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BIG AND LITTLE FEET PROVINCIAL PROFILES: NEWFOUNDLAND AND LABRADOR[†]

Sarah Dobson and G. Kent Fellows

This communiqué provides a summary of the production- and consumption-based greenhouse gas emissions accounts for Newfoundland and Labrador, as well as their associated trade flows. It is part of a series of communiqués profiling the Canadian provinces and territories.[1]

In simplest terms, a production-based emissions account measures the quantity of greenhouse gas emissions produced in Newfoundland and Labrador. In contrast, a consumption-based emissions account measures the quantity of greenhouse gas emissions generated during the production process for final goods and services that are consumed in Newfoundland and Labrador through household purchases, investment by firms and government spending. Trade flows refer to the movement of emissions that are produced in Newfoundland and Labrador but which support consumption in a different province, territory or country (and vice versa). For example, emissions associated with the production of Newfoundland and Labrador crude oil that is exported to New Brunswick for refining and sale as motor gasoline are recorded as a trade flow from Newfoundland and Labrador to New Brunswick. Moving in the opposite direction, emissions associated with the production of a Quebec manufactured good that is exported to Newfoundland and Labrador for sale are recorded as a trade flow from Quebec to Newfoundland and Labrador.

For further details on these results in a national context, the methodology for generating them and their policy implications, please see the companion papers to this communiqué series: (1) Fellows and Dobson (2017); and (2) Dobson and Fellows (2017). Additionally, the consumption emissions and trade flow data for each of the provinces and territories are available at: http://www.policyschool.ca/embodied-emissions-inputs-outputs-data-tables-2004-2011/.

Unless otherwise noted, all emissions data referenced in this communiqué are for 2011.

[†] This communiqué benefited from financial support provided by Alberta Innovates and by donors through The School of Public Policy's Energy for Life program.

[1] Nunavut, the Northwest Territories and the Yukon Territory are grouped into a single profile both for convenience and due to the underlying structure of available data.

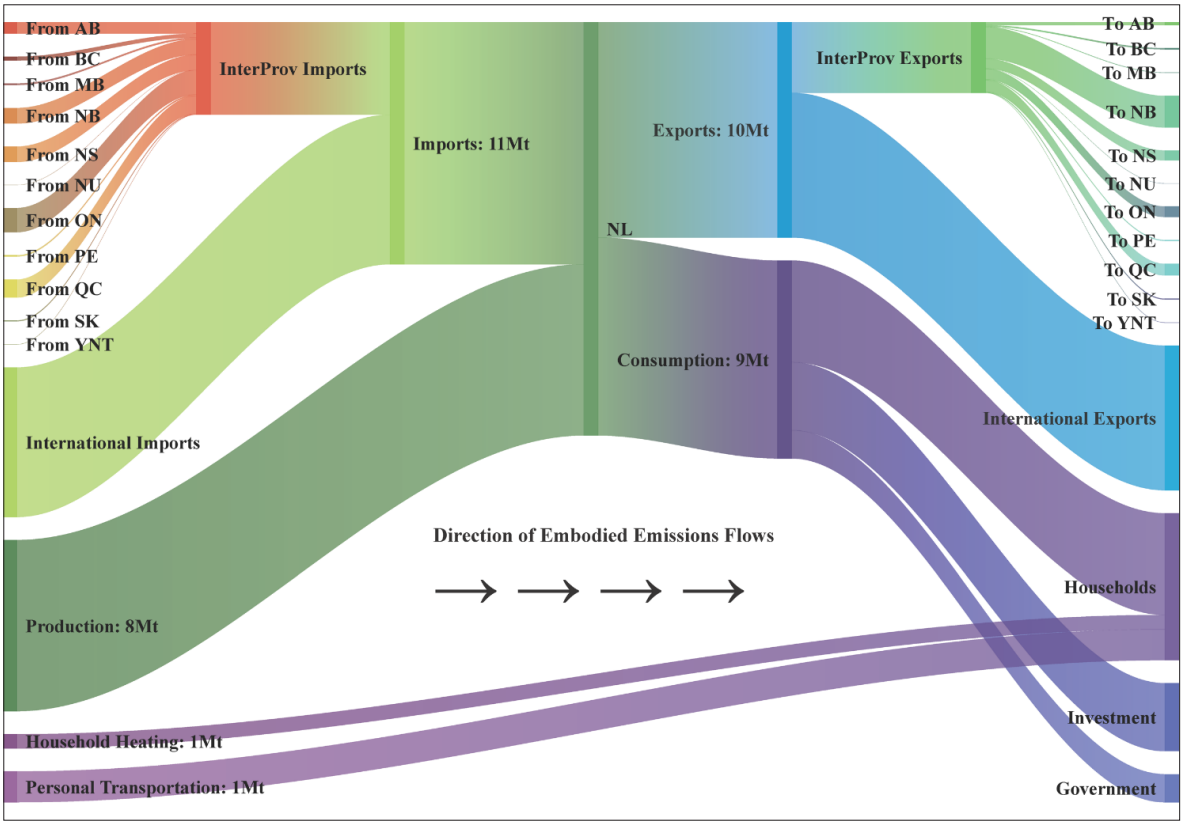
PRODUCTION- AND CONSUMPTION-BASED EMISSIONS ACCOUNTS

The relationship between production- and consumption-based greenhouse gas emissions is given by the following equation:

Consumption Emissions = Production Emissions + Interprovincial Imports + International Imports – Interprovincial Exports – International Exports

Newfoundland and Labrador's total production emissions in 2011 were 9.8 megatonnes (Mt) of CO_2e (Figure 1), corresponding to per capita emissions of 18.6 t. The province is a net importer of greenhouse gas emissions from both international (+0.2 Mt) and interprovincial (+1.0 Mt) sources. Newfoundland and Labrador's emissions therefore increase when moving to a consumption-based accounting approach, rising to 11.0 Mt total CO_2e emissions or 20.9 t of CO_2e per capita.[2]

FIGURE 1 EMISSIONS FLOWS THROUGH THE NEWFOUNDLAND AND LABRADOR ECONOMY



Net exporter of emissions to:	New Brunswick, Territories
Net importer of emissions from:	International, British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Nova Scotia, Prince Edward Island

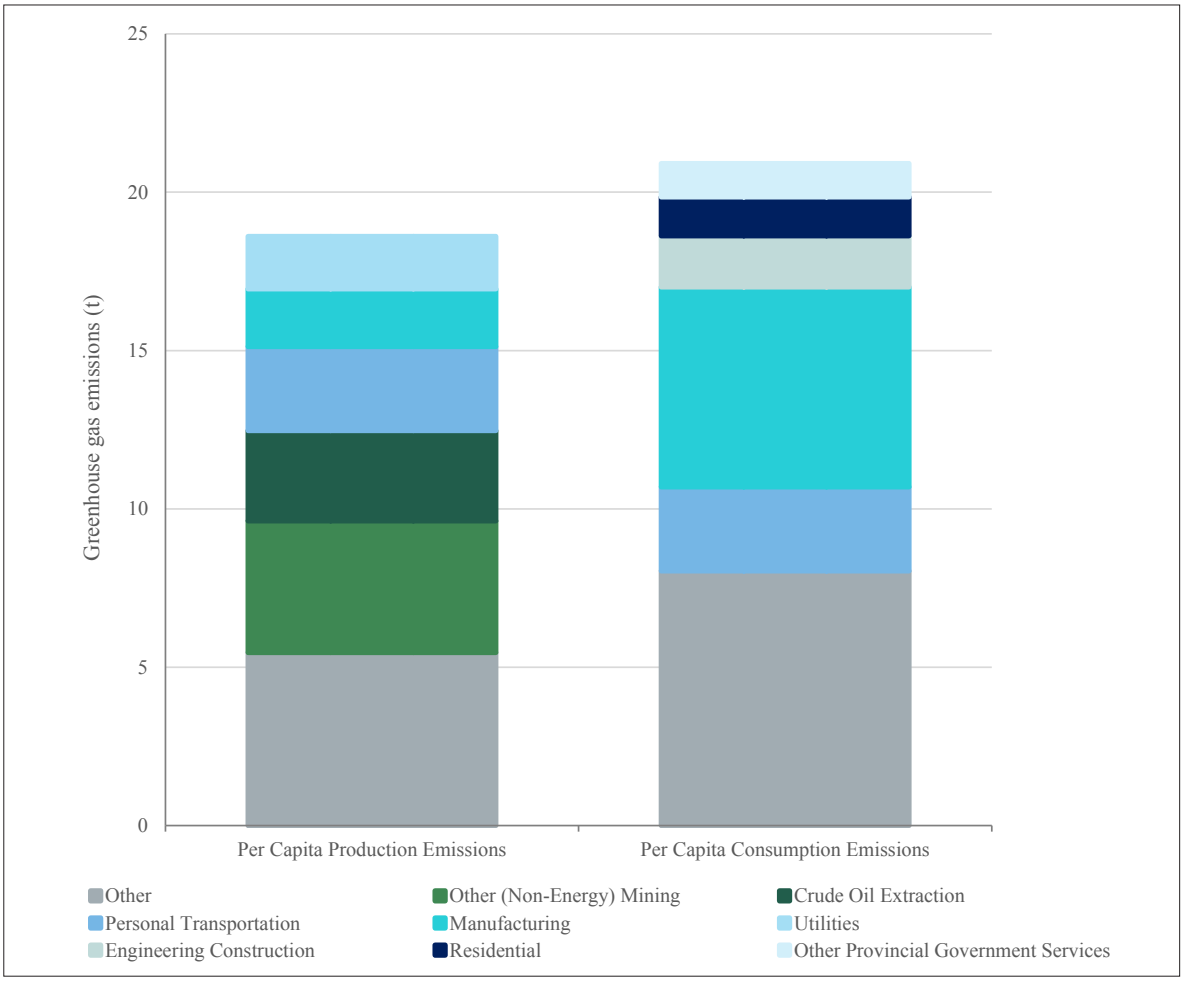
Data Source: Fellows, G. Kent and Sarah Dobson. 2017. "Embodied Emissions in Inputs and Outputs: A Value-Added Approach to National Emissions Accounting." *Canadian Public Policy*, 43(2): 140-164. https://doi.org/10.3138/cpp.2016-040.

Data tables are available at: http://www.policyschool.ca/embodied-emissions-inputs-outputs-data-tables-2004-2011/.

[2] Production and consumption totals indicated here include residential and personal transportation emissions. However, these emissions are not "embodied" in any traded good within the provincial economies, since they are produced during the act of final consumption by households. As such, these emissions are recorded as separate parallel flows in Figure 1.

The largest sectors responsible for per capita production emissions in Newfoundland and Labrador are other (non-energy) mining (4.2 t), crude oil extraction (2.8 t), personal transportation (2.7 t), manufacturing (1.8 t) and utilities (1.6 t). In comparison, the largest sectors responsible for per capita consumption emissions are manufacturing (6.3 t), personal transportation (2.7 t), engineering construction (1.6 t), residential (1.2 t) and other provincial government services (1.1 t) (Figure 2).

FIGURE 2 BREAKDOWN BY SECTOR OF NEWFOUNDLAND AND LABRADOR PER CAPITA PRODUCTION AND CONSUMPTION EMISSIONS



Note: See the appendix of Dobson and Fellows (2017) for a full listing of the sectors included in the "Other" category. Note also that the figure displays individually only the top five sectors contributing to per capita production emissions and the top five sectors contributing to per capita consumption emissions. As a result, a sector that is a primary source of production emissions but not consumption emissions will be included in the "Other" category for consumption emissions (and vice versa).

Only two sectors – personal transportation and manufacturing – overlap as main sources of both production and consumption emissions in Newfoundland and Labrador. Emissions in the personal transportation sector remain unchanged when moving from a production- to a consumption-based accounting approach while emissions in the manufacturing sector more than triple (+4.5 t). In the personal transportation sector, all of the production emissions are generated by household consumption of fossil fuels in personal vehicles. As a result, production and consumption emissions are by definition the same. The increase in manufacturing sector emissions, in contrast, is attributable to three factors. First, the sector uses substantial intermediate inputs with associated emissions produced by upstream suppliers. Second, the sector is a key supplier of final consumption goods for both households and firm investment. Third, the sector engages in significant trade with

a large share of intermediate inputs and final consumption goods being produced by suppliers in other provinces and internationally. Combined, these factors result in a large number of production emissions from Newfoundland and Labrador, elsewhere in Canada and internationally being reallocated to Newfoundland and Labrador's manufacturing sector – and specifically household consumption and firm investment – under a consumption-based accounting approach.

The other (non-energy) mining, crude oil extraction and utilities sectors are primary sources of production emissions in Newfoundland and Labrador but not consumption emissions. Emissions from the other (non-energy) mining and crude oil extraction sectors fall by 99 per cent (-4.1 t) and 100 per cent (-2.8 t) respectively when moving from a production- to a consumption-based accounting approach. This is because minerals and crude oil are not consumed in their raw form, but are instead used as inputs in the production of manufactured goods such as steel, wiring, jewelry or refined petroleum products. Production emissions are subsequently reallocated to the sector and region – often interprovincial or international – that supply the final consumption good for which Newfoundland and Labrador's raw minerals or crude oil is an input. Similarly, emissions in the utilities sector fall by 43 per cent (-0.7 t). This is attributable to two factors. First, a large share of electricity generated in Newfoundland and Labrador is directly exported to other provinces (Statistics Canada, 2017b). Emissions associated with this electricity generation will correspondingly be reallocated to the provinces that receive these exports. Second, a large share of electricity that remains in the province is purchased by firms and government. This electricity – and its associated emissions – then becomes an intermediate input into the production of goods or provision of services that are sold to final consumers in Newfoundland and Labrador, other provinces or internationally. Accordingly, under a consumption-based accounting approach these emissions are reallocated to the sector and region in which final consumption of these goods and services occurs.

Last, the engineering construction, other provincial government services sector and residential sectors are primary sources of consumption emissions in Newfoundland and Labrador but not production emissions. Emissions in the engineering construction sector quadruple (+1.2 t) when moving from a production- to a consumption-based accounting approach while emissions in the other provincial government services sector increase from 0.1 to 1.0 t. These increases are a result of both sectors absorbing all of the emissions associated with production of their inputs. For example, the sectors will be allocated emissions from the utilities sector that are associated with the production of electricity that is used in provincial government buildings and on engineering construction sites. Notably, output from the engineering construction sector reflects only expenditures by firms while output from the other provincial government services sector reflects primarily expenditures by government. Accordingly, all of the consumption emissions in the engineering construction sector are allocated to firm investment while those in the other provincial government services sector are primarily allocated to government spending. Last, emissions from the residential sector are unchanged when moving from a production- to a consumption-based accounting approach as this sector measures emissions that are produced by consumption of fossil fuels in homes. As a result, production and consumption emissions are by definition the same.

As shown on the right-hand side of Figure 1, Newfoundland and Labrador's consumption emissions can additionally be broken down by household, firm investment and government spending. Per capita consumption emissions for each of these groups, as well as the breakdown of emissions in each of these groups by sector, are summarized in Table 1.

TABLE 1 NEWFOUNDLAND AND LABRADOR PER CAPITA CONSUMPTION EMISSIONS BY CONSUMPTION GROUP AND SECTOR

Household Consumption Emissions		Firm Investment Consumption Emissions		Government Consumption Emissions	
Per Capita Consumption Emissions (*Share of Total Per Capita Consumption Emissions*)					
12.6 t (*60%*)		5.9 t (*28%*)		2.4 t (*12%*)	
Top Sectors Contributing to Consumption Emissions					
Manufacturing:	4.4 t	Manufacturing:	1.9 t	Other provincial government services	1.0 t
Personal transportation:	2.7 t	Engineering construction:	1.6 t	Other federal government services:	0.4 t
Residential:	1.2 t	Residential construction:	0.9 t	Government health services:	0.4 t
Utilities:	0.9 t	Non-residential building construction:	0.8 t	Other municipal government services:	0.3 t
Transportation and warehousing:	0.7 t	Natural gas extraction:	0.3 t	Government education services:	0.3 t
Other:	2.7 t	Other:	0.4 t	Other Aboriginal government services:	0.03 t

Note: See the appendix of Dobson and Fellows (2017) for a full listing of the sectors included in the "Other" category for household and firm investment emissions. The appendix additionally lists household and firm investment consumption emissions for each of these sectors. Government consumption emissions by sector are fully accounted for as they are limited to the six government-specific sectors listed in the table.

INTERPROVINCIAL TRADE FLOWS

The manufacturing sector is Newfoundland and Labrador's main source of net interprovincial imports of greenhouse gas emissions. With a relatively small domestic manufacturing sector, Newfoundland and Labrador is a net importer of greenhouse gas emissions from all of the other provinces, with the largest flows coming from Quebec, New Brunswick, Ontario, Nova Scotia and Alberta. The province additionally has smaller net imports of emissions from the transportation and warehousing sectors in Quebec, Nova Scotia, Alberta and New Brunswick, from the finance, insurance, real estate and rental and leasing sector in Ontario, from the support activities for oil and gas extraction and mining sector in Alberta and from the crop and animal production sectors in New Brunswick and Ontario.

Newfoundland and Labrador's largest sources of interprovincial net exports of emissions are the crude oil and natural gas extraction sectors. The province has net exports of emissions to New Brunswick, Nova Scotia and Quebec, which is consistent with Newfoundland and Labrador offshore crude oil production being the only domestic feedstock option for refineries in these provinces.[3] The province also has notable net exports of emissions to the utilities sector in Quebec and New Brunswick and to the other (non-energy) mining sectors in Quebec and Ontario. Emissions flows from the utilities sector are consistent with Newfoundland and Labrador exporting nearly 75 per cent of its generated electricity in 2011 (Statistics Canada, 2017b), while emissions flows from the other (non-energy) mining sector are consistent with Ontario and Quebec employing Newfoundland and Labrador-produced raw minerals in their manufacturing sectors.

INTERNATIONAL TRADE FLOWS

Newfoundland and Labrador has significant net imports of international greenhouse gas emissions in its manufacturing and natural gas extraction sectors. The two sectors with the largest net exports of emissions internationally are the crude oil extraction and other (non-energy) mining sectors.

[3] Newfoundland and Labrador has limited natural gas production, all of which is flared, re-injected or otherwise used by its oil and gas industry (Statistics Canada, 2017c). For technical reasons, however, our disaggregation of Statistics Canada data for the mining and oil and gas sector does not appropriately distinguish between marketable natural gas production and natural gas that is used as an input to further crude oil production in Newfoundland and Labrador. As a result, exports of emissions from the natural gas extraction sector are identified as a separate flow when in actuality these emissions are embedded in exports from the province's crude oil extraction sector (as the natural gas was an input to crude oil production). We intend to address this in any future iterations of the model.

This is consistent with crude oil and non-energy mining materials – most notably iron, copper and nickel ores – being Newfoundland and Labrador's largest exports in 2011 (Industry Canada, 2017). The province additionally has smaller net exports of emissions internationally in the transportation and warehousing, fishing, hunting and trapping, and wholesale trade sectors.

TIME TREND OF PER CAPITA PRODUCTION AND CONSUMPTION EMISSIONS

Total production emissions in Newfoundland and Labrador declined on net over the period of 2004 to 2011 (-8 per cent) (Figure 3). Newfoundland and Labrador's population grew only marginally over this period (+2 per cent), leading to a comparable percentage drop in the province's per capita production emissions (-9 per cent) (Figure 4). The decline in total emissions is consistent with falling output from Newfoundland and Labrador's manufacturing sector over this period, as well as a decrease in the amount of electricity generated in the province by fuel oil and diesel (Statistics Canada, 2017c; Statistics Canada, 2017a).

The decline in Newfoundland and Labrador's production emissions over the period of 2004 to 2011 did not translate into a decline in consumption emissions. Rather, total consumption emissions in the province increased by 10 per cent while per capita emissions increased by eight per cent. Consumption emissions followed two separate trends, however, largely declining from 2004 to 2008, and then increasing from 2008 to 2011. Newfoundland and Labrador was a net exporter of emissions in 2004, with per capita net exports measuring 1.2 t. With the sharp increase in consumption emissions in 2009 Newfoundland and Labrador transitioned to being a net importer of emissions. In 2011, the province had per capita net imports of 2.3 t.

Consumption emissions related to firm investment saw the largest percentage growth from 2004 to 2011. Specifically, total firm investment consumption emissions increased by 24 per cent while per capita emissions increased by 22 per cent. Firm investment emissions followed a similar pattern to total consumption emissions, steadily decreasing over the period of 2004 to 2008 and then sharply increasing from 2008 to 2011. The increase in emissions was driven primarily by the aggregate construction sector, with non-residential building construction driving most of the increase in construction sector emissions since 2009.[4] In contrast, emissions in the manufacturing sector have declined since 2004.

Total and per capita household consumption emissions also increased over the period of 2004 to 2011, rising by eight and six per cent respectively. Household consumption emissions followed a less evident pattern, however, declining from 2004 to 2006 and then alternating years of increases and decreases from 2006 to 2011. This pattern was driven primarily by fluctuating emissions in the manufacturing and utilities sector, and with the exception of 2008, largely matches fluctuations in the amount of electricity generated in the province from fuel oil and diesel (Statistics Canada, 2017a). Despite these similar fluctuations, on net from 2004 to 2011 household consumption emissions in the manufacturing sector increased while emissions in the utilities sector decreased. Other sectors that saw notable decreases in household consumption emissions were finance, insurance, real estate and rental and leasing, and retail trade.

In contrast to firm investment and household consumption emissions, total and per capita government consumption emissions decreased by six and eight per cent respectively from 2004 to 2011. Government consumption emissions followed a similar overall pattern to firm investment emissions, declining from 2004 to 2008 and then increasing from 2008 to 2011. The increase has been gradual, however, and emissions have not returned to their 2004 levels. Relative to 2009 there has been a notable increase in consumption emissions in the other (non-health care and education) provincial government services sector, while emissions in the remaining government subsectors have remained largely unchanged.[5]

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[4] Prior to 2009 emissions data are only available for the aggregate construction sector.

[5] Prior to 2009 emissions data are only available for the aggregate government services sector.

FIGURE 3 **TOTAL PRODUCTION AND CONSUMPTION EMISSIONS, NEWFOUNDLAND AND LABRADOR: 2004 TO 2011**

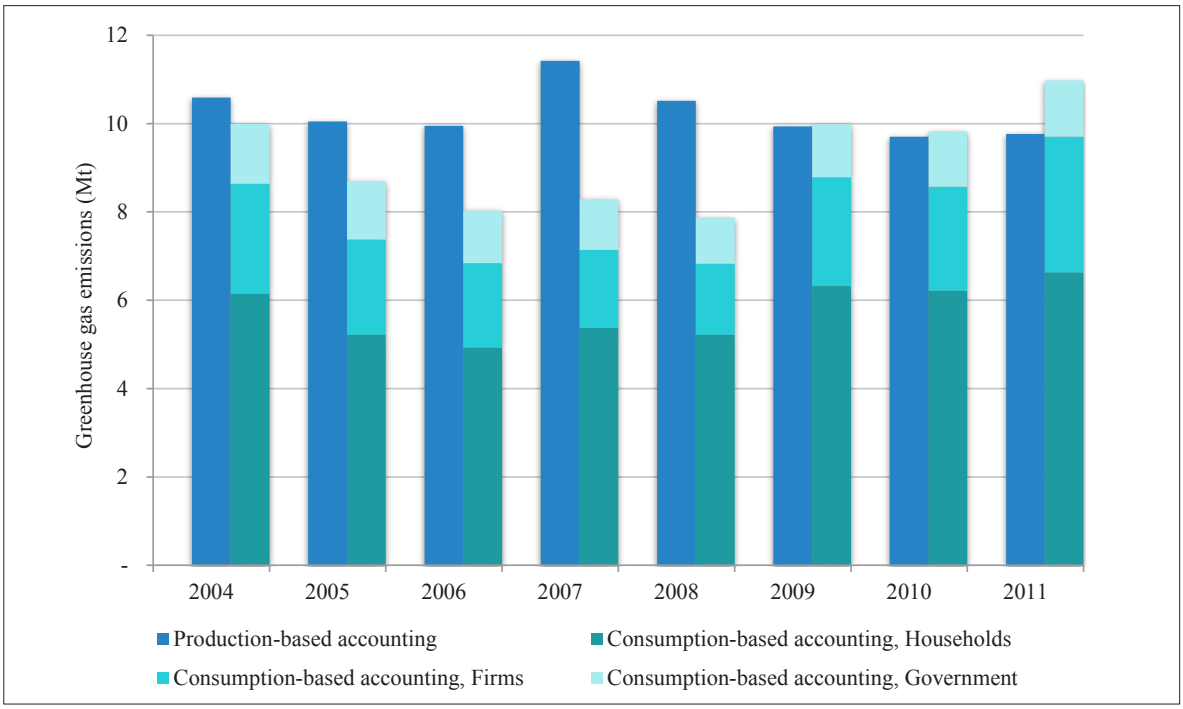
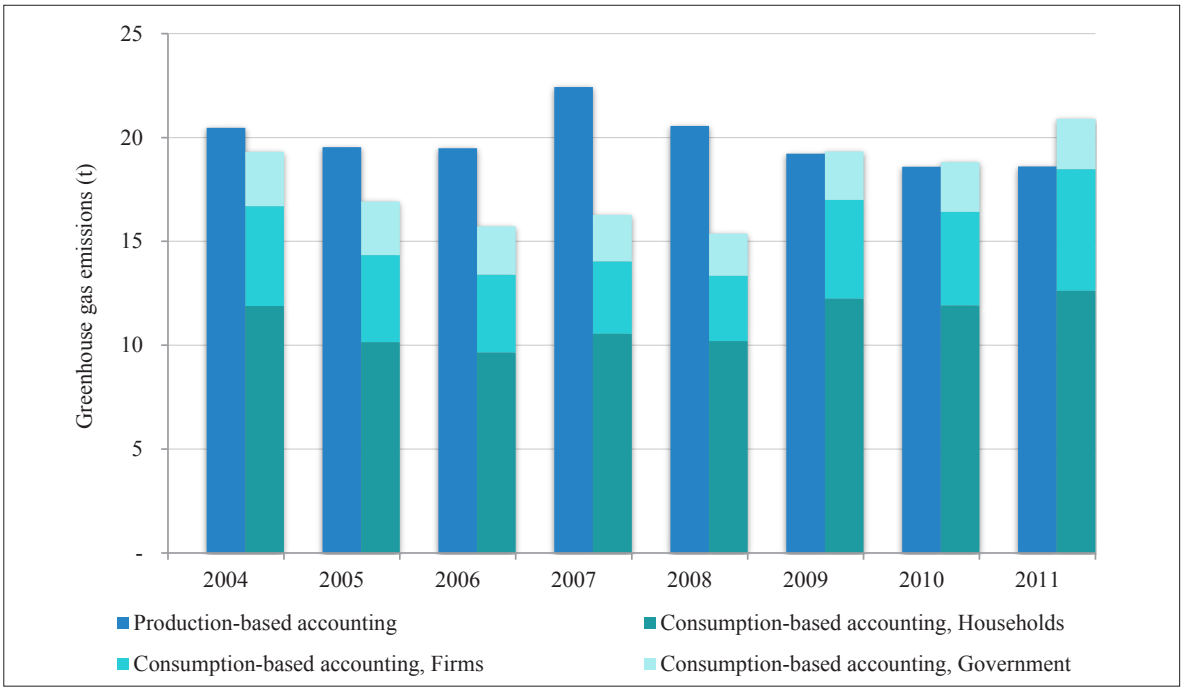


FIGURE 4 **PER CAPITA PRODUCTION AND CONSUMPTION EMISSIONS, NEWFOUNDLAND AND LABRADOR: 2004 TO 2011**



REFERENCES

Dobson, Sarah and G. Kent Fellows. 2017. "Big and Little Feet: A Comparison of Provincial Level Consumption- and Production-Based Footprints." *The School of Public Policy Publications: SPP Research Paper*, 10(23). September. http://www.policyschool.ca/wp-content/uploads/2017/09/Big-and-Little-Feet-Dobson-Fellows.pdf.

Fellows, G. Kent and Sarah Dobson. 2017. "Embodied Emissions in Inputs and Outputs: A Value-Added Approach to National Emissions Accounting." *Canadian Public Policy*, 43(2): 140-164.

Industry Canada, 2017. "Trade Data Online." Accessed September. https://www.ic.gc.ca/app/scr/tdst/tdo/crtr.html?andproductType=HS6andlang=eng.

Statistics Canada, 2017a. *Table 127-0006 – Electricity generated from fuels, by electric utility thermal plans annual (megawatt hour).* CANSIM (database). Accessed September. http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=1270006.

Statistics Canada, 2017b. *Table 127-0008 – Supply and disposition of electric power, electric utilities and industry annual*. CANSIM (database). Accessed September. http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=1270008.

Statistics Canada, 2017c. *Table 131-0001 – Historical supply and disposition of natural gas monthly (cubic metres x 1,000,000).* CANSIM (database). Accessed September. http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=1310001.

Statistics Canada. 2017d. *Table 379-0030 – Gross domestic product (GDP) at basic prices, by North American Industry Classification System (NAICS), provinces and territories annual*. CANSIM (database). Accessed September. http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=3790030.

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Sarah Dobson (PhD, UC Berkeley) is a research associate at The School of Public Policy, University of Calgary. Her research interests are focused on studying the design, implementation and evaluation of energy and environmental regulatory policy. In prior work she has considered such issues as the welfare implication of climate change policy, and the optimal design of regulatory policy to take into account the trade-off between the economic benefits of resource development and the ecological consequences of management decisions. Sarah's work with The School of Public Policy covers a range of topics including carbon pricing, climate change policy design, political response to hydraulic fracturing, and markets for Canadian oil and LNG.

G. Kent Fellows (PhD, Calgary) is a research associate at The School of Public Policy, University of Calgary. Kent has previously worked as a researcher for the University of Alberta's School of Public Health and as an intern at the National Energy Board. He has published articles on the effects of price regulation and bargaining power on the Canadian pipeline and pharmaceutical industries as well as the integration of renewable generation capacity in the Alberta electricity market. His current research agenda focuses on the area of computational economics as applied to the construction and use of large-scale quantitative models of inter-sector and interprovincial trade within Canada. Kent is also involved in forwarding The School of Public Policy's Canadian Northern Corridor research program, which is aimed at studying the concept of a multi-modal linear infrastructure right of way through Canada's North and near North.

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