

# Economic Assessment of Climate Policy Summary

## Overview

Alberta Environment and Parks has completed an economic assessment of the former Climate Leadership Plan (CLP) to support commitments made in the government's 2019 election platform. The [Economic Assessment of Climate Policy in Alberta](#) also outlines the potential costs of the federal government's carbon pricing policy if it were applied in Alberta.

This summary provides an overview of the report, showing how various climate policy scenarios would affect Alberta's economy and households if they were applied.

The full report is available [here](#).

### Scenario One: 2015 climate policies

Carbon pricing in Alberta began in 2007 when the Specified Gas Emitters Regulation (SGER) placed a \$15 per tonne price on large industrial emitters. SGER applied through 2015, and is used as government's baseline for calculating the economic impacts of the other climate policy scenarios.

If Alberta maintained the SGER, gross domestic product (GDP) growth is predicted to average 2.57% per year between 2016 and 2030.

### Scenario Two: CLP policies, with the carbon price staying at \$30 per tonne until 2030

The CLP was announced by the previous government in 2015. It included a carbon tax on households and small businesses and a revised climate policy for industries called the Carbon Competitiveness Incentive Regulation (CCIR) that replaced the SGER. The carbon tax started at \$20 per tonne in 2017 and increased to \$30 per tonne in 2018. Revenue was invested in areas like household rebates and programs to reduce emissions. The CLP also included methane regulations and support for renewable electricity.

If Alberta had maintained the announced CLP policies with the carbon price staying at \$30 per tonne until 2030, GDP growth was predicted to average 2.52% between 2016 and 2030 – a reduction in growth of 0.045% per year compared to Scenario One.

Alberta's GDP would reduce by between \$2 billion and \$2.6 billion per year (0.6%) in the years 2020 to 2030, compared to Scenario One (all costs are reported in 2018 dollars). The carbon tax itself accounted for between \$0.6 billion and \$1.8 billion per year (0.2 to 0.4%) of the reduced GDP with the other CLP measures accounting for the remainder.

In Scenario Two, annual household costs would increase in the range of \$1.4 billion and \$1.6 billion. This would cost \$781 to \$843 per household, per year. This estimate includes increased fuel prices,

household rebates, and other effects on household consumption (like higher priced goods and the impacts of lower overall economic growth).

The carbon tax accounted for between \$0.4 billion and \$1.2 billion per year of the total CLP impacts on households or \$269 to \$656 per household, per year

### **Scenario Three: CLP policies with increasing carbon pricing**

This scenario considers what would happen with all of the CLP policies and programs in place, but with the carbon price increasing to \$40 per tonne in 2021, \$50 per tonne in 2022, and staying at \$50 per tonne until 2030.

In Scenario Three, Alberta's GDP would continue to grow, averaging 2.50% per year between 2016 and 2030 – a 0.07% reduction in growth per year compared to Scenario One.

Alberta's GDP would reduce by between \$2.0 billion and \$3.9 billion per year (0.6 to 0.9%), compared to Scenario One. Annual household costs would increase by between \$1.4 billion to \$2.5 billion. This would cost \$843 to \$1,326 per household, per year.

## **Federal carbon pricing**

The federal government's carbon pricing backstop includes a fuel charge for households and small business and an emissions-based pricing system for industrial facilities effective January 1, 2020.

The federal carbon price will be \$30 per tonne in 2020. This will increase to \$40 per tonne in 2021 and \$50 per tonne in 2022. Revenue will go toward household rebates and investments in industry.

If both the federal fuel charge and the industrial carbon pricing systems applied in Alberta, GDP growth is predicted to average 2.51% per year between 2016 and 2030 – a 0.055% reduction in growth per year compared to Scenario One. The GDP is predicted to decrease by between \$2.7 billion and \$3.3 billion per year (0.7 to 0.9%), compared to Scenario One.

The federal carbon pricing backstop is estimated to increase household costs by \$0.8 billion to \$0.9 billion per year. This would cost between \$483 and \$557 per household, per year.

## **Next steps**

The Technology Innovation and Emissions Reduction (TIER) system regulation and proposed legislation have been announced. TIER, which will replace the CCIR on January 1, 2020, will help industries deploy pioneering, emissions-reducing technologies and solutions that respect Alberta's unique character and keep businesses competitive for years to come. It is the centrepiece of Alberta's new climate strategy, which government will share details on in the coming months.

Government continues to evaluate past policies and programs while exploring new options to support environmental protection, innovation and economic growth.

Alberta has a long tradition of climate action, with more than two decades of climate-related programs and policies that have paved the way for other jurisdictions. Government is committed to responsible energy development and a sensible approach to climate action that considers options beyond a punitive carbon tax that is all financial pain with little environmental gain.

in real 2018 dollars	2020	2025	2030
<b>Scenario 1: 2015 Climate Policies, carbon price is \$15 per tonne for large industry only</b>			
GDP (billion \$)	329.8	378.9	428.2
<b>Scenario 2: CLP Scenario with economy-wide carbon price at \$30 per tonne through 2030</b>			
GDP (billion \$)	327.8	376.7	425.6
GDP change relative to Scenario 1 (billion \$)	-2.0	-2.2	-2.6
GDP change due to carbon tax	-0.6	-1.3	-1.8
GDP change due to other CLP measures	-1.4	-0.9	-0.9
Household costs (billion \$ including other effects on household consumption <sup>a)</sup> )	1.36	1.37	1.56
Household costs due to carbon tax only (billion \$)	0.43	0.93	1.23
Household costs (\$ per household)	843	781	829
Household costs due to carbon tax only (\$ per household)	269	534	656
<b>Scenario 3: CLP Scenario with economy-wide carbon price at \$50 per tonne in 2022 through 2030</b>			
GDP (billion \$)	327.8	375.6	424.3
GDP change relative to Scenario 1 (billion \$)	-2.0	-3.3	-3.9
Household costs (billion \$, including other effects on household consumption)	1.36	2.26	2.49
Household costs (\$ per household)	843	1,294	1,326
<b>Federal carbon pricing backstop (\$50 per tonne)</b>			
GDP (billion \$)	327.1	375.6	425.1
GDP change relative to Scenario 1 (billion \$)	-2.7	-3.3	-3.1
Household costs (billion \$, including other effects on household consumption))	0.90	0.85	0.94

Household costs (\$ per household)	557	483	497
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<sup>a</sup> – Household costs include rebates, direct and other effects on household incomes. The other effects are defined as indirect costs and the impacts from varied level of macroeconomic activity  
GDP change and the household costs cannot be added together, instead the household costs are a portion of the impacts to the entire economy captured in GDP change.