Alberta's

Proposed Technology Innovation and Emissions Reduction System

Discussion Document

JULY 2019

Alberta

Environment and Parks, Government of Alberta

July 9, 2019

Alberta's Proposed Technology Innovation and Emissions Reduction System: Discussion Document

ISBN 978-1-4601-4529-6

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1. Overview and Context

The Government of Alberta is proposing to replace the Carbon Competitiveness Incentive Regulation (CCIR) with a Technology Innovation and Emissions Reduction (TIER) system for Alberta's large industrial emitters, with a target effective date of Jan. 1, 2020. TIER is a realistic plan for reducing emissions without overregulating and slowing the economy. It proposes that:

- Existing facilities emitting more than 100,000 tonnes of carbon dioxide equivalent (CO_2e) per year, other than electricity generators, will be required to comply with facility specific product benchmarks, equal to 90 per cent of their average 2016 to 2018 emissions intensity. The reduction requirement will increase by one per cent per year after the first compliance year.
    - That is, facilities will be subject to a reduction requirement of 10 per cent in 2020, 11 per cent in 2021, 12 per cent in 2022, and so on.
- Electricity generators emitting more than 100,000 tonnes of CO_2e per year will be required to comply with a "good-as-best-gas" benchmark set at 0.37 tonnes CO_2e per megawatt-hour (MWh).
- Regulated facilities can meet the benchmarks by:
    - Reducing emissions intensity
    - Using credits from other facilities that have exceeded their reduction requirements
    - Using Alberta emission offsets
    - Paying into the TIER Fund

A TIER Fund will also be established to invest in the implementation and development of innovative technology that will reduce greenhouse gas emissions over time.

- The first $100 million in annual revenue and 50 per cent of the remaining revenue paid into the fund will be used for emissions reduction technologies, such as new and improved technologies for oil sands extraction, research and investment in carbon capture, utilization and storage, or other areas of opportunity for industrial emissions reductions.

The Government of Alberta is also considering solutions under the TIER system to protect facilities (such as smaller conventional oil and gas facilities) emitting less than 100,000 tonnes CO_2e per year from the federal fuel charge.

2. Purpose of this Document

The purpose of this discussion document is to frame an informed, solutions-oriented discussion around the options for development, transition and implementation of the TIER system. This discussion document outlines:

- Principles to guide the development and implementation of the TIER system
- Principles to guide the engagement process
- Engagement approach
- Engagement scope

3. Principles of the TIER System

Increased Competitiveness

Reducing economic costs will increase industry competitiveness and encourage emissions reductions.

Encourage Innovation

A strong regulatory incentive and investing revenues from compliance payments will stimulate innovation and the development of emissions-reducing technologies.

Continuous Improvement

Implementing an annual tightening rate of one per cent on the emissions intensity benchmarks will encourage facilities to become more efficient.

4. Principles of Engagement

Transparent

Stakeholders are advised of the engagement and associated scope of engagement sessions. This technical discussion document and materials from engagement sessions will be posted publicly on the Government of Alberta website.

Solutions-focused

Stakeholders are empowered to bring forward solutions and recommendations that align with the principles and intent of the TIER system as outlined by the Government of Alberta.

Meaningful

Stakeholder input is heard and considered in the development and analysis of policy options.

5. Engagement Approach

The stakeholder engagement process will take place in the following stages:

- Minister-led roundtable discussions with senior industry representatives.
- A webinar where industry stakeholders will be presented with a high-level outline of the proposed TIER system and key policy considerations for which feedback is sought. Invitees will include regulated facilities, industry associations, and emission offset project developers. Stakeholders will have an opportunity to ask questions and engage in discussion.
- In-person workshop sessions with industry stakeholders in Calgary and Edmonton. Invitees will include regulated facilities and industry associations. Stakeholders will have an opportunity to ask questions and engage in discussion.

Stakeholders, individual Albertans and other interested parties also have the opportunity to provide line-by-line comments on the proposed decisions in this discussion document using the TIER Stakeholder Feedback Form. **Feedback must be submitted by Aug. 2, 2019**.

The engagement process will gather the input required to inform the development of the TIER system, including understanding the implications of various policy options on emissions reductions and industry competitiveness. The engagement process will ensure that stakeholders have the opportunity to provide input that is heard and considered by government.

6. Scope

The focus of the engagement is on development of the TIER system. The following items are not directly in scope for the purposes of the TIER engagement process:

- Carbon Levy
- Oil Sands Emissions Limit (OSEL)
- Methane Regulations
- Renewable Electricity Program (REP)
- Bio-Energy Producer Program
- Federal policies (e.g. the Clean Fuel Standard, Bill C-69)
- Federal Fuel Charge
- Emissions offset protocols
- 90-day review of Alberta's Electricity Market Framework
- Off-coal agreements

Notwithstanding Section 6, the remainder of this document outlines the in-scope items that the Government of Alberta is seeking feedback on.

7. Regulatory Coverage

7.1 Emissions Threshold

- CCIR Treatment: The CCIR automatically applies to any facility that has total regulated annual emissions of 100,000 tonnes of CO_2e or more in 2003 or a subsequent year.
- TIER System: It is proposed that the TIER system apply to any facility that has total regulated annual emissions of 100,000 tonnes of CO_2e or more in 2016 or a subsequent year.

7.2 Opt-in

- CCIR Treatment: A facility is eligible to opt-in to the CCIR if it competes directly against a facility that is covered by the regulation, or if the facility has greater than 50,000 tonnes CO_2e of annual emissions and belongs to a high emissions-intensive, trade-exposed (EITE) sector, (per Figure 1):

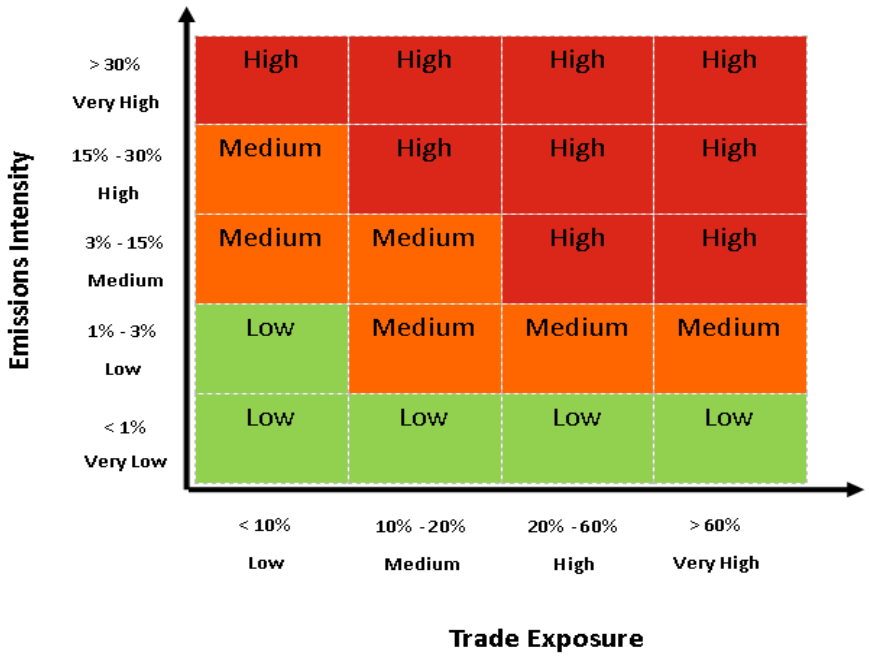

Figure 1: EITE Classification

- TIER System: Under the TIER system, it is proposed that a facility may opt-in to the regulation if it competes directly against a facility that is covered by the regulation, or if the facility has greater than 10,000 tonnes CO_2e of annual emissions and belongs to a high EITE sector. Eligible facilities that opted-in to the CCIR would be automatically opted-in to TIER to facilitate exemption from the federal fuel charge, but may opt-out if desired.

The Government of Alberta is seeking input on whether renewable electricity should be eligible to opt-in to the TIER regulation.

7.3 Opt-out

- CCIR Treatment: If an opted-in facility does not want to remain regulated under the CCIR, the facility may apply to opt-out of the Regulation. Under CCIR, these facilities must demonstrate that their emissions coverage is equivalent under the carbon levy (which has now been repealed), or alternative regulatory system.

- TIER System: The Government of Alberta is seeking input on provisions to allow opted-in facilities and regulated facilities with emissions below a certain threshold for a period of time to opt-out of the TIER regulation without being required to demonstrate equivalent coverage under an alternative regulatory system.

7.4 First Year of Compliance for New Facilities

- CCIR Treatment: New facilities that exceed the 100,000 tonnes CO_2e threshold receive up to three years without a compliance obligation under the CCIR. This allows time for most facilities to stabilize operations prior to facing compliance. Facilities can request to be compared to the benchmark sooner (generally for facilities that outperform the benchmark).

- TIER System: The Government of Alberta is seeking input on an appropriate period for new facilities (other than power generators) to be exempt from compliance under the TIER system. For power generators, it is proposed that facilities be subject to the “good-as-best-gas” benchmark in the first calendar year that the emissions threshold is breached. This is because start-up times in this sector are typically short, and temporarily exempting some facilities from carbon pricing could have adverse market impacts.

7.5 Review Period

- CCIR Treatment: The CCIR required regulatory reviews to be completed by January 1, 2021, followed by January 1, 2023, and every five years after 2023.
- TIER System: It is proposed that review periods be implemented to ensure that the regulation continues to address the policy principles of TIER and considers climate policy changes in other jurisdictions. It is proposed an initial regulatory review be completed by January 1, 2023, and every fifth year after 2023.

8. Benchmarking

8.1 Reference Years

- CCIR Treatment: Three years of data (2013, 2014, and 2015) were used for benchmark development under the CCIR, except in a few cases where use of these years was not practical or not representative of normal operations.
- TIER System: It is proposed that facility-specific product benchmarks be based on 2016 to 2018 average emissions intensity. Consideration will be given for circumstances where emissions intensity in those years is not representative of normal operations.

8.2 "Good-as-best-gas" Benchmark

- CCIR Treatment: Under the current regulation, electricity generators are subject to a "good-as-best-gas" benchmark, set at 0.37 tonnes CO_2e per MWh, which is equal to the performance of the best combined-cycle natural gas powered electricity generator in Alberta.
- TIER System: It is proposed that a standard of 0.37 tonnes CO_2e per MWh apply under the TIER system.

8.3 Best-in-class Facility Treatment

- CCIR Treatment: Under the CCIR, best-in-class facilities that outperform established benchmarks are eligible to earn emissions performance credits.
- TIER System: The Government of Alberta is considering methods to reward best-in-class facilities under the TIER system. This could include retaining product benchmarks as an option to allow best-in-class facilities to earn emissions performance credits.

8.4 Benchmarks for New Facilities or Facilities that have Undergone Significant Expansion or Change

- CCIR Treatment: Under the CCIR, new facilities are subject to an established product benchmark (where available), or are assigned a benchmark following the standardized benchmarking approach. New facilities that outperform established benchmarks can earn emissions performance credits. Facilities that have undergone a significant expansion or change may be designated a different year of commercial operation.

- TIER System: In keeping with the policy principles of increasing competitiveness and encouraging innovation, the Government of Alberta is seeking input on how new facilities can be incentivized to invest in the best available technology under the TIER system. This could include product benchmarks, which would provide an emissions intensity target for new facilities. If facilities outperform those benchmarks, they could earn emissions performance credits immediately. The Government of Alberta is also seeking input on treatment of facilities that have undergone significant expansion or change.

8.5 Treatment of Multi-Product Facilities

- CCIR Treatment: Facilities that produce two or more products, other than electricity, heat, or hydrogen, are considered multi-product facilities. Under the CCIR, facilities generally receive individual benchmarks for each product that is produced at the facility. The benchmarks are calculated based on the emissions associated with the production of each individual product. In some instances, multiple products are combined into a single benchmark for simplicity.

- TIER System: Under the TIER system, it is proposed that individual facility-specific product benchmarks would be set for each product, or processing unit, at a multi-product facility. In some cases, the regulation could enable combining multiple products into a single benchmark for simplicity, where appropriate. Additionally, the Government of Alberta may not provide benchmarks for products that are not considered EITE (e.g. space heating).

8.6 Product Definitions for Refining, Upgrading and Natural Gas Processing

- CCIR Treatment: The CCIR applies the Alberta Complexity Weighted Barrel (AB-CWB) approach for refineries and upgraders as a method of combining the outputs from various unit operations into a single production metric. Similarly, a functional unit modular approach called the Alberta Gas Processing Index is applied for natural gas processing facilities. This allows for consistent reporting across each sector.

- TIER System: It is proposed that the modular-type approaches continue to be used under the TIER system to account for the varying complexity among facilities and to effectively benchmark these multiproduct facilities.

8.7 Tightening Rate

- CCIR Treatment: Under the CCIR, emissions intensity benchmarks are reduced by a linear rate of 1 per cent per year, beginning in 2020. The tightening rate is applicable to all regulated emissions except for industrial process emissions.

- TIER System: It is proposed that benchmarks be reduced by a linear rate of 1 per cent per year, beginning in 2021. For example, facility-specific product benchmark(s) would reduce from 90 per cent of reference period emissions intensity in 2020, to 89 per cent in 2021, 88 per cent in 2022, and so on. The Government of Alberta is seeking input on whether the tightening rate should apply to the “good-as-best-gas” benchmark for electricity.

9. Emissions Scope

9.1 Indirect Emissions

The Government of Alberta is seeking input on the treatment of indirect emissions from the import and export of heat, hydrogen, and electricity.

A system for treating indirect emissions is required to ensure the emissions pricing system does not favour one business model over another (such as integrated compared to merchant cogeneration) or discourage emissions reductions projects (such as building a cogeneration unit instead of using grid electricity).

A responsive indirect emissions treatment will not double-price emissions, nor will it lose coverage over some indirect emissions. It will encourage efficient use of indirect products and account for changes in production at a facility over time. The system will neither disincentivize cogeneration nor favour one business model over another.

9.2 Industrial Process Emissions

Industrial process emissions are direct emissions from an industrial process involving chemical reactions other than combustion, where the primary purpose is not energy production. Also included are the direct emissions from the unavoidable combustion of carbon black in the production of carbon black and of ethylene in the production of ethylene oxide. Industrial process emissions do not include emissions of specified gases from landfills, tailings ponds, or mine faces.

- CCIR Treatment: Industrial process emissions are regulated under the CCIR, but are included in the benchmarks at 100 per cent of sector production-weighted average emissions intensity for sector-based benchmarks, or 100 per cent of facility average emissions intensity for facility-based benchmarks. The 1 per cent annual benchmark tightening rate does not apply to industrial process emissions, except sectors using AB-CWB, recognizing that abatement opportunities for these emissions are limited.

- TIER System: The Government of Alberta is seeking feedback on industrial process emissions treatment under the TIER system.

9.3 Biomass Emissions

- CCIR Treatment: The CCIR does not include CO_2 emissions from biomass combustion, decomposition, or fermentation in the regulated emissions, or the emissions threshold; however, biomass methane (CH4) and nitrous oxide (N2O) emissions from combustion and decomposition are included in both the regulated emissions and the emissions threshold.
- TIER System: Under the TIER System, it is proposed that the treatment of biomass emissions remain the same as under CCIR:
    - Biomass CH_4 and N_2O emissions would be subject to the reduction requirement and included in the emissions threshold
    - Biomass CO_2 would be excluded from the reduction requirement and emissions threshold.

9.4 Formation CO_2 Emissions

Formation CO_2 emissions are direct emissions of CO_2 that are recovered or recoverable from raw gas in an underground reservoir.

- CCIR Treatment: Formation CO_2 emissions from gas plants are regulated under the CCIR, and are subject to a facility-specific benchmark set at 90 per cent of facility historical emissions intensity and are subject to tightening. CO_2 in an acid gas stream which is sent to a disposal well for permanent storage, in accordance with applicable Alberta Energy Regulator directives, is not included in a facility's total regulated emissions.
- TIER System: The Government of Alberta is seeking feedback on formation CO_2 emissions treatment under the TIER system.

9.5 Fugitive Emissions

- CCIR Treatment: Fugitive emissions were regulated under the CCIR and were generally included in benchmarks at the given stringency level (e.g. 80 per cent, 90 per cent, or 100 per cent of average emissions intensity); however, fugitive emissions from oil sands mine face and tailings ponds did not receive free emissions allocations.
- TIER System: The Government of Alberta is seeking stakeholder feedback on the treatment of these emissions under the TIER system.

10. Conventional Oil and Gas Facilities Below Emissions Threshold

The Government of Alberta is challenging the federal fuel charge in court. In the meantime, the Government of Alberta is seeking input to determine the best approach for protecting thousands of smaller conventional oil and gas facilities who emit less than 100,000 tonnes CO_2e per year from potential application of the Federal Fuel Charge on January 1, 2020.

The Government of Alberta is seeking input on potential opt-in solutions for conventional oil and gas facilities under the TIER system in 2020.

The government is seeking feedback on the following items, and how they may specifically apply to conventional oil and gas facilities below the emissions threshold:

- Scope of emissions coverage (stationary combustion, venting, flaring, fugitives, indirect emissions, etc.)
- Treatment of formation CO_2
- Treatment of methane from fugitive, flaring, and venting emissions
- Source of emissions and production data
- Type of benchmarking:
    - processing units based (modular) for natural gas and which modules
    - product based and what products
    - facility type based and which types
    - overall sector based
- Facility boundary definitions
- Verification requirements
- Data reporting, and input on how to facilitate streamlined reporting, for example, corporate roll ups (a single report for all small oil and gas facilities in a corporation)

11. Revenue Recycling

- CCIR Treatment: Funding from CCIR revenues is available to support industry in the implementation of innovation projects that reduce emissions. Funding supports oil sands innovation, innovation across sectors (including Emissions Reduction Alberta and the Climate Change Innovation and Technology Framework), industrial energy efficiency, bioenergy and green loan guarantees.

- TIER System: It is proposed that compliance payments be directed into a TIER Fund, which will be used for new and cleaner Alberta-based technologies that reduce carbon emissions.

    - The first $100 million in annual revenue and 50 per cent of remaining revenue paid into the fund will be used for emissions reduction technologies, such as new and improved technologies for oil sands extraction, research and investment in carbon capture utilization and storage, or other opportunity areas for industrial emissions reductions.

    - Government is seeking input on how to most effectively use future TIER Fund revenues in this respect.

12. Reporting and Compliance

12.1 Reporting Requirements

- CCIR Treatment: Regulated facilities must submit compliance reports annually, due on March 31 of the following compliance year. Facilities emitting greater than 1,000,000 tonnes CO_2e per year must submit compliance reports with true-up quarterly, and provide annual forecasting of emissions, production, and credit usage, with a final annual true-up due on March 31 of the following year.

- TIER System: It is proposed that all regulated facilities submit compliance reports annually, due on March 31 of the following compliance year. Facilities would no longer be required to submit quarterly compliance reports and true-up. Facilities emitting greater than 1,000,000 tonnes CO_2e per year would be required to submit non-binding annual forecasting reporting.

12.2 Verification Requirements

- CCIR/Specified Gas Emitters Regulation (SGER) Treatment: Under the previous SGER and CCIR, third party verification has been a requirement for compliance submissions such as annual compliance reports, offset project reports, and baseline/benchmark applications.
- TIER System: Under TIER, it is proposed that third party verification continues to be a requirement. The Government of Alberta is seeking input on professional designation, accreditation, and training requirements for verifiers.

12.3 Compliance Flexibility and Fund Price

Similar to CCIR, it is proposed that facilities can comply with requirements by reducing facility emissions intensity, using credits from other facilities that have exceeded their targets, using Alberta emission offsets, or paying into the TIER Fund.

12.3.1 Credit Expiry

It is proposed that credits created under SGER or CCIR will be eligible for use under TIER, and that the credit expiry remain the same as under CCIR:

- Credits from 2014 and earlier expire in 2020 (can be last used for 2020 compliance)
- Credits from 2015 expire in 2021 (can be last used for 2021 compliance)
- Credits from 2016 expire in 2021 (can be last used for 2021 compliance)
- New credits from 2017 and forward have an eight-year expiry (2017 vintage credits can be last used for the 2025 compliance period)

12.3.2 Credit Usage Limit

Currently, CCIR includes a limit to credit usage for compliance purposes to support effective revenue recycling. Government is seeking feedback on the implementation of a limit as part of the TIER approach.

12.3.3 TIER Fund Price

The Government of Alberta is seeking input on TIER Fund price.

13. Compliance Cost Containment

- CCIR Treatment: The existing Compliance Cost Containment Program is a temporary program that provides transitional support to regulated facilities experiencing economic challenges as a result of compliance costs under the CCIR. The cost containment program may provide compliance cost relief to EITE facilities in three ways (in order of priority): additional compliance flexibility, priority for industrial energy efficiency grant funding, and additional free allocations. Facilities may qualify for the cost containment program if one of two thresholds are met:
    - Net CCIR compliance costs are greater than 3 per cent of facility sales, compared to its estimated net compliance costs if the former SGER 2015 policy was applied in that same given year, or
    - Net CCIR compliance costs are greater than 10 per cent of facility profit, compared to its estimated net compliance costs if the former SGER 2015 policy was applied in that same given year.
- TIER System: Compliance Cost Containment Program design and application will be reviewed under the TIER system.
    - Keeping with the principles of increased competitiveness, encouraging innovation, and continuous improvement, the Government of Alberta is seeking input on the need for and design of relief mechanisms under the new system, as well as seeking feedback on the existing programs that serve this function.

Glossary

Alberta Complexity Weighted Barrel (AB-CWB): A standardized volumetric production unit of a refining facility (refining AB-CWB) or upgrading facility (upgrading AB-CWB) in Alberta, which is used to represent its specified gas emissions potential based on its configuration and processing complexity.

Alberta Gas Processing Index: A standardized emission potential of a natural gas processing facility, based on its configuration and processing complexity.

Biomass: Comprises the organic materials made from living organisms, such as crops, crop residue, trees, wood and animal residue that have stored sunlight in the form of chemical energy. Biomass can be used directly to produce biofuels or other products or it can be burned to create heat or electricity.

Carbon Competitiveness Incentive Regulation (CCIR): Came into effect in 2018. It requires facilities that emit 100,000 tonnes or more of greenhouse gases a year to meet emissions intensity benchmarks. The CCIR replaced the Specified Gas Emitters Regulation, which expired at the end of 2017.

Carbon pricing: Price on carbon emissions that provides a financial incentive for emitters to reduce their emissions. This provides emitters with flexibility to reduce emissions in a way that best suits their individual processes, abilities and circumstances.

Carbon dioxide equivalent (CO_2e): Measure used to compare the emissions from various greenhouse gases based upon their global warming potential (a measure of how much energy a greenhouse gas will absorb relative to carbon dioxide).

Cogeneration: The process of jointly producing electricity and heat.

Combustion emissions: Direct emissions resulting from the combustion of fuel for the purpose of energy production.

Compliance Cost Containment Program: A temporary program that provides transitional support to regulated facilities experiencing economic challenges as a result of compliance costs under the CCIR.

Emission offsets: Generated by projects that voluntarily reduce greenhouse gas emissions. Emissions offsets must be quantified using Alberta-approved quantification protocols. One tonne of CO_2e reduced is equal to one emission offset.

Emissions intensity: The quantity of specified gases released in the production of a product per unit of product, for example, tonnes of CO_2e per tonne of product.

Emissions-intensive and trade-exposed (EITE): Refers to industrial emitters with a substantial exposure to emissions costs and that compete at a provincial, national and/or global level and are therefore exposed and vulnerable to competitive market conditions.

Emissions intensiveness: In respect of a sector means the full carbon pricing costs of the sector divided by the gross value added for the sector.

Emissions performance credits: Credits issued for reductions in GHG emissions beyond the regulatory requirement. One tonne of CO_2e reduced beyond the requirement is equal to one emission performance credit.

Formation CO_2 Emissions: Direct emissions of CO_2 that are recovered or are recoverable from raw gas in an underground reservoir.

Federal Fuel Charge: A federal charge applied under the *Greenhouse Gas Pollution Pricing Act* to heating and transportation fuels such as diesel, gasoline, natural gas, and propane.

Fugitive emissions: Direct emissions resulting from unintentional releases and leaks of greenhouse gases to the atmosphere from the extraction, production, processing, transmission, storage, and use of hydrocarbons.

Good-as-best-gas benchmark: A level of greenhouse gas emissions per unit of production, equal to the emissions intensity of the cleanest natural gas-fired electricity generation system.

Greenhouse gas (GHG): An atmospheric gas that absorbs and emits heat into the atmosphere. The primary greenhouse gases in the atmosphere are carbon dioxide, methane, nitrous oxide, ozone and water vapour.

Indirect emissions: Emissions associated with imported or exported electricity, heat, or hydrogen.

Industrial process emissions: Direct emissions from an industrial process involving chemical or physical reactions other than combustion, and where the primary purpose of the industrial process is not energy production. Also included are the direct emissions from the unavoidable combustion of carbon black in the production of carbon black and of ethylene in the production of ethylene oxide. Industrial process emissions do not include emissions of specified gases from landfills, tailings ponds or mine faces.

Methane: The main component of natural gas, with the chemical formula of CH_4. Methane is an abundant fuel that can be found below ground. While methane is a useful fuel source, when released directly into the atmosphere it becomes a greenhouse gas.

Multi-product facilities: Facilities that produce two or more products, not including electricity, heat, or hydrogen.

Natural gas: Mixture of hydrocarbons. While mainly methane, other hydrocarbons include ethane, propane and butane. Water, oil, sulphur, carbon dioxide, nitrogen and other impurities may be contained in the gas when it is produced.

Product Benchmark: An emissions intensity target for the production of a product of a facility.

Refining: Process of converting conventional and synthetic crude oil into oil-based products and petrochemical feedstock.

Renewable electricity: Electricity that comes from resources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, sustainable biomass, and geothermal heat.

Specified Gas Emitters Regulation (SGER): Came into effect in 2007. It requires facilities that emit 100,000 tonnes or more of greenhouse gases a year to reduce their emissions intensity. The Specified Gas Emitters Regulation expired at the end of 2017 and was replaced by the CCIR.

Tightening rate: Rate by which the reduction requirement could tighten (becomes more stringent) per year.

Trade exposure: Means the ratio of A to B, where:

- “A” is the is the total value in dollars of all end products produced by the sector in Alberta that are exported from Alberta plus the total value in dollars of all end products produced by the sector that are imported into Alberta;
- “B” is the total value in dollars of all end products produced by the sector in Alberta plus the total value in dollars of all end products produced by the sector that are imported into Alberta.

Upgrading: Process of converting heavy oil or bitumen into synthetic crude oil so it can be handled by conventional light oil refineries. Upgrading often includes reducing viscosity so that it can be pumped through pipelines, separating out the heaviest hydrocarbons and reducing sulfur, nitrogen and metals as well as sediments and water.

Thank you for your feedback. Collecting stakeholder perspectives as the Government of Alberta designs TIER will make sure it meets the needs of Alberta's economy and environment.