depend on snow-fed water supplies to provide drinking water, irrigation for agriculture, and almost 75 percent of the state's electrical power. Greenhouse gases are global pollutants so they affect the Earth equally no matter where they are emitted.

How does the study analyze greenhouse gas emissions?

The study looks at the greenhouse gas emissions that could result from constructing and operating the proposed project. It looks at emissions currently happening at the project area and in Cowlitz County. It also evaluates emissions beyond Cowlitz County such as transporting coal by rail from the mine to the project area and vessel transportation to locations in Asia where coal would be exported.



Source: Washington State Department of Ecology 2016

The study also evaluates greenhouse gases released when the exported coal is burned. The proposed project would export 44 million metric tons of coal a year at full operations, which is about half of the coal the United States exported in 2014. Changes in the transportation and use of coal in the United States and Asia could result from the proposed project. The study includes a coal-market assessment, which used a specialized computer model to analyze changes in coal markets to determine if combustion of the coal from the proposed project would change global greenhouse gas emissions.

What does the coal market assessment evaluate for the study?

The coal market assessment evaluates the changes in the United States and Asian markets from coal that would be exported by the proposed project. A computer model estimates greenhouse gas emissions using four different scenarios. The model predicts what would happen to coal markets under the different scenarios if the proposed project is built. One scenario uses 2015 energy policies for the United States and other countries with coal prices from 2013. The second scenario looks at what would happen if coal prices go up. The third scenario looks at what would happen if coal prices go down. The fourth scenario includes past energy policies from when the study began. The first scenario described above represents the U.S. energy policy in 2015, and was chosen as the preferred scenario for the analysis.

What does the study analyze to determine the amount of greenhouse gas emissions?

The study looks at greenhouse gases that are released as a result of the proposed project, including:

- Emissions from equipment and materials used for construction and operations like bulldozers and trucks.
- Electricity to operate the coal export terminal and associated equipment.
- Emissions from train locomotive engines for transporting coal from the mines to the project area and train movement within the project area.
- Emissions from vessels used to transport coal from the proposed project to the export markets in Asia, including when the vessels are at the docks and tugboats are used to move the vessel.
- Emissions from coal combustion in Asia and the United States based on the type of coal.
- Changes in coal and natural gas usage in the United States for power stations.

How would the proposed project affect greenhouse gas emissions?

Construction Emissions

The study found emissions would come from construction equipment, employees commuting, and materials delivered to and from the project area. The emissions would mainly be in Cowlitz County. The study found that construction emissions would be the same as adding about 5,000 cars to the road each year.

Operations and Transportation Emissions in Cowlitz County and Washington State

Greenhouse gas emissions in Cowlitz County from operations would include rail transport of coal, vessel idling and tugboat use at the proposed terminal, and vessel transport of coal. The emissions would be the same as adding about 8,100 cars to the road each year. Outside of Cowlitz County, greenhouse gas emissions from rail and vessel transport of coal in Washington State would be the same as adding about 672,000 cars to the road each year.

Total Emissions for Coal Export Terminal Proposal

As described above, a specialized computer model was used to determine the change in global greenhouse gas emissions that would be caused by the proposed project. Using the scenario that best represents U.S. energy policy, the study found that for the years when the coal export terminal would be starting operations, the proposed project would result in an increase of about 1.4 million metric tons of greenhouse gas emissions each year. At full operations, the study found that the proposed project would result in an increase of about 2.5 million metric tons of greenhouse gas emissions each year. For construction and operations over a 20-year period, the study found the coal export terminal would result in about 37.6 million metric tons of greenhouse gas emissions.

What is being recommended to reduce greenhouse gas emissions?

The study identifies the following proposed mitigation measures to reduce impacts related to greenhouse gas emissions:

- Develop a greenhouse gas mitigation plan that would reduce or offset 50% of the increased greenhouse gas emissions that would result from the proposed project. For initial operations this would be about 694,000 metric tons of greenhouse gas emissions each year. For operations at maximum capacity this would be 1.27 million metric tons of greenhouse gas emissions each year. The plan must be approved by Washington State Department of Ecology. For mitigation that occurs in Cowlitz County, the plan will be approved by Cowlitz County and Ecology. The plan must be implemented prior to the start of operations. The measures described in the plan may include a range of mitigation options. The measures must achieve emissions reductions that are real, permanent, enforceable, verifiable, and additional. The emissions reductions may occur within or outside of Washington State, but must meet all five criteria.
- Implement an anti-idling policy to reduce emissions from vessels and locomotives in the project area.
- Provide fuel-efficiency training for equipment operators to reduce greenhouse gas emissions from construction equipment.
- Evaluate the use of electric cars for company vehicles, incentivize the use of electric vehicles by providing charging stations, and develop an incentive program for carpooling.

Are there significant and adverse impacts that cannot be mitigated?

The mitigation measures identified above will substantially reduce, but not completely eliminate, the greenhouse gas emissions attributable to the proposed project. The proposed project's remaining projected contribution to greenhouse gas emission impacts, which are cumulative in nature, would still be significant and adverse.

How can the public comment on the Draft Environmental Impact Statement?

There are multiple ways for the public to provide comments. Comments will be accepted during the comment period from April 29 to June 13, 2016.

By Mail

Millennium Bulk Terminals—Longview SEPA EIS
c/o ICF International
710 Second Avenue, Suite 550, Seattle, WA 98104

Online

At www.millenniumbulkeiswa.gov

In Person

At a public hearing, orally or in writing

- **May 24, 2016**
1:00 p.m. to 4:00 p.m. and 5:00 pm to 9:00 pm
Cowlitz County Regional Conference Center
1900 7th Avenue
Longview, WA 98632
- **May 26, 2016**
1:00 p.m. to 4:00 p.m. and 5:00 pm to 9:00 pm
Spokane Convention Center
334 W Spokane Falls Boulevard
Spokane, WA 99201
- **June 2, 2016**
1:00 p.m. to 4:00 p.m. and 5:00 pm to 9:00 pm
TRAC Center
6600 Burden Boulevard
Pasco, WA 99301

Where can I find more information?

Chapter 5, Section 5.8, *Greenhouse Gas Emissions*, of the Draft Environmental Impact Statement (EIS) has detailed information on current conditions, analysis and findings related to the potential impacts of the proposed project on greenhouse gas emissions. The coal market assessment is provided in Volume III of the Draft EIS.

Visit www.millenniumbulkeiswa.gov for more information on the proposed project and the Draft EIS.