

CleanBC Industrial Incentive Program

Steel Wire Sector Guidance

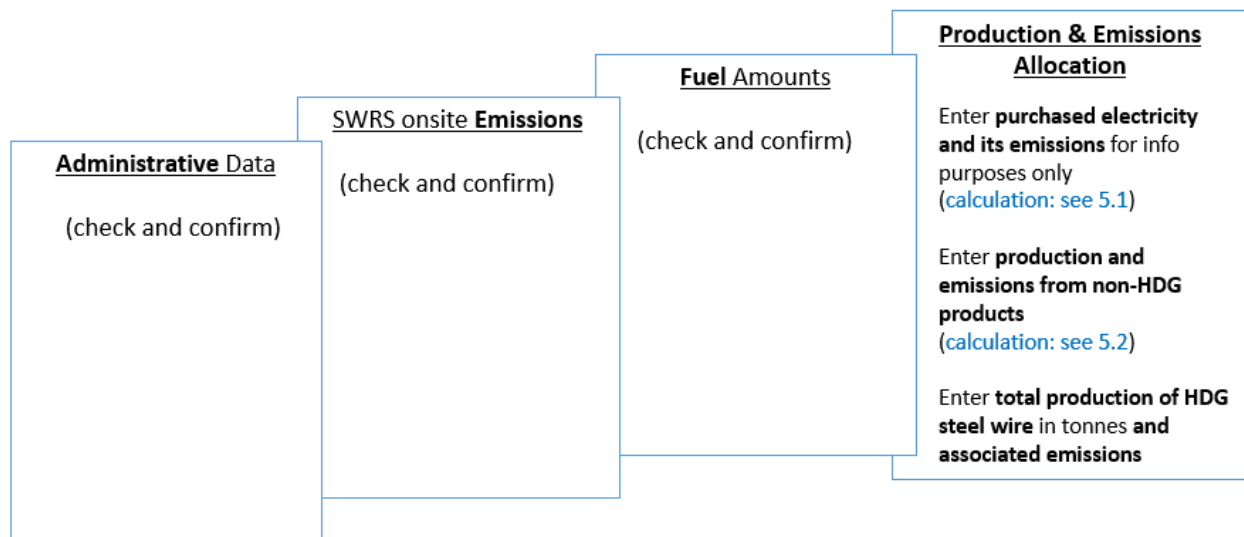
1. Applicable NAICS codes:

- **NAICS – 331222: Steel Wire Production**

Sub-Sector	CIIP Product
Steel Wire	HDG-process (hot dip galvanization) steel wire
	Non-CIIP Product (excluded from benchmarking)
	Non-HDG production

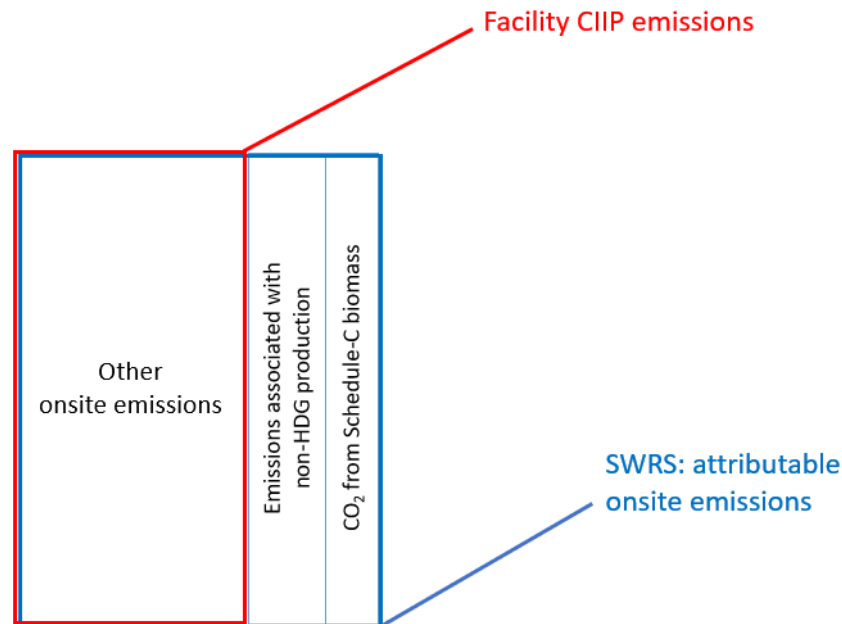
2. Quick Summary – Main Steps in CIIP application

- 2.1 Complete and submit a facility emission report in the Single Window Reporting System (SWRS)
- 2.2 Complete and submit a CIIP application (it is pre-filled with SWRS data where applicable)



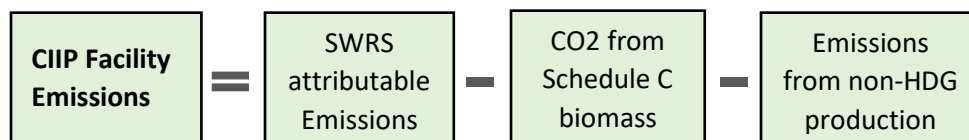
([calculation](#)) steps are detailed in section **5. Calculation Methodologies** below.

3. Facility Emissions for CIIP purposes



For the Facility emission total for CIIP purposes:

- Facility onsite emissions CO₂ from Schedule C biomass are excluded,
- Facility onsite emissions from non-HDG production are excluded



Or, equivalently,

$$E_{Facility}^{CIIP} = E_{Attr.}^{SWRS} - E_{CO2bioC}^{SWRS} - E_{nonHDG}$$

Facility onsite emissions are pre-filled in the CIIP application with data submitted through the SWRS system.

Facility emissions associated with non-HDG production must be entered in the *Production and Emissions Allocation* section of the CIIP application.

4. Completing a CIIP Application

The CIIP application has four sections. Where possible, the *Administrative*, *SWRS Onsite Emissions* and *Fuels* sections are pre-populated with data reported through the SWRS system. Applicants must review, confirm, and, if applicable, update this information and also enter production and emissions allocation information in the *Production and Emissions Allocation* section.

Administrative Data

Most information in the administrative section will be pre-populated from SWRS.

- Review pre-populated data for accuracy
- Enter the BC Corporate Registry number as it appears on orgbook.gov.bc.ca

NOTE: The BC Corporate Registry number and the operator's legal name on the CIIP application must match the entry on [OrgBook](https://orgbook.gov.bc.ca). The incentive payment will be issued to the legal business name as it appears on the CIIP application.

- Please ensure all mailing addresses follow the [Canada Post address format](#)
- Enter at least one application contact. The Primary Application Contact field will be pre-populated based on the user who starts an application; please confirm or edit as applicable. This will be the primary contact CAS will use for all application-related correspondence: questions, application status changes, review results, etc. A Secondary Application Contact can be added, if applicable. Please note that automated system messages such as application status updates will only be sent to the primary contact.
- Choose the primary NAICS code that the facility operates under from the available list. The NAICS codes in the pre-populated list reflect the sectors eligible to apply for CIIP. You will not be able to enter a NAICS code that is not on the list. The production information required to be entered in the *Production and Emissions Allocation* section will depend on the NAICS code selection

If you believe your facility's sector is eligible but your NAICS code is not on the list, please contact the CIIP team at GHGRegulator@gov.bc.ca.

SWRS Onsite Emissions

This section is pre-filled with data from the facility's SWRS report. Please review and confirm. If the information needs updating, this likely means that the SWRS report has to be updated first.

Fuels

This section is pre-filled with data from the facility's SWRS report. Please review and confirm. If the information needs updating, this likely means that the SWRS report has to be updated first.

Production & Emissions Allocation

NOTE: The ministry provides a calculator spreadsheet with the appropriate calculation formulas built in, to assist in calculations at this step of the CIIP application process (available [at this link](#)).

NOTE: To enter data as required in this section, first select 'Offsite Emissions: Purchased Electricity', then 'Excluded Product: non-HDG production', and finally 'HDG-process (hot dip galvanization) steel wire', as applicable, from the 'Product or Service' dropdown menu.

NOTE: Facility offsite emissions associated with purchased electricity must be calculated from electricity amount purchased and are required for information purposes only. These emissions do not count towards a facility's emission total for CIIP purposes (see section 3 above).

Allocating CIIP Facility emissions

CIIP facility emissions, calculated as shown in section 3, must be allocated to '**HDG-process (hot dip galvanization) steel wire**'.

Select '**Offsite Emissions: Purchased Electricity**'

- Enter purchased electricity (in GWh). Enter 0 if not applicable.
- Calculate and enter the emissions associated with purchased electricity:
 - multiply the amount of purchased electricity by the published [grid electricity emission intensity](#) for the year, or
 - if preferred, use the calculator (see section 5.1 below for details)

Select '**Excluded Product: non-HDG production**'

- Enter the amount of production not requiring HDG, in tonnes.
- Calculate and enter the emissions associated with non-HDG production, using the calculator (see section 5.2 below for details)

Select '**HDG-process (hot dip galvanization) steel wire**'

- Enter HDG steel wire production amount in tonnes.

HDG steel wire production includes all HDG steel wire produced during the reporting year, regardless of whether it is sold during the year or added to inventory. It does not include HDG steel wire sold from a previous year's production.

Products other than HDG steel wire, such as nails and other products not requiring HDG process, are not part of the benchmark for CIIP purposes.

- Enter the CIIP facility emissions, using the calculator (see section 5.2 below for details).

Summary

Review your application for accuracy, review the terms and conditions, and submit the application.

The system will automatically perform some checks for consistency. If inconsistencies are found, the application will show a warning message, highlighting the issue requiring attention. To address any highlighted inconsistencies, you must go back to the relevant application section/tab and either correct the reported values or provide an explanation by entering a comment in the relevant section.

Additionally, the system may detect errors in your application, such as missing data. These errors must be corrected in order to submit an application. In certain exceptional cases when the issue cannot be addressed through the application system, you will have the ability to override the error message by providing an explanation and then submit the application.

Any unresolved warnings or errors may delay the processing of your application.

5. Calculation Methodologies

Unless explicitly stated otherwise in 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 steel-wire-producing reporting operations are:

- WCI.020 General Stationary Combustion
- WCI.280 Mobile Equipment at Facilities

A CIIP applicant must first submit an emission report in SWRS (SWRS report) complying with GGIRCA and GGERR and using the WCI methodologies. A CIIP application is then pre-filled where possible with applicable information from the SWRS report.

5.1 Calculating emissions associated with purchased grid electricity

The ministry provides a calculator spreadsheet with the appropriate calculation formulas built in, to assist in calculations at this step of the CIIP application process (available [at this link](#)).

In the calculator, in the section 'Purchased Electricity (for information purposes only)', select the applicable electrical grid (Integrated or Fort Nelson) from the pulldown menu in cell E11. This will cause the appropriate electricity intensity factor in tCO₂e/GWh to be displayed in cell G11.

In the blue cell, enter the amount of purchased electricity (in GWh).

Emissions associated with purchased grid electricity are then automatically calculated and displayed in cell G13, in tonnes CO₂e.

For example:

Purchased Electricity (for information purposes only)

INPUT each variable listed below:

Purchased Electricity

	Electrical Grid:		Amount	Units
Emissions Intensity Factor of Grid	Integrated Grid	EIF _{El.Grid}	11.5	tCO ₂ e/GWh
Amount of electricity purchased		EL_PURCHASED	300.00	GWh
Emissions from Purchased Electricity		EL_PURCHASED	3,450.00	tCO ₂ e

Choose grid
from dropdown
menu

Enter the amount of emissions from purchased grid electricity in the CIIP application.

The calculator uses the following methodology to determine emissions associated with purchased grid electricity:

If

$EIF^{El.Grid}$ (selection) is the grid electricity emission factor for the selected grid and applicable year, in tCO₂e/GWh;

$Q_{Purchased}^{Electr.}$ (input) is the quantity of purchased grid electricity, in GWh;

$E_{Purchased}^{Electr.}$ are the emissions associated with purchased grid electricity, in tCO₂e.

Then

$$E_{Purchased}^{Electr.} = EIF^{El.Grid} * Q_{Purchased}^{Electr.}$$

where $EIF^{El.Grid}$ data comes from the published [electricity emission intensity factor for grid-connected entities](#) for the selected grid for applicable year.

5.2 Calculating emissions associated with non-HDG production and HDG steel wire

The ministry provides a calculator spreadsheet with the appropriate calculation formulas built in, to assist in calculations at this step of the CIIP application process (available [at this link](#)).

NOTE: If the non-HDG production is zero (all production is HDG steel wire), skip this section and enter 0 for the emissions associated with non-HDG production in the CIIP application.

5.2.1 Production and emissions data

In the calculator, in the section on emission allocation to HDG steel wire and non-HDG production, in the blue cells:

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- Enter HDG process steel wire production (tonnes)
- Enter production not requiring HDG (tonnes)
- Enter total GSC (General Stationary Combustion) emissions from the SWRS report (tonnes CO₂e)
- Enter total Mobile Combustion emissions from the SWRS report (tonnes CO₂e)

For example:

Do not leave blank - enter zero if needed

Product	Amount	Units
HDG process steel wire production	2,500.00	tonnes
Production not requiring HDG (the non-CIIP product)	500.00	tonnes
Total	3,000.00	tonnes

Emissions	Amount	Units
GSC emissions from SWRS report	12,000.00	tCO ₂ e
Mobile Combustion emissions from SWRS report	3,000.00	tCO ₂ e

5.2.2 Shared generator data

- Enter a minimum of five (5) days worth of fuel consumption of the generator, in which days:
 - 1) Hot dip galvanization is running at its regular capacity; and
 - 2) Hot dip galvanization is the only user of energy from the generator

These days do not need to be consecutive.

- Enter the units in cell E39 next to the amount of fuel entered for the first day.

NOTE: The daily entries for fuel amounts have to be in the same units for all entries.

The calculator then displays the generator's average daily fuel consumption for HDG-only production.

- Enter the total amount of generator fuel consumed for the year, regardless of whether used for HDG steel wire or non-HDG production (same units as above are assumed)

For example:

Day	Fuel consumption	Units (same for all entries)
1	9,000	cubic metres NG
2	8,770	
3	9,100	
4	8,800	
5	8,890	
6		
Average daily fuel consumption for HDG-only	8,912	cubic metres NG
Total annual fuel consumption @ Generator	5,000,000	cubic metres NG

5.2.3 Emissions for non-HDG production and HDG steel wire

Based on the data entered above, the calculator automatically determines the total emissions associated with non-HDG production and the CIIP Facility emissions. For example:

Emission Allocation:

General combustion for non-HDG production	4,193.09	tCO ₂ e
Mobile combustion for non-HDG production	500.00	tCO ₂ e
Total Emissions for non-HDG production	4,693.09	tCO₂e
General combustion for Hot Dip Galvanized (CIIP)	7,806.91	tCO ₂ e
Mobile combustion for Hot Dip Galvanized (CIIP)	2,500.00	tCO ₂ e
CIIP Facility Emissions	10,306.91	tCO₂e

Enter the emissions associated with non-HDG production under '**Excluded Product: non-HDG production**' in the CIIP application.

Enter the CIIP Facility Emissions under '**HDG-process (hot dip galvanization) steel wire**' in the CIIP application.

The calculator uses the following methodology to determine these emissions:

If

E^{GSC} (input) are the facility's general stationary combustion emissions from the SWRS report;

E^{MC} (input) are the facility's mobile combustion emissions from the SWRS report;

$Average\ Daily\ Fuel_{HDG\ Only}^{Generator}$

is the generator's average daily fuel consumption for HDG-only production;

$Annual\ Fuel_{All}^{Generator}$

(input) is the generator's annual fuel consumption for all production;

P^{HDG} (input) is the HDG steel wire production;

P^{nonHDG} (input) is the non-HDG production (non-CIIP product);

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Then

$$E_{nonHDG}^{GSC} = \left(\frac{365 * \text{Average Daily Fuel}_{HDG \text{ Only}}^{Generator}}{\text{Annual Fuel}_{All}^{Generator}} \right) * E^{GSC}$$

and

$$E_{nonHDG}^{MC} = \left(\frac{P^{nonHDG}}{P^{nonHDG} + P^{HDG}} \right) * E^{MC}$$

and

$$E_{nonHDG} = E_{nonHDG}^{GSC} + E_{nonHDG}^{MC}$$