



## CANADA: INVENTORY OF ESTIMATED BUDGETARY SUPPORT AND TAX EXPENDITURES FOR FOSSIL-FUELS

### Energy resources and market structure

Canada has substantial and diversified fossil-energy resources, and the energy sector makes a significant contribution to the economy. It is a net exporter of oil, natural gas and coal, as well as uranium (being the world's largest producer) and electricity (the majority of it hydropower-based). Canada has the third-largest proven oil reserves in the world, most of which are in oil sands. Production from oil sands has grown rapidly in recent years, broadly offsetting a decline in output of conventional oil. Proven natural gas reserves have risen in the last few years, mainly thanks to shale gas and other unconventional types of gas, though overall production and exports (entirely to the United States) have declined. Oil and gas together account for two-thirds of the country's primary energy use, with hydro-based electricity (12%) and nuclear power (9%) accounting for most of the rest. Overall, Canada exports about one-third of its energy production.

Canadian energy policy relies on competitive markets for determining supply, demand, prices and trade. The federal government no longer has any ownership stake in any major energy company, other than Atomic Energy of Canada Limited (AECL) — a Crown corporation responsible for managing Canada's national nuclear-energy research and development programme. The privatisation of Petro-Canada, previously the main state-owned energy company, was completed in 2004. By contrast, all but one of the ten provinces still have Crown corporations in energy, notably in hydropower production.

In general, the provinces have jurisdictional responsibility for the resources that lie within their boundaries and are therefore responsible for oversight of the industry within their boundaries. Four provinces — British Columbia, Alberta, Saskatchewan and Newfoundland and Labrador — account for a large majority of Canada's oil-and-gas production. Production in British Columbia, Alberta and Saskatchewan is regulated by the provinces, but in Newfoundland and Labrador (as in Nova Scotia) the federal government and the province jointly regulate offshore production activities. In addition, federal government jurisdiction applies to Crown and some private lands north of 60 degrees latitude in the territories, reserve lands and offshore frontier areas. However, territorial governments are provided with the authority to exercise most onshore-land and natural-resource responsibilities where devolution or administrative agreements are in place. The upstream oil and gas industry in Canada is highly competitive, with hundreds of exploration and production firms.

The natural gas gathering and transmission pipeline network is owned and operated by several private companies. The main exceptions are TransGas and Swan Valley Gas Corporation, which are provincial Crown corporations, owned by SaskEnergy in Saskatchewan and Manitoba Hydro in Manitoba. Gas distribution assets are typically owned and operated by private companies that have exclusive rights to distribute gas in a given regional or local area. Distribution companies are provincially regulated and most are the only retailer in their concession area with the exception of the provinces of Alberta and Ontario, where some retail competition exists. Regulation of the gas industry is primarily in the hands of the provincial authorities, with the National Energy Board responsible for regulating interprovincial and international gas trade and pipelines.

In most provinces, the electricity industry is highly integrated, and the bulk of generation, transmission and distribution services are provided by a few dominant utilities. Although some of these are privately owned, most

are Crown corporations owned by the provincial governments. In some cases, small generators also exist, but rarely compete directly with a Crown corporation. In many cases, the previously integrated utilities are increasingly becoming functionally unbundled to accommodate the introduction of wholesale competition, and in some provinces, generation, transmission and distribution/retail activities are structurally distinct. In several places, notably in Alberta, some municipalities have maintained ownership of their local distribution utility facilities, while also setting up municipally owned generating companies to compete in the open wholesale market. Only two provinces — Ontario and Alberta — have moved to full retail competition although Ontario also has a Regulated Price Plan as a default for residential and low-volume consumers. Generation, transmission and distribution services are regulated largely by provincial regulatory agencies.

### **Prices, taxes and support mechanisms**

Most energy commodity prices are unregulated in Canada. Nonetheless, some retail oil price controls remain in place in Québec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador. These provincial controls set a maximum retail price or a minimum price, or (in the case of Prince Edward Island and Nova Scotia) both. Natural gas and electricity prices are regulated in most provinces by a quasi-judicial board or commission on a cost-of-service basis. In Alberta and Ontario, prices are set by the market, although households and smaller commercial consumers have the option of subscribing to a regulated rate.

Income-tax treatment of the oil, gas and mining sectors in Canada has been undergoing fundamental reforms. Royalties are now fully deductible from income for corporate income-tax purposes, and the resource allowance, a special deduction permitted in lieu of royalty deductibility, has been phased out. Also, corporate tax rates for the oil, gas and mining sectors, which had been higher than those for other industries for a number of years, have been brought into line with the general corporate rate. The accelerated capital cost allowance for oil-sands projects (which permitted companies a fast write-off of certain kinds of assets) is being phased out over the period 2011-2015. In its 2011 budget, the Canadian government announced that in order to make the system more neutral, deduction rates for oil sands resource rights and certain intangible development costs of oil sands projects would be reduced to the rates applicable in the conventional oil and gas sector. However, several other tax measures that support energy production remain in place. These include: accelerated depreciation for physical assets in mines (including coal mines, but not oil sands mines) and for successful oil, gas and mineral exploration expenses; flow-through shares, which allow a corporation to transfer unused exploration and development expenses to their shareholders; and the ability for small oil and gas companies to reclassify some development expenses as exploration expenses under the flow-through share scheme. In addition, Alberta and British Columbia both offer several royalty-reduction programmes that target specific types of oil and gas projects.

Federal excise taxes are imposed on leaded and unleaded gasoline, diesel and aviation fuels used on domestic flights. Since April 2008, renewable fuels (ethanol and biodiesel) are subject to the same federal excise taxes as the motive fuels (gasoline and diesel fuel) with which they are blended. Diesel used as heating oil is exempt for excise tax. Diesel used in the generation of electricity is also exempt, except where the electricity so generated is used primarily in the operation of a vehicle. A federal goods and services tax (GST) is levied on all fuels and energy services. In all provinces except Alberta and the territories of Yukon, Northwest Territories, and Nunavut, a provincial sales tax is also generally levied, in several cases combined with the GST into a Harmonized Sales Tax (HST).

The provinces also levy specific taxes on fuels. Some provinces have programmes or fiscal features that support the consumption of certain types of energy. For example, in Alberta, a farm fuel distribution allowance provides farmers with direct budgetary transfers; another provision exempts farmers from the provincial component of the tax. The province of Saskatchewan exempts marked diesel fuel sold to valid Fuel-Tax Exemption Permit holders for use in unlicensed farm, unlicensed primary production<sup>1</sup> machinery, and licensed

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<sup>1</sup> Unlicensed primary production here comprises activities such as commercial fishing, commercial trapping, commercial logging, and commercial peat harvesting.

farm vehicles. Prince Edward Island exempts from tax marked fuel sold to valid permit holders for use in unlicensed equipment in a number of activities including farming, fishing, and aquaculture. New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, and the territory of Yukon all provide certain eligible households with some sort of rebate on their heating bills.

Canada has also traditionally provided support to northern communities to assist with the high cost of living in remote communities, including issues relating to access to energy. Support has been provided to First Nations communities in northern Ontario, for example, to upgrade infrastructure for power generation and alleviate the impact of high diesel fuel costs on generating and distributing electricity.

## **Data documentation**

### *General notes*

The fiscal year in Canada runs from 1 April to 31 March. Following OECD convention, data are allocated to the starting calendar year so that data covering the period April 2005 to March 2006 are allocated to 2005.

Since Canada is a federal country, the data collection exercise was also conducted for the following provinces and territories: Alberta (AB), British Columbia (BC), Manitoba (MB), New Brunswick (NB), Newfoundland and Labrador (NL), Nova Scotia (NS), Ontario (ON), Prince Edward Island (PE), Quebec (QC), Saskatchewan (SK), and the territory of Yukon (YT).<sup>2</sup>

The inventory includes a number of provincial tax expenditures within resource royalty systems. These are included because they are explicitly defined as quantified departures from the general royalty rules. As noted in Chapter 1 of this Inventory, however, it is important that such measures, including their objectives and impacts, be considered (in a parallel way with income tax and consumption tax measures) within the context of the broader royalty system of which they form a part.

Several features of Canada's tax system that indirectly support the production of fossil fuels—including coal and oil sands—apply to the mining sector as a whole. While our definition of support stresses specificity as a requisite, we consider those measures that apply to mining in general as being specific enough to warrant their inclusion in the database. In the absence of data on the actual sector distribution of the usage of these measures, as in other countries, the OECD has presumed based on relative output levels that the majority of the usage relates to fossil-fuel extraction. This should not be interpreted, however, as reflecting the views of the responsible governments.<sup>3</sup>

A counter-example of a measure that we have not considered specific enough would be the Atlantic Investment Tax Credit, which provides a 10% income tax credit for tangible capital investments in a particular region of Canada by corporations in certain sectors. Because this tax provision applies to a range of goods-producing sectors including mining (including oil and gas extraction), logging, farming, fishing and manufacturing, we have not included it in the database. It is noted, however, that in its

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<sup>2</sup> The inventory does not include at this stage the territory of Nunavut and the Northwest Territories.

<sup>3</sup> An estimated allocation based on gross-output shares is used here to provide readers with a sense of the magnitudes involved. Since these allocations are not from government sources and are based on general volume and value ratios, they might not always correlate well with actual distributions, if such information were available. These assumptions have been made by the OECD and should not be interpreted as reflecting the views of the responsible government.

March 2012 budget, the Government of Canada announced its intention to phase out the eligibility of oil and gas and mining activities for this regional credit over a four-year period.

### **Federal government**

#### ***Producer Support Estimate***

##### *Earned Depletion Allowance (data for 1991- )*

This tax provision allowed oil and gas and mining corporations to claim additional deductions against their income tax base. Those additional deductions could generally equal up to 25% of the company's resource profits and were specifically meant to encourage further exploration and development. In practice, oil and gas and mining companies investing in the exploration and development of mineral resources in Canada were able to claim depletion allowances in addition to other available deductions such as those for Canadian Exploration Expense and Canadian Development Expense (see below), thereby obtaining overall deductions in excess of the total amounts actually spent on exploration and development (e.g. for as much as 133% of these amounts). Unclaimed depletion allowances could be accumulated in a pool to be carried forward indefinitely. Although the measure was phased out on 1 January 1990, unclaimed allowances from the pool were still giving rise to limited annual tax expenditures on a cash-flow basis as of 2011.

Because this measure applies to the mining sector as a whole, for this and similar measures, we deduct from the annual amounts reported in official tax-expenditure documents the estimated share associated with mining output that is not concerned with fossil fuels. This is done using gross output data from the OECD's STAN database on the assumption that the tax expenditure is evenly distributed across sub-sectors according to output. The remaining amounts are then allocated to the various types of fossil fuels (i.e. crude oil, natural gas, and coal) using production data from the IEA's Energy Balances.

Sources: Department of Finance Canada (various years), Natural Resources Canada (2010[a]), IEA, OECD.

Tag: CAN\_te\_01

##### *Excess of Resource Allowance over Non-Deductibility of Royalties (data for 1993-2006)*

Starting in 1976, oil and gas and mining companies operating in Canada were able to deduct a fixed percentage (25%) of their annual resource profits from their taxable income. This provision was meant to compensate companies for the non-deductibility of government royalties (which in Canada are primarily levied at the province level) that had been in place since 1974. In practice, the resource allowance sometimes exceeded the amount of royalties paid to the provinces. It was decided to phase out this provision over a five-year period starting in 2003. Government royalties, therefore, are now once again deductible from the income tax base.

Because royalties are often treated as operating expenses and in order to ensure a consistent reporting across countries, we consider here the net fiscal cost of the resource allowance. This is consistent with Canadian tax-expenditure accounts, which subtract from the total revenue foregone the revenues that arise due to the non-deductibility of provincial royalties. This yields positive tax expenditures for most of the period under consideration.

Since this measure applies to the mining sector as a whole, we deduct from the annual amounts reported in official tax-expenditure documents the estimated share associated with mining output that is not

concerned with fossil fuels. This is done using gross output data from the OECD's STAN database. The remaining amounts are then allocated to the various types of fossil fuels (i.e. crude oil, natural gas, and coal) using production data from the IEA's Energy Balances.

Sources: Department of Finance Canada (various years), Natural Resources Canada (2010[a]), IEA, OECD.

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#### *Canadian Exploration Expense (no data available)*

The Canadian Exploration Expense (CEE) provision allows oil and gas and mining companies to deduct exploration expenses in full (100%) in the year in which they are incurred. Exploration expenses include the costs of geological surveys and exploratory drilling, whether successful or unsuccessful. For the mining sector (including oil sands mines and coal mines, but not including conventional oil and gas), CEE also includes intangible costs incurred for the purpose of bringing a mine into production, such as clearing land or removing overburden, described as "pre-production development costs." Unclaimed deductions can be carried forward indefinitely.

The notes to Canada's tax expenditure accounts remark that the costs of development, of successful exploration and, potentially, of some unsuccessful exploration would not be immediately deductible in the benchmark tax system. Canada does not, however, produce annual estimates of the revenue foregone due to the CEE.

In its 2011 budget, the Canadian government announced that development expenses incurred for the purpose of bringing a new oil-sands mine into production, currently immediately deductible as CEE, will in future be treated as Canadian development expenses (CDE), deductible at a rate of 30% per year. This will align the deduction rates for pre-production development costs in oil-sands mines with the rates applicable to in situ oil-sands projects and the conventional oil and gas sector. The change will be phased in over the 2013-2016 period.

Sources: Department of Finance Canada (various years), Government of Canada (2011), Natural Resources Canada (2010[a]).

#### *Canadian Development Expense – Oil Sands Property (no data available)*

In the conventional oil and gas sector, the cost of acquiring rights to explore for, drill or extract oil or natural gas, or to acquire an oil or natural-gas well or other resource property, is treated for tax purposes as Canadian oil and gas property expense (COGPE). COGPE is deductible at the rate of 10% per year on a declining balance basis. By contrast, the cost of acquiring oil sands leases and other oil sands resource property generally could be treated as Canadian development expense (CDE), which is deductible at the rate of 30% per year on a declining balance basis.

In its 2011 budget, the government of Canada announced a reduction in the deduction rate for resource rights in the oil sands sector to the 10% rate that applies to resource rights in the conventional oil and gas sector (COGPE). This change was cited as one that would "improve fairness and neutrality of the taxation of oil sands relative to other sectors." The government estimates that this change, together with the change described above in respect of development costs for oil-sands mines, will save an amount of revenues rising to CAD 75 million per year in 2015-16, and generate total savings of CAD 220 million over the next five years.

Sources: Department of Finance Canada (various years), Government of Canada (2011), Natural Resources Canada (2010[a]).

*Flow-Through Share Deductions (data for 1996- )*

Flow-through shares were introduced in some form as early as the 1950s to help finance the production of oil, gas, and other minerals. Under current rules, companies that have incurred exploration and development expenses (see “Canadian Exploration Expense” and “Canadian Development Expense” above) can issue flow-through shares to transfer to investors deductions in respect of those expenses up to the value of the share. Investors thus acquire both an equity interest in the issuing company and a tax deduction. This makes it easier for resource companies to attract capital, and thus favours investment in exploration and development of resources. A tax expenditure arises to the extent that the deduction is taken earlier than it otherwise would have been taken, or is claimed at a higher rate (e.g. because the investor is subject to a tax rate higher than the issuing company).

The amount of benefit provided to producers by this measure is indirect and depends on the degree to which it attracts incremental capital investment to the sector. The tax-expenditure estimates for this measure are the cost to the government of allowing investors (individuals and corporations, not necessarily engaged in the fossil-fuel sector) to deduct, in calculating their taxable income, expenses renounced by corporations. They represent the cost to the government of providing the support, rather than the value of the benefit received by corporations in the sector.

Canada’s Department of Finance changed the way it estimates and reports the annual revenue foregone due to this tax provision in the 2008 and 2010 editions of its tax-expenditure report. This results in a break in the time series in terms of how the information is reported in 2003 and again in 2005. The reports caution that the figures for years before 2003 over-state the tax expenditure in that they include resource deductions claimed by individuals other than via flow-through shares, while the figures for years before 2005 do not take into account the special rules that apply to the taxation of gains on the disposition of flow-through shares.

Estimates for this particular measure comprise both the annual revenue foregone associated with the personal income tax and that associated with the corporate income tax. Because the measure applies to the mining sector as a whole, we deduct from the annual amounts reported in official tax-expenditure documents the estimated share associated with mining output that is not concerned with fossil fuels. This is done using gross output data from the OECD’s STAN database. The remaining amounts are then allocated to the various types of fossil fuels (i.e. crude oil, natural gas, and coal) using production data from the IEA’s Energy Balances.

Sources: Department of Finance Canada (various years), Government of Canada (2011), Natural Resources Canada (2010[a]), IEA, OECD.

Tag: CAN\_te\_03

*Reclassification of Expenses Under Flow-Through Shares (data for 1996- )*

Starting in 1992, junior oil and gas companies (having less than CAD 15 million worth of taxable capital employed in Canada) have been able to reclassify each year a limited amount of development expenses as exploration expenses when they are transferred to investors under flow-through shares (see “Flow-Through Share Deductions” above). Exploration expenses can be deducted in full in the year in which they are incurred while development expenses can be deducted at 30% per year. This has the

effect of accelerating the tax deductions obtained by investors who acquire flow-through shares, thereby making it easier for oil and gas companies to raise capital. The amount of development expenses that can be reclassified as exploration expenses is currently capped at CAD 1 million per company.

The benefit provided to producers by this measure is indirect and depends on the degree to which it attracts incremental capital investment to the sector. The tax-expenditure estimates for this measure are the cost to the government of allowing investors (individuals and corporations, not necessarily engaged in the fossil-fuel sector) to deduct, in calculating their taxable income, Canadian exploration expenses instead of Canadian development expenses. They represent the cost to the government of providing the support, rather than the value of the benefit received by corporations in the sector.

Canada's Department of Finance changed the way it estimates and reports the annual revenue foregone due to this tax provision in the 2008 edition of its tax-expenditure report. This results in a break in the time series in terms of how the information is reported around 2003, at which time the new data become available.

Estimates for this particular measure comprise both the annual revenue foregone associated with the personal income tax and that associated with the corporate income tax. We use production data from the IEA's Energy Balances to allocate these annual estimates to oil and natural-gas extraction.

Sources: Department of Finance Canada (various years), Natural Resources Canada (2010[a]), IEA.

Tag: CAN\_te\_04

#### *Accelerated Capital Cost Allowance (limited data for 2007- )*

Most machinery, equipment and structures used to produce income from a mine or an oil-sands project, are eligible to be deducted at a capital cost allowance (CCA) rate of 25% per year under CCA Class 41. This rate also applies to assets owned by a mineral-resource owner that are used in the initial processing of ore from the mineral resource or in the upgrading of bitumen (the oil-sands product) from the mineral resource into synthetic crude oil. In addition to the regular CCA deduction, an accelerated CCA has been provided since 1972 for assets acquired for use in new mines, including oil-sands mines, and major mine expansions (i.e. those that increase the capacity of a mine by at least 25%). This provision allows a company to deduct as early as the year in which the asset is available for use up to the full amount of the remaining capital cost, not exceeding the taxpayer's income for the year from the project (calculated after deducting the regular CCA deductions). In 1996, this accelerated CCA was extended to in-situ oil sands projects, which use oil wells rather than mining techniques to extract bitumen. The 1996 changes also extended the accelerated CCA to expenditures on eligible assets acquired in a taxation year for use in a mine or oil-sands project, to the extent that the cost of those assets exceeds 5% of the gross revenue for the year from the mine or project.

The Canadian 2007 budget announced the phase-out of the accelerated CCA for oil-sands projects — leaving in place the regular 25% CCA rate for these assets. To ensure a stable investment climate, the existing accelerated CCA was grandfathered for oil-sands assets acquired before 2012 in project phases that commenced major construction prior to the Budget announcement. For other assets, companies maintained the ability to claim accelerated CCA until 2010, with the rate being gradually reduced between 2011 and 2015. The accelerated CCA for mines other than oil sands mines is not affected by this phase-out.

The government of Canada does not produce annual estimates of the revenue foregone due to the accelerated capital cost allowance for mines and oil sands projects. It has stated, however, that the estimated cost of the provision in the oil-sands sector (which is being phased out), was forecast at the time of the announcement to be on the order of CAD 300 million per year over the period from 2007 to 2011, before the beginning of the phase-out. The government noted, however, that the value can vary considerably from one year to another based on project and industry factors.

Sources: Department of Finance Canada (various years), Department of Finance Canada (2007), Department of Finance Canada (2008), Natural Resources Canada (2010[a]).

Tag: CAN\_te\_06

#### *Syncrude Remission Order (data for 1991-2010)*

The Syncrude project is a joint venture set up in the 1970s to exploit some of the oil sands that are located in the province of Alberta. The Syncrude Remission Order was enacted in 1976 to allow investors participating in the Syncrude project to deduct both royalties and the resource allowance from their income-tax base (see also “Excess of Resource Allowance over Non-Deductibility of Royalties” above). This initial agreement had a built-in phase-out mechanism through which deductions would cease when cumulative production reaches 2.1 billion barrels or on 31 December 2003 at the latest.

We allocate this measure entirely to oil sands. Data come from Canada’s Department of Finance up to 1995 and from the Public Accounts of Canada thereafter. Because the Syncrude Remission Order expired in 2003, positive and negative cash transfers in the following years could be related to delays in filing, assessing and processing remissions to the venture participants.

Sources: Department of Finance Canada (various years), Natural Resources Canada (2010[a]), Public Accounts of Canada (various years).

Tag: CAN\_te\_05

#### ***General Services Support Estimate***

##### *Petroleum Technology Research Centre (data for 1999- )*

The Petroleum Technology Research Centre (PTRC) was set up in 1998 to conduct research connected to enhanced oil recovery techniques and carbon capture and storage. The PTRC is primarily co-funded on a project basis by the government of Saskatchewan, the federal government of Canada, the US Department of Energy, and the industry.

We report here public funding coming from all levels of government (thus excluding industry funding). We use production data from the IEA’s Energy Balances to allocate the annual amounts reported in budget documents to oil and natural-gas extraction. The measure is attributed to the GSSE as it does not increase current production or consumption of oil and natural gas. It also benefits the oil and gas industry as a whole.

Sources: Petroleum Technology Research Centre (various years), Natural Resources Canada, Government of Saskatchewan, IEA.

Tag: CAN\_dt\_03



## **Alberta**

### ***Producer Support Estimate***

*[Alberta] Energy Industry Drilling Stimulus (data for 2009-2010)*

The province of Alberta introduced this initiative in 2009 on a temporary basis to support the production of oil and natural gas. It comprises two different programmes, both of which reduce the amounts of provincial royalties that are to be paid by producers. The Drilling Royalty Credit for new oil and gas wells provides them with a CAD 200 royalty credit per metre drilled. A cap is, however, set on the amount of credit a company can receive, with the limit being contingent on the production levels from the preceding year. Meanwhile, the New Well Incentive Program sets a maximum royalty rate of 5% for the first 50 000 barrels of oil produced (500 000 thousand cubic feet for natural gas). Although the Energy Industry Drilling Stimulus was initially designed to last for one year only, the government of Alberta subsequently prolonged the initiative before it then expired on 31 March 2011.

Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs. We include here the annual amounts of negative revenues as reported by Alberta Energy (various years).

We use province-level data from the Canadian Association of Petroleum Producers (CAPP) on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Alberta Energy (various years), CAPP.

Tag: CAN\_te\_07

*[Alberta] Alberta Royalty Tax Credit (data for 1997-2007)*

The Alberta Royalty Tax Credit (ARTC) was introduced in 1974 at the time when provincial royalties were made non-deductible for income-tax purposes (see also “Excess of Resource Allowance over Deductibility” above). It provided all Alberta Crown royalty payers with a royalty credit, calculated at a specified percentage of the lesser of Crown royalties paid to the province of Alberta in the year or a specified annual maximum amount of qualifying royalties. The ARTC was eliminated in 2007 when Crown royalties again became fully deductible for federal and provincial income-tax purposes.

Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs. We include here the annual amounts of negative revenues as reported by Alberta Energy (various years).

We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Alberta Energy (various years), CAPP.

Tag: CAN\_te\_08

*[Alberta] Alberta Crown Royalty Reductions (data for 2001- )*

The province of Alberta offers several royalty-reduction programmes that target specific types of oil and natural-gas projects. Although a detailed breakdown by programme is not available, this item includes measures for enhanced oil recovery projects and low-productivity and reactivated wells. The Ministry of Energy's Annual Report for FY2010/11 mentions that the province of Alberta operates seven such programmes (excluding the Energy Industry Drilling Stimulus described above).

Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs. We include here the annual amounts of negative revenues as reported by Alberta Energy (various years).

We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Alberta Energy (various years), CAPP.

Tag: CAN\_te\_09

***Consumer Support Estimate***

*[Alberta] Alberta Farm Fuel Distribution Allowance (data for 1999- )*

This programme provides farmers in the province of Alberta with a CAD 0.06 per-litre grant on their purchases of marked (i.e. dyed) diesel and heating fuel. It is generally provided upfront at time of sale.

Sources: Government of Alberta (various years), Alberta Agriculture and Rural Development (various years).

Tag: CAN\_dt\_02

*[Alberta] Alberta Tax Exempt Fuel Use Program (data for 2000- )*

Sales of marked fuel to be used in eligible, unlicensed off-road vehicles in the province of Alberta are exempted from the provincial fuel tax usually levied on sales of petroleum products (CAD 0.09 per litre in Alberta). This tax exemption is generally provided upfront at time of sale. In 2011, the government of Alberta narrowed the range of exempted uses to unlicensed vehicles.

Sources: Government of Alberta (various years).

Tag: CAN\_te\_10

*[Alberta] Alberta Farm Fuel Benefit (data for 2000- )*

The Alberta Farm Fuel Benefit programme exempts fuel purchased by farmers in the province of Alberta from the provincial fuel tax. As set out by the Fuel Tax Act and the Fuel Tax Regulations, marked tax-exempt fuel can be used by farmers for farming operations in Alberta if all the specified criteria are met. Fuel may be used in licensed (e.g. farm trucks) and unlicensed vehicles.

Sources: Government of Alberta (various years), Legislative Assembly of Alberta (2000).

Tag: CAN\_te\_55

### ***General Services Support Estimate***

*[Alberta] Orphan Well Fund (data for 2009-2010)*

This one-off Alberta programme was introduced in 2009 along with the Energy Industry Drilling Stimulus (see above). It provided funding for the cleaning up of old, “legacy” oil and gas wells on the grounds that this would free up industry resources. The measure applied primarily to those sites where no distinct party can be held liable, i.e. orphan wells. Funds were administered by the Orphan Well Association which normally levies a fee on the upstream oil and gas industry to pay for the cleaning up and reclamation of sites. The present item only covers additional funding from the government of Alberta.

Estimates are based on a single CAD 30 million appropriation that we split evenly between 2009 and 2010. This comes from the fact that the appropriated sum had to be spent no later than 31 March 2011. We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction. The measure is attributed to the GSSE as it does not increase current production or consumption of oil and natural gas.

Sources: Alberta Energy (various years), Orphan Well Association (2010), CAPP.

Tag: CAN\_dt\_01

### **British Columbia**

#### ***Producer Support Estimate***

*[British Columbia] Fuel-Tax Exemption for Transmitting Waste Gas (data for 1999- )*

The use of natural gas in compressors used to transmit waste gas from gas-processing plants to wellheads (and vice versa) in British Columbia is exempt from the province’s fuel tax.

We allocate this measure entirely to natural gas.

Sources: Government of British Columbia (various years).

Tag: CAN\_te\_18

*[British Columbia] Deep Drilling Credit (data for 2006- )*

This measure was introduced in 2002 to encourage the drilling of deep, high-cost wells in the province of British Columbia. The credit has since been increased by 15% in the case of deep natural-gas drilling and broadened to cover certain horizontal wells following the introduction of BC’s Oil and Gas Stimulus Package in 2009.

Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs. We include here the annual amounts of negative revenues as reported by the Government of British Columbia (various years).

We allocate this measure entirely to natural gas.

Sources: Government of British Columbia (various years).

Tag: CAN\_te\_19

*[British Columbia] Summer Drilling Credit (data for 2006- )*

This measure was introduced in 2003 by the province of British Columbia to encourage the drilling of hydrocarbons over the summer season. The winter season usually provides for a better terrain owing to the cold temperatures that make the ground more adapted to moving around heavy machinery.

Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs. We include here the annual amounts of negative revenues as reported by the Government of British Columbia (various years).

We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Government of British Columbia (various years), CAPP.

Tag: CAN\_te\_20

*[British Columbia] Marginal and Ultramarginal Credit (data for 2006-2007)*

A first version of the Marginal and Ultramarginal Credit was introduced in 2003 to encourage the drilling of high-cost, marginal natural-gas wells in the province of British Columbia. The programme was then extended to ultramarginal natural-gas wells.

Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs. We include here the annual amounts of negative revenues as reported by the Government of British Columbia (various years).

We allocate this measure entirely to natural gas.

Sources: Government of British Columbia (various years).

Tag: CAN\_te\_21

*[British Columbia] Road and Pipeline Infrastructure Credit (data for 2006- )*

This measure was introduced in 2003 by the province of British Columbia to promote the construction of roads, pipelines, and associated facilities in relation to oil and gas extraction, with a view to increasing new capital investment to further develop the province's fossil resources. The programme allows oil and gas companies to deduct as much as 50% of the cost of eligible infrastructure projects against royalties otherwise payable to the province.

Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs. We include here the annual amounts of negative revenues as reported by the Government of British Columbia (various years).

We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Government of British Columbia (various years), CAPP.

Tag: CAN\_te\_22

*[British Columbia] Other Royalty Exemptions and Holidays (data for 1995-2001)*

This item covers several royalty-reduction programmes that have been introduced over the years in the province of British Columbia, but excluding those that have already been included in the present inventory. The exact number of schemes underlying this item has varied over time, but includes the Natural Gas Royalty Reduction and the Discovery Oil Royalty Holiday.

Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs. We include here the annual amounts of negative revenues as reported by the Government of British Columbia (various years).

We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Government of British Columbia (various years), CAPP.

Tag: CAN\_te\_23

*[British Columbia] Mineral Tax Framework (no data available)*

The mining of coal in British Columbia is subject to taxation under the province's Mineral Tax Act, which provides for a particular tax system approximating cash-flow taxation.<sup>4</sup> Under this system, the tax rate facing coal-mining companies in any given year is determined by comparing all cumulative revenues and expenditures (including capital costs) over the life of the project. Investment expenditures are therefore entirely deductible in the year in which they are incurred. Interest charges and other costs of financing are not, however, deductible for mineral-tax purposes.

Since the immediate expensing of exploration, development and other capital costs is a standard feature of taxes that approximate cash-flow taxation like BC's mineral tax, this treatment may not be preferential in the particular case of BC's mineral tax.

However, some other features of BC's mineral tax system may still be considered preferential depending on which benchmark is used. For example, the New Mine Allowance allows mining companies to deduct as much as 133% of eligible capital expenditures to encourage the development of new mines, while the Earned Depletion Tax Credit provides for reductions in mineral taxes to account for the depletion of coal deposits.

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<sup>4</sup> Cash-flow tax systems are particular tax systems where "capital is costed by allowing an immediate write-off of investment expenditures at the time they are undertaken. No deductions for interest or depreciation are then permitted." Such systems can be theoretically equivalent to the more common imputed-income tax systems where the objective is to levy a neutral business tax (Boadway and Bruce, 1984).

Sources: BC Ministry of Finance (2009).

*[British Columbia] Mining Exploration Tax Credit (data for 1999- )*

The British Columbia Mining Exploration Tax Credit (not to be confused with the federal Mineral Exploration Tax Credit) provides mining companies operating in the province of British Columbia with a 20% income-tax credit on qualifying exploration expenditures. The latter include expenses in relation to geological surveys, test pits, and other similar activities aimed at determining the existence, extent, and quality of mineral deposits. The measure applies to most minerals and, unlike the federal credit, coal, but it does not cover exploration expenditures connected to oil and natural gas. Starting in February 2007, the rate of credit was increased to 30% in the particular case of the prescribed Mountain Pine Beetle affected areas.

Because this measure applies to the mining of both non-energy minerals and coal, we deduct from the annual amounts reported in official tax-expenditure documents the estimated share associated with mining output that is not concerned with coal. This is done using data from BC's Ministry of Energy and Mines on the value of minerals produced.

Sources: Government of British Columbia (various years), BC Ministry of Energy and Mines, IEA.

Tag: CAN\_te\_24

***Consumer Support Estimate***

*[British Columbia] Sales-Tax Rebate for Motor Fuels (data for 2010- )*

The Harmonized Sales Tax (HST) was introduced in the province of British Columbia in July 2010 to replace the previous Provincial Sales Tax (PST). The overall HST rate (12%) now comprises a federal part (5%) and a provincial part (7%), though several rebates exist that waive the provincial component of the tax for specific goods and services. This is the case with motor fuels, where point-of-sale rebates are available for: gasoline, ethanol, and gasoline blends; diesel fuel, biodiesel, and biodiesel blends (excluding heavy fuel oil); heating oil; locomotive fuel and marine diesel; and aircraft fuels. These fuels are, however, subject to a motor fuel tax and a carbon tax.

In late August 2011 the government of British Columbia announced that it would reinstate the old PST in accordance with the results of a referendum held earlier that month.

We use data from Natural Resources Canada on energy use in British Columbia's transport sector to allocate the annual amounts reported in budget documents to gasoline, diesel fuel, and kerosene-type jet fuel (the numbers for aviation gasoline and biofuels are negligible).

Sources: Government of British Columbia (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_25

*[British Columbia] Residential Energy Credit (data for 2010- )*

This measure exempts the use of energy in British Columbia's residential sector from the provincial part of the Harmonized Sales Tax that is normally levied on most sales of goods and services (see also "Sales-Tax Rebate for Motor Fuels"). It applies to electricity, natural gas, heating fuel, heat, steam, kerosene, propane, and firewood.

We use data from Natural Resources Canada on energy use in British Columbia's residential sector to allocate the annual amounts reported in budget documents to electricity, natural gas, heating oil, heat, steam, kerosene, propane, and firewood. We only report, however, the amounts attributable to natural gas (the numbers for coal, propane, and heating oil are negligible).

Sources: Government of British Columbia (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_26

*[British Columbia] PST Exemption for Residential Fuels (data for 1995-2008)*

Prior to the introduction of the Harmonized Sales Tax in July 2010 (see also "Sales-Tax Rebate for Motor Fuels"), the province of British Columbia applied a Provincial Sales Tax (PST) on purchases of most goods and services. Purchases of residential fuels were, however, exempted from the PST. The list of eligible fuels included electricity, natural gas, and fuel oil.

We use data from Natural Resources Canada on energy use in British Columbia's residential sector to allocate the annual amounts reported in budget documents to electricity, natural gas, heating oil, heat, steam, kerosene, propane, and firewood. We only report, however, the amounts attributable to natural gas (the numbers for coal, propane, and heating oil are negligible).

Sources: Government of British Columbia (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_27

*[British Columbia] Fuel-Tax Exemption for Farm Trucks (data for 1995- )*

This measure exempts sales of motor fuels for use in farm trucks (on-road) from British Columbia's Motor Fuel Tax, which is normally levied in the province on most sales of petroleum products for use in internal combustion engines.

We allocate this measure entirely to diesel fuel.

Sources: Government of British Columbia (various years).

Tag: CAN\_te\_28

*[British Columbia] Fuel-Tax Exemption for Farmers (data for 2011- )*

This measure exempts the use of motor fuels in farming activities from British Columbia's Motor Fuel Tax.

Data are only available starting in FY2011/12. We allocate this measure entirely to diesel fuel.

Sources: Government of British Columbia (various years).

Tag: CAN\_te\_29

### ***General Services Support Estimate***

#### *[British Columbia] Funding for Geoscience BC (data for 2005- )*

Geoscience BC, a non-governmental, not-for-profit organisation, was set up in April 2005 to encourage investment in minerals and hydrocarbons exploration in British Columbia through the collection and diffusion of geophysical data. It has attracted funding from the province's Ministry of Energy and Mines on several occasions, starting with an initial grant of CAD 25 million in 2005, and continuing with funding of CAD 11.7 million in 2008 and CAD 12 million in 2011.

Because this measure applies to BC's mining sector as a whole, we deduct from the annual amounts reported in Geoscience BC's financial statements the estimated share associated with mining output that is not concerned with fossil fuels. This is done using data from CAPP and BC's Ministry of Energy and Mines on the value of minerals and hydrocarbons produced. We allocate this measure to the GSSE since it benefits BC's oil and gas industry as a whole.

Sources: Geoscience BC (various years), BC Ministry of Energy and Mines, CAPP, IEA.

Tag: CAN\_dt\_06

#### *[British Columbia] Heartlands Oil and Gas Road Rehabilitation (data for 2005- )*

This measure forms part of British Columbia's transportation investment plan and aims to improve transport infrastructure in relation to hydrocarbons extraction. One declared aim of the programme is to "lengthen the winter drilling season".

We allocate this measure to the GSSE as it benefits BC's oil and gas industry as a whole. We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Government of British Columbia (various years), CAPP.

Tag: CAN\_dt\_07

### **Manitoba**

### ***Producer Support Estimate***

#### *[Manitoba] Manitoba Drilling Incentive Program (no data available)*

This measure was first introduced on a temporary basis in 1992 to encourage the drilling of new wells and certain existing ones in the province of Manitoba. It has since been prolonged, with the latest renewal due to end in 2014. It provides petroleum companies operating in the province with a "holiday oil volume", i.e. an exemption from Crown royalties and freehold production taxes that applies until the amount of oil extracted from a given well reaches a pre-determined level. The programme itself comprises six different sub-programmes, each targeting specific types of wells: the New Well Incentive, the Deep Drilling Incentive, the Horizontal Well Incentive, the Marginal Well Major Workover Incentive, the Injection Well Incentive, and the Holiday Oil Volume Account.



Some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs.

No estimates are available for this particular programme and its sub-components.

Sources: Manitoba Innovation, Energy and Mines (2008).

*[Manitoba] Sales-Tax Exemption for Exploration Equipment (data for 2006- )*

This measure exempts from Retail Sales Tax purchases of eligible equipment used in conducting geophysical surveys and exploring for oil and gas resources. Manitoba's Retail Sales Tax (7%) is normally levied on sales of most goods and services in the province. This tax provision was introduced in 2006 with a view to supporting the oil and gas industry. Eligible equipment includes drill rigs, rig components, mobile equipment used in seismic exploration, and associated services such as well stimulation.

Province-level data from CAPP on the value of oil and gas production indicate that crude oil only is produced in significant quantities in the province of Manitoba. For that reason, we allocate this measure entirely to crude oil.

Sources: Manitoba Finance (various years).

Tag: CAN\_te\_30

***Consumer Support Estimate***

*[Manitoba] Sales-Tax Exemption for Natural Gas (data for 2003- )*

The use of reticulated natural gas for residential-heating purposes in Manitoba is exempt from the province's Sales Tax (7%), which is normally levied on sales of most goods and services.

Sources: Manitoba Finance (various years).

Tag: CAN\_te\_31

*[Manitoba] Fuel-Tax Exemption for Marked Diesel and Gasoline (data for 2003- )*

Sales of marked (i.e. dyed) diesel fuel and gasoline in Manitoba are exempt from the province's Fuel Tax, which is normally levied on most sales of petroleum products.

We use data from Natural Resources Canada on energy use in Manitoba's farming sector to allocate the annual amounts reported in budget documents to diesel fuel and gasoline.

Sources: Manitoba Finance (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_32

## **New Brunswick**

### ***Consumer Support Estimate***

#### *[New Brunswick] Petroleum Products Pricing Act (no data available)*

The Petroleum Products Pricing Act was introduced in 2006 by the government of New Brunswick. It provides for the setting of a cap on prices for automotive fuels and heating fuels (furnace oil and propane) in the province. The New Brunswick Energy and Utilities Board, the province's energy regulator, sets this cap on a weekly basis based on a benchmark taking into account average world prices.

No data are available for this particular measure.

Sources: Energy and Utilities Board (2012).

#### *[New Brunswick] Gasoline and Motive Fuel Tax Refunds (data for 2007- )*

This measure comprises excise-tax refunds granted to certain users of petroleum products in the province of New Brunswick. Products subject to those refunds range from gasoline to diesel fuel, heating oil, propane, natural gas, and kerosene. Eligible users include sectors such as forestry, farming, fishing, manufacturing, mining and quarrying, electricity generation, and the residential sector.

We use data from Natural Resources Canada on energy use in the Atlantic Provinces<sup>5</sup> for three sectors (residential, industrial, and agriculture) to allocate the annual amounts reported in official documents to heating oil, natural gas, propane, fuel oil, kerosene, gasoline, and diesel fuel.

Sources: NB Department of Finance (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_46

#### *[New Brunswick] Diesel-Fuel Equivalent Tax-Reduction Rebates (data for 2007- )*

This measure provides certain users in the province of New Brunswick with fuel-tax refunds on their purchases of diesel fuel.

Sources: NB Department of Finance (various years).

Tag: CAN\_te\_47

#### *[New Brunswick] Home Energy Assistance Program (data for 2006- )*

This programme was introduced in 2006 to provide low-income households in the province of New Brunswick with annual payments of CAD 100 to help them pay their energy bills.

Estimates for FY2008/09 are not available. We use data from Natural Resources Canada on energy use in New Brunswick's residential sector to allocate the annual amounts reported in official documents to electricity, heating oil, natural gas, propane, coal, and firewood. We only report, however, the amounts attributable to heating oil and natural gas (the numbers for coal and propane are negligible).

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<sup>5</sup> Detailed data at the level of the province of New Brunswick are only available for a few sectors.

Sources: NB Department of Social Development (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_dt\_11

*[New Brunswick] Fuel Supplement (data for 2005- )*

The Fuel Supplement provides eligible households in the province of New Brunswick with monthly payments to help them cope with heating costs during the winter season (November to April). Eligibility is contingent upon meeting a certain set of criteria related to accommodation, income, and family status.

We use data from Natural Resources Canada on energy use in New Brunswick's residential sector to allocate the annual amounts reported in official documents to electricity, heating oil, natural gas, propane, coal, and firewood. We only report, however, the amounts attributable to heating oil and natural gas (the numbers for coal and propane are negligible).

Sources: NB Department of Social Development (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_dt\_12

### **Newfoundland and Labrador**

#### ***Producer Support Estimate***

*[Newfoundland and Labrador] Oil and Gas Export Development Fund (data for 2008- )*

This programme was introduced in 2008 by the province of Newfoundland and Labrador to help finance specific investment projects connected to the marketing and export of equipment and services used in the oil and natural-gas industry. Its stated aims are to increase companies' export capabilities and opportunities, and encourage technology transfer. Eligible companies can receive grants covering up to 50% of a project's total costs.

We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Government of Newfoundland and Labrador (various years), CAPP.

Tag: CAN\_dt\_08

#### ***Consumer Support Estimate***

*[Newfoundland and Labrador] NL Energy Rebate (data for 2011- )*

This measure was introduced in October 2011 to provide Newfoundland and Labrador's residential sector with a rebate of Harmonized Sales Tax (HST) on the sector's energy purchases. The HST was established in April 1997 to replace the former federal GST and the province's old sales tax. Under the general HST regime, a 13% rate of tax applies to sales of most goods and services in Newfoundland and Labrador. The energy rebate amounts to 8%, which corresponds to the provincial portion of the overall 13% HST rate. Energy products that are eligible for the rebate include electricity, heating oil, propane, and wood.

We use data from Natural Resources Canada on energy use in Newfoundland and Labrador's residential sector to allocate the annual amounts reported in budget documents to electricity, heating oil, coal, propane, and firewood. We only report, however, the amounts attributable to heating oil (the numbers for coal and propane are negligible).

Sources: Government of Newfoundland and Labrador (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_33

*[Newfoundland and Labrador] Gas-Tax Exemption for Farming (data for 2004- )*

Sales of motor fuels in Newfoundland and Labrador are exempt from the province's Motive Fuel Tax when used in internal combustion engines for farming, fishing, or logging purposes.

We allocate this measure entirely to gasoline since it does not apply to marked diesel fuel.

Sources: Government of Newfoundland and Labrador (various years).

Tag: CAN\_te\_34

*[Newfoundland and Labrador] Gas-Tax Exemption for Vessels (data for 2006- )*

Sales of motor fuels in Newfoundland and Labrador are exempt from the province's Motive Fuel Tax when used in vessels navigating on regularly scheduled routes.

We allocate this measure entirely to diesel fuel and light fuel oil.

Sources: Government of Newfoundland and Labrador (various years).

Tag: CAN\_te\_35

*[Newfoundland and Labrador] Gas-Tax Exemption for Electricity Generation (data for 2004- )*

Sales of motor fuels in Newfoundland and Labrador are exempt from the province's Motive Fuel Tax when used for electricity-generation purposes.

We allocate this measure entirely to diesel fuel and light fuel oil.

Sources: Government of Newfoundland and Labrador (various years).

Tag: CAN\_te\_36

*[Newfoundland and Labrador] Gas-Tax Exemption for Municipalities (data for 2004- )*

Sales of motor fuels in Newfoundland and Labrador are exempt from the province's Motive Fuel Tax when used by municipal governments.

Documentation on fuel use by local administrations suggests that the use of gasoline may be twice that of diesel. Vehicles used by police forces, and smaller fire and rescue vehicles, tend to run on gasoline, whereas larger fire trucks, garbage trucks, heavy-duty road-working equipment and snow ploughs tend to have diesel-powered engines. Consequently, we use this ratio (2:1) to split the reported amounts between those two types of motor fuel.

Sources: Government of Newfoundland and Labrador (various years).

Tag: CAN\_te\_37

*[Newfoundland and Labrador] NL Home Heating Rebate Program (data for 2001- )*

This programme provides low-income households in the province of Newfoundland and Labrador with annual rebates on their heating bills. Households must have had incomes equal to or below CAD 40 000 in 2010 in order to qualify for the rebate. Payments are capped at CAD 250 per household and year (CAD 500 in some coastal Labrador communities). Eligible households must file an application and present their electricity or heating-oil bills.

We use data from Natural Resources Canada on energy use (space heating only) in Newfoundland and Labrador 's residential sector to allocate the annual amounts reported in budget documents to electricity, heating oil, coal, propane, and wood. We only report, however, the amounts attributable to heating oil (the numbers for coal and propane are negligible).

Sources: Government of Newfoundland and Labrador (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_dt\_09

### ***General Services Support Estimate***

*[Newfoundland and Labrador] Petroleum Exploration Enhancement Program (no data available)*

As part of its Provincial Energy Plan released in 2007, the province of Newfoundland and Labrador introduced a new initiative aimed at boosting the onshore exploration for hydrocarbons in Western Newfoundland. The Petroleum Exploration Enhancement Program (PEEP) is a CAD 5 million, two-year initiative that provides funding for the improvement of geophysical data in relation to the province's underground oil and gas resources. The programme has since been extended to last more than two years.

We allocate this measure to the GSSE as it benefits NL's oil and gas industry as a whole. Annual estimates of total provincial funding for this programme are not, however, available.

Sources: NL Department of Natural Resources (2007).

*[Newfoundland and Labrador] Offshore Development Fund (no data available)*

This measure was introduced following the signature of the 1985 Canada-Newfoundland Atlantic Accord, which organised the joint management of the province's offshore oil resources. As provided by the Accord, the federal government and the province of Newfoundland and Labrador established the Offshore Development Fund to attract offshore oil investment in the province. Initial funding of CAD 300 million was split between the federal government (75%) and the province (25%), with much of it being dedicated to creating a pool of workers through training initiatives. The fund was discontinued after 2005 when the Accord was renegotiated.

We allocate this measure to the GSSE as it benefitted NL's oil and gas industry as a whole. Annual estimates of total provincial funding for this programme are not, however, available.

Sources: Government of Newfoundland and Labrador (1985).

## **Nova Scotia**

### ***Consumer Support Estimate***

*[Nova Scotia] Your Energy Rebate (data for 2006- )*

This programme was introduced in 2006 by the government of Nova Scotia to provide households with an 8% sales-tax rebate on their heating bills. The measure applies irrespective of whether heating comes from electricity, heating oil, propane, firewood, or coal. It is also not tied to income.

We use data from Natural Resources Canada on energy use (space heating only) in Nova Scotia's residential sector to allocate the annual amounts reported in budget documents to electricity, heating oil, coal, propane, and wood. We only report, however, the amounts attributable to heating oil, propane, and coal.

Sources: Nova Scotia Finance (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_16

## **Ontario**

### ***Consumer Support Estimate***

*[Ontario] Fuel-Tax Exemption for Coloured Fuel (data for 2005- )*

Sales of coloured fuel in Ontario are exempt from the province's Fuel Tax (CAD 0.143 per litre) that is normally levied on most sales of diesel fuel. Users of coloured (dyed) fuel include sectors such as construction, farming, forestry, fishing, and electricity generation.

We allocate this measure entirely to diesel fuel and light fuel oil.

Sources: Ontario Ministry of Finance (various years).

Tag: CAN\_te\_38

*[Ontario] Fuel-Tax Reduction for Railway Diesel (data for 2005- )*

The use of diesel fuel in railway locomotives in the province of Ontario benefits from a reduced rate of Fuel Tax (CAD 0.045 per litre).

Sources: Ontario Ministry of Finance (various years).

Tag: CAN\_te\_39

*[Ontario] Fuel-Tax Refunds for Auxiliary Equipment (data for 2005- )*

The use of fuel for "power take-off" purposes in Ontario attracts a full refund from the province's Fuel Tax. "Power take-off" means that fuel from the vehicle's fuel tank is used to power an external unit such as a refrigeration unit.

We allocate this measure entirely to diesel fuel and light fuel oil.

Sources: Ontario Ministry of Finance (various years).

Tag: CAN\_te\_40

*[Ontario] Gasoline-Tax Reduction for Propane (data for 2005- )*

Sales of propane in the province of Ontario are subject to a lower rate of Gasoline-Tax (CAD 0.043 per litre) than sales of conventional gasoline (CAD 0.147 per litre, which is the province's benchmark).

Sources: Ontario Ministry of Finance (various years).

Tag: CAN\_te\_41

*[Ontario] Gasoline-Tax Exemption for Unlicensed Equipment (data for 2005- )*

This measure was introduced prior to 1960 and exempts the use of gasoline in unlicensed equipment in Ontario from the province's Gasoline Tax. Unlicensed equipment includes, for example, eligible machinery used in forestry, farming, construction, and fishing.

We allocate this measure entirely to gasoline.

Sources: Ontario Ministry of Finance (various years).

Tag: CAN\_te\_42

*[Ontario] Gasoline-Tax Exemption for Methanol and Natural Gas (data for 2007- )*

Sales of methanol and natural gas for use in internal combustion engines in Ontario are exempted from the province's Gasoline Tax (CAD 0.147 per litre, which is the province's benchmark).

In the absence of data on the use of methanol in Ontario, we allocate this measure entirely to natural gas.

Sources: Ontario Ministry of Finance (various years).

Tag: CAN\_te\_43

*[Ontario] Ontario Energy and Property Tax Credit (data for 2010- )*

The energy component of the Ontario Energy and Property Tax Credit (OEPTC) was introduced in 2010 to provide low-income households who rent or own a home with sales-tax assistance for their purchases of energy. Although annual payments were initially capped at CAD 200 starting in 2010, this ceiling is to increase in line with price inflation every year.

We use data from Natural Resources Canada on energy use in Ontario's residential sector to allocate the annual amounts reported in budget documents to electricity, heating oil, natural gas, propane, and firewood. We only report, however, the amounts attributable to heating oil, propane, and natural gas.

Sources: Ontario Ministry of Finance (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_44

*[Ontario] Sales-Tax Exemption for Energy Products (data for 2005-2008)*

Prior to the introduction of the Harmonized Sales Tax in July 2010, the province of Ontario applied a Retail Sales Tax (RST; at a rate of 8%) on purchases of most goods and services. Purchases of certain energy products were, however, exempted from the RST. The list of eligible products included electricity, natural gas, fuel oil, diesel fuel, gasoline, propane, coal, coke, and firewood.

We use data from Natural Resources Canada on energy use in Ontario for four sectors (residential, commercial and institutional, agriculture, transport) to allocate the annual amounts reported in budget documents to electricity, heating oil, natural gas, propane, firewood, fuel oil, kerosene, gasoline, and diesel fuel. We only report, however, the amounts attributable to fossil fuels, thereby excluding those attributable to electricity and firewood.

Sources: Ontario Ministry of Finance (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_45

*[Ontario] Northern Ontario Energy Credit (data for 2010- )*

This programme was announced as part of Ontario's budget for FY2010/11. It provides low- and middle-income households who reside in the Northern part of the province with assistance for their purchases of energy. Although annual payments were initially capped at CAD 130 for a single person and CAD 200 for a family starting in 2010, this ceiling is to increase in line with price inflation every year.

We use data from Natural Resources Canada on energy use in Ontario's residential sector to allocate the annual amounts reported in budget documents to electricity, heating oil, natural gas, propane, and firewood. We only report, however, the amounts attributable to heating oil, propane, and natural gas.

Sources: Ontario Ministry of Finance (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_dt\_10

**Prince Edward Island**

***Consumer Support Estimate***

*[Prince Edward Island] Tax Exemption for Marked-Fuel Permits (data for 2005- )*

This measure comprises provincial excise-tax exemptions granted to certain users of petroleum products in the province of Prince Edward Island. Products subject to those exemptions are gasoline and diesel fuel. In cases where marked exempt gasoline is unavailable, eligible users can apply for a rebate of the provincial excise tax on fuel. Eligible users must be valid permit holders using fuel in unlicensed equipment for activities such as farming, forestry, fishing, and aquaculture.

We use data from Natural Resources Canada on energy use in the Atlantic provinces' agriculture sector to allocate the annual amounts reported by PEI's Department of Finance, Energy and Municipal Affairs to gasoline and diesel fuel.



Sources: Prince Edward Island Department of Finance, Energy and Municipal Affairs, Natural Resources Canada (2010[b]).

Tag: CAN\_te\_54

## Quebec

### *Producer Support Estimate*

The province of Quebec does not currently produce fossil fuels on a significant scale, though some companies are actively exploring for oil in the Gaspé Peninsula. Exploration efforts are also concentrating on the province's potential for shale gas, mostly in the south (e.g. Basses-Terres du Saint-Laurent).

The refundable tax credit for resources (Crédit d'impôt remboursable relatif aux ressources) was introduced in March 2001 by the government of Quebec and provides eligible mining companies operating in the province with a refundable tax credit for up to 38.75% of qualifying exploration expenditure.<sup>6</sup> Qualifying exploration expenditure includes, *inter alia*, those expenses made with respect to oil and natural-gas, and which attract an additional 50% deduction for tax purposes.

While this measure benefits some companies engaged in the exploration for fossil fuels in Quebec, exploration expenditure in the province remains heavily oriented towards non-energy minerals. This measure is therefore deemed not specific enough to warrant inclusion in the present inventory, which would not preclude its inclusion at a later stage should fossil-fuel exploration further increase in scale.

### *Consumer Support Estimate*

*[Quebec] Fuel-Tax Reductions in Certain Regions (data for 1996- )*

This item comprises two different measures that both act to reduce the rate of fuel tax in certain regions of the province of Quebec. One was introduced in 1982 and provides for a reduction in the rate of fuel tax applicable to sales of gasoline in regions bordering the United States or other Canadian provinces (Ontario and New Brunswick). The other measure dates back to 1985 and reduces the rate of fuel tax applicable to sales of gasoline and diesel fuel in regions that are distant from the province's main urban centres.

We allocate this measure entirely to gasoline given the small use of diesel fuel in Quebec's road transport sector.

Sources: Finances Québec (various years).

Tag: CAN\_te\_48

*[Quebec] Fuel-Tax Reductions for Air and Rail Transport (data for 1996- )*

Sales of gasoline and diesel fuel for use in aircraft and railway locomotive engines in the province of Quebec have attracted a reduced rate of fuel tax since 1972 for aircraft engines and 1980 for

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<sup>6</sup> The amount of credit that can be claimed depends on whether taxpayers are also engaged in the extraction of minerals or hydrocarbons, and on the region in which they operate (e.g. the Great North). This measure is not compatible with flow-through shares.

locomotives. Although a provincial fuel-tax exemption also exists for kerosene used by airlines in international flights, tax expenditures in relation to fuel used in international aviation fall outside the scope of the present inventory (Box 1.2).

We use data from Natural Resources Canada on energy use in the province of Quebec's air and rail transport sector to allocate the annual amounts reported in budget documents to aviation gasoline and diesel fuel.

Sources: Finances Québec (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_49

*[Quebec] Fuel-Tax Concessions for Certain Industrial Activities (no data available)*

Sales of petroleum products for use in certain industrial activities in the province of Quebec benefit from exemptions or rebates of fuel tax. Eligible activities include the transformation of petroleum products into solvents for use in chemical processes and the use of gasoline and heavy fuels in stationary engines.

No estimates are available for this particular measure.

Sources: Finances Québec (various years).

*[Quebec] Fuel-Tax Exemption for Propane Gas (no data available)*

Sales of propane in the province of Quebec have been exempted from fuel tax since 1997. This measure is meant to encourage the greater use of LPG in road vehicles in the province.

No estimates are available for this particular measure.

Sources: Finances Québec (various years).

*[Quebec] Fuel-Tax Rebates for Farming, Forestry and Mining (data for 1999- )*

This measure was introduced in 1978 and provides the province of Quebec's farming, forestry and mining industries with refunds of fuel tax for their off-road operation of road vehicles.

We use data from Natural Resources Canada on energy use in the province of Quebec's agricultural sector to allocate the annual amounts reported in budget documents to gasoline and diesel fuel.

Sources: Finances Québec (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_50

*[Quebec] Fuel-Tax Concessions for Farmers and Fishers (no data available)*

Farmers and fishers operating in the province of Quebec are entitled to fuel-tax concessions on their purchases of fuel oil and gasoline for use in farming machinery or fishing boat engines. The concessions for gasoline and fuel oil were introduced in 1935 and 1972 respectively to reduce production costs in Quebec's primary industries.

No estimates are available for this particular measure but the associated revenue foregone is likely to be small (under CAD 2 million).

Sources: Finances Québec (various years).

*[Quebec] Fuel-Tax Rebate for Public Carriers (data for 1999- )*

Sales of motor fuels for use in public-transit buses in the province of Quebec benefit from a full refund of fuel tax. This measure started in 1984 as a partial rebate (33%) before it subsequently became a full one in 2006.

We allocate this measure entirely to diesel fuel given the small use of gasoline in buses in Quebec.

Sources: Finances Québec (various years).

Tag: CAN\_te\_51

*[Quebec] Fuel-Tax Exemption for Commercial Vessels (no data available)*

This provision was introduced in 1972 by the province of Quebec and exempts the use of residual fuel oil (i.e. bunker fuel) in commercial vessels from the provincial fuel tax.

No estimates are available for this particular measure.

Sources: Finances Québec (various years).

*[Quebec] Fuel-Tax Rebate for Certain Stationary Engines (data for 2000- )*

This measure was introduced in 1999 and provides a full refund of fuel tax for purchases of motor fuels used in vehicles equipped with stationary engines in the context of commercial or public activities. Refunds apply only to that portion of the fuel that serves to activate a stationary engine (as opposed to that portion of the fuel used to operate the vehicle).

We allocate this measure entirely to diesel fuel.

Sources: Finances Québec (various years).

Tag: CAN\_te\_52

## **Saskatchewan**

### ***Producer Support Estimate***

*[Saskatchewan] Saskatchewan Petroleum Research Incentive (data for 2000- )*

This programme was introduced in FY1998/99 and has been periodically renewed since then. Its latest renewal was decided in FY2010/11 for a period of five years, with automatic expiry on 31 March 2015. The Saskatchewan Petroleum Research Incentive (SPRI) provides a credit against royalties and production taxes that would otherwise be payable in order to cover a portion of the eligible costs of enhanced oil-recovery projects and projects involving new technology in the oil and natural-gas industries. Over the five-year renewal period, a total of CAD 30 million is made available (i.e. the tax expenditure is estimated at an average of CAD 6 million per year). Maximum credits per project are:

50% of eligible research costs incurred with the Petroleum Technology Research Centre, up to a maximum credit of CAD 1 million; and 30% of eligible field pilot research costs, up to a maximum credit of CAD 3 million. The programme is designed to encourage companies to field-test recovery technologies on a pilot scale, and does not apply to full-scale commercial projects.

Readers are advised that some fiscal measures related to oil and gas production may not constitute tax expenditures under an alternative baseline where royalties (or severance taxes) vary with market conditions and production costs.

We use province-level data from CAPP on the value of oil and gas production to allocate the annual amounts reported in budget documents to oil and natural-gas extraction.

Sources: Saskatchewan Energy and Resources (various years), CAPP.

Tag: CAN\_te\_15

*[Saskatchewan] Support to SaskEnergy for the La Ronge Project (data for 2006)*

The government of Saskatchewan provided SaskEnergy with a one-time grant for FY2006/07 to help finance the completion of a natural-gas distribution project in the area of La Ronge. SaskEnergy is a provincial Crown corporation and the sole distributor of natural gas in the province of Saskatchewan.

Sources: Saskatchewan Finance (various years).

Tag: CAN\_dt\_04

### ***Consumer Support Estimate***

*[Saskatchewan] Fuel-Tax Exemption for Farm Activity, Heating and Mining (data for 1999- )*

Marked diesel fuel may be sold exempt of tax (normally CAD 0.15 per litre) to valid Fuel-Tax Exemption Permit holders for use in unlicensed farming, unlicensed primary production (i.e. commercial fishing, commercial trapping, commercial logging and commercial peat harvesting) machinery, and licensed farm vehicles. Unmarked gasoline may be sold by bulk fuel dealers at an 80% reduced tax rate to farmers for use in eligible farming activities. Prior to 2000, the Fuel-Tax Rebate for farm-use gasoline was capped at a maximum of CAD 900 per year.

Marked diesel fuel sold for eligible heating uses in the province of Saskatchewan may be sold exempt of tax if identified as heating fuel or fuel oil at the time of sale.

Fuel used in unlicensed machinery and equipment used in mineral exploration in the province of Saskatchewan may be eligible for a full rebate of fuel tax. Fuel consumed in licensed vehicles or equipment is not eligible for a rebate, regardless of its use. Mineral exploration does not include processing, developing or producing minerals from the site beyond those activities which are by necessity part of exploring or prospecting for minerals.

For farming activity, we use data from Natural Resources Canada on energy use in Saskatchewan's farming sector to allocate the annual amounts reported in budget documents to diesel fuel and gasoline. The amounts reported for heating and mining are entirely allocated to diesel and similar fuels (i.e. light fuel oil).

Sources: Saskatchewan Finance (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_te\_11

*[Saskatchewan] Sales-Tax Exemption for Natural Gas (limited data for 1999- )*

Saskatchewan's Provincial Sales Tax (PST) exempts the retail sale of motive fuels, all natural-gas consumption, and the residential consumption of electricity.

Electricity, natural gas, and propane used in the processing of minerals are not subject to PST either. The power exemption typically begins when the raw materials enter the mill and ends when the final product is moved to storage. Electricity consumed for any other purpose, including lighting of premises, underground extraction of minerals, shaft hoist and elevators, movement of raw materials prior to processing, water pumping, ventilation, and movement of finished product to storage, is subject to tax. Natural gas and propane used to produce steam that is used in the milling process is not subject to tax. Natural gas and propane used for other heating purposes is also exempt.

Electricity, diesel fuel, domestic fuel oil, coke and gas used in a direct manufacturing process are not subject to PST. The exemption for manufacturing electricity applies only to the electricity that is consumed by equipment and machinery used in a direct manufacturing process. Electricity consumed for any other purpose, including lighting of premises, ventilation, refrigeration and elevators, is subject to tax.

Only the portion of the exemption that is concerned with the consumption of natural gas is reported here.

Sources: Saskatchewan Finance (various years).

Tag: CAN\_te\_14

*[Saskatchewan] Home Heating Assistance for Alternative Fuels (data for 2005)*

This initiative comprises a one-time appropriation for FY2005/06 that was meant to provide eligible households and businesses in the province of Saskatchewan with a CAD 200 heating grant. Eligibility required that heating be provided using either fuel oil or propane.

We allocate this item entirely to heating oil given the lack of data and the relatively low share of propane in overall residential heating.

Sources: Saskatchewan Finance (various years), Natural Resources Canada (2010[b]).

Tag: CAN\_dt\_05

## **Territory of Yukon**

### ***Consumer Support Estimate***

*[Yukon] Yukon Fuel Oil Tax Act Exemption Program (data for 2007- )*

Sales of fuel oil for certain specific uses in Yukon are exempted as per the territory's *Fuel Oil Tax Act*. Eligible uses include space heating, cooking, heating of ore as part of mineral extraction, stationary

power generation, and certain off-road commercial activities such as mining, farming, fishing, logging, hunting, and trapping.

Sources: Government of Yukon.

Tag: CAN\_te\_53

[Yukon] Yukon Pioneer Utility Grant Program (data for 2002- )

The Yukon Pioneer Utility Grant Program was introduced in 2002 and provides financial assistance with home heating costs to Yukon seniors over the age of 65. The budgetary grant for FY2011/12 was CAD 1.5 million, of which about 70% (CAD 1.1 million) could be attributed to subsidising oil-based space heating.

Sources: Government of Yukon, Taggart *et al.* (2003).

Tag: CAN\_dt\_13

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