



# Cost Estimate of the Removal of GST from Residential Energy Use



OFFICE OF THE PARLIAMENTARY BUDGET OFFICER  
BUREAU DU DIRECTEUR PARLEMENTAIRE DU BUDGET

Ottawa, Canada  
30 May 2019  
[www.pbo-dpb.gc.ca](http://www.pbo-dpb.gc.ca)

The Parliamentary Budget Officer (PBO) supports Parliament by providing economic and financial analysis for the purposes of raising the quality of parliamentary debate and promoting greater budget transparency and accountability.

In February 2016, the House of Commons Standing Committee on Finance requested that the PBO provide a detailed and comprehensive costing analysis of private Members' bills and motions appearing on the Private Member's Business Order of Precedence. Motion M-230 was placed on the Order of Precedence on 11 April 2019 and states that the government should remove the Goods and Services Tax (GST) from home energy bills. This report provides an estimate of the removal of that GST.

Lead Analyst:

Diarra Sourang, Financial Analyst

This report was prepared under the direction of:

Mark Mahabir, Director of Policy (Costing) and General Counsel

Nancy Beauchamp, Jocelyne Scrim and Rémy Vanherweghem assisted with the preparation of the report for publication.

For further information, please contact [pbo-dpb@parl.gc.ca](mailto:pbo-dpb@parl.gc.ca)

Yves Giroux

Parliamentary Budget Officer

# Table of Contents

---

Executive Summary	1
1. Introduction	2
2. Methodology	2
3. Results	3
References	5

# Executive Summary

This report is a response to a motion adopted by the House of Commons Standing Committee on Finance to estimate the financial cost of private Members' bills and motions on the Order of Precedence in the House of Commons. Motion M-230 was placed on the Order of Precedence on 11 April 2019 and states that the government should remove the Goods and Services Tax (GST) from home energy bills.

The cost estimate produced by the PBO does not account for potential payments from the federal government to certain provinces for the loss in Harmonized Sales Tax (HST) revenues; nor does it make assumptions about the different means of implementing the measure.

The PBO estimates that the removal of GST from residential energy use will cost the federal government \$1.52 billion in GST revenues during the 2019-20 fiscal year, rising to \$1.63 billion annually in 2024-25 (Summary Table).

## Summary Table

### Cost of the removal of GST from residential energy use

*\$ billions*

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Total cost	1.52	1.55	1.57	1.59	1.62	1.63

Sources: Parliamentary Budget Officer, Canada Revenue Agency GST/HST Calculator, National Energy Use Database, National Energy Board's Supply and Demand Projections.

The removal of GST from residential energy use will result in savings for households. The PBO estimates that removing the GST from residential energy use would help households save an average of \$121 annually beginning in the 2019 calendar year. However, those savings will largely depend on the residential energy mix.

# 1. Introduction

---

Residential energy refers to the energy used by households for space heating (61% of total use in 2016), water heating (19%), appliances (14%), lighting (4%) and space cooling (3%).<sup>1</sup> Residential energy mix vary across provinces, however the most common types of energy used by Canadian households are electricity, natural gas, wood, and heating oil.

The Goods and Services Tax (GST) is a 5% sales tax levied by the federal government on most goods and services sold in Canada. In some provinces, the GST is combined with the province's sales tax rate to form the Harmonized Sales Tax (HST).<sup>2</sup> This is the case in Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, and Ontario. In provinces where the HST is in place, the federal portion of the sales tax remains 5%. GST or HST applies to the retail price at the point-of-sale.

GST or HST applies to all the energy types used for residential purposes. Some provinces may offer a rebate equivalent to their portion of the HST on the sale of energy depending on its use (for example Nova Scotia offers a rebate on energy used for home heating), or on a specific type of energy (e.g. Ontario's rebate on electricity).

# 2. Methodology

---

The cost estimate produced by the Parliamentary Budget Officer (PBO) is based on data from:

- the National Energy Board: Supply and Demand projections;<sup>3</sup>
- Natural Resources Canada: National Energy Use Database;<sup>4</sup> and
- the Canada Revenue Agency: GST/HST calculator.<sup>5</sup>

We use forecasts for residential energy demand by province and territory published by the National Energy Board. We then use historical data on residential energy use from the National Energy Use Database to estimate total energy demand by energy type for each province and the territories. Combining these data sets provides a forecast of residential energy demand by type of energy.

We use the Canada Revenue Agency's GST/HST calculator to determine effective tax rates on after-tax amounts for each province and the territories. We then apply those effective tax rates to energy prices to obtain the cost of removing the GST from residential energy use.<sup>6</sup>

## 3. Results

The PBO estimates that removing GST from residential energy use will cost the federal government \$1.52 billion in GST revenue during the 2019-20 fiscal year, rising to \$1.63 billion by 2024-25. Table 3-1 presents a six-year projection of the costs, beginning in the 2018-19 fiscal year.

**Table 3-1 Cost of GST removal on residential energy use, by province**  
\$ millions

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Newfoundland and Lab.	\$35	\$36	\$37	\$37	\$37	\$37
Prince Edward Island	\$7	\$8	\$8	\$7	\$8	\$7
Nova Scotia	\$62	\$65	\$64	\$63	\$64	\$64
New Brunswick	\$50	\$51	\$51	\$52	\$53	\$53
Quebec	\$338	\$342	\$342	\$343	\$346	\$349
Ontario	\$650	\$662	\$673	\$685	\$696	\$708
Manitoba	\$51	\$53	\$54	\$55	\$56	\$57
Saskatchewan	\$47	\$49	\$50	\$52	\$53	\$53
Alberta	\$120	\$121	\$124	\$130	\$134	\$136
British Columbia	\$156	\$158	\$159	\$161	\$161	\$162
Territories	\$8	\$8	\$8	\$8	\$8	\$8
<b>Total cost</b>	<b>\$1,524</b>	<b>\$1,553</b>	<b>\$1,570</b>	<b>\$1,593</b>	<b>\$1,616</b>	<b>\$1,635</b>

Sources: Parliamentary Budget Officer, Canada Revenue Agency GST/HST Calculator, National Energy Use Database, National Energy Board's Supply and Demand Projections.

The removal of the GST from residential energy use will result in savings for households.<sup>7</sup> However, these savings will largely depend on the mix of energy sources used by households, since some energy sources are more expensive than other, thus resulting in higher GST.

Table 3-2 presents an estimation of households' average annual savings following the removal of GST from residential energy use, beginning in the 2019 calendar year. Certain provinces already offer rebates on residential energy use, which means that some households may see additional savings, that is, on top of those resulting from the GST removal, due to these additional provincial rebates. For instance, Ontario offers a rebate on the provincial portion of the HST on electricity consumption; New Brunswick has

recently introduced a Home Energy Assistance program that provides a \$100 rebate for families with an income of \$30,000 or less in 2017.<sup>8</sup>

**Table 3-2 Estimated annual savings per household, by province**

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Newfoundland and Lab.	\$156	\$161	\$159	\$159	\$159	\$159	\$159
Prince Edward Island	\$117	\$126	\$120	\$115	\$114	\$112	\$110
Nova Scotia	\$148	\$155	\$151	\$148	\$148	\$147	\$146
New Brunswick	\$150	\$156	\$154	\$154	\$155	\$155	\$156
Quebec	\$90	\$91	\$89	\$89	\$88	\$88	\$87
Ontario	\$116	\$117	\$117	\$117	\$118	\$118	\$118
Manitoba	\$103	\$106	\$107	\$108	\$110	\$110	\$111
Saskatchewan	\$105	\$110	\$112	\$115	\$117	\$117	\$117
Alberta	\$72	\$71	\$71	\$73	\$75	\$74	\$73
British Columbia	\$78	\$78	\$77	\$77	\$76	\$75	\$74
Territories	\$184	\$186	\$181	\$177	\$176	\$173	\$171

Sources: Parliamentary Budget Officer, Canada Revenue Agency GST/HST Calculator, National Energy Use Database, National Energy Board's Supply and Demand Projections.

# References

---

1. Natural Resources Canada. [National Energy Use Database - Residential](#) (accessed May 23, 2019).
2. Natural Resources Canada. [Fuel Consumption Taxes in Canada](#) (accessed May 23, 2019).
3. National Energy Board. [Canada's Energy Future 2018: Energy Supply and Demand Projections to 2040](#). October 2018 (accessed May 23, 2019).
4. Note 1.
5. Canada Revenue Agency. [GST/HST calculator and rates](#) (accessed May 23, 2019).
6. Retail prices (including applicable taxes) for electricity, natural gas and heating oil are retrieved from NEB's Supply and Demand Projections. We use an estimation for wood prices from sellers in Newfoundland and Labrador and Manitoba, based on the price of 1 cord of birch wood (assuming an energy content of 30.6 gigajoules per cord).
7. The number of households is taken from the National Energy Use Database – Residential. It is forecasted using its long-term growth rate calculated between 1990 to 2016.
8. Government of New Brunswick. [2019 Home Energy Assistance Program](#) (accessed May 23, 2019).