



Turning Taxpayers into Risk Takers

Contracts for Difference – the Eternal Subsidy

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EXECUTIVE SUMMARY

Budget 2024, the government of Canada's statement of its economic and financial plans for the next five years, included an announcement that the government would continue to expand its use of "contracts for difference" as instruments of its climate policy. Contracts for difference are ways to transfer financial risks from one group of people to another. Specifically, they would transfer the risks that future policy or market changes may reduce or eliminate the present and planned financial incentives for "clean energy" projects. The risks would be removed from project investors and placed on the Canadian general taxpayer.

There are different ways in which CFDs could be used to "de-risk" investments in "clean" projects. One way would be to bring more certainty regarding the credit prices that emerge as a result of the output-based pricing system (OBPS). The OBPS is the version of carbon dioxide pricing that seeks to reduce emissions by industrial plants. Credit price CFDs could provide "certainty" on future credit prices by having the government guarantee firms a minimum value for the credits.

The biggest risk for many "clean energy" investors may be that a Conservative government would eliminate the entire carbon dioxide pricing regime (i.e. both the OBPS and carbon taxes). That would sharply reduce the cost advantage that these investors now enjoy and the growth of these advantages in future. The goal of a CFD in such cases would be to leave the green energy investors whole by having the government commit by contract to provide future financial benefits at least equal to those that the investors would have enjoyed if the present carbon dioxide pricing regime has continued. The design of such contracts could be complex.

Yet another way in which CFDs could be applied would be to insure investors in "clean energy" projects that, regardless of how either markets or policies may change, they will continue to receive financial benefits from taxpayers that approximate or equal the benefits that they now expect to receive from existing and announced federal subsidy programs. The number of these programs is very large; they include both direct expenditures and tax expenditures (e.g. credits, deductions, deferrals, exemptions and preferential tax rates).

To date, the federal government has announced only one CFD. On December 20, 2023, Deputy Prime Minister Chrystia Freeland announced that the Canada Growth Fund had concluded an agreement with Calgary's Entropy Inc. Freeland proclaimed, could reduce emissions by up to 9 million tonnes over 15 years. At a price of \$86.50 per tonne plus an initial payment of \$200 million, the federal expenditure totals \$978.5 million, or almost \$1,000 per tonne, an absurdly high cost.

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How can this be considered as justified? The alleged benefit of CFDs as applied to investments in many “clean energy” projects like CCUS or EV batteries is that it may accelerate the commercialization of new emissions-reduction technologies. One has to wonder what evidence there is that CFDs are needed, in addition to all the other measures in place, to do this. Also, if the general public is to take on the economic risks, what benefits are there to compensate for this? The only benefits are the theoretical ones that may come from changes in global emissions and temperatures over which Canadians have little influence and no control.

The tradition in Canada has long been that one parliament cannot bind another. In practice, this means that a new government is bound to honour the legislation passed by a previous government only until it passes new legislation to amend or repeal the previous legislation. CFDs negotiated by the present Liberal government would be an obvious attempt to frustrate the efforts of a future Conservative government if it chose to reduce or eliminate the carbon dioxide pricing regime and the other large subsidies and tax benefits now conferred on “clean energy” investments. They would contravene an important parliamentary and democratic principle.

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Budget 2024, the government of Canada's statement of its economic and financial plans for the next five years, included an announcement that the government would continue to expand its use of "contracts for difference" as instruments of its climate policy. Few people outside of the financial services industry and the climate activist organizations promoting the use of contracts for difference know what they are.

This article will try to shed some light on the subject. I acknowledge at the outset that, while I have many years of experience in analyzing and advising on energy and climate policy issues, I have very limited knowledge of financial services. What I will offer here is based on the available online information.

In effect, the federal government proposes to use contracts for difference as a means to transfer the risks that future policy or market changes may reduce or eliminate the present and planned financial incentives for "clean energy" projects from project investors to the Canadian general taxpayer. This could end up costing taxpayers hundreds of billions of dollars and frustrate the efforts of a new government to end the current carbon tax and green subsidy regimes.

What are Contracts for Difference?

As used in financial markets up to now, a contract for difference (CFD) refers to a contract that enables two parties to enter into an agreement to trade on financial instruments based on the price difference between the entry prices and the closing prices. This is similar to a forward or futures contract that is cash settled. The amount of the cash settlement will represent the difference between the underlying asset's price agreed at the outset of the contract and its market price at the date of the settlement of the contract. CFDs can be long (that is, where the holder gains from a rise in the price of the underlying asset) or short (that is, where the

holder gains from a fall in the price of the underlying asset).¹ The Canadian Climate Institute has published a series of [articles](#) explaining how CFDs might be used to ensure against the risk of a fall in carbon taxes or in the prices of emissions trading permits.



Mark Carney argues for Contracts For Difference at Senate Hearing on Banking and Bill S-243 on May 08, 2024.

For example, an investor might believe that he or she has superior insight into how oil prices will change a year from now. Let's say he or she is confident that prices will rise by 12% per barrel, so if the current price is \$80 per barrel, the price a year from now (i.e. the closing price) will be at least \$89.60 per barrel. The investor approaches CFD brokers who buy the investor 20,000 units at \$80 per barrel (i.e. \$1.6 million), expecting that in a year's time his investment will be worth \$1.792 million, making him a profit of \$192,000. Instead, the price could fall by, say, 5%, to \$76 per barrel, causing the investor to lose \$80,000. A trader thus stands a chance to lose or gain depending on market trends.

¹ [https://content.next.westlaw.com/practical-law/document/lb9aa3e271c9a11e38578f7ccc38dcbee/Contract-for-differences-CFD?viewType=FullText&transitionType=Default&contextData=\(sc.Default\)#:~:text=Similar%20to%20a%20forward%20or,the%20settlement%20of%20the%20contract](https://content.next.westlaw.com/practical-law/document/lb9aa3e271c9a11e38578f7ccc38dcbee/Contract-for-differences-CFD?viewType=FullText&transitionType=Default&contextData=(sc.Default)#:~:text=Similar%20to%20a%20forward%20or,the%20settlement%20of%20the%20contract)

In financial markets, a CFD allows someone to speculate on changes in the price of a security without having to actually buy the security. It is a contract designed to profit between the difference in the price of a security between the opening and closing of a market.

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 **Mark Carney** @MarkJCarney · May 1 ...

The AI revolution powered by clean energy. [@microsoft](#) delivering the solutions [@Brookfield](#) supplying the clean power

 **Brookfield Asset Management** @Brookfield · May 1

We are pleased to have signed a landmark global agreement with @Microsoft to develop over 10.5 GW of new renewable energy, which will support their growing demand for electricity driven by #digitalization trends. Read more in the @FT here: brkfld.co/zdwdtk91

"This agreement is a testament to our ability to reliably deliver clean power solutions at scale to our corporate partners and accelerate the energy transition."

Connor Teskey
CEO, Renewable Power & Transition

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Applying Contracts for Difference to Investors in “Clean Energy”²

Organizations that support the goals of decarbonizing the economy, such as the Canadian Climate Institute, have come up with creative variations on the design of a CFD. The Canadian Climate Institute is an allegedly non-partisan and non-profit organization that funds and publishes reports on how Canada might attempt to attain the “net-zero” carbon dioxide emissions goal by 2050. In 2020, the Institute received \$20 million in funding from the Trudeau government.

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The versions of CFDs proposed by the Institute are not designed to facilitate speculation concerning market prices. Rather, they would take the risk out of investments in emissions-reducing projects, especially large ones that stand to benefit enormously from the present system of carbon taxes, tax credits and multiple government (i.e. taxpayer) subsidies. In the Institute’s terminology, CFDs can make carbon pricing “work better”.

There are different ways in which CFDs could be used to “de-risk” investments in “clean” projects. One way would be to bring more certainty regarding the credit prices that emerge as a result of the output-based pricing system (OBPS). The OBPS is the version of carbon dioxide pricing that seeks to reduce emissions by industrial plants. The firms subject to the OBPS have the choice between reducing emissions per unit of production through increasing energy efficiency or by purchasing tradeable credits from other firms. The value of the credits can be affected both by the cost of emissions reduction and by the size of the market for the credits. In other words, if governments give too many exemptions from emissions-reduction to protect firms from the anti-competitive effects of the carbon pricing regime, the increase in available credits may cause the market price of the credits to fall. That, in turn, would reduce the incentive for all regulated firms to spend more on reducing emissions.

The Canadian government is now considering how to apply CFD’s to credit prices. Credit price CFDs could provide “certainty” on future credit prices by having the government guarantee firms a minimum value for the credits. Advocates claim that this would have the added benefit of reducing the incentive for governments to over-supply the credit market. However, that assumes governments care more about avoiding increases in taxpayer costs than they do about accommodating firms threatening to leave Canada. There has been no news about how the government plans to approach this.

² “Clean energy” is a politicized term often used to describe any form of energy that does not produce pollution, but especially carbon dioxide. In fact, there is no form of energy production and consumption that does not have some adverse environmental effects, but almost all of them have societal benefits that far outweigh the adverse effects.



David Turver  @7Kiwi · 23h

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How deluded do you have to be to believe electricity is free? They don't understand the difference between market value (sometimes close to zero) and cost (some offshore wind CfDs >£200/MWh). Who is picking up the tab?

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Will.I.Am @WillPinner · 23h

Replies to @HullTeslaModel3 and @7Kiwi

Happy to freeload - here's my link for anyone wanting to join us freeloaders getting free electricity share.octopus.energy/amber-tiger-346

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44

2.4K

↑

Contracts for Difference are active in the UK. As this tweet shows, people who have signed up for 'free' energy from "OCTOPUS" (where CPP and Al Gore's Generation Investment Management firm are significantly invested³) do not realize they are paying huge subsidies to these 'free' providers via CfDs.

Another way to implement CFD's is as a complement to the carbon tax system. According to the present schedule, the carbon tax regime will remain an increasingly important part of the government's carbon dioxide emissions reduction policies until the "net-zero" emissions goal is reached, and perhaps beyond. The rates of the tax will rise in steady increments until they reach "at least" \$170 per tonne by 2030. The effect of this tax is to make the cost of hydrocarbons-dependent goods more expensive and thus to provide market advantages to non-hydrocarbon energy sources and to industries and regions that are less dependent on hydrocarbons.

The nature of contracts for difference, as negotiated deals between the government and the investor, would seem to imply that they could not be used to make arrangements with hundreds or thousands of individual firms. In Budget 2024, however, the Trudeau government announced that it was exploring ways to employ

³ <https://www.energylivenews.com/2024/05/09/octopus-energys-value-soars-to-9bn/#:~:text=Generation%20now%20owns%2013%25%20of,deal%20in%20Texas%20in%202023>. "Generation now owns 13% of the Octopus Energy Group, while CPP Investments has increased its stake to 12%."

CFDs in a broader range of ways. It would not be surprising, for example, if the government were to experiment with ways to combine several investments together in different ways that would allow smaller firms to gain the benefits of CFDs.

The biggest risk for many “clean energy” investors may be that a Conservative government would eliminate the entire carbon dioxide pricing regime (i.e. both the OBPS and carbon taxes). That would sharply reduce the cost advantage that these investors now enjoy and the growth of these advantages in future. The goal of a CFD in such cases would be to leave the green energy investors whole by having the government commit by contract to provide future financial benefits at least equal to those that the investors would have enjoyed if the present carbon dioxide pricing regime had continued. The design of such contracts could be complex.

Yet another way in which CFDs could be applied would be to assure investors in “clean energy” projects that, regardless of how either markets or policies may change, they will continue to receive financial benefits from taxpayers that approximate or equal the benefits that they now expect to receive from existing and announced federal subsidy programs. The number of these programs is very large; they include both direct expenditures and tax expenditures (e.g. credits, deductions, deferrals, exemptions and preferential tax rates). The largest subsidies so far are the direct subsidies for electric vehicle battery plants, with total commitments in the range of \$40 billion. Another subsidy, not yet implemented in practice, is the promised investment tax credit for investments in carbon capture and storage (CCUS) projects and infrastructure, to be set at a remarkable 50% rate. It is easy to envisage a series of CFD’s with the sponsors of these projects transferring part or all of the costs and risks to taxpayers in case a future government should change its mind.

CFDs to Date in Canada

To date, the federal government has announced only one CFD. On December 20, 2023, Deputy Prime Minister Chystia Freeland announced that the Canada Growth Fund had concluded an agreement with Calgary’s Entropy Inc. The agreement provided for a \$200 million direct “investment”, meaning a grant. It also includes a carbon contract for difference to allow Entropy to scale up its technology to reduce emissions at Advantage Energy’s Glacier Phase 2 plant by approximately 2.8 million tonnes over 15 years, as well as commercialize its proprietary technology for implementation in other projects.

Interestingly, the CFD entails a commitment by the government of Canada to purchase up to 185,000 tonnes per year of carbon credits for 15 years at an initial price of \$86.50 per tonne. The announcement did not

indicate why \$86.50 per tonne was an appropriate price or whether it would prevail over the duration of the contract.

By the way, Entropy's project, Freeland proclaimed, could reduce emissions by up to 9 million tonnes over 15 years. At a price of \$86.50 per tonne plus an initial payment of \$200 million, the federal expenditure totals \$978.5 million, or almost \$1,000 per tonne, an absurdly high cost.

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This is an ominous precedent as to what future CFDs will cost taxpayers.



<https://twitter.com/7Kiwi/status/1787030584449003664>

https://open.substack.com/pub/davidturver/p/putting-the-wind-up?r=f96qu&utm_campaign=post&utm_medium=web

Comments

CFDs may be viewed from a policy perspective as a way to deal with economic risk. According to some sources, economic risk is “the risk of exposure of an investment due to changes in the business conditions or adverse effects of macroeconomic factors like government policies or collapse of the current government and significant swings in the exchange rates.”⁴ The macroeconomic or “sovereign” risks in the past were primarily perceived as most likely to arise in other countries where the regimes might not share common interests or common values with the governments where the investors resided.

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Investors have usually dealt with economic risk by investing in insurance or international mutual funds, diversifying investments and demanding higher rates of return for the riskier investments.

Contracts for difference as envisaged by the Canadian Climate Institute and the Trudeau government amount to granting favoured firms and industries protection against the risk of policy change in Canada. They would transfer the economic risk from the investors to the general public taxpayer.

How can this be considered as justified? For the climate activist and supporter of the thesis that the world faces the prospect of an imminent climate “catastrophe” and that eliminating GHG emissions in Canada will somehow avert this catastrophe, any and all measures to reduce GHG emissions are justified. In fact, current Canadian climate policy includes the use of over 400 different measures that span the entire range of potential policy instruments – subsidies, taxes, regulations, etc. This endless “pancaking” of measure upon measure has already made it virtually impossible to assess the marginal effect, if any, of each measure or to assess the cost effectiveness of them all.

The alleged benefit of CFDs as applied to investments in many “clean energy” projects like CCUS or EV batteries is that it may accelerate the commercialization of new emissions-reduction technologies. One has to wonder what evidence there is that CFDs are needed, in addition to all the other measures in place, to do this. **Also, if the general public is to take on the economic risks, what benefits are there to compensate for this? The only benefits are the theoretical ones that may come from changes in global emissions and temperatures over which Canadians have little influence and no control.**

⁴ <https://www.wallstreetmojo.com/economic-risk/>

From a policy perspective, there are other reasons to doubt the desirability of CFDs. In principle, policy measures should be simple enough to be readily understood by the beneficiaries and by the general public, so that all may understand the merits or lack thereof. The discussion of CFDs to date, limited as it has been, anticipates a wide range of contracts to offset the potential loss of many different subsidies and tax benefits. They would inevitably be complex.

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More importantly, the tradition in Canada and other parliamentary democracies has long been that one parliament cannot bind another. In practice, this means that a new government is bound to honour the legislation passed by a previous government only until it passes new legislation to amend or repeal the previous legislation. CFDs negotiated by the present Liberal government would be an obvious attempt to frustrate the efforts of a future Conservative government if it chose to reduce or eliminate the carbon dioxide pricing regime and the other large subsidies and tax benefits now conferred on “clean energy” investments. They would contravene an important parliamentary and democratic principle.

Right now, few Canadians understand or pay much heed to contracts for difference. It is time they started to do so.



About the Author

Robert Lyman is an economist with 27 years' experience as an analyst, policy advisor and manager in the Canadian federal government, primarily in the areas of energy, transportation, and environmental policy. He was also a diplomat for 10 years. Subsequently he has worked as a private consultant conducting policy research and analysis on energy and transportation issues as a principal for Entrans Policy Research Group. He is a frequent contributor of articles and reports for Friends of Science, a Calgary-based independent organization concerned about climate change-related issues. He resides in Ottawa, Canada. [Full bio.](#)

About Friends of Science Society

Friends of Science Society is an independent group of earth, atmospheric and solar scientists, engineers, and citizens that is celebrating its 21st year of offering climate science insights. After a thorough review of a broad spectrum of literature on climate change, Friends of Science Society has concluded that the sun is the main driver of climate change, not carbon dioxide (CO₂).

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