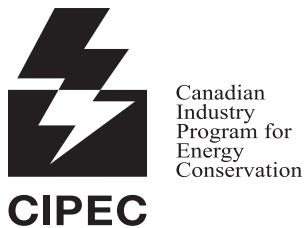


ENERGY MANAGEMENT THAT WORKS
WHERE EFFICIENCY MEETS PROFITABILITY



CIPEC ANNUAL REPORT 2013

ENERGY MANAGEMENT THAT WORKS
WHERE EFFICIENCY MEETS PROFITABILITY



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Là où l'efficacité devient rentable*

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CIPEC Leaders
ISO 50001 certified in 2013



CONTENTS

About CIPEC	1	The Year in Review	13	Mining	47
Message from the Chair	3	Industry Sector Profiles	14	Oil Sands	49
The Results	5	Aluminum	15	Petroleum Products	51
ISO 50001 Energy Management Systems Standard	7	Brewery	17	Plastics	53
Energy Efficiency Programs and Tools for Industry	9	Cement	19	Steel	55
ISO 50001 – Energy Management Systems Standard	9	Chemicals	21	Transportation Equipment Manufacturing	57
Webinars	10	Construction	23	Upstream Oil and Gas	59
Dollars to \$ense Energy Management Workshops	10	Dairy	25	CIPEC Who's Who	61
Classes 29, 43.1, and 43.2 and CRCE Tax Savings	11	Electrical and Electronics	27	CIPEC Executive Board Members	62
Energy Management Information Systems – Planning Manual and Tool	12	Electricity Generation	29	CIPEC Task Force Council	63
		Fertilizer	31	CIPEC Leader Companies by Sector	65
		Food and Beverage	33	CIPEC Trade Associations	83
		Forest Products	35	Contacts – Industry and Transportation Division	84
		Foundry	39		
		General Manufacturing	41		
		Lime	45		

About CIPEC

The Canadian Industry Program for Energy Conservation (CIPEC) is a voluntary industry-government partnership established to improve Canada's industrial energy efficiency. CIPEC is funded under the [ecoENERGY Efficiency for Industry initiative](#).

The 24-member CIPEC Task Force Council includes volunteer representatives from each of CIPEC's 21 industrial sectors, which encompass more than 2400 facilities and more than 50 trade associations. Each CIPEC task force represents companies engaged in similar industrial activities. The Task Force Council provides a forum for sectors to share ideas and recommend ways to address common needs. It includes representatives from every CIPEC sector task force. Overall direction is provided by the CIPEC executive board, made up of private-sector leaders who are champions of industrial energy efficiency and who provide advice on industrial energy efficiency programs and related issues to the Government of Canada.

In the CIPEC partnership, change emerges from consensus and joint action developed through open communication. CIPEC continues to be the focal point for industry's response to Canada's energy efficiency efforts.

CIPEC's role is to promote greater energy efficiency and to recognize and reward trendsetters. At its biennial industrial energy efficiency conferences, CIPEC presents the [CIPEC Leadership Awards](#) to honour Canadian companies that have demonstrated a significant and innovative contribution to energy efficiency. In 2011, the [Future Leaders Award](#) category was created to honour post-secondary students and recent graduates whose projects or initiatives have impacted industrial energy efficiency in a considerable way.

Part of CIPEC's mandate is a strong communications and awareness program anchored in its *Heads Up CIPEC* newsletter, which has a readership of more than 10 500 subscribers. CIPEC also raises awareness of the goals and benefits of improved energy use. The Task Force Council and sector task forces are constantly working toward broadening participation, encouraging information sharing and bolstering awareness of the role and achievements of CIPEC members.

CIPEC volunteers include successful business leaders and nationally recognized players. The profiles of these leaders and their strong belief in CIPEC's principles attract new members from industry, building on the successful partnership between industry and government.

OUR MISSION

To promote effective voluntary action that reduces industrial energy use per unit of production, thereby improving economic performance while participating in meeting Canada's climate change objectives.

JOIN CIPEC

Participate in CIPEC by registering your company's commitment to energy efficiency improvements and greenhouse gas (GHG) reductions. Signing up as a CIPEC Leader is free and provides eligibility for a broad range of benefits:

- cost-shared assistance
 - implementation for the Energy Management Systems standard (ISO 50001)
 - process integration studies
 - computational fluid dynamics studies
 - other energy management projects
- Natural Resources Canada's (NRCan's) Dollars to \$ense Energy Management workshops (including opportunities to have them delivered on-site and customized to meet specific company needs)
- free monthly webinars on innovative energy practices such as
 - energy management information systems
 - ISO 50001 Energy Management Systems standard certification
 - motor systems management
 - compressed air
 - boiler efficiency
- eligibility to nominate your organization for a CIPEC Leadership award
- technical guidebooks
- *Heads Up CIPEC* – a monthly e-newsletter that provides the latest energy efficiency information
- opportunities to network with other industrial energy managers and practitioners

CONTACT CIPEC

cipec.gc.ca

info.ind@nrcan-rncan.gc.ca

Message from the Chair



CIPEC members continued to set an example for Canada and the world with their commitment to use energy efficiency as a mechanism to build a greener, leaner and more profitable future. More CIPEC Leaders have begun to leverage energy management as a way to create and promote business opportunities.

During 2012–2013, CIPEC efforts to champion the ISO 50001 Energy Management Systems standard yielded significant benefits. Several companies were certified to ISO 50001, including Broan-NuTone, Chrysler Canada Inc. (Brampton), IBM Canada Limitée (Bromont), Lincoln Electric Company of Canada, New Gold Inc. (New Afton Mine), Soprema Inc., 3M Canada (London), and VeriForm Inc. And to help make the new standard more accessible, the Standards Council of Canada continued to develop a process to accredit ISO 50001 registrars.

Energy management systems (EnMS), a systematic approach to energy management, lies at the core of ISO 50001. EnMS is based on the truism, "if you can't measure it, you can't manage it." By identifying not only how much energy is used, but exactly when, where and how it is

consumed, the EnMS approach generates the data companies need to increase energy efficiency, reduce costs and improve performance.

Furthermore, because ISO 50001 features elements common to all ISO management system standards, it is fully compatible with ISO 9001 (quality management) and ISO 14001 (environmental management). Companies can now readily integrate energy efficiency into management practices and make better use of existing processes and practices. As a result, EnMS provides a powerful competitive differentiator; ISO 50001 certified companies gain a tangible advantage over the competition. Given this reality, it should come as no surprise that more Canadian companies are moving toward the new standard and improving their competitive position in the global marketplace.

The success of efforts to improve energy performance in industry demonstrates the considerable value of CIPEC. This partnership played a key role in the development of ISO 50001 and its adoption by industry in Canada. Pilot projects involving multiple partners, including those in the provinces and utilities have helped demonstrate the considerable advantages of EnMS and ISO 50001.

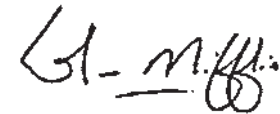
Dollars to \$ense energy management workshops are another valuable product of the partnership between the public and private sectors. The workshops, delivered by NRCan's Office of Energy Efficiency (OEE), enable industry representatives to learn the latest techniques and practices to minimize energy consumption. The OEE delivered 144 workshops during 2012–2013 and launched a new half-day workshop on implementing the ISO 50001 standard in industrial facilities.

I am proud that during 2012–2013, CIPEC Leaders recorded total annual energy savings of 0.735 petajoules (PJ) – enough to power almost 8500 households – and reduced annual GHG emissions by an estimated 78 kilotonnes (kt). While these numbers are certainly impressive, of greater significance is the fact that they were achieved voluntarily – the foundation of CIPEC's success. The CIPEC Leaders who drive Canada's success on industrial energy efficiency all share a voluntary commitment. And the 18 new CIPEC Leaders we welcomed this year are now part of this proud tradition. Since 1975, CIPEC has grown to include more than 2400 CIPEC Leaders.

I am inspired by the extraordinary progress CIPEC continues to make and the remarkable voluntary partnership it remains. I wish to express my gratitude to CIPEC's Executive Board and Task Force Council

and to the many volunteers on the sector task forces for their ongoing dedication to improving industrial energy efficiency in Canada. I am convinced that their leadership and our collective efforts will ensure CIPEC has a promising future as we lead the drive toward sustainable growth in the wider Canadian economy.

Sincerely,



Glenn Mifflin
Chair, CIPEC Executive Board

The Results

The Canadian Industry Program for Energy Conservation (CIPEC) brings exceptional value to Canadian industry while supporting Canada's drive to improve energy efficiency and reduce greenhouse gas (GHG) emissions. Its extraordinary impact is clear – CIPEC delivers results.

The share of Canada's gross domestic product (GDP) created by CIPEC industries increased by 37.3 percent between 1990 and 2011. With the help of effective energy management, energy consumption by these industries rose by only 23.1 percent.

In 2011, CIPEC industries produced approximately 26 percent of the country's GDP and provided jobs for approximately 3.5 million Canadians.

The more than 5400 facilities that CIPEC sectors represent reduced their combined energy intensity by 10.4 percent between 1990 and 2011, an average of 0.5 percent per year.

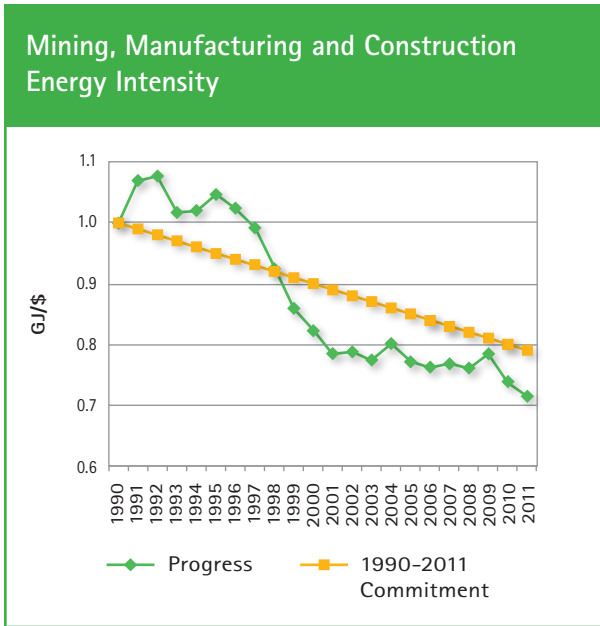
Improved energy efficiency enabled Canadian industry to avoid approximately \$5.1 billion in purchased energy in 2011 – enough energy to heat almost 6 million Canadian households for one year.

Had energy intensity remained constant, GHG emissions from CIPEC industries would have been 51.4 megatonnes (Mt) higher.

From the fall of 1997 to March 31, 2013, the CIPEC Dollars to \$ense Energy Management workshops helped companies save an estimated 11 PJ of energy, equivalent to \$160 million in annual energy savings, and cut carbon dioxide (CO₂) emissions by more than 1.1 Mt.

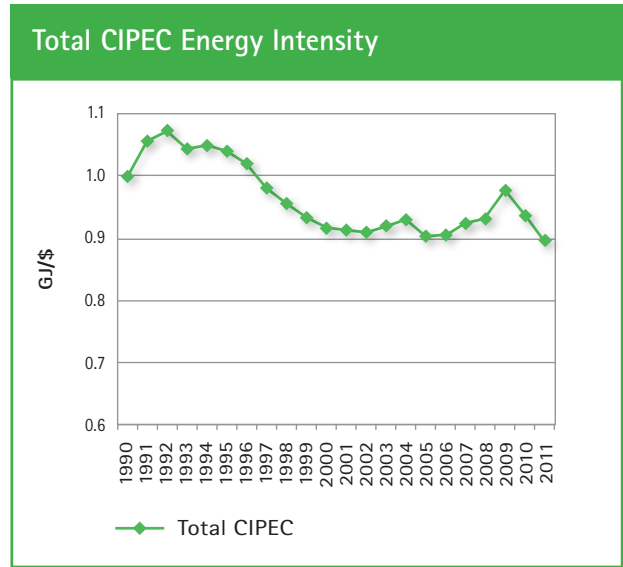
The *Heads Up CIPEC* newsletter was distributed electronically monthly and reached more than 10 500 recipients across Canada.

More than 2400 industrial facilities have signed on as CIPEC Leaders since 1975.



GJ: gigajoule

The mining, manufacturing and construction sectors improved their energy intensity by an average of 1.4 percent per year between 1990 and 2011. This rate surpasses the public voluntary commitment made by these CIPEC members to achieve an average annual energy intensity improvement of 1 percent per year.



Between 1990 and 2011, all CIPEC industries improved their combined energy intensity by 10.4 percent or an average of 0.5 percent per year. If energy intensity had remained constant, GHG emissions would have been 51.4 Mt higher in 2011.

ISO 50001

ENERGY MANAGEMENT SYSTEMS STANDARD

Published in June 2011, the [ISO 50001 Energy Management Systems standard](#) establishes an energy management framework for all types of organizations and companies. The voluntary standard could quickly become a de facto requirement for businesses competing in today's globalized world. Therefore an increasing number of Canadian organizations are seeking ISO 50001 certification given the multiple economic and environmental benefits to be gained.

ISO 50001 follows the [Plan-Do-Check-Act](#) cycle for continual improvement of the energy management system. It enables organizations to integrate energy management into their other initiatives to improve quality, environmental performance and other management systems.

The standard is the product of the collaborative work of many countries striving to improve energy management. Canada helped develop the standard and continues to be involved in other global energy initiatives such as the [Clean Energy Ministerial \(CEM\)](#), which is a global forum to share best practices and programs that encourage and facilitate the transition to clean energy.

As part of its work, the CEM created the [Global Superior Energy Performance Partnership \(GSEP\)](#). GSEP is working to accelerate energy efficiency

improvements throughout industrial facilities and large buildings and to significantly reduce global energy use. To achieve this goal, GSEP has six working groups that focus on specific technologies or energy-intensive sectors.

One of the six groups, the Energy Management Working Group (EMWG), identifies best practices, creates and disseminates resources, and offers technical expertise to support efforts to promote energy management. One of its initiatives involved the 3M manufacturing facility in Brockville, Ontario, which is now ISO 50001 certified. This pilot project provided useful information about EnMS implementation and the path to ISO 50001 certification.

Companies that implement energy management systems to improve their energy performance can achieve a higher return on investment than

with business-as-usual activities. The EMWG is demonstrating the truth of this statement by developing case studies of energy management systems, a database of energy savings achieved by these systems, and a business case model for implementing an energy management system.

For many companies, ISO 50001 certification provides an achievable, short- to long-term strategy that will make them more competitive. After all, energy is a controllable cost, and therefore, many organizations see energy management as the key to ensuring long-term control of production costs and increasing their profitability.

To encourage and support ISO 50001, NRCan offers [cost-shared assistance](#) to implement the standard.

TESTIMONIALS FROM ISO 50001 CERTIFIED CIPEC LEADERS

"The ISO 50001 Energy Management Systems standard provides us with a set of procedures that outline the who, what, when and why of energy savings initiatives, which allows the company to achieve the best possible results."

– JOHN MARTINOVIC, DIRECTOR OF OPERATIONS
AT BROAN-NUTONE CANADA INC.

"The ISO 50001 Energy Systems Management standard is the perfect fit for our plant's continuous improvement plan. We like that it is a global standard that assures employee awareness and also allows us to engage our suppliers in energy efficiency and green our purchasing practices."

– YVES VEILLEUX, FACILITIES MANAGER, IBM CANADA
LIMITÉE – BROMONT.

"VeriForm's reason for embarking on this energy systems management journey was very practical; it was to make our business more profitable by looking at a controllable cost."

– GERRY CUTTING, ENERGY MANAGER, VERIGREEN
(VERIFORM INC.'S ENERGY MANAGEMENT COMPANY)

"ISO 50001 fits well with our company, where we all understand that energy management is a cost containment activity. Ultimately, we want to be competitive and keep manufacturing in Canada."

– ADEL MIR, DIRECTOR ENGINEERING SERVICE,
LINCOLN ELECTRIC COMPANY OF CANADA

"By embracing international standards, we are able to incorporate third-party evaluation by unbiased auditors who look at different operations around the world.

This provides us with important information that helps inform our own decision making. The energy management systems of five group plants are already ISO 50001-certified and by 2014, all of our principal plants, which represent 92 percent of the energy consumed by Fiat-Chrysler, will be ISO 50001-certified.

We have also set specific targets for each sector to reduce the energy consumed (per unit value up to 30 percent compared with 2009 levels) and CO₂ emissions (per unit value up to 35 percent compared with 2009 amounts) by 2014. All these efforts are part of our ongoing commitment to a sustainable management of our industrial processes."

– SERGIO MARCHIONNE, CHAIRMAN AND CHIEF EXECUTIVE
OFFICER, CHRYSLER GROUP LLC

Source: [ISO News](#), Sergio Marchionne – Chrysler Group and Fiat. February 8, 2012.

"New Afton's vision for energy management is to ensure that energy management is not just project-based, but is self-sustaining – something that is done by all employees on a day-to-day basis as part of what we do at New Afton Mine. We see ISO 50001 as the vehicle to help us achieve this vision."

– ANDREW COOPER, ENERGY SPECIALIST, NEW GOLD INC.,
NEW AFTON MINE

"At 3M Canada, energy efficiency and energy management are major priorities in our offices, research laboratories, and especially in our manufacturing facilities. We're proud to have been the first company in Canada to earn the honour of ISO 50001 with Superior Energy Performance at the Platinum level in 2012 at one of our manufacturing facilities in Brockville, Ontario, and are thrilled to have achieved the ISO 50001 designation again – this time in our London, Ontario, facility. Thank you to Natural Resources Canada for all their support."

– ANDREW HEJNAR, ENERGY MANAGER, 3M CANADA

Energy Efficiency Programs and Tools for Industry

Natural Resources Canada (NRCan) offers several energy efficiency and renewable energy programs and services to meet the needs of Canadian industry.

NETWORKING OPPORTUNITIES

- Canadian Industry Program for Energy Conservation (CIPEC)

ENERGY MANAGEMENT TRAINING SERVICES

- Dollars to \$ense Energy Management workshops

FINANCIAL SUPPORT

- Cost-shared assistance: To perform ISO 50001 implementation pilots, energy assessments and other energy management projects
- Tax savings: Classes 29, 43.1, and 43.2 and Canadian Renewable and Conservation Expenses (CRCE) tax savings program

TECHNICAL SUPPORT

- Canadian Industry Program for Energy Conservation (CIPEC)
- Technical guides, benchmark studies, tools and equipment

ISO 50001 – ENERGY MANAGEMENT SYSTEMS STANDARD

Published in June 2011, the [ISO 50001 Energy Management Systems standard](#) establishes an energy management framework for all types of organizations and companies. This voluntary

standard could quickly become a de facto requirement for businesses competing in today's globalized world.

ISO 50001 IMPLEMENTATION WILL

- help organizations make better use of their existing energy-consuming assets
- create transparency and facilitate communication on the management of energy resources and the promotion of energy efficiency throughout the supply chain
- lead to significant reductions in energy cost, GHG emissions and other environmental impacts

- promote energy management best practices and reinforce good energy management behaviours
- help facilities evaluate and prioritize the implementation of new energy-efficient technologies
- allow integration with other organizational management systems, like environmental and health and safety systems. It is compatible with other performance improvement approaches (Superior Energy PerformanceSM, Lean, Theory of Constraints, Six Sigma, 5S, etc.) and energy management systems.

COST-SHARED ASSISTANCE

The people behind CIPEC know how to implement energy management programs. Performance measurement, baselines and best practices are what CIPEC is all about. So it was only natural that CIPEC representatives were involved in the negotiations for ISO 50001.

CIPEC members can leverage CIPEC resources to implement ISO 50001. The ecoENERGY Efficiency for Industry program is offering [cost-shared assistance](#) to industrial companies to perform ISO 50001 implementation pilots, energy assessments and other energy management projects.

NRCAN will provide up to 50 percent of the cost, to a maximum of \$25,000, for

- [ISO 50001 Energy Management Systems standard implementation pilots](#)
- [process integration studies](#)
- [computational fluid dynamics studies](#)
- energy management projects

To be eligible, a company must have written approval of its technical proposal from NRCAN before beginning the project.

For more information on the ISO 50001 Energy Management System standard, visit nrcan.gc.ca/energy/efficiency/industry/cipec/5379.

Or send an e-mail to info.ind@nrcan-rncan.gc.ca.

WEBINARS

Webinars are free online workshops for CIPEC Leaders that feature real-world examples. Topics include the ISO 50001 Energy Management Systems standard, energy management information systems (EMIS), motor systems management, compressed air, boiler efficiency and more. Webinars are offered monthly.

For more information, send an e-mail to info.ind@nrcan-rncan.gc.ca.

DOLLARS TO \$ENSE ENERGY MANAGEMENT WORKSHOPS

Hundreds of organizations have reduced operating costs by adopting energy-saving practices offered through [Dollars to \\$ense Energy Management workshops](#). The workshops are facilitated by leading experts in energy efficiency. The workshops give owners, managers and operators of industrial facilities a competitive edge in managing energy costs.

THE SIX ONE-DAY DOLLARS TO \$ENSE WORKSHOPS ARE

- [Energy Management Information Systems \(EMIS\)](#) – makes energy performance visible and helps organizations apply a systematic approach to energy efficiency
- [Energy Management Planning](#) – how to plan ahead to realize the benefits of energy management

- [Spot the Energy Savings Opportunities](#) – shows how to identify, and capitalize on, immediate savings opportunities through practical exercises and hands-on demonstrations
- [Energy Monitoring](#) – shows companies how to measure and analyze energy use
- [Energy Efficiency Financing](#) – improves awareness of financing options and skills in obtaining financing for energy efficiency projects
- [Recommissioning for Buildings](#) – increases awareness and knowledge of the fundamentals of building recommissioning

The workshops can also be customized to meet the needs of industrial sector organizations and companies. Professional instructors will consult with the company to identify specific requirements and then assemble the information and resource materials for the target audience.

Newly launched half-day customized workshops on ISO 50001 implementation are available on request for CIPEC members.

Register online by visiting the workshop Web site at nrcan.gc.ca/energy/efficiency/industry/training-awareness/5487.

Or contact NRCAN to find out more about workshop customization.

Fax: 613-943-5380

E-mail: DollarstoSenseworkshops@nrcan-nrcan.gc.ca.

CLASSES 29, 43.1, AND 43.2 AND CRCE TAX SAVINGS

For a limited time, companies that invest in manufacturing and processing equipment may take advantage of Class 29 in Schedule II of the *Income Tax Regulations* (the Regulations). This tax incentive allows for the capital costs of certain manufacturing and processing equipment that would otherwise qualify for 30 percent per year capital cost allowance (CCA) on a declining balance basis under Class 43 to be written-off at 50 percent per year on a straight-line basis. This incentive is available for equipment acquired after March 18, 2007, and before 2014. [Budget 2013: Jobs Growth and Long-Term Prosperity](#) proposed to extend this temporary tax incentive for two years to include the costs of equipment acquired in 2014 and 2015.

Companies that invest in clean energy generation and energy conservation equipment such as cogeneration systems, photovoltaic panels, wind turbines and bio-fuel production equipment may be able to write-off the capital costs of such equipment at accelerated CCA rates under Class 43.1 or 43.2 in the Regulations.

Under Class 43.1 or 43.2, the capital costs of qualifying equipment can be written-off at 30 or 50 percent per year, respectively, on a declining balance basis. Without these accelerated write-offs, many of these assets would be depreciated at annual rates of only 4, 6, 8 or 15 percent.

The eligibility requirements for Class 43.1 and 43.2 are generally the same, except that for Class 43.2, equipment must be acquired after February 22, 2005, and before 2020 to be eligible, and fossil-fuelled cogeneration equipment must meet a higher efficiency standard to qualify.

NRCAN is the technical authority for Classes 43.1 and 43.2. Further information on what equipment qualifies for Class 43.1 or 43.2 is in the *Class 43.1 Technical Guide* published by NRCAN.

Budget 2013 proposed to expand Class 43.2 by making biogas production equipment that uses more types of organic waste eligible for inclusion in Class 43.2. Budget 2013 also proposed to broaden the range of cleaning and upgrading equipment used to treat eligible gases from waste that is eligible for inclusion in Class 43.2

In addition to Class 43.1 or Class 43.2 CCA, the Regulations allow expenses incurred during the development and start-up of renewable energy and energy conservation projects – Canadian renewable and conservation expenses (CRCE) – to be fully deducted in the year incurred, carried forward and deducted in future years, or financed through flow-through shares.

To qualify as CRCE, expenses must be incurred for a project in which it is reasonable to expect at least 50 percent of the capital costs incurred would be capital costs for equipment that is described in Class 43.1 or Class 43.2.

For more information on tax savings for industry, visit nrcan.gc.ca/energy/efficiency/industry/financial-assistance/5147.

ENERGY MANAGEMENT INFORMATION SYSTEMS – PLANNING MANUAL AND TOOL

The [Energy Management Information Systems Tool](#) makes energy performance visible to different levels of the organization so that actions can be taken to create financial value for the company. The tool is also a performance management system that helps reduce energy consumption and cost.

For more information on the *Energy Management Information Systems – Planning Manual and Tool*, visit nrcan.gc.ca/energy/efficiency/industry/cipec/5223.

Or send an e-mail to info.ind@nrcan-rncan.gc.ca.

The Year in Review

CIPEC members continued to make advances in energy efficiency during the past year. These impressive gains were realized thanks to strong leadership and dedication from the CIPEC Executive Board, the Task Force Council and the 21 task forces, together with support from the Office of Energy Efficiency.

- Seven CIPEC Leaders, Broan–NuTone Canada Inc., Chrysler Canada Inc. (Brampton), IBM Canada Limitée (Bromont), Lincoln Electric Company of Canada, New Gold Inc. (New Afton Mine), Soprema Inc., 3M Canada (London) and VeriForm Inc. were certified to the ISO 50001 Energy Management System standard.
- The total number of CIPEC Leaders rose to more than 2400.
- Dollars to \$ense Energy Management workshops were delivered to more than 3000 people, bringing the total to more than 27 000 attendees since the workshops were first offered in 1997.
- More than 1600 people attended 26 CIPEC webinars.
- CIPEC's estimated total annual energy savings exceeded 0.7 PJ.
- CIPEC's estimated reductions in annual GHG emissions totalled 78 kt.

Industry Sector Profiles

Accurate measurement and meaningful data are fundamental to measuring energy improvements. Data used in this annual report are collected by Statistics Canada, with funding from Natural Resources Canada and Environment Canada, and supplemented by information received from associations that participate in the Canadian Industry Program for Energy Conservation, as well as other private and government organizations. The data represent entire industrial sectors, not just CIPEC members.

Statistics Canada data for the manufacturing sector are collected through the annual Industrial Consumption of Energy (ICE)¹ survey, which covers approximately 4300 establishments in the manufacturing sector. For each establishment, the survey gathers information on energy fuel consumption for 13 fuels. Survey results are used to track energy efficiency improvements, calculate carbon dioxide emissions and inform Canadians about energy conservation.

Statistics Canada began streamlining the questionnaire and data collection process in 2004. The changes included standardizing some special industry questionnaires, making provisions for

respondents to explain any major changes in energy consumption and thus minimize follow-up inquiries, and converting fuels to a standard unit of measure. Data analysis and interpretation involves the collective effort of NRCan's OEE, CIPEC trade associations and the Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC) at Simon Fraser University in Burnaby, British Columbia. The CIEEDAC produces energy intensity indicators for each sector based on production and gross domestic product.

Much of the ICE data is available online. Statistics Canada data are published in CANSIM Table 128-0005 – Energy fuel consumption

of manufacturing industries in natural units, using the North American Industry Classification System (NAICS) and CANSIM Table 128-0006 – Energy fuel consumption of manufacturing industries in GJ, also using the NAICS.

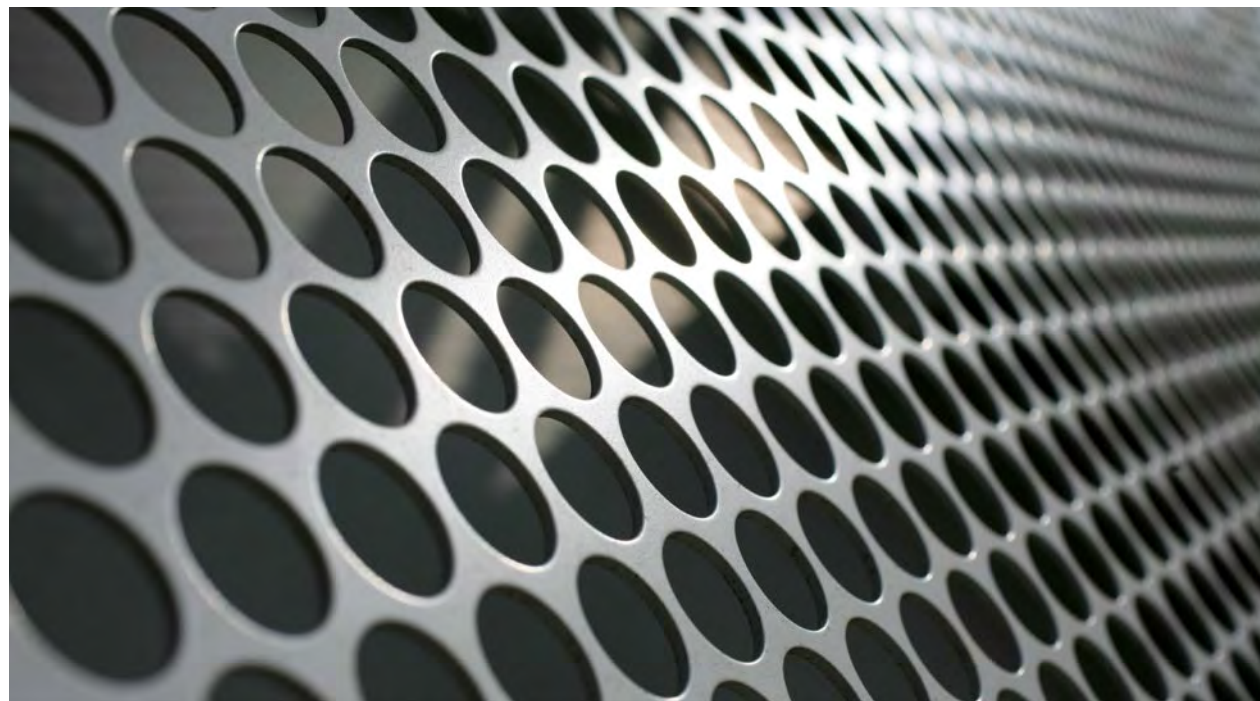
For more information, see the Statistics Canada Web site at cansim2.statcan.ca.

The OEE publishes *Energy Efficiency Trends in Canada* annually at oee.nrcan.gc.ca/publications/statistics/ice11/ice11.pdf.

Data from the CIEEDAC are available at www2.cieedac.sfu.ca/index.html.

¹ The data from the ICE survey are for the 2011 calendar year.

Aluminum



► PROFILE

The aluminum sector comprises companies engaged primarily in extracting alumina from bauxite ore, producing aluminum from alumina, refining aluminum by any process, and rolling, drawing, casting, extruding and alloying aluminum and aluminum-based alloy basic shapes. Canada's aluminum sector is ranked fourth in the world in annual primary aluminum production after the United States, Russia and China and is the second-largest exporting country after Russia. The combined output of the aluminum plants in Canada is a major contributor to Canada's national and local economies. There are nine aluminum smelters in Quebec and one in British Columbia. An alumina refining site is in Arvida, Quebec, and coke calcination plants are in Arvida and in Kitimat and Strathcona, British Columbia.

▶ ACHIEVEMENTS

Canada's aluminum industry continues to adopt measures that promote energy efficiency, and all Canadian aluminum manufacturers belong to CIPEC. All the Quebec aluminum manufacturing facilities use the baked-anode method, which uses 20 percent less electricity per tonne than the Söderberg method. It is expected that all aluminum production facilities in Canada will convert to modern, energy-efficient manufacturing methods by 2015.

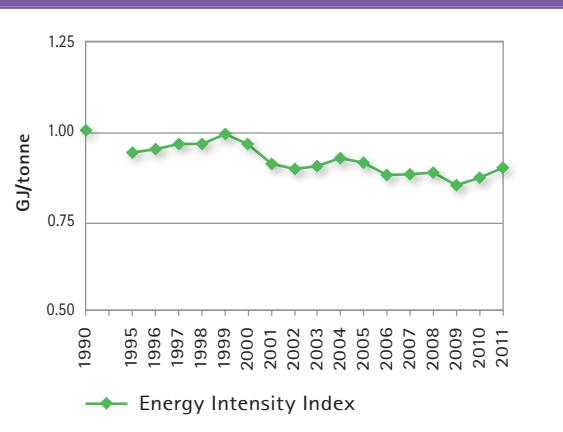
According to a study completed by Simon Fraser University's CIEEDAC, the amount of energy consumed by Canadian manufacturers per tonne of aluminum improved by 10 percent between 1990 and 2011. Canada's capacity for, and success with, aluminum recycling generates further efficiencies. Furthermore, research and development have helped increase the amount of alumina that is recoverable from bauxite, which helps reduce the amount of energy needed to produce aluminum by 50 percent.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5255.

▶ HIGHLIGHTS

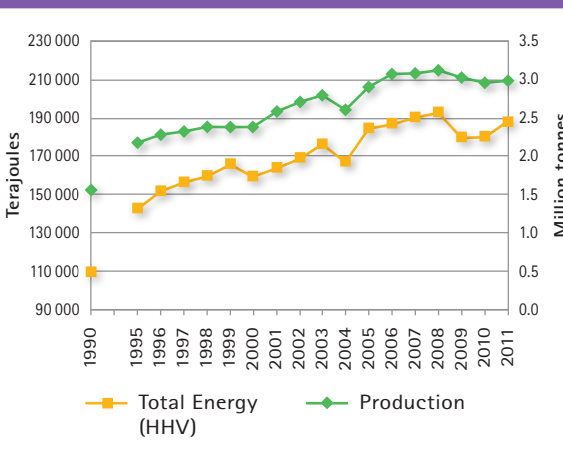
ALUMINUM SECTOR – NAICS 331313

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



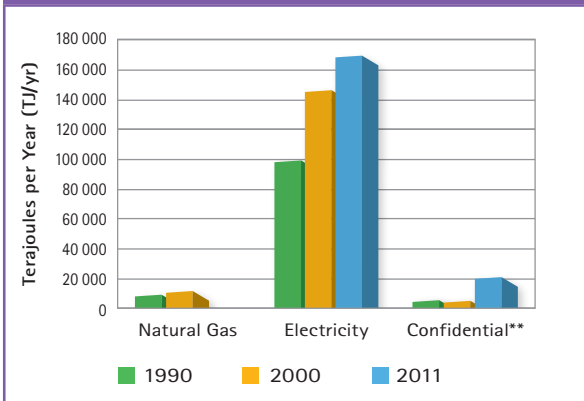
Energy intensity increased by 3.3 percent between 2010 and 2011.

Total Energy and Physical Output (1990–2011)



Total energy consumption increased by 4.2 percent, and total production increased by 0.8 percent between 2010 and 2011.

Energy Sources



** Confidential includes Heavy Fuel Oil (HFO), Middle Distillates (LFO) and Propane (LPG).

Between 2010 and 2011, electricity consumption increased by 0.8 percent. Consumption of other fuel types increased by 44.2 percent, mainly because data about all other fuels used in the process are now considered confidential.

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995–2011*, Ottawa, March 2013.

Production – Natural Resources Canada, *Production of Canada's Leading Minerals*, January 2013.

Brewery



► PROFILE

The Canadian brewery industry includes approximately 160 large and small companies making beer, ale, malt liquors and non-alcoholic beer. The sector generates more than \$14 billion in total annual revenues, which represents approximately 12 percent of the food-manufacturing industry's total revenues.²

Mergers and acquisitions, along with the establishment of microbreweries and craft breweries, have changed the industry in recent

years. According to Statistics Canada's Canadian Business Patterns database, large firms often employ more than 500 workers at a single establishment, while small microbreweries employ fewer than 50. The production, marketing and sale of Canadian beer generate more than 205 000 jobs, with about 13 000 people working directly for Canada's brewers.³

Energy and utility costs typically represent 3 to 8 percent of a brewery's expenditures. Between 1990 and 2008, the average amount of energy Canadian brewers consumed to produce 100 litres of beer declined by 53 percent.

► ACHIEVEMENTS

Water is essential to the brewing industry; it is used as a raw ingredient and to wash, heat and

cool materials and containers. Consequently, water stewardship and sustainability are important goals for the industry. Over the years, the amount of water needed to produce beer has declined substantially – from 10 hectolitres (hL) of water for every hectolitre of beer to less than 5 hL. Some brewers have achieved ratios of 3.5:1.

The [The Guide to Energy Efficiency Opportunities in the Canadian Brewing Industry](#) is a joint project of the Brewers Association of Canada and Natural Resources Canada. The guide recognizes the brewing industry's current activities related to energy efficiency and reductions of GHG emissions and water consumption, and identifies opportunities for improvement. It also lists current data from Canada and abroad.

Molson Coors, a corporation based in both Canada and the United States and internationally, continues to implement company-wide measures to promote

² www.brewers.ca/en/beer-and--canadas-economy

³ [Brewers Association of Canada](#)

energy efficiency. A corporate energy council, reporting directly to the global chief supply-chain officer, develops energy targets for each facility. Energy teams at each brewery identify and implement initiatives to achieve these targets. Measures include replacing old lights with efficient fittings, bulbs and control systems, installing variable-speed drives in motors and using optimized distribution voltage. Furthermore, upgrades to heating, ventilating and air-conditioning systems have significantly reduced energy consumption and carbon-dioxide emissions.

Calgary's Big Rock Brewery recently established a sustainability management team, comprised of employees from all departments, to identify and implement energy efficiency measures. The installation of a lighting system, for instance, cut electricity use by more than 10 percent. A series of initiatives helped reduce water consumption by almost 35 percent.

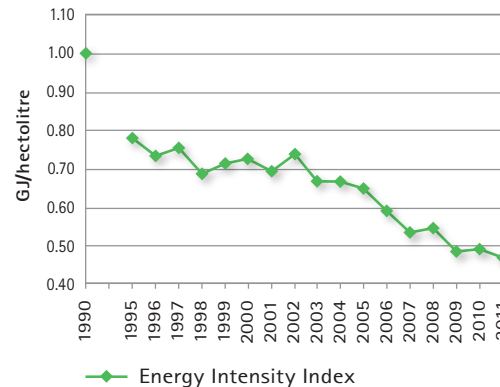
Sleeman Brewery Ltd. assessed water and energy consumption at its facilities in Guelph, Ontario, and Dartmouth, Nova Scotia. The assessment identified feasible opportunities to reduce water consumption and natural gas use at the Guelph brewery by 8 and 20 percent, respectively, generating total savings of more than \$300,000 per year. At the Dartmouth facility, the assessment identified opportunities to reduce water consumption by 10 to 18 percent and recover an additional 200 000 litres per year of product. A subsequent energy efficiency study identified opportunities to reduce consumption of electrical and thermal energy by 14 and 7 percent, respectively.

For more information on the sector, visit oee.nrcan.gc.ca/industrial/opportunities/cipec/meetings/beer/login.cfm.

HIGHLIGHTS

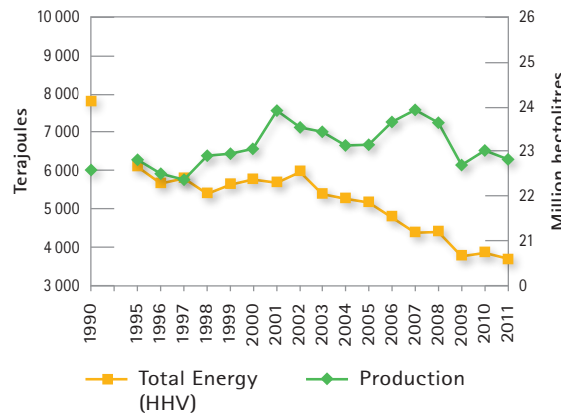
BREWERY SECTOR – NAICS 31212

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



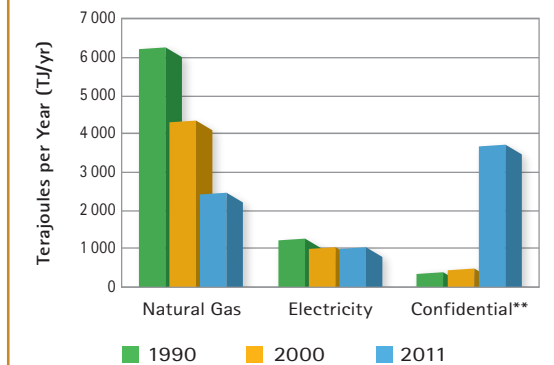
Energy intensity decreased by 4.5 percent between 2010 and 2011.

Total Energy and Physical Output (1990–2011)



Between 2010 and 2011, total energy consumption decreased by 5.3 percent, and total production decreased by 0.8 percent.

Energy Sources



** Confidential includes Propane, Heavy Fuel Oil (HFO) and Middle Distillate (LFO).

Natural gas consumption decreased by 6.7 percent, and electricity consumption increased by 8.2 percent between 2010 and 2011.

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995–2011*, Ottawa. March 2013.

Production – *Brewers Association of Canada*. Ottawa. March 2013.

Cement



► PROFILE

A key player in Canada's construction sector, the cement industry provides a reliable material essential to building and maintaining the country's communities and critical infrastructure. The cement industry contributes more than \$8 billion and 27 000 direct and indirect jobs to the Canadian economy.

In 2012, Canada's eight cement companies operated 16 processing facilities across the country and produced more than 13 million tonnes (t) of cement.

Energy accounts for approximately 40 percent of total input costs in the manufacturing process. During the past decade, the industry has increased its energy efficiency by 11 percent and continues to aggressively pursue strategies to reduce its reliance on the use of fossil fuels.⁴

► ACHIEVEMENTS

Cement kilns consume large amounts of thermal energy, typically generated by coal and other fossil fuels. Switching to alternative sources of low-carbon fuels that are either carbon neutral (e.g. biomass) or that would otherwise go to waste (e.g. refuse-derived fuels) is a major focus of the industry's overall

sustainability and energy efficiency efforts. A few examples follow.

ST. MARYS CEMENT

Under a partnership with Pond Biofuels, St. Marys Cement's plant in southwestern Ontario became the first company to produce high-value biomass from microalgae and to incorporate the carbon dioxide emitted into an industrial process. The success of the alternative fuels demonstration project convinced St. Marys Cement to make alternative fuels a core aspect of its energy strategy.

LAFARGE

Lafarge's Cement 2020 initiative, launched in 2011, is designed to increase the use of biomass fuels in the production of cement and boost the industry's overall

⁴ [Cement Association of Canada](#)

sustainability. Cement 2020 is a multi-stakeholder process that aims to replace 30 percent of the imported fossil fuels used at the company's plant in Bath, Ontario, with locally produced, low-carbon fuels by 2020.

CIMENT QUÉBEC

Ciment Québec Inc., one of Canada's largest manufacturers of cement, uses a green production process unique in North America. Known as Synergia™, the process requires 30 percent less combustible energy during production and generates up to 10 percent fewer GHG emissions. The process relies on replacing fossil fuels with alternative fuels and satisfies the air quality regulations of the ministère du Développement durable, de l'Environnement et des Parcs du Québec.

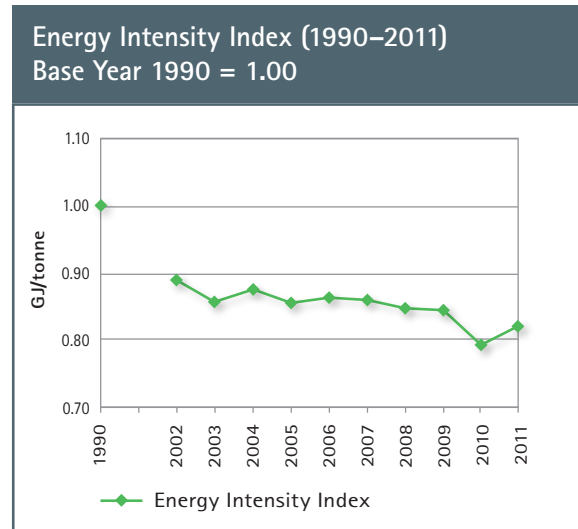
HOLCIM CANADA

Another example of innovation in the sector includes Holcim Canada's installation of a hot gas recovery system at their Mississauga, Ontario, facility, which diverts approximately one third of its main stack effluent to its adjoining vertical roller mill. In addition to reducing the demand for natural gas that would have been required to dry the granulated blast furnace slag before it is ground and then used as a cement replacement, this hot gas recovery system, unique in North America, also acts as a dry scrubber that dramatically reduces sulfur dioxide emissions in the kiln effluent gases.

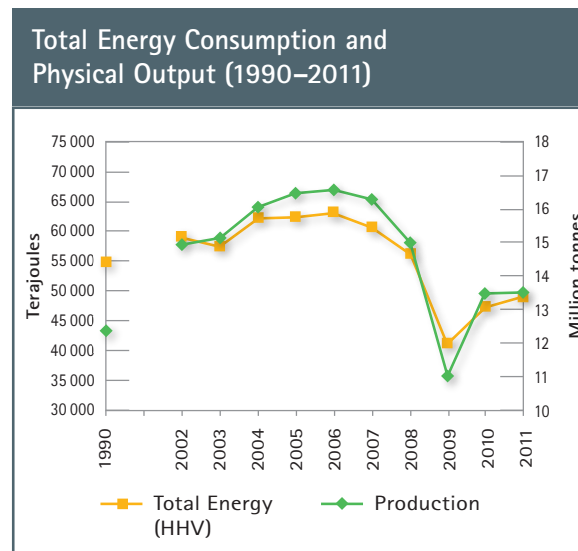
For more information on the sector, visit oee.nrcan.gc.ca/industrial/opportunities/cipec/meetings/cem/login.cfm.

HIGHLIGHTS

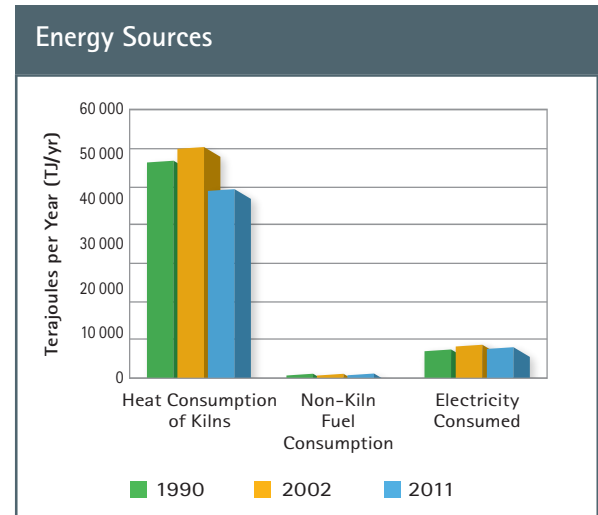
CEMENT SECTOR – NAICS 327310



Energy intensity increased by 3.4 percent between 2010 and 2011.



Between 2010 and 2011, total energy consumption increased by 3.3 percent while total production stayed at same level as in 2010.



The heat consumption of kilns increased by 3.5 percent and electricity consumption increased by 0.8 percent between 2010 and 2011.

Data sources

Fuel Consumption and Cementious Production – Portland Cement Association (PCA), Spring 2012.
[Cement Association of Canada](http://www.cementassociation.ca), Spring 2012.

Chemicals



► PROFILE

The chemicals sector is a diverse industry that produces organic and inorganic chemicals, and synthetic resins and rubbers. Members of the [Chemistry Industry Association of Canada \(CIAC\)](#) produce about 75 percent of industrial chemicals manufactured in Canada.

Industrial chemical manufacturing sites are concentrated in three provinces: Ontario (38 percent), Quebec (29 percent) and Alberta (17 percent). However, the plants in Alberta are much larger than average, so on the basis of share of shipment, the distribution looks different: Ontario (41 percent), Alberta (37 percent) and Quebec (12 percent).

The overall chemical industry employs 85 000 people directly and 425 000 indirectly.⁵

Industrial chemicals sales in 2012 were \$26 billion, essentially unchanged from 2011. Operating profits reached \$3 billion, the second-highest ever. Approximately 67 percent of Canadian production of industrial chemicals is exported; the vast majority of exports go to the United States, with smaller amounts going to the United Kingdom, China and the Netherlands.

► ACHIEVEMENTS

The 2012 edition of the CIAC's [Reducing Emissions Report 1992 – 2012](#) illustrates the sector's remarkable progress. Emissions of GHG have fallen dramatically – ozone by 99 percent and other

GHG emissions by 60 percent. Today, the amount of emissions generated by the production of a single unit of chemical product is 87 percent – less than it was in 1992.⁶

CIAC members began its emission-reduction and energy efficiency projects as part of Responsible Care® – its sustainability initiative recognized by the United Nations. Under Responsible Care®, CIAC members innovate for safer and more environmentally friendly products and processes and work to eliminate harm throughout the entire life cycle of their products. CIAC members also partner with companies that act as responsible stewards of chemical products by providing reliable feedstock, transportation, equipment, and environmental and emergency management services to Canada's chemistry industry.

⁵ [Chemistry Industry Association of Canada](#)

⁶ www.canadianchemistry.ca/EnvironmentBRSustainability/ReducingEmissionsBR.aspx

Feedstock suppliers, such as Shell and Nexen, now incorporate combined heat and power generation (also known as cogeneration) in their processing of fossil fuels. Cogeneration leads to significant reductions in both fuel consumption and GHG emissions. Cogeneration has helped Shell Chemicals Canada reduce GHG emissions produced by its plant in Fort Saskatchewan, Alberta.

Other suppliers have also initiated energy efficiency projects. Rail-tank company Procor Limited, for instance, improved its lighting systems, and upgraded compressors and bay doors. Canadian Pacific Railway has improved fuel efficiency by almost 11 percent since 2000 despite a 21 percent increase in its total number of shipments during that period. The gains were the result of several initiatives, including trip-optimizer software, special lubricants for railcar wheels and the distribution of remote-controlled locomotives in its longest trains.

Water consumption reduction is another aspect of Responsible Care®. National Silicates implemented several water-conservation projects; the company's Toronto facility now discharges as little as 7 percent of its consumed water as wastewater and has begun to capture and use rain water. Ethyl Corporation Canada's plant in Sarnia, Ontario, has reduced its water consumption by 85 percent in the past decade and eliminated more than 90 percent of the organic content of its effluent.

In 2012, CIAC members adopted a standardized water-use metric to facilitate peer-to-peer benchmarking and public reporting.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5261.

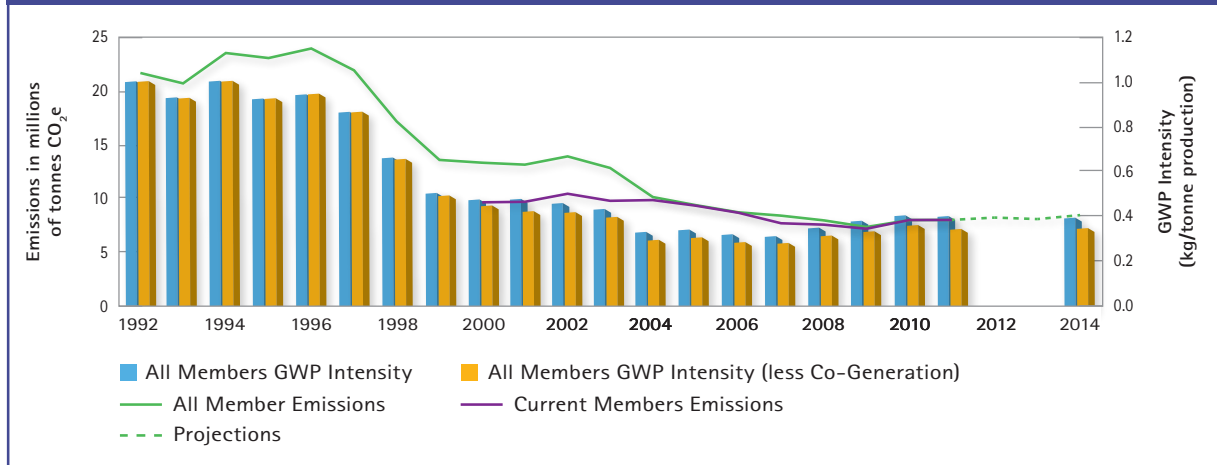
► HIGHLIGHTS

CHEMICALS SECTOR – NAICS 325

The total CO₂ emissions for all members from 1992 to 2011 decreased by 37 percent.

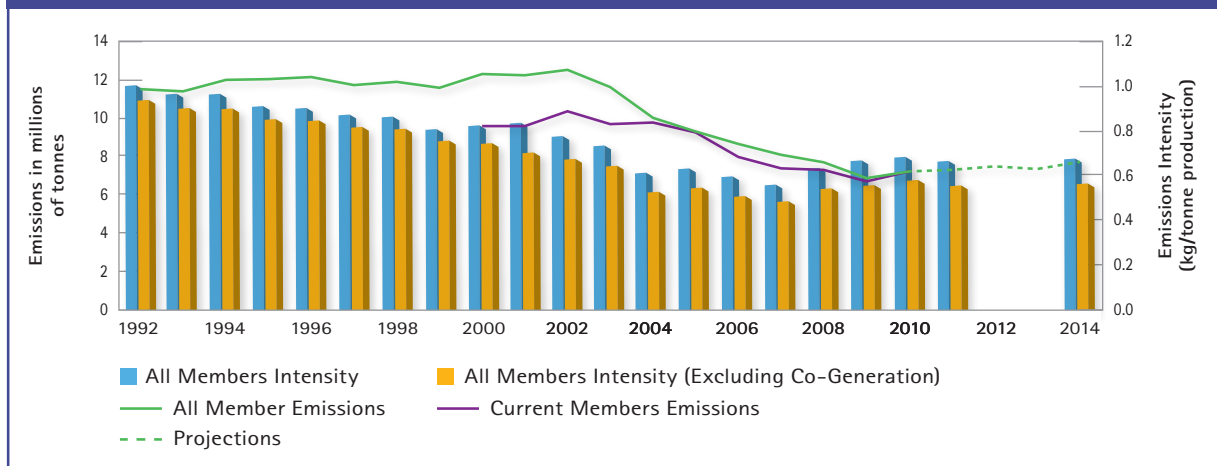
In terms of global warming potential, member companies' GHG emissions (millions of tonnes of carbon dioxide-equivalent (CO₂e) emissions) declined by 60 percent in 2011 compared to 1992 amounts.

Global Warming Potential vs. Production



kg: kilogram

Carbon Dioxide Emissions vs. Production



Construction



► PROFILE

The Canadian construction industry represents a major component of Canada's economy. Statistics Canada data indicate that the industry provided 1.4 million direct jobs in 2012, accounting for approximately 7.4 percent of the total Canadian

workforce. As a whole, construction was responsible for \$280 billion in spending in 2012 and accounted for just over 7.1 percent of Canada's overall gross domestic product.⁷

The [Canadian Construction Association \(CCA\)](#) represents the construction sector within CIPEC. CCA is the national

voice of the construction industry and has a membership of more than 20 000 firms across the country. CCA members represent all segments of the construction of multi-storey residential, industrial, commercial, institutional, and civil engineering projects.

⁷ Data are from Statistics Canada: [CANSIM Table 383-0009 \(Labour statistics\)](#), Canadian Business Patterns database (establishments), [CANSIM Table 379-0027 \(GDP\)](#). Gross output value from [Informetrica Limited](#).

▶ ACHIEVEMENTS

Since 1990, the construction industry has made considerable progress in reducing its overall consumption of energy and CO₂ emissions. On an intensity basis, energy usage in 2012 was 18 percent lower than it was in 1990, when calculated by using industry gross output data; CO₂ emissions declined by 15 percent during the same period. Today, many companies upgrade their equipment (particularly engines) regularly to maximize fuel efficiency. And several construction companies have switched to less harmful fuels, such as B2 diesel, which contains 2 percent biodiesel.

Other ongoing and important innovations within the construction sector include

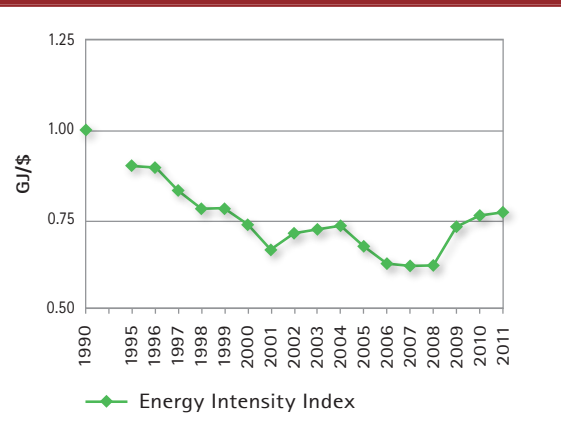
- Many contractors recycle 50 percent of the waste generated during projects – a remarkable achievement considering that virtually nothing was recycled 20 years ago.
- New technologies and construction innovations help reduce the amount of energy that buildings consume and the amount of harmful emissions they generate during their life cycles. Many new buildings incorporate design improvements that help lower their operating costs and reduce their environmental footprint.
- Certification systems are increasingly being used to test, measure and assign ratings to construction projects based on their sustainability and eco-friendliness.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5271.

▶ HIGHLIGHTS

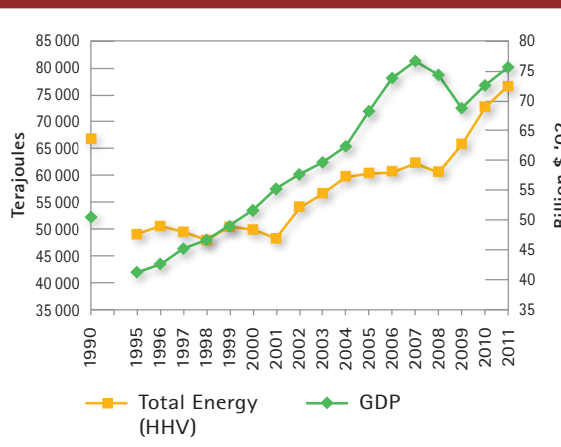
CONSTRUCTION SECTOR – NAICS 23

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



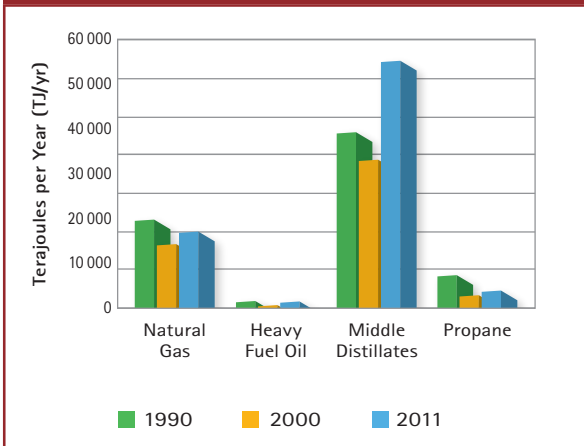
Energy intensity increased by 1.15 percent between 2010 and 2011.

Total Energy and Economic Output (1990–2011)



Between 2010 and 2011, total energy consumption increased by 5.31 percent while total production increased by 4.11 percent.

Energy Sources



Natural gas consumption decreased by 8.49 percent while the use of middle distillates increased by 12.01 percent between 2010 and 2011.

Data sources

Energy Use – [Canadian Industrial Energy End-Use Data and Analysis Centre \(CIEEDAC\)](#). Simon Fraser University. February 2013.

Output – [Informetrica Limited](#), *T1 Model and National Reference Forecast*, March 2013.

Dairy



► PROFILE

The dairy industry ranks third in Canada's agricultural sector for revenues generated, with 2011 total net farm receipts of \$5.8 billion and sales of \$13.7 billion.⁸ Ontario and Quebec are home to most of Canada's dairy farms and three companies (Saputo Dairy Products Canada, Agropur cooperative and Parmalat Canada Inc.) process nearly 80 percent of the country's total raw milk production.

Most of this production – 62 percent or 48 million hL – is used to manufacture dairy products such as butter, cheese, yogurt and ice cream.

Production of organic milk, although fairly limited, has more than doubled in recent years, to 90 million L in 2010–11. Production of goat and sheep milk (used primarily to make cheese) is also increasing; the annual production of goat milk is 35 million L.

The Canadian cheese industry has entered a maturity phase, evidenced by its know-how developed through extensive cheese making traditions and the diversity of its more than 700 varieties of cheese (cow, goat and ewe). Many of these are recognized around the world for their quality and taste.

Canadians looking for healthy and nutritional products continue to have access to an ever expanding range of quality and innovative Canadian dairy products. To meet increased demand for healthy, nutritious

foods, the dairy sector continues to introduce new products, such as Greek-style yogurts, pre- and probiotic dairy products, ultra filtered and lactose free milk, and products containing Omega-3 fatty acids. Milk protein products are used as ingredients in a growing array of food items, such as infant formula, sports and nutritional beverages and confectionaries.⁹

Research and development of new dairy products and production methods are the result of strategic alliances among producers, processors, universities, and federal and provincial research centres.

► ACHIEVEMENTS

In July 2010, Canadian dairy farmers adopted a sustainable-development strategy. While dairy

⁸ www.dairyinfo.gc.ca/index_e.php?s1=cdi-ilc

⁹ www.dairyinfo.gc.ca/index_e.php?s1=dff-fcil&ts2=proc-trans&ts3=psdp-pvpl

farmers have long served as environmental stewards, the strategy directs efforts to further reduce the carbon footprint of dairy farming. The [Dairy Farmers of Canada](#), in partnership with government, academic institutions and the private sector, funds research on sustainable practices in dairy. Among a series of 13 projects that are underway is a life-cycle assessment of milk production and the testing of a GHG emissions calculator. Dairy Farmers of Canada's vision for the strategy is "Working within the context of a strong supply management system, Canadian dairy farmers will strive to produce safe, nutritious food in an economically, socially and environmentally sustainable way to the benefit of Canadian society."¹⁰

Saputo, a leader in Canada's dairy industry, adopted an environmental policy in 2006 that aims to reduce the company's consumption of electricity and natural gas – its principal sources of energy.

Saputo implemented several process improvements to optimize energy usage through heat transfer and regeneration. The installation of high-efficiency fire-tube boilers, for instance, reduced carbon emissions by almost half. Another improvement involved recovering waste heat from the ultra-high temperature process for pasteurizing raw milk. The waste heat was recycled via hot-water loops and used elsewhere in the plant, and the condensate was used to top-up boiler-water levels. In addition, variable-frequency drives were installed on several pieces of equipment to improve operating efficiency.

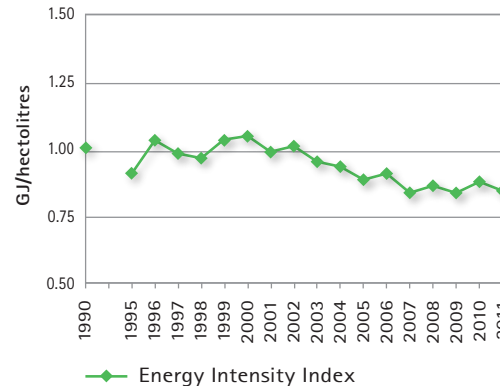
For more information on the sector, visit oee.nrcan.gc.ca/industrial/opportunities/cipec/meetings/dairy/login.cfm.

¹⁰ www.dairy-sustainability-initiative.org/Public/ListPage.php?ID=112

HIGHLIGHTS

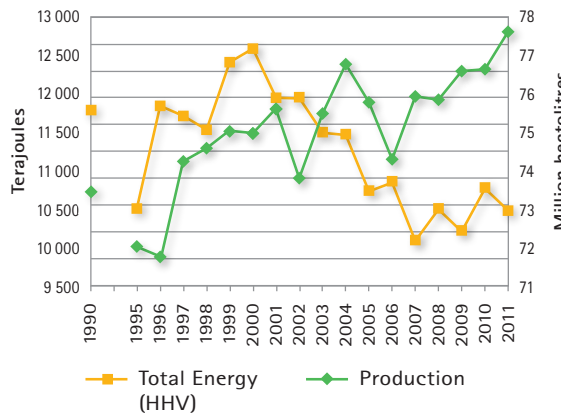
DAIRY SECTOR – NAICS 3115

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



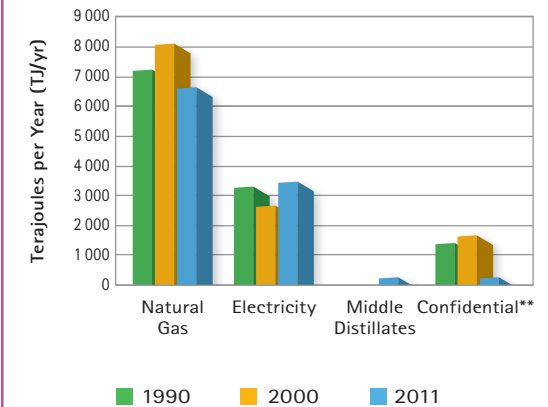
Energy intensity decreased by 4.04 percent between 2010 and 2011.

Total Energy and Physical Output (1990–2011)



Between 2010 and 2011, production increased by 1.28 percent and energy consumption decreased by 2.81 percent.

Energy Sources



** Confidential includes Heavy Fuel Oil (HFO), Propane and Middle Distillates (LFO).

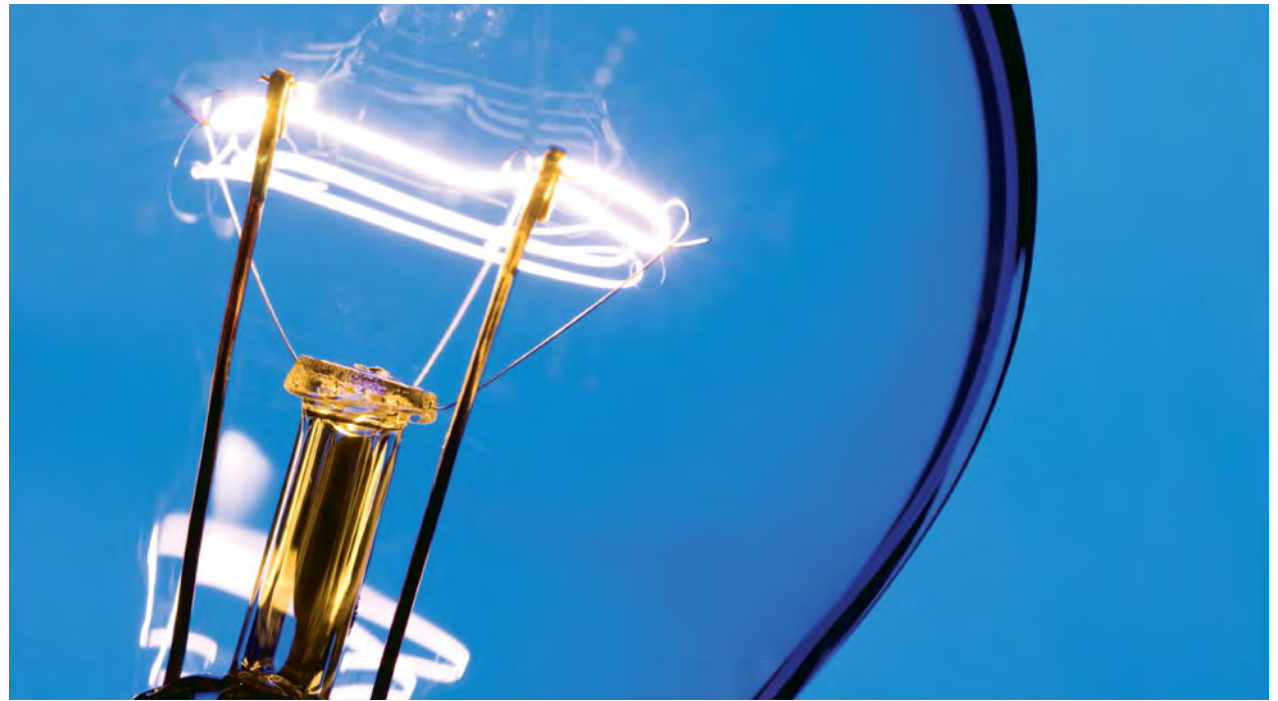
Between 2010 and 2011, natural consumption decreased by 2.11 percent while electricity consumption decreased by 1.32 percent.

Data sources

Energy Use – Statistics Canada, [Industrial Consumption of Energy Survey 1990, 1995–2011](#), Ottawa. March 2013.

Production – GDP – [Informetrica Limited, T1 Model and National Reference Forecast](#). March 2013.

Electrical and Electronics



► PROFILE

The electrical and electronics sector includes a diverse array of companies that produce electrical appliances, lighting, consumer electronics, communications and electronic equipment, cabling, office equipment, industrial equipment and other electrical products such as power and distribution transformers.

These companies operate more than 1400 facilities and employ more than 130 000 workers across Canada. The sector is a major exporter and

a vital, growing contributor to the national economy. It contributes more than \$50 billion to Canada's economy.¹¹

► ACHIEVEMENTS

The third company in Canada to earn ISO 50001 Energy Management Systems standard certification, Broan-NuTone Canada Inc., manufactures residential ventilation products in Mississauga, Ontario, and employs approximately 150 people. Since 2007, the company has cut energy consumption by 45 percent through a variety of measures – everything from employee engagement and operating procedures to total cost of ownership and legal requirements. To earn the certification, the company formalized its

energy consumption review process and identified opportunities to save energy. Seven projects are in the planning stage.

Two of the projects involve recirculating heat from the building's ceiling and installing a heat exchanger to recover and reuse waste heat from the facility's ovens. ISO 50001 certification commits Broan-NuTone to achieving further reductions and realizing the cost savings they generate. The certification also makes the company more appealing to clients interested in improving the sustainability of their supply chains.

The progress achieved by a relatively small company in Ontario provides yet another hint of what could be accomplished if many other companies followed suit. Tyco Thermal Controls (Canada) Ltd. manufactures specialized cables, wires and sensing solutions at a facility in Trenton, Ontario, that operates around

¹¹ [Electro-Federation Canada](#)

the clock. A compressed air analysis revealed that the facility's 75-horsepower (hp) rotary screw compressor was not meeting production demand and operated constantly, even during extended periods of low demand.

The company reduced energy costs by \$40,000 a year by installing a new compressor (with a 100-hp variable frequency drive and built-in dryer), doing a lighting refit, and programming the automatic shutdown of idle machinery with a programmable logic controller. Along with providing constant pressure and having low maintenance costs, the new compressor is expected to generate annual energy savings of about 500 GJ. If other small and medium-sized companies followed similar initiatives, the result would not only dramatically reduce energy expenses, but also significantly reduce Canada's emissions of GHG.

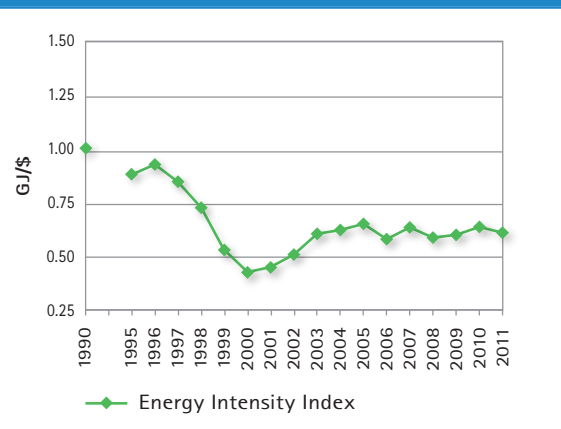
IBM Canada has made significant progress on energy efficiency at its plant in Bromont, Quebec. The plant, which assembles and tests semiconductors, follows a continuous improvement strategy to integrate energy efficiency into its day-to-day operations. By involving employees in an annual energy management plan, standardizing operations, and establishing standards and best practices, the plant has achieved significant gains. The more than 50 energy efficiency projects implemented since 2009 have generated savings in excess of \$1 million, reduced energy use by more than 8 percent and GHG emissions by more than 22 percent. These accomplishments helped the plant win the Camfil Farr 5-Star Energy Cost Index (ECI) Energy Award in 2011. Additionally, the IBM plant in Bromont is now ISO 50001-certified.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5267.

HIGHLIGHTS

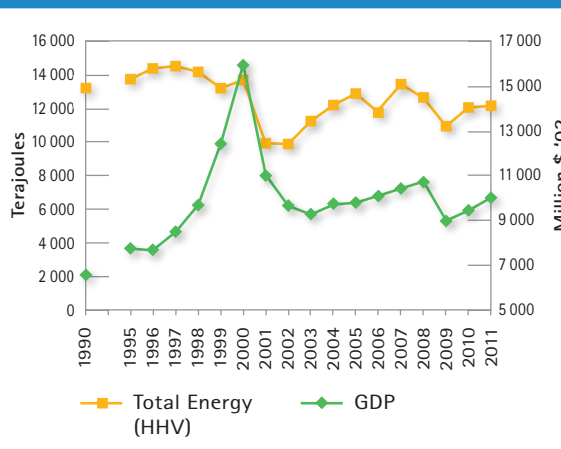
ELECTRICAL AND ELECTRONICS SECTOR – NAICS 334 AND 335

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



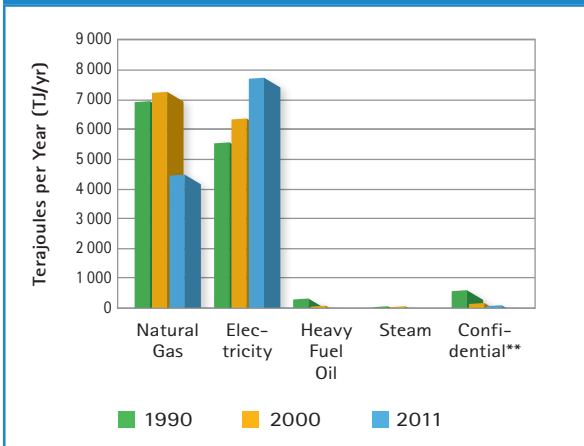
Energy intensity decreased by 4.93 percent between 2010 and 2011.

Total Energy and Economic Output (1990–2011)



Total energy consumption increased by 0.72 percent while total production GDP increased by 5.95 percent between 2010 and 2011.

Energy Sources



** Confidential includes Middle Distillates (LFO), Propane (LPG), Wood Waste and HFO (since 2010).

Natural gas consumption decreased by 9.92 percent and electricity consumption increased by 7.51 percent between 2010 and 2011.

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995–2011*, Ottawa. March 2013.

Output – GDP – *Informetrica Limited, T1 Model and National Reference Forecast*, March 2013.

Electricity Generation



► PROFILE

The electricity generation sector powers industries, businesses and homes across Canada and is a significant contributor to the economy and the well-being of Canadians. Represented by the [Canadian Electricity Association \(CEA\)](#), the sector provides a reliable and essential service.

Association members are committed to producing, delivering and using electricity in an efficient manner while promoting conservation and demand-side management. To reduce its environmental footprint, the sector invests in advanced technologies and enhanced environment-management practices.

► ACHIEVEMENTS

Since 2010, the electricity generation sector's total emissions of both CO₂ and sulphur dioxide (SO₂) have decreased by 16.2 percent. Between 2010 and 2011, the amount of electricity generated increased by nearly 5 percent. The implementation of energy management systems at generation facilities, along with a decreased reliance on coal, have played a large role in these achievements.

In 2011, the sector invested approximately \$9.2 billion in infrastructure projects. These ongoing investments in generation, transmission and distribution systems ensure a reliable and modern electricity system.

BC Hydro converted its simple-cycle 47-megawatt (MW) natural gas station in Fort Nelson into a 73-MW combined cycle generation turbine (CCGT) station. CCGT technology is one of the most efficient and environmentally friendly ways to generate electricity by using natural gas. The conversion

involved installing an upgraded dry low emissions gas turbine, a heat-recovery steam generator and a steam turbine-driven generator system. BC Hydro expects that the conversion will enable the station to meet rising demand in the Fort Nelson region while reducing nitrous oxides (NO_x) emissions by 10 to 15 percent per megawatt hour.

The largest wind farm in Canada now produces enough electricity to power more than 70 000 homes. The Comber wind project developed by Brookfield Renewable Energy Partners is in Essex County, Ontario. It includes the 51-MW Gosfield wind facility and the 166-MW Comber wind farms, which feature a total of 94 2.3-MW turbines and two transformer stations.

In 2011, construction started on ENMAX's Shepard Energy Centre, destined to become Alberta's largest natural gas-fired facility. The facility in southeast Calgary will rely on combined-cycle gas turbine technology to add 800 MW of generating capacity to the provincial power grid. Compared with coal-fired plants of similar capacity, the

centre is expected to produce less than half the CO₂ emissions and significantly fewer SO₂ and NO_x emissions. The plant's proximity to Calgary minimizes electricity loss due to transmission. In addition, the plant will use water reclaimed from Calgary's Bonnybrook Wastewater Treatment Plant.

In 2011, Nova Scotia Power began construction of a biomass co-generating station and associated facilities with an anticipated nominal generating capacity of 60 MW on the site of the NewPage Port Hawkesbury mill in Nova Scotia. The facility will be fuelled by biomass, and it will contribute toward compliance of the Nova Scotia Renewable Energy Standards (RES). It is expected to supply approximately 3 percent of Nova Scotia's electricity needs. The facility opened in July 2013.

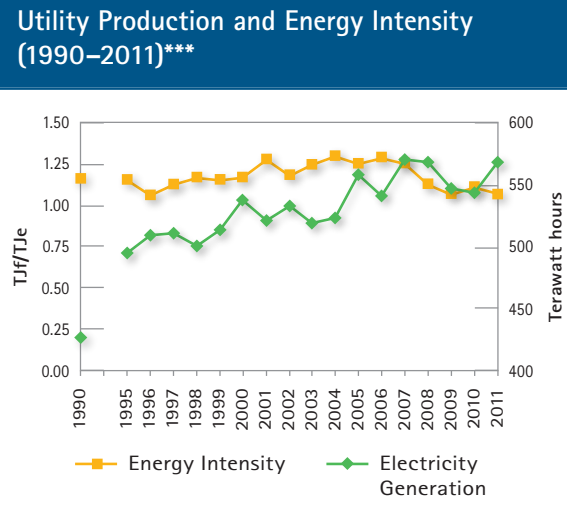
Toronto Hydro established an electric vehicle infrastructure section to address the emerging electric vehicle industry and assess its potential impacts on the distribution grid. Among other activities, the group will study electric vehicle charging patterns and educate customers about the vehicles.

Canada's largest generator of wind power, TransAlta, marked its first full year having generated 1000 MW of wind capacity in 2011. In 2012, the company completed its latest project, the \$205-million, 68-MW New Richmond wind facility on Quebec's Gaspé Peninsula. The New Richmond facility will supply electricity under a 20-year agreement with Hydro-Québec Distribution.¹²

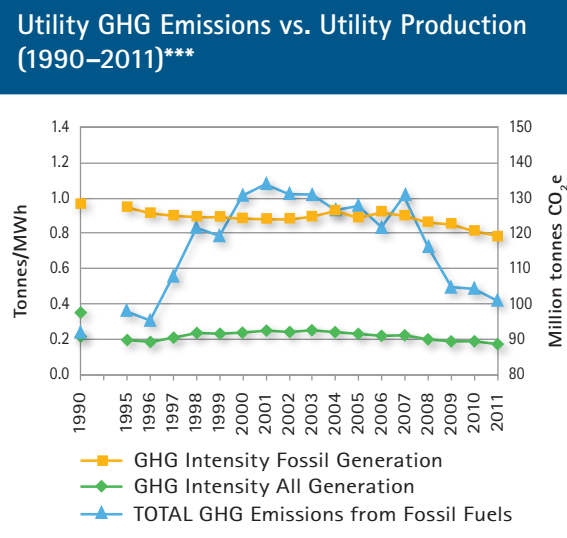
For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5279.

HIGHLIGHTS

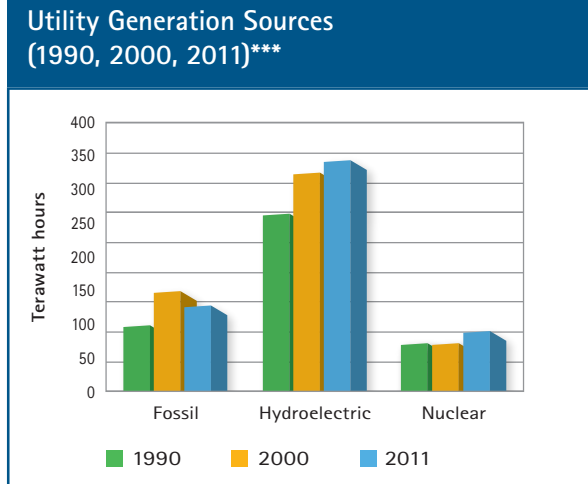
ELECTRICITY GENERATION SECTOR – NAICS 22111



Electricity generation increased by 4.6 percent and energy intensity decreased by 5.04 percent between 2010 and 2011.



GHG intensity from fossil generation decreased by 4.29 percent, and GHG intensity for total generation decreased by 7.53 percent, while total GHG emission decreased by 3.26 percent between 2010 and 2011.



*** This sector excludes industrial electricity generation.

Data source

Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC). [Energy Use and Related Data: Canadian Electricity Generation Industry 1990 to 2011](#).

¹² [Transforming Commitment into Performance, 2012 Sustainable Electricity Annual Report](#). Canadian Electricity Association

Fertilizer



► PROFILE

Canada supplies approximately 12 percent of the world's fertilizer materials. The fertilizer industry is essential to ensure the world's food needs are met in an economical and

sustainable manner. Canada is the world's largest exporter of potash and elemental sulphur. Represented by the [Canadian Fertilizer Institute](#), Canadian companies in the sector contribute more than \$12 billion annually to the national economy.¹³

► ACHIEVEMENTS

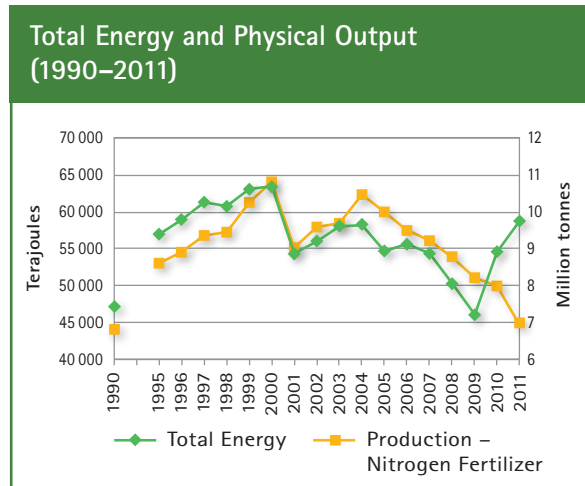
The Canadian fertilizer industry has made significant investments to increase energy efficiency and reduce air emissions. A key accomplishment was the development of air pollution measures and targets. The industry worked with the Government of Canada to develop BLIERs (base-level industrial emission requirements) for key air pollutants and to design an effective regulatory approach to reducing GHG emissions. Regulatory measures covering GHGs and air pollutant emissions will be published in 2014.

For more information on the sector, visit oee.nrcan.gc.ca/industrial/opportunities/cipec/meetings/fertilizer/login.cfm.

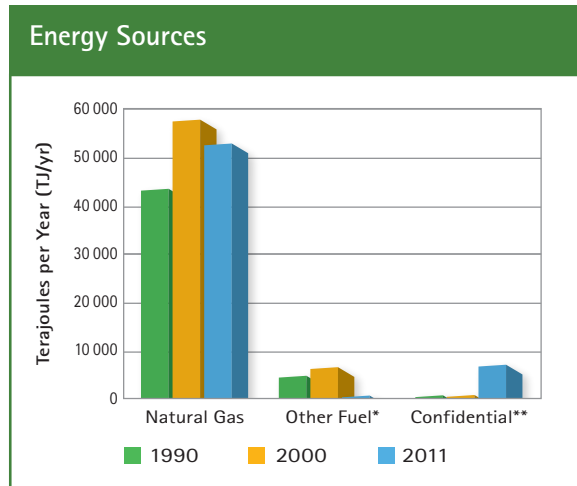
¹³ [Canadian Fertilizer Institute](#)

► HIGHLIGHTS

FERTILIZER SECTOR (NITROGENOUS) – NAICS 325313



Between 2010 and 2011, production decreased by 12.9 percent while energy use increased by 8 percent and energy intensity increased by 24 percent.



* Other Fuel includes Electricity, Middle Distillates (LFO) and Propane (LPG).

** Confidential includes Heave Fuel Oil (HFO) and Steam.

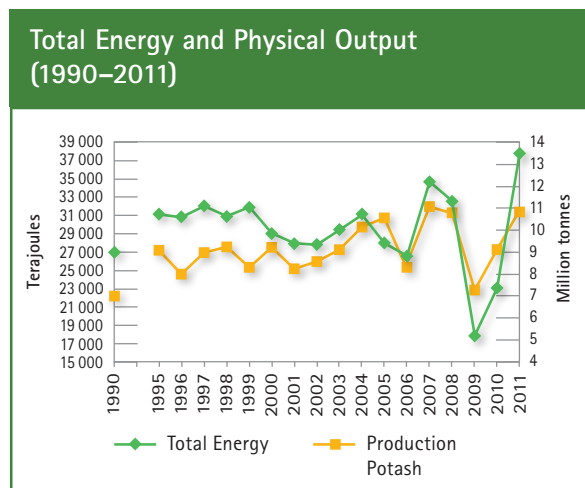
Between 2010 and 2011, natural gas consumption increased by 8.94 percent. In 2011 the majority of other fuels have been included in the confidential data.

Data sources

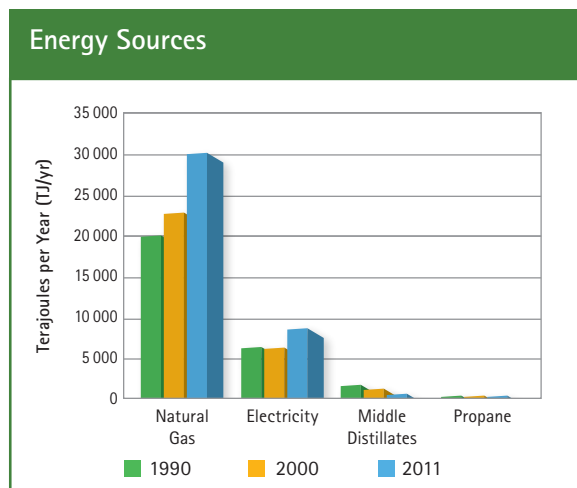
Energy Use – Statistics Canada, [Industrial Consumption of Energy Survey 1990, 1995–2011](#), Ottawa. March 2013.

Production – GDP – [Informetrica Limited, T1 Model and National Reference Forecast](#), March 2013.

FERTILIZER SECTOR (POTASH) – NAICS 212396



Between 2010 and 2011, production increased by 18.7 percent while energy use increased by 67 percent and energy intensity increased by 40.8 percent.



Natural gas consumption increased by 84.6 percent and electricity consumption increased by 24.7 percent between 2010 and 2011.

Data sources

[Canadian Fertilizer Institute \(CFI\)](#), 1990, 1999–2009, November 2010.

Canadian Fertilizer Institute (CFI), 1995–1998, March 2006.

Energy Use – [Canadian Industrial Energy End-Use Data and Analysis Centre \(CIEEDAC\)](#). March 2013.

(1) Natural Gas – 1990, 1999–2006, Canadian Fertilizer Institute, November 2010.

Natural Gas – 1995–1998, Canadian Fertilizer Institute, March 2011.

(2) Other Fuels 1990–2005. Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC). [Development of Energy Intensity Indicators for Canadian Industry 1990–2011](#). Simon Fraser University. March 2012.

Food and Beverage



► PROFILE

Canada's food and beverage sector includes manufacturers that produce meat, poultry, fish, fruit and vegetables, flour and bakery products, oils and sugars, coffee, snack foods, soft drinks, and confectionery. After transportation equipment, it is Canada's second-largest manufacturing industry.

► ACHIEVEMENTS

Campbell Soup Company implemented several sustainability measures at its Toronto plant. A project to recover heat and wastewater included the design and installation of tanks, piping and heat exchangers to reuse cooling water and recycle waste heat. The result was a reduction in water consumption of more than 20 percent, a reduction in natural gas use of up to 5 percent and total annual savings of \$900,000. The company also installed a solar-photovoltaic system on the roof of the Toronto plant to power the office lights. The system reduces carbon-dioxide emissions by approximately 9 t per year.

The Cadbury manufacturing plant, a subsidiary of Mondelez Canada Inc., in Toronto produces a range of chocolate products. When the company analyzed

ways to save energy, it identified its ammonia compressors as the largest consumer of electricity, accounting for up to 25 percent of the site's total electricity costs. In 2011, the company installed two 500-t chillers and an ammonia-control system – a comprehensive energy management system – that adjusts numerous refrigeration components to optimize energy use while maintaining set temperatures and meeting operational needs.

The control system also monitors the floating suction pressure and optimizes the fans and pumps operating on condensers to match relative humidity and ambient air conditions. Discharge pressure has also been reduced, and the evaporator fan use is now linked to actual requirements. The ammonia control system is estimated to save about 4025 GJ of electricity annually.

The Freshwater Fisheries Society of BC (FFSBC) considerably reduced consumption of both electricity and water at its Vancouver Island Trout Hatchery in Duncan, British Columbia, one of the five hatcheries it operates. After investigating various options, the FFSBC launched a \$215,000-pilot project in partnership with BC Hydro. The project focused on reducing water pumping – which can account for up to 70 percent of a hatchery’s total electricity consumption – by using airlift water-reuse technology. The technology uses compressed air to help circulate water, which reduces consumption of both water and energy, and increases oxygen levels in the water, which benefits the fish. The project is expected to reduce annual electricity consumption at the trout hatchery by 46 percent.

Brookside Poultry Ltd. of Annapolis, Nova Scotia, installed a geothermal system to heat the floor of two broiler poultry barns. The system is expected to cut annual heating costs in half.

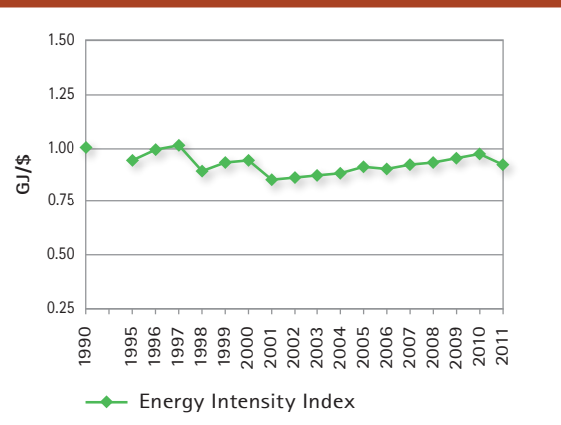
Saputo’s plant in Sainte-Marie, Quebec, part of the company’s bakery division, qualified to join the Réseau Électrique d’Hydro-Québec, an initiative by the province’s electrical utility that recognizes companies making exceptional progress in energy efficiency. A project to centralize control of the plant’s stop-and-start ventilation systems through a centralized controller produced significant reductions in electricity consumption. To qualify for *Réseau Électrique*, companies must reduce energy consumption by at least 5 percent – the Sainte-Marie facility reduced consumption by 16 percent.

For more information on the sector, visit oee.nrcan.gc.ca/industrial/opportunities/cipec/meetings/fandb/login.cfm.

► HIGHLIGHTS

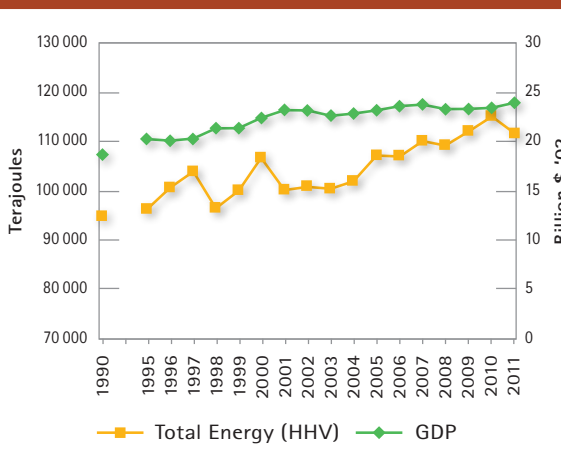
FOOD AND BEVERAGE SECTOR – NAICS 3121

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



Between 2010 and 2011, energy intensity decreased by 4.8 percent.

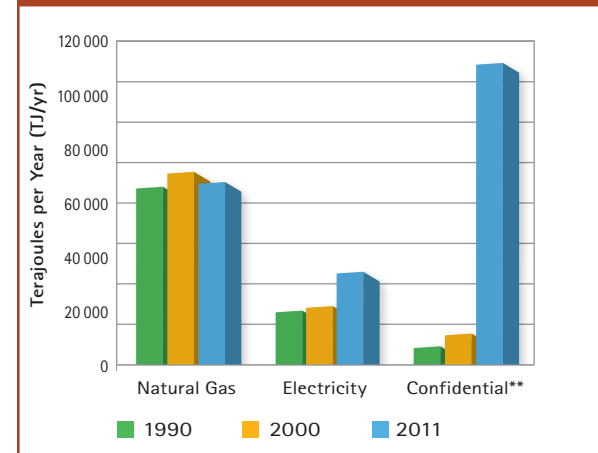
Total Energy and Economic Output (1990–2011)



HHV: higher heating value

The GDP increased by 1.9 percent while energy consumption decreased by 3 percent between 2010 and 2011.

Energy Sources



** Confidential includes Coal, Heavy Fuel Oil (HFO), Middle Distillates (LFO), Propane (LPG), Wood Waste and Steam.

Natural gas consumption increased by 0.3 percent while electricity consumption increased by 3.5 percent between 2010 and 2011.

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995-2011*, Ottawa, March 2013.

Production – *Informetrica Limited, T1 Model and National Reference Forecast*, March 2013.

Forest Products



► PROFILE

The Forest Products sector is composed of the wood products and pulp and paper industries.

The wood products sector comprises approximately 7000 facilities in primary and secondary manufacturing. The primary grouping includes commodity-based production facilities

such as lumber and structural panels and more specialized production facilities that manufacture engineered wood products and assemblies. The secondary grouping encompasses a diverse range of facilities that manufacture prefabricated buildings, windows and doors, flooring, mouldings, containers and pallets, other millwork, and numerous other products.

The pulp and paper sector comprise approximately 100 facilities in primary manufacturing. The sector includes commodity-based production facilities such as pulp, newsprint, paper, tissue, sanitary and paperboard products. The pulp and paper sector is currently transforming to produce more specialized goods such as bio-based chemicals and bio-energy.

► ACHIEVEMENTS

In June 2009, the federal government invested \$1 billion in the Pulp and Paper Green Transformation Program.¹⁴ The program helped Canada's pulp and paper mills improve their environmental performance and, in the process, lay the groundwork for a more sustainable and prosperous sector. The following articles highlight a few funded projects.

A project at RockTenn's mill in La Tuque, Quebec, is expected to reduce annual consumption of fossil fuel by 38.6 million L, or 49 percent of current consumption.

An \$11-million project at Canfor's pulp mill in Prince George, British Columbia, has reduced the intensity and frequency of odour events by nearly 60 percent.¹⁵ The project involved installing ductwork and piping to collect vapours from brown-stock washers, black-liquor tanks and black-liquor fibre filter (26 sources in all). A project to recycle waste heat from the paper manufacturing process has reduced the plant's annual consumption of energy by 47 000 GJ.

The AV Cell Inc. mill in Atholville, New Brunswick, installed a host of innovative technologies to capture and recycle biogas from effluent streams. The biogas is used to generate power and reduce consumption of fossil fuels. NRCan's Transformative Technologies Program provided funding support for the project.

CelluForce has partnered with NRCan's Transformative Technologies Program, the province of Quebec and NRCan's Transformative Technologies Pilot Scale Demonstration Program to build and operate a nanocrystalline cellulose (NCC) demonstration plant in Windsor, Quebec. NCC, an ingredient that increases the strength and stiffness of materials, has huge commercial potential. The facility, the first of its kind in the world, will produce 1 t of dried NCC a day.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5281.

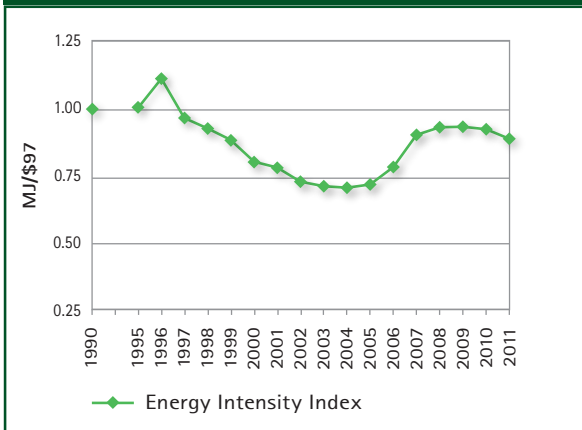
¹⁴ [Pulp and Paper Green Transformation Program](#)

¹⁵ www.canforpulp.com/greentransformation/projects/odourreduction.asp

► HIGHLIGHTS

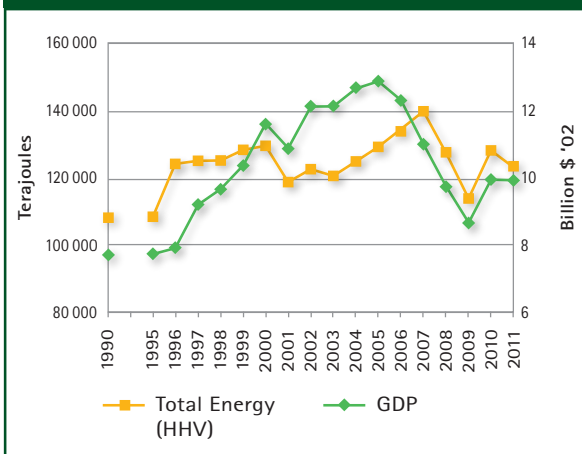
WOOD PRODUCTS SECTOR – NAICS 321

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



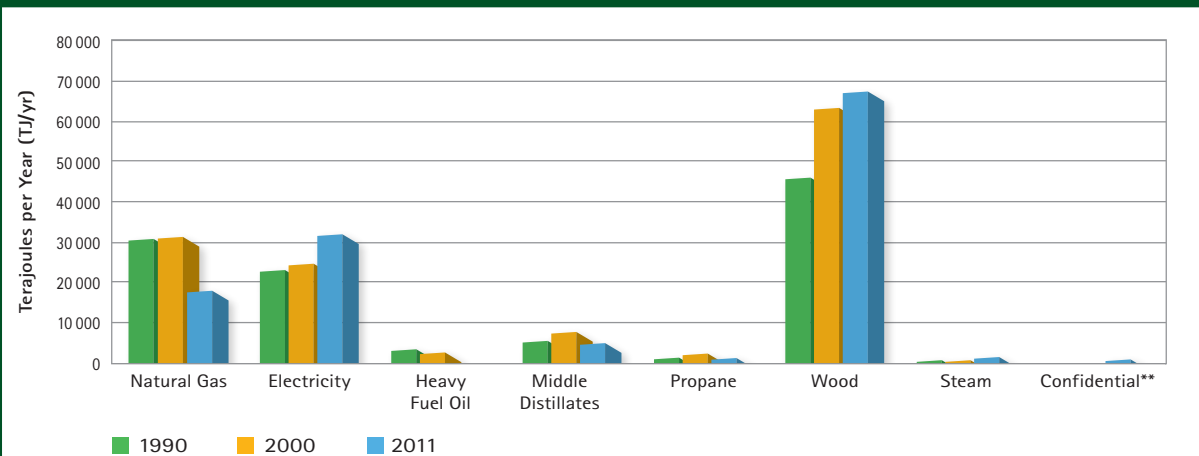
Between 2010 and 2011, energy intensity decreased by 4.3 percent.

Total Energy and Economic Output (1990–2011)



Production increased by 0.2 percent while energy consumption decreased by 4.1 percent between 2010 and 2011.

Energy Sources



** Confidential includes Heavy fuel oil for 2011.

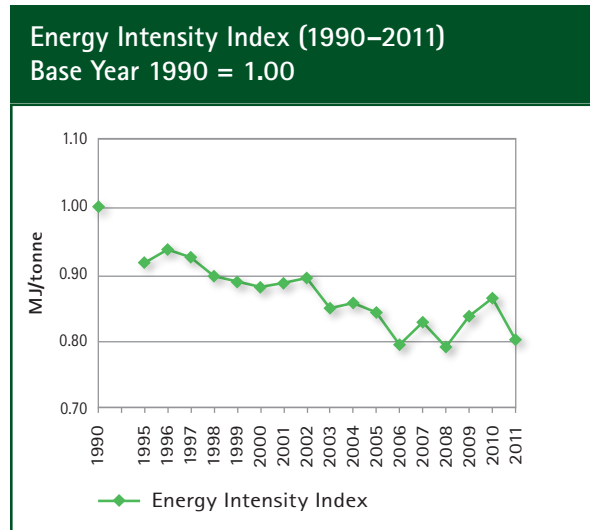
Between 2010 and 2011, middle distillate consumption decreased by 8 percent, wood consumption decreased by 11.6 percent, steam consumption increased by 13.3 percent, electricity consumption increased by 9 percent, and natural gas consumption increased by 11.5 percent.

Data sources

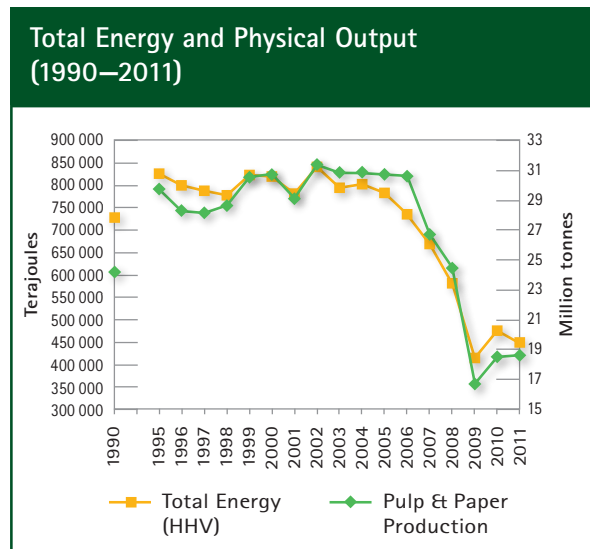
Energy Use – Statistics Canada, [Industrial Consumption of Energy Survey 1990, 1995–2011](#), Ottawa. March 2013.

Production – GDP – [Informetrica Limited](#), *T1 Model and National Reference Forecast*, March 2013.

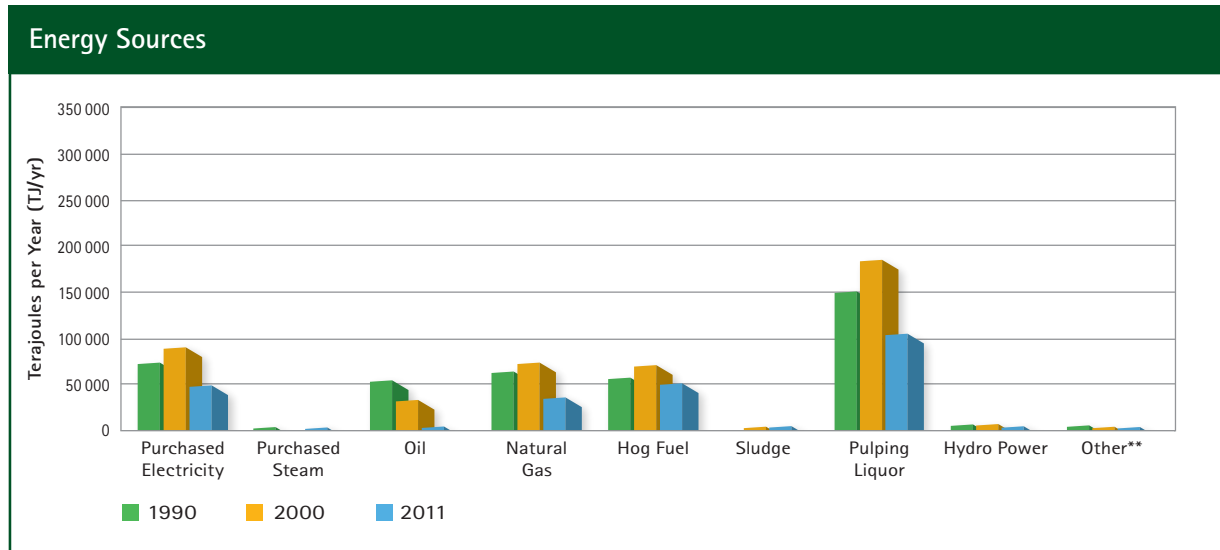
PULP AND PAPER SECTOR – NAICS 3221



Between 2010 and 2011 energy intensity decreased by 7.4 percent.



Total energy consumption decreased by 7.1 percent while total production increased by 0.3 percent between 2010 and 2011.



** Other includes Coal, Middle Distillates (LFO), Diesel, Propane (LPG), other purchased energy and other self-generated energy.

The use of oil continues to decline while the use of biomass and renewables continues to increase. Several energy efficiency projects under the Pulp and Paper Green Transformation Program were fully operational in 2011, which led to the energy consumption reduction.

Data source

[Forest Products Association of Canada](#), *Annual Energy Survey, 1990-2011*.

Foundry



► PROFILE

The Canadian foundry industry is comprised of approximately 150 companies producing metal castings, which are used in the manufacture of most durable goods. The industry supports several sectors, including aerospace, automotive, agriculture, construction, forestry, mining, railway, defence, pulp and paper, heavy industrial machinery and

equipment, plumbing, soil pipe, municipal road castings, petroleum and petrochemical, electric distribution and a myriad of specialty markets. The foundry sector is the original recycling industry, as recycled metal is a key raw material. The sector employs approximately 10 000 Canadians. There is also the multiplier effect whereby foundries supply machine shops, and machine shops supply assembly plants. The industry exports

more than three-quarters of its total production. Global casting markets are intensely competitive, so reductions in energy consumption can significantly improve profitability.

► ACHIEVEMENTS

Wescast Industries generated considerable energy savings at its foundry in Wingham, Ontario. The company participates in Hydro One's Demand Response Program (DR3). Each of the five times that Hydro One made a demand response request in 2012, the Wingham plant reduced its electrical

load by more than 1 MW. As a result, the company increased its participation requirements to 2 MW as of December 2012. During the five events, melt operation employees, with the assistance of energy management software, adjusted the energy consumption of the plant's furnaces to achieve appropriate load reductions.

Wescast Industries plans to install a more sophisticated energy management system that can automatically curtail the load in response to high market prices or demand. The upgrade will also promote more efficient use of energy and could lead to savings of \$6.10 a month for every kilowatt of reduction – a projected annual savings of more than \$51,000. The experience inspired Wescast Industries to reduce consumption by installing fluorescent lights and a new energy management system.

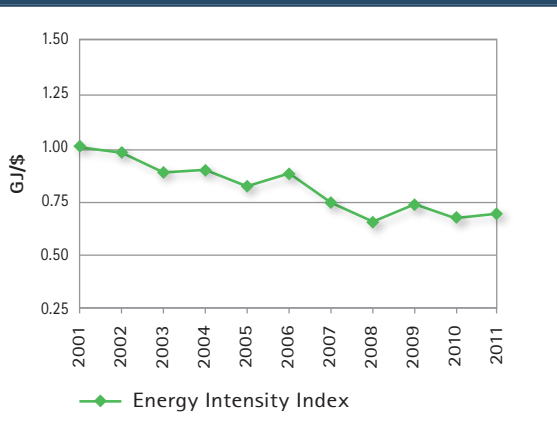
ESCO Corporation contracted an external company to conduct an energy audit of its foundry in Port Coquitlam, British Columbia. The audit identified several ways to reduce energy consumption, and the company plans to implement many improvements. Metal halide lights will be replaced by T-5 fluorescents linked to motion-sensitive switches where feasible. In addition, localized electrical monitors will be installed to allow better ground fault and reduce power loss.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5275.

► HIGHLIGHTS

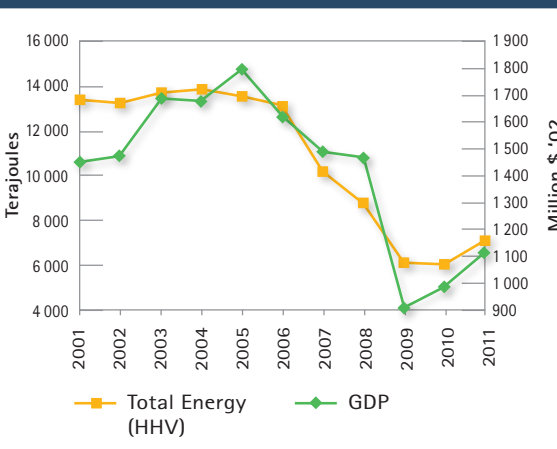
FOUNDRY SECTOR – NAICS 3315

Energy Intensity Index (2001–2011)
Base Year 2001 = 1.00



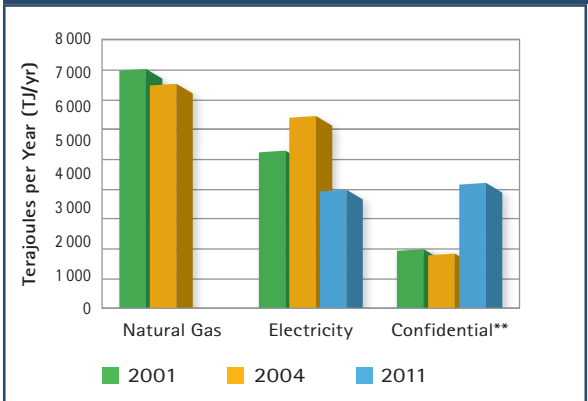
The energy intensity increased by 3.7 percent between 2010 and 2011.

Total Energy and Economic Output (2001–2011)



Between 2010 and 2011, the GDP increased by 13.1 percent and energy consumption increased by 17.3 percent.

Energy Sources



** Confidential includes Electricity, Natural Gas, Coal Coke, Heavy Fuel Oil (HFO), Middle Distillates (LFO) and Propane (LPG).

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995–2011*, Ottawa. March 2013.

Production – *Informetrica Limited, T1 Model and National Reference Forecast*, March 2013.

General Manufacturing



► PROFILE

Ontario and Quebec have sizable manufacturing sectors; there are also many manufacturers in British Columbia and the Atlantic and Prairie provinces. The general manufacturing sector includes a variety of industries not otherwise covered in the sector descriptions of this report, including leather, clothing, furniture, printing activities, glass and glass products, adhesives, tobacco products and pharmaceuticals, as well as construction materials such as floor coverings and insulation.

More than 1.8 million Canadians are employed in manufacturing – about 15 percent of the Canadian workforce. Manufacturing accounts for 12 percent of the total Canadian gross domestic product.¹⁶

¹⁶ [Canadian Manufacturers and Exporters](#)

► ACHIEVEMENTS

Canadian companies in the general manufacturing sector continue to improve the energy efficiency of their operations. A survey conducted by KPMG found that Canadian manufacturers were more likely than manufacturers from other countries to invest in “sustainability, energy efficiency or reduced environmental-impact” initiatives.¹⁷

Participating in the [Excellence in Manufacturing Consortium \(EMC\)](#) is one way that companies strive to increase energy efficiency and reduce costs. With more than 1000 members, EMC facilitates the exchange of best practices, expertise and training. EMC's Energy Initiative helps members manage costs and improve efficiency, sustainability and conservation efforts. Based on power volume, EMC's energy group grew by 62 percent during 2012, enabling members to access lower prices for energy.

NOVANNI STAINLESS INC.

Based in Coldwater, Ontario, Novanni Stainless Inc. is a recognized CIPEC Leader. The company purchases energy through Green Energy Options Ltd. (GEO) as a complement to their energy program. GEOPower ensures that the equivalent of between 20 and 100 percent of electricity use is generated from renewable “green sources” such as biomass, hydro and wind and injected into their local electricity grid. Furthermore, 90 percent of the stainless steel that the company uses to manufacture its sinks comes from recycled materials. The average useful life of a stainless steel product is 30 years and is 100 percent recyclable. Stainless steel is one of the world's longest-lasting and most recycled materials.

ROXUL INC.

A leading manufacturer of stone-wool insulation products, Roxul operates facilities in Grand Forks, British Columbia, and Milton, Ontario, that have furthered their green initiatives. Both facilities reduce energy consumption by using waste heat to keep building interiors warm, installing energy-efficient

lighting fixtures and by enforcing a no-idling policy for vehicles. The company's insulation products, designed to conserve energy once installed, contain a minimum of 75 percent recycled materials. Efforts to recycle and conserve water (e.g. storm runoff is used in the production process) have helped cut energy consumption in half.

ARTOPEX

Artopex manufactures office equipment and operates three facilities in Quebec: Laval, Sherbrooke and Granby. The company has taken several steps to increase the energy efficiency of its operations. For example, Artopex buys more than 85 percent of its materials locally, which reduces the amount of energy required for shipping. The company also relies exclusively on hydroelectricity and has invested more than \$12 million over the past five years to build and renovate facilities that consume less energy.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5265.

¹⁷ www.kpmg.com/ca/en/issuesandinsights/articlespublications/pages/canadian-manufacturing-outlook-2012.aspx

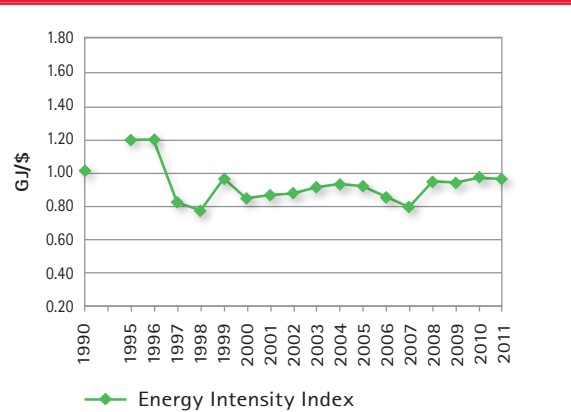
► HIGHLIGHTS

GENERAL MANUFACTURING SECTOR – NAICS***

*** NAICS CATEGORY NAME

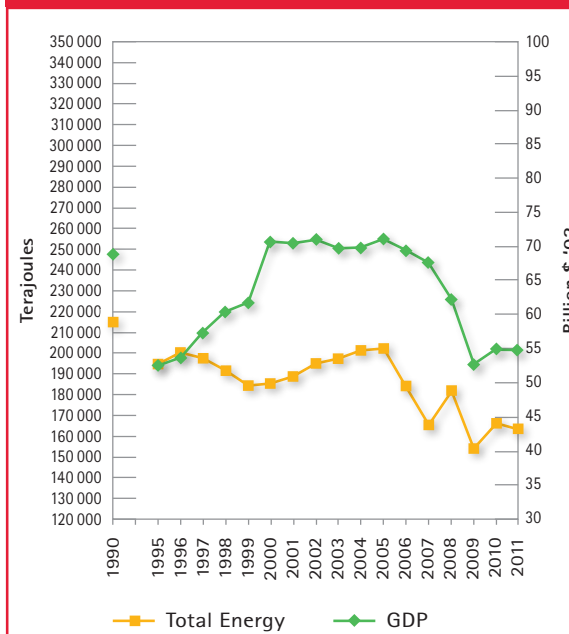
Textiles	313 and 314
Clothing and Manufacturing	315
Leather and Allied Product	316
Rubber Products	3262
Printed and Related Support Activities	323
Fabricated Metal Product	332
Machinery	333
Furniture and Related Product	337
Miscellaneous Manufacturing	339
Tobacco Product Manufacturing	3122
Converted Paper Product Manufacturing	3222
Non-metallic Mineral Product not Elsewhere Classified	3271, 3272, 32732, 32733, 32739, 32742 and 3279
Chemical Manufacturing not Elsewhere Classified	32522, 325314, 32532, 3254, 3255, 3256 and 3259

Energy Intensity Index (1990–2011) Base Year 1990 = 1.00



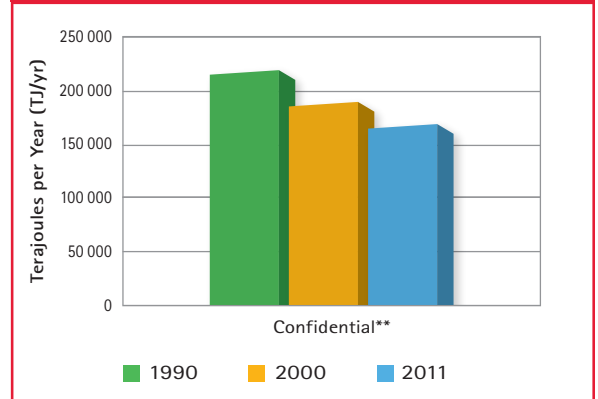
Between 2010 and 2011, energy intensity improved by 0.8 percent.

Energy Intensity and Economic Output (1990–2011)



Production decreased by 0.5 percent and energy consumption decreased by 1.4 percent between 2010 and 2011.

Energy Sources



** Confidential includes Coal, Coke, Petroleum Coke, Heavy Fuel Oil (HFO), Middle Distillates (LFO), Propane (LPG), Wood Waste, Steam, Natural Gas and Electricity.

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995–2011*, Ottawa. March 2013.

Production – *Informetrica Limited, T1 Model and National Reference Forecast*, March 2013, Statistics Canada National Accounts: Industry-based.

Lime



► PROFILE

Canada's merchant lime sector supplies essential raw materials to industrial consumers such as steel, mining, and pulp and paper companies. It also provides lime for water treatment to more than 150 communities across Canada. The sector's four companies operate 17 facilities and employ more than 750 people.

▶ ACHIEVEMENTS

GRAYMONT

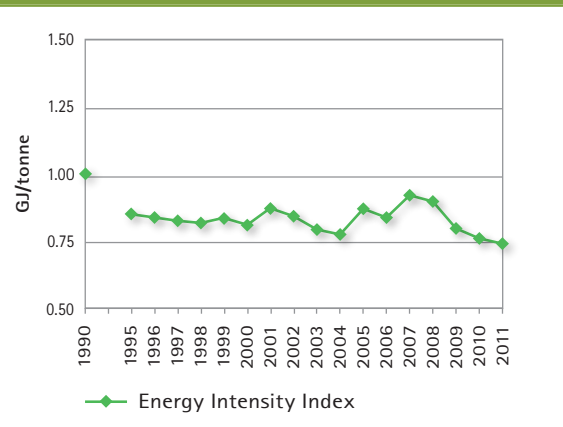
Graymont continually looks for ways to reduce energy consumption in lime kilns and other areas of its operations. Typically, kilns consume more than 95 percent of the energy used at a lime plant. The company took several steps to improve the efficiency of its kilns. It began to use biomass and natural gas as fuel at its facility in Marbleton, Quebec, and natural gas at its facility in Exshaw, Alberta. It also began to switch to more fuel-efficient kilns. These measures have produced significant results. Compared with 2004 levels, Graymont reduced its fuel-related emission intensity related to lime production by 11 percent. Based on 2012 production volumes, this represents an annual reduction of 56 000 t of GHG emissions.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5283.

▶ HIGHLIGHTS

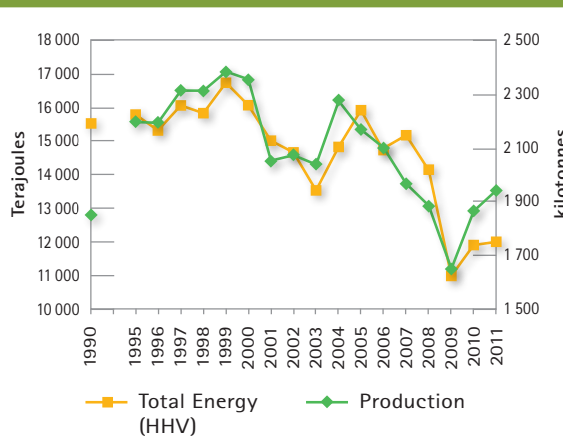
LIME SECTOR – NAICS 327410

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



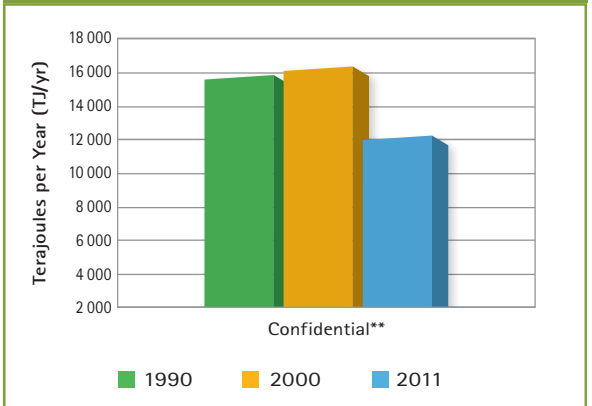
Energy intensity decreased by 2.9 percent between 2010 and 2011.

Total Energy and Physical Output (1990–2011)



Between 2010 and 2011, total energy consumption increased by 1 percent and total production increased by 4 percent.

Energy Sources



** Confidential includes HFO (Heavy Fuel Oil), LFO (Middle Distillates), LPG (Propane), Coal Coke, Petroleum Coke, Coal, Electricity and Natural Gas.

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995–2011*, Ottawa. March 2013.

Production – *Minerals and Metals Sector, Natural Resources Canada*, 2013.

Mining



► PROFILE

Mining is one of Canada's most important economic sectors and is a major contributor to our country's prosperity. In 2011, the industry contributed \$35.6 billion to our GDP and employed 320 000 workers in the mineral extraction, processing and manufacturing sectors. This industry stimulates and supports economic growth, both in large urban centres and in remote rural communities, including numerous First Nations communities; mining is a major employer of Aboriginal Canadians.

Mining accounts for 22.8 percent of Canadian goods exports. The industry also generates considerable economic spin-off activity: there are approximately 3200 companies that provide services to the industry that range from engineering consulting to drilling equipment.¹⁸

The [Mining Association of Canada](#) is the national organization of the Canadian mining industry and represents companies involved in mineral exploration, mining, smelting, refining and semi-fabrication.

► ACHIEVEMENTS

Gains in energy efficiency have been much greater in non-metal mining than in metal mining. Since the 1990s, the amount of energy consumed per unit of extracted non-metal ore has dropped by nearly 50 percent, while it has remained fairly stable for metal mining. Canadian mines striving for energy efficiency face various challenges: as mines get older and deeper, more energy is required to access and extract ore. The lack of electricity grids in remote areas means that many mines must rely on delivered fossil fuels. The Diavik and Ekati diamond mines in the Northwest Territories, for example, both depend on oil transported via winter ice roads.

New Gold, which has two producing mines and two properties in development worldwide, is the first Canadian mining company to become ISO 50001 certified.

¹⁸ [F&F 2012 – Facts and Figures of the Canadian Mining Industry](#)

To reduce the energy consumption of the mine's ventilation systems, Xstrata installed automatic controls on 70 of 200 underground fans, generating annual savings of \$700,000. The company further optimized the mine's energy consumption by using three secondary grinding mills instead of four.

Each of Goldcorp Inc.'s mine sites completed an energy management plan in 2012, and the company began to implement a variety of initiatives to achieve the following three five-year goals:

- increase energy efficiency by 15 percent
- reduce emissions by 20 percent
- have renewable energy sources contribute 5 percent of energy consumption

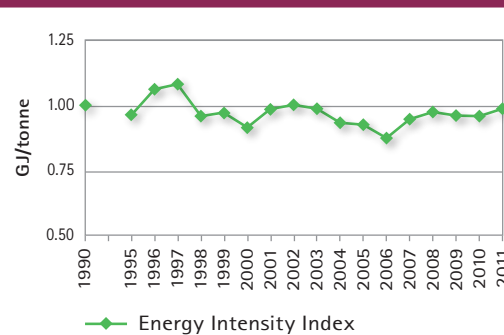
Teck Resources set a series of short- and long-term goals for its Canadian mining operations. By 2030, for instance, the company plans to implement projects that will reduce energy consumption by 6000 terajoules (TJ) and decrease emissions of CO₂e emissions by 450 kt. By 2015, the company will implement projects to reduce energy consumption by 1000 TJ and GHG emissions by 75 kt, and commit to purchasing 30 MW of the energy it needs from renewable sources.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5257.

► HIGHLIGHTS

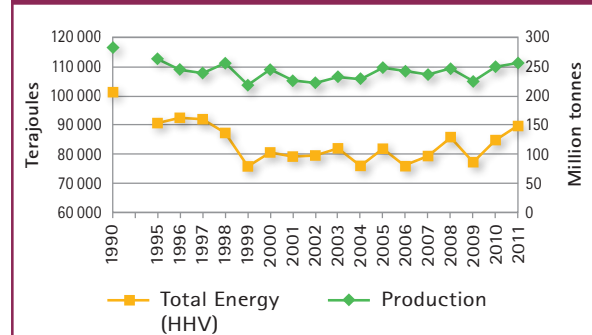
METAL MINING SECTOR – NAICS 2122

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



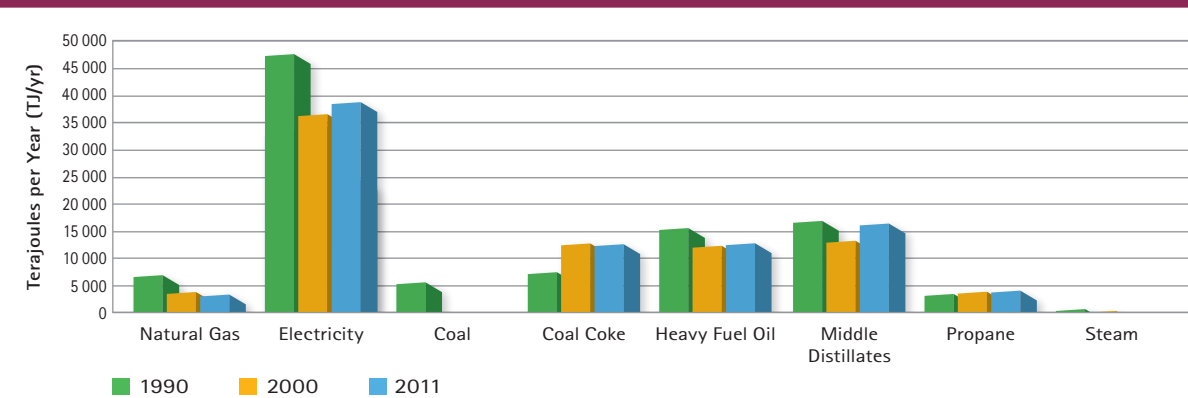
Between 2010 and 2011, energy intensity increased by 2.7 percent. This is consistent with the longer term and stable relationship between the energy required per unit of extracted metal ore dating back to the early 1990s.

Total Energy and Physical Output (1990–2011)



Production increased by 2.4 percent while energy consumption increased by 5.2 percent between 2010 and 2011. This relationship illustrates that the amount of energy required per unit of production increases as miners extract minerals and metals from today's older and deeper mines.

Energy Sources



Electricity consumption increased by 2.4 percent, heavy fuel oil consumption decreased by 7.3 percent, and middle distillates consumption increased by 29.4 percent between 2010 and 2011.

Data source

Energy Use – [Canadian Industrial Energy End-Use Data and Analysis Centre \(CIEEDAC\)](http://Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC)). Simon Fraser University, January 2013.

Oil Sands



► PROFILE

Alberta's oil sands are the third-largest proven crude oil reserve in the world, next to Saudi Arabia and Venezuela.

Through responsible development, advancement of technology and significant investment, the Government of Alberta is working in conjunction with industry to enhance Alberta's role as a world-leading energy supplier. New projects are being added every year and production is expected to increase from 1.31 million barrels per day in 2008 to 3 million barrels per day in 2018, keeping pace with demand and providing a sound economic basis for the future.¹⁹

¹⁹ Source: [Government of Alberta – Oil Sands](#)

► ACHIEVEMENTS

CANADA'S OIL SANDS INNOVATION ALLIANCE (COSIA)

In fall 2012, COSIA and the Southern Alberta Institute of Technology launched the first certificate program for operators of the complex water-treatment facilities critical to Steam Assisted Gravity Drainage (SAGD) operations. The Water Treatment Operator Certificate of Achievement Program establishes a standardized skill set for operators, and enables SAGD operations to maximize the efficiency and reliability of their water-treatment and recycling facilities. The program expects to graduate 35 students each year.

Another significant development is the use of oxy-fuel: using high concentrations of oxygen to increase combustion efficiency and reduce emissions

and energy consumption. The use of oxy-fuel combustion in Once-Through Steam Generator (OTSG) boilers is expected to have several potential advantages over competing technologies. These include lower energy consumption and operating costs compared to many other carbon capture technologies; the capture of up to 99 percent of carbon dioxide emissions, significant reductions of nitrogen oxides emissions, and the recovery of water from flue gas that could reduce overall water usage. COSIA's Oxy-Fuel combustion project is moving into its second phase following a design and cost estimate for a commercial scale OTSG boiler with built-in carbon capture, purification and compression technology. Phase two will be a pilot project at Cenovus' Christina Lake site to test the reliability, efficiency and cost effectiveness of an OTSG boiler equipped with oxy-fuel technology.

SUNCOR

Suncor continues to make progress toward the target it set in 2009 for energy efficiency performance in 2015. The company aims to reduce fresh water consumption by 15 percent and air emissions by 10 percent, double the amount of disturbed land it reclaims, and improve energy efficiency by 10 percent.

For each cubic metre of oil Suncor's mining operations produced in 2011, it consumed 1.25 cubic metres of river water and groundwater – 70 percent less than the amount consumed in 2003. Suncor's water consumption intensity declined by 39 percent between 2010 and 2011; during the same period, withdrawals from the Athabasca River decreased by 22 percent. Key projects involved recycling wastewater from upgrading ponds for use in a delayed coker and as utility water. The next step, planned for 2013, is to build the infrastructure needed to transport and recycle treated tailings water in the Firebag operation.

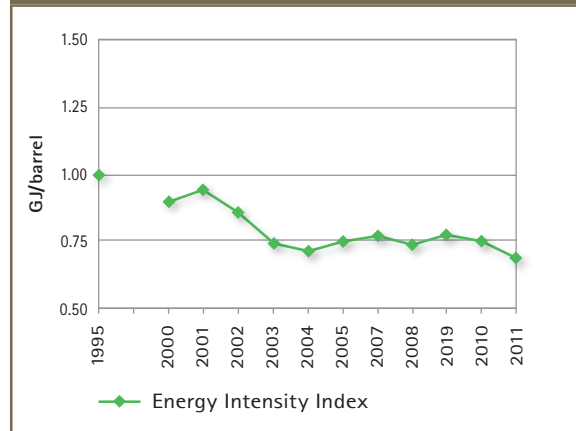
Suncor's emissions of nitrogen oxides, sulphur oxides and volatile organic compounds decreased by 17 percent between 2010 and 2011. Key projects included the installation of pollution control technology at the in situ unit and methodology improvements in oil sands operations. At the Sarnia refinery, a \$1 billion investment in new equipment has enabled the production of lower sulphur diesel fuel and improved operational efficiency.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5259.

HIGHLIGHTS

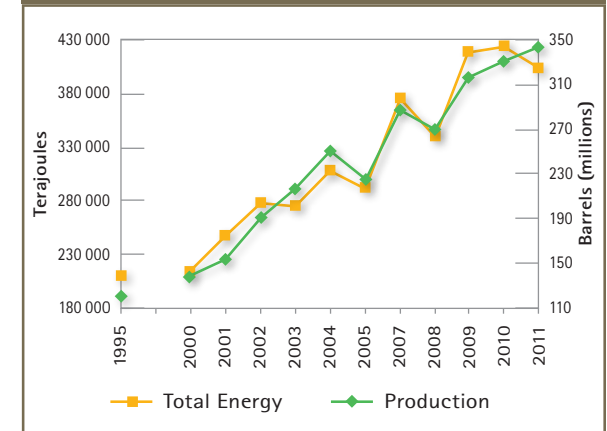
OIL SANDS SECTOR – NAICS 211114

Energy Intensity Index (1995–2011)
Base Year 1995 = 1.00



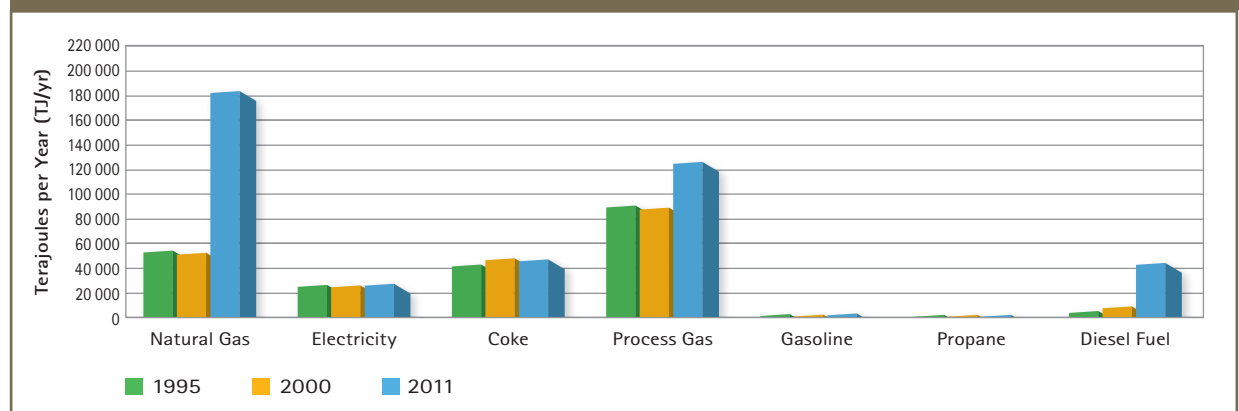
Energy intensity decreased by 8.58 percent between 2010 and 2011.

Total Energy and Physical Output (1995–2011)



Between 2010 and 2011, total energy consumption decreased by 5.02 percent while total production increased by 3.89 percent.

Energy Sources



Natural gas consumption decreased by 7.07 percent and process gas decreased by 3.82 percent between 2010 and 2011.

Data source

[Energy Resources Conservation Board](http://EnergyResourcesConservationBoard) 2011 (Fort McMurray office). Data excludes in-situ production.

Petroleum Products



► PROFILE

Canada's petroleum products sector manufactures and markets the fuels that drive the Canadian economy. From transportation fuels to heating oil, chemicals and asphalt, its products are present in many aspects of Canadian daily activities. The petroleum refining sector contributes \$2.5 billion to Canada's GDP and employs 17 500 professional, highly educated refinery workers. There are 19 refineries in eight Canadian provinces that makes an aggregate production capacity of about 2 million barrels per day (bpd). To round out the value chain, there are 70 distribution terminals and 12 000 retail sites across Canada that employ 82 000 workers.²⁰

²⁰ [Canadian Fuels Association](#)

▶ ACHIEVEMENTS

Suncor Energy Inc's corporate goal is to improve energy efficiency by 10 percent by 2015. To reach this target, the company has developed energy efficiency performance and complementary longer-term energy intensity targets.

Suncor plans to implement energy management systems at its Montréal and Edmonton refineries. At the Sarnia refinery, a \$1-billion investment in new equipment has enabled the production of lower sulphur diesel fuel and improved operational efficiency.²¹

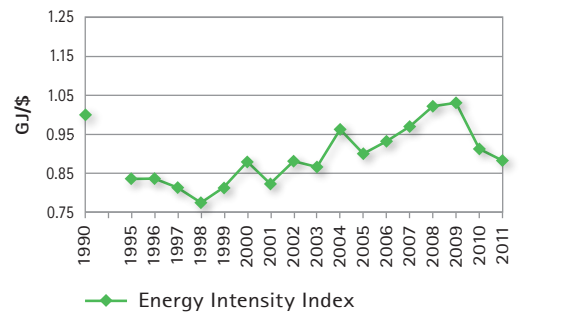
Imperial Oil Limited has implemented a global energy management system that identifies areas in need of improvement by comparing the performance of its sites with that of ideal operations. In 2011, the company's refining business achieved its target of improving energy efficiency by at least 1 percent per year. Imperial Oil continues to pursue energy efficiency improvements by implementing management systems, energy audits, new technologies and waste heat recovery projects. The company continues to install energy conservation technologies in its retail facilities; installations are complete at 125 of the company's largest sites.²²

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5277.

▶ HIGHLIGHTS

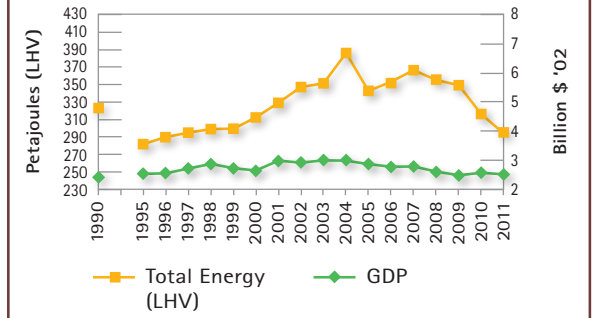
PETROLEUM PRODUCTS SECTOR – NAICS 324110

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



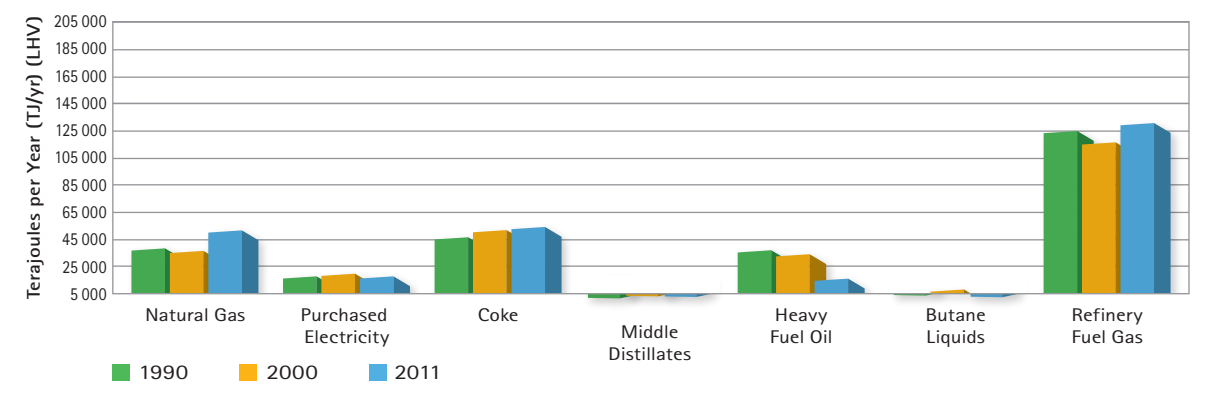
Between 2010 and 2011, energy intensity decreased by 3.10 percent.

Total Energy and Economic Output (1990–2011)



GDP decreased by 3.65 percent, and energy consumption decreased by 6.65 percent between 2010 and 2011.

Energy Sources



Between 2010 and 2011, natural gas consumption increased by 5.35 percent, heavy fuel oil consumption increased by 0.55 percent, and refinery fuel gas consumption decreased by 17.67 percent.

Data source

Review of Energy Consumption in Canadian Oil Refineries: 1990, 1994 to 2009, prepared for the Canadian Fuels Association and Canadian Industry Program for Energy Conservation, and [Canadian Industrial Energy End-Use Data and Analysis Centre \(CIEEDAC\)](#), Simon Fraser University, February 2013.

²¹ [Suncor Report on Sustainability 2013](#)

²² [Imperial Oil Corporate Citizenship Summary Report 2011](#)

Plastics



► PROFILE

Canada's \$17.6-billion plastics industry is sophisticated and multi-faceted and encompasses manufacturing, machinery, moulds and resins. Represented by the Canadian Plastics Industry Association (CPIA), and celebrating its 70th anniversary in 2013, the sector is comprised of 2422 companies that employ more than 76 500 workers.²³

The CPIA focuses on three priorities. The association prides itself on communicating the facts behind plastics' manufacturing and use –

from the material's economic, social and environmental contributions to the size and strength of the Canadian manufacturing sector. It is committed to increasing the amount of plastic and the various types of plastic waste being diverted from landfill by using various waste management options, such as reuse, recycle and energy recovery. And, the CPIA remains committed to building on the industry's long history of innovation and achievement by taking advantage of new opportunities and meeting industry challenges as they arise.

► ACHIEVEMENTS

The CPIA contributes to the industry's efforts to improve its environmental performance by executing an annual program of stakeholder collaboration to increase the diversion of plastics from landfill through greater recycling and energy recovery of plastics.

Initiatives include providing tools, best practices and guides to reduce the costs of plastic recycling collection and sorting; undertaking demonstration projects to expand the collection of plastics; conducting research to help create end markets for plastics; and developing partnerships to facilitate energy recovery for unrecyclable plastics and to reduce marine debris. Recycling efforts focus on materials that have existing markets and energy-recovery projects for unrecyclable plastics. Energy-recovery plants should be upgraded to increase efficiency; co-generation can help achieve this goal.

²³ [Canadian Plastics Industry Association \(CPIA\)](#)

There are also new advanced technologies specifically for plastics recovery, such as pyrolysis and gasification to convert non-recycled plastics and other materials into fuels, electricity and chemicals. Pyrolysis heats the plastic in the absence of oxygen; the plastics are then gasified and converted into synthetic crude oil, diesel or naphtha. Gasification heats the plastics in an oxygen-deficient atmosphere which can then be converted into chemicals or fuels such as methanol and ethanol.

Driving the industry's focus on energy recovery is the fact that there are limits to cost-effective recycling of plastics. But best performing countries divert over 90 percent of plastics from landfill through recycling and recovery of residues. This model supports the resource recovery hierarchy – conserving resources and energy. The use of recovery as an option to divert more materials from landfill has been complementary to establishing higher recycling rates for plastics and other waste materials.

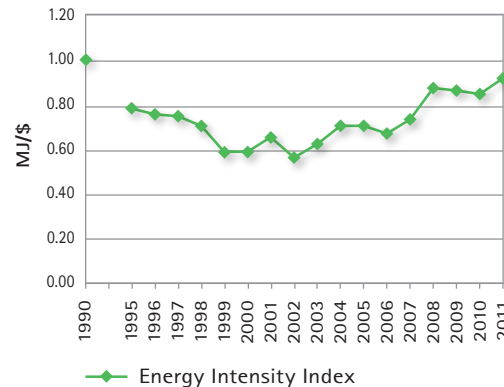
Currently, energy-recovery technologies treat approximately 4 percent of Canada's municipal waste. Facilities in Charlottetown, Québec (City), Ontario's Peel Region and Burnaby, British Columbia, process approximately 1.5 million t of waste each year. Through energy recovery, approximately 1 t of waste can produce the equivalent of 550 net kilowatt hours of energy. A typical energy-recovery facility can process approximately 2000 t of waste per day, generating about 50 net MW of electricity. This is enough to power about 60 000 homes.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5269.

HIGHLIGHTS

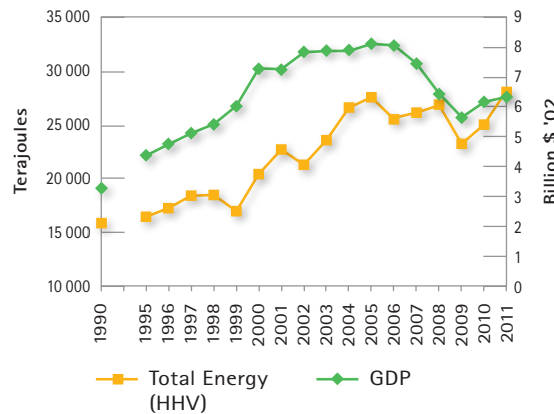
PLASTICS SECTOR – NAICS 3261

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



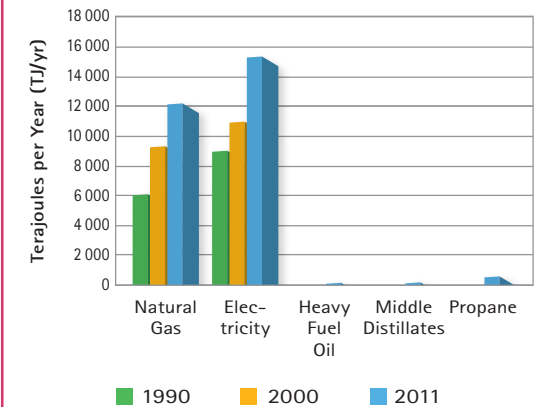
Between 2010 and 2011, energy intensity increased by 8.4 percent.

Total Energy and Economic Output (1990–2011)



GDP increased by 3.2 percent while energy consumption increased by 11.9 percent between 2010 and 2011.

Energy Sources



Between 2010 and 2011, natural gas consumption increased by 13.3 percent, and electricity consumption increased by 9.9 percent.

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995–2011*, Ottawa, March 2013.

Production – GDP – *Informetrica Limited, T1 Model and National Reference Forecast*, March 2013.

Steel



► PROFILE

With \$12 to \$14 billion in annual sales, Canada's steel industry is at the root of the Canadian industrial tree, providing the key material for many industries, including automotive, construction, energy, packaging and advanced manufacturing. Steel is also an important customer for many other industries, including raw materials and transportation.²⁴

There are two major ways to produce steel in Canada: the basic oxygen furnace (BOF) process and the electric arc furnace (EAF) process. These two processes have different energy profiles. The BOF process uses raw materials (notably iron ore and coal), combined with 25 to 35 percent recycled steel to make new steel. The EAF process uses almost 100 percent recycled steel to make new steel.

Both processes produce different products for a wide spectrum of applications. While the steel industry maximizes its consumption of available recycled steel to make new steel, additional demand for steel products cannot be fully met through finite scrap steel supplies. In 2010, Canadian steel producers recycled 7 million tonnes of steel.

²⁴ Canadian Steel Producers Association – [Steel Facts](#)

▶ ACHIEVEMENTS

Steel manufacturing facilities continue to design and implement energy improvement and equipment optimization initiatives. Members of the CIPEC Steel Task Force took part in Natural Resources Canada's Energy Management Information Systems *Dollars to \$ense* workshop. The participants included key decision makers, who were informed of new opportunities to manage and reduce energy consumption and costs.

U.S. Steel Canada surveyed steam usage at its Hamilton Works facility to help identify plant-wide energy savings opportunities.

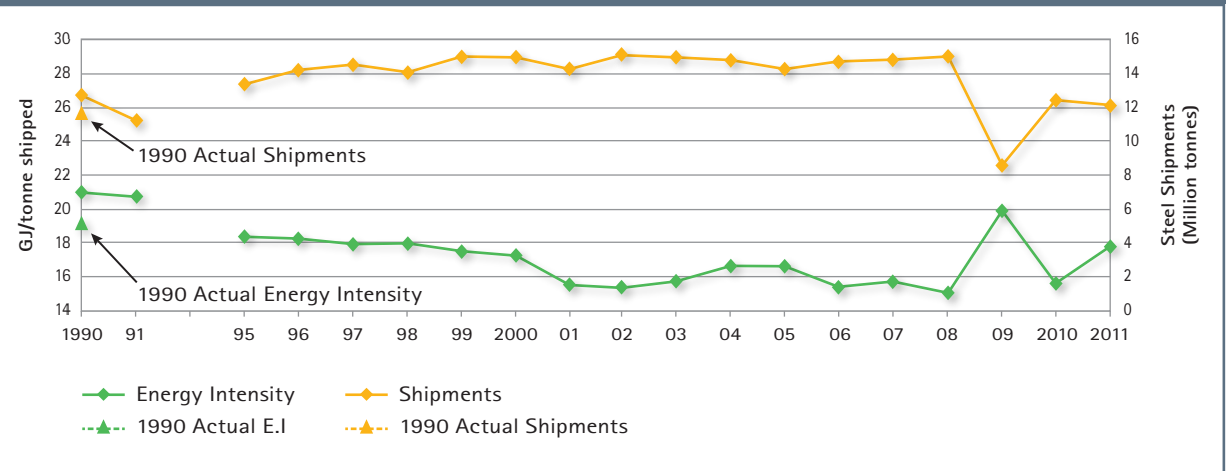
ArcelorMittal took steps to improve energy efficiency at several of its facilities. At the St. Patrick facility in Montréal, for instance, the company converted 2500 lights from incandescent to LED fixtures. At the company's Dofasco facility in Hamilton, Ontario, high-efficient radiant natural gas heaters replaced outdated models. A compressed air system replaced the conveyor system previously used on the facility's hot mill reheat furnace shaker table. By-product gas from coke making and blast furnaces are now used to generate power from steam turbines.

For more information on the sector, visit oee.nrcan.gc.ca/industrial/opportunities/cipec/meetings/steel/login.cfm.

▶ HIGHLIGHTS

STEEL SECTOR – NAICS 331100

Energy Intensity and Physical Output (1990–2011)



Steel product shipments decreased by 3.0 percent in 2011 compared to 2010 while energy intensity increased by 12.0 percent within the same time frame. Steel production levels continue to show a gradual recovery from the global economic crisis.

Transportation Equipment Manufacturing



► PROFILE

Canada is the ninth largest vehicle producer in the world. The auto sector is Canada's biggest contributor to manufacturing GDP and employs more Canadians than any other manufacturing industry.

The industry directly supports more than 550 000 jobs across the country in 11 light-duty and 3 heavy-duty assembly plants, more than 540 original equipment parts manufacturers (OEM), nearly 4000 dealerships and many other directly related industries.

The Canadian vehicle assemblers are highly competitive, accounting for close to 4 percent of total world production of 68.6 million units and a global trade surplus in finished vehicles of more than \$13.8 billion.

The Canadian automotive industry is a leader in the development of a highly skilled workforce and in its efforts to improve environmental quality and is a major contributor to the health of Canada's economy.²⁵

► ACHIEVEMENTS

Energy management is increasingly common in Canada's transportation equipment manufacturing industry. Chrysler Canada's assembly plant in Brampton, Ontario, is a case in point. The plant employs more than 2800 workers and is certified for the ISO 14001 Environmental Management System (EMS). The EMS enables plant personnel to quickly and easily check the operational status of equipment and power down machines during non-production periods. Turning off

ventilation equipment during non-production periods has yielded significant energy savings.

Chrysler Canada already operates under World Class Manufacturing (WCM) principles, which mandate an energy survey methodology known as cost deployment. Cost deployment is a core component of the ISO 50001 standard. In addition to the Brampton plant, Chrysler Canada Inc. is committed to achieve ISO 14001, OHSAS 18001 and ISO 50001 certification at all Chrysler Canada Inc. facilities.

Another example is Magna International Inc. Headquartered in Aurora, Ontario, Magna is one of Canada's largest companies. Training in energy efficiency is a key part of the company's energy management program. Along with briefing new hires on conservation issues, Magna designates energy champions at several plants. To spur progress in energy efficiency, Magna contracted a Dollars to

²⁵ [Canadian Vehicles Manufacturing Association \(CVMA\)](#)

Sense Energy Management workshop instructor to tour several plants, analyze energy usage patterns and identify opportunities to reduce consumption and improve energy management practices. Magna subsequently offered customized workshops to staff.

Most Magna plants in Canada maintain energy management teams. Members of the teams not only lead internal initiatives to save energy, but also meet with their peers from other plants at conferences to discuss environmental and energy management issues.

To date, 14 Magna facilities have participated in the compressed-air challenge, a voluntary collaboration among manufacturers, distributors, utilities and other organizations. Magna engineers, operators and maintenance staff learned to save energy and reduce costs by using compressed air more efficiently. Within a year, one division had achieved annual savings of more than \$20,000, while the other division had reduced demand for compressed air by 33 percent.

Several Magna divisions in Ontario now participate in Demand Response 3. The program has helped these divisions achieve a 10 percent reduction in electricity loads by shifting non-essential processes and decreasing baseline loads.

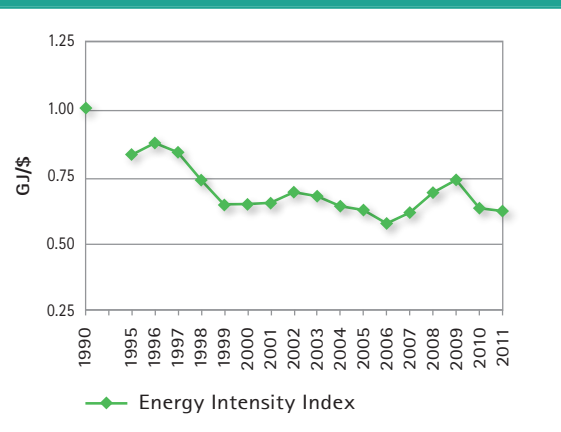
To help generate additional savings, Magna established an EMIS that tracks both energy consumption and GHG emissions. The combination of training, data analysis and investments in efficiency improvements will continue to reduce consumption and generate savings.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5273.

HIGHLIGHTS

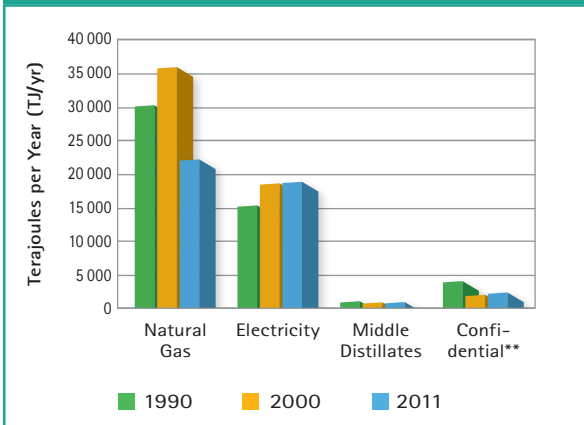
TRANSPORTATION EQUIPMENT MANUFACTURING – NAICS 336

Energy Intensity Index (1990–2011)
Base Year 1990 = 1.00



Between 2010 and 2011, energy intensity decreased by 0.6 percent.

Energy Sources



** Confidential includes Coal, Steam, Propane and Wood.

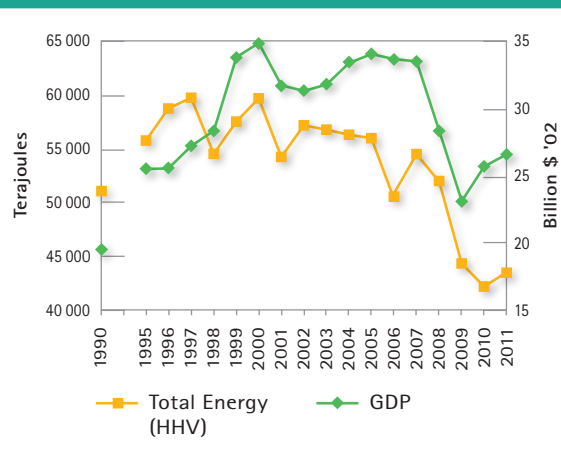
Between 2010 and 2011, natural gas consumption decreased by 5.7 percent, and electricity consumption decreased by 0.6 percent.

Data sources

Energy Use – Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995–2011*, Ottawa, March 2013.

Production – GDP – *Informetrica Limited, T1 Model and National Reference Forecast*, March 2013.

Total Energy and Economic Output (1990–2011)



GDP increased by 3.7 percent while energy consumption increased by 3.1 percent between 2010 and 2011.

Upstream Oil and Gas



► PROFILE

The upstream oil and gas sector includes companies that find and develop Canada's vast oil and gas resources. The sector is broadly divided between conventional oil and gas production and oil sands production and upgrading. This section discusses the conventional oil and gas sector. The [oil sands sector](#) is covered separately in the report.

Products and services derived by downstream sectors from the output of this industry include heating and transportation fuels, building supplies and materials, clothing, and medicines.

The exploration and production industry is represented by the [Canadian Association of Petroleum Producers \(CAPP\)](#) and the [Explorers and Producers Association of Canada](#). CAPP represents both large and small companies that explore develop and produce natural gas and crude oil throughout Canada. CAPP's member companies produce about 90 percent of Canada's natural gas and crude oil. CAPP's associate members provide a wide range of services that support the upstream crude oil and natural gas industry. Together, CAPP members and associate members are an important part of a national industry with revenues of about \$100 billion per year.²⁶

²⁶ [Canadian Association of Petroleum Producers \(CAPP\)](#)

► ACHIEVEMENTS

In April 2012, ConocoPhillips, Petroleum Technology Alliance of Canada (PTAC) and The Prasino Group held a technology information session on developing oil and gas energy efficiency project platforms. Session participants learned how to overcome the challenges associated with the development, aggregation, tracking and financing of oil and gas energy efficiency projects.

A survey of Alberta upstream companies found significant reductions in fuel gas consumption through a variety of projects. A total of 17 companies responded to the survey²⁷ conducted by the Energy Resources Conservation Board, an independent, quasi-judicial agency of the Government of Alberta. The survey found that 11 of the

²⁷ www.ercb.ca/data-and-publications/statistical-reports/st110

companies invested a total of \$29 million on fuel gas reduction projects during 2010, and that 12 companies reported fuel gas savings totalling approximately 460 000 cubic metres per day. In 2011, 11 of the companies surveyed reported total investments of \$67 million for similar projects.

Survey respondents identified several successful projects, including the replacement of glycol burners with more efficient units, the installation of thermally optimized production tanks, shutting in-line heaters, regular preventative maintenance and burner upgrades. Most companies reported that leak detection and repair projects are part of existing fugitive emission management programs. Other successful projects included recycling vent gas from instruments, packing vents or casing gas for use as fuel, downsizing submersible pump motors and changes to piping and process changes.

Companies provided several suggestions on how to make fuel gas efficiency projects successful, such as engaging operations staff in the process and getting management and organizational commitment early on. Another suggestion involves considering improved reliability and safety, emissions reductions and optimizing production, when evaluating proposed projects.

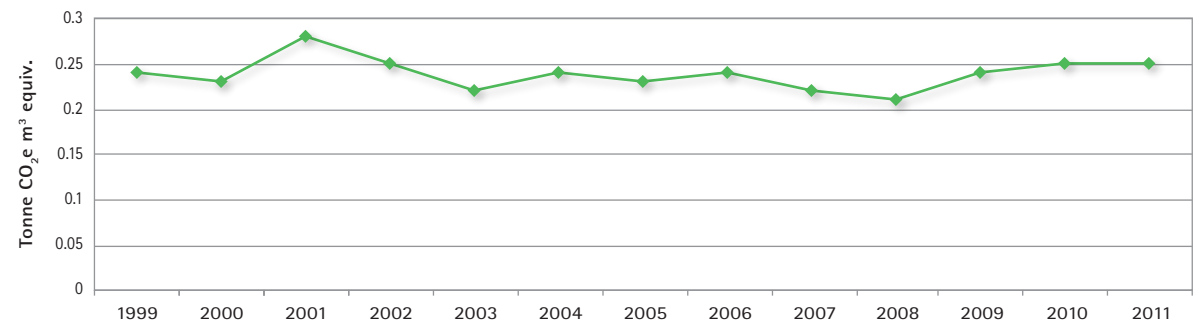
Several survey respondents suggested that energy efficiency should be factored into all new projects.

For more information on the sector, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5263.

► HIGHLIGHTS

UPSTREAM OIL AND GAS SECTOR – NAICS 211113

GHG Emission Intensity – Conventional Oil and Gas



In 2011, GHG emissions intensity remains at the same level as in 2010.

This was a result of overall production growth in oil sands and unconventional gas, as well as production shifting from conventional to unconventional reserves.

Unconventional reserves often require enhanced production techniques, which use more energy and consequently generate more GHGs than would be generated through the production of conventional reserves.

Data source

[The CAPP Responsible Canadian Energy Report 2012](#) – Canadian Association of Petroleum Producers.

CIPEC Who's Who

CIPEC EXECUTIVE BOARD MEMBERS

The executive board provides leadership for CIPEC's task forces, associations and companies. The board's 12 members are all volunteers with senior management responsibilities and expertise in energy efficiency. They are drawn from across the 21 CIPEC sectors. The executive board has regular teleconferences and meetings throughout the year.

CIPEC TASK FORCE COUNCIL MEMBERS

The 24-member CIPEC Task Force Council includes volunteer representatives from each of CIPEC's 21 sectors. Members of the Task Force Council benefit from the energy efficiency expertise offered by their council peers. They meet regularly to exchange ideas and recommend ways to address the challenges associated with improving energy efficiency and sustainability as well as reducing greenhouse gas emissions.

CIPEC LEADERS

CIPEC Leaders are drawn from CIPEC member companies and trade associations. Every member has access to tools and services offered by Natural Resources Canada's Office of Energy Efficiency. CIPEC Leaders support voluntary initiatives that lead to energy cost savings and assist the Government of Canada in meeting its objectives to save energy and reduce greenhouse gas emissions and air pollution. Every two years, member companies are invited to compete in the CIPEC Leadership Awards showcasing their energy efficiency achievements. The awards are presented during CIPEC's biennial conference.

NATURAL RESOURCES CANADA INDUSTRY AND TRANSPORTATION DIVISION CONTACTS

Contact information for the Program's director, chiefs, general enquiries and Dollars to \$ense Energy Management workshops program.

CIPEC Executive Board Members

Glenn Mifflin (Chair)**Martin Vroegh**

*Ex-officio member – Chair, CIPEC Task Force Council
Environment Manager*
Cement
St. Marys Cement Inc.

Helen Bennett

Emerging Regulatory Policy Issue Advisor
Shell Canada Downstream

Sara Curwen

Vice-president
National Operations and Interim GM
Ready Bake

Wayne Kenefick

Vice-president
Sustainable Development
Graymont Western Canada Inc.

Peter Kinley

President and CEO
Lunenburg Industrial Foundry & Engineering

Richard Lamarche

Vice-president
Energy Division
Alcoa Canada Primary Metals

Yves Leroux

Vice-president
Regulatory and Government Affairs
Parmalat Dairy & Bakery Inc.

Andy Mahut

Manager
Energy Practices
U.S. Steel Canada Inc.

Ronald C. Morrison

Treasurer of the Board
Canadian Manufacturers & Exporters (CME)

George T. Partyka

Vice-president
Partner Technologies Incorporated

Bradley Robertson

Senior Continuous Improvement Leader
ESCO Limited

CIPEC Task Force Council

CIPEC TASK FORCE COUNCIL CHAIR

Martin Vroegh

Environment Manager

Cement

St. Marys Cement Inc.

ALUMINUM SECTOR TASK FORCE

Anik Dubuc

Vice-president

Sustainable Development

Aluminium Association of Canada (AAC)

BREWERY SECTOR TASK FORCE

Edwin Gregory

Director

Policy and Research

Brewers Association of Canada (BAC)

CEMENT SECTOR TASK FORCE

Adam J. Auer

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Business Development and Stakeholder Relations

Cement Association of Canada (CAC)

CHEMICAL SECTOR TASK FORCE

Vacant

CONSTRUCTION SECTOR TASK FORCE

Ken Lancaster

Associate Director

Communications and Technology

Canadian Construction Association (CCA)

DATA SPECIALIST

Susan Olynyk

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Environmental Department

ArcelorMittal Dofasco Inc.

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Vice-president

EEMAC Council

Electro-Federation Canada

ELECTRICITY GENERATION SECTOR TASK FORCE

Channa S. Perera

Manager

Sustainable Electricity Program

Canadian Electricity Association (CEA)

FERTILIZER SECTOR TASK FORCE

Giulia Brutesco

Director

Scientific and Regulatory Affairs

Canadian Fertilizer Institute (CFI)

FOOD AND BEVERAGE SECTOR TASK FORCE

CIPEC Task Force Council Vice-chair

Doug Dittburner

Manager

Power Services

Campbell Company of Canada

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Environment, Energy, Economics and Climate Change
Forest Products Association of Canada

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Program Leader

Transport and Energy
FPInnovations

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Executive Director

Canadian Foundry Association (CFA)

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John Woods

Vice-president

Energy Development
Minas Basin Pulp & Power Company Limited

GENERAL MANUFACTURING SECTOR TASK FORCE – CENTRAL REGION

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Environment, Health and Safety Specialist

Crown Metal Packaging Canada LP

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Regional Environmental Manager

Carmeuse Lime (Canada) – Beachville Operation

MINING SECTOR TASK FORCE

Brendan Marshall

Director

Economic Affairs
The Mining Association of Canada (MAC)

PETROLEUM PRODUCTS SECTOR TASK FORCE

Gilles Morel

Director

Eastern Canada and National
Canadian Fuels Association

PIPELINES SECTOR TASK FORCE

Bill Tubbs

Climate Change and Energy Efficiency Specialist

Spectra Energy

PLASTICS SECTOR TASK FORCE

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Jennifer Stephens

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Canadian Steel Producers Association

TRANSPORTATION EQUIPMENT MANUFACTURING SECTOR TASK FORCE

Michael O'Meara, P. Eng., C.E.M.

Senior Specialist

Environmental Compliance and Energy
Magna International Inc.

UPSTREAM OIL AND GAS SECTOR TASK FORCE

Elise Bieche

Manager

National Air Issues
Canadian Association of Petroleum Producers (CAPP)

CIPEC Leader Companies by Sector

ALUMINUM

Alcan inc. – *Montréal*

Alcan Specialty Aluminas – *Brockville*

Alcoa Canada Première fusion – *Montréal*

Alcoa Ltée – Aluminerie de Baie-Comeau – *Baie-Comeau*

Alcoa – Aluminerie de Deschambault S.E.N.C. – *Deschambault*

Alcoa Ltée – Alcoa-Usine de Tige – *Bécancour*

Aluminerie de Bécancour inc. – *Bécancour*

Almag Aluminum Inc. – *Brampton*

Alumicor Limited – *Toronto*

Aluminerie Alouette inc. – *Sept-îles*

Novelis Inc. – *Toronto*

Recyclage d'aluminium Québec inc. – *Bécancour*

Universal Stainless & Alloys Inc. – *Mississauga*

BREWERY

Big Rock Brewery Ltd. – *Calgary*

Columbia Brewery – *Creston*

John Allen Brewing Company (The) – *Halifax*

Labatt Breweries of Canada – *Edmonton, London, St. John's, Toronto*

La Brasserie Labatt – *LaSalle*

Les Brasseurs du nord inc. – *Blainville*

Molson Coors Canada – *Edmonton, Moncton, Montréal, Ontario, Vancouver*

Moosehead Breweries Limited – *Saint John*

Pacific Western Brewing Company – *Prince George*

Rahr Malting Canada Ltd. – *Alix*

Sleeman Brewing and Malting Co. Ltd. – *Guelph*

Sleeman Maritimes Ltd. – *Dartmouth*

Sleeman Unibroue Quebec – *Chambly*

Sleeman Breweries Ltd. o/a Okanagan Spring Brewery – *Vernon*

CEMENT

Advanced Precast Inc. – *Bolton*

Arriscraft International – *Cambridge, Saint-Étienne-des-Grès*

ESSROC Canada Inc. – *Picton*

Gordon Shaw Concrete Products Ltd. – *Windsor*

Groupe Permacon – *Ville d'Anjou*

Decor Precast – Div. of Oldcastle Building Products Canada – *Stoney Creek*

Groupe Permacon Div. des Matériaux de Construction Oldcastle Canada Inc. – *Ville d'Anjou*

Groupe Permacon inc. – Division Trois-Rivières – *Trois-Rivières*

Groupe Permacon (Sherbrooke) – Div. des Matériaux de Construction Oldcastle Canada inc. – *Sherbrooke*

Permacon Group Inc. – *Bolton, Oshawa*

Permacon Group – *Milton*

Permacon Ottawa – *Stittsville*

Holcim (Canada) Inc. – *Joliette, Mississauga*

Dufferin Concrete – *Concord*

International Erosion Control Systems – *Rodney, West Lorne*

Lafarge Canada inc. – *Montréal, Winnipeg*

Lehigh Inland Cement Limited – *Edmonton*

Lehigh Northwest Cement Limited – *Richmond*

Pre-Con Inc. – *Brampton*

St. Marys Cement Inc. (Canada) – *Bowmanville*

CHEMICALS

Abrex Paint & Chemical Ltd. – *Oakville*

APCO Industries Co. Limited – *Toronto*

Apotex Pharmachem Inc. – *Brantford*

Arclin Canada Ltd. – *North Bay*

Avmor Ltée – *Laval*

Banner Pharmacaps (Canada) Ltd. – *Olds*

Bartek Ingredients Inc. – *Stoney Creek*

Becker Underwood – *Saskatoon*

Benjamin Moore & Cie Limitée – *Montréal*

Big Quill Resources Inc. – *Wynyard*

BioVectra Inc. – *Charlottetown*

BOC Gaz – *Magog*

Celanese Canada inc. – *Boucherville*

Charlotte Products Ltd. – *Peterborough*

Church & Dwight Canada – *Mount Royal*

Colgate-Palmolive Canada Inc. – *Mississauga*

Collingwood Ethanol L.P. – *Collingwood, Toronto*

Commercial Alcohol Inc. – *Chatham, Tiverton, Varennes*

Diversey Canada, Inc. – *Edmonton*

Dominion Colour Corporation – *Ajax, Toronto*

Dyno Nobel Nitrogen Inc. – *Maitland, North Bay*

Eka Chimie Canada inc. – *Magog, Salaberry-de-Valleyfield*

Eli Lilly Canada Inc. – *Scarborough*

Emery Oleochemicals Canada Ltd. – *Toronto*

Estée Lauder Cosmetics Ltd. – *Scarborough*

Evonik Degussa Canada Inc. – *Brampton, Burlington, Gibbons*

Fibrex Insulations Inc. – *Sarnia*

Fielding Chemical Technologies Inc. – *Mississauga*

Galderma Production Canada inc. – *Baie d'Urfé*

Germiphene Corporation – *Brantford*

Grace Canada inc. – *Valleyfield*

GreenField Ethanol Inc. – *Tiverton*

Honeywell – *Amherstburg*

Hostmann-Steinberg Limited – *Brampton*

HP Polymers Ltd. – *Puslinch*

ICI Canada Inc. – *Concord*

International Group Inc. (The) – *Toronto*

Jamieson Laboratories Ltd. – *Windsor*

Kronos Canada Inc. – *Varenes*

Lanxess Inc. – *Sarnia*

L'Oréal Canada inc. – *Montréal*

Les Emballages Knowlton inc. – *Knowlton*

Mancuso Chemicals Limited – *Niagara Falls*

Nalco Canada Co. – *Burlington*

Nordion Inc. – *Ottawa*

NOVA Chemicals Corporation – *Corruna, Joffre, Moore Township, St. Clair River*

Oakside Chemicals Limited – *London*

OmegaChem inc. – *Lévis, Saint-Romuald*

Orica Canada Inc. – *Brownsburg*

Osmose-Pentox Inc. – *Montréal*

Oxy Vinyls Canada Inc. – *Niagara Falls*

Pharmascience inc. – *Montréal*

PolyOne Canada Inc. – *Orangeville*

Powder Tech Ltd. – *Brampton*

PPG Canada Inc. – *Beauharnois*

Procter & Gamble Inc. – *Brockville*

Prolab Technologies Inc. – *Thetford Mines*

Purdue Pharma – *Pickering*

Rhema Health Products Limited – *Coquitlam*

Rohm and Haas Canada Inc. – *Scarborough*

Sanofi Pasteur Limited – *North York*

Saskatchewan Minerals Inc. – *Chaplin*

Sifto Canada Corp. – *Goderich, Unity*

Solucor Ltd. – *Bradford*

Soucy Techno inc. – *Sherbrooke*

Tech Blend s.e.c. – *Saint-Jean-sur-Richelieu*

Technical Adhesives Ltd. – *Mississauga*

Tri-Tex Co. Inc. – *Saint-Eustache*

Trillium Health Care Products Inc. – *Brockville, Newmarket, Perth, Prescott*

Westbrook Technologies Inc. – *Scarborough*

Wyeth-Ayerst Canada Inc. – *Saint-Laurent*

CONSTRUCTION

AnMar Mechanical & Electrical Contractors Ltd. – *Lively*

ATCO Structures Inc. – *Calgary, Spruce Grove*

Basin Contracting Limited – *Enfield*

Battle River Asphalt Equipment Ltd. – *Cut Knife*

Construction DJL Inc. – *Saint-Philippe-de-Laprairie*

Denko Mechanical Ltd. – *Springfield*

Lockerbie & Hole Industrial Inc. – *Edmonton*

M J Roofing & Supply Ltd. – *Winnipeg*

Mira Timber Frame Ltd. – *Stony Plain*

Moran Mining & Tunnelling Ltd. – *Lively*

Northland Building Supplies Ltd. – *Edmonton*

Pavages Beau-Bassin, division de Construction DJL Inc. – *Gaspé*

Production Paint Stripping Ltd. – *Toronto*

Taggart Construction Ltd. – *Ottawa*

Whitemud Ironworks Group Ltd. – *Edmonton*

DAIRY

Agrilait Cooperative agricole – *Saint-Guillaume*

Agropur Coopérative – *Beauceville*

Agropur Coopérative, division Natrel – *Don Mills*

Amalgamated Dairies Limited – *Summerside*

ADL O'Leary – *Summerville*

ADL St. Eleanors – *Summerside*

ADL West Royalty – *Charlottetown*

O'Leary and Perfection Foods – *Summerside*

Arla Foods Inc. – *Concord*

Atwood Cheese Company – *Atwood*

Baskin-Robbins Ice Cream – *Peterborough*

Entreprise Le Mouton Blanc – *La Pocatière*

Farmers Co-Operative Dairy Limited – *Halifax*

Foothills Creamery Ltd. – *Calgary, Didsbury, Edmonton*

La Fromagerie Polyethnique inc. – *Saint-Robert*

Hewitt's Dairy Limited – *Hagersville*

Kerry Québec Inc. – *Sainte-Claire*

Laiterie Chagnon Ltée – *Waterloo*

Laiterie Charlevoix inc. – *Baie-Saint-Paul*

Neilson Dairy Ltd. – *Halton Hills, Ottawa*

Nutrinar (Laiterie Alma) – *Alma*

Parmalat Dairy & Bakery Inc. – *Etobicoke*

Parmalat Canada Inc. – *Brampton*

Pine River Cheese & Butter Co-operative – *Ripley*

Roman Cheese Products Limited – *Niagara Falls*

Salerno Dairy Products Ltd. – *Hamilton*

Saputo inc. – *Montréal*

Saputo Foods Limited – *Tavistock*

Saputo Cheese, G.P. – *Saint-Léon*

S.C.A. de L'île-aux-Grues – *L'île-aux-Grues*

Silani Sweet Cheese Ltd. – *Schomberg*

ELECTRICAL & ELECTRONICS

ABB Inc. – *Lachine, Quebec, Saint-Laurent, Varennes*

ABB Bomem Inc. – *Québec*

Alstom Hydro Canada Inc. – *Sorel-Tracy*

Apollo Microwaves – *Pointe-Claire*

ASCO Valve Canada – *Brantford*

Best Theratronics Ltd. – *Ottawa*

C-Vision Limited – *Amherst*

Candor Industries Inc. – *Toronto*

Circuits GRM Enr. – *Ville Saint-Laurent*

Crest Circuit Inc. – *Markham*

Cogent Power Inc. – *Burlington*

DALSA Semiconducteur Inc. – *Bromont*

DRS Technologies Canada Ltd. – *Carleton Place*

Duke Electric Ltd. – *Hamilton*

Duplium Corporation – *Thornhill*

Eaton Yale Company – *Milton*

Éclairages PA-CO inc. (Les) – *Laval*

Ecopower Inc. – *London*

Electrolux Canada Corp. – *L'Assomption*

Energizer Canada Inc. – *Walkerton*

EPM Global Services Inc. – *Markham*

Firan Technology Group – *Scarborough*

General Electric Canada – *Peterborough*

General Dynamics Canada – *Ottawa, Calgary*

GGI International – *Lachine*

Hammond Manufacturing Company Limited – *Guelph*

Honeywell – *Mississauga*

IBM Canada Ltd. – *Bromont, Markham*

Ideal Industries (Canada) Corp. – *Ajax*

Master Flo Technology Inc. – *Hawkesbury, North Vancouver*

MDS Nordion Inc. – *Kanata*

Mersen Canada Toronto, Inc. – *Toronto*

Milplex Circuit (Canada) Inc. – *Scarborough*

Moloney Electric Inc. – *Sackville, Spruce Grove, Toronto*

Nexans Canada Inc. – *Fergus*

Osram Sylvania Ltd. – *Mississauga*

Osram Sylvania Ltée – *Drummondville*

Pivotal Power Inc. – *Bedford*

Powersmiths International Corp. – *Brampton*

Proto Manufacturing Ltd. – *Oldcastle*

Prysmian Systèmes et Câbles – *Saint-Jean-sur-Richelieu*

Purifics ES Inc. – *London*

Ralston Metal Products Ltd. – *Guelph*

Real Time Systems Inc. – *Toronto*

Remco Solid State Lighting – *Toronto*

Rheinmetall Canada inc. – *Saint-Jean-sur-Richelieu*

Rockwell Automation Canada Inc. – *Cambridge*

S&C Electric Canada Limited – *Toronto*

Southwire Canada – *Stouffville*

Surette Battery Company Limited – *Springhill*

Systèmes Électroniques Matrox Ltée – *Dorval*

Tyco Electronics Canada Ltd. – *Markham*

Tyco Safety Products – *Toronto*

Tyco Thermal Controls Canada Limited – *Trenton*

Ultra Electronics Maritime Systems – division of Canada
Defence Inc. – *Dartmouth*

Vansco Electronics Ltd. – *Winnipeg*

ELECTRICITY GENERATION

Ontario Power Generation – *Toronto*

Qulliq Energy Corporation – *Iqaluit*

FERTILIZER

Agrium Inc. – *Redwater*

Canadian Fertilizers Limited – *Medicine Hat*

Fafard et Frères Itée – *Saint-Bonaventure*

Mosaic Potash Belle Plaine – *Belle Plaine*

Mosaic Potash Colonsay – *Colonsay*

Mosaic Potash Esterhazy – *Esterhazy*

Profid'Or Coopérative Agricole – *Joliette*

Sherritt International Corporation – *Fort Saskatchewan*

Tourbières Berger Itée (Les) – *Baie-du-Vin, Baie Sainte-Anne,
Saint-Modeste*

FOOD & BEVERAGE

A. Harvey Et Company Limited – *St. John's*

Argentia Freezers – *Dunville*

Browning Harvey Limited – *Corner Brook, Grand Falls-Windsor,
St. John's*

Abattoir Saint-Germain inc. – *Saint-Germain-de-Grantham*

AgEnergy Co-operative Inc. – *Guelph*

Agri-Marché Inc. – *Saint-Isidore*

Alberta Processing Co. – *Calgary*

Alex Coulombe Ltée – *Québec*

Aliments Lucyporc – *Yamachiche*

Aliments Ouimet-Cordon Bleu inc. – *Anjou*

Aliments Ultima Foods inc. – *Granby*

Aliments ED Foods inc. – *Pointe-Claire*

Aliments Multibar inc. (Les) – *Montréal*

Aljane Greenhouses Ltd. – *Pitt Meadows*

Alkema Greenhouses Ltd. – *Grimsbly*

Allen's Fisheries Limited – *Benoit's Cove*

Amco Farms Inc. – *Leamington*

Andrés Wines Ltd. – *Grimsbly*

Andrew Hendriks and Sons Greenhouses – *Beamsville*

Freeman Herbs – *Beamsville*

Andrew's Greenhouses Inc. – *Ruthven*

Antigonish Abattoir Ltd. – *Antigonish*

Antonio Bajar Greenhouses Limited – *Newmarket*

Atrahan Transformation Inc. – *Yamachiche*

Balfour Greenhouses Ltd. – *Fenwick*

Bayview Greenhouses (Jordan Station) Inc. – *Brantford, Jordan Station*

Belgian Nursery Limited – *Breslau*

Beothic Fish Processors Limited – *Badgers Quay*

Bevo Farms Ltd. – *Milner*

Biscuits Leclerc inc. – *Saint-Augustin-de-Desmaures*

Black Velvet Distilling Company – *Lethbridge*

Boekestyn Greenhouses – *Jordan Station*

Bonduelle Canada Inc. – *Bedford, Sainte-Cécile-de-Granby, Saint-Césaire, Saint-Denis-sur-Richelieu, Sainte-Martine*

Bonduelle Ontario Inc. – *Ingersoll, Stratroy, Tecumseh*

Border Line Feeders Inc. – *Ceylon*

Boulangerie St.-Méthode inc.– *Adstock*

Boulart inc. – *Lachine*

Breakwater Fisheries Limited – *Cottlesville*

Bridgeview Greenhouses – *Niagara-on-the-Lake*

Brookdale Treeland Nurseries – *Niagara-on-the-Lake*

Brookside Cold Storage Ltd. – *Chilliwack*

Brookside Poultry Limited – *Bridgetown*

Browning Harvey Limited – *Corner Brook, Grand Falls, St. John's, Windsor*

Brunato Farms Limited – *Leamington*

Burnbrae Farms Limited – *Brockville, Calgary, Lyn, Mississauga, Pandora, Winnipeg*

Island Egg – *Westholme*

Maple Lyn Foods Ltd. – *Strathroy*

Oeufs Bec-O inc. (Les) – *Upton*

C & M Seeds – *Palmerston*

Café Vittoria inc. – *Sherbrooke*

Campbell Company of Canada – *Listowel, Toronto*

Canada Bread Company Ltd. – *Beauport, Calgary, Chicoutimi, Concord, Delta, Edmonton, Etobicoke, Grand Falls, Hamilton, Langley, Laval, Levis, London, Moncton, Mont-Laurier, Montréal, North Bay, Quebec, Scarborough, Saint-Côme-Linière, St. John's, Toronto, Woodstock*

Canada Malting Co. Ltd. – *Montréal*

Canadian Organic Maple Co. Ltd.– *Bath*

Cantor Bakery – *Montréal*

Canyon Creek Soup Company Ltd. – *Edmonton*

Cargill Animal Nutrition – *Camrose, Lethbridge*

Cargill Foods – *High River, Toronto*

Cargill Limited – *Sarnia, Winnipeg*

Cargill Aghorizons – *Albright, Brandon, Canora, Dauphin, Edmonton, Elm Creek, Lethbridge, Melbourne, Nicklen Siding, North Battleford, Princeton, Rosetown, Rycroft, Shetland, Staples, Strathroy, Talbotville, Vegreville, Winnipeg, Yorkton*

Cargill Meats Canada – *London*

Cargill Meat Solutions – *Guelph*

Casa Italia Ltd. – *Brampton, Port Colborne*

Cavendish Farms – *New Annan*

Cedar Beach Acres Ltd. – *Kingsville*

Cedar Field Greenhouses Ltd. – *Freelton*

Cedarline Greenhouses – *Dresden*

Central Alberta Greenhouses Ltd. – *Blackfalds*

Cericola Farms Inc. – *Bradford*

Sure Fresh Foods Inc. – *Bradford*

Champion Feed Services Ltd. – *Barrhead*

Champion Petfoods Ltd. – *Morinville*

Charles A. Heckel Holdings Ltd. o/a Johnston Greenhouses & Garden Centre – *Peterborough*

Clearwater Seafoods Limited Partnership – *Bedford*

Clearwater Lobsters Ltd. – *Arichat, Clark's Harbour*

Continental Seafoods – *Shelburne*

Grand Bank Seafoods – *Grand Bank*

Highland Fisheries – *Glace Bay*

Pierce Fisheries – *Lockeport*

St. Anthony Seafoods Limited – Partnership – *St. Anthony*

Coca-Cola Refreshments Canada – *Calgary, Toronto*

Cold Springs Farm Limited – *Thamesford*

Colonial Florists Ltd. – *St. Catharines*

Commercial Alcohols Inc. – *Brampton, Toronto*

Compagnie Allan Candy (La) – *Granby*

Conestoga Meat Packers Ltd. – *Breslau*

Connors Bros. – *Blacks Harbour*

Continental Mushroom Corporation (1989) Ltd. – *Metcalfe*

Cornies Farms Limited – *Kingsville*

CosMic Plants Inc. – *Beamsville*

County Grower Greenhouse – *Medicine Hat*

Cristofari Farms Inc. – *Leamington*

Crust Craft Inc. – *Edmonton*

Crowley Farms Norwood Ltd. – *Norwood*

Dallaire Spécialités inc. – *Rouyn-Noranda*

Dare Foods Limited – *Toronto*

Dainty Foods – Division of MRRM (Canada) Inc. – *Windsor*

Dairytown Products Ltd. – *Sussex*

Debono Greenhouses Limited – *Waterford*

Del Sol Greenhouses Inc. – *Kingsville*

Devan Greenhouses Ltd. – *Abbotsford*

Diageo Canada Inc. – *Gimli*

Domric International Ltd. – *Ruthven*

Don Chapman Farms Ltd./Lakeview Vegetable Processing Inc. – *Queensville*

Dr. Oetker Canada Ltd. – *Mississauga*

Dykstra Greenhouses – *St. Catharines*

E.D. Smith and Sons LP – *Seaforth, Winoma*

East Side Acres – *Leamington*

Ed Sobkowich Greenhouses – *Grimsby*

Elmira Poultry Inc. – *Waterloo*

Enniskillen Pepper Co. Ltd. – *Petrolia*

Erievue Acres Inc. – *Kingsville, Leamington*

Exceldor Coopérative Avicole – *Saint-Anselme*

Fancy Pokket Corporation – *Moncton*

Federated Co-operatives Limited – *Saskatoon*

Ferme Daichemin s.e.n.c. – *Saint-Damase, Saint-Pie*

Ferme La Rouquine inc. – *Chicoutimi*

Fermes Lufa inc. (Les) – *Montréal*

Fernlea Flowers Limited – *Delhi*

Fishery Products International Limited – *Port Union, St. John's, Triton*

Five Star Farms – *Ruthven*

Fleischmann's Yeast – *Calgary*

Flower Ranch (The) – *London, Strathroy*

Fresh Sprout International Ltd. – *Mississauga*

Freshwater Fisheries Society of BC – *Victoria*

Clearwater Trout Hatchery – *Clearwater*

Fraser Valley Trout Hatchery – *Abbotsford*

Kootenay Trout Hatchery – *Fort Steele*

Summerland Trout Hatchery – *Summerland*

Vancouver Island Trout Hatchery – *Duncan*

Freybe Gourmet Foods Ltd. – *Langley*

Frisia Flora Greenhouses – *Beamsville*

Frito Lay Canada – *Ancaster, Cambridge, Lethbridge, Lévis, Mississauga, New Minas, Pointe-Claire, Taber*

Froese Vegetables Inc. – *Vienna*

Furlani's Food Corporation – *Mississauga*

G.E. Barbour Inc. – *Sussex*

Ganong Bros. Limited – *St. Stephen*

General Mills Canada Corporation – *Midland, Saint-Hubert, Winnipeg*

George Sant & Sons Greenhouses – *Kleinburg*

Good Taste Food Products Inc. – *Scarborough*

Green Mountain Gardens – *Stoney Creek*

Greenfield Gardens (Niagara) Inc. – *Fenwick*

Greenwood Mushroom Farm – *Ashburn, Greenwood*

Gregory Greenhouses Inc. – *St. Catharines*

Griffith Laboratories Ltd. – *Toronto*

Gull Valley Greenhouses – *Blackfalds*

H.J. Heinz Company of Canada Ltd. – *Leamington*

Handi Foods Ltd. – *Weston*

Hanemaayer Greenhouses – *Vineland Station*

Hans Dairy Inc. – *Toronto*

Harster Greenhouses Inc. – *Dundas*

Heritage Frozen Foods Ltd. – *Edmonton*

Hillside Hothouse Ltd. – *Ruthven*

Hiram Walker & Sons Limited – *Windsor*

Homeland Grain Inc. – *Burgessville*

Houweling Nurseries Ltd. – *Delta*

HQ Fine Foods – *Edmonton*

HSF Foods Ltd. – *Centerville*

Hubberts Industries – *Brampton*

Ice River Springs Water Co. Inc. – *Feversham*

Icewater Seafoods Inc. – *Arnold's Cove*

Imperial Tobacco Canada Ltd. – *Montréal*

Ingredion Canada Inc. – *Cardinal, Etobicoke, London, Port Colborne*

Inovata Foods Corp. – *Edmonton*

Jadee Meat Products Ltd. – *Beamsville*

Jayden Floral – *Dunnville*

Jeffery's Greenhouses Plant II Limited – *Jordan Station*

Jeffery's Greenhouses Inc. – *St. Catharines*

Jem Farms – *Ruthven*

John Kouwenberg Floral Inc. o/a Foliera – *Beamsville*

Jolly Farmer Products Inc. – *Northampton*

JTI-Macdonald Corp. – *Montréal*

Kapital Produce Limited – *Leamington, Ruthven*

Kejay Farms Inc. – *Chatham*

Kern Water Systems Inc. – *Sarnia*

Kraft Canada Inc. – *Vancouver, Ville Mont-Royal,*

Kuyvenhoven Greenhouses Inc. – *Brampton, Halton Hills*

La Coop Fédérée – *Montréal, Joliette, Saint-Romuald*

Comax Coopérative Agricole – *Saint-Hyacinthe*

Société Coopérative Agricole des Bois-Francs – *Victoriaville*

La Corporation d'aliments Ronzoni du Canada – *Montréal*

La Rocca Creative Cakes – *Thornhill*

Landmark Feeds Inc. – *Abbotsford, Brossard, Claresholm, Landmark, Medicine Hat, Otterburne, Rosenort, Strathmore, Winnipeg*

Laprise Farms Ltd. – *Pain Court*

Lassonde Beverages Canada – *Toronto*

Leahy Orchards Inc. – *Franklin, Saint-Antoine Abbé*

Leclerc Foods Ltd. – *Hawkesbury*

Legal Alfalfa Products Ltd. – *Legal*

Les Aliments Dare limitée – *Sainte-Martine*

Les Cuisines Gaspésiennes Itée – *Matane*

Les Distilleries Schenley inc. – *Salaberry-de-Valleyfield*

Les Jardiniers du chef – *Blainville*

Les Oeufs d'Or – *Val d'Or*

Les Productions Horticoles Demers inc. – *Saint-Nicolas*

Les produits Zinda Canada inc. – *Candiac*

Les Serres Bergeron – *Notre-Dame-de-la-Salette, Notre-Dame-du-Laus*

Les Serres Daniel Lemieux inc. – *Saint-Rémi*

Les Serres Florinove – *Saint-Paulin*

Les serres Gilles et Francine Lahaie enr. – *Saint-Michel-de-Napierreville*

Les Serres Gola – *Mont Saint-Grégoire*

Les Serres Maedler (1989) inc. – *Nyon*

Les Serres R. Bergeron inc. – *Saint-Apollinaire*

Les Serres Riel inc. – *Saint-Rémi*

Les Serres Sagami (2000) inc. – *Chicoutimi, Sainte-Sophie*

Les Serres Nouvelles Cultures inc. – *Sainte-Sophie*

Les Serres Serge Dupuis – *Saint-Élie-de-Caxton*

Les Serres Saint-Benoît-du-Lac inc. – *Austin*

Les Viandes du Breton inc. – *Rivière-du-Loup*

Lilydale Cooperative Ltd. – *Edmonton*

Lindy's Flowers – <i>Dunnville</i>	Mother Parkers Tea & Coffee Inc. – <i>Ajax, Mississauga</i>	Otter Valley Foods Inc. – <i>Tillsonburg</i>
Link Greenhouses – <i>Bowmanville</i>	Mt. Lehman Greenhouses (1999) Ltd. – <i>Mt. Lehman</i>	Oxford Frozen Foods Limited – <i>Oxford</i>
Linwell Gardens Ltd. – <i>Beamsville</i>	Mucci Farms Ltd. – <i>Kingsville</i>	Hillaton Foods – <i>Port Williams</i>
Lucerne Foods – <i>Calgary</i>	Nadeau Poultry Farm Ltd. – <i>Saint-François-de-Madawaska</i>	P. Ravensbergen & Sons. Ltd. – <i>Smithville</i>
Lyalta Gardens – <i>Lyalta</i>	Nanticoke Greenhouses Limited – <i>Simcoe</i>	Palmerston Grain – <i>Palmerston</i>
Lyo-San inc. – <i>Lachute</i>	Nature Fresh Farms – <i>Leamington</i>	Paradise Hill Farms Inc. – <i>Nanton</i>
Madelimer inc. – <i>Grande-Entrée</i>	Nature's Finest Produce Ltd. – <i>Pain Court</i>	Paradise Island Foods Inc. – <i>Nanaimo</i>
Maidstone Bakeries Co. – <i>Brantford</i>	Nestlé Canada Inc. – <i>Chesterville, Edmonton, North York, Rexdale, Scarborough, Sherbrooke, Toronto, Trenton</i>	Parrish & Heimbecker Limited – <i>Glencoe</i>
Maison des Futailles – <i>Saint-Hyacinthe</i>	Nestlé Professional – <i>Trenton</i>	Parkway Gardens Ltd. – <i>London</i>
Malteurop Canada Ltd. – <i>Winnipeg</i>	Nestlé Purina PetCare – <i>Mississauga</i>	Pelee Hydroponics – <i>Leamington</i>
Maple Leaf Consumer Foods Inc. – <i>Hamilton, Laval, Lethbridge, Mississauga, North Battleford, Weston, Winnipeg</i>	Nestlé Waters Canada – <i>Guelph</i>	Pepe's Mexican Foods Inc. – <i>Etobicoke</i>
Maple Leaf Foods Inc. – <i>Burlington, Kitchener</i>	New West Milling – <i>Bassano</i>	Peppertree Greenhouses Ltd. – <i>Tupperville</i>
Maple Leaf Fresh Foods – <i>Brandon, Burlington, Charlottetown, Lethbridge, Stoney Creek, New Hamburg, Toronto, Wataskiwin</i>	Nicol Florist Ltd. – <i>Brantford</i>	Pepsi-Cola Canada Beverages – <i>Mississauga</i>
Maple Lodge Farms Ltd. – <i>Norval</i>	Noël Wilson & Fils S.N.C. – <i>Saint-Rémi</i>	PepsiCo Foods Canada Inc. – <i>Peterborough, Trenton</i>
Marcel Depratto inc. – <i>Saint-Louis-de-Richelieu</i>	Norfolk Fruit Growers' Association (The) – <i>Simcoe</i>	Petite Bretonne inc. (La) – <i>Blainville</i>
Marish Greenhouses – <i>Dunnville</i>	Norfolk Greenhouses Inc. – <i>Courtland</i>	Planet Bean Coffee Inc. – <i>Guelph</i>
Mars Canada Inc. – <i>Bolton, Newmarket</i>	Northern Alberta Processing Co. – <i>Edmonton</i>	Poinsettia Plantation (The) – <i>Bothwell</i>
Marsan Foods Limited – <i>Toronto</i>	Northumberland Co-operative Limited – <i>Miramichi</i>	Prairie Mushrooms (1992) Ltd. – <i>Sherwood Park</i>
Mastron Enterprises Ltd. – <i>Kingsville</i>	Nunavut Development Corporation – <i>Rankin Inlet</i>	Prism Farms Ltd. – <i>Leamington</i>
Mastronardi Estate Winery – <i>Grand Falls, Kingsville</i>	Kitikmeot Foods Ltd. – <i>Cambridge Bay</i>	Production Serres Yargeau inc. – <i>Sherbrooke</i>
McCain Foods (Canada) – <i>Borden-Carleton, Carberry, Florenceville, Grand Falls, Mississauga, Portage la Prairie, Toronto</i>	Kivalliq Arctic Foods Ltd. – <i>Rankin Inlet</i>	Produits Alimentaires Viau inc. (Les) – <i>Montréal-Nord</i>
Charcuterie la Tour Eiffel – Division of McCain Foods Limited – <i>Blainville, Québec</i>	Pangnirtung Fisheries Ltd. – <i>Pangnirtung</i>	Pyramid Farms Ltd. – <i>Leamington</i>
Wong Wing – Division of McCain Foods Limited – <i>Montréal</i>	Oakrun Farm Bakery Ltd. – <i>Ancaster</i>	Quark Farms Ltd. – <i>Mossbank</i>
Meyers Fruit Farms and Greenhouses – <i>Niagara-on-the-Lake</i>	Ocean Nutrition Canada Ltd. – <i>Dartmouth</i>	Redpath Sugar Ltd. – <i>Toronto</i>
Minor Bros. Farm Supply Ltd. – <i>Dunnville</i>	Okanagan North Growers Cooperative – <i>Winfield</i>	Regal Greenhouses Inc. – <i>Virgil</i>
Mitchell's Gourmet Foods Inc. – <i>Saskatoon</i>	Old Dutch Foods Inc. – <i>Summerside, Winnipeg</i>	Reif Estate Winery Inc. – <i>Niagara-on-the-Lake</i>
Mondelez Canada Inc. – <i>Chambly</i>	Olymel S.E.C. / LP – <i>Red Deer</i>	Reinhart Foods Limited – <i>Stayner</i>
Biscuiterie Montréal – <i>Montréal</i>	Aliments Prince S.E.C – <i>Princeville, Cornwall</i>	Rekker Gardens Ltd. – <i>Bowmanville</i>
Cadbury Plant – <i>Toronto</i>	Machinerie Olymel (1998) inc. – <i>Saint-Valérien-de-Milton</i>	Rich Products of Canada Limited – <i>Fort Erie</i>
Lakeshore Bakery – <i>Toronto</i>	Olymel S.E.C. – <i>Anjou, Berthierville, Brampton, Iberville, Saint-Hyacinthe, Saint-Damase, Trois-Rivières, Saint-Jean-sur-Richelieu</i>	Rol-land Farms Limited – <i>Campbellville</i>
Peek Frean Bakery – <i>East York</i>	Unidindon inc. – <i>Saint-Jean-Baptiste</i>	Rootham's Gourmet Preserves Ltd. – <i>Guelph</i>
Montréal Pita inc. – <i>Montréal</i>	Orangeline Farms Limited – <i>Leamington</i>	Rosa Flora Limited – <i>Dunnville</i>
	Orchard Park Growers Ltd. – <i>St. Catharines</i>	Rothmans, Benson & Hedges Inc. – <i>North York</i>
		Rothsay – <i>Dundas, Moorefield, Québec, Saint-Boniface, Truro</i>
		Rothsay, A member of Maple Leaf Foods Inc. – <i>Winnipeg</i>

Round Hill Poultry Limited – *Roundhill*
 Sakai Spice (Canada) Corporation – *Lethbridge*
 Les Salaisons Desco inc. – *Boisbriand*
 Sanimax ACI inc. – *Lévis*
 Sanimax Lom inc. – *Montréal*
 Scotia Garden Seafood Inc. – *Yarmouth*
 Scotian Halibut Limited – *Clarks Harbour, Lower Woods Harbour*
 Schenck Farms Et Greenhouses Co. Limited – *St. Catharines*
 Schneider Foods – *Mississauga, Port Perry, St. Marys, Toronto*
 Schuurman Greenhouses Ltd. – *Branchton*
 Scotsburn Co-Operatives Services Ltd. – *Truro*
 Scott Street Greenhouses Ltd. – *St. Davids*
 Select Food Products Limited – *Toronto*
 Sepp's Gourmet Foods Ltd. – *Delta, Richmond Hill*
 Serres du Marais, inc. (Les) – *Sainte-Martine*
 Serres Sylvain Cléroux (Québec) inc. (Les) – *Laval*
 Shah Trading Company Limited – *Scarborough, Port Williams, Saint-Félix-de-Valois, Saint-Hugues, Saint-Hyacinthe, St. Marys, Saint-Romuald, Stevensville, Summerside, Sussex, Truro, Weston, Yamachiche*
 Sifto Canada Corporation – *Goderich Evaporator Plant – Goderich*
 Simplot Canada (II) Limited – *Portage La Prairie*
 Sofina Foods Inc. – *London*
 Sons Bakery – *Brampton*
 Southshore Greenhouses Inc. – *Kingsville*
 Sovereign Farms – *Waterford*
 Smucker Food of Canada Co. – *Sherbrooke*
 Spring Valley Gardens Niagara Inc. – *St. Catharines*
 St. David's Hydroponics Ltd. – *Niagara-on-the-Lake, Beamsville*
 Stag's Hollow Winery and Vineyard Ltd. – *Okanagan Falls*
 Stratus Vineyards Limited – *Niagara-on-the-Lake*
 Streef Produce Ltd. – *Princeton*
 Sucre Lantic Limitée – *Montréal*
 Sun Harvest Greenhouses – *Glenburnie*
 Suns Bakery – *Brampton*

Sunshine Express Garden Centre Ltd. – *Niagara-on-the-Lake*
 Suntech Greenhouses Ltd. – *Manotick*
 Sunny Crunch Foods Ltd. – *Markham*
 Sunrise Bakery Ltd. – *Edmonton*
 Sunrise Farms Limited – *Kingsville, Leamington*
 Sunrise Greenhouses Ltd. – *Vineland Station*
 Sunrite Greenhouses Ltd. – *Kingsville, Wheatley*
 Sun-Rype Products Ltd. – *Kelowna*
 SunSelect Produce (Delta) Inc. – *Aldergrove, Delta*
 Sunterra Meats Ltd. – *Trochu*
 Sunwold Farms Ltd. – *Acme*
 Largie Farm – *Dutton*
 Peterborough Farms – *Indian River*
 Sysco Canada, Inc. – *Acheson, Calgary, Etobicoke, Kelowna, Kingston, Lakeside, Langford, Milton, Mississauga, Moncton, Montréal, Mount Pearl, Peterborough, Port Coquitlam, Regina, Thunder Bay, Toronto, Vancouver, Winnipeg*
 Target Marine Products Ltd. – *Sechelt*
 Thomson Meats Ltd. – *Melfort*
 Tidal Organics Inc. – *Pubnico*
 Transfeeder Inc. – *Olds*
 Trevisanutto's Greenhouses – *Thunder Bay*
 Trophy Foods Inc. – *Calgary*
 Unifeed Et Premix – *Lethbridge*
 Unilever Canada – *Brampton, Rexdale*
 United Floral Greenhouse – *Fenwick*
 Valleyview Gardens – *Markham, Scarborough*
 Van Geest Bros. Limited – *Grimbsy, St. Catharines*
 Van Houtte S.E.C. – *Montréal*
 Van Noort Florists – *Niagara-on-the-Lake*
 Vandermeer Greenhouses Ltd. – *Niagara-on-the-Lake*
 Vandermeer Nursery Ltd. – *Ajax*
 Van Vliet Greenhouses Inc. – *Fenwick*
 VanZanten Greenhouses – *Fenwick*
 Veri Hydroponics Inc. – *Exeter*

Vermeer's Greenhouses – *Welland*
 Versacold Corporation – *Vancouver*
 Vincor International Inc. – *Niagara Falls*
 Virgil Greenhouses Ltd. – *Niagara-on-the-Lake*
 Viterra Inc. o/a SWP – *Thunder Bay Terminal Elevator Viterra "A" – Viterra "B" – Thunder Bay*
 Viterra Food Processing – *Barrhead*
 Vitoeuf inc. – *Saint-Hyacinthe*
 Voogt Greenhouses Inc. – *Niagara-on-the-Lake*
 Voortman Cookies Ltd. – *Burlington*
 Young Street Gardens Ltd. – *Smithville*
 W.J. O'Neil Et Sons Ltd. – *Maidstone*
 W.T. Lynch Foods Limited – *Toronto*
 W. Martens Greenhouses Inc. – *Leamington*
 Waldan Gardens – *Wainfleet*
 Waterloo Flowers Limited – *Breslau*
 Weesjes Greenhouses Ltd. – *St. Thomas*
 Westland Greenhouses (Jordan) Ltd. – *Jordan Station*
 Weston Foods Inc. – *Etobicoke*
 Weston Bakeries Limited – *Kingston, Kitchener, Orillia, Ottawa, Sudbury, Toronto, Winnipeg*
 Bronson Bakery Limited – *Ottawa*
 Crissa Bakery – *Barrie*
 Golden Mill Bakery – *Hamilton*
 Maplehurst Bakeries Inc. – *Brampton*
 Pepe's Mexican Foods Inc. – *Etobicoke*
 Ready Bake Foods Inc. – *Mississauga*
 Weston Fruit Cake Co. – *Cobourg*
 Willow Spring Hydroponics Farms Ltd. – *Bothwell*
 Willy Haeck et Fils Inc. – *Saint-Rémi*
 Willy's Greenhouses Ltd. – *Niagara-on-the-Lake*
 Windset Greenhouses Ltd. – *Delta*
 Witzke's Greenhouses Ltd. – *Courtice*
 Woodhill Greenhouses Inc. – *Lynden*

FOREST PRODUCTS

AbitibiBowater Inc. – o/a Rolute Forest Products – *Alma, Amos, Baie-Comeau, Brooklyn, Bridgewater, Clermont, Fort Frances, Girardville, Grand Falls – Windsor, Grand-Mère, Iroquois Falls, Jonquière, La Doré, Maniwaki, Mistassini, Montréal, Price, Saint-Félicien, Saint-Raymond, Thorold*

Abzac Canada Inc. – *Drummondville, Trois-Rivières*

Alberta Newsprint Company – *Whitecourt*

Alberta-Pacific Forest Industries Inc. – *Boyle*

Atlantic Packaging Products Ltd. – *Agincourt, Brampton, Don Mills, Ingersoll, Mississauga, Scarborough*

AV Cell Inc. – *Atholville*

Barco Materials Handling Limited – *Burns Lake*

Baytree Logging Ltd. – *Baytree*

Bois-Francis inc. – *Saint-Phillippe-de-Néri*

British Confectionery Company Limited – *Mount Pearl*

Building Products of Canada Corp. – *Edmonton, Pont Rouge*

Cariboo Pulp and Paper Company Limited – *Quesnel*

Caraustar Industrial & Consumer Products Group – *Kingston*

Canfor Corporation – *Vancouver*

Canadian Forest Products – *Bear Lake*

Canfor Pulp Limited Partnership – *Prince George*

Intercontinental – *Prince George*

Northwood – *Prince George*

Prince George – *Prince George*

Cascades Boxboard Group – *East Angus, Jonquière, Montréal, Mississauga, Toronto*

Cascades Conversion Inc. – *Kingsey Falls*

Cascades East Angus – *East Angus*

Cascades Enviropac – *Berthierville, Saint-Césaire*

Cascades Fine Paper Group – *Breakeyville, Saint-Jérôme*

Converting Center – *Saint-Jérôme*

Cascades Inc. – *Kingsey Falls*

Cascades Lupel – *Cap-de-la-Madeleine*

Cascades Multi-Pro – *Drummondville*

Cascades Speciality Products Group – *Kingsey Falls*

Cascades Tissue Group – *Agincourt, Candiac, Kingsey Falls, Lachute*

Catalyst paper Corporation – *Crofton Division – Crofton*

Cie Matériaux de Construction BP Canada – *Joliette, Lasalle*

CDEX usine de sciage – *Val d'Or*

Cherry Forest Products – *Division of Barco Handling – Pushlinch*

Coldstream Lumber – *Vernon*

Columbia Forest Products – *Saint-Casimir*

Commonwealth Plywood Co. Ltd. – *Lachute, Low, Mont-Laurier, Princeville, Rapides-des-Joachims, Sainte-Thérèse, Shawinigan*

Corporation Internationale Masonite Inc. (La) – *Lac Mégantic*

Dava Inc. – *Tring Junction*

Daishowa-Marubeni International Ltd. – *Peace River*

Domtar Inc. – *Dryden, Espanola, Kamloops, Montréal, Terrebonne, Windsor*

Easy Pack Corporation – *Markham*

Emballages Festival Inc. – *Montréal*

Emballages Mitchel-Lincoln Ltée – *Drummondville, St-Laurent*

Emterra Environmental – *North Vancouver, Surrey*

Entreprises Interco inc. – *Saint-Germain-de-Grantham*

Erie Flooring and Wood Products – *West Lorne*

F.F. Soucy Inc. – *Rivière-du-Loup*

Finewood Flooring & Lumber Limited – *Baddeck*

Fiready Inc. – *Clair*

Flakeboard Company Limited – *St. Stephen*

Fortress Cellulose Spécialisée – *Thurso*

George Guenzler & Sons Inc. – *Kitchener*

Georgia-Pacific Canada, Inc. – *Thorold*

Granules L.G. inc. – *Saint-Félicien*

Greif Bros. Canada Inc – *LaSalle, Maple Grove*

Groupe Lebel (2004) inc. – *Cacouna, Rivière-du-Loup*

Bois Traitel Itée – *Saint-Joseph de Kamouraska*

Groupe Savoie inc. – *Saint-Quentin*

Harring Doors Ltd. – *London*

Industries Maibec inc. – *Saint-Pamphile*

Industries Ling Inc. – *Warwick*

Hinton Pulp – *Hinton*

Interforest Ltd. – *Durham*

Interlake Papers – *St. Catharines*

Irving Forest Services Limited – *Saint John*

Irving Papers Inc. – *Saint John*

Irving Tissue Corporation – *Dieppe*

Irving Tissue Inc. – *Dieppe*

J.D. Irving, Limited – *Saint John, Deersdale*

J.H. Huscroft Limited – *Creston*

K&C Silviculture Ltd. – *Red Deer, Oliver*

Kord Products Inc. – *Brampton*

Kruger Inc. – *Montréal*

Corner Brooke Pulp and Paper Limited – *Corner Brook*

Division Bromptonville – *Sherbrooke*

Division carton – *Montréal*

Division de papiers journal – *Sherbrooke*

Division des emballages – *Brampton, Lasalle*

Gérard Crête & Fils inc. – *Saint-Rock-de-Makina, Saint-Séverin-de-Prouxville*

Kruger Products Ltd. – *Calgary, Gatineau*

Kruger Wayagamack Inc. – *Île-de-la-Potherie*

Longlac Wood Industries Inc. – *Mississauga*

Longue-Rive Planing and Drying Mills – *Longue-Rive*

Manufacturing Region East – *Crabtree, Sherbrooke*

Manufacturing Region West – *New Westminster*

Produits Kruger Limitée – *Lennoxville*

Scierie Manic, division de Kruger inc. – *Ragueneau*

Scierie Parent inc., division de Kruger inc. – *Parent*

Lake Utopia Paper – *Utopia*

Les Cartons Northrich Inc. – *Granby*

Loger Toys Ltd. – *Brantford*

Louisiana-Pacific Canada Ltd. – *Bois-Franc, Dawson Creek, East River, Golden, Swan River*

Madawaska Doors Inc. – *Bolton*

Marcel Lauzon inc. – *East Hereford*

Maritime Paper Products Limited – *Dartmouth*

Marwood Ltd. – *Tracyville*

Master Packaging Inc. – *Borden-Carleton, Dieppe*

Matt'rs Inc. – *Wallaceburg*

MDF La Baie inc. – *La Baie*

Millar Western Forest Products Ltd. – *Whitecourt Pulp Division – Whitecourt*

Muskoka Timber Mills Limited – *Bracebridge*

Neucel Specialty Cellulose – *Port Alice*

Norampac Inc. – *Burnaby, Cabano, Calgary, Drummondville, Moncton, Saint-Bruno, St. Marys, Vaughan*

Norampac Lithotech – *Scarborough*

Norampac Inc. OCD – *Mississauga*

Norampac Inc. Viau – *Montréal*

Norampac – Newfoundland, a division of Cascades Canada Inc. – *St. John's*

Norbord Inc. – *Plaster Rock*

Northern Pulp Nova Scotia Corporation – *Abercrombie*

Orchard International Inc. – *Mississauga*

Palliser Lumber Sales Ltd. – *Crossfield*

Papiers Kingsey Falls, une division de Cascades Canada Inc. – *Kingsey Falls*

Paper Source Converting Mill Corp. – *Granby*

Papiers White Birch, division Stadacona SEC – *Québec*

Perfecta Plywood Itée – *Saint-Hyacinthe*

Planchers Mercier inc. – *Montmagny*

Peterboro Cardboards Limited – *Peterborough*

Pope Et Talbot Ltd. – *Nanaimo*

Poutres et Poteaux Val-Morin inc. – *Sainte-Agathe-des-Monts*

Princeton Co-Generation Corporation – *Princeton*

Produits Kruger Limitée – *Crabtree, Gatineau, Lennoxville*

Rip-O-Bec inc. – *Saint-Apollinaire*

Riverside Forest Products Limited – *Armstrong*

Roland Boulanger Et Cie Itée. – *Warwick*

Rosmar Litho Inc. – *Baie D'Urfé*

Sac Drummond Inc. – *Saint-Germain-de-Grantham*

Scierie Girard inc. – *Shipshaw*

Sonoco Canada Corporation – *Trois-Rivières*

Spécialiste du Bardeau de Cèdre inc. (Le) – *Saint-Prosper*

Tembec Inc. – *Témiscaming*

Tembec Industries Inc. – *Chapleau*

Tembec Paper Group – *Spruce Falls*

Terrace Bay Pulp – *Terrace Bay*

Tolko Industries Ltd. – *Armstrong, Heffley Creek, High Level, High Prairie, Kamloops, Kelowna, Lumby, Meadow, Lake Merritt, Quesnel, Slave Lake, The Pas, Vernon, Williams Lake*

Twin River Paper Company Inc. – *Edmunston*

West Fraser Timber Co. Ltd. – *Vancouver*

Alberta Plywood Ltd. – *Slave Lake*

Blue Ridge Lumber – *Whitecourt*

Chetwynd Forest Industries – *Chetwynd*

Eurocan Pulp and Paper Co. – *Kitimat*

Fraser Lake Sawmills – *Fraser Lake*

Hinton Pulp – *Hinton*

Hinton Wood Products – *Hinton*

Houston Forest Products – *Houston*

Northstar Lumber – *Quesnel*

100 Mile Lumber – *100 Mile House*

Pacific Inland Resources – *Smithers*

Quesnel Plywood – *Quesnel*

Quesnel River Pulp Co. – *Quesnel*

Quesnel Sawmill – *Quesnel*

Ranger Board – *Whitecourt*

Slave Lake Pulp Corporation – *Slave Lake*

Sundre Forest Products Inc. – *Sundre*

West Fraser LVL – *Rocky Mountain House*

West Fraser Mills – Chasm Division – *70 Mile House*

West Fraser Mills Ltd. – *Quesnel*

West Fraser Timber – *Williams Lake*

WestPine MDF – *Quesnel*

Williams Lake Plywood – *Williams Lake*

Zellstoff Celgar Limited Partnership – *Castlegar*

FOUNDRY

Ancast Industries Ltd. – *Winnipeg*

Bibby-Ste-Croix, Division Tuyauterie Canada Limitée – *Sainte-Croix*

Breyer Casting Technologies Inc. – *Brampton*

Canadian Specialty Castings Incorporated – *Niagara Falls*

Century Pacific Foundry Ltd. – *Surrey*

Deloro Stellite Inc. – *Belleville*

Elkem Métal Canada inc. – *Chicoutimi*

ESCO Limited – *Port Coquitlam, Port Hope*

Grenville Castings Limited – *Merrickville, Perth, Smiths Falls*

J Et K Die Casting Ltd. – *Scarborough*

Johnson Matthey Limited – *Brampton*

M.A. Steel Foundry Ltd. – *Calgary*

Magotteaux Itée – *Magog*

Mueller Canada – *Saint-Jérôme*

Norcast Castings Company Ltd. – *Mont-Joli*

Peninsula Alloy Inc. – *Fort Erie, Stevensville*

Royal Canadian Mint – *Winnipeg*

Supreme Tooling Group – *Toronto*

Victaulic Custom Casting – *Richmond Hill*

Wabi Iron Et Steel Corporation – *New Liskeard*

Wabtec Foundry – Div. of Wabtec Canada Inc. – *Wallaceburg*

Xstrata Copper Canada – CCR – *Horne – Rouyn-Noranda*

Xstrata Zinc Canada

Brunswick Smelter – *Belledune*

Fonderie générale du Canada – *Lachine*

GENERAL MANUFACTURING

3M Canada Company – *Brockville, Etobicoke, London, Morden, Perth*

A1 Label Inc. – *Toronto*

ABCO Industries Limited – *Lunenburg*

Aberfoyle Metal Treathers Ltd. – *Guelph*

Acadian Platers Company Limited – *Etobicoke*

Accuride Canada Inc. – *London*

Acier Les fab international inc. – *Terrebonne*

Active Burgess Mould & Design Ltd. – *Windsor*

Acuity Innovative Solutions – *Richmond Hill*

Advanced Ag and Industrial Ltd. – *Biggar*

AeroTek Manufacturing Limited – *Whitby*

AirBoss Produits d'Ingénierie inc. – *Acton Vale*

AirBoss Rubber Compounding – *Kitchener*

Airex Industries inc. – *Drummondville, Montréal, Mississauga*

Airia Brands Inc. – *London*

Airtek Systems Inc. – *Edmonton*

Airworks Compressors Corp. – *Edmonton*

Albany International Canada Inc. – *Perth*

Albarrie Canada Limited – *Barrie*

Alfield Industries, Division of Rea International Inc. – *Woodbridge*

Aluminum Surface Technologies – *Burlington*

American Color Graphics Inc. – *Stevensville*

American Et Efird Canada Inc. – *Montréal*

Anchor Lamina Inc. – *Reliance Fabrications – Tilbury*

Anchor Lamina Inc. – *Cambridge, Mississauga, Windsor*

Annabel Canada inc. – *Drummondville*

A.P. Plasman Inc. – *Tecumseh, Tilbury, Windsor*

APC Coatings Limited – *Dartmouth*

A.R. Thomson Group – *Edmonton*

Armtec Limited Partnership – *Guelph, Woodstock*

Art Design International inc. – *Saint-Hubert*

Artopex Plus inc. – *Granby, Laval*

Arva Industries Inc. – *St. Thomas*

Associated Tube Industries – *Markham*

Atlantic Packaging Products Ltd. – *Scarborough*

Atlas Industries Ltd. – *Saskatoon*

Automatic Coating Limited – *Scarborough*

AYK Socks Inc. – *Saint-Léonard*

Babcock Et Wilcox Canada Ltd. – *Cambridge*

Baron Metal Industries Inc. – *Woodbridge*

Barrday Inc. – *Cambridge*

BASF The Chemical Company – *Georgetown*

Batteries Power (Iberville) Itée – *Saint-Jean-sur-Richelieu*

Baxter Corporation – *Alliston*

B.C. Instruments – *Barrie, Schomberg*

Beaulieu Canada inc. – *Acton Vale*

Belvedere International Inc. – *Mississauga*

Bennett Fleet (Québec) inc. – *Ville-Vanier*

Bentofix Technologies Inc. – *Barrie*

Bernard Breton inc. – *Saint-Narcisse-de-Beaurivage*

Bérou International inc. – *Anjou*

Best Color Press Limited – *Vancouver*

Blount Canada Ltd. – *Guelph*

Borden Cold Storage Limited – *Kitchener*

Bosch Rexroth Canada Corp. – *Welland*

Bourgault Industries Ltd. – *St. Brieux*

Braam's Custom Cabinets – *St. Thomas*

Brampton Engineering Inc. – *Brampton*

Brant Corrosion Control Inc. – *Brantford*

Brawo Brassworking Ltd. – *Burk's Falls*

BRC Business Enterprises Ltd. – *Georgetown*

Brenntag Canada Inc. – *Mississauga*

Bridgeline Limited – *Deseronto*

Broan-NuTone Canada Inc. – *Mississauga*

Builders Furniture Ltd. – *Winnipeg*

Burnco Manufacturing Inc. – *Concord*

Butcher Engineering Enterprises Limited (The) – *Brampton*

Byers Bush Inc. – *Mississauga*

CAE Inc. – *Saint-Laurent*

Calko (Canada) Inc. – *Montréal, Ville d'Anjou*

Cambridge Towel Corporation (The) – *Cambridge*

Camfil Farr (Canada) Inc. – *Laval*

Cam-Slide – *Newmarket*

Canada Mold Technology – *Woodstock*

Cancoil Thermal Corporation – *Kingston*

Cambridge Brass Inc. – *Cambridge*

Cambridge Heat Treating Inc. – *Cambridge*

Canada's Best Store Fixtures Inc. – *Woodbridge*

Canada Colors and Chemicals Limited – *Plastics Division – Colborne*

Canadatum Moulds Ltd. – *Etobicoke*

Canadian Curtis Refrigeration Inc. – *Stoney Creek*

Canadian General-Tower Limited – *Cambridge*

Cannon Knitting Mills Limited – *Hamilton*

Canwood Furniture Inc. – *Penticton*

Cansew Inc. – *Montréal*

Carrière Bernier Limitée – *Saint-Jean-sur-Richelieu*

Carrière Union Ltée – *Québec*

Casavant Frères s.e.c. – *Saint-Hyacinthe*

Cascade Canada Ltd. – *Guelph*

CCL Container Aerosol Division – *Penetanguishene*

Cello Products Inc. – *Cambridge*

Centerline (Windsor) Limited – *Windsor*

Centre du Comptoir Sag-Lac inc. – *Alma*

CertainTeed Gypsum Canada Inc – *Mississauga*

Chandelles Tradition Itée – *Laval*

ChromeShield Co. – *Windsor*

Climatizer Insulation Inc. – *Etobicoke*

CMP Advanced Mechanical Solutions (Ottawa) Ltd. – *Ottawa*

CMP Solutions Mécaniques Avancée Ltée – *Châteauguay*

CNH Canada Ltd. – *Saskatoon*

Collingwood Fabrics Inc. – *Collingwood*

Colonial Tool Group Inc. – *Windsor*

Colorama Dyeing and Finishing Inc. – *Hawkesbury*

Colourific Coatings Ltd. – *Mississauga*

Columbia Industries Limited – *Sparwood*

Comp-Tech Mfg. Inc. – *North York*

Compact Mould Ltd. – *Woodbridge*

Compagnies du Groupe DATA (Les) – *Granby*

Compagnie Henry Canada inc. – *Lachine*

Conference Cup Ltd. – *London*

Consoltex Inc. – *Cowansville, Montréal*

Control Skateboards Inc. – *Saint-Nicolas*

Cooper-Standard Automotive – *Stratford*

Corporation Emballages Flexible Sonoco Canada – *Terrebonne*

Cosella-Dorcen Products Inc. – *Beamsville*

Créations Verbois inc. – *Rivière-du-Loup*

Cristini North America Inc. – *Lachute*

Crown Metal Packaging Canada LP – *Calgary, Concord, Ville Saint-Laurent*

CUMI Canada Inc. – *Summerside*

D. Repol Enterprises Inc. – *Whitby*

Data Group of Companies (The) – *Brampton, Brockville, Drummondville*

Davis Wire Industries Ltd. – *Delta*

DCR Holdings Inc. – *Stoney Creek*

Délavage National inc. – *Asbestos*

Delta Elevator Co. Ltd. – *Kitchener*

Dentex – *Montréal*

Derma Sciences Canada Inc. – *Scarborough*

Descor Industries Inc. – *Markham*

DEW Engineering and Development Limited – *Miramichi, Ottawa*

Dipaolo CNC Retrofit Ltd. – *Mississauga*

Display Merchandising Group Inc. – *Scarborough*

Di-tech inc. – *Montréal*

Dixie Electric Ltd. – *Concord*

DK-Spec inc. – *Saint-Nicolas*

Dorothea Knitting Mills Limited – *Toronto*

Dortec Industries – *Newmarket*

Doubletex inc. – *Montréal*

Durable Release Coaters Limited – *Brampton*

Dura-Chrome Limited – *Wallaceburg*

Durham Furniture Inc. – *Durham*

Dutch Industries Ltd. – *Pilot Butte, Regina*

Eastern Fluid Power Inc. – *Kingston*

EHC Global – *Oshawa*

Emballages Alcan Lachine – *Lachine*

Emerson Process Management – *Edmonton*

Engauge Controls Inc. – *Lakeshore*

Enstel Manufacturing Inc. – *Concord*

Entreprises Dauphinais inc. (Les) – *Sherbrooke*

Envirogard Products Ltd. – *Richmond Hill*

Ezeflow Inc. – *Granby*

Fabrication S Houle inc. – *Saint-Germain-de-Grantham*

Farnel Packaging Limited – *Dartmouth*

Fasteners Et Fittings Inc. – *Milton*

FBT Inc. – *St. Catharines*

Fileco Inc. – Division of Teknion Furniture Systems – *Concord*

Flexstar Packaging Inc. – *Richmond*

Floform Industries Ltd. – *Edmonton, Winnipeg*

Custom Countertops Ltd. – *Regina, Saskatoon*

Fournitures Funéraires Victoriaville inc. – *Victoriaville*

Fuller Industrial Corporation – *Lively*

Futuretek-Bathurst Tool Inc. – *Oakville*

Garaga Inc. – *Barrie*

Garant – *Saint-François*

Garland Commercial Ranges Limited – *Mississauga*

Garlock du Canada Ltée – *Sherbrooke*

Garrtech Inc – *Stoney Creek*

General Dynamics Produits de défense et Systèmes tactiques-Canada Inc. – *Saint-Augustin-de-Desmaures*

Genfoot Inc. – *Montréal*

George A. Wright Et Sons Ltd. – *Kingston*

Georgia-Pacific Canada, Inc. – *Thorold*

Geo. Sheard Fabrics (1994) Ltd. – *Coaticook*

Global Casegoods Inc. – *Concord*

Global Wood Concepts Ltd. – *North York*

Gonderflex International inc. – *Longueuil*

Goodyear Canada Inc. – *Napanee*

Gosco Valves Inc. – *Oakville*

Gregory Signs Et Engraving Ltd. – *Vaughan*

Groupe Altech 2003 inc. – *Pointe-Claire*

Groupe Lacasse inc. – *Saint-Pie*

Gunnar Manufacturing Inc. – *Calgary*

H. Beck Machinery Ltd. – *Windsor*

Hafner Inc. – *Granby*

Halink RSB Inc. – *Cambridge*

Hamilton Kent – *Toronto*

Harber Manufacturing Limited – *Fort Erie*

Hartmann Canada Inc. – *Brantford*

Hendrickson Spring – *Stratford*

Henninger's Diesel Limited – *Sudbury*

Heritage Memorials Limited – *Windsor*

Hercules SLR Inc. – *Dartmouth*

Hilroy, A Division of MeadWestvaCo Canada LP – *Toronto*

Hitachi Canadian Industries Ltd. – *Saskatoon*

Horst Welding Ltd. – *Listowel*

Hurteau Et Associés inc. (Fruits Et Passion) – *Candiac*

Hydroform Solutions – *Brampton*

Iafate Machine Works Limited – *Thorold*

Infasco – *Marieville*

IKO Industries Ltd. – *Brampton, Hawkesbury*

IMAX Corporation – *Mississauga*

Imprimerie Interweb inc. – *Boucherville*

Indal Technologies Inc. – *Mississauga*

Independent Mirror Industries Inc. – *Toronto*

Industrie Bodco inc. – *Saint-François-Xavier*

Industries Graphiques Cameo Crafts Limitée – *Montréal*

Integrated Mechanical Services Inc. – *Stratford*

Interface Flooring Systems (Canada) Inc. – *Belleville*

J.A. Wilson Display Ltd. – *Mississauga*

JAB Produits Récréatifs inc. – *Batiscan*

Jay Ge Electroplating Ltd. – *Laval*

Jervis B. Webb Company of Canada Ltd. – *Hamilton*

Jobal Industries Ltd. – *Brampton*

John Gavel Custom Manufacturing Ltd. – *Emo*

Johnsonite Canada Inc. – *Waterloo*

Jones Packaging Inc. – *London*

JTL Integrated Machine Ltd. – *Port Colborne*

Juliana Manufacturing Ltd. – *Winnipeg*

KelCoatings Limited – *London*

KI Pembroke LP – *Pembroke*

KIK Custom Products – *Etobicoke*

Franke Kindred Canada Limited – *Midland*

Kobay Tool & Stampings Inc. – *Scarborough*

Korex Canada – *Toronto*

Korex Don Valley ULC – *Toronto*

Kwality Labels Inc. – *Richmond Hill*

KWH Pipe (Canada) Ltd. – *Huntsville, Saskatoon*

Kuntz Electroplating Inc. – *Kitchener*

La Compagnie Américaine de Fer et Métaux inc. – *Montréal*

Lac-Mac Limited – *London*

Lainages Victor Itée – *Saint-Victor*

Lanart Rug inc. – *Saint-Jean-sur-Richelieu*

Lantz Truck Body Ltd. – *Port Williams*

Larsen & D'Amico Manufacturing Ltd. – *Edmonton*

Laser Impressions Inc. – *Saskatoon*

Laval Tool & Mould Ltd. – *Maidstone*

Lee Valley Tools Ltd. – *Carp, Ottawa*

Les Distributions Option Kit inc. – *Québec*

Les industries Peintek inc. – *Chesterville*

Les Productions Ranger (1988) inc. – *Granby*

Les Produits Belt-Tech inc. – *Granby*

Les Technologies Fibrox Itée – *Thetford Mines*

Les Tricots Confort Absolu inc. – *Montréal*

Linamar Corporation – *Guelph*

Cemtol Mfg. – division of Linamar Corporation – *Guelph*

Skyjack Inc. – *Guelph*

Lincoln Electric Company of Canada LP – *Toronto*

Lincoln Fabrics Ltd. – *St. Catharines*

L'Oréal Canada inc. – *Ville Saint-Laurent*

Lowe-Martin Group (The) – *Mississauga, Ottawa,*

Ludlow Technical Products Canada, Ltd. – *Gananoque*

Luzenac Incorporated – *Timmins*

Lyn-Jay Holdings Ltd. o/a Brannon Steel – *Brampton*

Macleam Engineering & Marketing Co. Limited – *Collingwood*

Magnum Signs Inc. – *Kent Bridge*

Maksteel Service Centre – *Mississauga*

Manluk Industries Inc. – *Wetaskiwin*

Manor Tool & Die Ltd. – *Oldcastle*

Mansour Mining Inc. – *Sudbury*

Manufacturier de bas de nylon Doris Itée – *Montréal*

Manufacturier TechCraft inc. – *Laval*

Marimac Group (The) – *Iroquois, Montréal*

Maritime Geothermal Ltd. – *Petitcodiac*

Matériaux Spécialisés Louiseville inc. – *Louiseville*

Maverick Canada Limited – *Wallaceburg*

McCabe Steel – a division of Russel Metals Inc. – *Stoney Creek*

McCloskey International Limited – *Peterborough*

MeadWestvaCo Packaging Systems LP – *Ajax, Pickering, Toronto*

Métal Leetwo Inc. – *Pointe-Claire*

Metal World Incorporated – *Torbay*

Métalus inc. – *Drummondville*

Metex Heat Treating Ltd. – *Brampton*

Metro Label Company Ltd. – *Toronto*

Metro Label Pacific Ltd. – *Langley*

Métro Jonergin Inc. – *Saint-Hubert*

Metroland Printing, Publishing & Distributing – *Mississauga*

Metso Minerals Canada Inc. – *North Bay*

Meubles Canadel inc. – *Louiseville*

Meubles Idéal Itée – *Saint-Charles-de-Bellechasse*

Michelin North America (Canada) Inc. – *New Glasgow*

MIRALIS inc. – *Saint-Anaclet-de-Lessard*

MLT International – *Saint-Pie*

Mobilier MEQ Itée – *La Durantaye*

Modern Dyers – *Hamilton*

Moli Industries Ltd. – *Calgary*

Momentum – *Newmarket*

Mondo America Inc. – *Laval*

Mondor Itée – *Saint-Jean-sur-Richelieu*

Montebello Packaging – *Hawkesbury*

Montréal Woollens (Canada) Ltd. – *Cambridge*

Moore Canada Corporation o/a RR Donnelley – *Cowansville, Edmonton, Fergus, Mississauga, Montréal, Oshawa, Scarborough, Trenton, Vancouver*

Morbern Inc. – *Cornwall*

MS Gregson div. de RAD Technologies Inc. – *Drummondville*

Multy Industries Inc. – *North York*

Nahanni Steel Products Inc. o/a Jancox Stampings – *Brampton*

National Rubber Technologies Corp. – a division of KN Rubber – *Toronto*

Newalta Corporation – *Abbotsford, Airdrie, Amelia, Brooks, Calgary, Cranbrook, Drayton Valley, Drumheller, Eckville, Edmonton, Elkpoint, Fort St. John, Gordondale, Grande Prairie, Halbrite, Hays, Hughenden, Nanaimo, Nisku, Nilton Junction, North Vancouver, Pigeon Lake, Prince George, Raymond, Red Earth, Redwater, Regina, Richmond, Sparwood, Stauffer, Stettler, Surrey, Taber, Valleyview, West Stoddart, Willesden Green, Winfield, Zama*

Nexans Canada Inc. – *Montréal-East*

NGF CANADA Limited – *Guelph*
 NODMAN Automation Systems – *Rockwood*
 Nord Gear Limited – *Brampton*
 North American Decal – *Markham*
 Northern Industrial Plating Ltd. – *Saskatoon*
 Norwest Precision Limited – *Weston*
 Novanni Stainless Inc. – *Coldwater*
 Nutech Brands Inc. – *London*
 Oberthur Jeux et Technologies inc. – *Montréal*
 OCM Manufacturing – *Ottawa*
 Oetiker Limited – *Alliston*
 O-I Canada Corporation – *Montréal*
 Olympic Tool & Die Inc. – *Mississauga*
 Owens-Corning – *Toronto*
 P. Baillargeon Itée – *Saint-Jean-sur-Richelieu*
 Padinox Inc. – *Charlottetown, Winsloe*
 Paisley Brick & Tile Co. Ltd. – *Paisley*
 Pan-Oston Ltd. – *Peterborough*
 Patt Technologies Inc. – *Saint-Eustache*
 Pavage U.C.P. Inc. – *Charlesbourg*
 Pavex Itée – *Jonquière*
 Piddi Design Associates Limited – *Mississauga*
 Pinnacle Finishing – *Chatham*
 Pinnacle Mold Inc. – *Tecumseh*
 Placage Chromex inc. – *Sainte-Foy*
 Plastiques Cellulaires Polyform inc. – *Granby*
 Polycor Granite Bussière inc. – *Saint-Sébastien*
 Polycote Inc. – *Concord*
 Polytainers Inc. – *Toronto*
 Poudrier Frères Itée – *Victoriaville*
 Poutrelles Delta inc. – *Sainte-Marie*
 Powell PowerComm Inc. – *Edmonton, Grande Prairie, Hardisty, Lloydminster, Nisku, Olds, Provost*
 Powercast Manufacturing inc. – *Saint-Eustache*
 Premier Horticulture Itée – *Rivière-du-Loup*

Prémoulé Comptoirs – *Saint-Augustin-de-Desmaures*
 Prescott Finishing Inc. – *Prescott*
 Prestige Glass International – *Elliot Lake*
 PrintWest Communications Ltd. – *Regina, Saskatoon*
 Pro-Meubles inc. – *Granby*
 Procter & Gamble Inc. – *Belleville*
 Produits D'Acier Hason inc. (Les) – *Berthierville, Lanoraie*
 Produits Verriers Novatech inc. (Les) – *Sainte-Julie*
 Créations Vernova inc. (Les) – *Sainte-Julie*
 Groupe Verrier Novatech – *Sainte-Julie*
 Portes Novatech inc. – *Sainte-Julie*
 ProFile Industries Ltd. – *North York*
 Pullmatic Manufacturing – *Unionville*
 QBD Cooling Systems Inc. – *Brampton*
 Railtech Ltd. – *Baie d'Urfé*
 Ramstar Carbide Tool Inc. – *Oldcastle*
 Rayonese Textile inc. – *Saint-Jérôme*
 Ready Rivet & Fastener Ltd. – *Kitchener*
 Reko International Group Inc. – *Oldcastle*
 Concorde Machine Tool – *Tecumseh*
 Reko Automation & Machine Tool – *Tecumseh*
 Reko Tool & Mould (1987) Inc. – *Oldcastle*
 Resco Canada Inc. – *Grenville-sur-la-Rouge*
 Reversomatic Manufacturing Ltd. – *Woodbridge*
 Ridgewood Industries Ltd. – *Cornwall*
 RLD Industries Ltd. – *Ottawa*
 Royal Building Technologies – *Woodbridge*
 Royal Dynamics Co. – *Woodbridge*
 Royal Machine Manufacturing Co. – *Woodbridge*
 Royal Window Coverings (Canada) Inc. – *Boisbriand*
 Royalbond Co. – *Woodbridge*
 Roxul (West) Inc. – *Grand Forks*
 Russel Metals Inc. – *Calgary, Mississauga*
 McCabe Steel – a division of Russel Metals Inc. – *Stoney Creek*

Russell Industries – *St. Catharines*
 Canadian Babbitt Bearings Ltd. – *Brantford*
 CME Protective Coatings – *Sarnia*
 Gudgeon Thermfire International Inc. – *London*
 S.A. Armstrong Limited – *Scarborough*
 S.C. Johnson and Son, Limited – *Brantford*
 Sable Marco inc. – *Pont-Rouge*
 Sabre Machine Tool Inc. – *Oldcastle*
 Safety-Kleen Canada Inc. – *Breslau*
 Saint-Gobain Ceramic Materials Canada Inc. – *Niagara Falls, Paris*
 Sandvik Materials Technology, Tube Production Unit, Division of Sandvik Canada Inc. – *Arnrior*
 Sandvik Mining and Construction Canada Inc. – *Burlington*
 Sandvik Tamrock Canada Inc. – *Lively*
 Sani Métal Itée – *Québec*
 Sarjeant Company Ltd. (The) – *Barrie, Orillia*
 Scapa Tapes North America Ltd. – *Renfrew*
 Sher-Wood Hockey inc. – *Sherbrooke*
 Shorewood Packaging Corp. – *Scarborough*
 Siemens Milltronics Process Instruments Inc. – *Peterborough*
 SIHI Pumps Limited – *Guelph*
 Simmons Canada Inc. – *Brampton*
 Sixpro inc. – *Notre-Dame-du-Bon-Conseil*
 SMS Siemag Ltd. – *Oakville*
 Snap-on Tools of Canada Ltd. – *Newmarket*
 Société Industrielle de décolletage et d'outillage Itée – *Granby*
 Société Laurentide Inc. – *Shawinigan*
 SOFAME Technologies Inc. – *Montréal*
 Sonaca NMF Canada – *Mirabel*
 Soprema inc. – *Drummondville*
 Soucy Techno inc. – *Rock Forest*
 Soudure Germain Lessard inc. – *Boucherville*
 Spartek Systems – *Sylvan Lake*
 Spec Furniture Inc. – *Toronto*
 Spinrite LP – *Listowel*

Sportspal Products – *North Bay*
 Stanfield's Limited – *Truro*
 Stedfast Inc. – *Granby*
 Steelcase Canada Ltd. – *Markham*
 Stepan Canada Inc. – *Longford Mills*
 St. Lawrence Corporation – *Iroquois*
 Suntech Heat Treating Ltd. – *Brampton*
 Superior Radiant Products Ltd. – *Stoney Creek*
 Supremex inc. – *Lasalle, Mississauga*
 Techform Products Limited – *Penetanguishene*
 Technologies Veyance Canada Inc. – *Saint-Alphonse de Granby*
 Teknion Furniture Systems Ltd. – *Toronto*
 Teknion Roy Et Breton Inc. – *Saint-Romuald*
 RBLogistek – *Saint-Romuald*
 RBTek – *Saint-Romuald*
 Roy Et Breton – *Saint-Vallier*
 Teknion Concept – *Lévis*
 Teknion Form – *Concord*
 Teknion Québec – *Montmagny*
 Télio Et Cie – *Montréal*
 TenCate Protective Fabrics Canada – *Magog*
 Textiles Monterey (1996) inc. – *Drummondville*
 Thermetco inc. – *Montréal*
 Timken Canada LP – *St. Thomas*
 Times Fiber Canada Limited – *Renfrew*
 Top Grade Molds Ltd. – *Mississauga*
 Tractel Limited – *Swingstage Division – Scarborough*
 Tranches Polycor inc. – *Saint-Sébastien*
 Transcontinental Interweb Toronto – *Mississauga*
 Imprimerie Interglobe inc. – *Beauceville*
 Imprimeries Transcontinental S.E.N.C. – *Boucherville, Saint-Hyacinthe*
 Transcontinental de la Capitale – *Québec*
 Transcontinental Printing 2005 G.P. – *Saskatoon*
 Transcontinental RBW Graphics – *Owen Sound*

Trenergy Inc. – *St. Catharines*
 Tri-Service Metal Products Inc. – *Ajax*
 Tube-Fab Ltd. – *Mississauga, Charlottetown*
 Tuiles Polycor Inc. – *Saint-Sébastien*
 Tylon Prototype – *Campbellville*
 Ultramet Industries Inc. – *Breslau*
 Uni-Fab – *Oldcastle*
 Unifiller Systems Inc. – *Delta*
 Unimotion-Gear – *Division of Magna Powertrain Inc. – Aurora*
 Unique Tool & Gauge Inc. – *Windsor*
 Unitrak Corporation Limited – *Port Hope*
 USINATECH Inc. – *Melbourne*
 USNR/Kockums Cancar Company – *Plessisville*
 VA TECH Ferranti-Packard Transformers Ltd. – *Hamilton*
 Van Wyck Packaging Ltd. – *Owen Sound*
 Vannatter Group Inc. – *Wallaceburg*
 Velcro Canada Inc. – *Brampton*
 VeriForm Incorporated – *Cambridge*
 Vesta Marble Et Granite Ltd. – *Ottawa*
 Vibac Canada inc. – *Montréal*
 Vitafoam Products Canada Ltd. – *Downsview*
 V.N. Custom Metal Inc. – *North York*
 VicWest Steel – *Oakville*
 VOA Canada Inc. – *Collingwood*
 Vulcan Contenants (Québec) Itée – *Lachine*
 Wabash Alloys Mississauga – *Mississauga*
 Waiward Steel Fabricators Ltd. – *Edmonton*
 Waterloo Textiles Limited – *Cambridge*
 Waterville TG Inc. – *Waterville*
 Watts Water Technologies (Canada) Inc. – *Burlington*
 Walsh Brothers Welding – *Mitchell*
 Web Offset Publications Limited – *Pickering*
 Welland Forge – *Welland*
 Welsh Industrial Manufacturing Inc. – *Stoney Creek*

Wescam Inc. – *Burlington*
 Wheaton's Woodworking Ltd. – *Berwick*
 Wheeltronic Ltd. – *Mississauga*
 Windham Harvest Specialties Limited – *Simcoe*
 Wolverine Tube (Canada) Inc. – *London*
 Woodman Machine Products Ltd. – *Kingston*
 YKK Canada Inc. – *Montréal*
 ZENON Environmental Inc. – *Oakville*
 Zip Signs Ltd. – *Burlington*
 Zodiac Fabrics Company – *London*

LIME

Carmeuse Beachville (Canada) Limited – *Blind River*
 Carmeuse Lime (Canada) Limited – *Dundas, Ingersoll*
 Chemical Lime Company of Canada Inc. – *Langley*
 Ebel Quarries Inc. – *Warton*
 Graymont (NB) Inc. – *Havelock*
 Graymont (QC) Inc. – *Bedford, Boucherville, Joliette, Marbleton*
 Graymont Western Canada Inc. – *Cache Creek, Calgary, Richmond (C.O.)*
 Summit Plant – *Coleman*
 Exshaw Plant – *Exshaw*
 Faulkner Plant – *Faulkner*

MINING

Aerosion Ltd. – *Aldersyde*
 ArcelorMittal Mines Canada – *Port-Cartier*
 BHP Billiton Diamonds Inc. – *Yellowknife*
 Canadian Salt Company Limited (The) – *Pugwash*
 Construction DJL Inc. – *Boucherville, Bromont*
 Continental, division de Construction DJL inc. – *Boucherville, Shawinigan*
 De Beers Canada Inc. – *Toronto, Yellowknife, Timmins*

Démix Agrégats – *Varenes*

Démix Agrégats, une division de Holcim (Canada) inc. – *Laval*

Goldcorp Inc. – *Vancouver*

Goldcorp Canada Ltd. – *Musselwhite Mine – Thunder Bay*

Goldcorp Inc. – *Porcupine Gold Mine Division – South Porcupine*

Hillsborough Resources Limited – *Campbell River*

Hudson Bay Mining & Smelting Co. Ltd. – *Flin Flon*

Hy-Tech Drilling Ltd. – *Saskatoon*

Iron Ore Company of Canada – *Labrador City*

Luzenac Inc. – *Timmins*

Mines Wabush – *Sept-Îles*

New Gold, *Kamloops*

Teck Metals Ltd. – *Trail*

Teck Resources Limited – *Vancouver*

Vale Inco – *Birchtree, Copper Cliff, Creighton, Garson, McCreedy East, Mississauga, Murray, Port Colborne, Stobie, Thompson, Toronto, Totten, Victor, Voisey's Bay*

Xstrata Canada Corporation – *Toronto*

Xstrata Coal Canada Donkin – *Glace Bay*

Xstrata Copper Canada – *CCR – Montréal*

Kidd Creek – *Timmins*

Xstrata Nickel Canada – *Sudbury Operations – Falconbridge*

Fraser Mine – *Sudbury*

Fraser Morgan – *Sudbury*

Montcalm – *Timmins*

Nickel Rim – *Sudbury*

Raglan – *Nunavik territory*

Sudbury Mines – *Sudbury*

Xstrata Zinc Canada – *Toronto*

Noranda-Matagami – *Matagami*

CEZ Refinery – *Valleyfield*

OIL SANDS

Suncor Energy Inc. – *Suncor Group – Sarnia*

Synchrude Canada Ltd. (Oil Sands) – *Fort McMurray*

PETROLEUM PRODUCTS

Bitumar Inc. – *Hamilton, Montréal*

Chevron Canada Limited – *Burnaby, Vancouver*

Husky Energy Inc. – *Calgary*

Husky Oil Operations Ltd. – *Rainbow Lake*

Imperial Oil Limited – *Calgary*

Irving Oil Limited – *Saint John*

North Atlantic Refining Limited – *Come By Chance*

Nova Chemicals (Canada) Limited – *Calgary*

Shell Canada Limited – *Calgary*

Suncor Energy Products Partnership – *Calgary*

Ultramar Ltée – *Montréal*

PIPELINES

Duke Energy Gas Transmission – *Calgary, Chetwynd, Fort Nelson, Hope, Mile 117, Mile 126, Pink Mountain, Taylor, Vancouver*

Enbridge Pipelines Inc. – *Calgary, Edmonton*

Floating Pipeline Company (The) – *Halifax, Saint John*

PLASTICS

1 Source Design Ltd. – *Wallaceburg*

ABC Group Inc. – *Toronto*

ABC Air Management Systems – *Rexdale, Ronson*

ABC Plastic Moulding – *Brydon, Orlando*

MSB Plastics Manufacturing Ltd. – *Etobicoke*

PDI Plastics Inc. – *Etobicoke*

Polybottle Group Limited – *Edmonton, Vancouver*

Saflex Polymers Limited – Weston

Salga Associates – *Concord*

ADS Groupe Composites Inc. – *Thetford Mines*

Advanced Panel Products Ltd. – *Nisku*

AMCOR PET Packaging – *Moncton*

American Biltrite (Canada) Itée – *Sherbrooke*

Amhil Enterprises – *Burlington*

Ani-Mat inc. – *Sherbrooke*

A.P. Plasman Inc. – *Windsor*

Armstrong World Industries Canada Ltd. – *Montréal*

Armtec Limited Partnership – *Orangeville*

Associated Packaging Enterprises Canada Inc. – *Cambridge*

BainUltra inc. – *Saint-Nicolas*

Baytech Plastics Inc. – *Midland*

Berry Plastics Canada Inc. – *Waterloo*

Berry Plastics – *Belleville*

Blue Falls Manufacturing Ltd. – *Coleman, Thorsby*

Cam-Slide – *Newmarket*

Camoplast Inc. – *Richmond*

Camtac Manufacturing – *division of Linamar Holdings Inc. – Guelph*

Canplas Industries Ltd. – *Barrie*

Cascades Inopak – *Drummondville*

CKF Inc. – *Etobicoke, Langley, Rexdale*

Clorox Company of Canada Ltd. (The) – *Brampton, Orangeville*

Co-Ex-Tec – *Concord*

Compact Mould Ltd. – *Brampton*

D & V Plastics Inc. – *Acton*

DDM Plastics – *Tillsonburg*

Deflex Composite inc. – *Saint-Victor*

Downeast Plastics Ltd. – *Cap-Pelé*

Dura-Tech Industrial & Marine Limited – *Dartmouth*

DynaPlas Ltd. – *Scarborough*

Emballage Saint-Jean Itée – *Saint-Jean-sur-Richelieu*

Emballages Poliplastic Inc. – *Granby*

Entreprises Hamelin – Division de Groupe Hamelin Inc. –
Boucherville

Fabrene Inc. – *North Bay*

Fenplast – *Delson*

Fibres Armtex inc. – *Magog*

Flexahopper Plastics Ltd. – *Lethbridge*

Formica Canada inc. – *Saint-Jean-sur-Richelieu*

FRP Systems Ltd. – *Thunder Bay*

Genpak Limited Partnership – *Mississauga*

Greif Bros. Canada Inc. – *Belleville*

Groupe Accent-Fairchild inc. – *Saint-Laurent*

Groupe RCM inc. – *Yamachiche*

GSW Building Products – *Barrie*

High-Q Design Ltd. – *Edmonton*

Hinspergers Poly Industries Ltd. – *Mississauga*

Horizon Plastics International Inc. – *Cobourg*

Husky Injection Molding Systems Ltd. – *Bolton*

Hymopack Ltd. – *Etobicoke*

Les industries de moulage Polytech inc. – *Granby*

Imaflex Inc. – *Montréal*

Industries Nigan (Les) – *Cookshire-Eaton*

Injection Technologies Inc. – *Windsor*

Intertape Polymer Group – *Truro*

IPEX Inc. – *Edmonton, Invader, Langley, L'Assomption,
London, Mississauga, Saint-Jacques-de-Montcalm,
Saint-Joseph-de-Beauce, Saint-Laurent, Scarborough*

Jacobs & Thompson Inc. – *Weston*

Jokey Plastics North America Inc. – *Goderich*

Kal-Trading Inc. – *Mississauga*

Kohler Canada Co. – *Armstrong*

L-D Tool & Die Inc. – Div. of Madix Engineering Inc. – *Stittsville*

Lefko Produits de Plastiques inc. – *Magog*

Les industries de moulage Polymax – *Granby*

Masternet Ltd. – *Mississauga*

Matrix Packaging Inc. – *Mississauga*

Mold-Masters Limited – *Georgetown*

Molded Plastic Consultants – *Shanty Bay*

Neocon International – *Dartmouth*

Newdon Industries Ltd. – *Fergus*

Newell Rubbermaid – *Calgary, Mississauga*

Niigon Technologies Ltd. – *MacTier*

Norseman Plastics Limited – *Etobicoke*

Nu-Co Plastics – *Blenheim*

Ontario Plastic Container Producers Ltd. – *Brampton*

Pano Cap (Canada) Limited – *Kitchener*

Papp Plastics & Distributing Limited – *Windsor*

Par-Pak Ltd. – *Brampton*

Plastiflex Canada Inc. – *Orangeville*

Plastiques Cascades inc. – *Kingsey Falls*

Plastiques GPR inc. – *Saint-Félix-de-Valois*

Plastiques Novaprofil inc. – *Sainte-Julie*

Plastube inc. – *Granby*

PM Plastics Ltd. – *Windsor*

Polar Plastique Itée – *Montréal*

Pollard Windows Inc. – *Burlington*

Polybrite – *Richmond Hill*

Pultrall Inc. – *Thetford Mines*

Reid Canada Inc. – *Mississauga*

Reinforced Plastic Systems – *Mahone Bay, Minto*

Reliance Products LP – *Winnipeg*

Richards Packaging Inc. – *Etobicoke*

Rochling Engineering Plastics Ltd. – *Orangeville*

Ropak Packaging – *Langley, Oakville, Springhill*

Royal Group Technologies Limited – *Woodbridge*

Candor Plastics Co. – *Woodbridge*

Crown Plastics Extrusions Co. – *Woodbridge*

Dominion Plastics Co. – *Woodbridge*

Dynast Plastics Co. – *Winnipeg*

Gracious Living Industries – *Woodbridge*

Imperial Plastics Co. – *Woodbridge*

Industrial Plastics – *Saint-Hubert*

Le-Ron Plastics Inc. – *Surrey*

Majestic Plastics Co. – *Woodbridge*

Montréal PVC – *Saint-Laurent*

Prince Plastics Co. – *Woodbridge*

Regal Plastics Co. – *Woodbridge*

Residential Building Products – *Saint-Lambert-de-Lauzon*

Royal EcoProducts Co. – *Concord*

Royal Flex-Lox Pipe Limited – *Abbotsford*

Royal Foam Co. – *Woodbridge*

Royal Group Resources Co. – *Woodbridge*

Royal Outdoor Products Co. – *Woodbridge*

Royal Pipe Co. – *Woodbridge*

Royal Plastics Co. – *Concord*

Royal Polymers Limited – *Sarnia*

Royal Tooling Co. – *Woodbridge*

Roytec Vinyl – *Woodbridge*

Thermoplast – *Laval*

Ultimate Plastics Co. – *Woodbridge*

S & Q Plastic – Division of Uniglobe (Canada) Inc. – *Mississauga*

SABIC Specialty Extrusion Canada – *Long Sault*

Silgan Plastics Canada Inc. – *Lachine, Mississauga*

Sonioplastics Inc. – *Boucherville*

Sonoco Flexible Packaging Canada Corporation – *Mississauga*

Soucy Baron Inc. – *Saint-Jérôme*

Tarkett inc. – *Farnham*

Technologies d'extrusion appliquées (Canada) inc. – *Vareennes*

Truefoam Limited – *Dartmouth*

Vifan Canada inc. – *Montréal, Lanorai-d'Autray*

Vulsay Industries Ltd. – *Brampton*

W. Ralston (Canada) Inc. – *Brampton*

Wipak Heat Seal Packaging Inc. – *Vaudreuil-Dorion*

Wipak Portion Packaging Ltd. – *Toronto*

Woodbridge Foam Corporation – *Woodbridge*

STEEL

Abraham Steel Service Ltd. – *Woodbridge*

AltaSteel Ltd. – *Edmonton*

ArcelorMittal Dofasco Inc. – *Hamilton*

ArcelorMittal Montréal inc. – *Contrecoeur-Est, Contrecoeur-Ouest, Hamilton East, Longueuil, Saint-Patrick-Montréal*

ArcelorMittal Tubular Products – *Woodstock*

Armtec Limited Partnership – *Guelph*

Bull Moose Tube Limited – *Burlington*

Douglas Barwick Inc. – *Brockville*

Essar Steel Algoma Inc. – *Sault Ste. Marie*

Gerdau Ameristeel Corporation – *Cambridge*

Gerdau Ameristeel Whitby – *Whitby*

Gerdau Ameristeel Manitoba – *Selkirk*

Ivaco Rolling Mills 2004 LP – *L'Orignal*

Lakeside Steel Corp. – *Welland*

Laurel Steel – Division of Harris Steel – *Burlington*

Nelson Steel – Division of Samuelson & Co. Ltd. – *Stoney Creek*

Nova Tube inc. – *Montréal*

Ontario Chromium Plating Inc. – *Oakville*

Rio Tinto Fer et Titane inc. – *Tracy*

Spencer Steel Ltd. – *Ilderton*

Samuel Plates Sales – *Stoney Creek*

U.S. Steel Canada Inc.

Hamilton Works – *Hamilton*

Lake Erie Works – *Nanticoke*

TRANSPORTATION EQUIPMENT MANUFACTURING

A.G. Simpson Automotive Inc. – *Cambridge, Oshawa, Scarborough*

ABC Group Inc. – *Toronto*

ABC Climate Control Systems Inc. – *Toronto*

ABC Flexible Engineered Product Inc. – *Etobicoke*

ABC Group Exterior Systems – *Toronto*

ABC Group Interior Systems – *Toronto*

ABC Group Product Development – *Toronto*

ABC Metal Products Inc. – *Toronto*

LCF Manufacturing Ltd. – *Rexdale, Weston*

Aalbers Tool & Mold Inc. – *Oldcastle*

Affinia Canada ULC – *Guelph*

Anton Mfg. – *Concord*

Arcon Metal Processing Inc. – *Richmond Hill*

Avcorp Industries Inc. – *Delta*

Aviation Lemex inc. – *Saint-Hubert*

B & W Heat Treating Canada ULC – *Kitchener*

Blau Autotec Inc. – *Brampton*

Bombardier Aerospace – *Downsview*

Bombardier Aéronautique – *Mirabel, St. Laurent*

Bombardier Produits Récréatifs Inc. – *Valcourt*

Bovern Enterprises Inc. – *Markham*

Burlington Technologies Inc. – *Burlington*

Cami Automotive Inc. – *Ingersoll*

Capital Tool & Design Ltd. – *Concord*

Chalmers Suspensions International Inc. – *Mississauga*

Chemin de fer Canadien Pacifique – *Montréal*

Citerne Almac International inc. – *Lanoraie*

Composite Atlantic Limited – *Lunenburg*

Corvex Mfg. – division of Linamar Corporation – *Guelph*

CSI Gear Corporation – *Mississauga*

DaimlerChrysler Canada Inc. – *Brampton, Mississauga*

Chrysler Canada Inc. – *Windsor*

Daimler Buses North America – *Mississauga*

Daimler Trucks North America – *St. Thomas*

Dana Canada Corporation – *Burlington, Cambridge, Oakville*

Dana Thermal Products – *Mount Forest*

Dortec Industries – Division of Magna International Inc. – *Newmarket*

Dresden Industrial – *Rodney, Stratford*

Dura-Lite Heat Transfer Products Ltd. – *Calgary*

DYNA-MIG Mfg. of Stratford Inc. – *Stratford*

Eston Manufacturing – division of Linamar Corporation – *Guelph*

Eurocopter Canada Limited – *Fort Erie*

F & P Mfg., Inc. – *Tottenham*

Faurecia Automotive Seating – *Bradford*

Ford Motor Company of Canada, Limited – *Oakville, St. Thomas, Windsor*

Formet Industries – *St. Thomas*

GATX Rail Canada – *Coteau-du-Lac, Moose Jaw, Montréal, Red Deer, Rivière-des-Prairies, Sarnia*

General Motors of Canada Limited – *Oshawa, St. Catharines*

Global Emissions Systems Inc. – *Whitby*

Glueckler Metal Inc. – *Barrie*

Groupe Environnemental Labrie – *Saint-Alphonse*

Halla Climate Control Canada Inc. – *Belleville*

Hastech Mfg. – *Guelph*

Héroux Devtek inc. – *Longueuil, Scarborough*

Hitachi Construction Truck Manufacturing Ltd. – *Guelph*

Honda of Canada Mfg. – *Alliston*

Kingsville Stamping Ltd. – *Kingsville*

Jefferson Elora Corporation (JEC) – *Elora*

Johnson Controls LP – *London, Milton, Mississauga, Tillsonburg*

Lafrate Machine Works Ltd. – *Thorold*

Lunenburg Industrial Foundry & Engineering Limited – *Lunenburg*

Lear Corporation – *Mississauga*

Leggett & Platt Inc. London – *London*

Schukra of North America – *Lakeshore*

Linex Manufacturing – division of Linamar Corporation Inc. – *Guelph*

Litens Automotive Partnership – *Woodbridge*

LPP Manufacturing – division of Linergy Manufacturing Inc. – *Guelph*

Mancor Canada Inc. – *Oakville*

Massiv Die-Form – *Brampton*

Meritor Suspension Systems Company – *Chatham, Milton*

Métal Marquis inc. – *La Sarre*

Modatek Systems – *Milton*

National Steel Car Limited – *Hamilton*

Nemak Canada – *Windsor*

Neptunus Yachts – *St. Catharines*

Niagara Piston Inc. – *Beamsville*

Northstar Aerospace (Canada) Inc. – *Milton*

NTN Bearing Corporation of Canada – *Mississauga*

Omron Dualtec Automotive Electronics Inc. – *Oakville*

Ontario Drive Et Gear Limited – *New Hamburg*

Orenda Aerospace Corporation – *Mississauga*

Orlick Industries Limited – *Hamilton*

Pilkington Glass of Canada Limited – *Collingwood*

Platinum Tool Technologies – *Oldcastle*

Pratt Et Whitney Canada Corp. – *Enfield, Longueuil, Saint-Hubert*

Presstran Industries – *St. Thomas*

Prévost – division of Volvo Group Canada – *Sainte-Claire*

Prince Metal Products Ltd. – *Windsor*

Procor Limited – *Edmonton, Joffre, Oakville, Regina, Sarnia*

Quadrad Manufacturing – division of Linamar Corporation Inc. – *Guelph*

Remtec Inc. – *Chambly*

Roctel Manufacturing – division of Linamar Corporation Inc. – *Guelph*

Rollstamp Mfg., division of Decoma International Inc. – *Concord*

Satisfied Brake Products Inc. – *Cornwall*

Simcoe Parts Service Inc. – *Alliston*

Spinic Manufacturing – division of Linamar Corporation Inc. – *Guelph*

Stackpole International – *Mississauga*

StandardAero – *Winnipeg*

STT Technologies Inc. – *Concord*

Summo Steel Corp. – *Burlington*

Sydney Coal Railway Inc. – *Sydney*

Tool-Plas Systems Inc. – *Oldcastle*

Toyota Motor Manufacturing Canada Inc. – *Cambridge*

Traxle Mfg – division of Linamar Corporation Inc. – *Guelph*

TRW Automotive – *St. Catharines, Woodstock*

TS Tech Canada Inc. – *Newmarket*

Unison Engine Components – *Orillia*

Vehcom Manufacturing – division of Linamar Corporation Inc. – *Guelph*

Ventra Group Co. – *Calgary*

Flex-n-Gate Bradford – *Bradford*

Flex-n-Gate Canada – *Tecumseh*

Flex-n-Gate Seeburn – *Beaverton, Tottenham*

Veltri Metal Products – *Glencoe, Tecumseh, Windsor*

Ventra AFR – *Ridgetown*

Ventra Plastics Kitchener – *Kitchener*

Ventra Plastics Windsor – *Windsor*

Volvo Cars of Canada Toronto – *Toronto*

Wallaceburg Preferred Partners – *Wallaceburg*

Woodbridge Foam Corporation – *Mississauga*

UPSTREAM OIL AND GAS

AltaGas Services Inc. – *Wabasca*

Baytex Energy Ltd. – *Taber*

BP Canada Energy Company – *Calgary, Edson, Grande Prairie, Rocky Mountain House*

Cenovus Energy Inc. – *Calgary*

Chevron Canada Resources – *Calgary*

Connacher Oil and Gas Ltd. – *Calgary*

ConocoPhillips Canada – *Atlantic French Corridor, Big Valley, Calgary, Deep Basin, Edson, Foothills, Jenner, Kaybob/Edson, Mackenzie Delta, Morrin, Northern Plains, Rimbey/O'biese, Southern Plains, Vulcan, Wembley*

Crescent Point Energy Trust – *Calgary, Sounding Lake*

Devon Canada Corporation – *Calgary, Central, Deep Basin, Fairview, Foothills, Fort McMurray, Fort St.-John, Lloydminster, NE British Columbia/NW Alberta, Northern Plains, Peace River*

Imperial Oil Limited – *Calgary*

Keyera Energy – *Rocky Mountain House*

Nexen Canada Ltd. – *Calgary*

Nuvista Energy Ltd. – *Calgary*

Paramount Resources Ltd. – *Calgary*

Pengrowth Corporation – *Calgary*

Penn West Petroleum Ltd. – *Calgary*

Talisman Energy Inc. – *Calgary, Carlyle, Chauvin (Alta.), Chauvin (Sask.), Chetwynd, Edson, Grande Prairie, Lac La Biche, Shaunavon, Turner Valley, Warburg, Windsor*

TAQA North Ltd. – *Calgary, Niton Junction*

For an up-to-date list of CIPEC Leaders, visit nrcan.gc.ca/energy/efficiency/industry/opportunities/5233.

CIPEC Trade Associations

[Aerospace Industries Association of Canada \(AIAC\)](#)

[Alberta Food Processors Association \(AFPA\)](#)

[Alliance of Ontario Food Processors \(AOFPP\)](#)

[Aluminum Association of Canada \(AAC\)](#)

[Atlantic Dairy Council](#)

[Automotive Parts Manufacturers' Association \(APMA\)](#)

[Baking Association of Canada \(BAC\)](#)

[Brewers Association of Canada \(BAC\)](#)

[Canadian Association for Surface Finishing \(CASF\)](#)

[Canadian Association of Petroleum Producers \(CAPP\)](#)

[Canadian Chamber of Commerce \(CCC\)](#)

[Canadian Construction Association \(CCA\)](#)

[Canadian Electricity Association \(CEA\)](#)

[Canadian Energy Pipeline Association \(CEPA\)](#)

[Canadian Fertilizer Institute \(CFI\)](#)

[Canadian Foundry Association \(CFA\)](#)

[Canadian Fuels Association](#)

[Canadian Gas Association \(CGA\)](#)

[Canadian Lime Institute \(CLI\)](#)

[Canadian Manufacturers & Exporters \(CME\)](#)

[CME Alberta Division](#)

[CME British Columbia Division](#)

[CME Manitoba Division](#)

[CME New Brunswick Division](#)

[CME Newfoundland and Labrador Division](#)

[CME Nova Scotia Division](#)

[CME Ontario Division](#)

[CME Prince Edward Island Division](#)

[CME Quebec Division](#)

[CME Saskatchewan Division](#)

[Canadian Meat Council \(CMC\)](#)

[Canadian Plastics Industry Association \(CPIA\)](#)

[Canadian Steel Producers Association \(CSPA\)](#)

[Canadian Vehicle Manufacturers' Association \(CVMA\)](#)

[Cement Association of Canada \(CAC\)](#)

[Chemistry Industry Association of Canada \(CIAC\)](#)

[Council of Forest Industries \(CFI\)](#)

[Electro-Federation Canada \(EFC\)](#)

[\(The\) Explorers and Producers Association of Canada \(EPAC\)](#)

[Fisheries Council of Canada \(FCC\)](#)

[Food and Consumer Products of Canada \(FCPC\)](#)

[Forest Products Association of Canada \(FPAC\)](#)

[FPIInnovations](#)

[\(The\) Mining Association of Canada](#)

[North American Insulation Manufacturers Association \(NAIMA Canada\)](#)

[Ontario Agri Business Association \(OABA\)](#)

[Packaging Association of Canada \(PAC\)](#)

[Quebec Forest Industry Council \(QFIC\)](#)

[Rubber Association of Canada \(RAC\)](#)

[Wine Council of Ontario \(WCO\)](#)

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