

CARBON TAX COSTS VARY WIDELY ACROSS HOUSEHOLDS

Since January 1, 2017, Albertans have paid a carbon tax on combustible fuels. The costs to households will be a central issue in the upcoming provincial election. Eliminating Alberta's carbon tax will mean the federal government imposes its backstop. This has implications for the distribution of net costs to households.

Carbon taxes affect different households in different ways. Those with long commutes, multiple vehicles, larger homes, older homes, and so on, tend to burn more fuel than those with short commutes and smaller, newer homes. In addition, carbon taxes indirectly raise the price of goods and services throughout the economy. Offsetting these costs, however, are rebates provided to lower income families.

With the latest data, we estimate the distribution of carbon tax costs net of rebates across all Alberta families and report results by family income in the top figure. Higher income families tend to have higher costs, and receive no rebate. Most have costs below \$500 per year, and rarely see costs over \$1,000. Lower income households disproportionately see rebates above their carbon tax costs.

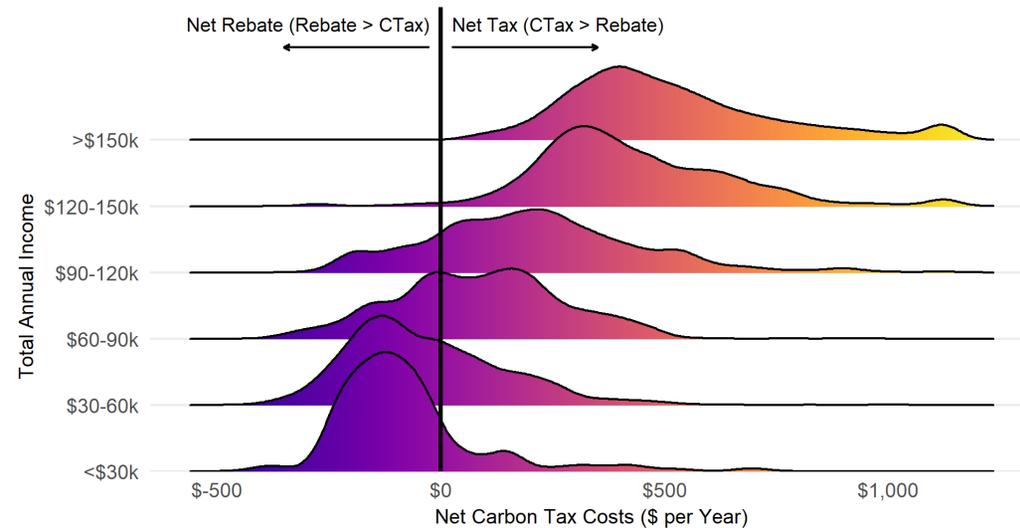
Nearly 40% of Alberta families have carbon tax credits that exceed carbon tax costs. Of those with incomes below \$60,000, over 70% have credits that exceed costs. Rebates under the federal backstop are larger, and universal.

The structure of rebates matters. In the bottom graph, for all households, we estimate the distribution of net costs under Alberta's rebate system and compare it to our estimate of what rebates from the federal backstop would be in Alberta. Federal rebates are larger and universal, whereas Alberta's are targeted. We estimate 80% of households would see rebates exceed their expected direct and indirect carbon tax costs under the federal backstop, or roughly double the number as under Alberta's rebate system.

There are costs beyond those captured here, such as lower GDP, investment, wages, and so on. The full distribution of these costs requires more detailed analysis.

Distribution of Net Carbon Tax Costs for Alberta Families in 2018

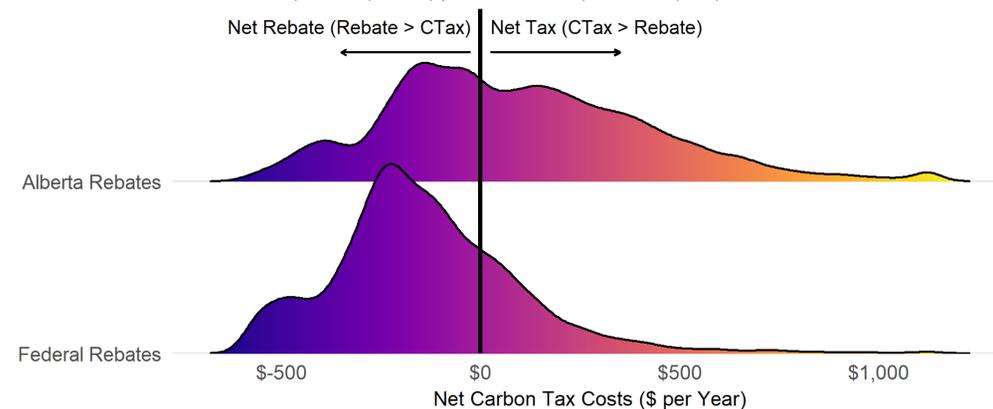
Displays the distribution of costs to households with one nuclear family, by annual income.



Source: Own calculations from Statistics Canada's SPSPD/M version 27. Based on \$30 per tonne.

Carbon Tax Costs for All Households, AB vs Fed Rebates

Assumed Federal rebates: \$400 (first adult), \$200 (spouse or first child), and \$100 (child).



Source: Own calculations from Statistics Canada's SPSPD/M version 27. Based on \$30 per tonne.