BUSINESS COUNCIL OF ALBERTA

DEFINE THE DECADE

Discussion Paper Series

New ideas for unlocking Alberta's low-carbon potential

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The Business Council of Alberta is a non-partisan, for-purpose organization dedicated to building a better Alberta within a more dynamic Canada. Composed of the chief executives and leading entrepreneurs of the province's largest enterprises, Council members are proud to represent the majority of Alberta's private sector investment, job creation, exports, and research and development. The Council is committed to working with leaders and stakeholders across Alberta and Canada in proposing bold and innovative public policy solutions and initiatives that will make life better for Albertans.

Land Acknowledgement

In the spirit of truth, reconciliation, and respect, we honour and acknowledge the lands upon which we live and work as guests, including the traditional territories of the First Nations in Treaties 6, 7, and 8 and the citizens of the Metis Nation of Alberta. We thank the First Peoples of this land, which we now call Alberta, for their generations of stewardship of the land, and we seek to walk together in the spirit of truth and reconciliation to build a shared future for all in Alberta.

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About the Author

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Adam Sweet is Clean Prosperity's Director for Western Canada. Adam joined Clean Prosperity from the Government of Alberta, where he helped establish Canada's first ESG Secretariat as its Executive Director, ESG Coordination and Integration. Albertan by birth and by choice, Adam returned home to Alberta in 2013 following many years in Ottawa working on Parliament Hill, including in Canada's Environment Minister's Office in 2011-13. Prior to that, Adam spent time in Canada's Embassy in Washington, D.C., and served nearly two years on the ground in Afghanistan deployed with the Canadian Government.

Introduction

Earlier last year, the Government of Alberta released its climate plan—the Emissions Reduction and Energy Development (ERED) Plan—which sets a goal for the province to reach net-zero emissions by 2050. The importance of this plan to Alberta's future should not be understated. It ended the provincial debate about whether or not Alberta would embrace a low-carbon economic future, and it signaled to investors that Alberta was ready to carve out a position as a diversified, low-carbon energy powerhouse.

Fortunately, Alberta has almost everything a province needs to compete in a decarbonizing world—a strong industrial base, abundant energy and natural resources, a skilled and growing workforce, reliable regulatory processes, and the largest carbon market in Canada.

Building a world-leading low-carbon economy should be smooth sailing then, right?

Not exactly. In 2022, the US *Inflation Reduction Act* (IRA) changed the stakes for the world, particularly for Alberta.

The IRA is offering companies substantially more generous and straightforward incentives relative to what's available in Canada—so generous that some investors have suggested that it would make sense to disassemble Canadian plants and put them back together in the United States. The investment incentive gaps created by the IRA undermine Alberta's ambitions. The longer these gaps remain, the greater the risk that Alberta falls behind in the race for technology development, investment, and talent.

Neither Alberta nor Canada has pockets deep enough to match the generous incentives found in the IRA, and nor should we try. Instead, the province must focus its efforts on adopting policies that bolster investment in specific low-carbon industries where we have a competitive advantage. Fortunately, Alberta has policy levers—notably its Technology Innovation and Emissions Reduction (TIER) Regulation—that could quickly close these gaps and position the province as a destination of choice for low-carbon investment.

TIER: A *made-in-Alberta system to drive low-carbon economic growth*

Alberta is a pioneer in North America; it was the first jurisdiction to introduce carbon pricing for industry back in 2007. The current iteration of the industrial pricing system is called the Technology Innovation and Emissions Reduction (TIER) Regulation, and it covers more than half of all the industrial greenhouse gas (GHG) emissions in the country. TIER puts a price on emissions from large facilities, like the oil sands, power generation, manufacturing, and petrochemicals.

TIER is a unique asset for Alberta. No other province has a carbon market close to its size. With some important tweaks, it could dramatically accelerate our efforts to decarbonize.

Every facility covered by TIER has an emissions benchmark that it must meet to avoid paying the carbon price. Benchmarks measure GHG emissions per unit of output, like a barrel of oil or a tonne of cement. Facilities that don't meet their benchmark are charged for their excess emissions. The benchmark is typically based on the facility's historical emissions and tightens every year.

If the facility emits below its benchmark, it is awarded emissions performance credits. Firms whose emissions have exceeded their benchmarks can buy those credits and use them to pay their carbon charges. They can also pay with offset credits generated by emissions reduction projects, like carbon capture and storage systems—or with cash, which goes into the TIER Fund. Credits typically trade at a discount to the cash price.

As the carbon price continues to rise—TIER currently charges $65 per tonne, and Alberta's ERED Plan has committed to increasing the price to $170 per tonne in 2030—so too will the value of those credits.

Uncertainty about carbon credit prices threatens investment

Carbon credits can be an important source of revenue for new low-carbon projects. Some low-carbon business models depend on generating revenue through selling credits in order to be profitable.

Unfortunately, research warns of a looming problem within the TIER carbon credit market. The market is at risk of being oversupplied with credits because the share of industrial emissions that face a carbon price isn't increasing fast enough to match the growing supply of credits.

This imbalance threatens to crash the credit market, which discourages investments in new decarbonization projects. Therein lies our challenge. Uncertainty about future carbon credit revenues puts Alberta at a competitive disadvantage against the guaranteed revenue from IRA incentives in the US.

It is important to note that project proponents in Alberta can be certain about some investment incentives—for example, Canada's new investment tax credits for carbon capture, hydrogen, and clean electricity, as well as the Alberta Petrochemicals Incentive Program and the newly announced Alberta Carbon Capture Incentive Program. However, the IRA still offers a lot more guaranteed money for a number of low-carbon technologies.

If project proponents could be certain that TIER carbon credits would continue to trade at a small discount to the headline carbon price, then many low-carbon projects could earn more revenue in Alberta than in the US. It's a lack of certainty about the future value of TIER credits that is holding up final investment decisions on numerous shovel-ready projects.

Contracts for difference can de-risk low-carbon projects

There are ways to guarantee the future value of TIER carbon credits and give firms and investors the confidence to make big investments in decarbonization.

Financial instruments called carbon contracts for difference (CCfDs) offer a solution. They function like a government-backed insurance policy for low-carbon projects, tied to the future value of carbon credits. If TIER credit prices fall below an agreed-upon minimum price, the government will pay out the difference. If credit prices exceed the contract price, the project pays the difference back to the government. Carbon contracts for difference help mitigate carbon-pricing risks for low-carbon projects that depend on carbon credit revenue, by shifting this risk to the government.

Put simply, CCfDs turn the "stick" of carbon pricing into a "carrot" of investment certainty for decarbonization projects.

From the government's perspective, this might seem like a large liability. If credit values crash, they might need to pay out hundreds of millions of dollars depending on the program's size. But governments can avoid payouts. As long as they maintain the carbon price trajectory and keep the TIER carbon-credit market operating efficiently—most importantly, by ensuring that demand for credits exceeds supply—they won't need to make any payouts.

That's one of the best features of carbon contracts for difference—their low cost and low risk for governments. Research by Clean Prosperity and the Transition Accelerator found that contracts for difference can give Alberta a competitive edge in attracting low-carbon investment like outfitting hydrogen, cement, and natural gas-fired power plants with carbon capture technology. Without contracts for difference, Alberta would need to pay out billions in subsidies to achieve the same results.

The federal government tasked the new Canada Growth Fund (CGF) with signing tailored contracts for difference, the first of which was signed with Calgary-based carbon capture company Entropy in December of last year. The CGF has $7 billion set aside for these bespoke CCfD deals. While this was a positive step, a broad-based program, with CCfDs available to any low-carbon project proponent, would draw in even more investment for low-carbon industries and unlock greater decarbonization. While the 2023 federal budget promised to look into a broad-based CCfD program in Budget 2023, it has not happened yet.

The federal government tasked the new Canada Growth Fund with signing tailored contracts for difference and also promised to look into a broad-based program in Budget 2023. But neither has happened yet.

To get things moving, Alberta needs to let the federal government know that it urgently needs contracts for difference to help grow its low-carbon economy. Whether or not the feds make a move, the province should also look into signing contracts on its own—using TIER revenues as collateral.

At present, just over 50% of the TIER Fund is allocated to emissions reduction projects and R&D initiatives, while the remaining half goes to general revenues.

That's a missed opportunity to fully leverage TIER's potential to accelerate low-carbon investment—which could yield much greater fiscal and economic returns over the long term. Instead, the government should invest 100% of TIER revenues in decarbonization and use some of that money to backstop provincial carbon contracts for difference.

That would send a strong signal to investors that Alberta is dedicated to building a low-carbon economy and is willing to commit the resources required to compete. With access to more capital, the provincial government could also fund strategic investments or production tax credits to attract low-carbon projects.

Alberta is in the midst of a global clean-energy investment race. We can take the steps that will attract billions of dollars in new, clean-energy investment and create thousands of good jobs, or we can sit back and let a generational economic opportunity pass us by. The choice is that simple—let's not mess this up.

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