SB 1530: Potentially Covered Entities

The following tables show entities that have the potential to be covered by the greenhouse gas (GHG) program as proposed in SB 1530. The tables show emissions reported to the Oregon Department of Environmental Quality (DEQ) under the mandatory greenhouse gas reporting requirement for the 2017 emissions year. Please note important assumptions and caveats described in advance of each of the tables.

Natural Gas

Natural gas pipelines and utilities annually report to DEQ the total volume of natural gas imported and supplied to end users in Oregon. The table below lists the total volume of natural gas reported in 2017 and the associated emissions from the combustion of that gas. LC19 would cover all GHG emissions from natural gas combustion. Nearly all of this gas would be regulated at the gas suppliers (gas marketers or gas utilities). However, a few large industrial facilities would be directly regulated for the gas they receive directly from connections to interstate pipelines (see separate section below).

| Natural Gas Supplier | Quantity (Mscf) | Emissions (MTCO2e) |
|-------------------------------|-----------------|--------------------|
| Marketers or Large Facilities | 169,889,941 | 9,415,024 |
| Avista Utilities | 8,625,214 | 470,038 |
| Cascade Natural Gas | 8,265,845 | 472,406 |
| Northwest Natural Gas | 69,929,402 | 3,998,978 |
| Total | 256,710,402 | 14,356,446 |

Quantity and emissions reported by natural gas suppliers

Electricity

SB 1530 would cover emissions from electricity generated in Oregon as well as emissions from imported electricity serving Oregonians. Electricity generated at facilities in Oregon would be covered at the electricity generation facility (gas power plants have direct connections to interstate pipelines). Emissions from imported electricity shown in this section would be covered at the supplier level. The tables below include emissions reported to DEQ from in-state power plants and emissions associated with imported electricity provided to Oregon ratepayers in 2017.

Emissions from electricity generated in Oregon

| | | Natural Gas | Coal | Total |
|------------------------------------|----------|-------------|------------|-----------|
| Facility Name | County | (MTCO2e) | (MTCO2e) | Emissions |
| Portland General Electric (Carty & | Morrow | | | |
| Boardman) | | 902,884 | 1,706,683* | 2,609,567 |
| Hermiston Power LLC | Umatilla | | | |
| | | 1,175,627 | - | 1,175,627 |
| Portland General Electric (Coyote | Morrow | | | |
| Springs) | | 1,096,407 | - | 1,096,407 |
| Portland General Electric | Columbia | | | |
| (Beaver/Port Westward) | | 1,008,157 | - | 1,008,157 |
| Klamath Energy LLC | Klamath | | | |
| | | 955,631 | - | 955,631 |
| Hermiston Generating Company, | Umatilla | | | |
| _L.P. | | 719,622 | - | 719,622 |
| Portland General Electric (Port | Columbia | | | |
| Wesward II) | | 104,700 | - | 104,700 |
| Total | | 5,963,028 | 1,706,683 | 7,669,711 |

*The emissions shown from coal are from PGE's coal-fired power plant that is planned to close by the end of 2020

Emissions from imported power serving Oregon

| | Emissions from Specified Imported | Emissions from Unspecified Power | |
|---------------------------------|--------------------------------------|-------------------------------------|------------|
| Investor Owned Utility | Power (MTCO2e) | (MTCO2e) | Total |
| Idaho Power Company | 177,434 | 11,337 | 188,770 |
| Pacific Power (PacifiCorp) | 7,905,163 | 630,209 | 8,535,373 |
| Portland General Electric (PGE) | 2,378,292 | 645,584 | 3,023,876 |
| Total | 10,460,889 | 1,287,130 | 11,748,019 |

| | Emissions from Specified Imported | Emissions from Unspecified Power | |
|-----------------------------------|--------------------------------------|-------------------------------------|--------|
| Consumer Owned Utility* | Power (MTCO2e) | (MTCO2e) | Total |
| Emerald PUD | 293 | 54,893 | 55,186 |
| PNGC Power (on behalf of Umatilla | 25,341 | - | 25,341 |
| Electric Cooperative) | | | |
| Total | 25,634 | 54,893 | 80,527 |

* In line with the design of LC19, this only shows COUs (or entities scheduling imported power on their behalf) with 25,000 MTCO2e or more in 2017.

| | Emissions from Specified Imported | Emissions from Unspecified Power | |
|---|--------------------------------------|-------------------------------------|--------------------|
| Bonneville Power Administration | Power (MTCO2e) | (MTCO2e) | Total |
| Bonneville Power Administration | - | 129,426 | 129,426 |
| | Emissions from Specified Imported | Emissions from Unspecified Power | |
| | | | |
| Electricity Service Supplier | Power (MTCO2e) | (MTCO2e) | Total |
| Electricity Service Supplier Avangrid Renewables | • • | • | Total 5,599 |
| | • • | (MTCO2e) | |
| Avangrid Renewables | • • | (MTCO2e) 5,599 | 5,599 |
| Avangrid Renewables Calpine Energy Solutions | • • | (MTCO2e) 5,599 576,749 | 5,599 576,749 |

Imported Fossil Fuels

SB 1530 would cover companies that own fossil fuel as it is imported into Oregon. The table below lists the anthropogenic emissions from the combustion of the total volume of fuel, excluding aviation fuel, reported to DEQ for 2017 for all companies importing at least 500,000 gallons of fuel.

| Fuel Supplier | Emissions (MTCO2e) |
|---|--------------------|
| BP West Coast Products LLC | 4,877,349 |
| Phillips 66 Company | 4,174,735 |
| Tesoro Refining And Marketing Company LLC | 3,633,597 |
| Shell Oil Products Us | 3,441,869 |
| Chevron Usa Inc. | 2,759,872 |
| Space Age Fuel Inc. | 1,643,562 |
| Vitol Inc | 1,626,575 |
| Mccall Oil & Chemical Corp | 216,928 |
| PC Energy, LLC | 185,898 |
| Shell Trading (US) Company | 159,938 |
| Mieco Inc. | 119,573 |
| Byrnes Oil Company, Inc. | 114,835 |
| Hattenhauer Distributing Company | 106,784 |
| Plains Midstream Canada Ulc | 99,999 |
| Ed Staub and Sons Petroleum, Inc. | 97,820 |
| Valero Marketing And Supply Co. | 84,274 |
| Apex Oil Company, Inc. | 80,409 |
| Amerigas Propane, Inc. | 78,286 |
| Campo & Poole Distributing, LLC | 58,096 |
| Jacksons Food Stores, Inc. | 55,724 |
| Carson Oil Company, Inc. | 53,672 |
| SeQuential-Pacific Biodiesel, LLC | 53,290 |
| A & B Enterprises, Inc. | 49,931 |
| Devin Oil Co., Inc. | 49,401 |
| Kiva Energy, Inc. | 45,186 |
| Wilson Oil dba Wilcox & Flegel | 44,446 |
| Powell-Christensen Inc | 43,466 |
| Heller & Sons Dist Inc | 41,765 |
| Musket Corporation | 41,281 |
| Colvin Oil I, LLC | 39,924 |
| Elbow River Marketing Ltd., A Corporation Of Canada | 36,300 |
| Associated Petroleum Products | 29,596 |
| Suburban Propane, L.P. | 27,452 |
| Farmers Supply Cooperative | 27,067 |
| Jubitz Corporation | 25,222 |
| CHS Inc. Of Minnesota | 24,136 |
| AH Schade, Inc. | 23,368 |
| Tyree Oil, Inc. | 18,943 |
| Marc Nelson Oil Products, Inc. | 18,150 |
| Petrogas, Inc. | 17,858 |

Emissions reported from fuel imported into Oregon

| Fuel Supplier | Emissions (MTCO2e) |
|-----------------------------------|--------------------|
| Maverik Inc. | 17,204 |
| Truax Corporation | 16,888 |
| Hicksgas, LLC | 16,565 |
| Conrad & Bischoff, Inc. | 15,113 |
| WSCO Petroleum | 14,628 |
| Morrow County Grain Growers, Inc. | 14,277 |
| Coleman Oil Company | 14,095 |
| ARS Fresno LLC | 11,542 |
| Connell Oil, Inc. | 9,843 |
| Pounder Oil Service, Inc. | 9,514 |
| Pratum Co-Op | 8,819 |
| UPS Fuel Services, Inc. | 8,774 |
| Quality Petroleum Products, Inc. | 8,769 |
| Hartland Fuel Products, LLC | 7,726 |
| PacWest Energy LLC | 7,529 |
| Mid Columbia Producers Inc | 7,112 |
| Franklin United Inc | 6,423 |
| Total | 24,521,398 |

Permitted Facilities

SB 1530 would directly regulate emissions from facilities with air quality permits annually emitting over 25,000 tons of anthropogenic emissions from industrial processes. Natural gas would also be directly regulated at the few facilities receiving gas from direct connections to interstate pipelines. This table does not include emissions from fuels that are covered by the fuel suppliers listed in the previous section (e.g. onsite use of distillate fuel in a boiler) or CO2 emissions from biogenic fuels such as wood waste or biogas. Thus, emissions listed below are different from emissions listed on DEQ's GHG emissions webpage. This table also provides the types of facilities based on their primary North American Industrial Classification System (NAICS) codes. Most of these directly regulated permitted facilities would be considered "Emissions Intensive Trade Exposed" (EITE) entities under LC19. LC19 would mitigate the effects of direct regulation on these industries that are also highly exposed to competition in other jurisdictions to minimize the potential for blunting their competitiveness.

| Facility | County | NAICS description | Total directly regulated emissions |
|--|-------------------|--|---|
| Ash Grove Cement Company* | Baker | Cement Manufacturing | 715,806 |
| Cascade Steel Rolling Mills, Inc.* | Yamhill | Iron and Steel Mills | 29,477 |
| Covanta Marion, Inc. | Marion | Solid Waste Combustors and Incinerators | 74,424 |
| Dyno Nobel Incorporated* | Columbia | Inorganic Chemical Manufacturing | 113,912 |
| EVRAZ Inc. NA* | Multnomah | Iron and Steel Mills | 95,586 |
| Gas Transmission Northwest LLC | Morrow | Pipeline Transportation of Natural Gas | 63,571 |
| Intel Corporation* | Washington | Semiconductor and Related Device Manufacturing | 259,203 |
| Jireh Semiconductor, Inc.* | Washington | Semiconductor and Related Device Manufacturing | 95,521 |
| Maxim Integrated Products, Inc.* | Washington | Semiconductor and Related Device Manufacturing | 43,476 |
| Microchip Technology, Inc.* | Multnomah | Electronics Manufacturing | 91,985 |
| Qorvo US* | Washington | Semiconductor and Related Device Manufacturing | 55,218 |
| SemiConductor Components Industries, LLC* | Multnomah | Electronics Manufacturing | 92,877 |
| Total * Indicates a business that SB 1530 would establ | liah as an "Eucle | sions Intension Trada Ferrara d'' antita | 1,731,056 |

* Indicates a business that SB 1530 would establish as an "Emissions Intensive Trade Exposed" entity