

CARBON MARKET BUSINESS BRIEF

ALBERTA

ALBERTA'S TIER AT A GLANCE

Years in operation	<p>2007: Specified Gas Emitters Regulation (SGER) begins</p> <p>2014: First phase of SGER concludes</p> <p>2018: Carbon Competitiveness Incentive Regulation (CCIR) replaces SGER</p> <p>2020: Technology Innovation and Emissions Reduction (TIER) regulation replaces CCIR</p>
Overall cap & trajectory	<ul style="list-style-type: none"> • TIER regulation applies to facilities that emit 100,000 tonnes of carbon dioxide equivalent (tCO_{2e}) or more per year in 2016, or a subsequent year. • Emission reduction obligations are determined using either a: <ul style="list-style-type: none"> • Facility-specific benchmark; or • High-performance benchmark. • In most cases, a regulated facility is subject to the less stringent of the two benchmark approaches for that facility. • The stringency of facility-specific benchmarks will increase by 1% annually beginning in 2021 until reaching the high-performance benchmark; the high-performance benchmark is not subject to annual tightening.
Target(s)	<ul style="list-style-type: none"> • Limit oil sands emissions to 100 million tCO_{2e} • Phase out coal-fired electricity generation by 2030 • Reduce methane emissions by 45% by 2020
Emissions Reduced to date	95.4 million tCO _{2e} were reduced under SGER from 2007 to 2017
Sectors covered	<p>TIER covers the following products:</p> <ul style="list-style-type: none"> • Ammonia • Ammonium nitrate • Bituminous coal • Cement • Electricity • Ethylene glycol • Hardwood kraft pulp • High-value chemicals • Hydrogen • Industrial heat • Natural gas processing • Oil sands in situ bitumen • Oil sands mining bitumen • Softwood kraft pulp

GHGs covered	The following specified gases are covered under the regulation: <ul style="list-style-type: none"> • CO₂ • Methane • N₂O • HFCs • SF₆ • PFCs • NF₃
# of covered entities	Unknown
Allocation method	Allocation is based on the facility-specific benchmark or high-performance benchmark approach.
Trading rules	Benchmarks can be met by: <ul style="list-style-type: none"> • Reducing facility emissions intensity; • Retiring Emission Performance Credits (EPCs), which can be traded; • Retiring Alberta-based emissions offsets (Offsets), which can be traded; and/or • Paying into the TIER Fund at prevailing TIER Fund price. <ul style="list-style-type: none"> • 2020 TIER Fund Price: C\$30/tCO_{2e} (price aligns with 2020 federal benchmark requirements under GGPPA).
Use of offsets and linking	No more than 60% of a facility's compliance obligation can be met with EPCs or Offsets.
Penalties for non-compliance	A fine of no more than C\$200/tCO _{2e} , by which the net emissions for the regulated facility exceeds its allowable emissions.
Use of revenues	Revenue from TIER is used for: <ul style="list-style-type: none"> • Investing in emission reductions technology; • Reducing Alberta deficits; and/or • Supporting the province's energy war room, the "Canadian Energy Centre".

MAJOR DEVELOPMENTS

TIER launched on 1 January 2020, with a \$30/tCO_{2e} TIER Fund price. It is not yet legislated for the TIER Fund price to rise by \$10/tCO_{2e} to align with planned federal carbon pricing increases under the Greenhouse Gas Pollution Pricing Act (GGPPA); however, in order for the province to maintain jurisdiction over its carbon pricing system, it is required to rise in line with the federal government's GGPPA.

MARKET COMMENTARY

The Alberta carbon market is opaque and complex, with Alberta compliance-grade Offsets and EPCs (collectively, the "Alberta Credits") trading through bilateral agreements. Volatility in Alberta Credit prices can be significant due to this lack of transparency and is affected by key factors based on:

1. Market Conditions;
2. Policy Risk; and
3. Commercial Positioning.

Market conditions include the cyclical nature of demand and supply and perceived market fundamentals, such as the impact of market participants' banking behaviour. Policy risk represents the anticipated, speculated or actual changes to provincial and federal carbon pricing programmes and structures. Commercial positioning relates to a market participant's percentage of total market supply or demand and the execution or influence of their trading strategy. Table 1 highlights a range of historical pricing impacts associated with each of these factors.

TABLE 1.
Alberta carbon pricing impacts

Factor	Carbon Price Impact
Market conditions	C\$2 - 5/tCO ₂ e
Policy risk	C\$5 - 10/tCO ₂ e
Commercial positioning	C\$2 - 5/tCO ₂ e

Alberta Credits transact at a discount to the market ceiling price, set at the TIER Fund price. The current TIER Fund price is C\$30/tCO₂e and Graph 1 illustrates how policy risks affected market prices by more than C\$10/tCO₂e over the last year.



FIGURE 1
Historical indicative Alberta Credit prices
Source: Carbon Credit Solutions Inc., <https://carboncreditsolutions.ca/>

The Canadian federal government has imposed an increasing minimum carbon price across all provincial carbon programmes, rising to C\$40/tCO₂e and C\$50/tCO₂e by 2021 and 2022, respectively. This factor is the single largest contributor to the Alberta market price and provides an incentive for suppliers to hold Alberta Credits for future higher-priced compliance years. As escalating ceiling prices drive up market prices, it remains to be seen how future market volatility impacts the discount to these ceiling prices.

Trading conditions have showed the continued resilience of the Alberta market to absorb changes in policy and preserve overall upward pricing momentum. The development or evaluation of a robust trading strategy requires Alberta market participants to carefully monitor and time transactions around the intricate interplay between changing market conditions, evolving policy risks and relevant commercial positioning.

USEFUL LINKS

[TIER Regulation Fact Sheet](#)

[Alberta Emission Offset System](#)

[Alberta TIER Regulation Homepage](#)

REFERENCES

[Technology Innovation and Emissions Reduction Regulation](#)

[Albert Climate Change Office \(ACCO\), 2018 CCIR Compliance and Offset Workshop \(slide 12\)](#)

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