The Daily

Statistics Canada

Thursday, August 14, 2008

Released at 8:30 a.m. Eastern time

Releases

Study: Over a barrel? Canada and the rising cost of energy, August 2008 Higher oil prices have raised gasoline bills for consumers, but also vaulted energy to Canada's leading export in 2008. Spending on research and development in the higher education sector, 2006/2007 4	New products	5
Higher oil prices have raised gasoline bills for consumers, but also vaulted energy to Canada's	Spending on research and development in the higher education sector, 2006/2007	4
	Higher oil prices have raised gasoline bills for consumers, but also vaulted energy to Canada's	2





Releases

Study: Over a barrel? Canada and the rising cost of energy

August 2008

Higher oil prices have sharply raised the cost of filling up at the pump for drivers. However, driving and commuting habits have been slow to change since 2002, partly because the squeeze of higher gasoline bills on household budgets has been partly offset by lower prices for other goods such as autos as well as by higher incomes. Meanwhile, higher prices have lifted energy to Canada's leading export so far in 2008.

The combination of higher prices and increased gasoline consumption has raised the portion of income consumers allocate to gasoline to 3.8% in the first guarter of 2008, from 2.9% in 2002.

The increase in spending on gasoline since 2002 was offset by the drop in the share of income devoted to purchasing autos, from 6.2% to 5.3%. The drop for autos entirely reflects lower prices, as Canadians increased vehicle purchases over the last six years.

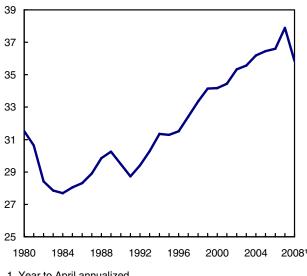
Meanwhile, the overall share of energy in consumer budgets has been steady at 6.7% over the past three years, reflecting lower electricity rates. As well, natural gas prices have risen only 32% by June 2008 compared with 2002, versus a 123% hike in the cost of oil for home heating. A mild winter and cool summer in 2008 has also provided some relief to overall household energy outlays. Energy consumption as a share of disposable income had risen from 5.8% in 2002 to 6.7% in 2005 before levelling off.

Despite the steady escalation of gasoline prices since 2002. Canadian drivers have so far not cut back their consumption. Overall, the retail sales volume of gasoline rose 7.2% from 2002 through 2007. Gasoline consumption rose in every year, with the exception of a 0.4% dip in 2006 when hurricane damage disrupted supplies and briefly sent prices to record levels.

largest annual increase in gasoline consumption was in 2007, despite the cumulative impact of years of rising prices. Retail sales of gasoline rose 3.9% last year, largely reflecting a 1.9% increase in kilometres driven by all vehicles as well as lower fuel efficiency. A dip in monthly gasoline sales early in 2008 appears partly to reflect poor driving conditions, due to several snow storms, and demand in the first five months of the year remained 0.5% ahead of the same period last year.

Retail gasoline sales

millions of cubic metres



1. Year to April annualized.

In the past, drivers in Canada have shown they can sharply curtail consumption in the face of higher prices. The volume of gasoline purchased by consumers fell 12.1% between 1980 and 1984, when prices rose 65%. Consumption also fell 5.1% from 1989 to 1991 when prices increased 12%. Of course, a major difference in both periods was that real incomes were being squeezed by recessions. Since 2002, real incomes have risen steadily.

The rise in gasoline consumption since 2002 reflects both the longer distances vehicles are being driven and the increasing number of vehicles on the road.

Canadians drove their vehicles 332 billion kilometres last year, up 5.2% from 2002, and the number of vehicles on the road rose 9.4% since 2002. New motor vehicle sales in the first five months of 2008 continued on a record pace.

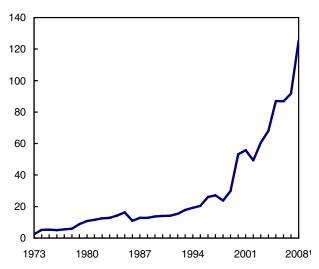
Moreover, the share of trucks in new vehicle sales rose from 2002 to 2007. The share of trucks retreated steadily in 2008, which may reflect the first move by drivers to boost fuel efficiency in response to higher prices. Given the 20.3 million vehicles already on the road, at the current rate of 1.7 million new motor vehicle sales a year it will take time to significantly change overall fuel efficiency of the fleet of vehicles being driven.

Canadians have only slightly altered their driving habits since 2002, and this is reflected in their use of mass transit. Demand for urban transit has barely kept pace with population growth since 2002. From 2002 to the first quarter of 2008, gross domestic product in urban transit systems has risen 10.1%, versus an 8.1% gain in the adult population. Some of the slow increase in demand for urban transit reflects faster population growth in rural areas.

Given the country's vast reserves of energy, Canadians think of themselves as self-sufficient in energy. However, Canadian imports of energy products totalled \$40 billion last year and are tracking close to \$50 billion in the first five months of 2008. Canada imports 19.8% of the energy it uses. It is more efficient for Canada's energy trade to flow North/South than East/West. As a result, eastern supplies often come from imports, notably for coal and crude oil.

Energy exports

\$ billions



1. Year to May annualized.

Despite these imports, Canada has a massive surplus overall in external trade in energy products. In the first five months of 2008, this surplus was \$76 billion at annual rates, as exports were nearly one-third ahead of their level a year earlier.

Higher energy prices have fundamentally altered the portrait of Canada's exports. As recently as 2004, energy was Canada's fourth largest export, behind machinery and equipment, autos and industrial goods. After rising to third place in the last two years ahead of autos, so far in 2008 energy is Canada's largest export earner. Energy exports nearly doubled from \$49 billion in 2002 to \$92 billion in 2007 and in the first five months of 2008 are running at an annual rate of \$125 billion.

Canada exported 38.3% of all the energy it produced in 2007. Around 60% of all the crude oil, natural gas and coal produced in this country is exported.

As a result of higher prices and output, energy as a share of total exports has jumped from 7% in 1971 to 12% in 2002 and 26.2% so far in 2008. Crude oil dominates Canada's exports of energy products, contributing almost half so far this year.

Definitions, data sources and methods: survey numbers, including related surveys, 1401, 2198, 2202, 2203 and 2301.

The article, "Over a barrel? Canada and the rising cost of energy," is included in the August 2008 Internet edition of the *Canadian Economic Observer*, Vol. 21, no. 8 (11-010-XWB, free), now available from the *Publications* module of our website. The monthly paper version of the *Canadian Economic Observer*, Vol. 21, no. 8 (11-010-XPB, \$25/\$243), will be available on August 21.

For more information about the *Canadian Economic Observer*, click on our banner ad from the *Publications* module of our website.

For more information, or to enquire about the concepts, methods or data quality of this release, contact Philip Cross (613-951-9162; ceo@statcan.gc.ca), Current Economic Analysis Division.

Spending on research and development in the higher education sector

2006/2007

Spending on research and development in the higher education sector amounted to \$9.6 billion (current dollars) in the fiscal year 2006/2007.

The higher education sector includes affiliated research hospitals, experimental stations and clinics. Social sciences and humanities accounted for 20% of the total, health sciences 39%, and other natural sciences the remaining 41%.

Higher education institutions themselves were the largest contributors, funding \$4.4 billion or 46% of the total. The second largest contributor was the federal government, funding \$2.5 billion, or 26% of the total.

Research and development expenditures in the higher education sector by funding sector 2006/2007

	Social	Health	Other	Total	
	sciences	sciences	natural		
	and		sciences		
	humanities		and		
			engineering		
	millions of current dollars				
Funding sector					
Federal government	401.2	938.7	1,147.6	2,487.5	
Provincial governments	198.5	297.8	496.4	992.7	
Business enterprises	32.8	341.5	433.9	808.2	
Higher education	1,132.2	1,669.6	1,632.4	4,434.2	
Private non-profit					
organisations	144.5	485.6	145.5	775.7	
Foreign	0.0	50.3	75.4	125.7	
Total	1,909.3	3,783.6	3,931.3	9,624.1	

Note: Figures may not add up to totals due to rounding.

Definitions, data sources and methods: survey number 5109.

The service bulletin *Science Statistics*, Vol. 32, no. 4 (88-001-XWE, free), is now available from the *Publications* module of our website.

For more information, or to enquire about concepts, methods or data quality of this release, contact Michael Lynch (613-951-2201; michael.lynch@statcan.gc.ca) or Louise Earl (613-951-2880; louise.earl@statcan.gc.ca), Science, Innovation and Electronic Information Division.

New products

Canadian Economic Observer, August 2008, Vol. 21, no. 8
Catalogue number 11-010-XWB

(free).

Aircraft Movement Statistics: Airports Without Air Traffic Control Towers (TP 141), February 2008, Vol. 3, no. 2 Catalogue number 51-008-XWE (free).

Science Statistics, Vol. 32, no. 4 Catalogue number 88-001-XWE (free).

Matter of Fact: "How satisfied are immigrants with their personal safety?"
Catalogue number 89-630-XWE
(free).

All prices are in Canadian dollars and exclude sales tax. Additional shipping charges apply for delivery outside Canada.

Catalogue numbers with an -XWE, -XIB or an -XIE extension are Internet versions; those with -XMB or -XME are microfiche; -XPB or -XPE are paper versions; -XDB or -XDE are electronic versions on diskette; -XCB or -XCE are electronic versions on compact disc; -XVB or -XVE are electronic versions on DVD and -XBB or -XBE a database.

How to order products

To order by phone, please refer to:

The title
 The catalogue number
 The volume number
 The issue number
 Your credit card number.

From Canada and the United States, call:

From other countries, call:

To fax your order, call:

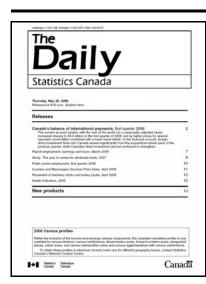
For address changes or account inquiries, call:

1-800-267-6677
1-613-951-2800
1-877-287-4369
1-877-591-6963

To order by mail, write to: Statistics Canada, Finance, 6th floor, R.H. Coats Bldg., Ottawa, K1A 0T6. Include a cheque or money order payable to **Receiver General of Canada/Publications**. Canadian customers add 5% GST and applicable PST.

To order by Internet, write to: *infostats@statcan.ca* or download an electronic version by accessing Statistics Canada's website (www.statcan.ca). From the Our products and services page, under Browse our Internet publications, choose For sale.

Authorized agents and bookstores also carry Statistics Canada's catalogued publications.



Statistics Canada's official release bulletin

Catalogue 11-001-XIE

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

To access *The Daily* on the Internet, visit our site at http://www.statcan.ca. To receive *The Daily* each morning by e-mail, send an e-mail message to listproc@statcan.ca. Leave the subject line blank. In the body of the message, type "subscribe daily firstname lastname".

Published by authority of the Minister responsible for Statistics Canada. © Minister of Industry, 2008. All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.