

Snohomish County PUD Procedure for Calculating Greenhouse Gas (GHG) Emission Updated 3/30/21

I. Background

Under the Clean Energy Transformation Act (CETA), the Department of Ecology (in consultation with the Department of Commerce) is to establish methods for calculation of the greenhouse gas emissions content an electric utility supplies to its retail electric customers in Washington state ([RCW 19.405.070](#)).

The Fuel Mix Disclosure is a requirement for suppliers of electricity to disclose to its customers, on an annual basis, the mix of fuels it offers to retail electric customers ([RCW 19.29A.050](#)).

Under RCW 19.405.070, utilities calculate and report GHG content in conformance with the Fuel Mix Disclosure.

II. Calculating GHG Emissions

1. Calculate Total Retail Load including distribution losses.

Total Retail Load for Snohomish PUD submitted in the Fuel Mix Disclosure Report. Distribution losses are given by Snohomish PUD's Financial Actuals.

2. Use the Washington State Fuel Mix Disclosure Report to identify all claimed resources for the given calendar year.

Fuel Mix Disclosure Reports are reviewed and published by the Washington State Department of Commerce. Published Fuel Mix Disclosure reports can be found [here](#).

3. Identify emitting resources from the Fuel Mix Disclosure Report.

Snohomish PUD does not have emitting resources in its Power Supply portfolio. Under either the EPA or EIA methodology, the emissions for Non-Emitting Resources such as wind and solar is zero. A share of the unspecified¹ energy from market purchases made by the Bonneville Power Administration (BPA) is attributed to the PUD due to the PUD's long-term contract with BPA.

There are three methods for calculating CO₂ emissions under Ecology rules: a) Environmental Protection Agency (EPA) method, b) Energy Information Administration (EIA) method, and c) Unspecified method

Per WAC 173-444-040 (2)(g)(iii), the EPA metrics for biomass plants cannot have GHG attributed to them. As such, Qualco Biomass project and Hampton Lumber Mill project do not have emissions attributes.

Per WAC 173-444-040 (3)(b)(iii)(C), Nuclear, Solar, Water, and Wind resource types are assumed to have zero CO₂ emissions factors.

For reporting of utility emissions for unspecified electricity under the Clean Energy Transformation Act (RCW 19.405.070(2)), an emissions rate of 0.437 MT of carbon dioxide per MWh is assumed.

4. Calculate Snohomish's share of BPA unspecified power emissions by multiplying Snohomish's share of BPA unspecified purchases by the default emissions rate.

Snohomish's share of BPA's unspecified market purchases is given by Commerce through the Fuel Mix Disclosure Report and are expressed in annual MWh. This total is multiplied by 0.437 MT/MWh to derive the total MT of CO₂ associated with those unspecified market purchases.

5. Add all emissions from all resource types identified in the Fuel Mix Disclosure Report to arrive at a total emissions number expressed in MT of CO₂ for the calendar year.

6. Calculate the utility emissions rate by dividing total utility emissions by the Total Resources (in MWh) used to serve Total Retail Load + Losses.

This rate, expressed in MT of CO₂/MWh provides the estimated emissions per MWh of Snohomish PUD electricity in the given study year.

¹ "Unspecified electricity" means an electricity source for which the fuel attribute is unknown or has been separated from the energy delivered to retail electric customers.