A clearer path to Canada's 2030 climate target

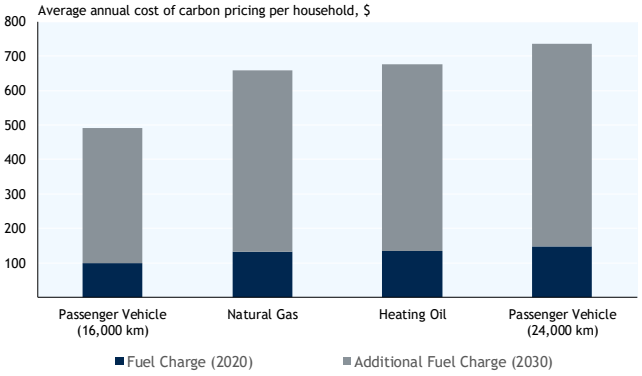
December 17, 2020

With the release of its $15 billion emissions-reduction plan, the federal government has, for the first time, outlined concrete actions that modelling suggests will enable Canada to meet its Paris Agreement targets. The plan focuses mostly on policies to address household behaviours. It includes additional efforts in areas that have seen slow uptake in the past, including building retrofits and incentives to buy electric vehicles. But by combining these measures with a strong pricing incentive—a hike in the carbon price to $170 a tonne by 2030—the plan is likely to substantially alter consumer behaviour and reduce emissions. Where the plan falls short is in not providing clear signals to materially change industrial behaviour. It includes a smattering of measures directed at oil & gas, heavy industry, and agriculture. It doesn't set out the actions needed to generate long-term emissions reductions in these sectors.

Plan combines a stick (higher carbon pricing) with carrots to help Canadians adjust

The government committed to increasing the federal backstop carbon price to $170 per tonne by 2030, through $15-a-year hikes beyond the 2022 price of $50. The plan is contingent on the Supreme Court of Canada affirming that the backstop carbon price is within federal powers. That decision is still pending.

Carbon price hike will hit heating and transport budgets



Source: RBC Economics, Statistics Canada, Canadian Energy Regulator, Government of British Columbia

A higher carbon tax is designed to alter consumer behaviour and encourage greener living, at home and on the road. If those behavioural changes don't materialize, the average Canadian household could face additional annual costs of around $530 for home heating and $390-590 per car (about 28 cents per liter of gasoline) as a result of the new plan. However, the plan also includes measures that would take some of the financial sting out of transitioning to greener behaviours, some of which had been previously announced. The measures include:

- $2.6 billion in funding for home retrofits,
- $1.5 billion for greening community spaces,
- $2 billion for large building retrofits,
- subsidies for zero-emission vehicles until March 2022,
- continued eligibility for a 100% corporate tax write-off to help reduce costs of acquiring ZEV fleets,
- continued public investment in electric-vehicle infrastructure.

Canada's emissions in 2020 are projected to total 612 million tonnes (Mt), temporarily lower due to the effects of the COVID-19 pandemic. Without intervention, they would bounce back to 657 Mt by 2030. Government modelling indicates the plan will trim emissions to 503 Mt by that time. Many of these reductions are expected to come from falling methane emissions (regulations out to 2030 have not yet been finalized), lower transportation emissions, and building retrofits.

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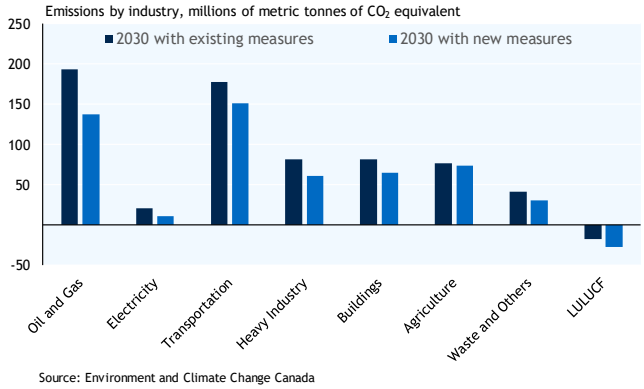
The $50 carbon price was expected to reduce emissions by 50-60 Mt by 2022. While further hikes in the carbon tax could have diminishing impacts—as the low-hanging fruit of lower-cost emissions-reduction efforts are exhausted—higher pricing will meaningfully reduce emissions by incentivizing behavioural change across the economy.

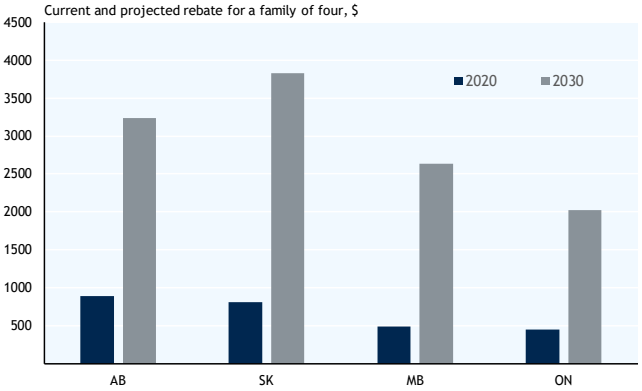
To help offset costs from the higher tax for those less able to adjust, the government recommitted to a revenue-neutral carbon tax and increased the frequency of household rebate cheques from annual to quarterly. The plan outlines 2030 rebates between $2,000 and $4,000 for a family of four, depending on the province. Rebates will likely encourage Canadians to make emissions-reducing investments, such as buying an electric vehicle, installing a charger at home, or replacing an aging furnace. But given that the government has promised to do so in other ways as well, rebates of this size may not be the most effective way to further reduce emissions.

Despite near term emissions cuts, the road ahead for industry is still daunting



Source: Environment and Climate Change Canada

Carbon price rebates balloon to offset added costs



Source: Department of Finance Canada, Environment and Climate Change Canada

Plan's signals to industry are more muddled

The government's long-term net-zero goal will require some heavy lifting from industry. On that score, the plan provides less clarity. For one, the government eased the forthcoming Clean Fuel Standard, applying it only to liquid and not gaseous or solid fuels (e.g. natural gas). This change could slow adoption of bio-gas and hydrogen, which could have reduced the carbon content of these fuels and reduced emissions without near-term changes in consumer behaviour. At the same time, the government earmarked $1.5 billion to increase production of low-carbon fuels including hydrogen, which received additional focus via a national strategy released this week. The government will use a carrot instead of a stick to spur innovation in this space. But tightening regulations will put the onus on oil and gas producers to reduce methane emissions and on vehicle manufacturers to improve fuel efficiency. How effective these programs will be in terms of driving emissions cuts will be in the details, which haven't been released.

Sectoral measures put a heavy focus on the end-users of fuel and on nature-based emissions reduction. Natural efforts total nearly $4 billion, and ultimately require continued investment to maintain offsets (trees, after all, must not be cut down to continue storing carbon). Long-term policy regarding oil, gas, and heavy industry, which makes up over half of the expected cuts, is limited. Industrial emitters will receive just $3 billion from the Strategic Innovation Fund (mostly for batteries, auto, and aerospace applications), and agriculture isn't expected to contribute meaningfully to the Paris target. In these sectors, carbon pricing will do most of the work. The plan includes only a brief nod to promising efforts like carbon capture and hydrogen, and omits details on a longer-term strategy in this space. As Canada works to make good on its net zero goal, more work on industrial and agricultural emissions will strengthen the credibility of the government's long-term plan.