

# Understanding the pros and cons of Alberta's new industrial carbon pricing rules

## Technical Note

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Trade-exposed industrial facilities that emit large quantities of carbon pollution face a new carbon pricing regime in Alberta. The [Carbon Competitiveness Incentive Regulation \(CCIR\)](#) unveiled this month replaces the old Specified Gas Emitters Regulation (SGER), which priced carbon based on emissions relative to individual facilities' historical performance. The CCIR approach, in its basic form, makes a lot of sense. It applies the market mechanism of [carbon pricing](#) – widely recognized as the most efficient way to reduce emissions fairly across all players in the economy – but also recognizes the economic pressures on emission intensive industries competing nationally and internationally. It does this by granting temporary free carbon allocations based on efficient operations' performance, so industry can remain competitive during the transition to lower emission operations. Most importantly, it intends to maintain a marginal price on carbon so that the market incentive to reduce, and ultimately the effectiveness of carbon pricing, is preserved across all sectors.

### How does the new regulation work?

All facilities in a sector get the same number of emissions credits for each unit of product output they create based on a single product benchmark. Emissions credits can be used to meet the facilities carbon compliance. Facilities with emissions above the benchmark must do some combination of reduce their emissions, purchase carbon offsets or emissions credits (for example, from better performing facilities), or pay into Alberta's Climate Change and Emissions Management Fund at the current carbon price. This way, all facilities have the same incentive to improve.

## The good

### 1. It will reduce emissions

The policy is expected to achieve emissions reductions. The [Alberta Government forecasts emissions reductions](#) of 20 megatonnes (Mt) by 2020 and 50 Mt by 2030. A 50 Mt reduction represents an 18 per cent decrease in Alberta's GHG emissions (274 Mt in 2015) — or a 26 per cent decrease in emissions when specifically looking at the sectors covered by the CCIR. It is even meaningful on a national scale where the policy will contribute 23 per cent to Canada's target by 2030. Delivering these reductions will ultimately depend on actions taken to avoid GHG costs, and Alberta still has not released an assessment of the emissions reductions expected from all elements of the Climate Leadership Plan, which is necessary to determine how this contributes to Canada's 2030 target.

### 2. A single benchmark for each product maintains fairness and efficiency

The principle of the new rules relies on a single emission benchmark for a given product regardless of the industrial process that creates it. This product may be for example cement, fertilizer, electricity, or almost any other industrial product (with the exception of oilsands mining and in situ bitumen production where separate emissions benchmarks are defined for the same product from different processes). Benchmarks are set within each industrial sector, so facilities compete within their own sector to find the most cost-effective solutions to reduce emissions.

In the electricity sector, this is applied in a way to ensure that all generators — emitting and non-emitting — receive the same allocation rate. This is fair, because revenue the non-emitting generation receives from the market is affected by the free allocations fossil generators receive. It's efficient too, as it reduces the administrative burden of recognizing the value of zero carbon electricity production.

### 3. More sectors are covered by standardized treatment

The regulation is a big step forward from SGER. CCIR, along with the link to the carbon levy, covers significantly more sectors and more emissions. The benefits are twofold: the policy drives emissions reductions across more sectors, and it reduces the need to incentivize emission reductions from uncovered sectors through offset protocols improving efficiency and reducing administrative costs.

### 4. Flexibility ensures the program can address competitiveness issues

The program allows facilities below the emissions threshold to opt in if they can demonstrate they are at a competitive risk by being both emissions-intensive and trade-exposed, avoiding penalizing smaller players within a given sector.

## The bad

### 1. Full carbon pricing won't be achieved for more than 100 years

The provision of free emissions is intended to phase in full economy-wide carbon coverage for sectors that are both emissions-intensive and trade-exposed. In the interim, it will help industry to preserve competitiveness and prevent corporate activity from moving to jurisdictions with a lower carbon price while industries develop lower emissions technologies. The regulation will tighten by one per cent per year starting in 2020, but at this rate it will take 100 years to reach the full carbon price.

This is particularly concerning in the case of sectors that are not clearly subject to external carbon competition and where low emissions technologies already exist, such as electricity generators. Low carbon electricity can be provided by switching more generation to renewable sources, and the falling costs of renewables means prices will not automatically rise. Similarly, if new low carbon technologies are successfully deployed in the oil sands the full carbon pricing should be phased in more quickly.

### 2. The phase in of a phase-in for some sectors is unnecessary and unfair

The policy itself, which provides free allocations for each sector, is designed to preserve competitiveness through a phase-in. However, the policy gives an additional phase-in for the majority of sectors (excluding only electricity and industrial heat). As a result these sectors will not be subject to the full policy for another two years. This additional lead-time for sectors such as oil and gas is unnecessary, it reduces the funds available to support additional emissions or tax reductions, and is unfair to other industrial sectors and consumers who are subject to the full policy from day one.

While it is good that the phase-in is based on a facility-specific level to preserve the marginal price, meaning each tonne reduced is worth the current carbon price level, the intention of the policy has been known since November 2015 and additional time to adapt is unnecessary.

### 3. Carry-over of previous credits is a windfall for owners

Facilities and projects that were granted offsets and emission performance credits under the SGER system will be allowed to carry these over into the new system at full value until 2020-2025<sup>1</sup>. The long term expiry is combined with generous limits on the use of offsets and credits from previous years to meet carbon compliance (40 per cent in 2018 rising to 60 per cent in 2022).

Instead of a simple carryover, a [price vintaging system](#) would preserve the fair value of the credit owners' investment without providing windfall profits or unnecessary subsidies. This would be similar to other systems, such as cap and trade, where credit use is restricted to ensure the policy's effectiveness and avoid windfall profits.

#### 4. Cost containment powers could be gamed

The regulation provides “cost containment powers” to the director to support specific industrial operations that face a substantial hardship due to the policy. If not applied carefully, this could lead to the unintended consequence of firms choosing to prove “substantial hardship” to receive a bail-out rather than pursue reductions to minimize cost. This would result in forgone low cost emission reductions for Alberta. In the worst-case scenario, they could use the bail-out to address non-emission related financial challenges. It will be critical to base decisions on real evidence and transparent evaluation so that they can't be gamed.

#### 5. Direct financial support for incremental improvements reduces policy efficiency

Government has a clear role to [support developing and deploying disruptive technology](#), but more incremental improvements, such as emissions reductions through incremental energy efficiency, are best incentivized by a [price on carbon](#) or leveraging private capital through [loan guarantees and similar mechanisms](#). [It is critical that funds intended for innovation are not diverted to more incremental projects](#). Using funds like these for direct energy efficiency grants to industry unnecessarily raises emission reductions' cost and comes with a large risk of public funding becoming simply a subsidy — paying industry for projects that would have happened without the support, leaving insufficient funds for truly disruptive innovation that won't happen without government support.

The new Carbon Competitiveness Incentive Regulation hits the mark on many of the most important measures: maintaining the marginal price, it is setup to deliver low-cost emissions reductions through standardized treatment within each industrial sector, while allowing for flexibility where needed. There were a few missed opportunities to maximize impact in the initial years due to the unnecessary phase-in and carryover of all historic credits at full value. Moving forward, the policy will have to adapt to resulting outcomes and bring in full coverage in a reasonable time frame, particularly in cases where new technologies with significantly lower carbon output are adopted. The ultimate success will continue to require a careful eye on the

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<sup>1</sup> Credits generated before 2014 expire in 2020, 2015/2016 in 2021 and 2017 forward have 8 year expiry

funds directed to cost containment and emissions reduction programs to help ensure the policy delivers on its full potential.