

Intelligence MEMOS



From: Grant Bishop
To: Jason Nixon, Minister of Alberta Environment and Parks
Date: August 9, 2019
Re: **ALBERTA'S NEW BIG-EMITTER PLAN TILTS TOWARDS HIGHER INTENSITY**

Last month, Alberta's government released its proposal for a new framework for output-based pricing of greenhouse gas emissions from large industrial emitters. The Technology Innovation and Emission Reduction (TIER) would replace the current Carbon Competitiveness Incentive Regulation (CCIR), introduced by the previous government in 2018.

The central difference is a move from a "one product, one benchmark" approach under CCIR for setting the thresholds above which facilities would face a carbon price and below which facilities would earn credits. In contrast with CCIR, for all sectors outside power generation, the TIER will move to a facility-specific benchmark equal to 90 percent of a facility's average emission intensity — that is, GHG tonne per unit of output — over the past three years.

But imposing a facility-specific benchmark on all facilities will reduce the comparative advantage of lower emissions facilities, as I [outlined in a submission](#) to the government's consultations on TIER. It thereby risks distorting the growth of production towards higher emissions facilities.

By leveraging estimates of emission intensity across in situ oil sands facilities (i.e., GHG tonnes per barrel of bitumen), I illustrated how TIER would eliminate differences in average carbon costs per tonne between producers with significantly higher emission intensity and best-in-class facilities.

The product-specific benchmarks under CCIR promote market competition and reward those producers of a given product that operate with lower emission intensity. That is, the lower average carbon cost per tonne for lower emission facilities means a comparative advantage.

It is commendable that Alberta's government intends to retain a product-specific benchmark for the electricity sector equal to the emission intensity of the best performing natural gas-fired facility.

A recent C.D. Howe Institute [paper](#) detailed the concerns with output-based carbon pricing for the electricity sector under the federal backstop. The federal scheme imposes separate benchmarks for each of natural gas and coal power generation facilities and would distort power generation towards the dispatch of higher emission coal power. Alberta's approach to power generation under CCIR is more economically efficient than Ottawa's backstop output-based pricing system.

However, a similar concern applies to the facility-specific benchmarks under TIER, which risk distorting production towards higher emission facilities. Therefore, even if TIER "grandparents" existing facilities under a facility-specific benchmark, lower emissions facilities should be able to opt into a product-specific benchmark. By achieving emission intensity below the established benchmark and earning credits, lower emissions facilities would retain a comparative advantage over higher emission facilities.

As well, any new or significantly expanded facilities should face a product-specific benchmark. Extending facility-specific benchmarks to new or significantly expanded facilities would bias production growth towards high emission facilities. Applying instead a product-specific benchmark to new and incremental expansions would provide economically efficient incentives, with a relative cost advantage for expanding low emissions facilities.

By allowing facilities to opt into product-specific benchmarks and applying such benchmarks to new or expanded production, Alberta's government would mitigate the potential distortion from grandparenting existing facilities under a default facility-specific benchmark. As well, a distortion from grandparenting may be less significant in circumstances where facilities already optimize production levels to minimize emission intensity.

For example, in situ oilsands facilities will optimally operate at engineered reservoir pressures and production levels. If decreasing production would increase emission intensity, a facility's level of output may be unchanged whether the producer faces a facility- or product-specific benchmark. In such circumstances, moving to a facility-specific benchmark for existing facilities should not distort how much producers produce.

Nonetheless, if the Alberta government's aim is to reduce GHG emissions at the lowest economic cost, policy should harness market competition to reward competitors that produce output with relatively fewer GHG emissions.

Notwithstanding the inefficiency of distorting production towards higher emissions facilities, Alberta's government should not deprive producers of an efficient comparative advantage that they won through risky investment and innovation.

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