Alberta Government

2018 CCIR Compliance Workshop

January 25, 2018

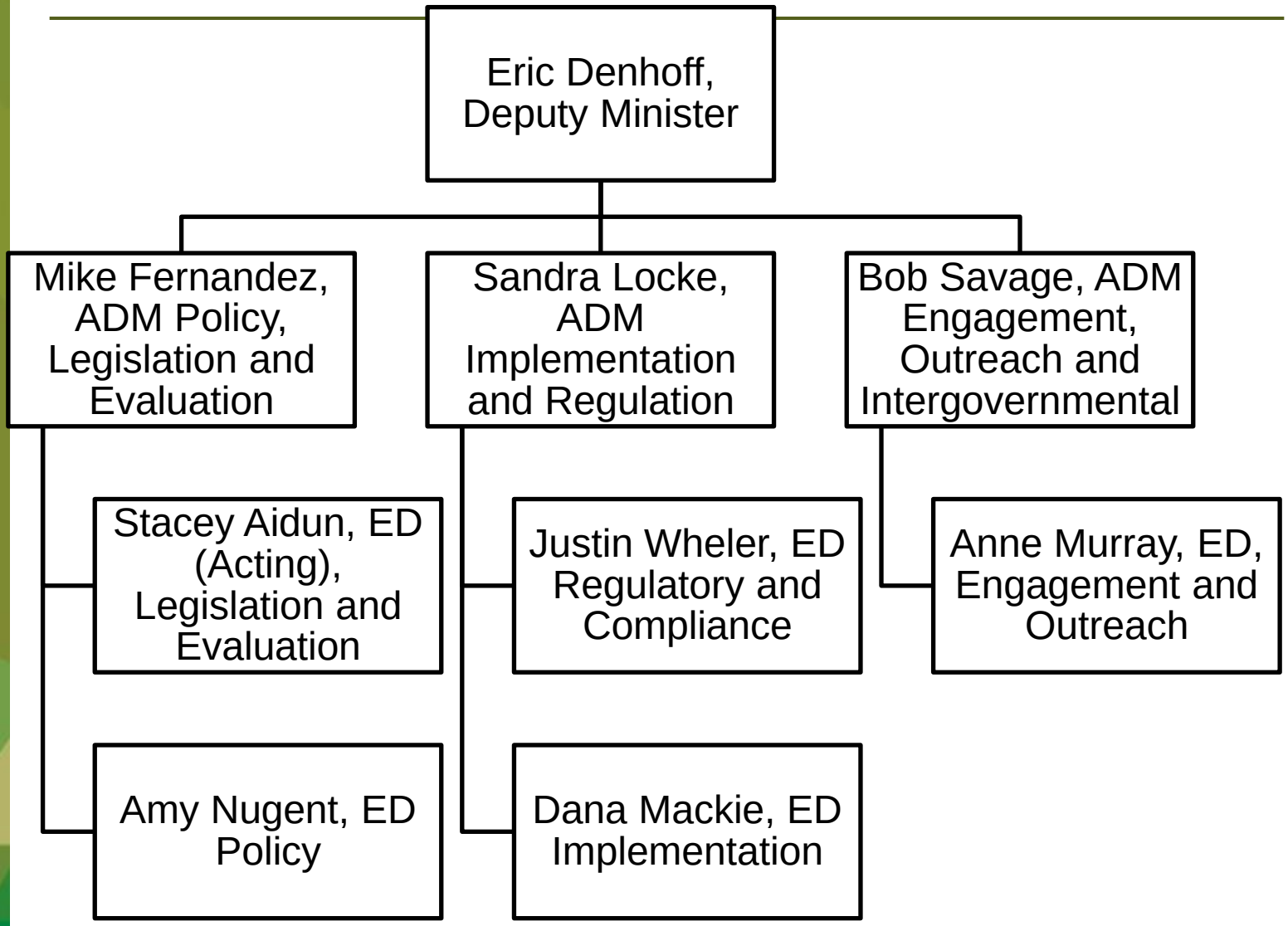
Agenda

Agenda Item	Time
Introduction / Session Overview / Context	8:30 – 8:45
Questions	8:45 – 9:00
General CCIR Overview 2018 CCIR Overview • Compliance Reporting and Standard	9:00 – 9:30
2018 CCIR Overview • Quantification • Verification Standard • Opt-in	9:30 – 10:45
Break	10:45 – 10:55
Offset System Update / Overview	10:55 – 11:30
Specified Gas Reporting Regulation update	11:30 – 11:45
2018 Compliance Form Review	11:45 – 12:00
Closing remarks / Reminders	12:00 – 12:30

Overview

- Session / Webinar logistics
- Purpose of workshop
  - 2018 CCIR compliance and offset system update
- Upcoming stakeholder sessions
- Reminder comment period for quantification methodology chapters

ACCO Org Chart



Organization Offsets/SGRR/CCIR

Justin Wheler Executive Director Regulatory and Compliance

- **Rob Hamaliuk**
  Director, Emissions Inventory and Trading
  - **Offsets**
    - Amanda Bambrick
    - Amanda Stuparyk
    - Bryan Adkins
    - Lindsay Mclaren
    - Andre Buiza
  - **Reporting / Inventory,**
  - **Scott MacDougall**
    - Shahin Manji
    - Reanna Zhang
    - Yury Potapovich
- **Jacqueline Sichangwa, Office Administrator**
- **John Storey-Bishoff**
  Director, Climate Change Compliance
    - Ward Gegolick
    - Maggie Scott
    - Karla Alsop
    - Patrick Forseth
    - Yan Liu
    - Shan Pletcher
    - James Chen
    - Ana Miranda
    - Gustavo Hernandez
    - Prashant Reddy
- **Gabriel Tremblay, Manager Bio-energy**
    - Arifa Sultana

Context

Alberta

- Climate Leadership Plan
  - Carbon Pricing (Levy, CCIR)
  - Coal phase out and Renewable energy policy (REP, BPP)
  - Methane reductions
  - Climate Change Innovation Technology Framework (CCITF)
  - Emission Reduction Alberta (ERA), Energy Efficiency Agency (EEA)

National

- Pan-Canadian Framework (PCF)
  - On Clean Growth and Climate Change
- Canadian Council of Ministers of the Environment (CCME)
  - Inventories, Offset framework, Internationally traded mitigation outcomes.
- Low Carbon Economy Fund (LCEF)

Regulation Overview

Regulation Overview

Section	Key elements
Interpretation	Facility definition unchanged contact the department if you think your SGER facility boundary should not carry over. Total regulated emissions different than SGER total annual emissions.
Incorporation of Standards	Part 1 is binding of listed standards.
Opted-in facilities	Opt-in based on competitively impacted or emissions-intensive trade-exposed threshold and emissions over 50,000 tonnes SGER opt-in does not carry forward
Determination of output based allocation	For 2018 and 2019 includes established benchmarks, assigned benchmarks, transition allocation benchmarks and scope adjustment

Regulation Overview

Section	Key elements
Duty to not exceed	Net emissions less than or equal to output based allocations
Net emissions	Total regulated emissions less credit use and fund payment
Assignment of benchmarks/Application/Determination	Will be assigned for products of existing SGER facilities with no established benchmarks. New facilities with products that do not have established benchmarks may apply. Determined in accordance with the standard.
Review of assigned benchmarks	If inaccurate or product/process significantly changed.

Regulation Overview

Section	Key elements
Compliance Report	Must be verified and certified. Need to submit for 2nd and subsequent years of operation unless renewable generator.
Interim Compliance Reports	Based on year to date emissions and production. Usage of credits and fund payment to match ratio in most recent forecast. Verification not required.
Annual Forecasting Report	For 2018 was due Jan 15th, subsequently due Nov 30th. Ratio of fund to credit binding for interim and annual compliance reporting. Possible to update along with interim compliance reports.
Offsets	Reductions, sequestrations and geological sequestrations.

Regulation Overview

Section	Key elements
Emissions Performance Credits	Based on output based allocations exceeding total regulated emissions. More automatic than under the SGER.
Fund Credits	Fund price established through Ministerial Order.
Use Compliance Instruments	Expiry: 2014 or earlier by 2020 2015 or 2016 by 2021 2017 or subsequent 8 year For 2018 compliance, maximum use of offsets and EPCs 50 percent. 40 percent new or old 10 percent new (2017 or later).
Application for Exemption	Shutdown or unusual operations causing material reduction in emissions.

Regulation Overview

Section	Key elements
Powers on Reviewing Applications	Ability to collect additional information, require verification etc.
Additional Metering	Can require additional measurement, metering or monitoring.
Third Party Verifiers	Defines qualifications for third party verifiers.
Request for Confidentiality	Written request can accompany compliance reports, interim compliance reports. Should speak to criteria under the regulation.
Access to applications and reports	Access to applications for assigned benchmarks, compliance reports and interim compliance reports not including information that is prescribed.

Regulation Overview

Section	Key elements
Publication	Ability to publish information in applications for assigned benchmarks, compliance reports and interim compliance reports.
Retention of Records	Generally 7 years after the record ceases to be relevant.
Forms	Ability to prescribe forms for the purposes of the Regulation.
Enforcement	Ability to audit by inspector or investigator Offences lists sections comprising offences Penalties define penalty amounts Due diligence

2018 Compliance Overview

2018 CCIR Compliance reporting

- This session focus is 2018 compliance reporting requirements under the CCIR.
- New compliance reporting
  - New Interim (quarterly) reporting for larger emitters >= 1Mt
  - March 31st 2019 compliance for all regulated facilities
  - New compliance reporting form
  - New forecasting form
  - New opt-in form
  - New assigned benchmark application form

2017 vs 2018 Regulation Application

- There are changes in the criteria for who is automatically captured by the regulation:
  - Still emissions based threshold for automatic application.
  - 2017 SGER based on total direct emissions of 100,000 tonnes or more in or after 2003 (includes biomass CO2)
  - 2018 CCIR based on total regulated emissions of 100,000 tonnes or more in or after 2003 (does not include biomass CO2).
- First compliance year
  - SGER year 4 of commercial operation.
  - CCIR year 2 of commercial operation.

2018 Regulation Information

- **Information related to the Carbon Competitiveness Incentive Regulation is available here**
  - **https://www.alberta.ca/carbon-competitiveness-incentive-regulation.aspx**

Standard for Completing GHG Compliance and Forecasting Reports

- Standard applies for 2018 annual and quarterly interim reporting, effective January 1, 2018
- Includes binding Part 1
  - Compliance and interim report certification requirements
  - Required contents of compliance report package
  - Annual forecasting requirements
  - Quantification methodology for compliance reporting
  - Global Warming Potential for specified gases
  - Requirements for verification

Standard for Completing GHG Compliance and Forecasting Reports

- **Technical guidance in Part 2**
  - **Opting-in and new entrants**
  - **Materiality threshold**
  - **Total regulated emissions and Output-based allocation**
  - **Compliance options**
  - **Production**
  - **Quantification Methodology and Document**
  - **Fuel and feedstock usage**
  - **Interim compliance reporting and annual forecasting**

Compliance Report Submission – covered in Part 1

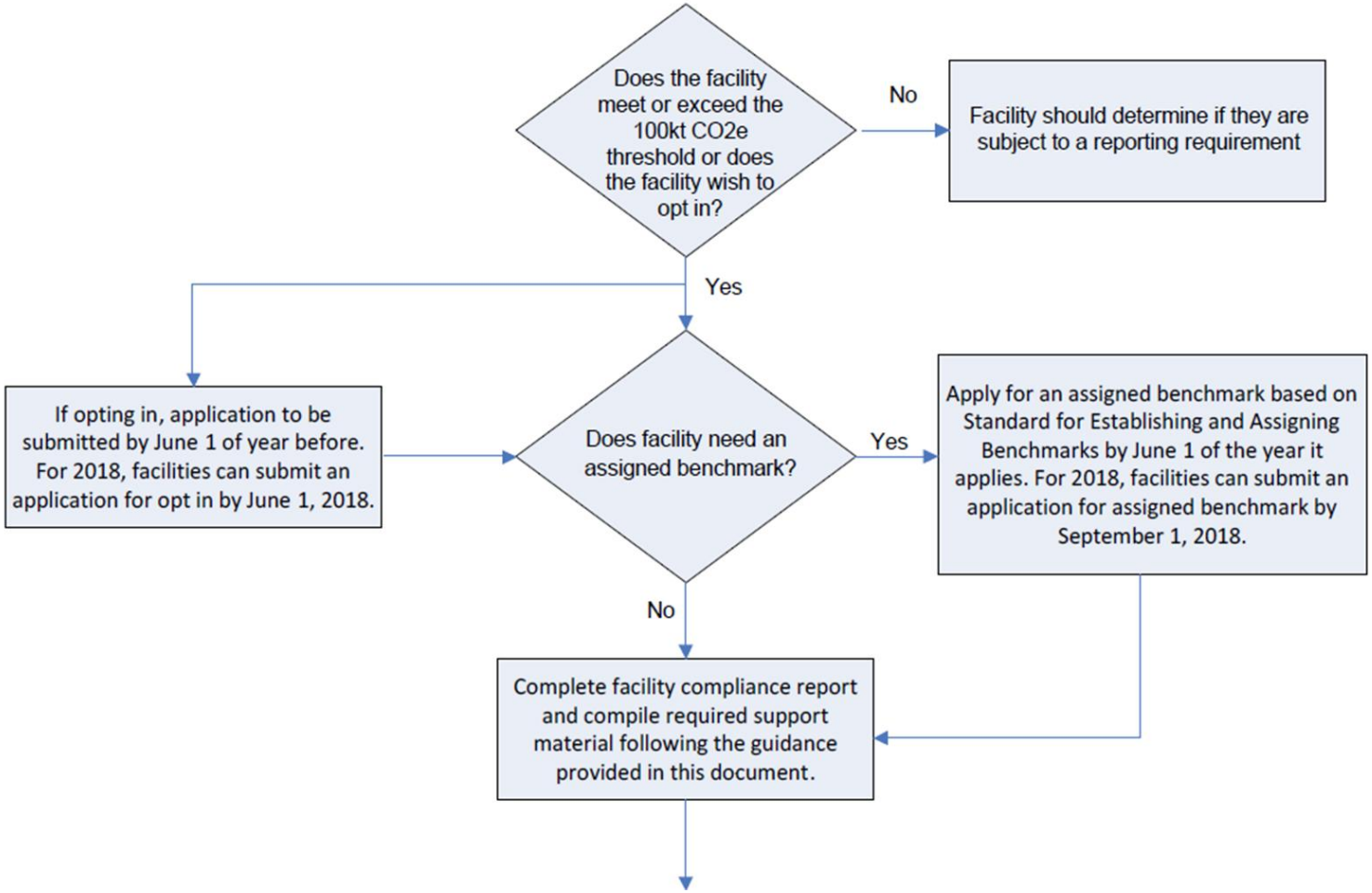
- Compliance and interim compliance report form
- Quantification Methodology Document
- Process flow diagram
- Signed Statement of Certification
- Third party verification report (annual report)
- Signed Statement of Verification (annual report)
- Signed Statement of Qualification (annual report)
- Signed Conflict-of-Interest (annual report)
- Confidentiality request (optional)

New Entrants

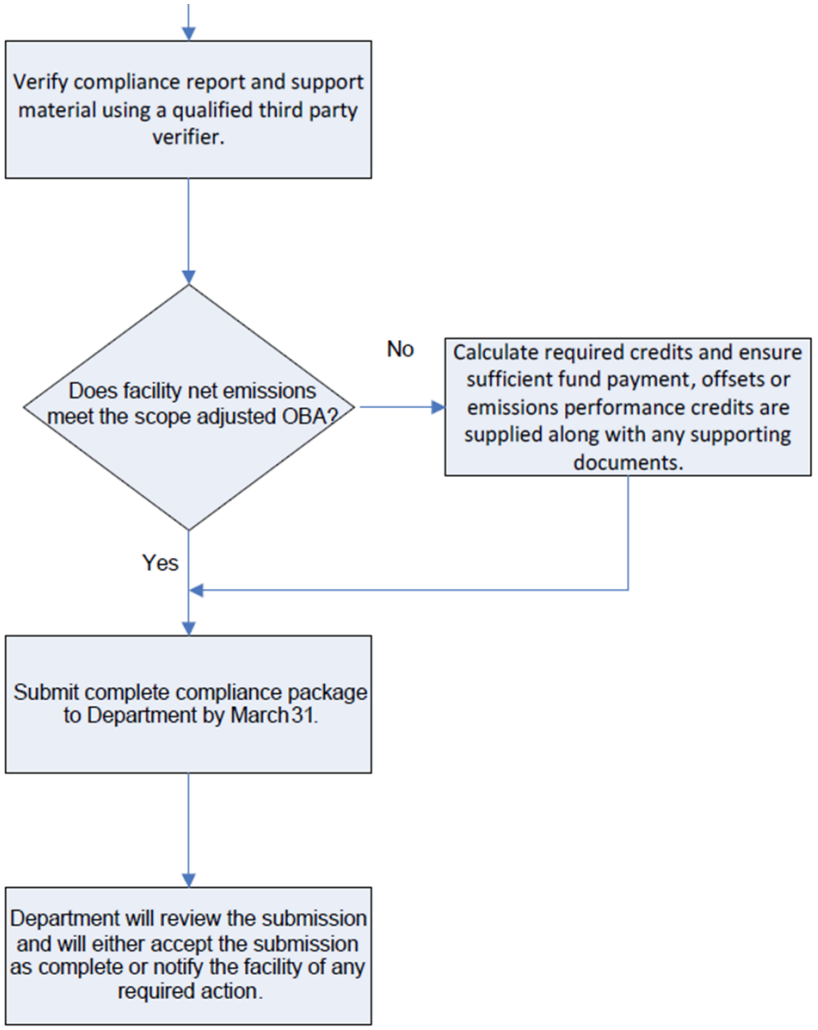
- There are two possible types of new entrants:
  - New or Existing facilities that exceed 100,000 tonnes threshold
  - Opted-in facilities

- Compliance:
  - New, existing, or opted-in facilities will be required to report compliance for year 2 of full-year commercial operation.

Compliance Submission Decision Tree



Compliance Submission Decision Tree (cont'd)



Materiality Threshold

- **Materiality threshold applies to total regulated emissions, production, and calculated OBA.**

Total Regulated Emissions	Materiality Threshold (Total Regulated Emissions, Production and Calculated Output-Based Allocation)
< 500 kt CO_2e	5 per cent
≥ 500 kt CO_2e	2 per cent

CCIR Compliance Requirements TRE and OBA

- **Total Regulated Emissions (TRE)**
  - all direct GHG emissions in tonnes CO2e, less biomass CO2 emissions, less CO2 brought on site which has been reported at another facility subject to the regulation, plus CO2 sent offsite including as a product, plus CO2 used as a feedstock for the production of urea
- **Output-base allocation (OBA)**
  - sum of the facility's products multiplied by the corresponding established or assigned benchmarks; the scope adjustment for imported quantities such as electricity, heat, and hydrogen; and the transition allocation benchmarks for products of the facility.

Compliance True-up Obligation

$$\textbf{Compliance} = TRE - \left[\left(\sum_{i=Product\ 1}^{Product\ n} B_i \times \boldsymbol{P}_i\right) - Scope\ Adj. + \left(\sum_{i=Product\ 1}^{Product\ n} BTA_{\ i} \times P_i\right)\right]$$

Where:

- TRE = Total Regulated Emissions
- B: for purpose of this presentation, B is used to represent either an established (BE) or an assigned (BA) benchmark
- P_i : Production of product i
- $Scope\ Adjustment = Electricity_{Import} \times BE_{\ Electricity} + Heat_{Import} \times BE_{\ Heat} + Hydrogen_{Import} \times BE_{Hydrogen}$
- BTA_i= Transition Allocation Benchmark per unit of product
  - BTA is based on phase in schedule and SGER 2016 floor. No phase in for electricity product.
  - BTA for phase in schedule calculated at 50% of OBA compliance based on historic emissions and production for 2018, and 25% for 2019, zero for all facilities from 2020 onwards

Note1: Scope Adjustment for the refining sector does not include hydrogen imports.

Note2 : any exported Electricity, Heat, or Hydrogen would be accounted for as a product in the Production term.

Net Emissions and True-up

- **At the end of period four, the person responsible for a facility must ensure the net emissions (NE) do not exceed the OBA for the facility by truing up**

NE = TRE – (EO + EPC + FC)

  - EO is the quantity of emission offsets in tonnes on a CO2e basis,
  - EPC is the quantity of emission performance credits in tonnes on a CO2e basis,
  - FC is the quantity of fund credits in tonnes on a CO2e basis, represented by the fund credits

Compliance Flexibility

- ACCO conducted focused engagement in July/August.
  - Policy goals: Maintain functional market, enable fiscal planning, and avoid recreating credit oversupply

Approach

- Revise the previous 30% to a base limit of 40% plus additional allowance for New credits starting at 10% in 2018
  - New credits defined as 2017 vintage and newer.
  - Credits = EPCs and Offsets

Policy Option	Credit Limit on	2018	2019	2020	2021	2022
Revised Approach – based on Engagement and Policy Phase-In	New and old	40%	40%	40%	40%	60%
	New	10%	15%	20%	20%	

- Expiry period for credit vintages where:
  - credits from 2014 and older expire after 2020 compliance
  - credits from 2015 expire after 2021 compliance
  - credits from 2016 expire after 2021 compliance
  - New credits from 2017 and newer expire after 8 years.

Quantification Tier Assignment

- A tiered approach is used to determine the minimum level of methodology suitable for each emission source

	Stationary Fuel Combustion	Biomass Combus-tion	IP	Flaring	Venting
Chemical	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0

- Mandatory (orange) or recommended (green)
- Digits:
  - (carbon dioxide, methane, nitrous oxide)
- For imported quantities:
  - (electricity, heat, hydrogen)

Quantification Tier Assignment

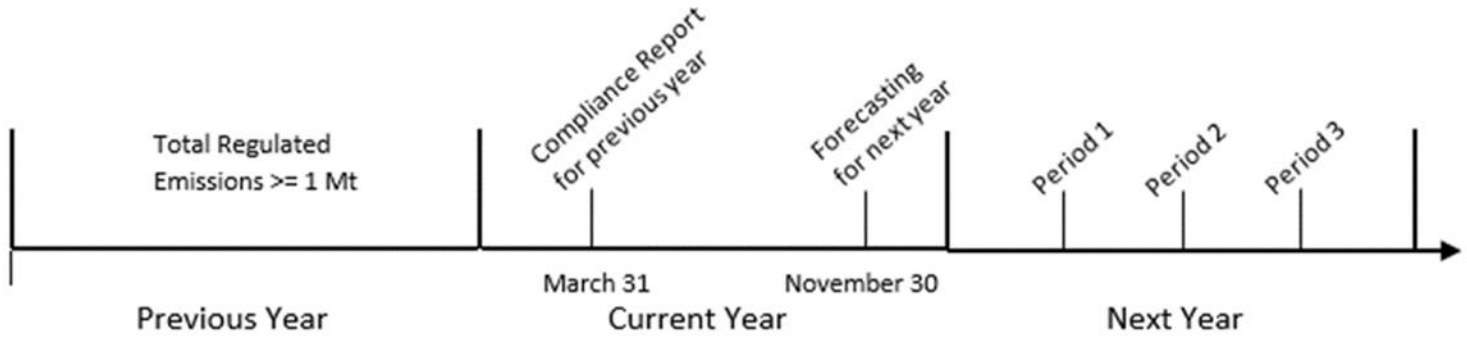
	Stationary Fuel Combustion	Biomass Combus-tion	IP	Flaring	Venting	
Chemical	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Coal Mines	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
District Heating	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Fertilizer	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Food Processing	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Forest Products	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Landfill	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Mineral	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Metals	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Gas Plant	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
In Situ	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Oil Sands	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Pipeline	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Refining	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Power Plant Biomass	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Power Plant - Coal	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Power Plant - Cogen	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Power Plant - Gas	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	
Upgrading	3, 2, 2	3, 2, 2	3, 0, 2	3, 2, 2	3, 2, 0	

Fuel and Feedstock

- Reporting of fossil fuels consumption is required to support estimates of emissions and feedstock quantities.
- Classification of types of fuel should distinguish between fuel and feedstock.
- Also used to confirm levy exemption received.
- The fuel and feedstock values reported as part of the compliance submission will be subject to verification review.

Forecasting and Interim Reporting

- **A forecasting facility is required to submit a forecast for the next year if the previous year total regulated emissions are more than or equal to one megatonne.**



- **Quarterly estimates of each period (from Jan 1st) compliance obligation and payment for the following year must be submitted by November 30. You can revise this estimate at each quarter.**

Forecasting and Interim Reporting – Reporting timeline

Submission	Determined By	Due Date
Annual Emissions and Production forecast (for next year)	Best estimation, certified	November 30 of current year*
Period 1 Report and Compliance True Up	Compliance with Q1 quarter actuals (March 31st)	May 15 of current compliance year
Period 2 Report and Compliance True Up	Compliance with Q1 Q2 quarters actuals (June 30th)	August 15 of current compliance year
Period 3 Report and Compliance True Up	Compliance with Q1 Q2 Q3 quarters actuals (September 30th)	November 15 of current compliance year
Annual Final Verified Compliance Report and Compliance True Up	Compliance with verified year-end results by quarter (December 31st)	March 31 of following compliance year

***Special consideration is for 2018 only. Forecasts for 2018 must be submitted by January 15, 2018.**

Forecasting 2018

- January 15 forecasting submissions have been received.
- Reminder to ensure certification of forecasts and to review entries prior to submission.
- Included updates to 2017 forecasting received in November 2017.
- Shift towards credit usage for 2017 in November to January forecasts.
- Updates to the 2018 forecast can be made along with interim compliance filing May 15, 2018.

Forecasting and Interim Reporting

- Quarterly interim reports are required which cover the period from January 1st to the end of each reporting period.
- Incremental compliance reconciliation is required with each interim report which includes incremental true-up from the previous payment or credit usage.
- The ratio of credit usage to fund usage in the interim report must be consistent with the latest forecast
- Annual reports for forecasting facilities are required to include finalized reporting for each period. (i.e. report includes each reporting period when submitting for reporting period four)

Forecasting and Interim Reporting - Verification

- **Third-party verification for the entire year including all reporting periods to be provided with March 31st reporting.**
- **Third-party verification of quarterly reporting may be required through a supplemental information request.**

Compliance Reporting Key Dates

FORECASTING FACILITIES (TRE > 1,000,000 tonnes CO_2 eq)

- May 15, 2018
  - Interim compliance report for period 1 (Jan 1 to Mar 31, 2018)
- August 15, 2018
  - Interim compliance report for period 2 (Jan 1 to Jun 30,2018)
- November 15, 2018
  - Interim compliance report for period 3 (Jan 1 to Sep 30, 2018)

ALL CCIR FACILITIES (TRE > 100,000 tonnes CO_2 eq and Opted-In)

- September 1, 2018
  - Facilities that require assigned benchmarks for 2018 must submit an application.
- March 31, 2019
  - Compliance report for period 4 (Jan 1 to Dec 31, 2018)

Compliance/Benchmark Application Form will be available on CCIR website:
https://www.alberta.ca/carbon-competitiveness-incentive-regulation.aspx

Break

Quantification Methodologies

- ACCO developing standardized quantification methodologies to be used under CCIR and SGRR
- Ensure consistency in quantification methodologies used for regulated facilities as we transition to common benchmarks.
- Intend to be aligned with AER reporting and quantification methodologies on methane related rules as they are developed

Structure of Methodology Documents

- Quantification methodologies are tiered (Tier 1, 2, 3 or 4) by source category.
- Stringency increases from tiers 1 to 4.
- Tier requirements are specified in Standard for Completing Greenhouse Gas Compliance and Forecasting Reports.
- For methods that are not prescribed a tier assignment, facilities may select the methodology that best represents their operations.

CCIR Mandatory Requirements

- First set of mandatory chapters anticipated to cover the majority of emissions generated by regulated facilities.
- Categories that will be mandatory for 2018:
  - Chapter 1 Stationary Fuel Combustion
  - Chapter 8 Industrial Process
  - Chapter 12 Imports
  - Chapter 13 Production
  - Chapter 17 Measuring, Sampling, Analysis and Data Management
  - Appendix C General Calculation Instructions
- Drafts posted for comment in December 2018.
- Comments received from stakeholders will be reviewed and incorporated into final documents.

CCIR Mandatory Requirements

- Chapters on venting, flaring, fugitive, waste and wastewater, and formation CO_2 are being developed and will be posted as draft.
- Refinements and additional chapters including HFCs/PFCs, CO_2 import and exports, on-site transportation (OST), and biomass decomposition are anticipated in Fall 2018 for 2019 use.

CCIR Mandatory Requirements

- Intend to phase in other mandatory chapters for 2019 and subsequent years.
- Will engage on 2019 requirements fall of 2018.
- Ongoing process to evaluate and update quantification methodologies.
- Will also be evaluating need to introduce additional metering or measurement in an orderly manner by site.

Quantification Methodology Chapters

- **Chapter 1: Stationary Fuel Combustion**
- Chapter 2: Flaring
- Chapter 3: Fugitives
- Chapter 4: Venting
- Chapter 5: On-Site Transportation
- Chapter 6: Waste and Wastewater
- Chapter 7: Biomass Combustion and Decomposition
- **Chapter 8: Industrial Processes**
- Chapter 9: HFCs, PFCs, SF6s
- Chapter 10: Formation CO2
- Chapter 11: Injected, Send Off, Received On CO2
- **Chapter 12: Imports**
- **Chapter 13: Production**
- Chapter 17: Measuring, Sampling, Analysis and Data Management
- Chapter 20: Tier Specification
- Chapter 14, 15, 16, 18, 19 currently placeholders if additional categories needed.

Key Points:
Chapter 1 Stationary Fuel Combustion (SFC)

- All regulated facilities are required to apply minimum of tier 3 methodology for CO_2 emissions and tier 2 methodology for CH_4 and N_2O emissions from SFC.
- Fuel carbon content and flow measurements are required in the methodologies and frequencies are prescribed in Chapter 17.
- Frequency of measurements and analyses is based on the type of fuel combusted (Table 17.3).
- Emission factors to be applied for CH_4 and N_2O based on equipment specific, supplier provided, default (AP-42), or site specific as approved by Director.

Key Points:
Chapter 8 Industrial Process Emissions

- IP emissions are included in the direct emissions (DE) and total regulated emissions (TRE) calculations.
- Different tiers are not specified for all emission scenarios. Facilities are required to select the methodology that best fit their process operations.
- CO2 consumed in urea production included in TRE through not emitted.
- Methodologies to determine feedstock quantities and composition is consistent with methodologies used for fuel (Chapter 17).

Key Points:
Chapter 12 Imports

- Imports include useful thermal energy, electricity, and hydrogen.
- Imports is to be based on third party invoiced quantities.
- If third party records are not available, imports can be quantified using same methods as production (Chapter 13).

Key Points:
Chapter 13 Production

- Chapter only includes products that have established benchmarks. Assigned benchmarks are addressed in the Standard for Assigning and Establishing Benchmarks.
- Chapter will be updated from time to time to include new products and production quantification methodologies.
- Production quantities are typically based on facility's production accounting system that are tied to third party and sales records.
- Refining is based on Alberta Complexity Weighted Barrel (AB-CWB), adapted from Solomon Associates' Canadian CWB.

Deviation Requests

- Where mandatory elements cannot be met, facilities may request a deviation.
- Submit request to the Director indicating reasons for deviation (i.e. Facility currently does not have the prescribed metering).
- Intention is to allow facilities time to address methodology requirements.
- Request for deviations are subject to review and approval of the Director.
- No specific deadline; however facility should submit request prior to compliance reporting.
  - Consideration being given to specific circumstance of first period interim reporting.

Standard for Verification Part 1

For 2018 facility compliance verifications and emission offset project verifications from Jan 1, 2018

- **Includes binding part 1**
  - **Lists requirements for Designated Signing Authority and Peer Reviewer including:**
    - Training in ISO 14064-3 and successful completion
    - 4 years verification experience
    - Technical knowledge of the quantification methods for the sector
  - **Materiality of 2% for offset projects generating 500,000 tonnes or more emission offsets per vintage year**

Standard for Verification Part 1 continued…

- **Lists requirements for:**
  - Conflict of Interest, contact Director if answers are ‘True’
  - records retention, 7 years after records are created
  - site visit, unless authorized in writing by the Director
  - Limit of 5 or more verifications, contact Director (8c & d)
  - Preparation, review and content of Statement of Verification (SoV) and Verification Report
- **Termination of re-verification (formerly Gov’t audit) for:**
  - **Access to site**
  - **Required information**

Standard for Verification

- **Guidance in part 2:**
  - **Describes the assertion and typical verification flow,**
  - **Detailed list of:**
    - Verification team roles
    - Verification plan
  - **Modifications to Statement of Verification**
    - Positive Opinion
    - Qualified Opinion
    - Adverse Opinion

Verification Report Template

- **Currently 2 Verification Report Template Versions**
  - **For emission offset project reports**
  - **For SGER facility reports**
  - **Coming Soon - A CCIR version for facility reports**

- **Differences include:**
  - **For Emission Offset Projects (and later CCIR)**
    - 3 Verification Opinions
  - **For SGER Reports**
    - 6 Verification Opinions – no change

2018 Opt-in Application Form Review

https://www.alberta.ca/assets/documents/CCI-optin-application-form.xls

Opt-in Application

- Facilities wishing to opt-in must apply using procedures described in the Standard for Establishing and Assigning Benchmarks
  - Demonstrate that they either:
    - Produce a product on the list of NAPCS codes, or
    - Are from a sector on the list of NAICS codes and emit or expect to emit in their second year of commercial operation over 50,000 tonnes
- Facilities that don't fall under these categories may still apply to opt-in if they believe they meet the criteria for opting in under the CCIR
  - In this case facilities must provide evidence to back up their application
- All facilities applying to opt-in must submit information on benefits they are receiving from Government of Alberta departments or agencies

Opt-In Application Process

- Information requested in the opt-in application:
  - Facility information
  - First year of facility operation
  - Year the facility would like to opt-in
  - Year of data that the facility will provide
  - NAICS code for facility
  - Production data, including NAPCS codes for products
  - Emissions data by category
  - Supporting information to demonstrate facility is EITE and/or produces products that are competitively impacted, in some cases
  - Fuel and feedstock data
  - Whether facility is a renewable electricity facility
  - Information on any benefits being received from government
  - Statement of Certification

Opt-In Application Key Dates

- February 15, 2018
  - Facilities that opted-in for 2017 under SGER and are able to opt-in for 2018 can maintain their exemption certificate if they opt-in by this date.
- June 1, 2018
  - Facilities that would like to opt-in for 2018 or 2019 must submit an opt-in application.
- September 1, 2018
  - Facilities that require assigned benchmarks for 2018 must submit an application.

Sites which have their applications accepted are eligible for exemption from the carbon levy and rebate of levy paid for 2018.

Opt-in application form available on CCIR website:

https://www.alberta.ca/carbon-competitiveness-incentive-regulation.aspx

Break

Offset System Update / Overview

Standard for Greenhouse Gas Emission Offset Project Developers

- **The standard has been published and came into effect on January 1, 2018.**
  - **New and existing projects required to follow the requirements on January 1, 2018**
  - **New Project Plan Form and Project Report Form**
  - **New statutory declaration**
  - **GHG Assertion is included in the project report**
  - **Offset project start date**
  - **Protocol deviations**
  - **Stacking protocols within one project**
  - **Aggregated project planning**

Standard for GHG Emission Offset Project Developers

- **Aggregated projects**
  - **Must include the Aggregated Project Planning Sheet with the project plan listing all subprojects**
  - **Conservation cropping project must submit a Master Planning Sheet with the project plan listing all subprojects**
  - **Projects must submit a Aggregated Project Reporting Sheet**
    - If a subproject is not listed in the planning (or master planning) sheet and is listed in the reporting sheet it will not be allowed to generate emission offsets
  - **Project planning and reporting sheets will not be posted publicly to the registry**

Standard for GHG Emission Offset Project Developers

- **Adding Subprojects**
  - **Mechanism to add subprojects is to submit an updated Aggregated Project Planning Sheet to the Registry**
    - This will be used to ensure transparent start dates for each subproject
  - **If a subproject is added part way through the offset crediting period it will have the same end date as the rest of the project**
    - The start date for the subproject added part way through is the date the updated planning sheet is submitted to the Registry
    - The subproject crediting start date cannot be before the date it is submitted to the registry

Additionality Policy Review

- Additionality is a key piece of ensuring offsets represent actions that are beyond business as usual.
- A review of Alberta's approach was initiated in 2017
  - to increase transparency and add more standardized, flexible approach;
  - and as a natural evolution of a maturing system.
- The review represents a significant offset program development and addresses system needs to move beyond simplistic definition of additionality.
- The review included technical input from stakeholders.
- The expert consultant report has been received along with recommendations.
- The revised draft approach will be posted for 30-day public comment period this Friday, with comments being accepted up until February 27, 2018.

Additionality Policy Review

Draft for 30-day comment includes:

- ***Regulatory Surplus Review and Ongoing Legal Scan***
  - ***Conducted on an ongoing basis, by ACCO, with support from stakeholders***
  - ***Includes regulatory instruments and fully priced emissions***
  - ***This is conducted per a standardized Legal Scan process in conjunction with the decision tree in the Technical Guidance***
- ***Regular Existing Offset Protocol Review***
  - ***Uses the existing penetration rate test, but adds flexibility by:***
    - *Ability to adjust geographic scope and to apply a complementary barriers analysis when appropriate*
  - ***Regular review is conducted by ACCO as per the risk-based approach, with support from stakeholders***

Additionality Policy Review

Draft for 30-day comment period includes (cont'd):

- ***New Offset Protocol Development***
  - ***Combines regulatory surplus tests with penetration rate assessment sections.***
  - ***Generally the responsibility of a protocol developer, but may also be initiated by ACCO.***
  - ***Technical Guidance to be used in conjunction Guidance for Protocol Developers.***

Additionality Policy Review

Draft for 30-day Comment period includes (cont'd):

Project Crediting Period Changes

- ***Introduces a classification system applied at protocol level***
  - *Class A: Conventional Projects*
    - *8 yr initial crediting period*
    - *Potential for 5 yr extensions based on the ongoing additionality assessment of the protocol*
  - *Class B: Capital Intensive*
    - *10 yr initial crediting period*
    - *no extensions*
  - *Class C: Forests, forestry and other long-term sequestration*
    - *Crediting period indicated in protocol*
- ***Existing projects are treated as Class A***

Grid Displacement Factor Review

- **Current Grid displacement factor used for:**
  - **Generation of electricity supplied to grid (0.59 tonnes CO_2e/MWh, e.g. wind, biomass)**
  - **On-site generation displacing grid use (0.64 tonnes CO_2e/MWh, e.g. distributed solar)**
  - **Reduced use of grid electricity (0.64 tonnes CO_2e/MWh, e.g. Energy Efficiency)**
- **Reviewed every 5 years**
  - **Last updated 2013**
- **Approach**
  - **Internal analysis and preparation of draft**
  - **Technical expert working group**
  - **Stakeholder review/public comment period (30 days)**
  - **Consideration of comments in analysis and finalization of grid factor for use.**

Alberta Offset System – 2018 items

- Technical Guidance for Protocol Development and Revision
- Alignment with the levy
- Protocol development and revision
  - Agricultural Nitrous Oxide Emission Reduction protocol review – *underway*
  - Enhanced Oil Recovery protocol review - *underway*
  - Forest carbon review – *to be started*
  - Solution Gas Conservation protocol review – *to be started*
- Continue analysis of emissions trading system
- Close work with Feds and other jurisdictions on PCF and CCME offset project team working groups

Specified Gas Reporting Regulation & Quantification Methodology Updates

Update on SGRR and Quantification Methodologies

- Manager, Emissions Inventory & Reporting – Scott MacDougall
  - Team: Shahin Manji, Reanna Zhang, Yury Potopovich

- The updated 2017 SGRR Standard was posted for stakeholder input in December, with these key updates:
  - Emission threshold for reporting is 10 000 t/y,
  - Definition of direct and reported emissions,
  - Additional Specified Gases Global Warming Potentials (GWPs),
  - References for quantification methodologies.
- The draft 2018 SGRR Standard will be posted for stakeholder input in mid 2018.
- Draft quantification methodologies that will be mandatory for the 2018 reporting year were posted for stakeholder input in December.
  - Additional chapters that are not mandatory for the 2018 reporting year will be posted by Fall 2018.

2018 Compliance Form Review

Key Differences

- New wasted Hydrogen category under GHG Intensive Inputs & Outputs.
- New field to report CO_2 used in manufacturing of Urea
- Classification of types of fuel should distinguish between fuel and feedstock
- Facilities submitting Offset Credits or Emission Performance Credits for true up are required to report them grouped by vintage year in 2 categories:
  - Vintage year before 2017
  - Vintage year 2017 and later
- SoQ will now include information of the Lead Verifier and the Peer Reviewer including their ISO 14064 Part 3 training

Differences

- The following greenhouse gases have been added to Schedule 1

Hydrofluorocarbon (HFC)	**GWP**
HFC-152 (CH_2FCH_2F)	53
HFC-161 (CH_3CH_2F)	12
HFC-236cb ($CH_2FCF_2CF_3$)	1340
HFC-236ea (CHF_2CHFCF_3)	1370
HFC-245fa ($CHF_2CH_2CF_3$)	1030
HFC-365mfc ($CH_3CF_2CH_2CF_3$)	794

Perfluorocarbon (PFC)	**GWP**
Perfluorodecalin $C_{10}F_{18}$	7500
Perfluorocyclopropane c-C_3F_6	17340

Nitrogen Trifluoride (NF_3)	**GWP**
Nitrogen Trifluoride (NF_3)	17200

- HFCs, PFCs, SF6 are no longer separated between Industrial Process and Industrial product use.

Questions