CleanBC Industrial Incentive Program

Lead-Zinc Sector Guidance

This guidance applies to reporting operations with primary NAICS codes as follows:

- NAICS – 331410: Non-Ferrous Metal (except Aluminum) Production and Processing

Sub-Sector: Lead-Zinc Smelting
CIIP Product: Smelting - lead-zinc

Quantification and Reporting of Emissions and Related Information

Unless explicitly stated otherwise in the CleanBC Industrial Incentive Program (CIIP) guidance, quantification and reporting of greenhouse gas emissions and related information under CIIP must comply with the Greenhouse Gas Industrial Reporting and Control Act (GGIRCA) and the Greenhouse Gas Emission Reporting Regulation (GGERR), including with the referenced in GGERR Western Climate Initiative (WCI) quantification methodologies.

The WCI methodologies typically applicable to lead-zinc smelting reporting operations include, but may not be limited to, the following:

- WCI.020 General Stationary Combustion
- WCI.040 Electricity Generation
- WCI.100 Coal Storage
- WCI.160 Lead Production
- WCI.240 Zinc Production
- WCI.280 Mobile Equipment at Facilities

In addition to the information required in the GGERR, applicants to CIIP must also report the GHG emissions associated with purchased grid electricity and heat, including electricity imported from outside BC.

Purchased and imported electricity and heat are reported under the ‘Production’ tab in the CIIP application. From the ‘Product or Service’ dropdown menu, select ‘Purchased Electricity’ or ‘Purchased Heat’ as applicable. Enter the amount of electricity purchased or imported (in gigawatt hours) or heat purchased (in gigajoules) and the emissions associated with the purchased electricity or heat.

- Grid electricity emissions are quantified by multiplying the published electricity emission intensity factor for grid-connected entities $EIF^\text{Electr}_{\text{Grid}}$ for the applicable reporting year by the amount of purchased grid electricity $Q^\text{Electr}_{\text{Purchased}}$ in GWh:
Purchased heat emissions are quantified by multiplying a BC-specific industrial heat emission intensity factor $E_{BC}^{Heat}$ by the amount of purchased heat $Q_{Purchased}^{Heat}$ in GJ:

$$E^{Heat}_{Purchased} = E_{BC}^{Heat} \times Q_{Purchased}^{Heat}$$

where

$E_{BC}^{Heat}$ is 0.063 tCO2e/GJ.

Emissions associated with electricity imported from outside BC are those of the corresponding Electricity Import Operation (EIO) as quantified and reported according to Schedule D of GGERR. To report electricity that is imported from another grid, select ‘Emissions from EIOs’ under the list of products and use the emissions intensity (in tonnes of CO2e/GWh) stated in the purchase agreement.

Therefore, the emissions for CIIP purposes are (where $E_{onsite}$ is the reporting operation’s emissions total as required to be reported under GGIRCA and submitted in the Single Window Reporting System):

$$E^{CIIP} = E_{onsite} + E^{EIO} + E^{Electr.}_{Grid} + E^{Heat}_{Purchased}$$

The emissions associated with purchased electricity and/or heat will be automatically added to the product’s emissions totals. The applicant must not allocate emissions from purchased electricity and/or heat to the products.

Quantification of Production

The amount of lead-zinc is the sum of all lead and all zinc production, in tonnes:

$$P_{L+Z} = P_{Lead} + P_{Zinc}$$

Lead-Zinc production includes all lead and zinc produced during the reporting year, regardless of whether it is sold during the year or added to inventory. It does not include lead and zinc sold from a previous year’s production.

Other metals or minerals produced as by-products must not be included. Production must also not include any waste products.

Emission Intensity

For the purposes of CIIP, the Emission Intensity will be calculated as:
\[ \text{E}_{L+Z} = \frac{P_{\text{CHP}}}{P_{L+Z}} \]