# CARBON MARKET BUSINESS BRIEF

## ALBERTA

### ALBERTA’S TIER AT A GLANCE

| Years in operation | 2007: Specified Gas Emitters Regulation (SGER) begins  
2014: First phase of SGER concludes  
2018: Carbon Competitiveness Incentive Regulation (CCIR) replaces SGER  
2020: Technology Innovation and Emissions Reduction (TIER) regulation replaces CCIR |
| Overall cap & trajectory | • TIER regulation applies to facilities that emit 100,000 tonnes of carbon dioxide equivalent (tCO₂e) or more per year in 2016, or a subsequent year.  
• Emission reduction obligations are determined using either a:  
  • 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) | • Limit oil sands emissions to 100 million tCO₂e  
• Phase out coal-fired electricity generation by 2030  
• Reduce methane emissions by 45% by 2020 |
| Emissions Reduced to date | 95.4 million tCO₂e were reduced under SGER from 2007 to 2017 |
| Sectors covered | TIER covers the following products:  
• 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

<table>
<thead>
<tr>
<th>The following specified gases are covered under the regulation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CO₂</td>
</tr>
<tr>
<td>• Methane</td>
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<tr>
<td>• N₂O</td>
</tr>
<tr>
<td>• HFCs</td>
</tr>
<tr>
<td>• SF₆</td>
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<tr>
<td>• PFCs</td>
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<td>• NF₃</td>
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</tbody>
</table>

# 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:

• 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.

- 2020 TIER Fund Price: C$30/tCO₂e (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/tCO₂e, by which the net emissions for the regulated facility exceeds its allowable emissions.

Use of revenues

Revenue from TIER is used for:

• 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/tCO₂e TIER Fund price. It is not yet legislated for the TIER Fund price to rise by $10/tCO₂e 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

<table>
<thead>
<tr>
<th>Factor</th>
<th>Carbon Price Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market conditions</td>
<td>C$2 - 5/tCO2e</td>
</tr>
<tr>
<td>Policy risk</td>
<td>C$5 - 10/tCO2e</td>
</tr>
<tr>
<td>Commercial positioning</td>
<td>C$2 - 5/tCO2e</td>
</tr>
</tbody>
</table>

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.

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

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

Technology Innovation and Emissions Reduction Regulation

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

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