

## **EWEB Greenhouse Gas Inventory Frequently Asked Questions: October 2012**

### **1. Why does EWEB prepare a greenhouse gas (GHG) inventory?**

Since 2010, EWEB has prepared an annual inventory of GHG emissions in order to better understand and measure our progress in reducing our climate impacts. By identifying and quantifying our emissions we can prioritize our mitigation activities to those areas that present the greatest risk and offer the greatest opportunities for improvement. Beginning in 2012, the Oregon Department of Environmental Quality requires consumer-owned utilities to annually report the GHG emissions associated with the delivery of electricity to end-users in Oregon.

### **2. What is included in EWEB's GHG Inventory?**

EWEB's first three annual Climate Registry compliant greenhouse gas inventories quantify our GHG emissions in two parts. The Energy Portfolio Inventory measures the GHG emissions associated with EWEB's owned, co-owned and contracted electric power resources and steam plant. The Operations Inventory measures the GHG emissions associated with EWEB's core business operations such as building energy consumption, vehicle and equipment operation, and our supply chain.

### **3. Why use the Climate Registry GHG inventory guidelines?**

The Climate Registry is a not for profit organization that sets consistent and transparent standards to voluntarily calculate, verify and publically report GHG emissions across North America. The Climate Registry builds on the accounting and reporting standards developed by the World Resource Institute and World Business Council for Sustainable Development. More than 400 corporations, utilities and public agencies have joined the climate registry. These widely accepted GHG accounting protocols go beyond mandatory regulatory requirements by considering additional sources of GHG emissions, including the emissions associated with electricity consumption, business travel, employee commuting, and vendor supply chains.

### **4. What is the difference between direct and indirect emissions sources?**

In quantifying our emissions, EWEB follows the guidelines of The Climate Registry's *Electric Power Sector Protocol* and *General Reporting Protocol* and includes both direct and indirect sources of greenhouse gas emissions. Direct emissions are those emissions from equipment and facilities owned and operated by EWEB. Indirect emissions are those emissions that are a consequence of EWEB's activities but occur from equipment and facilities owned and operated by others.

**5. *If we report both our direct and indirect emissions don't GHG emissions get counted more than once—when we count the GHGs and when others count their GHGs?***

In short, yes there is overlap between the emissions categories across different organizations. One organization's "direct" emissions are another organizations "indirect" emissions and if the total GHGs from the inventories of multiple organizations were added together then it is possible that the same emissions sources could be counted more than once. However this is not a major issue because direct and indirect emissions are not typically summed across organizations and it is important for EWEB quantify and mitigate where possible all GHG emission sources.

**6. *What is included in the Operations Inventory?***

The Operations Inventory includes direct emissions from:

- The combustion of fuels for EWEB's vehicle and equipment fleet;
- Fugitive releases of refrigerants used EWEB's HVAC system; and,
- The combustion of natural gas used to heat the Roosevelt Operations Center.

Also included in the Operations Inventory are indirect emissions from:

- EWEB's self-consumption of electricity and steam heat;
- Business travel;
- Solid waste disposal;
- Employee commute; and,
- Purchased goods and services.

**7. *What is the largest source of emissions for EWEB's operations?***

The single largest source of emissions associated with EWEB's operations is from our supply chain— those GHG emissions embodied in purchased goods and services— which annually account for nearly 20,000 Metric Tons of Carbon Dioxide Equivalent (MTCO<sub>2e</sub>), the equivalent of the annual GHG emissions from more than 14,000 cars.

**8. *What is included in the Energy Portfolio Inventory?***

The Energy Portfolio Inventory includes **direct** emissions from:

- The combustion of fossil and biomass fuels at EWEB's owned and co-owned electric power facilities—specifically those fuels associated with EWEB's share of the output of the International Paper Springfield Mill and Georgia-Pacific Wauna Mill cogeneration facilities. While the Wauna Mill facility is owned by separate legal entity, the Western Generation Agency, that entity is jointly controlled by EWEB and the Clatskanie People's Utility District and does not separately report its GHG emissions.

- The combustion of fossil fuels, primarily natural gas but in some reporting years also diesel fuel and waste transformer oil, at EWEB's Seam Plant.

Also included in the Energy Portfolio Inventory are **indirect** emissions from:

- The combustion of fossil and biomass fuels associated with short- and long-term contracted power resources—specifically those fuels associated with “block” purchases from the Bonneville Power Administration, the Metropolitan Wastewater biogas project, the Seneca Sustainable Energy biomass project, and other market purchases. Market purchases include those made on behalf of both retail and wholesale power customers.

The Energy Portfolio Inventory also includes emissions from null power—electricity generated by a qualifying renewable resource (e.g. wind) that is separated from its associated Renewable Energy Certificate (REC).

***9. Why are market purchases made on behalf of wholesale power customers included in the Energy Portfolio Inventory?***

The Climate Registry's Electric Power Sector Reporting protocol calls for electric utilities to report the direct and indirect emissions associated with all power deliveries regardless of who the end-user of electricity is. Quantifying these emissions enables a more accurate picture of an organization's carbon footprint and better illustrates the potential regulatory and financial risks associated with carbon emissions.

***10. How does the Oregon Department of Environmental Quality (DEQ) portfolio GHG reporting required from 2012 differ from The Climate Registry Compliant portfolio GHG reporting we have undertaken for the last three years?***

The Climate Registry's Electric Power Sector Reporting Protocol calls for electric utilities to report both the direct and indirect emissions associated with retail (i.e., to residential, commercial and industrial end-users of electricity) and wholesale (i.e., to other electric utilities and Federal and private power marketers) power deliveries, whether or not those deliveries were made via a local transmission and distribution system or not. Our reporting has included an accounting for null power transactions.

The DEQ's greenhouse gas reporting rules require consumer-owned utilities to report the megawatt hours of electricity distributed to end users of electricity in Oregon from generators owned or operated by the utility and from electricity purchased from the Bonneville Power Administration (BPA) and other sellers. The DEQ rules require that the utility calculate and report the emissions associated with electricity delivered to end-users generated by the utility. The calculation of emissions associated with electricity purchased from BPA and other sellers is left to

DEQ. Consumer-owned utilities, unlike Investor Owned Utilities, are not required to account for null power transactions

***11. What is the largest source of emissions from EWEB's energy portfolio?***

The largest source of GHG emissions from EWEB's energy portfolio are from short- and long-term contracted power resources most of which are associated with market purchases made on behalf of wholesale power customers. In 2011, these power resources accounted for 444,579 MTCO<sub>2</sub>e, the equivalent of the annual GHG emissions from nearly 290,000 cars.

***12. What is the carbon intensity of EWEB's retail power sales?***

In 2011, the average annual carbon intensity of EWEB's retail power sales was 36 lbs. CO<sub>2</sub>e/MWh (.016 MTCO<sub>2</sub>e/MWh).

EWEB's advice to customers preparing their own corporate GHG inventory is to calculate their emissions associated with electricity consumption using both EWEB's retail power sales average emissions intensity- as well as the emissions factor for the regional electric grid - the Northwest Power Pool. The most current estimate of Northwest Power Pool average emissions intensity is 823 lbs. CO<sub>2</sub>e/MWh (.373 MTCO<sub>2</sub>e/MWh).

***13. What is the carbon intensity of EWEB's Greenpower sales?***

The carbon intensity of EWEB Greenpower sales is zero, since the generation associated with those sales are from renewable resources whose REC's are retired under the Green-e program.