



Ministry of  
Environment and  
Climate Change Strategy

# Industrial Reporting Updates & Lessons Learned

2019 Industrial GHG Reporting and CleanBC Workshop

November 5, 2019



Ministry of  
Environment and  
Climate Change Strategy

# Presentation Overview

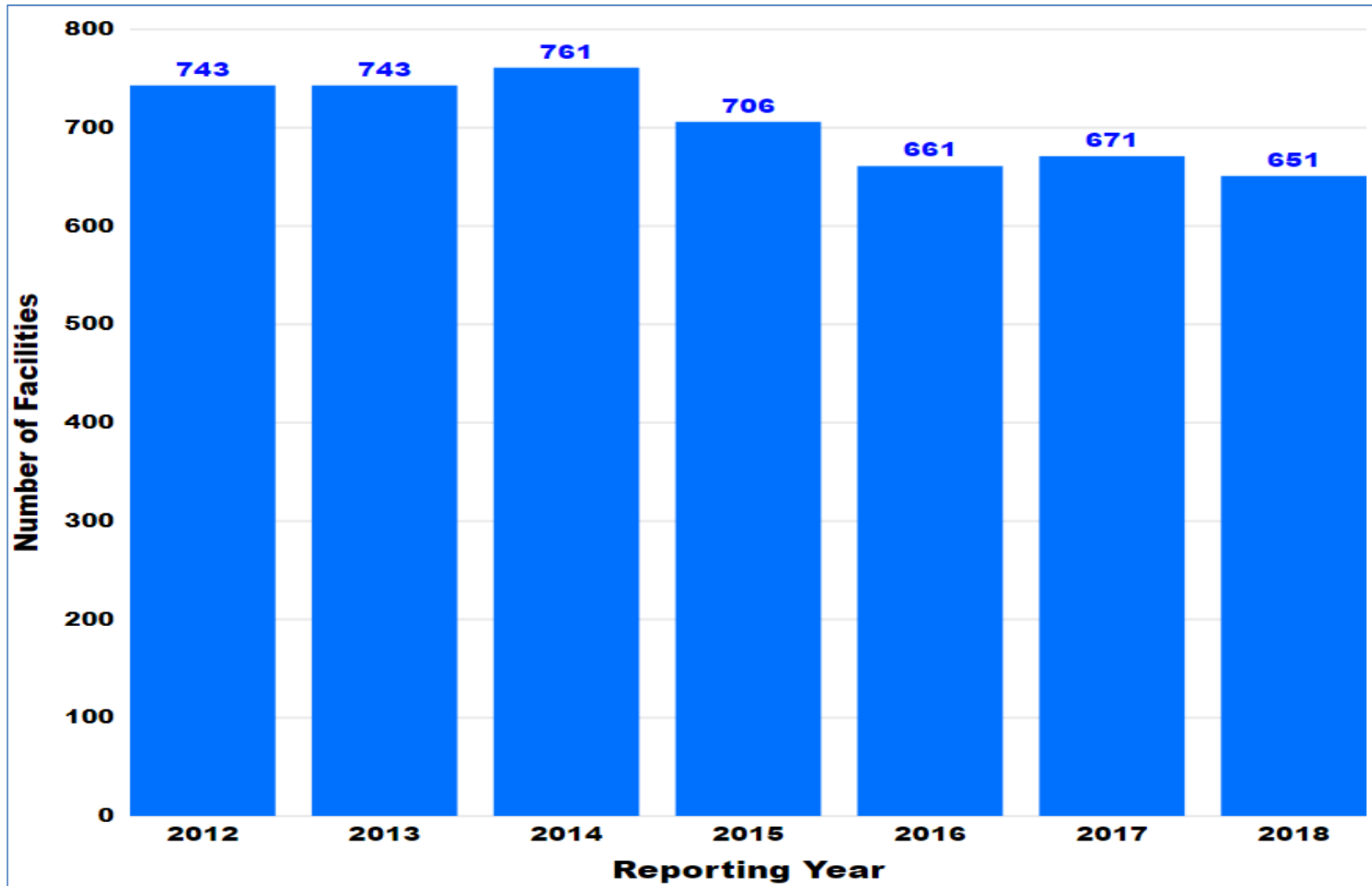
- Looking at historical reporting performance:
  - Statistics (Industrial Emission Profile)
  - Issues & Improvements
- New features of the Reporting System

# Session Objectives

- Provide a greater understanding of the Industrial Emission inventory and requirements to report GHG emissions.
- Provide a greater understanding of GHG reporting issues in order to improve data integrity.

# Industry Profile

# Number of Reports

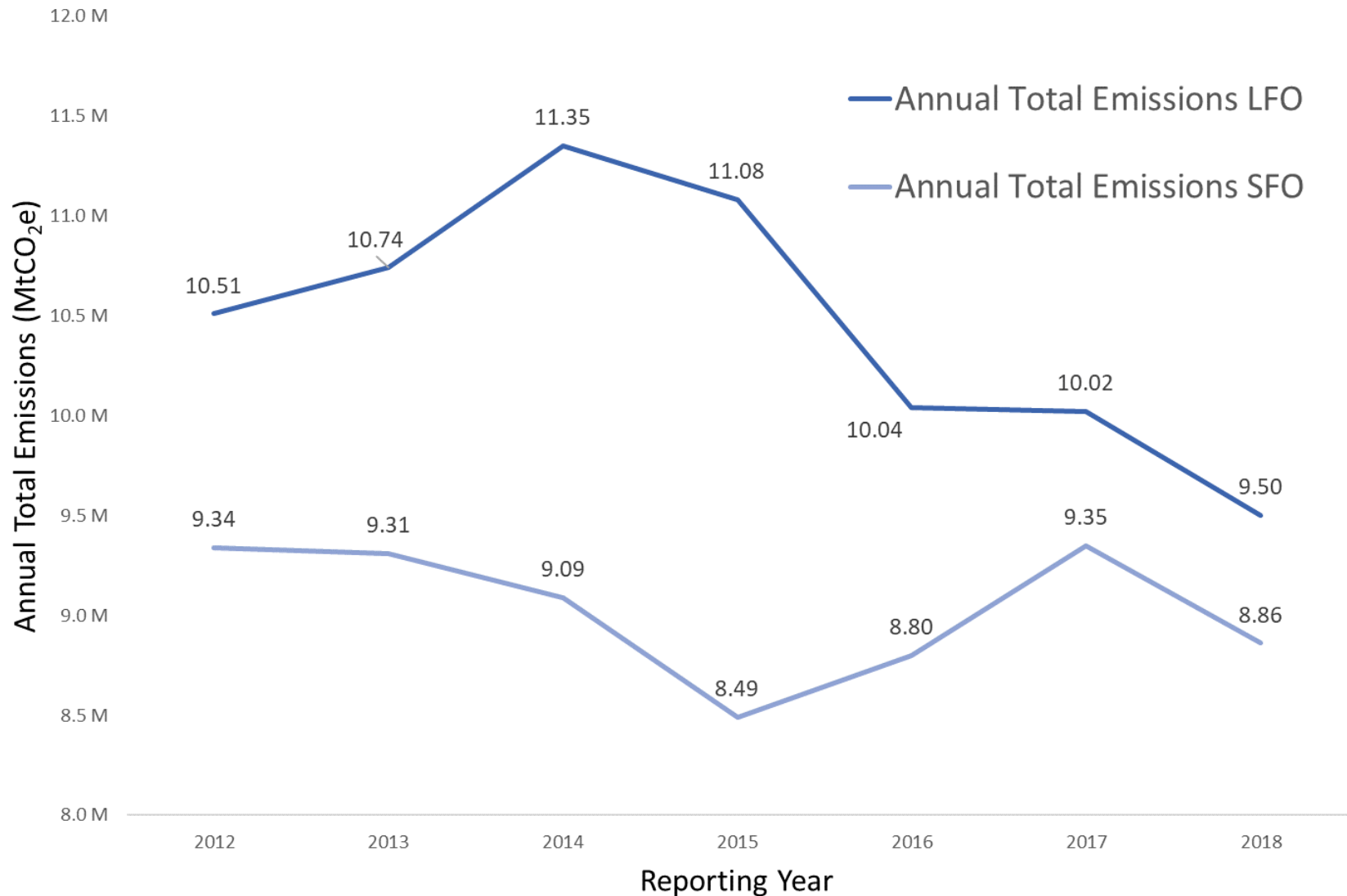


# Sectors & NAICS Codes

Industrial Segment	NAICS Classification & Operation Type	Industrial Segment	NAICS Classification & Operation Type
Forest Products	113210 - Forest nurseries & gathering forest products <a href="#">SFO</a>	Electricity & Heat Supply	221111 - Hydro-Electric Power Generation <a href="#">LFO</a>
	321111 - Sawmills (except Shingle and Shake Mills) <a href="#">SFO</a>		221112 - Fossil-Fuel Electric Power Generation <a href="#">SFO</a>
	321212 - Softwood Veneer and Plywood Mills <a href="#">SFO</a>		221119 - Other Electric Power Generation <a href="#">SFO</a>
	321216 - Particle Board and Fibreboard Mills <a href="#">SFO</a>		221121 - Electric Bulk Power Transmission and Control <a href="#">LFO</a>
	321999 - All other miscellaneous wood product manufacturing <a href="#">SFO</a>		221330 - Steam and Air-Conditioning Supply <a href="#">SFO</a>
	322111 - Mechanical Pulp Mills <a href="#">SFO</a>	Oil & Gas Industry	211110 - Oil and gas extraction (except oil sands) <a href="#">LFO</a>
	322112 - Chemical Pulp Mills <a href="#">SFO</a>		211113 - Conventional Oil and Gas Extraction <a href="#">LFO</a>
	322121 - Paper (except Newsprint) Mills <a href="#">SFO</a>		211114 - Non-Conventional Oil and Gas Extraction <a href="#">LFO</a>
322122 - Newsprint Mills <a href="#">SFO</a>	721310 - Rooming and Boarding Houses <a href="#">LFO</a>		
Inorganic Chemicals	325181 - Alkali and Chlorine Manufacturing <a href="#">SFO</a>		221210 - Natural Gas Distribution <a href="#">LFO</a>
	325189 - All Other Basic Inorganic Chemical Manufacturing <a href="#">SFO</a>		486210 - Pipeline Transportation of Natural Gas <a href="#">LFO</a>
Construction Materials	327310 - Cement Manufacturing <a href="#">SFO</a>		324110 - Petroleum Refineries <a href="#">LFO</a>
	327410 - Lime Manufacturing <a href="#">SFO</a>		325120 - Industrial Gas Manufacturing <a href="#">LFO</a>
	327420 - Gypsum Product Manufacturing <a href="#">SFO</a>	412110 - Petroleum Product Wholesaler-Distributors <a href="#">SFO</a>	
	327990 - All Other Non-Metallic Mineral Product Manufacturing <a href="#">SFO</a>	Food Industry	111419 - Other Food Crops Grown Under Cover <a href="#">SFO</a>
Metallic Materials	331222 - Steel Wire Drawing <a href="#">SFO</a>		311119 - Other Animal Food Manufacturing <a href="#">SFO</a>
	331313 - Primary Production of Alumina and Aluminum <a href="#">SFO</a>		311310 - Sugar Manufacturing <a href="#">SFO</a>
	331410 - Non-Ferrous Metal (except Aluminum) Smelting and Refining <a href="#">SFO</a>	Metal Mining	212220 - Gold and Silver Ore Mining <a href="#">SFO</a>
331511 - Iron Foundries <a href="#">SFO</a>	212233 - Copper-Zinc Ore Mining <a href="#">SFO</a>		
Waste Treatment	562210 - Waste Treatment and Disposal <a href="#">SFO</a>		212299 - All Other Metal Ore Mining <a href="#">SFO</a>
	221320 - Sewage Treatment Facilities <a href="#">SFO</a>	Other Consumer Products	336390 - Other Motor Vehicle Parts Manufacturing <a href="#">SFO</a>
Coal Mining	212114 - Bituminous Coal Mining <a href="#">SFO</a>		

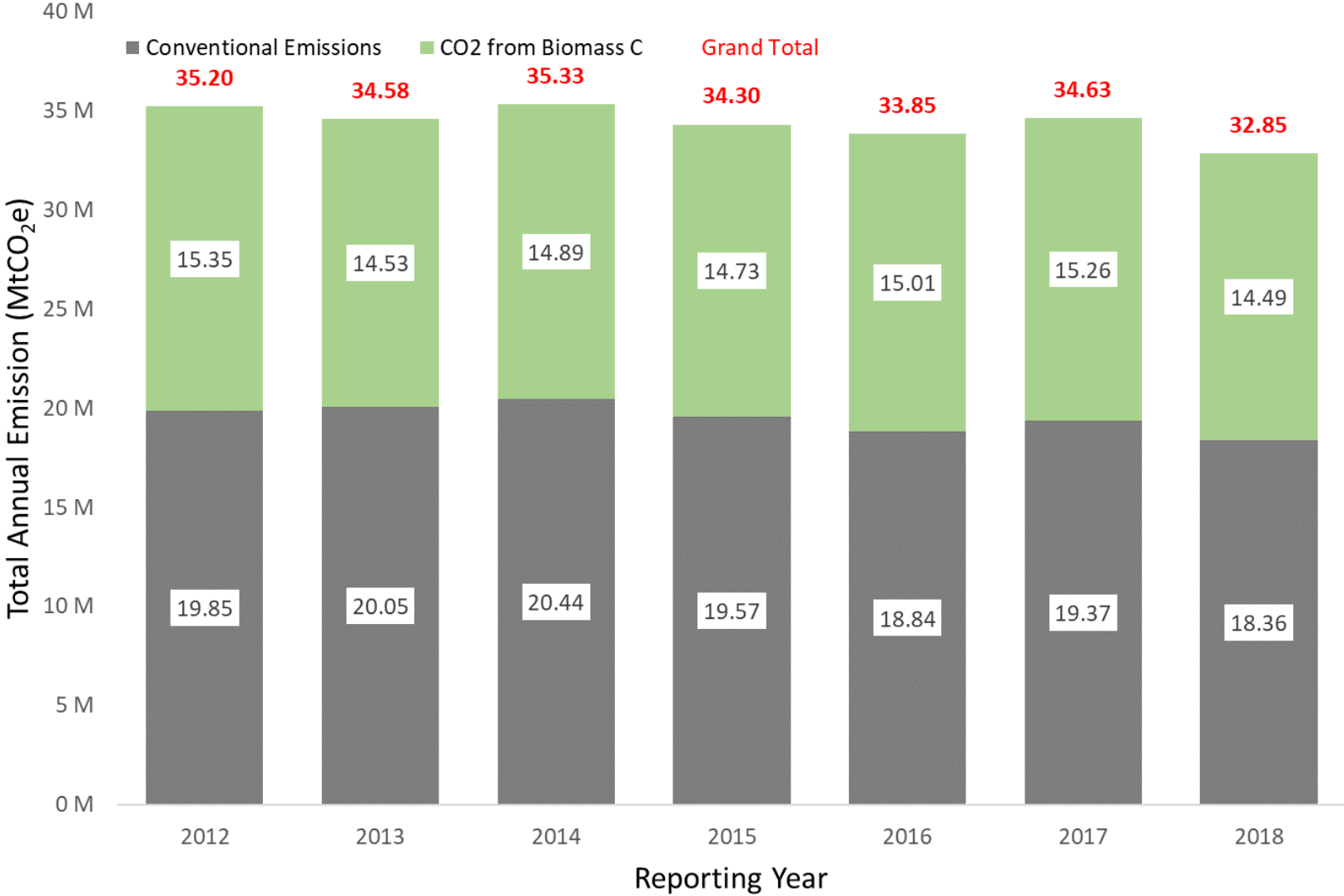
# Industrial Emission Profile

# Operation Type's Emission Profile

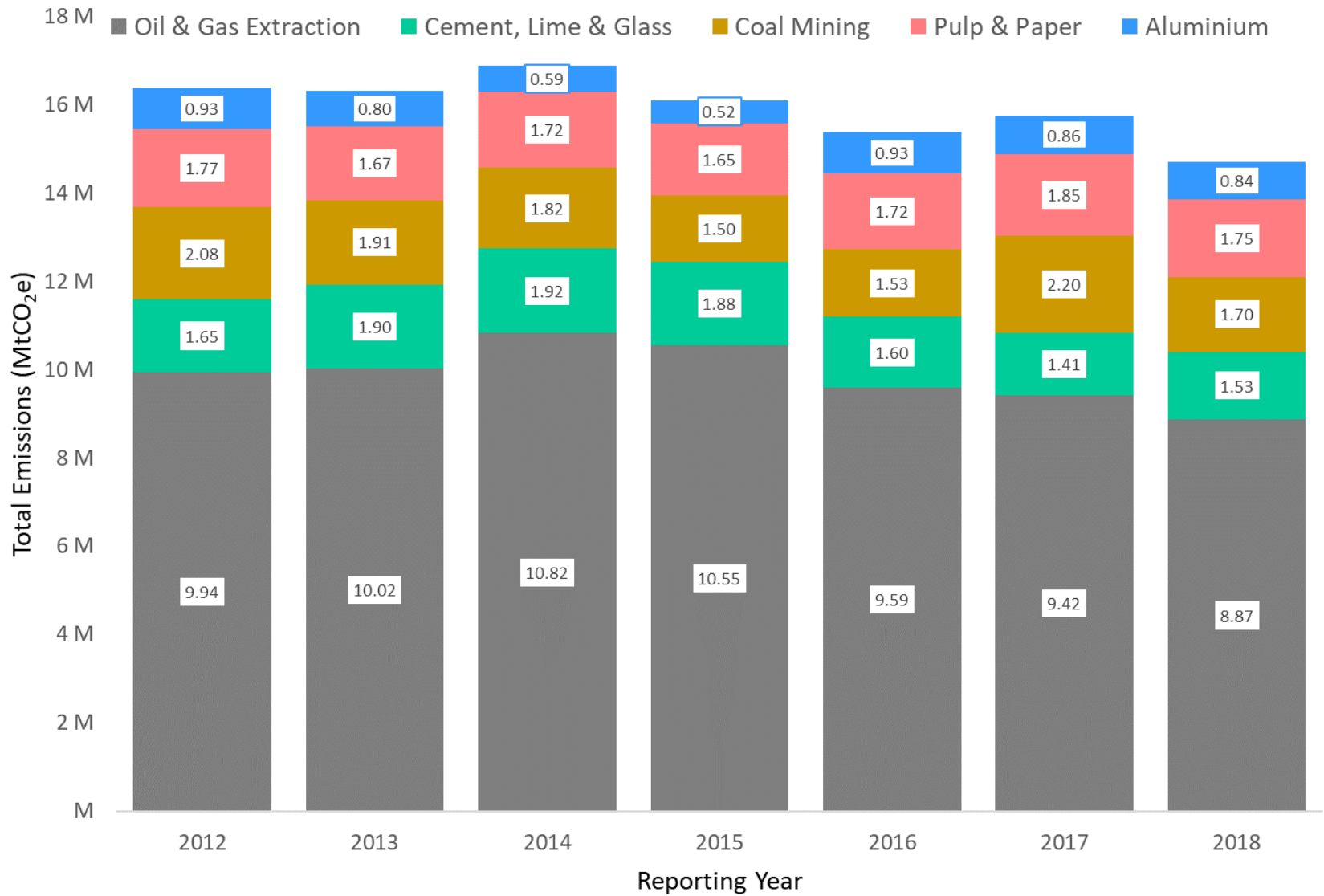




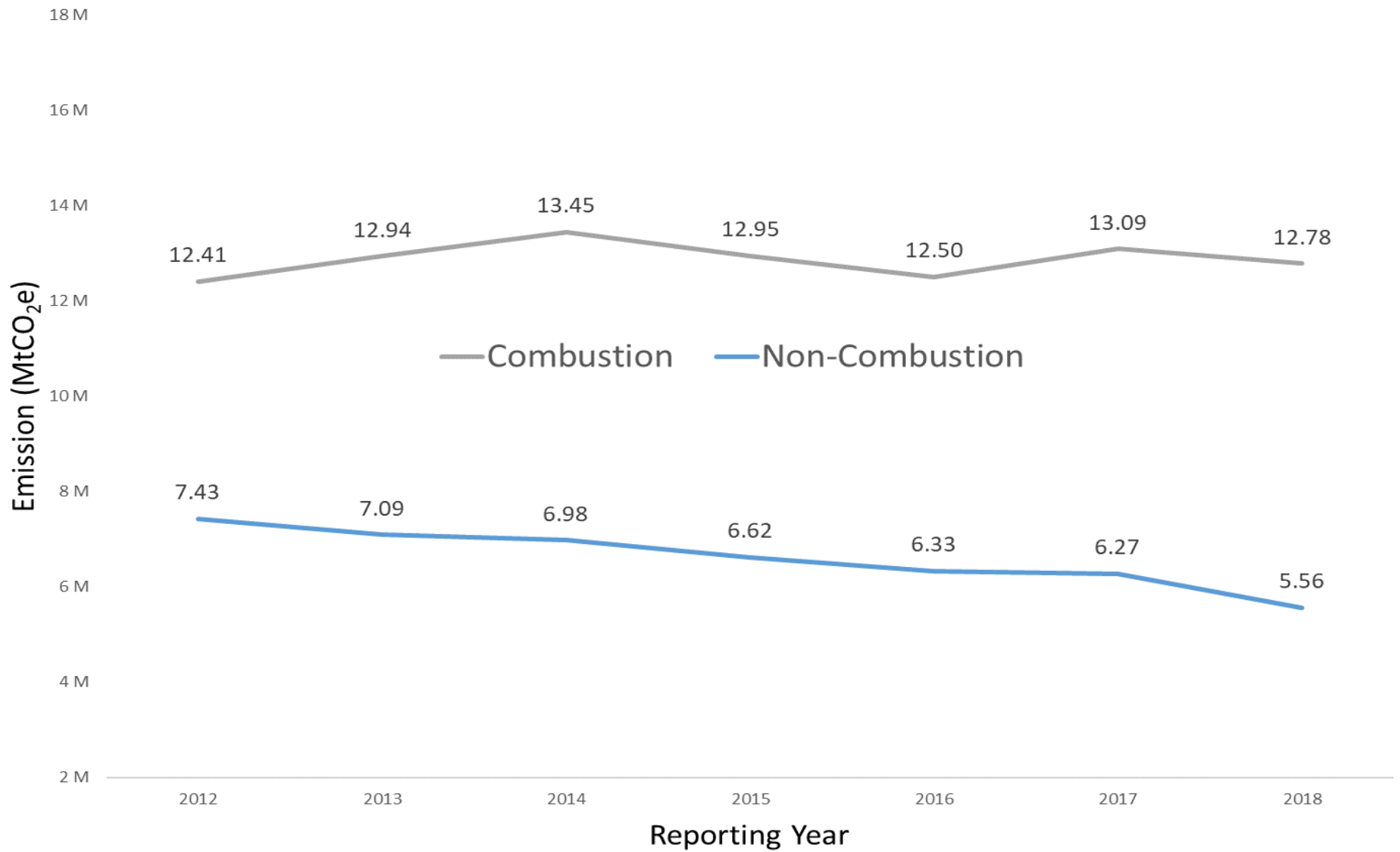
# Industrial Emission Total



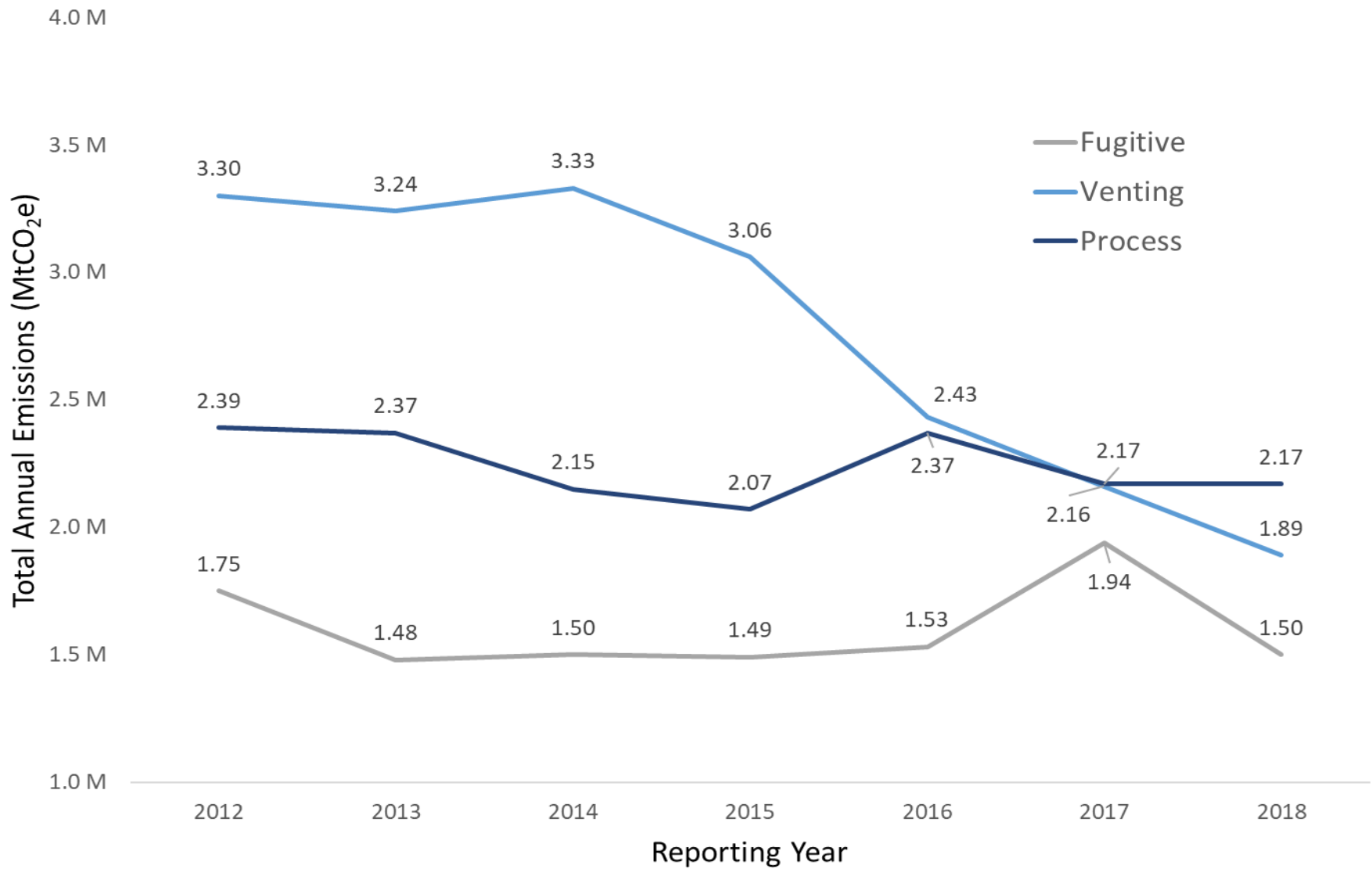
# Main Sectors Emissions (excl. CO<sub>2</sub> BioC)



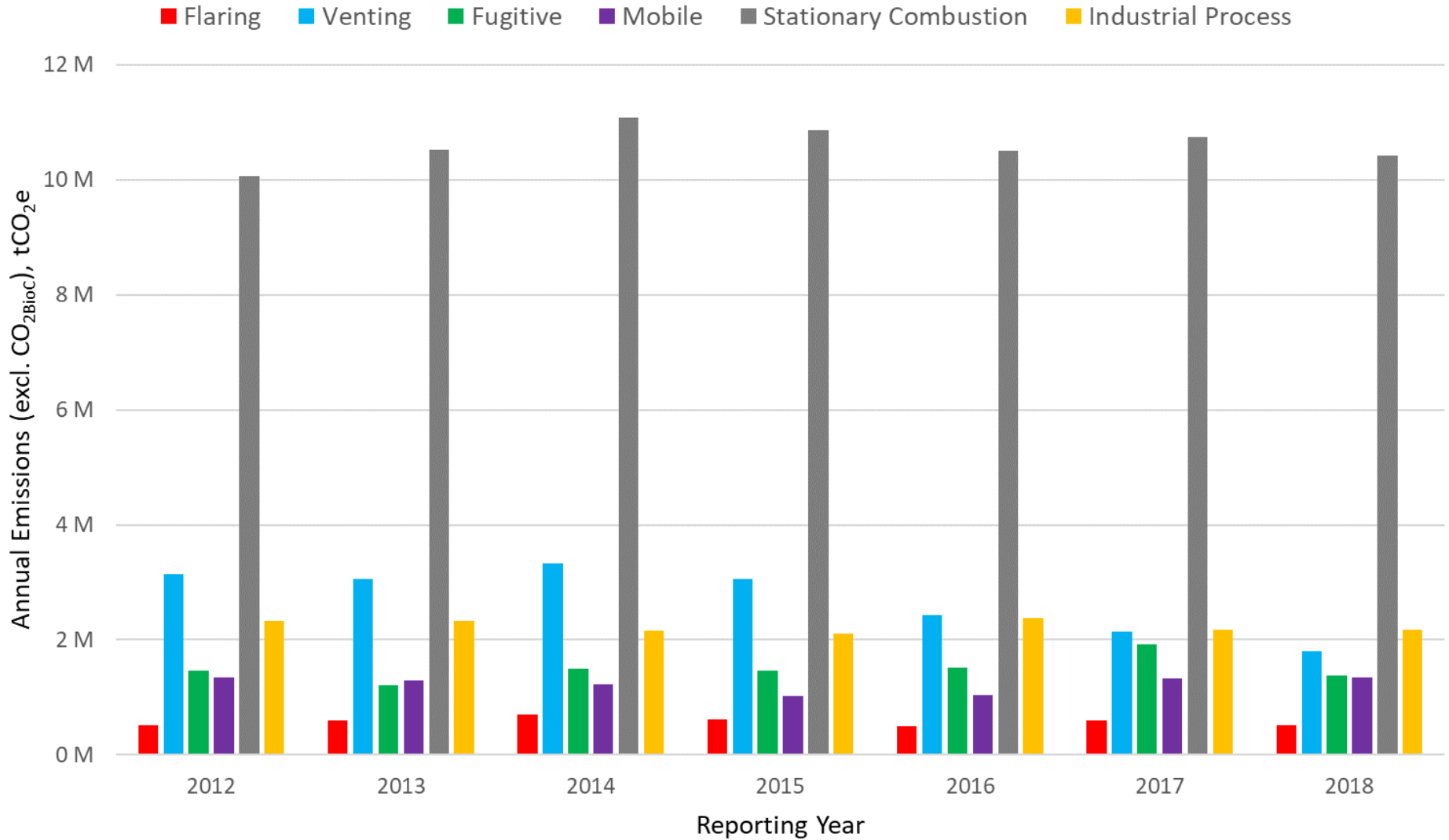
# Combustion and Non-Combustion Emissions (excl. CO<sub>2</sub> BioC)



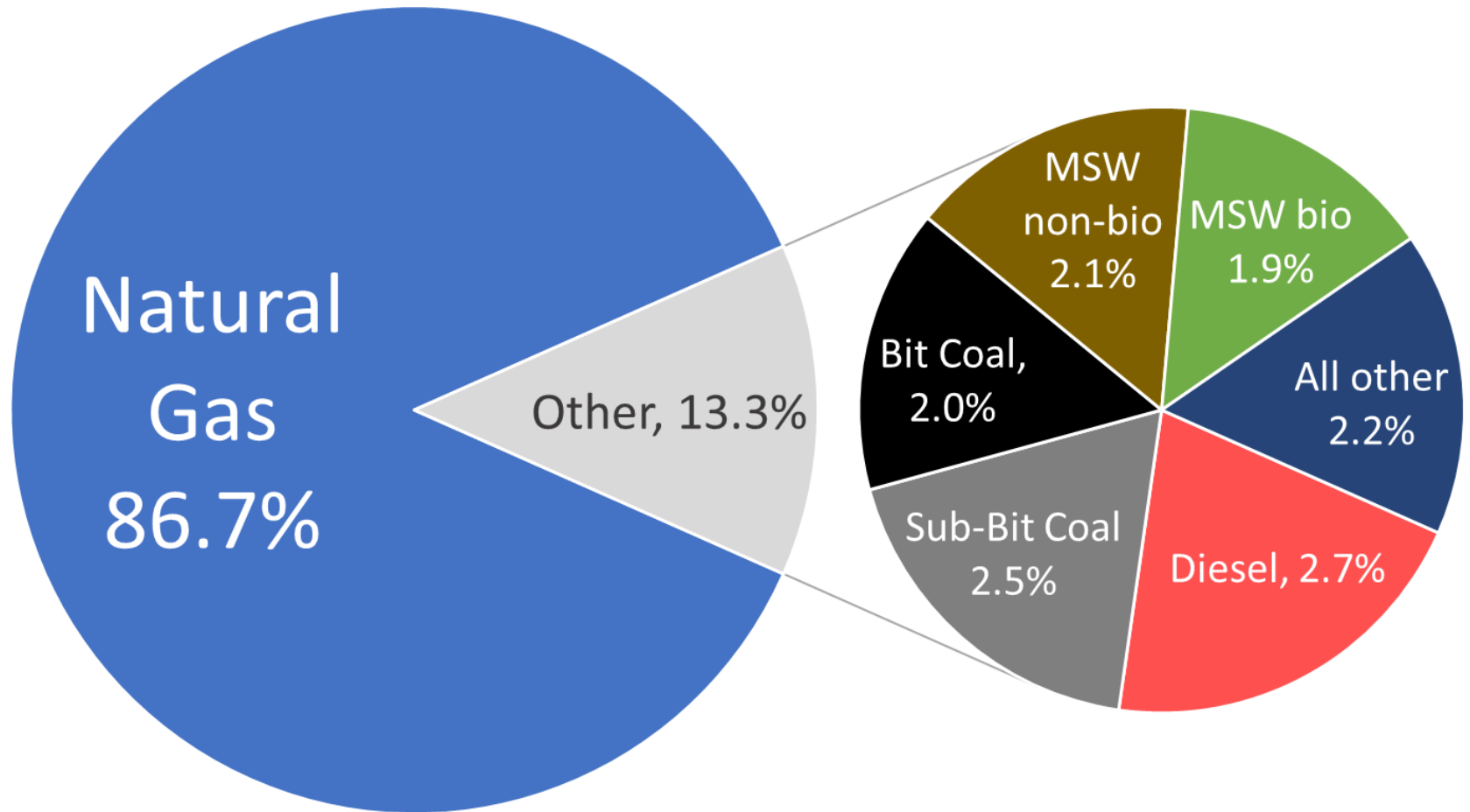
# Fugitive, Venting, & Process Emissions (excl. CO<sub>2</sub> BioC)



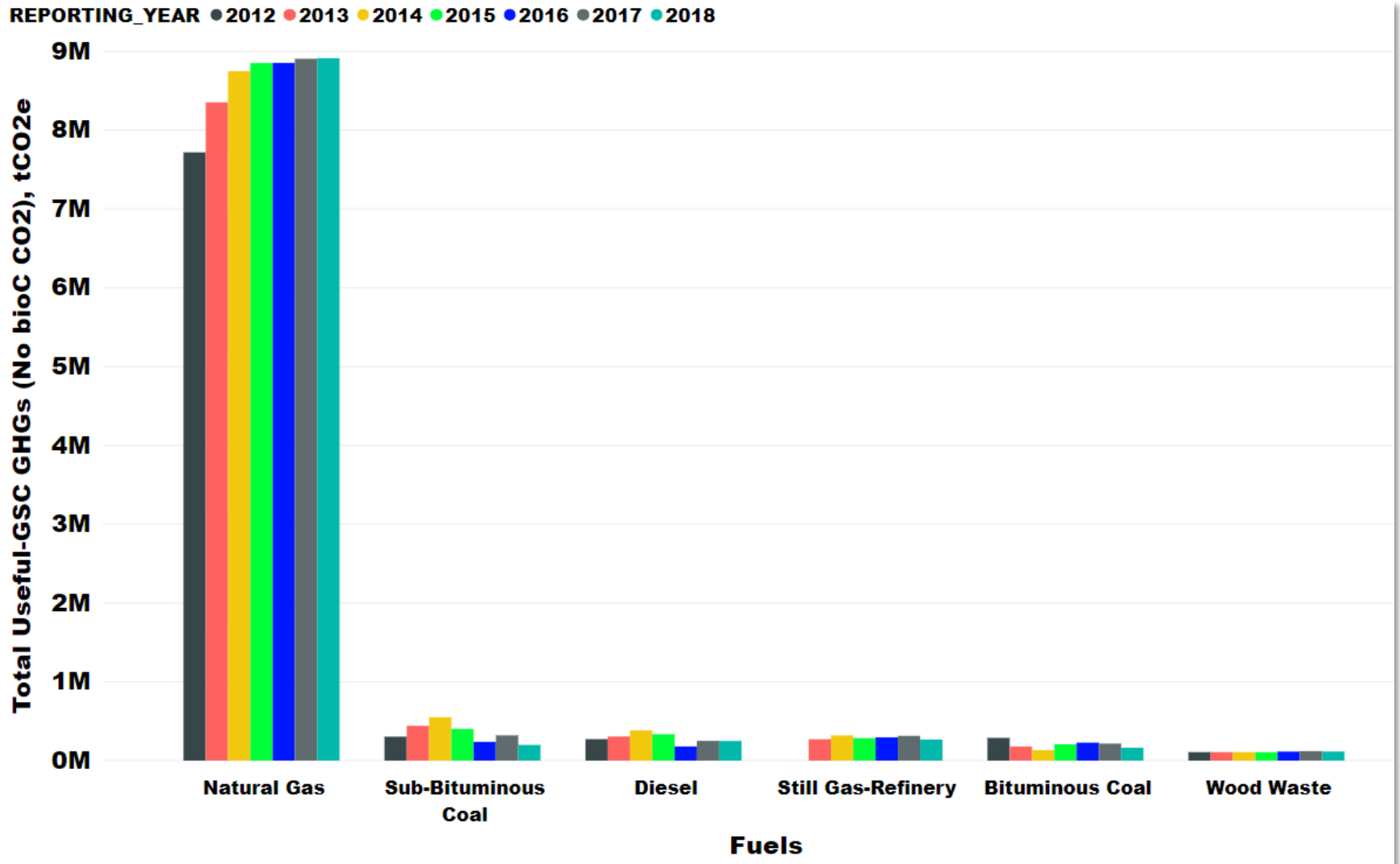
# Total Annual Emissions by Type



# Share of Emissions by Fuel Type for General Stationary Combustion

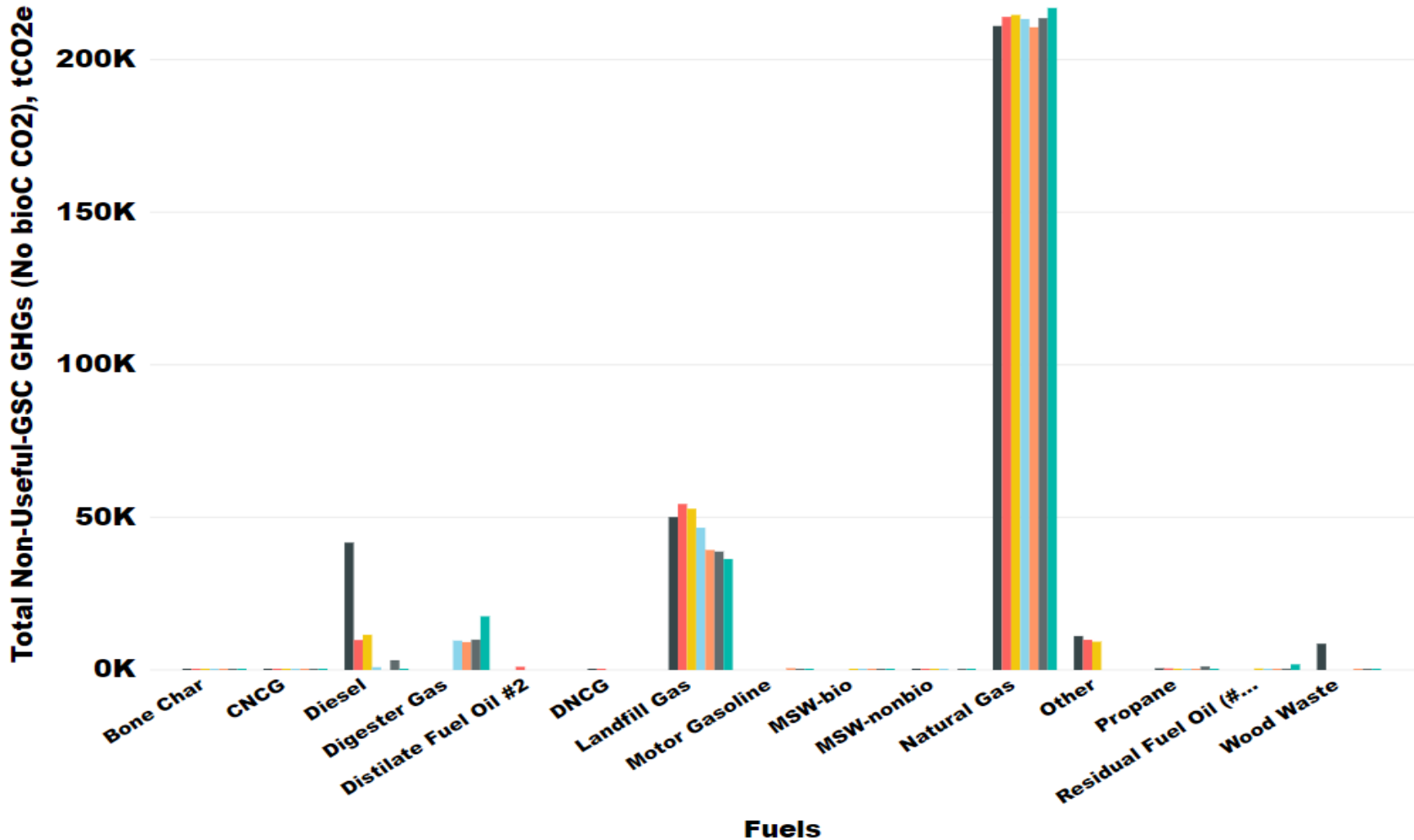


# Main Fuels Emissions for Useful Energy Production



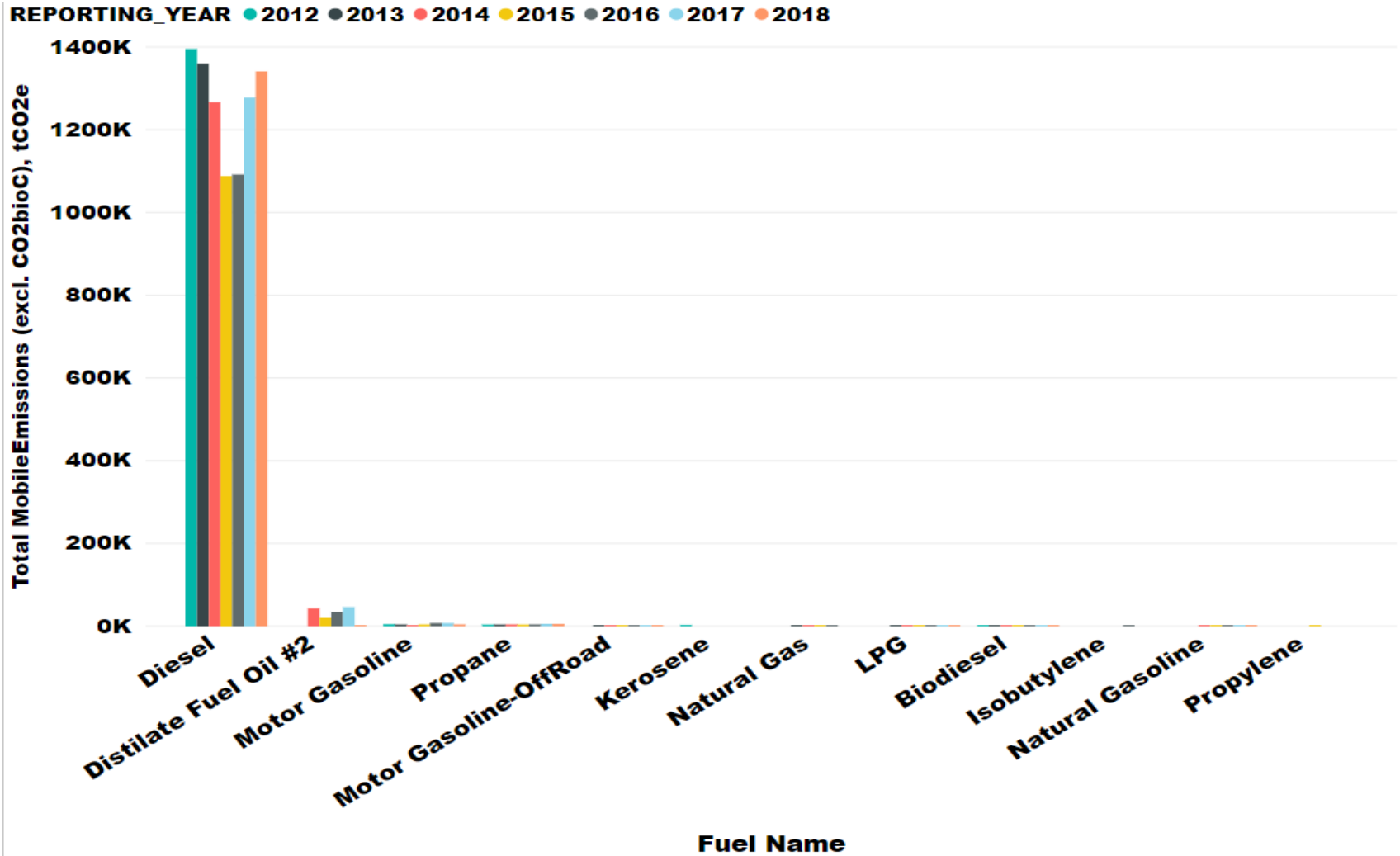
# Fuel GSC Non-useful Energy Production Emissions

REPORTING\_YEAR ● 2012 ● 2013 ● 2014 ● 2015 ● 2016 ● 2017 ● 2018





# Mobile Emissions



# Reporting Issues & Improvement Opportunities

# GHG Reporting Deadline

- **May 31**
- Both **GHG Report** and applicable **Verification Statement** must currently be submitted to BC Government through

**Single Window Reporting System**

**<https://ec.ss.ec.gc.ca>**

# Facility Status Changes

Reporting Facility's Status Change for a reporting period, through:

- Single Window Reporting System;
- Refer “**Facility Status Change Notification**” Bulletin for details at <https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/reporting/reference-materials>

# Facility Name and Type

- **Using the right facility name**
  - A facility can only submit one GHG report in a reporting year;
- **Using the right Facility Type. i.e. EIO, SFO, LFO, IF\_a, IF\_b and L\_c.**
  - Determining **Facility Type** based on the main activity(ies) listed in Table 1 or 2 in Schedule A of the Greenhouse Gas Reporting Regulation, and emission quantity.

## For Oil and Gas Extraction:

- NAICS Code 211113 needs to be replaced by 211110
  - In 2017 305 facilities not changed
    - ✓ 243 changed
  - In 2018 273 facilities not changed
    - ✓ 259 changed

- **Use the right units for fuel amount**

- Conventional fuels have units attached to their names. Check and comply with that, e.g.



- Gaseous fuels are required to report in standard cubic meters (Sm<sup>3</sup>), rather than GJ.
- Liquid fuels are required to report in kilolitres, not litres.
- Solid fuels are required to report in tonnes (dry basis if applicable).

# Use the right units for Custom fuels

- Existing custom fuels to be standardized in the system from 2019 & onwards, check and comply with. **Contact us for new custom fuels.**
- Make sure to use the right units as indicated instead of those you used previously, e.g.

**Kilolitres vs Litres**  
**Tonnes vs Kgs**

- **IMPORTANT:** moisture-containing fuels: considering the moisture content and reporting on **dry basis** like Bone Dry Tonnes



# Decimal places for various numeric values

- **System handling capabilities for data decimals**

Data category	Accepted decimal places
Emissions	4 (e.g. #.####)
Emission Factors	4 (e.g. #.####)
HHV & CC	4 (e.g. #.####)
Fuel Amount, ...	2 (e.g. #.##)

- **Raw data value**

- No rounding is necessary
- For linear facilities operation, GHG in LFO must match the sum of those in IF\_a, IF\_b and L\_c

# Facility Geographic Coordinates

To facilitate mapping of facility level emissions:

- Ensure accurate values
- Specify to 5 decimal places
- For LFOs use location of BC Main Office
- For IFs use actual location

**Out of provincial territory!**

Use decimal degrees

Remember the '-' sign

LAT.: ##.#####; LONG.: - ###.#####

# Mis-reported Activities

General Stationary Combustion	
(a) general stationary combustion, useful energy	
Fuel Groups **	
Electric Generator	
GSC Unit Name *	Electric Generator
Description	Small Back-up Generator
Fuels	
Diesel (kilolitres)	
Fuel *	Diesel (kilolitres)

- **Electric Generator** should be used in **Electricity Generation** activity, instead of in **General Stationary Combustion** activity

# GSC Unit Name

- Understand your processes and equipment
  - Reporting the right process/equipment info (*below should be for useful purpose, rather than non-useful purpose*)

<b>(b) General stationary combustion, <u>no useful energy</u></b>	
<b>Fuel Groups **</b>	
<b>Lime Kiln</b>	
GSC Unit Name *	Lime Kiln
Description	Unit to recycle spent lime in pulping process
<b>Fuels</b>	
<b>Natural Gas (Sm<sup>3</sup>)</b>	
Fuel *	Natural Gas (Sm <sup>3</sup> )
Fuel Classification	non-biomass
Fuel Description	
Units	Sm <sup>3</sup>
Annual Fuel Amount *	24239560
HHV Measured/Default **	Default
Annual Weighted Average High Heating Value (GJ/unit fuel) **	0.03946
Annual Weighted Average Carbon Content (weight fraction) **	0.742

# GSC Unit Name (continued)

- A **Unit Name** refers to the equipment name used for the combustion process. Don't use **fuel or gas name**

General Stationary Combustion	
(a) general stationary combustion, useful energy	
Fuel Groups **	Unit Info area ↓
CO2 nonbio	
GSC Unit Name *	CO2 nonbio
Description	
Fuels	
Natural Gas (Sm <sup>3</sup> )	
Fuel *	Natural Gas (Sm <sup>3</sup> )
Fuel Classification	non-biomass
Fuel Description	
Units	Sm <sup>3</sup>
Annual Fuel Amount *	5570962

# Mis-categorizing fuel

CNCG	
Fuel *	CNCG
Fuel Classification	non-biomass
Fuel Description	CNCG-LVHC Concentrated Non-condensable Gas - byproduct of pulping process
Units	bone dry tonnes
Annual Fuel Amount *	178538
HHV Measured/Default **	Default

- CNCGs (and DNCGs) etc. are biomass sources.
- Correctly categorizing a fuel is expected.
- Any questions regarding fuel category please contact us.

# Missing components required for Mandatory Additional Info, like:

Mandatory additional information for cement and lime production facilities only (not aggregated in totals)

Fuel combustion emissions from all kilns combined

N/A	Gas	Emissions (t) **	Emissions (t CO2e)
<input type="checkbox"/>	CO2	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	CH4	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	N2O	<input type="text"/>	<input type="text"/>

Fuel combustion emissions from all other fuel combustion units (kilns excluded)

N/A	Gas	Emissions (t) **	Emissions (t CO2e)
<input type="checkbox"/>	CO2	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	CH4	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	N2O	<input type="text"/>	<input type="text"/>

The diagram highlights the missing components for CH4 emissions. In both tables, the CH4 row is shaded grey, and a blue arrow points from the empty input field in the 'Emissions (t)' column to a blue box labeled 'Missing components'. Another blue arrow points from the empty input field in the 'Emissions (t CO2e)' column to the same box.

# Missing components required

- Info must be first reported here
- Info must also be reported under the “Additional Info Required” section

(c) Combustion: Field gas or Process Vent Gas

N/A	Gas Type	Amount (Sm3) **			
<input type="checkbox"/>	Field Gas	<input type="text"/>			

N/A	Gas	Emission Factor **	Emission Factor Unit **	Emissions (t) **	Emissions (t CO2e)
<input type="checkbox"/>	CO2 nonbio	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	CH4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	N2O	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

N/A	Gas Type	Amount (Sm3) **			
<input type="checkbox"/>	Process Vent Gas	<input type="text"/>			

N/A	Gas	Emission Factor **	Emission Factor Unit **	Emissions (t) **	Emissions (t CO2e)
<input type="checkbox"/>	CO2 nonbio	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	CH4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	N2O	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Thses must be reported when Field Gas/Process Vent Gas is combusted**



# Correctly reporting the activity and emission category

PROCESS	SUBPROCESS	FUEL_TYPE	Total_GSC(incl.C)
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	39658
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	36238
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	36333
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	36519
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	38590
GeneralStationaryCombustion2	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	58418
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	39910
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	40109
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	43156
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	43836
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	43368
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	41330
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	34220
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	33479
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	34966
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	32273
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	32662
GeneralStationaryCombustion	(b) general stationary combustion, no useful energy	Natural Gas (Sm^3)	30938

# Single Window Reporting System

## New features

# GSC - updated form

- HHV source required
- EF source, value and units required
- Apply to GSC (a) and (b) for SFO & LFO
- Applies to Electricity Generation

Wood Waste (bone dry tonnes)

Fuel \*\* Wood Waste (bone dry tonnes) ▼

Annual Fuel Amount \*\* 4567.08

HHV Measured/Default \*\* Measured

Annual Weighted Average High Heating Value (GJ/unit fuel) \*\*\* 14.934785

Annual Weighted Average Carbon Content (weight fraction) \*\* 0.7763

Annual Steam Generation (kg) \*\*\* 24546356

CO2 Measured/Default \*\* Measured

Emission Factor (CO2) \*\*

Emission Factor Unit (CO2) \*\*

CH4 Measured/Default \*\* Measured

Emission Factor (CH4) \*\* 0.005645

Emission Factor Unit (CH4) \*\* g/t

N2O Measured/Default \*\* Measured

Emission Factor (N2O) \*\* 0.041213

Emission Factor Unit (N2O) \*\* g/t

**Emissions for Fuel**

N/A	Gas	Methodology **	Emissions (t) **	Emissions (t CO2e)
<input type="checkbox"/>				
<input type="checkbox"/>	CO2 bio-C	Methodology 3 (measured CC/Ste) ▼	32445.098565	32445.0986
<input type="checkbox"/>	CH4	Measured HHV/EFc ▼	43.508657	1087.7164
<input type="checkbox"/>	N2O	Measured HHV/EFc ▼	0.897458	267.4425

Replacement/Alternative Methodology Description (Mandatory if Replacement Methodology or Alternative Parameter Measurement selected as a methodology above. Otherwise, not saved.) \*\*

Save Cancel

# Linear Facility GSC Structure

- If field gas/process vent gas burnt on-site, report their emissions in section (c), rather than (a) or (b) as described above
- Dedicated quantity entries for Field Gas and Process Vent Gas;
- Dedicated EF and EF units entries for Field Gas and Process Vent Gas

**General Stationary Combustion** Report Progress: 2/23 Page Status: Incomplete

- (a) General stationary combustion, useful energy  
 Fuel Groups  
*Empty*

- (b) General stationary combustion, no useful energy  
 Fuel Groups  
*Empty*

- (c) Combustion: Field gas or Process Vent Gas

**Dedicated to Field Gas combustion**

N/A	Gas Type				Amount (Sm3) **
<input type="checkbox"/>	Field Gas	← quantity here →			quantity here
N/A	Gas	Emission Factor **	Emission Factor Unit **	Emissions (t) **	Emissions (t CO2e)
<input type="checkbox"/>	CO2 nonbio	↓	↓	↓	
<input type="checkbox"/>	CH4				
<input type="checkbox"/>	N2O				

**Dedicated to Process Vent Gas**

N/A	Gas Type				Amount (Sm3) **
<input type="checkbox"/>	Process Vent Gas	← quantity here →			quantity here
N/A	Gas	Emission Factor **	Emission Factor Unit **	Emissions (t) **	Emissions (t CO2e)
<input type="checkbox"/>	CO2 nonbio	↓	↓	↓	
<input type="checkbox"/>	CH4				
<input type="checkbox"/>	N2O				

- Additional information required when other activities selected are Activities in Table 2

**(a) and (b) are the same as those in SFO; LFO, IF\_a, IF\_b and L\_c are all same**



# Verification & Delayed Verification Notice

- For Delayed Verification Notice, just upload the notice letter to submit;
- For Verification, need to attach the Verification Statement and make self-declaration of the verification result
- Clicking the “Save/Continue” button to proceed.

## Report Verification

A verification statement is required if  $E \geq 25,000$  t CO<sub>2</sub>e or E has been larger than 25,000 t CO<sub>2</sub>e in any of the past 3 reporting periods. A verification statement must be prepared as required by the Greenhouse Gas Emission Reporting Regulation. Click the paperclip icon to select the document to be uploaded. Then click Save/Continue to save the document into the system. If you are uploading a verification statement for a report that has already been submitted, the report itself does not need to be submitted again.

Comments

Type of Report Verification \*

Select an option

Self-declaration \*\*

Select an option

Please consult Climate Action Secretariat's website or directly contact Industrial Reporting Group via GHGRegulator@gov.bc.ca for details and guidance on requirements and the file templates.

Attach a file to support the option selected

File Name \*

Date \*

Back

Save/Continue

Enter comment here to help understand your verification/delayed verification

Select Verification or Delayed Verification Here

Self-declarifying verification result here

Click to attach Verification Statement or Delayed Verification Notice Letter here

Verification Statement or Delayed Verification Notice

# New Features in the Reporting Dashboard

In the "Status" Column exist:

- Emission report status;
- Verification status
- **Verification:**
- Emission Verification
  - Self-declaration
- Delayed Verification

## Reporting Dashboard

Welcome to the British Columbia Greenhouse Gas reporting module. Click "Help" then "Toggle In-Context Help" for more information.

### Report(s)

Company List: TESTORG\_CA-BC (20 facilities) | 
 Year: 2018 | 
 Report Category: Annual Report

Status	Facility Name	Report Type	Status	Action
✓	▶ Test CA-BC Facility 16	SFO	Submitted (03/07/2019 15:20:04) Verified: Yes	✎
⌚	▶ Test CA-BC Facility 10	IF_b	<div style="width: 100%; height: 10px; background-color: green;"></div> (8/14) Verified: No	✎
⌚	▶ Test CA-BC Facility 8	IF_a	<div style="width: 100%; height: 10px; background-color: green;"></div> (16/39) Verified: Yes	✎
⌚	▶ Test CA-BC Facility 13	SFO	<div style="width: 100%; height: 10px; background-color: green;"></div> (10/29) Verified: No	✎
⌚	▶ testBC_SFO_everything	LFO	<div style="width: 100%; height: 10px; background-color: green;"></div> (12/16) Verified: Yes	✎
⌚	▶ Test CA-BC Facility 14	SFO	<div style="width: 100%; height: 10px; background-color: green;"></div> (2/8) Verified: No	✎
⌚	▶ Test CA-BC Facility 12	SFO	<div style="width: 100%; height: 10px; background-color: green;"></div> (1/8) Verified: No	✎
✓	▶ Test FACility 20	SFO	Submitted (03/07/2019 12:29:06) Verified: Yes	✎
📄	▶ Test CA-BC Facility 1	SFO	Ready to Submit Verified: Yes	✎
⌚	▶ Test CA-BC Facility 0	IF_a	<div style="width: 100%; height: 10px; background-color: green;"></div> (8/9) Verified: Yes	✎

# New features to come

- A few new features to come in the 2019 version.
- Stay tuned for details through email and/or webinar

# Single Window Reporting System Walk-Through

If there are additional questions regarding the reporting system, staff are available to discuss in the break-out room



# Questions?

# Contacts

- For enquiries & questions

Email: [GHGRegulator@gov.bc.ca](mailto:GHGRegulator@gov.bc.ca).





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# Compliance and Enforcement

Industrial Reporting and Control  
Workshop

November 5, 2019



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# Presentation Overview

- Overview of *Greenhouse Gas Industrial Reporting and Control Act (GGIRCA)* Compliance Framework
- Roles and Responsibilities
- Policies and Procedures
- Compliance and Enforcement Activities
- CIIP Eligibility

# Session Objectives

- Know what to expect
- Provide assurance that:
  - compliance framework is transparent and accountable
  - actions are administratively fair and proportionate to the risk created by non-compliance

Ministry of Environment and Climate Change Strategy

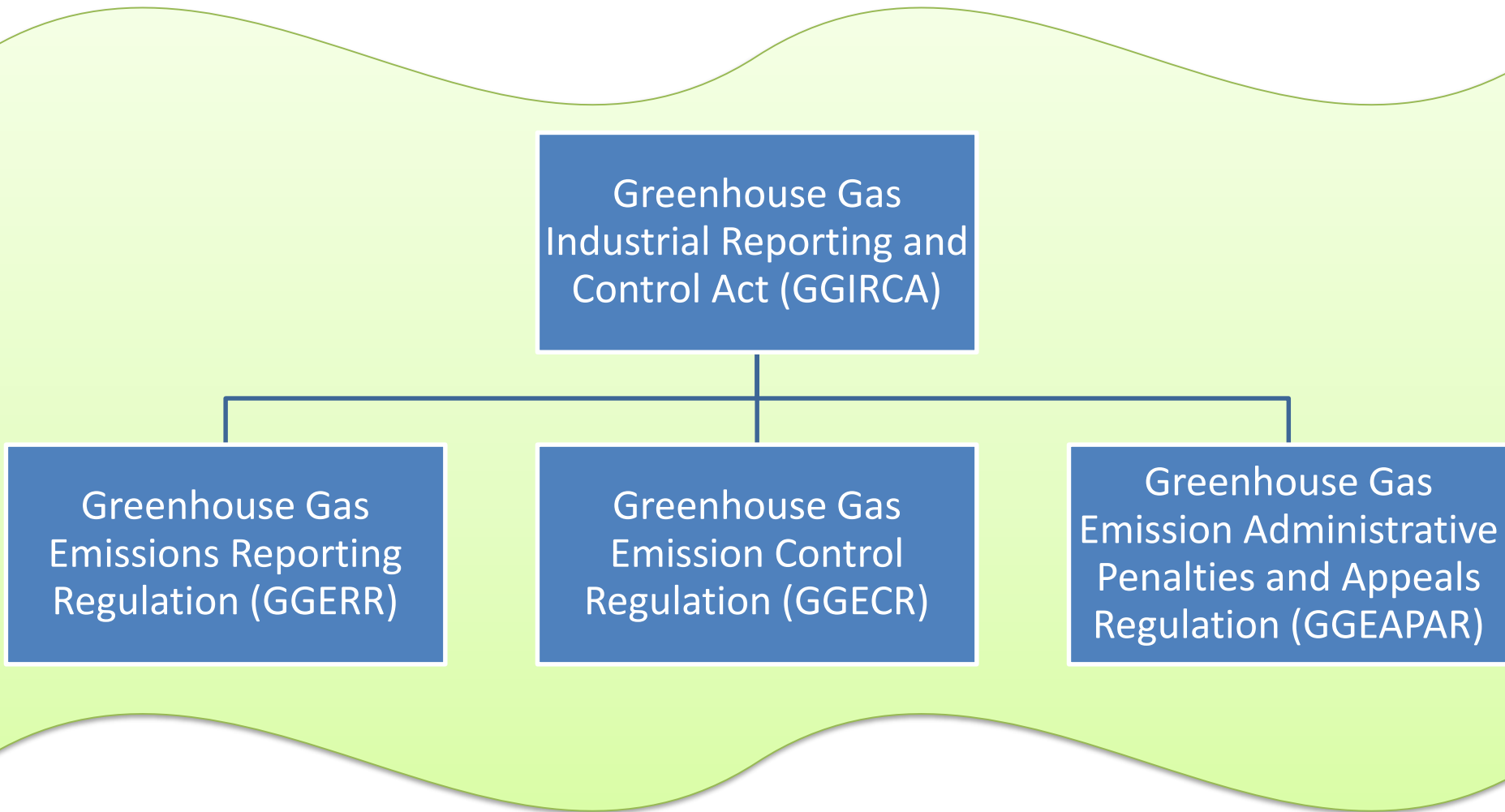
Climate Action Secretariat

Clean Growth Branch

Industrial Reporting and Control

**GGIRCA**

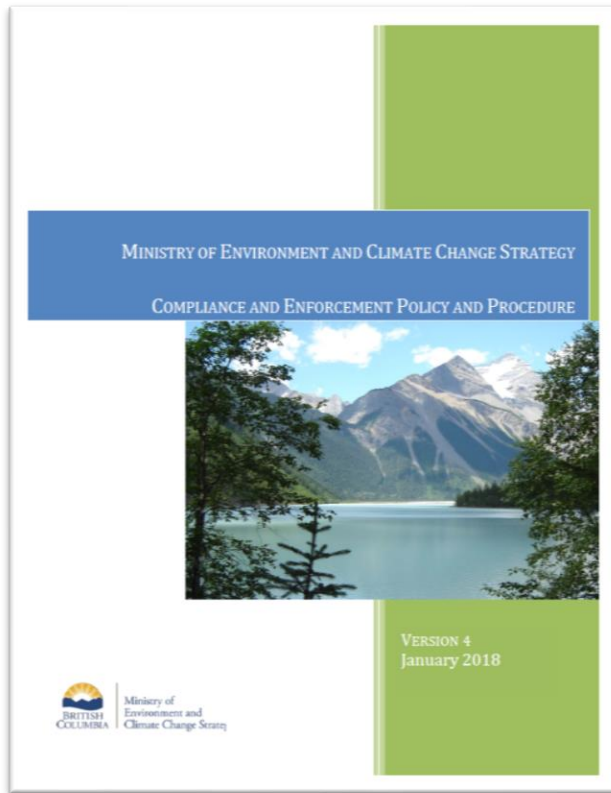
# GGIRCA Compliance Framework



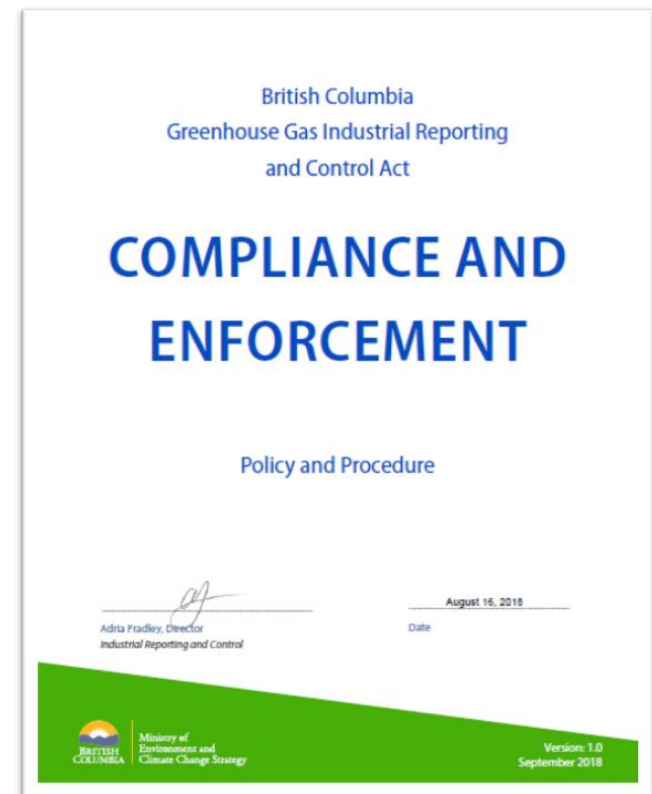


# Policy and Procedure

## MINISTRY



## GGIRCA



# Roles and Responsibilities

## **DIRECTOR, GGIRCA**

- Statutory Decision Maker, whose authority includes:
  - Issuance of administrative penalties
  - Refusal of non-compliant verification statements
  - Establishment of protocols
  - Acceptance of emission offset projects
  - Request for records

# Roles and Responsibilities

## **INSPECTOR, GGIRCA**

- Designated by the Director
- Conducts inspections
- Assesses compliance
- Recommends and issues enforcement actions

# Compliance and Enforcement Activities

## INSPECTION

- **Office-based**

- Review of submitted and/or requested information

- **On-site**

- Observe activities, equipment, processes
- Inspect fuel supply and combustion points, and emission source points (incl. fugitive)
- Ask questions and review records

# GGIRCA Inspection Policy and Procedure

## INSPECTION

- Priority of inspection determined using risk-based factors, including:
  - past non-compliance
  - the number and/or size of facilities
  - the quantity and source type of emissions

# Compliance and Enforcement Activities

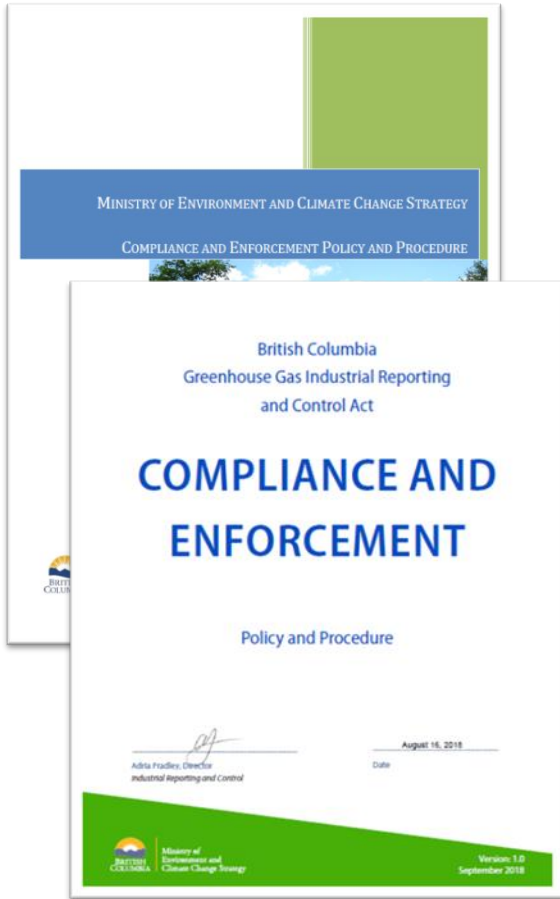
## ASSESSMENT

<b>Requirement:</b>	<b>Greenhouse Gas Industrial Reporting and Control Act, Greenhouse Gas Emission Reporting Regulation</b> 13 (a): An emission report under section 3 (1) of the Act must be submitted (a) to the director on or before May 31 of the calendar year immediately following the reporting period, and (b) in the electronic or other form, if any, specified by the director.
<b>Details/Findings:</b>	Based on a review...
<b>Compliance:</b>	IN / OUT
<b>Actions to be taken:</b>	Please re-submit....

# Compliance and Enforcement Activities

- **NON-COMPLIANCE DECISION MATRIX(NCDM)**
  - Standard risk-based assessment tool provided in the Ministry C&E Policy and Procedure
    - Evaluates:
      - **LEVEL OF IMPACT**
      - **LIKELIHOOD OF ACHIEVING COMPLIANCE**
    - Identifies enforcement responses proportional to risk

# NCDM under GGIRCA C&E Policy and Procedure



		ESCALATING ENVIRONMENTAL, HUMAN HEALTH OR SAFETY (ACTUAL OR POTENTIAL)				
		LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
DIMINISHING LIKELIHOOD OF COMPLIANCE (COMPLIANCE HISTORY/WILLINGNESS AND CAPACITY TO COMPLY)	CATEGORY A (HIGH)	ADVISORY	ADVISORY - WARNING	<p style="text-align: center;"><b>INVESTIGATION</b></p> <p><i>NOTE: Increasing significance of real or potential impacts and diminishing likelihood of compliance warrant the full investigative process (referral to COS). The outcome of the investigation may still be a lower level response, but if the process uncovers more than expected, prosecutorial tools will be available.</i></p> <p><i>Violation tickets, restorative justice and prosecution are additional enforcement tools that are not listed on the matrix because they would be selected after an investigation occurs.</i></p>		
	CATEGORY B	ADVISORY - WARNING	WARNING - ADMIN PENALTY			
	CATEGORY C	WARNING - ADMIN PENALTY	WARNING - ORDER - ADMIN SANCTION			
		WARNING - ORDER - ADMIN SANCTION - ADMIN PENALTY	ADMIN PENALTY - INVESTIGATION			
	CATEGORY D	ORDER - ADMIN SANCTION - ADMIN PENALTY	ADMIN PENALTY - INVESTIGATION			
CATEGORY E (LOW)	ORDER - ADMIN SANCTION - ADMIN PENALTY - INVESTIGATION	ADMIN PENALTY - INVESTIGATION				



# Enforcement Responses

## ADVISORY

- Legal notice
- Noted in compliance history of operator
- May list actions that you must take



# Enforcement Responses

## WARNING

- Warns of the possibility of an escalating response should non-compliance continue



# Enforcement Responses

## ADMINISTRATIVE PENALTY

- Monetary penalty
- Imposed in accordance with the *Greenhouse Gas Emission Administrative Penalty and Appeals Regulation*



# Enforcement Responses

## PROSECUTORIAL RESPONSES

- Investigation referral to Conservation Officer Service (COS)
- Initiation of formal charges by Crown Counsel in the exercise of their discretion



# Inspection Findings

## LATE SUBMISSIONS:

Reporting Year	Total # of Reporting Operations	# of Late Submissions	% of Emissions Late
2018	129	8	2%
2017	134	16	13%

**(Section 13 of the GGERR)**

# Recent Actions

## NON-REPORTERS

identify potential reporting obligation based on past production data

inform operators of potential obligations

assist operators to submit information

ensure compliance with GGIRCA

# CleanBC Industrial Incentive Program (CIIP)

## **ELIGIBILITY:**

- Must be a “reporting operation”
- Material non-compliance, e.g.:
  - No verification statement
  - Unresolved errors in fuel or emission volumesmay result in ineligibility or impact future payments.

# Compliance and CIIP Eligibility

## Fuel and Emission Volumes

- Important data points for CIIP payments
- Analysis conducted to confirm compliance and ensure:
  - allocations of taxed and non-taxed fuels are appropriate.
  - consistent use of methodologies.
  - overall agreement between reported fuel and gas volumes in emissions report and CIIP application.



# Contact

Please direct all enquiries to  
[GHGRegulator@gov.bc.ca](mailto:GHGRegulator@gov.bc.ca)

Questions?

# Resources

- [GGIRCA Compliance Framework:](https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/compliance-framework)  
<https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/compliance-framework>



# CleanBC Industrial Incentive Program

November 5, 2019

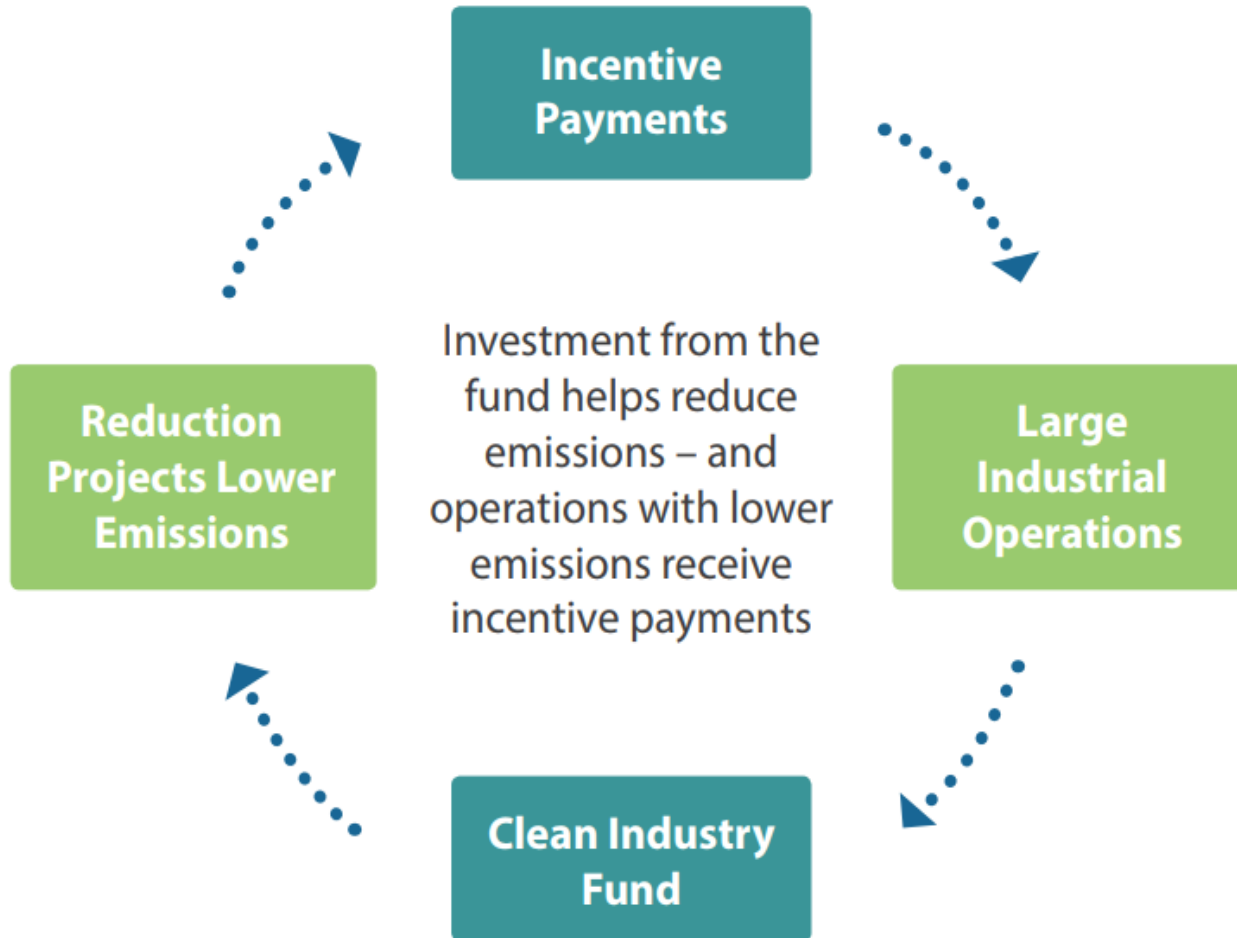
# Overview

- Context
- CleanBC Program for Industry
- CleanBC Industrial Incentive Program
- Transition Year
  - Timeline
  - Insights
  - Learnings
- Benchmarking
  - Studies
  - Process
  - Findings
- General Updates
- Next Steps
- Application Process
- CIIP Web Portal

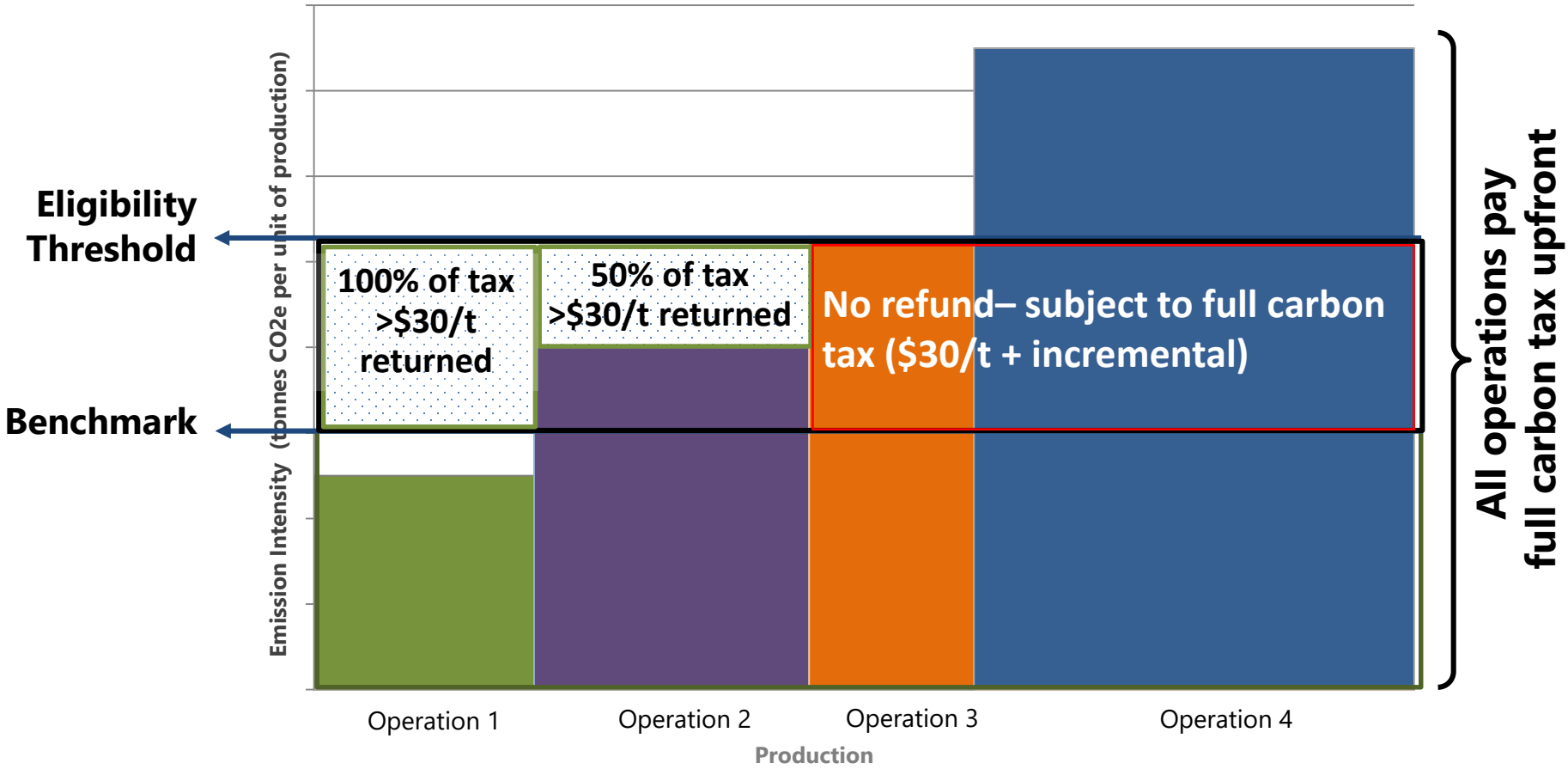
# Context

- In Dec 2018, government announced **CleanBC** to reduce climate pollution and build a low-carbon economy
- Includes **CleanBC Program for Industry (CPI)** with the following objective:
  - Enhancing British Columbia’s competitive advantages while reducing our own GHG emissions intensity
- Two CPI Initiatives:
  - **CleanBC Industrial Incentive Program (CIIP)**: incentive payments based on operations’ emissions intensity compared to a **world-leading performance benchmark**
  - **CleanBC Industry Fund (CIF)**: funding for industrial emissions reduction projects
- The program is funded by the carbon tax paid by industry above \$30/tonne

# Program for Industry



# CIIP in a nutshell





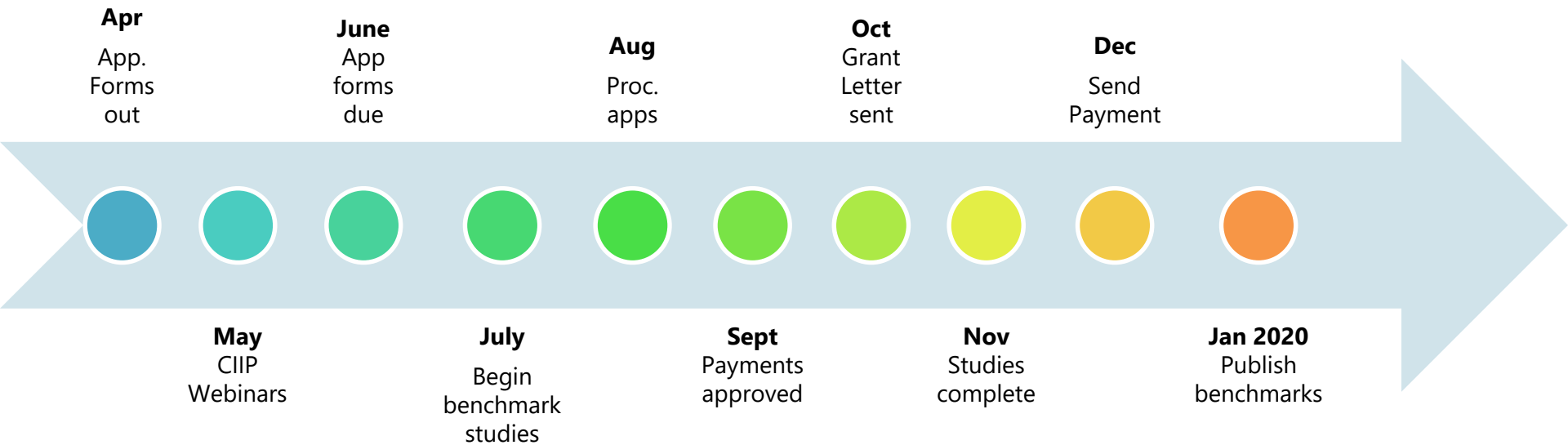
# CIIP Program Requirements

- Eligibility Criteria:
  - Must be a GGIRCA “reporting operation”
    - Emit 10,000+ tCO<sub>2</sub>e, excl. Sched. C Biomass
    - Submit an emissions report for the previous reporting year by deadline of current year
    - Not a waste treatment, power generation or natural gas distribution operation (ineligible sectors)
  - Material non-compliance under GGIRCA could result in ineligibility or impact future payments under CIIP
- Must submit a certified CIIP application with complete additional information (production, energy imports/exports, etc.)

# Transition Year

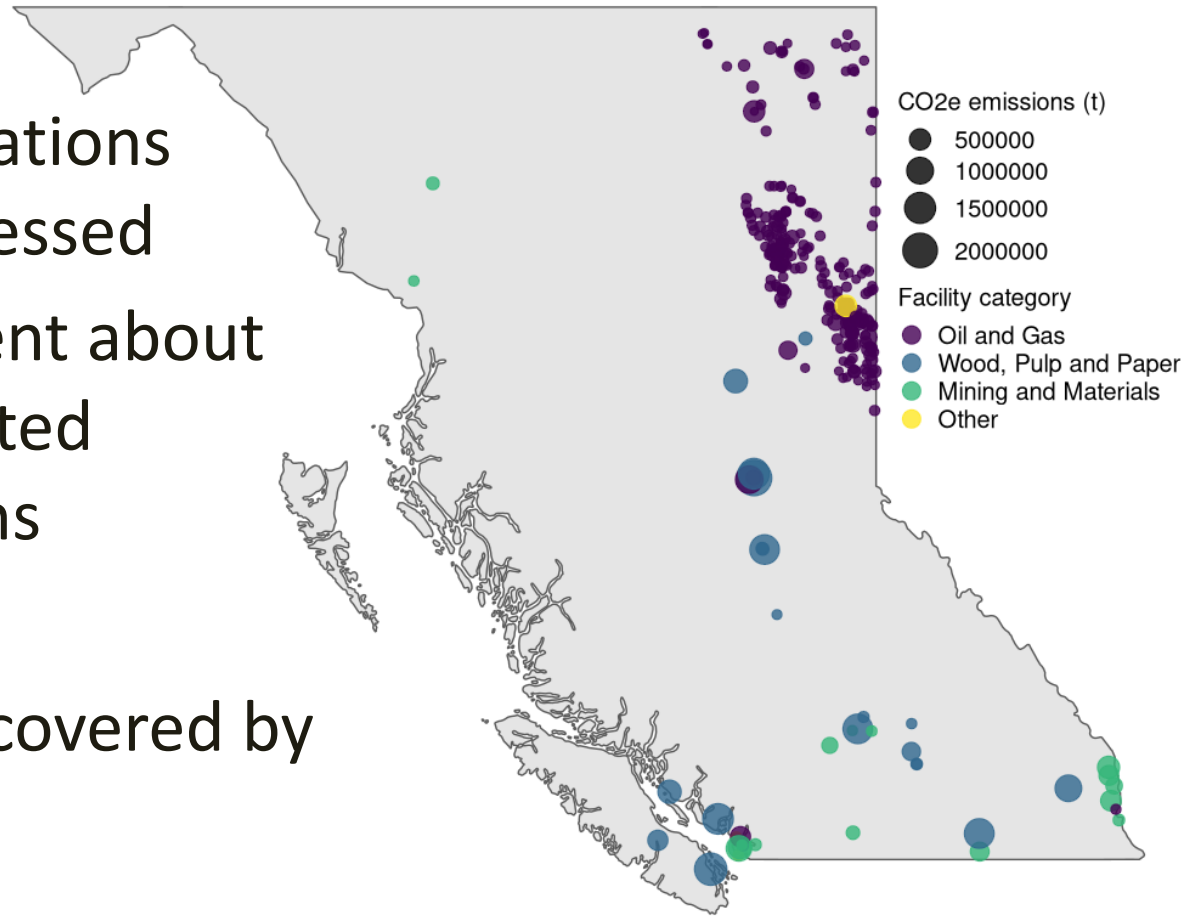
- 2019 is the first year of the program
- Applications for the 2018 reporting year were received
- No benchmarks set in first year
- For 1<sup>st</sup> year of CIIP:
  - 75% of available funds provided to industry in the form of industrial incentives; and
  - 25% of available funds were allocated to the CleanBC Industry Fund.

# Transition Year Timeline



# Transition Year Highlights

- 331 eligible applications received and processed
- Applicants represent about 80% of total reported industrial emissions (14.3 MtonCO<sub>2</sub>e)
- 60% of emissions covered by Carbon Tax



# Transition Year Learnings

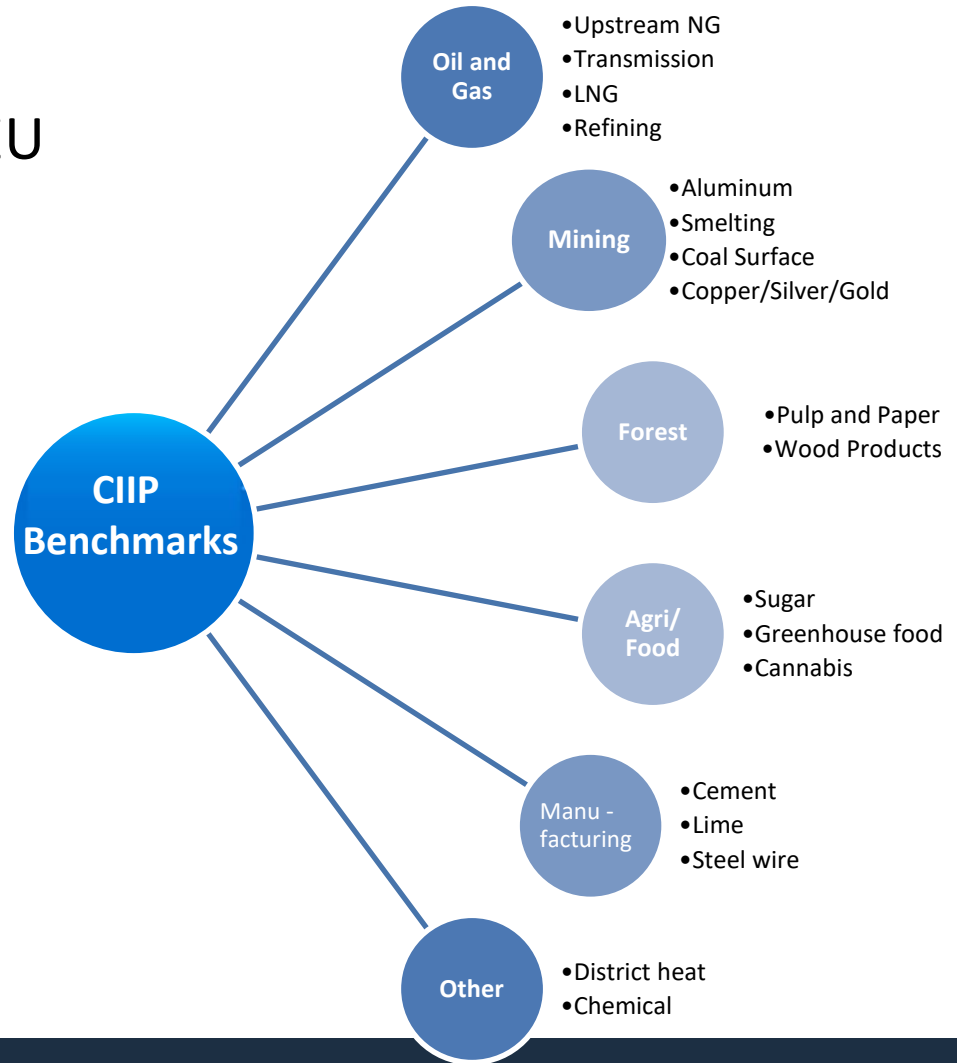
- Excel-based application form:
  - Duplicative and at times confusing for applicants
  - Need for standardization of fuel types and units
  - Prescriptive fuel and emissions allocation methods for multi-product facilities needed
  - Difficulties in parsing the information
- BC Corporate Registry Number
- Complex application process for Linear Facility Operations

# Benchmarking Studies

- Government contracted studies to either:
  - Survey global facilities for lowest emissions intensities; or
  - Determine a ‘best in class’ emissions intensity for a product/service using best available technologies/practices
- Studies explored factors that contribute to world leading emission performance and discussed replicability in BC
- Studies (conducted in collaboration with industry) will inform benchmark development

# Benchmarking Studies

- More variance in sectors covered than similar systems (EU ETS, OBPS, TIER)
- Output Based Benchmarks
  - CO<sub>2</sub> per tonne or product or activity
  - Facilities with multiple products increase complexity (e.g. sawmills, mines)
  - May be addressed through sectors having multiple benchmarks and/or using engineering assessments



# Benchmarking Process

May 2018 - ongoing	<b>STEP 1</b> Planning	<p>Design the benchmark with stakeholder engagement</p> <ul style="list-style-type: none"> <li>• Which sectors to benchmark</li> <li>• What to benchmark</li> <li>• How to benchmark</li> </ul> <p>Create an enabling environment</p> <ul style="list-style-type: none"> <li>• Develop a resourcing plan</li> <li>• Stakeholder engagement strategy</li> <li>• Create institutional and legal capacity</li> </ul>
Jan-July 2019	<b>STEP 2</b> Data Collection	<ul style="list-style-type: none"> <li>• Specify data requirements</li> <li>• Choose a data collection approach</li> <li>• Implement data collection approaches through stakeholder engagement</li> </ul>
June - October 2019	<b>STEP 3</b> Analysis	<ul style="list-style-type: none"> <li>• Assess and improve data quality and sufficiency</li> <li>• Determine the benchmark value</li> <li>• Assess the benchmark</li> <li>• Consult stakeholders during assessment</li> </ul>
Nov 2019 – Feb 2020	<b>STEP 4</b> Integration	<ul style="list-style-type: none"> <li>• Apply the benchmark in the policy instrument</li> <li>• Communicate with stakeholders and provide guidance on application</li> <li>• Address grievances</li> </ul>
2020/2021	<b>STEP 5</b> Monitoring and Improvement	<ul style="list-style-type: none"> <li>• Design the benchmark update approach</li> <li>• Develop a monitoring and review plan</li> <li>• Communicate with stakeholders and provide guidance on monitoring and review process</li> </ul>



*Adapted from a Guide to Greenhouse Gas Benchmarking for Climate Policy Instruments (World Bank)*



# Benchmarking Findings

- 10+ contractors worked on 20 benchmark studies
  - Technical working groups with each sector/operator
- Challenges in securing comprehensive data to establish world leading and average emission intensities for most sectors
- Some sectors shifted from surveys to ‘best in class’ benchmarks due to data scarcity or incomparability of facilities

# CIIP General Updates

- CO<sub>2</sub> emissions from Schedule C biomass excluded from determining or calculating benchmarks
- Benchmarks will be reviewed every 5 years
- ‘New entrant’ provision for new major facilities:
  - Full incentive payment back for up to 24 month period
- Further opportunity to apply for Incentive in 2018 reporting year
- Application process will be improved for ease of reporting, a web portal will be launched in 2020

# CIIP Application process: 2019+

CIIP introduced a need for:



**Efficient data  
collection and  
analysis**



**Trustworthy  
payment  
calculations**



**Analytical tools**



**Systematic  
application  
process**



**Accurate  
industrial GHG  
data**

# CIIP Application process: 2019+

CAS is developing new tools to create an accessible, single source for BC industrial GHG data. These new tools will:



**Improve  
program  
efficiency**



**Increase  
industrial GHG  
data integrity**



**Systematize  
quality  
assurance and  
control**



**Simplify  
program  
application  
process**



**Streamline  
public reports**

# CIIP Application process: 2019+

Coming soon to a web-browser near you!



CleanBC Industrial Incentive Program

Register

Login

## What is the CleanBC Industrial Incentive Program?

In 2018, B.C.'s \$30 carbon tax rate was raised to \$35, and it is set to increase by \$5 every year until 2021. As the price of carbon rises, the CleanBC Program for Industry will support competitiveness and facilitate emission reductions using revenues from the carbon tax that industry pays above \$30 per tonne carbon dioxide equivalent (tCO<sub>2</sub>e).

The CleanBC Industrial Incentive Program (CIIP) is part of the CleanBC Program for Industry, which applies to large industrial operations that report their emissions under the Greenhouse Gas Industrial Reporting and Control Act (GGIRCA).

The CIIP helps cleaner industrial operations across the province by reducing carbon tax costs for facilities near world-leading emissions benchmarks.


### Apply for CleanBC Industrial Incentive Program (CIIP)

Operators must submit a CIIP application form by June 30, 2019. As part of the application, information about the operation's energy use, emissions, and production is required.

Register and Apply

[Already have an account? Click here to login.](#)

# CIIP Web Portal

 BRITISH COLUMBIA

CleanBC Industrial Incentive Program

Register

Login

My Dashboard

My Applications

Facilities for R. Butus, Ltd.

Facility Name: Forest Floor

Address:

7326, Evergreen Street Northwest V1C6T8  
Oak Grove, British Columbia

Application Status: **draft**

Resume CIIP application

Home | Contact Us

# CIIP Web Portal

CleanBC Industrial Incentive Program

Register
Login

My Dashboard
My Applications

## My Operators

Once your access to the requested operators is approved you can view their facilities and apply for CIIP for each.

Operator	Access Status	Operations/Facilities
R. Butus, Ltd.	<div style="background-color: #4caf50; color: white; border-radius: 10px; padding: 2px 10px; display: inline-block;">active</div>	<div style="border: 1px solid #2196f3; border-radius: 5px; padding: 5px 15px; display: inline-block; color: #2196f3;">View Facilities</div>

**Request access to an Operator:**  
 (You can search to narrow the results in the dropdown)

### How to apply for CIIP

**Step 1:**  
Request access to one or more Operators.

**Step 2:**  
CIIP administrators will approve your request.

**Step 3:**  
Once approved, you can view all the facilities for the Operator.

**Step 4:**  
You can apply for CIIP for each facility.

# CIIP Web Portal



Register

Login

We filled this form for you with the data coming from your draft submission. Please review it and either submit or edit it.

## Administrative Information

### Reporting Operation Information

Legal Name of Operator:\*

R. Butus, Ltd.

Operator's Trade Name

R. Butus

DUNS Number\*

229937112

BC Corporate Registry Number

NAICS Code

21110



# CIIP Web Portal



Register

Login

We filled this form for you with the data coming from your draft submission. Please review it and either submit or edit it.

## Administrative Information

### Reporting Operation Information

Legal Name of Operator:\*

R. Butus, Ltd.

Operator's Trade Name

R. Butus

DUNS Number\*

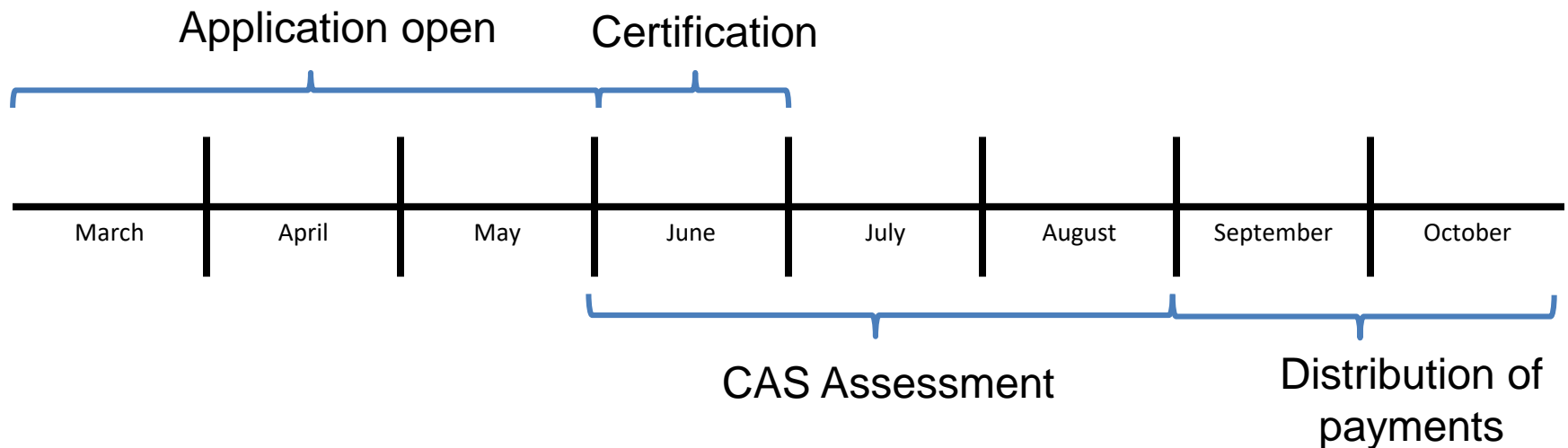
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BC Corporate Registry Number

NAICS Code

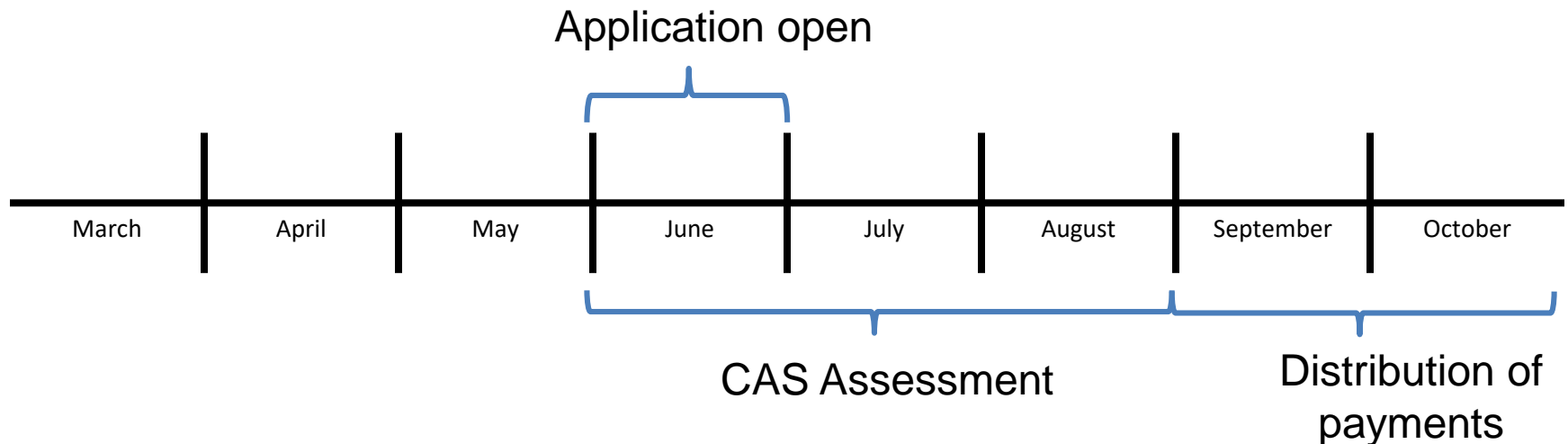
211110

# CIIP Application Process Options



- Application open March to May 31
  - Emissions information will not be pre-filled
- Certification of application would be completed after May 31, once emissions information has been submitted
- CAS assessment would include clarifying questions, and assessment of CIIP application to reported GHG data

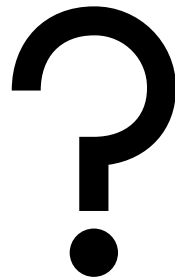
# CIIP Application Process Options



- Application open in June
  - Emissions information may be pre-filled from SWRS information
- Certification of application would be completed with the application
- CAS assessment would include clarifying questions, and assessment of CIIP application to reported GHG data
- Risk that payments could be delayed if material errors are found during assessment

# CIIP Application Process: Open questions

- Early application to the program?
- Pre-population of data submitted for the Reporting Program through the Single Window Reporting System (SWRS)
- Other features you'd like to see?



cleanBC



## CleanBC Industrial Incentive Program web portal: call for pilot participants

Have your say!

---

We are currently seeking willing participants to pilot our application and co-design the CIIP application portal



Interested? Please get in touch!

Email: [maral.Sotoudehnia@gov.bc.ca](mailto:maral.Sotoudehnia@gov.bc.ca)

# CIIP Next Steps

- Once benchmarks/thresholds are established, CAS will meet with each sector to discuss approach and additional data requirements for CIIP
- Meetings will also solicit feedback on application process through a web-based portal and application requirements

**Questions?  
Thank you!**

