

TIER Regulation

Fact Sheet

If information in this document conflicts with the Standard for Developing Benchmarks (the “Standard”), the Technology Innovation and Emissions Reduction Implementation Act (the “Act”) or the Technology Innovation and Emissions Reduction Regulation (the “Regulation”), then the Standard, Act and/or Regulation prevail over this document.

Overview

The Technology Innovation Emissions Reduction (TIER) regulation is at the core of emissions management in Alberta. TIER implements Alberta’s industrial carbon pricing and emissions trading system. TIER is an improved system to help industrial facilities find innovative ways to reduce emissions and invest in clean technology to stay competitive and save money.

Regulatory threshold

TIER applies to any facility that has emitted 100,000 tonnes or more of carbon dioxide equivalent (CO₂e) greenhouse gases (GHGs) in 2016, or any subsequent year.

Facility opt-in

A facility with fewer than 100,000 tonnes of carbon dioxide equivalent GHG emissions per year may be eligible to opt-in to the TIER system if it competes against a facility regulated under TIER, or has greater than 10,000 tonnes of annual emissions and is in an emissions-intensive, trade-exposed sector.

Multiple small conventional oil and gas facilities with a common person responsible can also enter into TIER by applying to be regulated as an aggregate facility.

Benefits of being regulated

The Government of Canada applied the federal carbon tax in Alberta on January 1, 2020, under the *Greenhouse Gas Pollution Pricing Act* (GGPPA). The tax applies to all fossil fuels used in Alberta, including those in the conventional oil and gas sector. Alberta has challenged the constitutionality of this legislation in court and is awaiting the ruling from the Supreme Court. The GGPPA includes provisions to exempt facilities subject to provincial policies that meet the federal benchmark criteria.

TIER meets federal requirements and protects regulated facilities from the full costs of complying with the GGPPA, while achieving emissions reductions using an approach that is cost-efficient and tailored to Alberta’s industries and priorities.

Benchmarking methodology

Emissions reduction obligations are determined according to a facility-specific benchmark approach, and high-performance benchmark approach. In most cases, a regulated facility is subject to the less stringent of the two approaches for that facility.

Exceptions

Facility-specific benchmarks are not applicable to facilities in the electricity sector, which is subject to a “good-as-best gas” benchmark. Where a facility produces a product that has not received a high-performance benchmark the facility-specific benchmark approach applies.

Facility-specific vs. high performance benchmarks

Under the facility-specific benchmark methodology, a facility is required to reduce emissions intensity by 10 per cent relative to the facility's historical production-weighted average emissions intensity.

High performance benchmarks are set to the average emissions intensity of the most emissions-efficient facilities (performers in the top 10 per cent) producing each benchmarked product over reference years. If there are fewer than ten facilities producing a product, the high-performance benchmark for a product is then set based on the emissions intensity of the best-performing facility.

Regulated emission sources

Regulated emission sources for aggregate facilities are different than for large emitters or opted-in facilities. Further information about emissions sources for aggregate facilities can be found in the regulation, applicable standards and the Conventional Oil and Gas TIER Fact Sheet.

For large emitter and opted-in facilities, regulated emissions under TIER include direct onsite emissions of greenhouse gases (see Schedule 1 of the TIER Regulation for a complete list of specified gases). Though not part of regulated emissions, indirect emissions are accounted for under the allowable emissions calculation.

Direct Emissions: Direct emissions are greenhouse gases released from sources located at the facility, expressed in tonnes CO₂e. It does not include biomass CO₂ emissions nor the emissions from federally levied fuel at a time when an exemption certificate had been issued.

Indirect Emissions: Indirect emissions are emissions associated with electricity, industrial heat, and hydrogen that are imported by a facility. The allowable emissions for each regulated facility is adjusted for these imports. For example, the allowable emissions of a facility importing electricity

will be adjusted to receive fewer allowable emissions.

Industrial Process (IP) Emissions: IP emissions are those emissions produced during chemical or physical reactions other than combustion for energy production. IP emissions are included in benchmarks at 100 per cent of facility-specific production weighted average emissions intensity for facility-specific benchmarks, or the average emissions intensity of the top 10 per cent performing facilities in a sector for the high performance benchmarks.

Biomass Emissions: Emissions of carbon dioxide from biomass combustion are excluded from net regulated emissions under TIER but will remain part of reporting requirements for GHG inventory purposes. Methane and nitrous oxide (N₂O) emissions from either biomass combustion, fermentation or decomposition are included in regulated emissions.

Co-generation

Facilities with co-generation are compared to the high performance benchmarks for heat and/or power at a facility. These facilities will benefit from the reduced emissions intensity associated with the combined production of heat and power.

Tightening rate

The stringency of facility-specific benchmarks will increase by 1 per cent annually beginning in 2021; so, a facility with a 90 per cent free emissions allocation (or a 10 per cent emissions intensity reduction requirement) in 2020 would receive 89 per cent free allocation in 2021, 88 per cent in 2022, and so on.

The tightening rate will not apply to IP emissions, emissions from electricity generation, high performance benchmarks or benchmarks for aggregate facilities. The high performance benchmarks will act as the tightening rate end point for the facility-specific benchmark.

Oil and gas facilities

Eligible conventional oil and gas facilities may apply to voluntarily enter to the TIER system effective January 1, 2020, with an emissions reduction obligation based on the facility-specific benchmark approach. The person responsible for multiple conventional oil and gas facilities may combine multiple individual conventional oil and gas facilities into a single aggregate facility under TIER to streamline the reporting and compliance process. Product-specific high performance benchmarks will be developed for the sector at a later date.

New facilities

TIER provides up to a three-year relief from compliance for new facilities to allow those facilities to stabilize operations. This includes the first partial year of operation and two full years of operation immediately following. The new facility treatment for electricity facilities will be phased out by 2023. A new facility is subject to a compliance obligation using either a facility-specific benchmark (at 95 per cent free allocation), or high-performance benchmark starting in the third, full year of operation. The ramp in rate applies at five per cent for new facilities starting in the third full year of operation until the reduction target is equal to the full reduction target. For example, in 2025 the full reduction target will be 15 per cent, following a 1 per cent tightening every year between 2020 and 2025.

Compliance flexibility

TIER provides regulated facilities with a number of compliance options, including:

- On-site emission reductions.
- Use of emissions performance credits (produced and traded by facilities that exceed their emission reduction obligations).
- Use of Alberta-based emissions offsets.
- Payment into a TIER fund (for the 2020 compliance year, a price of \$30/tonne of CO₂e has been set).

Under TIER, emissions performance credits and emissions offsets combined may not be used to

satisfy more than 60 per cent of a facility's total compliance obligation for a single compliance year.

TIER also includes a credit expiry timeline for emissions performance credits and emission offsets:

- Performance credits and emission offsets from 2014 or earlier expire after 2020.
- Performance credits and emission offsets from 2015 or 2016 expire after 2021.
- Performance credits from 2017 and onward have an eight-year expiry starting from the year following the year it was issued for.
- Emission offsets from 2017 and onwards have a nine-year expiry starting from the year in which the reduction was made.

Compliance Cost Containment

The Compliance Cost Containment Program (CCP) provides support to regulated facilities in emissions-intensive, trade-exposed sectors experiencing economic hardship as a result of compliance costs under the TIER system. Facilities for which total TIER compliance costs are greater than three per cent of facility sales, or 10 per cent of facility profits, may be eligible for the following support mechanisms:

- Additional compliance flexibility (exception to the 60 per cent credit limit).
- Additional free benchmark allocations.

Review period

The first full review of TIER is scheduled to be completed by the end of 2022. Subsequent reviews will occur every five years thereafter.

Emissions reporting

Facilities are subject to quantification and reporting standards. Facilities emitting more than 100,000 tonnes of CO₂e per year, opted-in facilities, and aggregate facilities are required to submit annual compliance reports prior to June 30 of the following year. Facilities emitting more than 1,000,000 tonnes of CO₂e per year are also required to submit an annual forecasting report. Annual compliance reports are required to be verified by a qualified third-party assurance provider.