

CleanBC Industrial Incentive Program Update

February 23, 2022

Presentation Overview

Context

- Background about CleanBC program for Industry

CIIP in a nutshell

- Benchmark and Eligibility Thresholds
- CIIP Program requirements

Highlights

- Highlights of 2021

CIIP Applications Review

- CIIP applications review
- Most Common Mistakes

CIIP Application Process

- Process Chart for the next CIIP Cycle
- Timeline

Looking forward

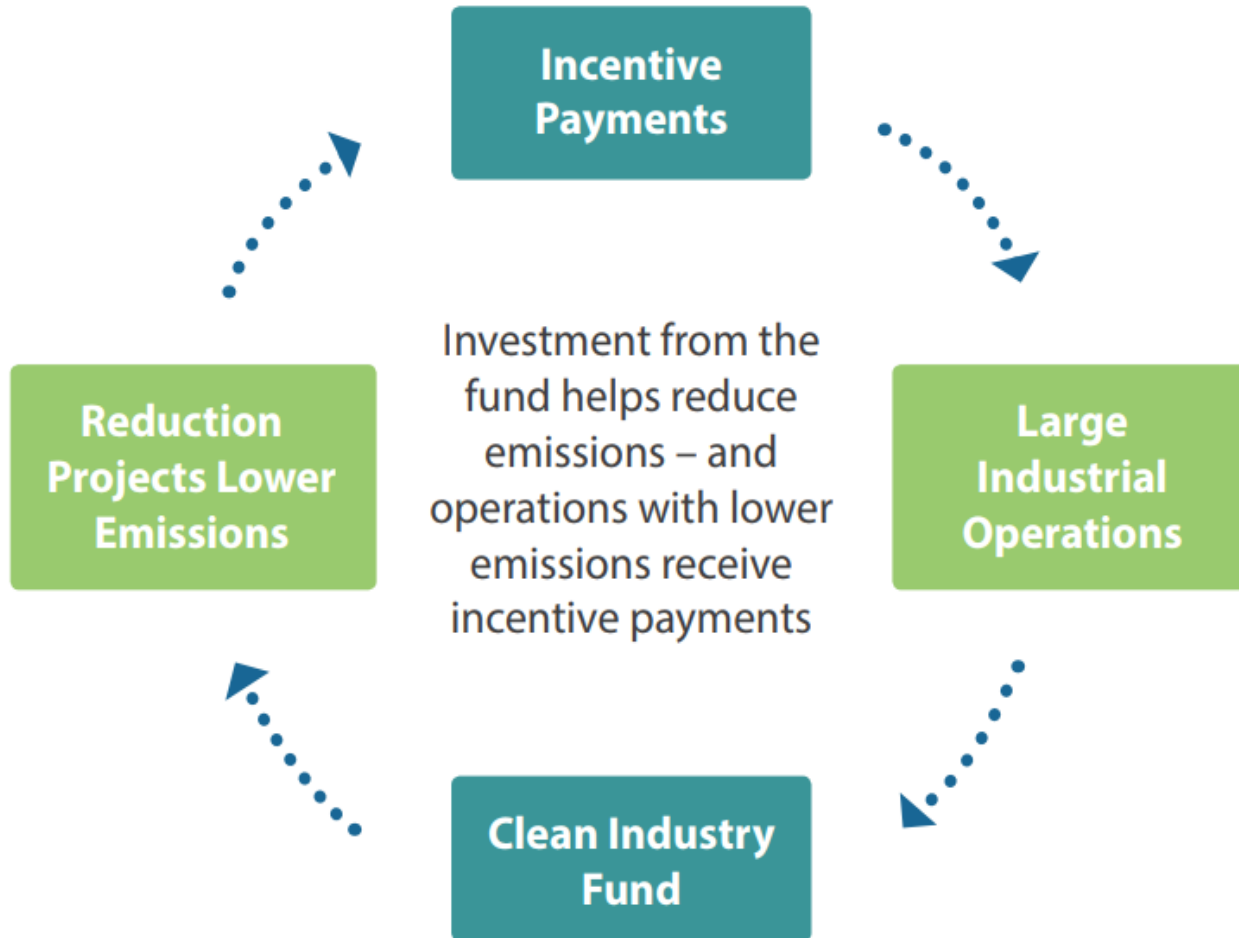
- CIIP Next Steps

Questions?

Context

- In Dec 2018, government announced the **CleanBC** plan 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

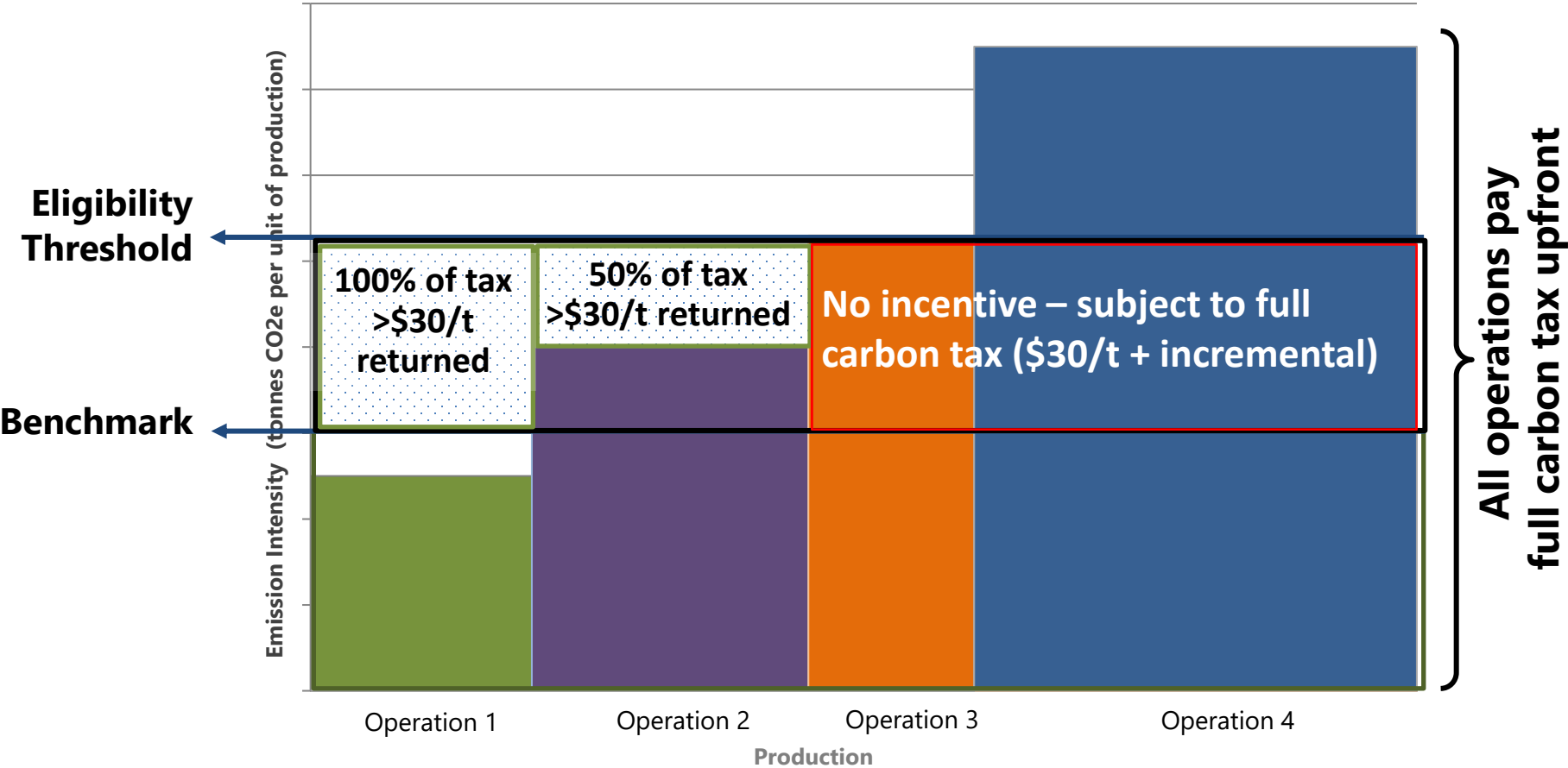
Program for Industry



CIIP Program Requirements

- Eligibility Criteria:
 - Must be a GGIRCA “reporting operation”
 - Emit 10,000+ tCO₂e, excl. Sched. C Biomass
 - Submit an emission report for the applicable reporting year
 - Must be in an eligible sector
 - Material non-compliance under GGIRCA could result in ineligibility or impact future payments under CIIP
- Must submit a CIIP application with all required additional information by program deadline
 - If applicable (emissions >25,000 tCO₂e), must also submit verification statement and report, including for production

CIIP in a Nutshell

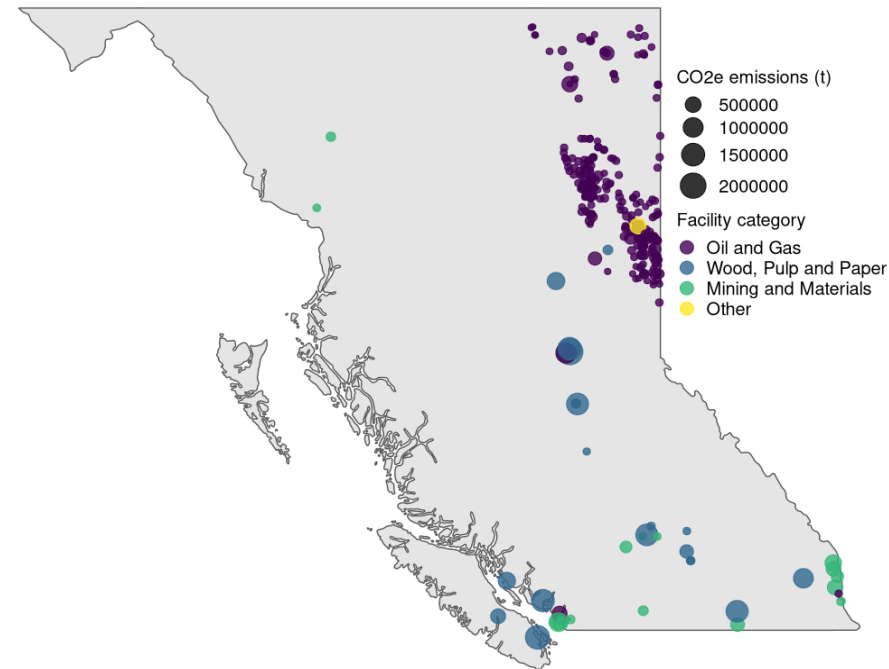


2021 CIIP Program Year

- 459 applications from 75 operators received and processed (518 applications, 82 operators in 2020)
- Incentive payments calculated based on facility's performance against benchmarks and thresholds
- Budget breakdown for 3rd year of CPI:
 - 67% → CleanBC Industrial Incentive Program
 - 23% → CleanBC Industry Fund

2021 CIIP Program Year

- 75% of total reported industrial emissions
- CIIP payments of just over \$65M (\$16M less than 2020)
- Reconciliation of 2020 applications
- Assessment included the effect of non-material errors



Application Review

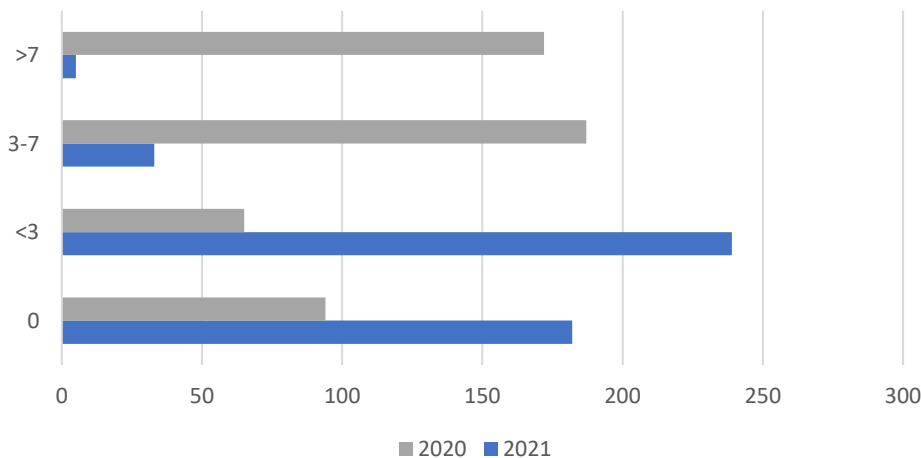
Area of comments	2020	2021	Change
No. of applications	518	459	↓ 11%
Applications with no comment	94	182	↑ 94%
Total no. of comments	2387	516	↓ 78%
Administration-related	206	116	↓ 44%
Emissions-related	587	148	↓ 75%
Fuel-related	1138	161	↓ 86%
Production-related	456	91	↓ 80%

2387
comments!



516
comments!

No. of Comments per Application



Common Mistakes

- Legal name and BC Corporate Registry number do not align
- Difference in emissions reported to CIIP vs. SWRS
- Discrepancy between reported emissions and emissions allocated to the products
- Using incorrect emissions factor for purchased electricity and heat
- Not assigning the emissions from purchased electricity to the products
- Incorrect emissions allocation between the products in multi-product facilities
- Reporting venting and flaring emissions but not reporting the associated fuel usages
- Reported fuel usages not matching with the associated emissions
- Reporting the total venting flow rate, instead of pneumatic venting only

Payment Reconciliation



Why?

- SWRS reports updated after approval of CIIP applications
- New program and processes both to industry stakeholders and program staff
- Consistent tools and more rigorous processes developed in 2021
- Grant agreements allow for a reconciliation to occur as a corrective action



Payment Reconciliation

Corrective Action

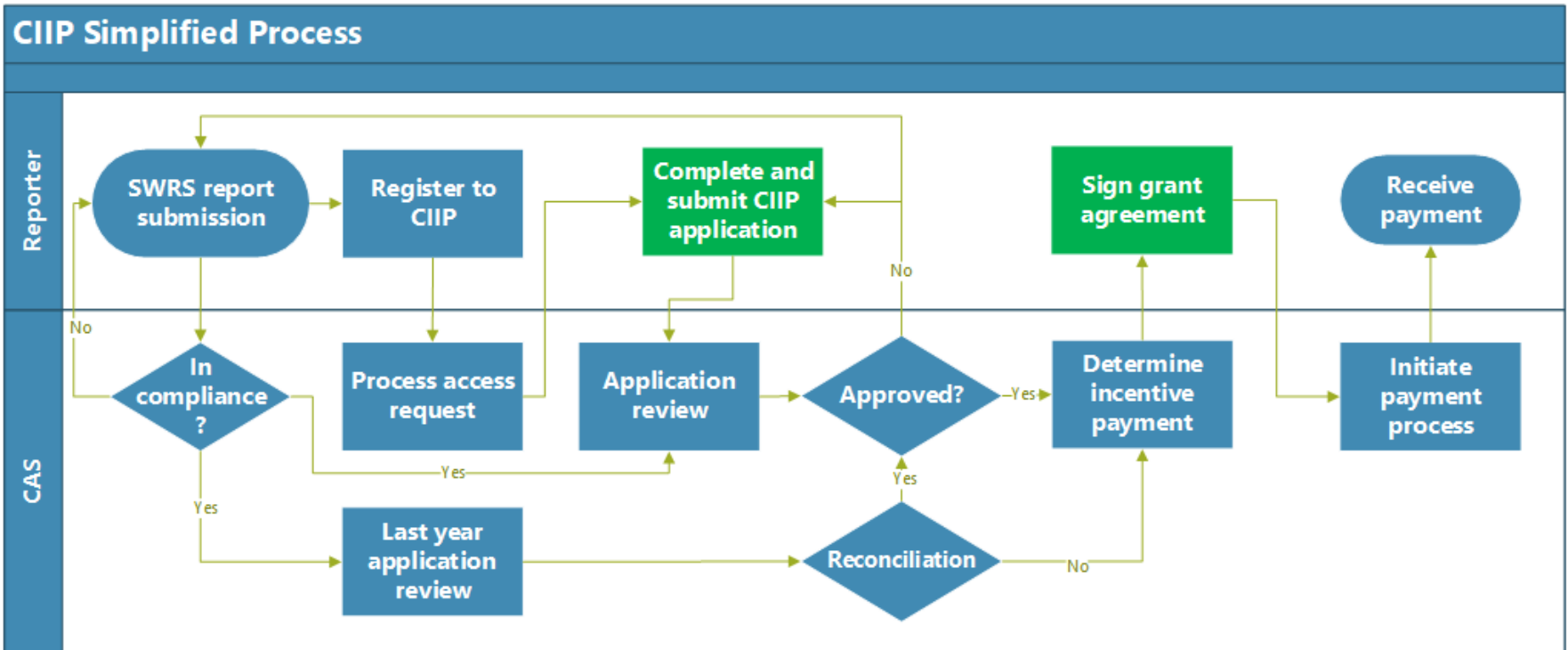
- 36 operators were contacted for clarification on their 2020 applications; applications were revised and resubmitted
- Reconciliation amounts (overpayment/underpayment) for 100 facilities added as adjustment to 2021 incentive payments
- **Reconciliation of previous year submissions is part of the CIIP process**

CIIP Application Process

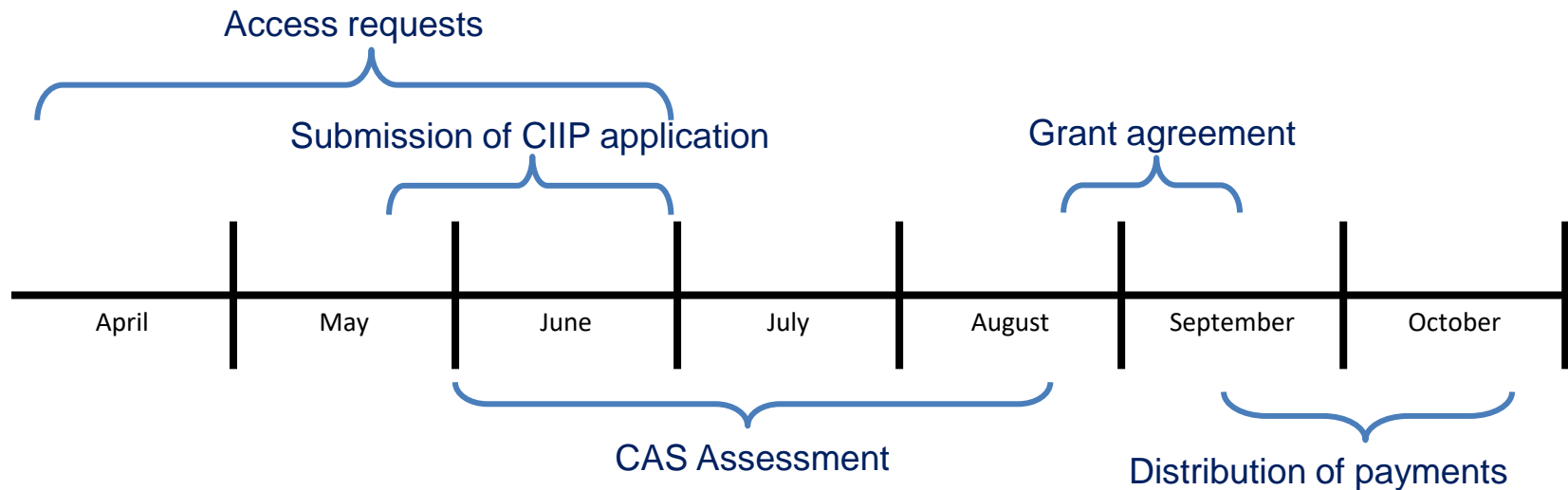
Improving the CIIP Web System and guidance materials to:

- Address any issues and minimize the possible sources of mistakes
- Provide further clarity on application requirements
- Reduce the application review period and number of communications necessary
- Increase the accuracy of the applications to confirm incentive payments
- Provide clarity on incentive payment calculation

Application process



2021 Cycle Timeline



1. CIIP Web System registration opens in April; CAS confirms user access
2. CIIP Web System expected to open on May 24th and close on June 30th
 - Emissions information pre-filled from SWRS information
 - Submission of verification statement/report with the SWRS reports
3. CAS assesses CIIP applications and may ask clarifying questions
4. CIIP applications approved and grant agreements issued
5. Signed grant agreements received and payments distributed to applicants

CIIP Next Steps



- Updated guidance materials will be posted in early May
- CIIP workshop on May 10th
- Consultation with industry on additional benchmarking
 - Sold electricity, Oil and gas other, Petroleum storage
- Survey on CIIP program and web system application
- Questions, feedback and suggestions for improvement are always welcome! GHGRegulator@gov.bc.ca

QUESTIONS?

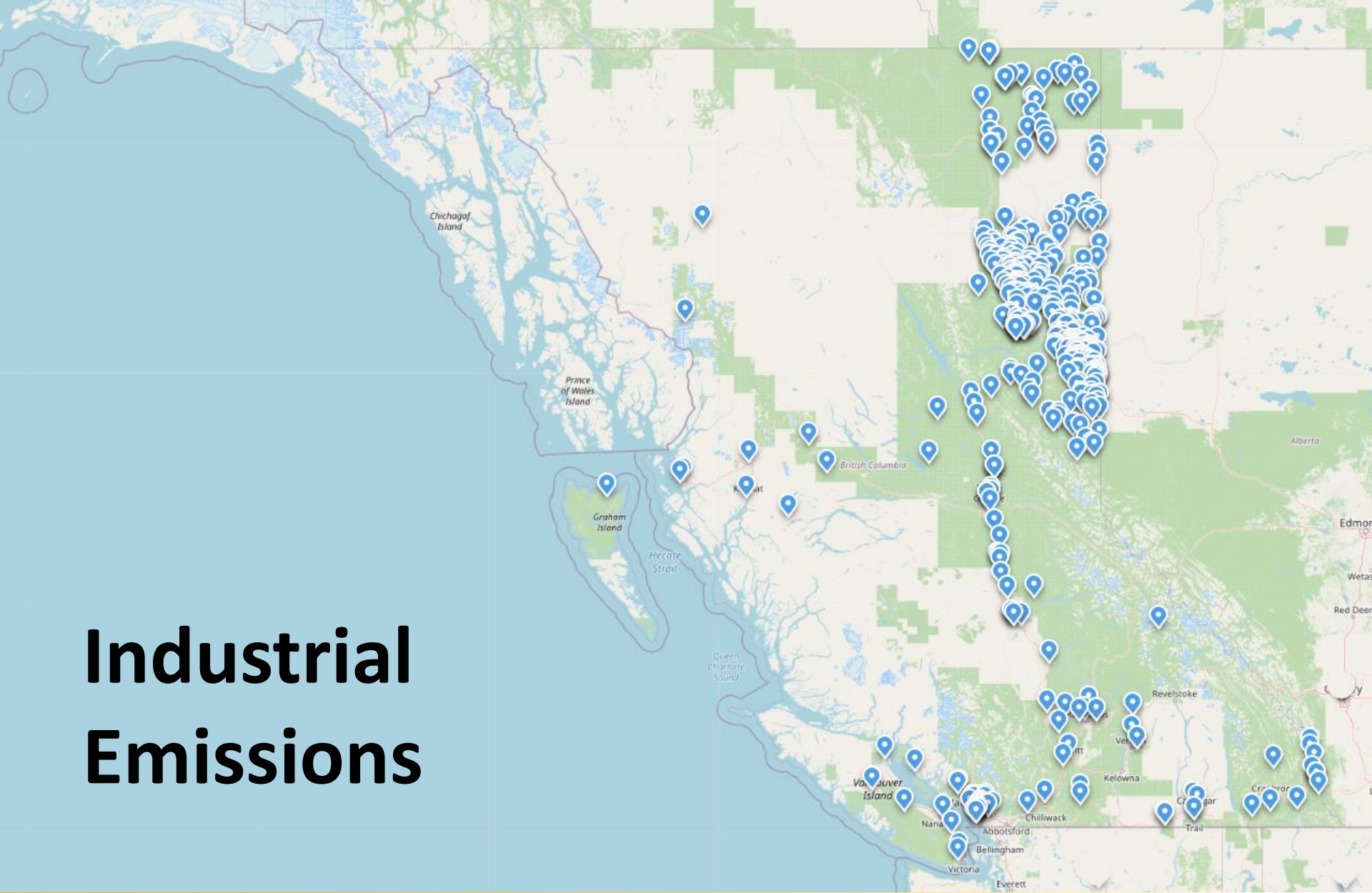
Industrial GHG Emissions Reporting

February 23, 2022

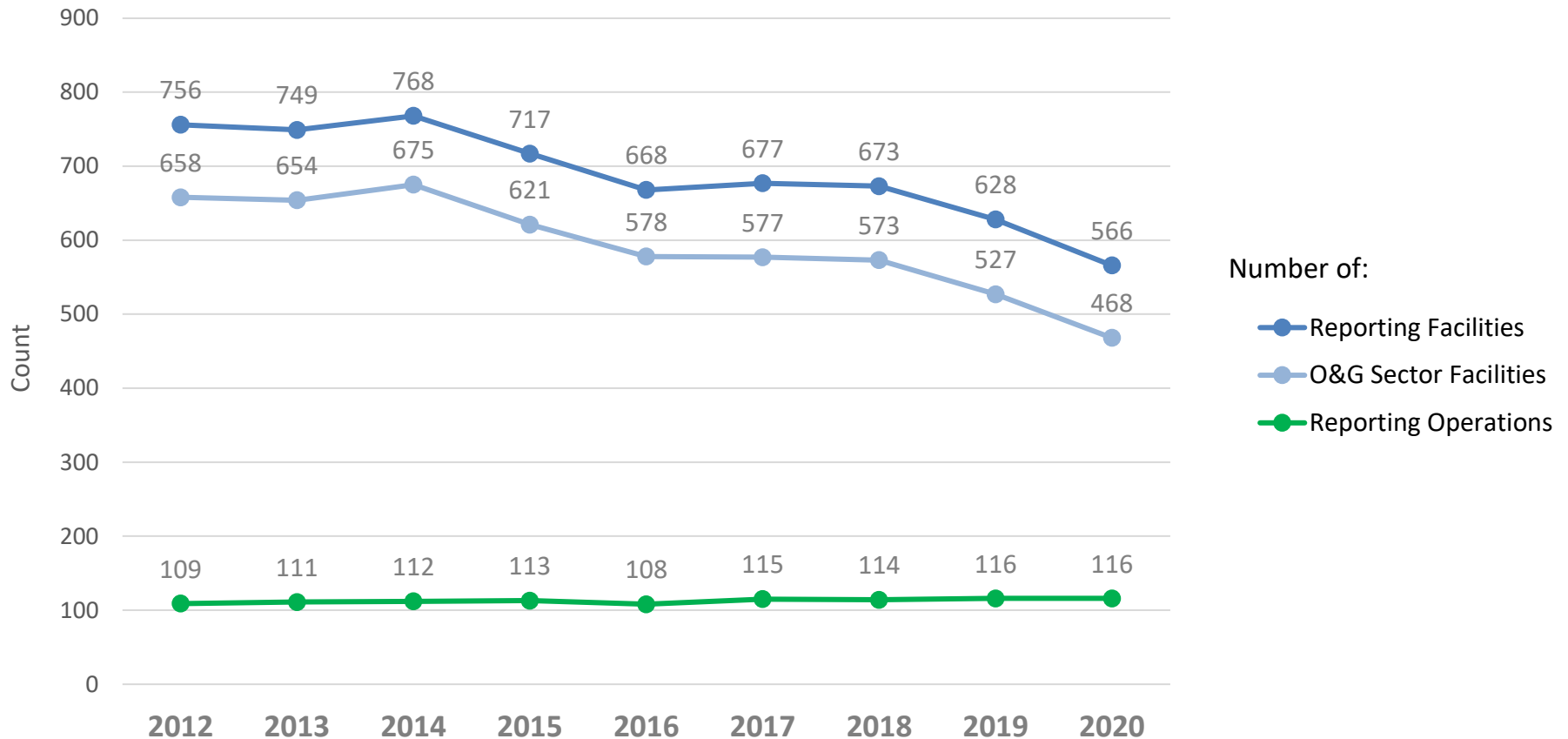
Presentation Overview

- 2020 Industrial Emissions
- New Public Reporting Website
- New Electricity Emission Intensity Factor Methodology

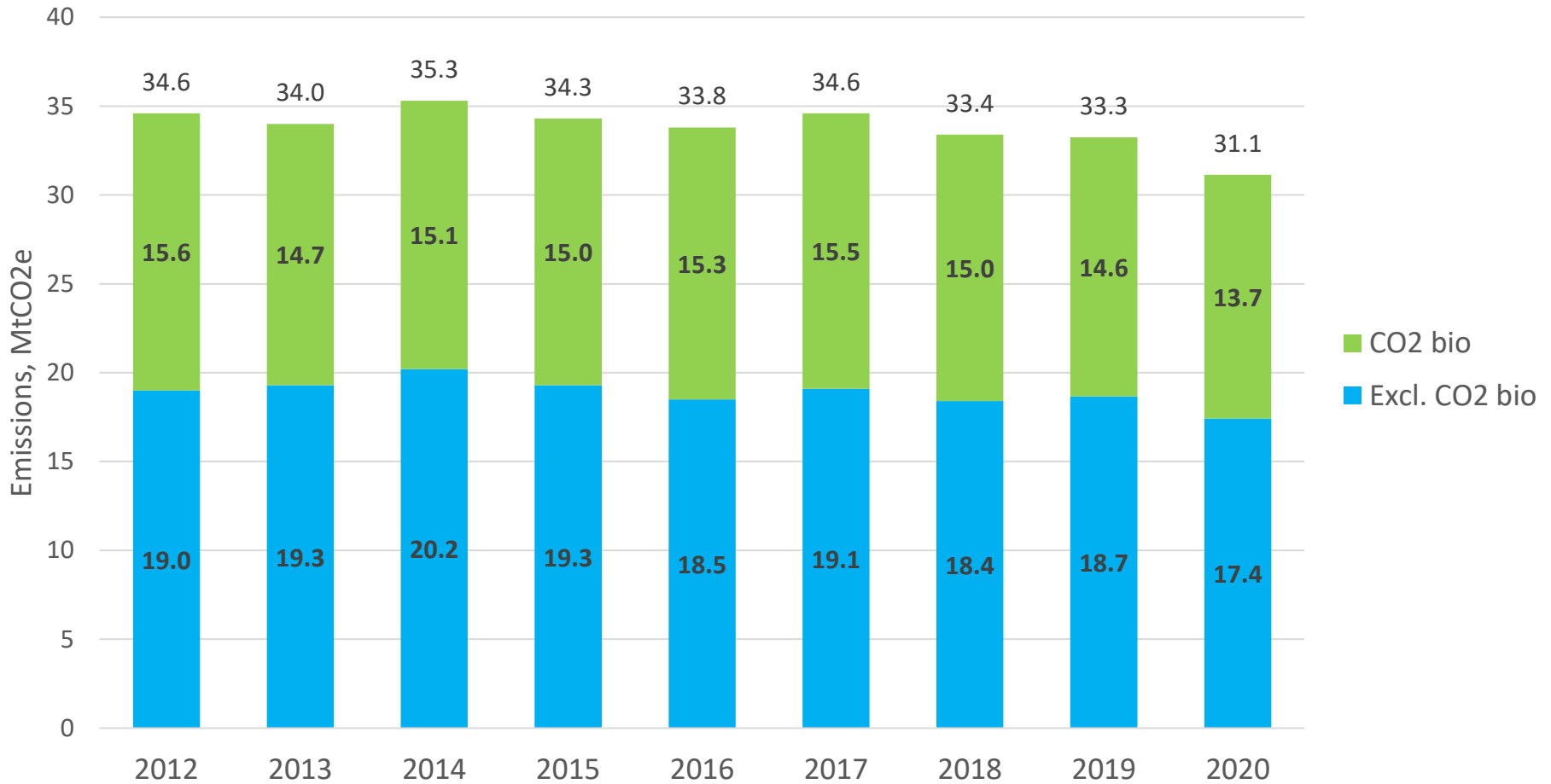
Industrial Emissions



Industrial Reporters

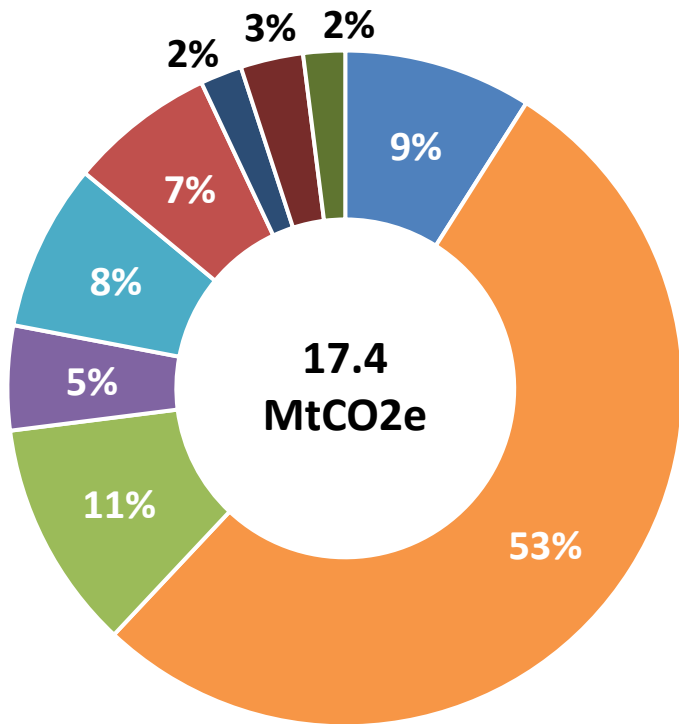


Industrial Emissions

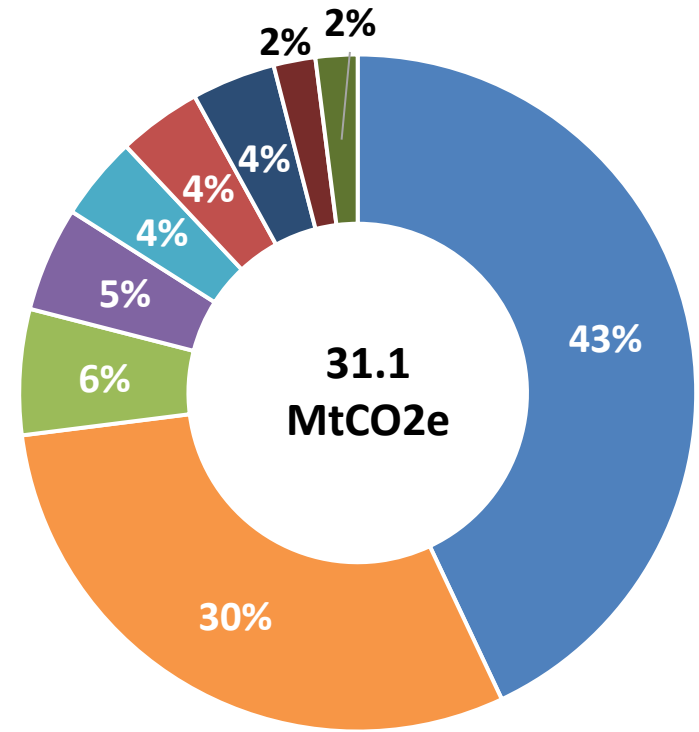


2020: Total Emissions

Excluding CO2 Bio

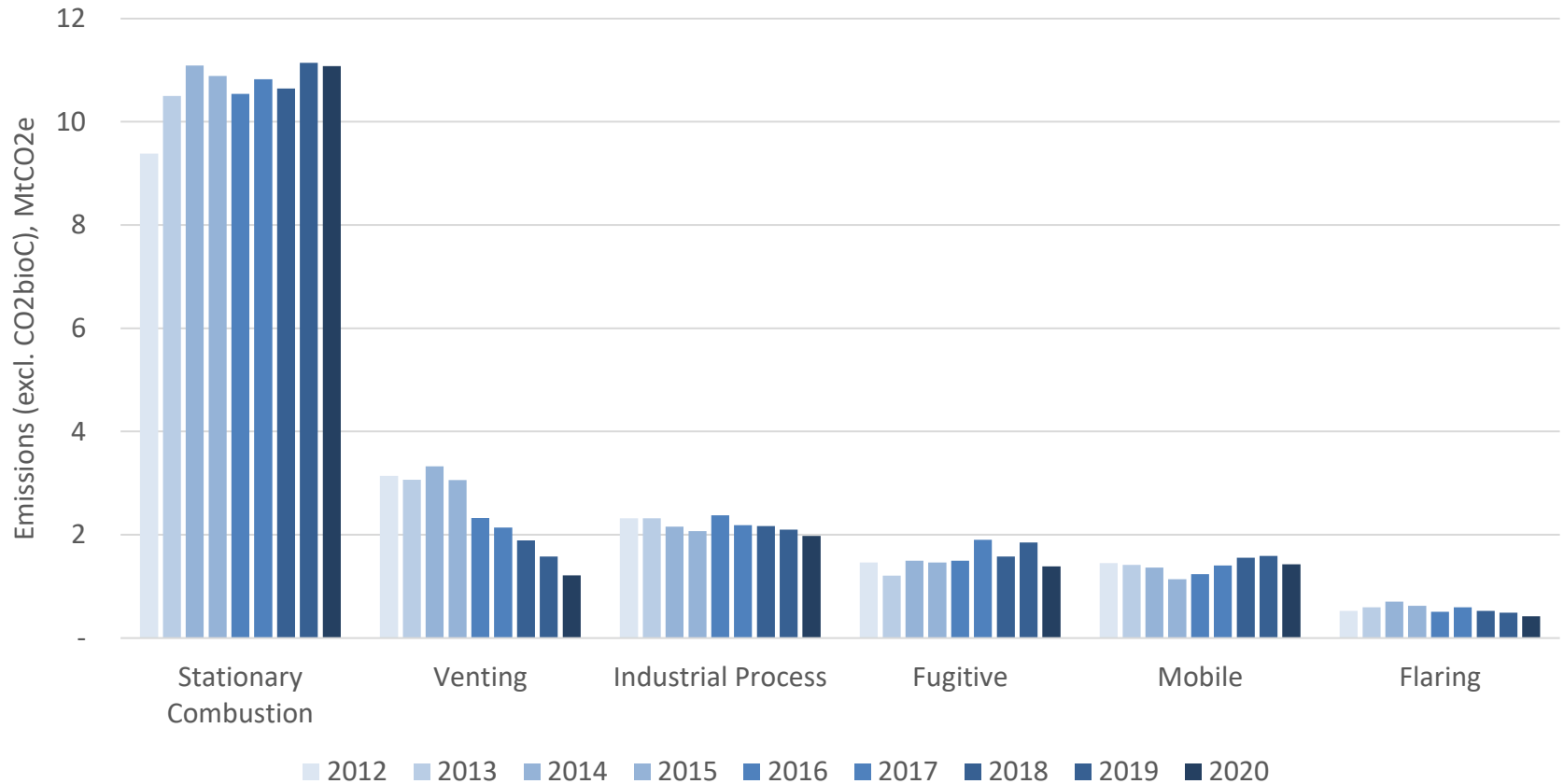


Including CO2 Bio

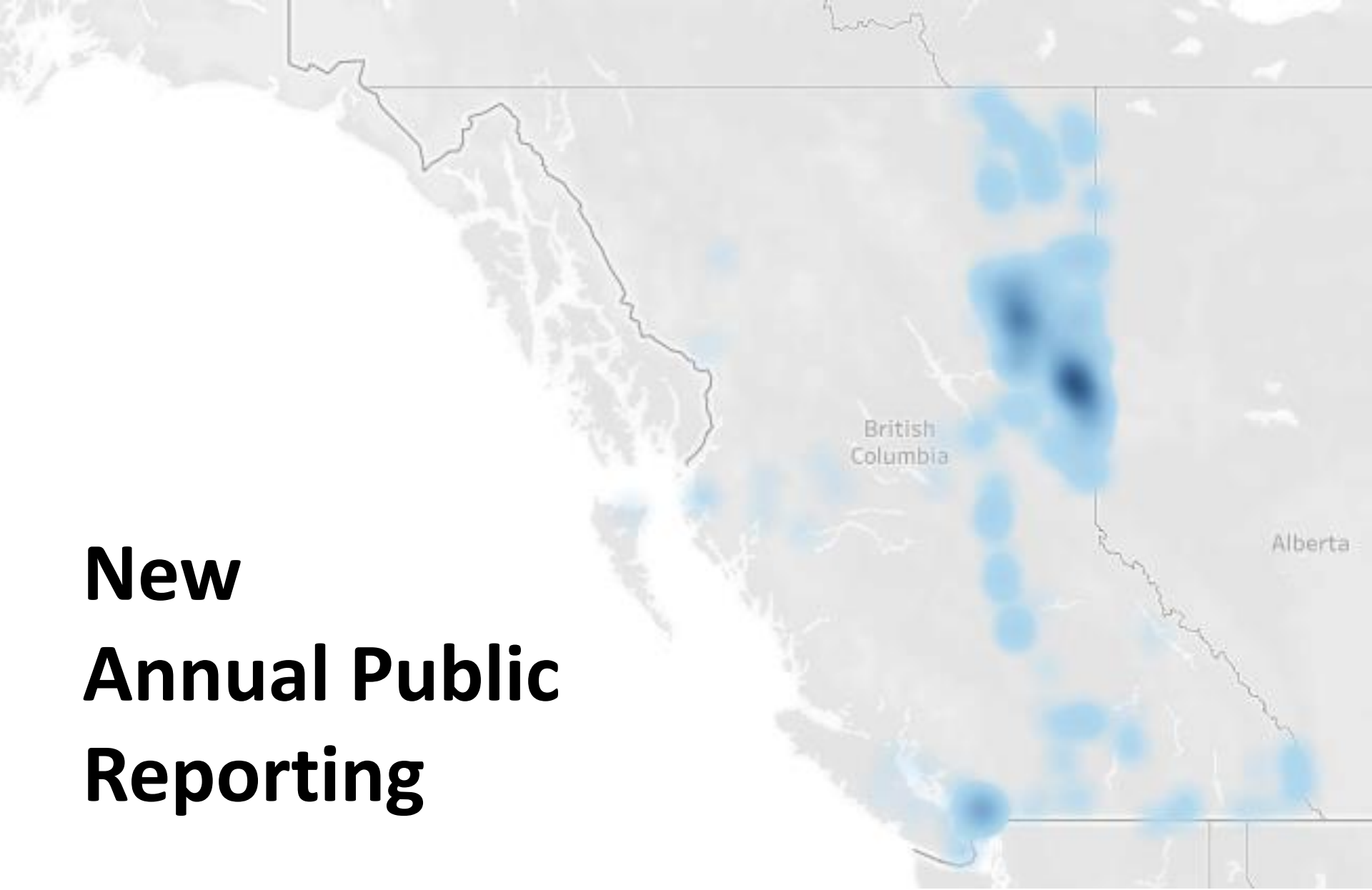


- Pulp & Paper
- Oil & Gas
- Coal Mining
- Electricity & Heat Supply
- Non-Metallic Materials
- Metallic Materials
- Wood Products
- Metal Mining
- Other

Emissions by Source Category



New Annual Public Reporting



Purpose of Public Reporting

- Make Industrial emissions accessible
- Expectation of government transparency
- Commitment of CleanBC
- Deliver value to users/stakeholders

- Provincial Inventory
 - [Industrial facility GHG reporting](#)
- Community energy and emissions inventory

Industrial facility greenhouse gas emissions

B.C. requires industrial facilities that emit 10,000 tonnes or more of carbon dioxide equivalent (CO₂e) per year and electricity import operations to report their emissions to government, as per the [Greenhouse Gas Emission Reporting Regulation](#).

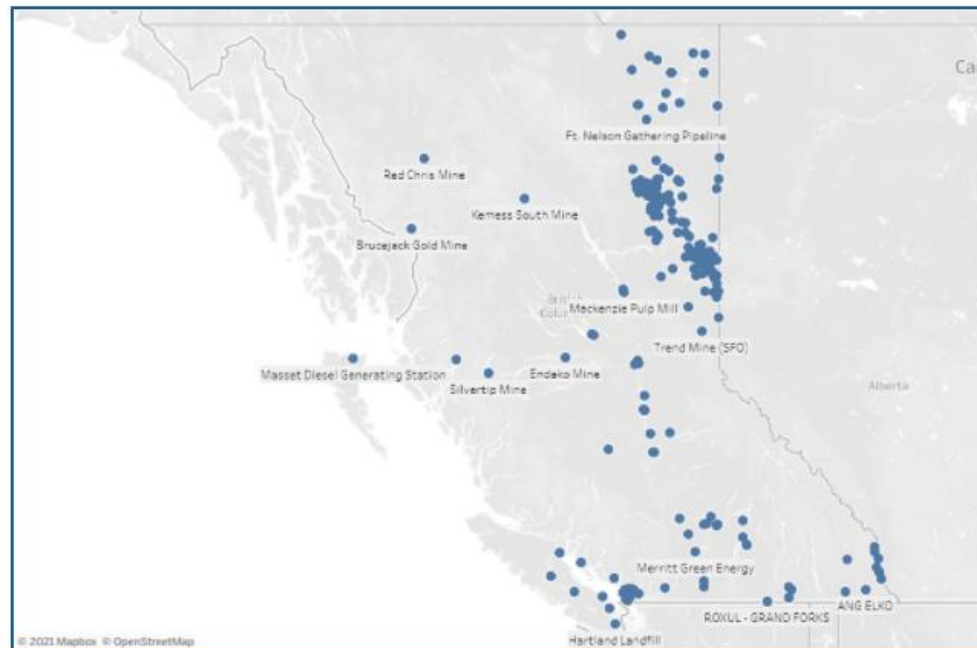
Annual industrial GHG emission report summaries serve several important purposes, including:

- Increasing the accessibility of industrial emissions data
- Informing policy and actions to reduce B.C. emissions
- Informing the public about significant sources of emissions

[Learn more about how emissions data is reported and verified.](#)

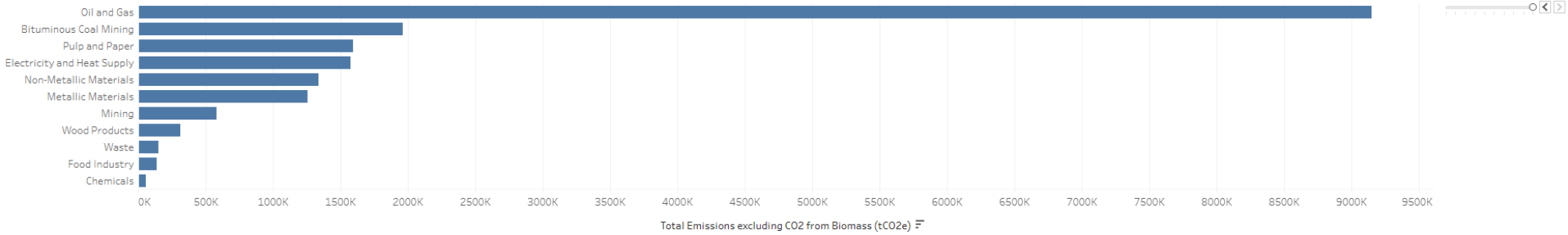
Interactive industrial emissions data

Large B.C. Industrial Facilities



[Learn more about GHG emissions at B.C.'s large industrial facilities, as well as the province's industrial sectors through interactive charts, graphs and mapping.](#)

Large BC Industry GHG Emissions by Sector



Next Steps

- Engagement to determine user needs
 - Industry
 - Public, NGOs, academic, financial sector
 - Intergovernmental, Indigenous community
- Renegotiation of SWRS Provincial Agreement
- Interested in providing input?
 - Survey
 - Email GHGRegulator@gov.bc.ca



**British Columbia
Electrical Transmission
System**

- Fort Nelson Grid
- Integrated Grid
- Isolated Grid

Scale: 0 10 20 30 40 50 Kilometers

Map Date: October 2014

New Electricity EI Factor Methodology

Electricity Emission Intensity Factor

- For quantifying emissions from electricity which is not self-generated
- Integrated grid (tCO₂e/GWh)
 - 2019 EEIF = 29.9
 - 2020 EEIF = 40.1
 - 2021 EEIF = est. 9-14

Methodology Update

- Goal: to more accurately reflect the carbon intensity of electricity consumed in BC
- Methodology amended:
 - Net imports basis
 - New reporting requirements for EIOs
 - 4-year rolling average

Additional Information

- EEIF website & FAQ document
 - <https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/reporting/quantify/electricity>
- GGIRCA Bulletin #022
 - <https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/bulletins-legislation-guidance>
- Email GHGRegulator@gov.bc.ca

Questions?



Ministry of
Environment and
Climate Change Strategy

Greenhouse Gas Emission Reporting Regulation Compliance Program and Policy Updates

*CleanBC Program for Industry Workshop
February 23, 2022*



Ministry of
Environment and
Climate Change Strategy

Agenda

Compliance program updates

- Role of C&E
- Compliance Priorities
- Program Updates

Regulatory policy changes

- Summary of recent regulatory amendments

Role of C&E



Operations



Policy review and development



Implement changes

Compliance Priorities

- Promoting compliance and due diligence
- Ensure complete and accurate reporting of industrial emissions
- Manage risks to implementation of CleanBC Program for Industry and Roadmap to 2030



COVID-19 Program Update



- Please follow current Public Health Orders, which may impact industrial operations and verification work in B.C.
- 2 policies in place that support operators and verification bodies impacted by COVID-19:
 - Virtual site visits (Bulletin 010)
 - Deadline extensions for submission of emission reports and verification statements (Bulletin 015)

Virtual Site Visits

- Virtual site visits are generally allowed if:
 - At least one of the site visits in the last two reporting periods was conducted in person
 - No significant changes have been made to a facility or their processes/ activities
- See Bulletin 010 on the BC Government website for details



Deadline Extensions



- Emission reports are due on May 31 each year
- Industrial operators can request an extension if:
 - An in-person site visit cannot safely be conducted prior to the deadline, and
 - They do not meet the criteria for a virtual site visit
- See Bulletin 015 on the BC Government website for details

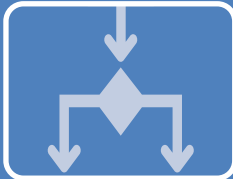
CIIP: Product Data Verification

- Application Requirements
 - All product data must be verified if the facility is verified under the Regulation.
- Timing
 - Applications for 2021 RY must submit verification statements by June 30, 2022. Extension requests may be considered but could delay payment.
- Eligibility
 - If required, applicants must submit a verification statement to be eligible. Applications without a positive opinion may still be eligible, but may have additional requirements prior to payment.
- Details
 - Visit our website or contact our office for policy details.

CIIP: Product Data Verification



Policy approach is consistent with the Regulation

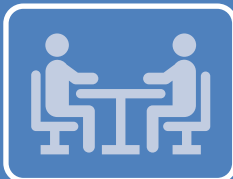


VB must be accredited and comply with ISO 14064-3.
Regulatory and CIIP verification work may be conducted at same time by same VB.



VB must conduct all procedures necessary to obtain reasonable level of assurance

- Site visits required, may be virtual if facility meets requirements
- Comprehensive data review, direct observations, interviews, etc.

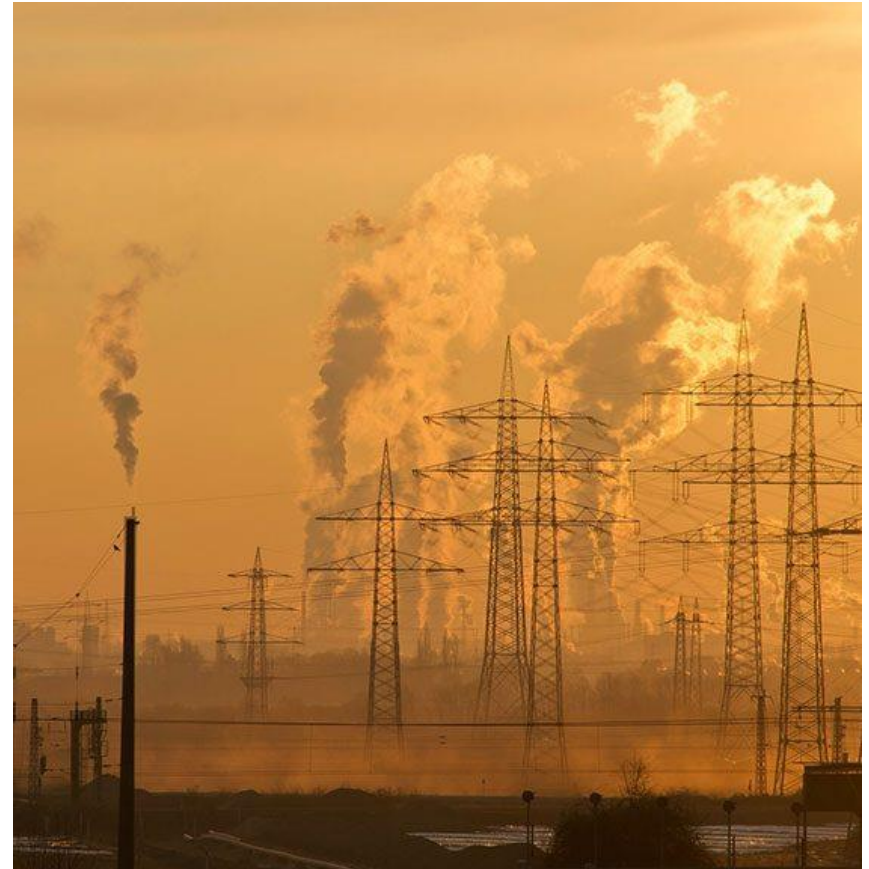


All errors must be documented and require correction if:

- Correctable in reasonable amount of time at reasonable effort
- Result in misstatement > 0.1% of product qty.

Non-Reporter Outreach Program

- Clarified regulatory authority to require information from industrial operations that do not report
- C&E team contacted over 60 operations last year to confirm compliance
- We work collaboratively to review information collected by other Ministries



Industrial GHG Reporting Program Update



Overview of amendments to the Greenhouse Gas
Emission Reporting Regulation (GGERR)

Reporting fugitive methane emissions from open pit coal mining

- Previously quantified “in accordance with best industry practices”.
- Operators must now use the methodology described in the National Inventory Report.
- See GGIRCA Bulletin 016 on the BC Government website.

$$\text{Emissions} = \Sigma (\text{EF} \times \text{Coal})$$

Where:

EF = the emission factor for the type of coal in the table titled “Fugitive Emission Factors for Coal Mining” for surface mines in British Columbia in the National Inventory Report

- (a) in the most recent National Inventory Report, and
- (b) before the end of the applicable reporting period.

Coal = the amount of the type of coal extracted

Reporting of on-site mobile fuel combustion emissions and fugitive coalbed methane

- Emissions from on-site mobile fuel combustion and fugitive coalbed methane are no longer “reporting-only emissions”
- 4 main impacts in the GGERR:
 - Section 4 – Attributable emissions
 - Section 18 – Supplementary reports (error correction requirements)
 - Section 27 - Verification obligation threshold
 - Section 32 - Materiality
- See GGIRCA Bulletin 017 on the BC Government website.

The definition of
“reporting-only emissions”
has been changed to
“carbon dioxide from biomass
listed in Schedule C”

Updated fugitive emission factors for pneumatic devices in oil and gas operations

- New vent rates for pneumatic devices and retrofitted devices added to Schedule A of GGERR
- Applies to 2022 reporting period and beyond
- See GGIRCA Bulletin 018 on the BC Government website

Pneumatic device is listed in Table 4 of Schedule A



Operator uses bleed rate listed in Table 4 of Schedule A

Pneumatic device is not listed in Table 4 of Schedule A



Operator uses bleed rate from WCI 350-6 and 360-6

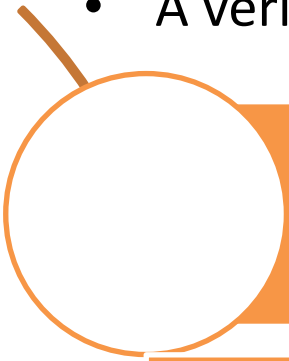
Requirement to report emissions from combustion of non-woody biomass

- Requirement was previously omitted from the GGERR
- Regulation has been updated to require reporting of this emission type from GSC
- See GGIRCA Bulletin 019 on the BC Government website


The GGERR has been amended to add “carbon dioxide from biomass not listed in Schedule C” to Column 4 of Item 1(a) in Schedule A.

Emission report error correction requirements during the verification process

- A verification body must not provide a verification statement unless:



Any errors, omissions and misstatements in the emission report have been corrected if possible, in a reasonable amount of time at a reasonable effort



Those errors do not result in a net misstatement that exceeds the lesser of:

- 1,000 tonnes CO₂e, not including reporting only emissions,
- 1% of the total emissions attributable to the reporting operation during the reporting period, not including reporting-only emissions, or
- An amount specified by the director that is less than the lesser of the amounts in subparagraphs noted above.

- See GGIRCA Bulletin 020 on the BC Government website.

Transition to new versions of ISO standards

- VBs are not required to transition to new ISO standards until required to do so by their accreditation body
- If a VB receives approval to use the new standard prior to the transition deadline, the VB should use them
- See GGIRCA Bulletin 021 on the BC Government website.

Verification bodies should transition to using ISO 14064-3:2019 and ISO 14065:2020 by the deadline set by their accreditation body

Requirement for non-reporting industrial operations to submit information

- If a non-reporting operation is suspected to meet the reporting threshold, information needed to verify compliance may be requested
- For example: copies of invoices, reports, or calculations relied on by the operation to forecast emissions
- See GGIRCA Bulletin 023 on the BC Government website.

Non-reporting industrial operations must submit records to the Director under GGIRCA, if requested to do

For Additional Information

Send questions or comments to the Compliance team at Industrial Reporting and Control:

GHGRegulator@gov.bc.ca





Ministry of
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B.C.'s Offset Program Update

Annual Clean Growth Workshop

February 23, 2022

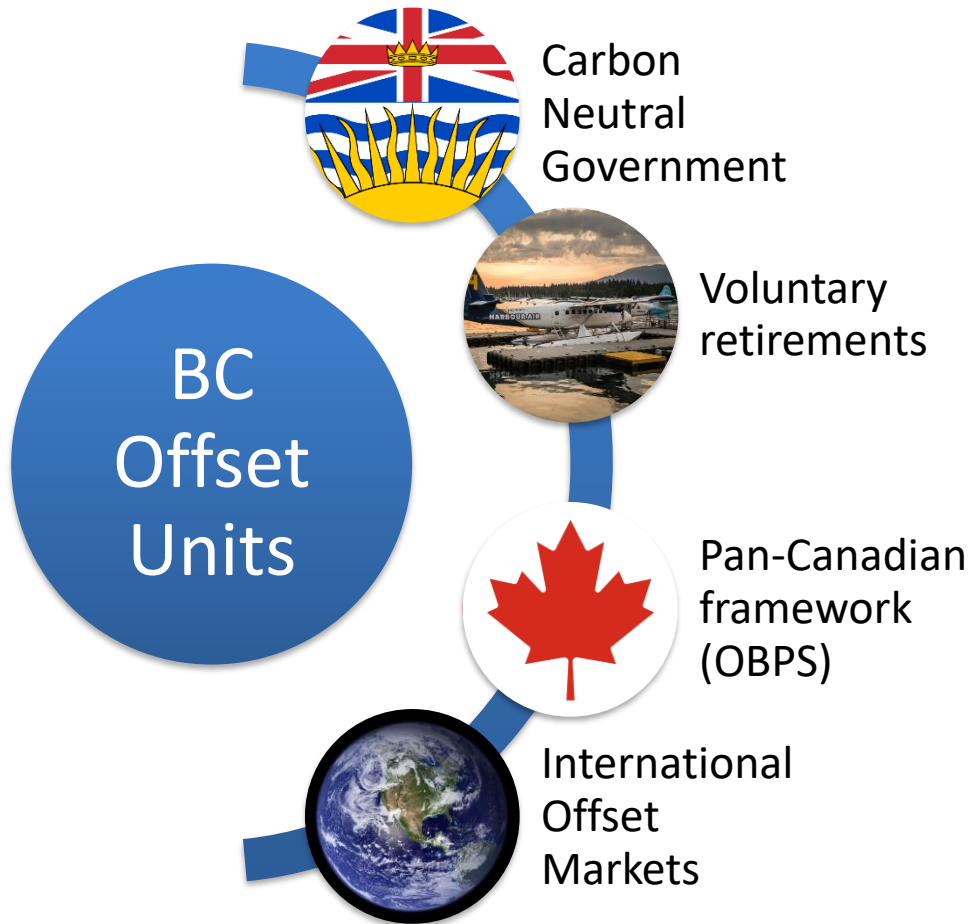


Ministry of
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Agenda

- Brief outline of the B.C. Offset Program
- B.C.'s Offset Strategy in B.C.
- Proposed Offset Protocol Policy
- Next Steps
- Questions and Answers

B.C. Offset Program Overview



BC's Carbon Offset Program supports:

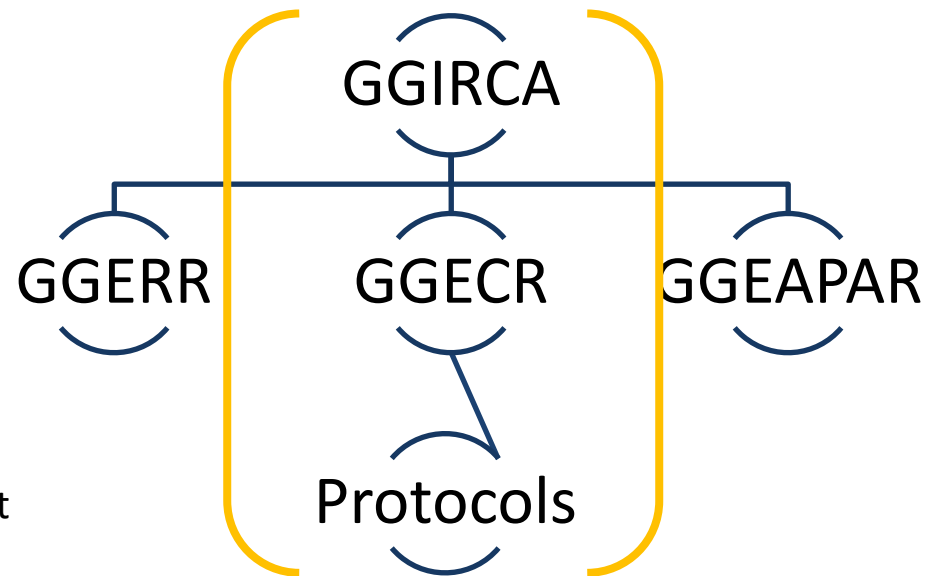
- 1) Additional GHG emission reductions and removals; and
- 2) Transition to a resilient, innovative, low-carbon economy that works for everyone.

B.C.'s Legislative Framework for Offsets

Under GGIRCA (2016), Offset projects **must meet approved protocol requirements and criteria established in the Greenhouse Gas Emission Control Regulation.**

Offset units may be credited for **verified** project activities **located in B.C.** involving the:

1. **Reduction** of greenhouse gas (GHG) emissions into the atmosphere; and/or
2. **Removal** of GHG emissions from the atmosphere.



B.C. Offsets under legislation

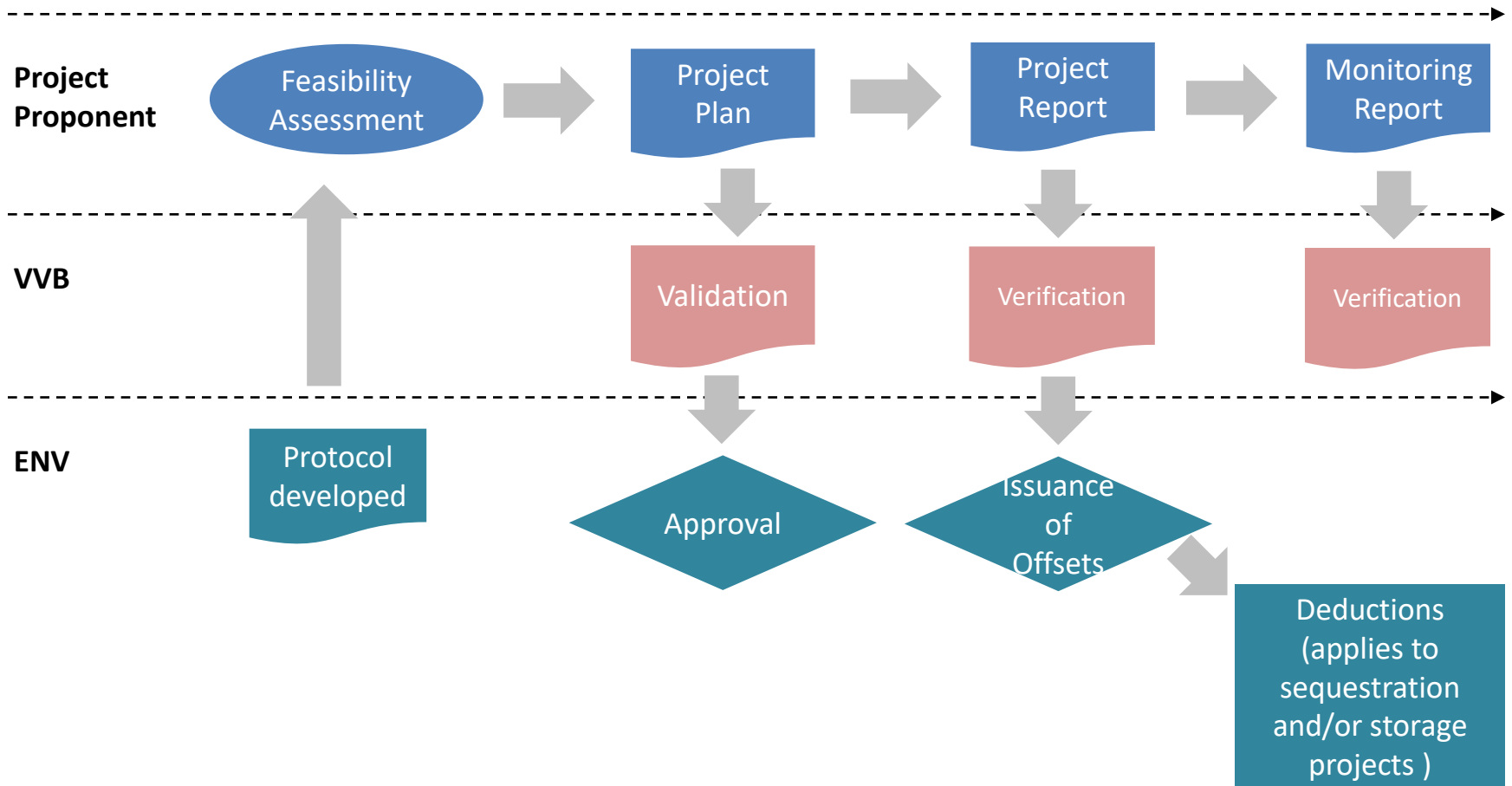
- B.C. offsets awarded for conservatively estimated and third-party verified carbon reductions and removals in B.C.
- Project start date must be 2014 or after
- Project plans must be developed using Director-approved offset protocols, third-party validated and submitted through the B.C. Carbon Registry
- Crediting periods:
 - Up to 10 years for emission reduction projects
 - Up to 25 years for sequestration projects.
- 100-year monitoring requirements for sequestration projects
- All transactions publicly available in the BC Carbon Registry

Current Status

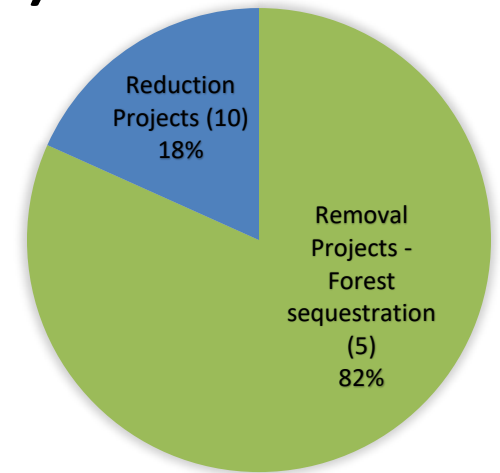
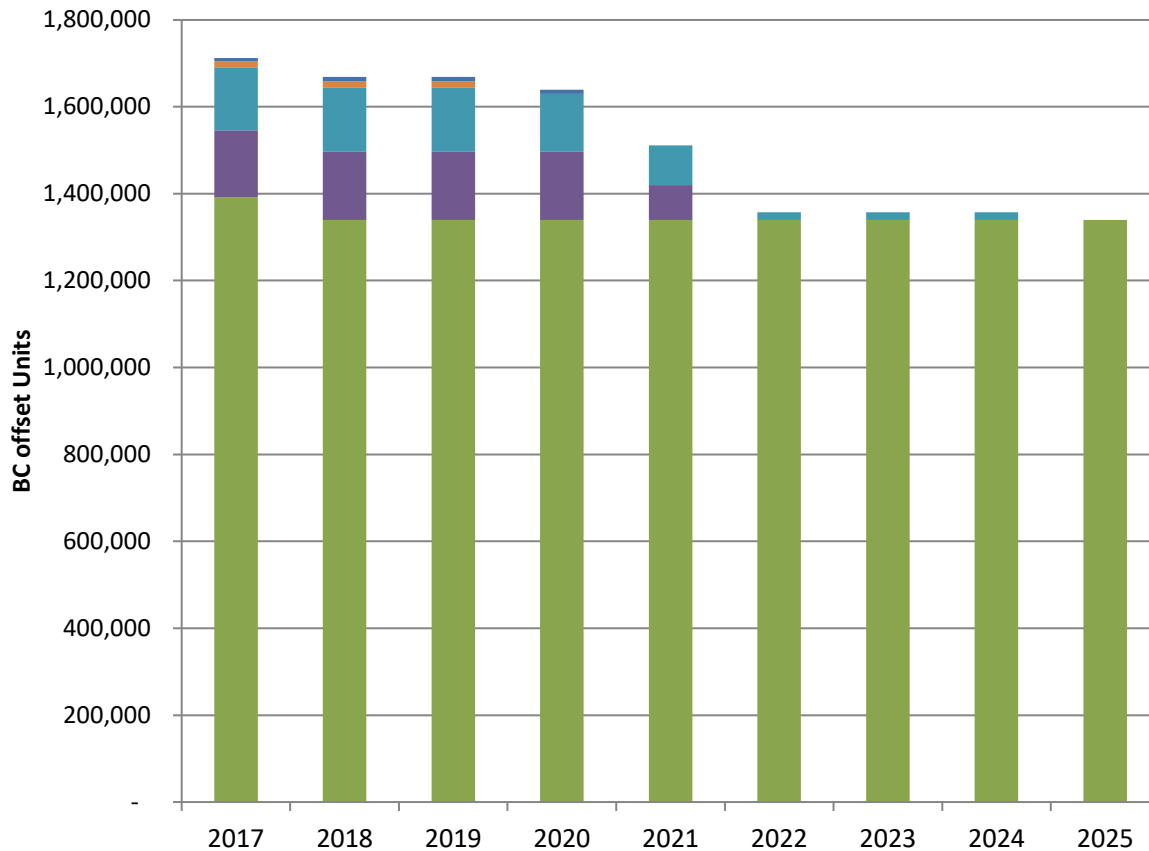
- **Fuel Switch Protocol**
- **Forest Carbon Offset Protocol** (under final review)
 - Afforestation and Reforestation
 - Conservation / Improved Forest Management
 - Avoided conversion
- **Methane Management Protocol** (under final review)
 - Landfill gas management
 - Organic waste diversion
 - Anaerobic digestion (wastewater, manure, other organics)
- **Offset Protocol Policy** (posted for public comments soon)



B.C. Offset Project Workflow

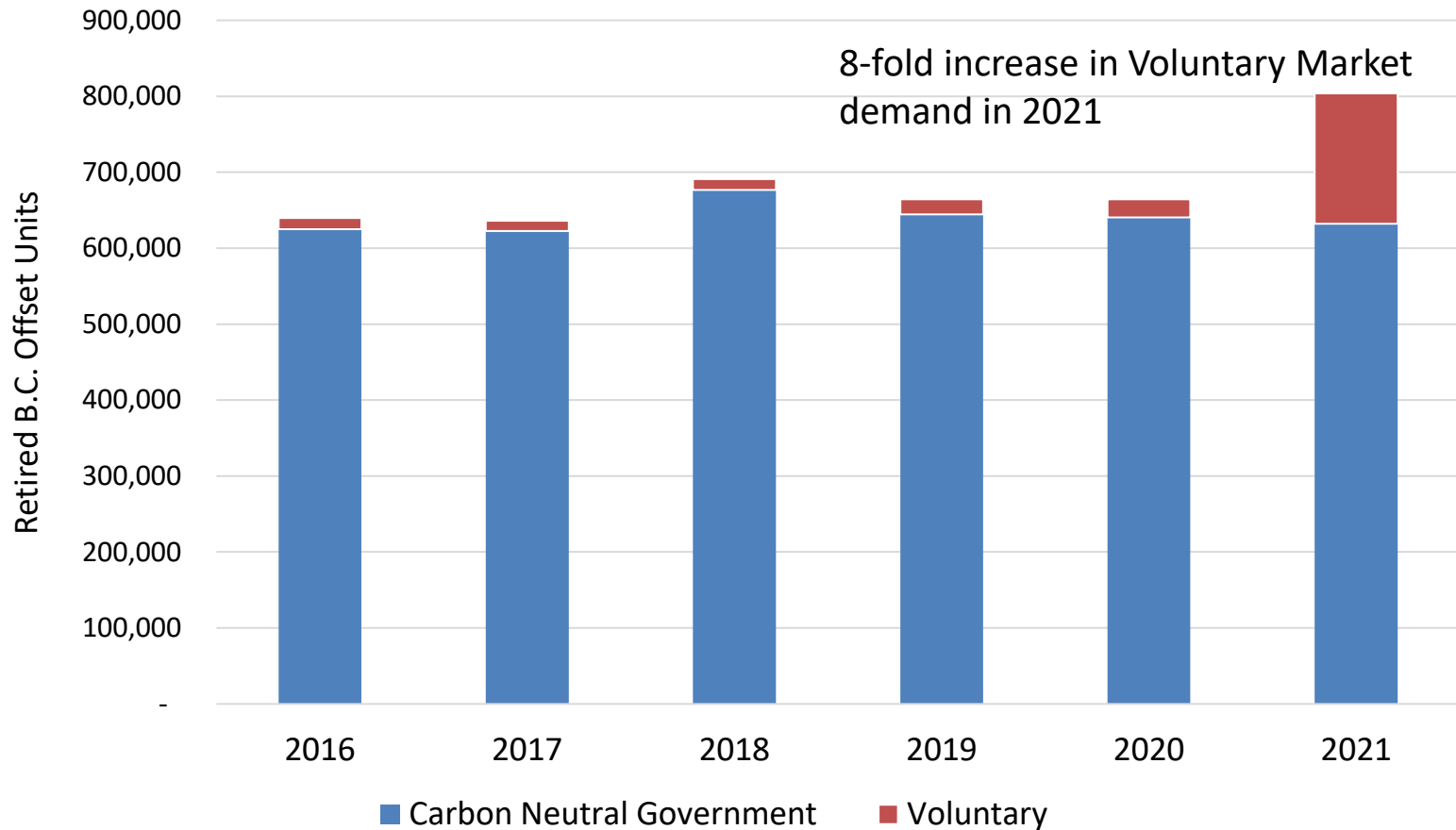


B.C. Annual Offset Supply (Pre-GGIRCA legacy projects)



- Landfill Gas Management (1)
- Fuel Switch - Biomass Gasification (1)
- Fuel Switch - Biomass in Forestry (6)
- Fuel Switch - Electrification O&G (3)
- Forest Sequestration and Storage (5)

B.C. Offset Market Uptake



Offset Strategy

At a high level, the B.C. Offset Program will:

- Tailor its offerings to meet the requirements of the voluntary market
- Focus on protocol types that align with provincial climate goals
- Empower project types that:
 - Advance Indigenous reconciliation,
 - Provide economic development opportunities,
 - Protect ecological biodiversity, and/or
 - Advance access or deployment of low-carbon technologies

OFFSET PROTOCOL POLICY (OPP)

Intro to OPP

- Outlines government policy on how B.C. offset protocols will be:
 - Identified and prioritized for development,
 - Developed,
 - Periodically reviewed, and
 - Amended or deactivated

Identifying opportunities

Two pathways for identification:

- Routine scan of other jurisdictions, and
- Proposed by interested parties
 - Must clearly demonstrate how suggested protocol addresses:
 - Prioritization criteria, and
 - Regulatory requirements

Prioritization for development

- Criteria:
 - Alignment with B.C.'s broad government priorities
 - Monitoring, reporting and verification (MRV) methodology readiness
 - Technological readiness
 - Potential scale of opportunity in B.C.
 - Marketability of offset units

Development process

- Review of relevant technical documentation
- Regulatory alignment review
- Internal consultation for policy alignment
- Develop protocol for users
- Public Engagement
- Preparation of final document
- Legal Review
- Director approval and release

Review of Approved Protocols

To assess continued consistency with:

- Regulatory requirements,
- The shared interests of the offset program and project owners,
- The scientific literature, and
- Quantification, verification and monitoring best practice

Protocol Review Process & Outcomes

Three stage review:

- Review of relevant technical documentation
- Regulatory alignment review
- Internal government scan for policy alignment

Outcomes:

- No action
- Deactivation
 - Permanent
 - Temporary (for amendments)

Next Steps

- Public Engagement on the proposed OPP to be open soon
- Release Director-approved protocols:
 - Methane Management
 - Forest Carbon
- Continue the development process for identified protocol priorities:
 - Technological Carbon Capture and Storage
 - Reductions in the agricultural sector

Thank you for your attention!

Resources

<https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/offset-projects>

Please direct all enquiries to
GHGRegulator@gov.bc.ca

Questions?