

The Daily

Statistics Canada

Wednesday, July 29, 2015

Released at 8:30 a.m. Eastern time

Releases

| | |
|--|---|
| Railway carloadings, May 2015 | 2 |
| Physical flow accounts: Energy use and greenhouse gas emissions, 2013 | 3 |
| Spending on research and development in the higher education sector, 2013/2014 | 5 |
| Research and development in the higher education sector, 2014/2015 | 7 |
| Quarterly civil aviation statistics, third quarter 2014 | 8 |

| | |
|---------------------------------|----------|
| New products and studies | 9 |
|---------------------------------|----------|



Releases

Railway carloadings, May 2015

The volume of rail freight carried in Canada totalled 30.0 million tonnes in May, down 7.2% from the same month last year.

Freight originating in Canada and destined within Canada and to other parts of the world declined 5.8% to 26.9 million tonnes. These shipments are composed of non-intermodal freight (that is, cargo moved via box cars or loaded in bulk) and intermodal freight (that is, cargo moved via containers and trailers on flat cars).

Non-intermodal freight decreased 6.3% to 292,000 carloads. The amount of freight loaded into these cars totalled 24.0 million tonnes, down 6.5%. The drop was attributable to a decrease in freight loadings in several commodity groupings, particularly coal (down 887 000 tonnes), fuel oils and crude petroleum (down 536 000 tonnes) and wheat (down 307 000 tonnes).

Intermodal freight loadings were up 3.2% to 195,000 units in May. From a tonnage perspective, traffic rose 0.7% to 2.9 million tonnes as a result of an increase in containerized cargo shipments.

Freight traffic received from the United States fell 18.1% to 3.1 million tonnes. The drop was the result of a decrease in both non-intermodal and intermodal shipments.

Note to readers

The survey presents data essential to the timely analysis of the rail transportation industry and its contribution to the Canadian economy. Survey data cover carrier railways operating in Canada that provide for-hire freight service and their transportation of various railway carloading components, such as the number of rail cars, tonnage, units and 20-foot equivalent units.

Data aggregations are available for Canada, the Eastern Division and the Western Division.

The aggregations in this release are not seasonally adjusted.

Available in CANSIM: table [404-0002](#).

Definitions, data sources and methods: survey number [2732](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (613-951-4636; mediahotline@statcan.gc.ca).

Physical flow accounts: Energy use and greenhouse gas emissions, 2013

Physical flows by industry and households

Total energy use by industries and households in Canada increased 2.1% in 2013, following a 0.2% gain the previous year. Greenhouse gas (GHG) emissions rose 1.9% in 2013 following a 1.0% gain in 2012.

These changes took place as economic growth, as measured by gross domestic product, was 2.0% in 2012 and 2.1% in 2013.

Households continued to be the largest energy users in 2013, accounting for 23.7% of national energy use, up from 23.3% in 2012. Conversely, households were responsible for 19.4% of national GHG emissions, since a large portion of household energy use is electricity, which does not directly contribute to household GHG emissions.

Energy use in the utilities and construction industries declined for the third consecutive year, falling from 13.2% of national energy use in 2012 to 12.6% in 2013.

The growth trend for GHG emissions in the mining, quarrying, and oil and gas extraction industries continued, as they remained the largest source of GHG emissions in 2013, accounting for 21.5% of the national total. These industries are more prominent in terms of GHG emissions than in energy use because of fugitive emissions from oil and gas extraction. The agriculture, forestry, fishing and hunting industries (accounting for 11.2% of national GHG emissions) are similarly pushed higher by the contribution of emissions from crop and animal production.

In other services and public administration, GHG emissions rose by 5.0% despite a decrease in energy use. The decline in energy use was related to lower electricity consumption, which was offset by the increased use of fossil fuels.

Table 1
Energy use and greenhouse gas emissions in Canada, 2013

| | Energy use | | | Greenhouse gas emissions ¹ | | |
|---|-------------------|--------------|-----------------|---------------------------------------|--------------|-----------------|
| | terajoules | % of total | annual % change | kilotonnes | % of total | annual % change |
| Total, industries and households | 11,665,286 | 100.0 | 2.1 | 769,734 | 100.0 | 1.9 |
| Agriculture, forestry, fishing and hunting | 316,785 | 2.7 | 4.5 | 86,157 | 11.2 | 3.6 |
| Mining, quarrying, and oil and gas extraction | 2,038,871 | 17.5 | 4.4 | 165,512 | 21.5 | 2.8 |
| Utilities and construction | 1,471,156 | 12.6 | -2.1 | 97,196 | 12.6 | -1.9 |
| Manufacturing | 2,417,649 | 20.7 | 3.3 | 131,300 | 17.1 | 1.8 |
| Wholesale and retail trade | 334,480 | 2.9 | 1.9 | 18,098 | 2.4 | 4.4 |
| Transportation and warehousing | 991,125 | 8.5 | -1.0 | 67,024 | 8.7 | -1.2 |
| Other services and public administration | 1,332,536 | 11.4 | -0.4 | 55,412 | 7.2 | 5.0 |
| Households | 2,762,684 | 23.7 | 4.0 | 149,036 | 19.4 | 2.9 |

1. Physical flow accounts data for greenhouse gas emissions differ from those in Environment Canada's *National Inventory Report* as a result of differences in the methodology used to produce them. For more information, consult the [survey page](#).

Source(s): CANSIM tables [153-0113](#) and [153-0114](#).

Note to readers

Statistics Canada's Physical flow accounts record the annual flows of natural resources, products and residuals between the Canadian economy and the environment. Data are presented to reflect the activities of industries, households and governments, and follow the classification system used in Statistics Canada's Input-output accounts. These data are available at the national level only.

Preliminary data for 2012 and 2013 from the Physical flow accounts are now available for energy use and greenhouse gas (GHG) emissions. Data for 2009, 2010 and 2011 on energy use and GHG emissions were updated with revised source data.

Energy use and GHG emissions intensities per industry for 2009 to 2011 were revised to reflect the updates to energy use and GHG emissions data.

A revised table for 2009 to 2011 on energy use and GHG emissions by final demand category is now available, again to reflect the updates to energy use and GHG emissions data.

Environment Canada is responsible for producing Canada's National Inventory Report on Greenhouse Gas Sources and Sinks. This inventory fulfills Canada's reporting obligations under the United Nations Framework Convention on Climate Change (UNFCCC), and is the official benchmark for GHG emissions in Canada. The reporting requirements of the UNFCCC differ from the methodological guidelines of the United Nations System of Environmental – Economic Accounting used to create the Greenhouse gas account described here. For more information on these differences, consult the [survey page](#).

Available in CANSIM: tables [153-0113](#) to [153-0115](#) and [153-0129](#).

Definitions, data sources and methods: survey number [5115](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (613-951-4636; mediahotline@statcan.gc.ca).

Spending on research and development in the higher education sector, 2013/2014

Total expenditures on research and experimental development (R&D) in Canada's higher education sector fell by 1.8%, from \$13.0 billion in 2012/2013 to \$12.7 billion in 2013/2014.

Table 1
Spending on research and development in the higher education sector, by source of funding

| | 2012/2013 ^r | | 2013/2014 | | 2012/2013 to 2013/2014 % change |
|------------------------|------------------------|--------------|---------------------|--------------|---------------------------------------|
| | millions of dollars | % of total | millions of dollars | % of total | |
| Total, spending | 12,953.4 | 100.0 | 12,714.6 | 100.0 | -1.8 |
| Higher education | 6,145.5 | 47.4 | 6,239.8 | 49.1 | 1.5 |
| Federal government | 3,168.8 | 24.5 | 3,102.5 | 24.4 | -2.1 |
| Provincial governments | 1,361.1 | 10.5 | 1,178.5 | 9.3 | -13.4 |
| Private non-profit | 1,155.2 | 8.9 | 1,133.5 | 8.9 | -1.9 |
| Business enterprises | 993.7 | 7.7 | 910.6 | 7.2 | -8.4 |
| Foreign | 129.1 | 1.0 | 149.7 | 1.2 | 16.0 |

^r revised

Source(s): CANSIM table [358-0162](#).

Spending in the natural sciences and engineering field, which accounted for 76.6% of R&D expenditures in 2013/2014, decreased 2.8% from the previous year to \$9.7 billion. In the social sciences and humanities, spending increased 1.5% to \$3.0 billion.

R&D spending in the higher education sector was down in eight provinces in 2013/2014. The largest decline was in British Columbia, down \$131.3 million, followed by Ontario (down \$63.8 million) and Newfoundland and Labrador (down \$58.6 million). Partially offsetting these declines was higher spending on R&D in Quebec (up \$84.6 million) and Manitoba (up \$37.9 million).

Overall, four of the six funding sources reduced their R&D funding in 2013/2014. The largest decrease in funding was posted by the provincial government sector, down \$182.6 million or 13.4% to \$1.2 billion, followed by the business enterprise sector, which declined by \$83.1 million or 8.4% to \$911 million in 2013/2014. Counterbalancing these declines was increased funding by the higher education sector itself, up 1.5% to \$6.2 billion, and the foreign sector, up 16.0% to \$149.7 million.

Chart 1

Spending on research and development in the higher education sector, by source of funding and science field, 2013/2014

Source(s): CANSIM table [358-0162](#).

The higher education sector itself was the largest funder of R&D for each field of science. In 2013/2014, the sector itself funded 65.9% of total higher education sector R&D spending in social sciences and humanities and 43.9% in the natural sciences and engineering fields.

Provincially, Manitoba was the lone province that had no decrease in funding from all six funding sources for R&D in higher education sector in 2013/2014. In contrast, British Columbia was the lone province to record a decrease in funding of R&D in the higher education sector from all six funding sources.

Note to readers

Expenditures on research and development in the higher education sector (HERD) concepts

The higher education sector is composed of universities and affiliated research hospitals, experimental stations and clinics.

Total expenditures on research and development (R&D) are classified into two fields of science: natural sciences and engineering, as well as social sciences and humanities.

There are six funding sources for R&D expenditures in the higher education sector: business enterprises, private non-profit organizations, the federal government, provincial governments, the foreign sector, and internal funding from the higher education sector itself.

Research and Development in the Higher Education Sector survey

The Research and Development in the Higher Education Sector survey was conducted in 2014/2015 to derive coefficients of time spent by faculty members on R&D activities by academic field of science. These new coefficients have been applied in Statistic Canada's HERD model for fiscal years 2012/2013 and 2013/2014. Data for previous years are not comparable.

For further information on concepts and definitions for HERD, click on the Related information tab for this release.

Available in CANSIM: table [358-0162](#).

Definitions, data sources and methods: survey number [5109](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (613-951-4636; mediahotline@statcan.gc.ca).

Research and development in the higher education sector, 2014/2015

Faculty at Canadian higher education institutions spent on average 42% of their professional work time on research and development activities in a typical week during the 2014/2015 academic year.

Note to readers

The survey collected information related to research and development in postsecondary institutions in Canada, in particular information related to faculty teaching, research, administration and service.

Coefficients for Research and Development in the Higher Education Sector (RDHES) survey, 2014/2015, are available upon request.

For further information on concepts and definitions for RDHES, click on the Related information tab for this release.

Definitions, data sources and methods: survey number 5216.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (613-951-4636; mediahotline@statcan.gc.ca).

Quarterly civil aviation statistics, third quarter 2014

Canadian Level I and II air carriers reported 18.9 million enplaned passengers in the third quarter of 2014, up 8.1% from the same quarter in 2013.

The passenger counts on scheduled flights rose 8.1% to 17.9 million, while the number of passengers flying on chartered flights rose 8.9% to 1.0 million. Traffic totalled 47.5 billion passenger-kilometres, up 9.4% from the same quarter a year earlier.

These carriers reported total operating revenues of \$5.9 billion, up 9.7% from the same quarter in 2013, while total operating expenses rose 5.5% to \$5.0 billion. This resulted in operating income of \$911.7 million, which, after including non-operating expenses, produced a net income of \$587.1 million.

Although the average number of employees reported in the third quarter of 2014 declined 0.5% to 49,347, total wages and salaries paid increased 2.0% to \$838.8 million.

Note to readers

Data in this quarterly release are not seasonally adjusted.

Definitions, data sources and methods: survey number 2712.

Civil aviation data will appear later in the service bulletin *Aviation* (51-004-X).

For more information, to order data tables, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (613-951-4636; mediahotline@statcan.gc.ca).

New products and studies

There are no new products today.



Statistics Canada's official release bulletin

Catalogue 11-001-X.

Published each working day by the Communications Division, Statistics Canada, 10G, R.H. Coats Building, 100 Tunney's Pasture Driveway, Ottawa, Ontario K1A 0T6.

To access or subscribe to *The Daily* on the Internet, visit our website at <http://www.statcan.gc.ca>.

Published by authority of the Minister responsible for Statistics Canada. © Minister of Industry, 2015. All rights reserved. Use of this publication is governed by the [Statistics Canada Open Licence Agreement](#):

<http://www.statcan.gc.ca/reference/copyright-droit-auteur-eng.htm>