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CIPEC ANNUAL REPORT 2010

SUSTAINABILITY IS GOOD BUSINESS

10 COMPANIES THAT ARE MAKING A DIFFERENCE

CIPEC Leadership Award Winners



CIPEC

Canadian
Industry
Program for
Energy
Conservation

Canada

CONTENTS

ABOUT CIPEC	4	INDUSTRY SECTOR PROFILES	38
MESSAGE FROM THE CHAIR		Aluminium	40
SUSTAINABLE GROWTH FOR CANADA'S ECONOMY	6	Brewery	41
THE RESULTS	8	Cement	42
CIPEC CELEBRATES 35 YEARS	10	Chemical	43
10 COMPANIES RECOGNIZED	12	Construction	44
Frito Lay Canada	14	Dairy	45
La fromagerie St-Guillaume	16	Electrical and Electronics	46
Miralis	18	Electricity Generation	47
McCain Foods (Canada)	20	Fertilizer	48
Redpath Sugar Ltd.	22	Food and Beverage	49
Alcoa Canada Primary Metals	24	Foundry	50
Husky Injection Molding Systems	26	General Manufacturing	51
Molson Coors Canada	28	Lime	52
Alberta Newsprint Company	30	Mining	53
Broan-NuTone Canada	32	Oils Sands	54
ENERGY EFFICIENCY PROGRAMS AND TOOLS FOR INDUSTRY	34	Petroleum Products	55
Canadian Industry Program for Energy Conservation (CIPEC)	35	Plastics	56
ecoENERGY Retrofit for Small and Medium-Sized Organizations	35	Pulp and Paper	57
ecoENERGY for Industry - Assessment Incentives	35	Rubber	58
Classes 43.1, 43.2 and 29 and CRCE Tax Incentives	35	Steel	59
Dollars to \$ense Energy Management Workshops	36	Textiles	60
Energy Benchmarking and Best Practices	36	Transportation Equipment Manufacturing	61
Energy Management Information Systems - Planning Manual and Tool	36	Upstream Oil and Gas	62
ISO 50001 - New Energy Management Standard	36	Wood Products	63
ISO 50001 highlights	36	CIPEC EXECUTIVE BOARD MEMBERS	64
		CIPEC TASK FORCE COUNCIL MEMBERS	65
		CIPEC LEADER COMPANIES BY SECTOR	67
		CIPEC TRADE ASSOCIATIONS	78
		CIPEC TEAM INDUSTRIAL PROGRAMS DIVISION	79

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 FOR INDUSTRY INITIATIVE.

CIPEC is made up of 26 sector task forces covering more than 50 trade associations. Each task force represents companies that are engaged in similar industrial activities. The Task Force Council, with representatives from each CIPEC sector, provides a forum for sectors to share ideas and recommend ways to address common needs. Overall direction is provided by the 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 built 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 recognize and reward those who lead the way. At the bi-annual industrial energy efficiency conferences, CIPEC presents the

CIPEC Leadership Awards to honour innovative Canadian companies that have demonstrated a significant and innovative contribution to energy efficiency. This annual report profiles the 10 winners of 2009.

Part of CIPEC's mandate is a strong communications and awareness program anchored in its biweekly *Heads Up CIPEC* newsletter, with a readership of over 10 000 subscribers.

CIPEC also raises awareness of the goals and benefits of improved energy use. The Task Force Council and individual sectors 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 others recognized on the national stage. 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 reductions. Signing up as a CIPEC Leader is free and comes with a broad range of benefits, including:

- ecoENERGY Retrofit Incentive for small and medium-sized organizations
- financial assistance for process integration and computational fluid dynamics studies
- Natural Resources Canada's Dollars to \$ense Energy Management Workshops (and opportunities to have them delivered on-site and customized to meet specific company needs)
- technical guidebooks
- *Heads Up CIPEC*—an e-newsletter with the latest energy efficiency information
- support for benchmarking studies and employee awareness initiatives
- opportunities to network with other industrial energy managers and practitioners

CONTACT CIPEC OEE.NRCAN.GC.CA/CIPEC • INFO.IND@NRCAN-RNCAN.GC.CA



SUSTAINABLE GROWTH FOR CANADA'S ECONOMY

Glenn Mifflin

Vice-President, North Atlantic Refining Limited
Chair, CIPEC Executive Board

THIS YEAR MARKED YET ANOTHER SERIES OF MILESTONES AND SUCCESSES FOR INDUSTRIAL ENERGY EFFICIENCY IN CANADA. CIPEC MEMBERS CONTINUED TO DISTINGUISH THEMSELVES, AND CANADA, WITH THEIR COMMITMENT TO INNOVATIVE APPROACHES TO ENERGY EFFICIENCY.

I am especially proud to be able to say that last year my fellow CIPEC Leaders recorded total annual energy savings of more than 4.2 petajoules – enough energy to power over 36 000 households. Estimated annual greenhouse gas emissions reductions totalled 412 kilotonnes. Perhaps the most important fact for me is that these impressive numbers were achieved voluntarily – something that is central to CIPEC's success.

CIPEC's success was on display at the Energy 2009 conference – the fourth industrial energy conference held by CIPEC. It was also the first conference jointly organized by CIPEC and Canadian Manufacturers and Exporters (CME). This bi-annual conference was an opportunity for more than 400 of us to get together to learn from each other and celebrate our successes on the energy efficiency front. Conference registration was up by almost 30 percent, thanks in large part to the CME's direct access to more than 25 000 businesses across Canada.

The two-day event featured more than 20 workshops and panel sessions presented by the country's foremost energy experts, industry leaders and energy efficiency suppliers. Attendees were treated to a keynote address from Jeremy Rifkin, an American economist who is shaping public policy in the United States and globally. He has served as an advisor to several world leaders including Chancellor Angela Merkel of Germany, President Nicolas Sarkozy of France and Prime Minister José Luis Rodríguez Zapatero of Spain. In his address, Rifkin argued that we are on the cusp of a third industrial revolution – a revolution that has energy efficiency as a guiding principle.

Conference attendees also heard from Canadian industrial energy efficiency pioneers like Scott Travers, President and Chief Operating Officer of Minas Basin Pulp and Power. At Minas, he is involved in carbon credits trading; tidal energy opportunities; and initiatives to harness energy, from the wind, waves, biomass and plastic-to-diesel.

The conference included a national industrial energy efficiency awards ceremony. The awards shone the spotlight on energy managers who are on the frontlines of industrial energy

efficiency and who once again proved their willingness to share expertise. The winning projects were as diverse as the products their companies produce, but they all had one thing in common: an outstanding commitment to improving industrial energy efficiency.

CIPEC Leaders who have driven Canada's success on industrial energy efficiency since 1975 all share this commitment. And the 330 new CIPEC Leaders we welcomed this year are now part of this proud 35-year history. Since 1975, CIPEC has grown to include more than 2100 CIPEC Leaders.

The Government of Canada continues to support these CIPEC Leaders with CIPEC's representation at the ISO 50001 negotiations, an emerging energy management standard. ISO 50001 is expected to be completed in 2011. It will establish a framework for all types of organizations and companies to manage energy consumption using a common standard. I am pleased to say that CIPEC has a prominent voice at the negotiating table.

As I look forward to my fourth year as the Chair of the CIPEC Executive Board, I am struck by the remarkable progress CIPEC continues to make as an example of an extraordinary voluntary partnership. I also wish to express my gratitude to CIPEC's Executive Board and Task Force Council, and the many volunteers on the sector task forces for their continuing contribution to industrial energy efficiency in Canada. I am convinced that our collective expertise and contribution will ensure CIPEC has a bright future as we pursue sustainable growth for Canada's economy.

Sincerely,

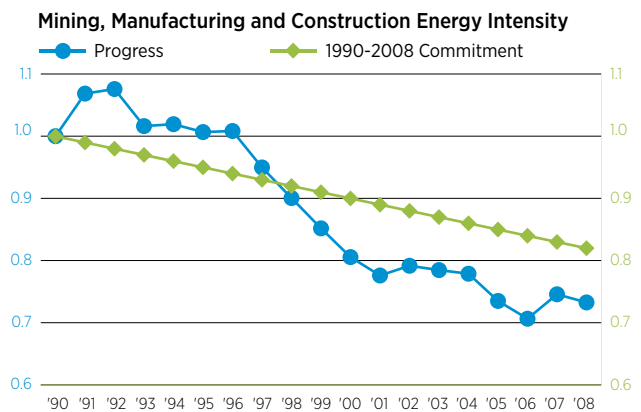
Glenn Mifflin

Vice-President, North Atlantic Refining Limited
Chair, CIPEC Executive Board

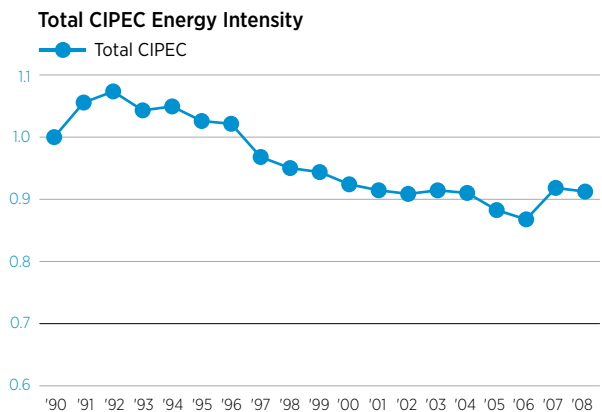
THE RESULTS

CIPEC BRINGS EXCEPTIONAL VALUE TO CANADIAN INDUSTRY WHILE SUPPORTING CANADA'S DRIVE TO IMPROVE ENERGY EFFICIENCY AND REDUCE GREENHOUSE GAS EMISSIONS. ITS EXTRAORDINARY IMPACT IS CLEAR - CIPEC DELIVERS RESULTS.

- The Gross Domestic Product (GDP) created by CIPEC industries increased 38.5 percent between 1990 and 2008. With the help of effective energy management, energy consumption by these industries rose only 26.4 percent.
- In 2008, CIPEC industries created approximately 27 percent of the country's GDP and provided jobs for 3.5 million Canadians.
- CIPEC industrial sectors, represented by more than 5000 companies, reduced their combined energy intensity by 8.8 percent between 1990 and 2008, an average of 0.5 percent per year.
- Improved energy efficiency enabled Canadian industry to avoid approximately \$3.8 billion in purchased energy in 2008 – enough energy to heat almost 4.8 million Canadian households for one year. Had energy intensity remained constant, GHG emissions from CIPEC industries would have been 37.1 megatonnes (Mt) higher.
- The mining, manufacturing and construction sectors improved their energy intensity by an average of 1.5 percent per year. Between 1990 and 2008, these sectors improved energy intensity by 26.7 percent.
- From the fall 1997 to March 31, 2010, the CIPEC Dollars to \$ense Energy Management Workshops have helped companies save an estimated 15 900 terajoules of energy and cut carbon dioxide emissions by 1644 kilotonnes.
- The *Heads Up CIPEC* newsletter was sent to 10 000 recipients across Canada. This newsletter is distributed electronically twice per month.
- As of March 31, 2010, over 2100 industrial facilities have signed on as CIPEC Leaders.



The mining, manufacturing and construction sectors improved their energy intensity by an average of 1.8 percent per year between 1990 and 2008. This rate surpasses the public voluntary commitment made by these CIPEC members to achieve an average annual energy intensity improvement of 1.0 percent per year.



All CIPEC industries improved their combined energy intensity by 8.8 percent, or an average of 0.5 percent per year, between 1990 and 2008. If energy intensity had remained constant, GHG emissions would have been 37.1 Mt higher in 2008.

CIPEC CELEBRATES 35 YEARS

THOUGH A LOT HAS CHANGED SINCE 1975, CIPEC'S FOCUS ON ENERGY EFFICIENCY REMAINS CONSTANT

A 35-YEAR HISTORY OF MILESTONES

1982 Name changes from Canadian Industry Energy Conservation Task Forces to Canadian Industry Program for Energy Conservation (CIPEC)

1983 Number of CIPEC reporting companies grows from 663 to 704

1985 CIPEC celebrates its 10th anniversary and establishes new five-year target for energy efficiency

1991 CIPEC launches a task force council and an executive board to provide leadership as well as advice to the Minister of Energy, Mines and Resources (the department is now Natural Resources Canada)

2004 CIPEC increases to 47 trade associations and 519 Industrial Energy Innovators; savings from Dollars to \$ense Energy Management Workshops equal 180 kilo tonnes of greenhouse gases and \$32 million

2005 CIPEC celebrates 30th anniversary; Energy 2005 CIPEC's first bi-annual energy conference launched

2007 Energy 2007 conference held; CIPEC members improve their combined energy intensity by 11.7 percent, an average of 0.7 percent per year from 1990

2009 Energy 2009 conference held; American Council for an Energy-Efficient Economy awards CIPEC the *Champion of Energy Efficiency in Industry* award

The debut of Microsoft and Saturday Night Live, the adoption of the metric system in Canada and the opening of the CN Tower were defining moments from 1975. The inception of the Canadian Industry Program for Energy Conservation (CIPEC) attracted less fanfare, but it would become a defining moment for industry-government cooperation on energy efficiency.

Against a backdrop of economic turmoil caused by the oil shock in 1973, Canadian industry and government came together to find ways to improve energy efficiency. Government officials were concerned about dependence on foreign energy supplies and the inflation caused by runaway prices. Industry representatives knew that using energy more efficiently had the potential to reduce uncertainty, enhance competitiveness and improve the bottom line.

CIPEC was born out of these government-industry consultations. Originally named the Canadian Industry Energy Conservation Task Forces, CIPEC was established as a voluntary partnership between the Government of Canada and Canadian industry. Today, with more than 2100 members covering 98 percent of Canadian industry, CIPEC remains a voluntary partnership focused on energy efficiency.

CIPEC's record speaks for itself. CIPEC members improved their combined energy intensity by 8.8 percent – an average of 0.5 percent per year between 1990 and 2008.* If energy intensity had remained constant, greenhouse gas emissions would have been higher by 37.1 megatonnes in 2008.

As CIPEC celebrates its 35th anniversary, it continues to break new ground in energy efficiency and raise the bar for voluntary public-private sector partnerships.

**latest available data*

1975 Energy Conservation Task Forces is born under the name Canadian Industry Energy Conservation Task Forces

1976 CIPEC Energy Conservation Task Forces launched, energy efficiency goals established

1978 CIPEC cited by the International Energy Agency as “worthy of emulation by other member countries”

1979 CIPEC Energy Conservation Task Forces meet and exceed energy efficiency goals set in 1976

1995 CIPEC celebrates its 20th anniversary, Industrial Energy Innovators launched; 178 more companies make a voluntary commitment to implement, review and report on energy efficiency measures; 15 industrial trade associations part of CIPEC

1999 CIPEC reports energy-use-related greenhouse gas emissions are 1.9 percent below 1990 levels; total energy saved since 1990 represents 73 percent of Canada's residential heating demand in 1998

2001 CIPEC network expands to include energy producers and 45 trade associations representing more than 5000 companies; 95 percent of secondary industrial energy demand are part of CIPEC

2002 Growth in energy use by CIPEC members is only half that of non-participants; CIPEC industries avoided more than 25.2 megatonnes of greenhouse gas emissions relative to 1990 energy intensity levels

2010 CIPEC celebrates its 35th anniversary; CIPEC plays a lead role in the negotiation of the new ISO 50001 standard for energy management systems

CORPORATE STEWARDSHIP

FRITO LAY
CANADALA FROMAGERIE
ST-GUILLAUME

PROCESS AND TECHNOLOGY IMPROVEMENTS



MIRALIS

McCAIN FOODS
(CANADA)

MONITORING



REDPATH SUGAR LTD.

CIPEC Leadership Awards

10 COMPANIES

Every two years, innovative Canadian companies compete for the CIPEC Leadership Awards. The winners must demonstrate a significant and innovative contribution to energy efficiency. Only 10 winners are chosen.

Award winners are honoured at the CIPEC Leadership Awards ceremony – the signature event at the CIPEC biannual industrial energy efficiency conference. The Energy 2009 conference drew more than 400 industry leaders to Toronto on November 24 and 25. The conference was co-hosted by CIPEC and Canadian Manufacturers and Exporters – a member of CIPEC and a leader in promoting energy-saving practices with industry.

To be eligible for the CIPEC Leadership Awards, all applicants had to register as CIPEC Leaders, and only projects begun after June 1, 2007, could qualify. The projects were evaluated by a panel of judges against five criteria:

Improved energy intensity – reduced energy use per unit of production

Innovation – creativity and ingenuity

Potential for broader application – transferability to other companies or industry sectors

Contribution to the environment – reduction in greenhouse gas emissions and improvement in environmental sustainability

Cost-effectiveness – return on investment, payback period and improved competitiveness

AND TRACKING

EMPLOYEE AWARENESS AND TRAINING

INTEGRATED ENERGY EFFICIENCY STRATEGY



ALCOA CANADA
PRIMARY METALS

HUSKY INJECTION
MOLDING SYSTEMS

MOLSON COORS
CANADA

ALBERTA NEWSPRINT
COMPANY

BROAN-NUTONE
CANADA

FIVE CATEGORIES OF AWARDS

WINNING PROJECTS WERE AS DIVERSE AS THE PRODUCTS THEIR COMPANIES PRODUCE, BUT THEY ALL HAD ONE THING IN COMMON - AN OUTSTANDING COMMITMENT TO IMPROVING INDUSTRIAL ENERGY EFFICIENCY.

CORPORATE STEWARDSHIP

Winners in the category promoted energy efficiency at the corporate level by creating an energy management team or developing a corporate energy management plan.

WINNERS

Frito Lay Canada, 25 locations across Canada, for combining people, leadership and an intense focus on energy efficiency

La fromagerie St-Guillaume, St-Guillaume, Quebec, for targeting energy efficiency through corporate policy

PROCESS AND TECHNOLOGY IMPROVEMENTS

These winning companies changed equipment and procedures to reduce the energy intensity of an industrial process.

WINNERS

Miralis, Rimouski, Quebec, for simultaneously increasing production and decreasing energy consumption

McCain Foods (Canada), Carberry, Manitoba, for recovering waste heat

MONITORING AND TRACKING

These winners enhanced their ability to provide accurate reports on facility- or company-wide energy consumption.

WINNERS

Redpath Sugar Ltd., Toronto, Ontario, for benchmarking energy use

Alcoa Canada Primary Metals, four Quebec locations, for monitoring and tracking furnace energy consumption

EMPLOYEE AWARENESS AND TRAINING

Award winners in this category helped their employees develop a broader awareness and understanding of energy efficiency opportunities, best practices, and the environmental and economic advantages of energy management.

WINNERS

Husky Injection Molding Systems, Bolton, Ontario, for driving energy efficiency throughout the manufacturing process with employee awareness and training

Molson Coors Canada, Vancouver, British Columbia, for increasing employee awareness and energy management skills with an energy conservation program

INTEGRATED ENERGY EFFICIENCY STRATEGY

These winners reduced the overall energy consumption of their facility or company through a combination of initiatives.

WINNERS

Alberta Newsprint Company, Whitecourt, Alberta, for establishing an integrated energy efficiency strategy to reduce electricity consumption

Broan-NuTone Canada, Mississauga, Ontario, for reducing process energy consumption with a cross-functional team

CIPEC Leadership Awards for Corporate Stewardship

FRITO LAY CANADA

COMBINING PEOPLE, LEADERSHIP AND
AN INTENSE FOCUS ON ENERGY EFFICIENCY

“The world’s first compostable chip bag comes from a company committed to energy efficiency.”

- Frito Lay Canada

Energy efficiency initiatives included heat recovery systems, upgraded insulation, retrofitted lighting, compressed air audits and improved energy use metering. Since 1999, such initiatives reduced water use 33 percent, electricity 18 percent and natural gas 20 percent per bag of chips.

“We are one hundred percent committed to energy efficiency, from our CEO all the way down to the production floor,” says Anne-Marie Renaud, Vice President of Operations.

Frito Lay Canada has a seven-point approach to reducing energy consumption.

An energy policy with specific energy efficiency improvement targets supported by senior management

In the 1990s, the company created employee-based green teams that established energy efficiency goals exceeding those of the parent company. But, they did not stop there. “We aspire to even greater achievements,” noted Helmi Ansari, Sustainability Director. In 2007, the company increased its sustainability goals to reducing manufacturing fuel use 50 percent, electricity use 45 percent, water use 75 percent and fleet fuel use 50 percent per bag of product.

A corporate plan for energy management

An energy conservation plan targets annual reductions of 3 percent to 5 percent in electricity, natural gas and water use.

The manufacturing facilities use heat recovery systems that allowed the company to strategically take natural gas boilers offline and reduce the company’s annual energy consumption by billions of BTUs.

At the Cambridge plant, a \$2-million steam stack heat recovery project decreased natural gas consumption, offsetting roughly 13.5-million BTUs each hour of operation, thus substantially reducing the greenhouse gas emissions. The three-year payback period proved that sustainability projects reduce the organization’s carbon footprint and the bottom line.

An energy management team with executive-level participation and energy management champions

The national energy management team includes front-line employees and senior management. The plant teams feed ideas to the national team and align on direction. The Green Team monitors compliance with environmental regulations, the Resource Conservation Team focuses on energy efficiency, and the Zero Landfill Team works on reducing landfill waste and increasing recycling.

A program to upgrade and replace aging equipment with more energy efficient equipment

The company partnered with ENERGY STAR® in process improvement projects. All new equipment is ENERGY STAR® rated. Front-line teams benchmark their performance against Frito-Lay





facilities across North America. This information helps develop plans for sharing best practices and continuous improvement.

The company upgraded two-thirds of its tractor-trailer fleet and is testing six fully electric, zero-emissions delivery trucks. "Our vehicle fleet is one of the five biggest private fleets in Canada, so there are good opportunities for us to reduce our footprint even further," says Ryan Merrick, Sustainability Resource.

Ongoing quality assurance

Frito Lay Canada's environmental program is aligned with the ISO 14001 environmental management standard. An annual audit verifies each facility's compliance with the environmental program. From the results, management develops an action plan.

Waste minimization

The company's waste reduction and recycling program diverted 92 percent (28 million kilograms) of manufacturing waste from landfill sites in 2009.

Working with external partners

In addition to CIPEC, the company partners with such organizations as the University of Waterloo and the Guelph Food Technology Centre.

"CIPEC is a great resource for us. The networking we have done at various CIPEC events has been very valuable. One of the reasons we go to the CIPEC conferences is to establish contacts to help with energy efficiency initiatives down the road," Ansari says.

The company is reaching even higher. "We are moving from doing the best with what we have to pushing the boundaries with new technologies such as custom energy recovery systems, zero landfill waste manufacturing and solar power. Our leading conservation plant in Casa Grande, Arizona, is reducing electricity and water consumption by 90 percent and its natural gas use by 80 percent. They are setting the pace for us on conservation," Ansari says.

FASTFACTS

(Five manufacturing plants and 18 distribution centres across Canada)

Winning edge: Combining people, leadership and an intense focus on energy efficiency

- *Canada's largest snack food manufacturer.*
- *Reduced water consumption 33 percent per bag of product.*
- *Reduced natural gas and electricity consumption 20 and 18 percent, respectively per bag of product.*
- *Recycled 92 percent of manufacturing waste.*

CIPEC Leadership Awards for **Corporate Stewardship**

LA FROMAGERIE ST-GUILLAUME

TARGETING ENERGY EFFICIENCY THROUGH CORPORATE POLICY

La fromagerie St-Guillaume has won many prizes in Canada for delighting the taste buds of the most avid cheese lovers. This cooperative cheese dairy is also earning kudos due to its appetite for energy efficiency.

The St-Guillaume Cheese Dairy, about 100 kilometers east of Montréal with a staff of 110, annually processes about 22 million L of milk into cheeses such as Cheddar, Brick, Monterey Jack, Swiss, and salted cheese curd. But the dairy still found time to institute a program to upgrade to more energy-efficient refrigeration systems and process-drying equipment.

The cheesemaker, which is also a CIPEC Leader in the dairy sector, reduced overall energy consumption by 45 percent annually in the first slice of a big serving of energy-efficiency measures. These improvements have also avoided more than 1700 tonnes of greenhouse gas emissions a year. Overall, the return on investment allowed a payback period of about 3.3 years. The up-front investment in the project was \$975,000, with annual savings of \$300,000.

“Our board of directors was motivated by the potential costs savings, as well as the environmental benefits; but they did not expect we could save so much,” says Pierre Tremblay, Plant Manager and Energy Efficiency Champion.

This success stems from a corporate policy that targets energy efficiency and fosters teamwork. The policy includes

supporting an energy efficiency champion who is responsible for managing audits and implementing energy efficiency projects.

“We had the complete support of our board of directors, so it was easy to mobilize our team. I took the mandate seriously, and our team worked hand-in-hand to target energy efficiency,” says Tremblay. “We assembled a work team from all the different parts of the factory and met regularly during the first year for measuring and planning.”

The three major projects to emerge from the evaluating and planning phase were upgraded systems for refrigeration, process drying and heat exchange.

The refrigeration system was upgraded to use outside air for cooling in the winter.

Installing variable speed drives on the HVAC system also reduced the energy required for cooling. And the variable speed drives helped regulate air temperature more precisely, thus enhancing the dairy’s ability to manage milk temperature and other key inputs.

Process drying of whey was a key energy efficiency focus because it uses the most energy of any activity in the dairy. A new pre-concentration system that relies on reverse osmosis allowed the dairy to remove more than 70 percent of the water in the whey. These upgrades allowed the process drying system to use 20 percent less make-up air, which in turn reduced natural gas consumption.

Heat exchange upgrades now capture most of the waste heat from whey evaporation that used to be vented. This heat is being reused to heat water for cleaning. And much of the factory is now heated and air conditioned using residual energy from production.





“We are close to being a model factory,” Tremblay says. “We now have more silos to store water for heat exchange than we do to store milk.” Reusing water has also reduced the waste water sent for municipal treatment by 50 percent — producing a 50 percent reduction in those costs.

These accomplishments were recognized at the Energy 2009 Leadership Awards, where Tremblay and Ghislain Gervais, President of the cooperative’s board, accepted the corporate stewardship award. After returning inspired and energized by the success of the first phase of the dairy’s energy efficiency upgrades, Tremblay and the team are now implementing phase two. Reducing the use of process steam is high on their list.

“There is so much potential for energy efficiency gains to go to the bottom line. It’s incredible,” Tremblay says.

The quality of its products has established la fromagerie St-Guillaume as a perennial winner of prizes and other

“THERE IS SO MUCH POTENTIAL FOR ENERGY EFFICIENCY GAINS TO GO TO THE BOTTOM LINE. IT’S INCREDIBLE”

Pierre Tremblay, Plant Manager and Energy Efficiency Champion

distinctions, such as “grand champion all categories” for its flavoured Cheddar cheeses at the Canadian Western Agribition in Regina. La fromagerie St-Guillaume also earned an honourable mention for its Swiss cheese as “reserve champion all categories” at the prestigious Royal Winter Fair in Toronto.

If the dairy continues to focus on energy efficiency with as much dedication as it brings to the quality of its cheeses, it might just find itself vying for another CIPEC Leadership Award in 2011.

FASTFACTS

(St-Guillaume, Quebec)

Winning edge: Targeting energy efficiency through corporate policy

- *La fromagerie St-Guillaume turns 22 million L of milk into cheese every year.*
- *About 50 milk producers from St-Guillaume got together to create La Société Coopérative Agricole de Beurrerie de St-Guillaume in 1940.*
- *Energy consumption was cut by 45 percent.*
- *More than 1700 tonnes of greenhouse gas emissions a year were avoided.*
- *An up-front investment of \$975,000 has yielded annual savings of \$300,000.*
- *The cheese maker now uses more silos to store water for heat exchange than for milk.*

CIPEC Leadership Awards for Process and Technology Improvements

MIRALIS

SIMULTANEOUSLY INCREASING PRODUCTION AND DECREASING ENERGY CONSUMPTION

Increasing production while lowering energy consumption is at the heart of most economically successful energy efficiency initiatives. Miralis is making more custom kitchen cabinets and doing so with less energy than ever thanks to innovative improvements to process and technology.

“Our dust collection system was the obvious target for an energy reduction project because it’s our biggest energy consumer,” says Donald Brisson, the company’s Director of Operations in Rimouski, about 300 kilometers east of Québec City on the St. Lawrence river’s south shore. A new on-demand control, installed in fall 2008, has saved the company about \$50,000 in annual electricity costs related to dust collection. The new system had a capital cost of \$200,000.

“Before the upgrades, the dust collection system used 23 percent of the energy we use in production. Afterwards it dropped to 12 percent, despite the fact that our production capacity has increased by about 20 percent,” Brisson says.

Miralis, a CIPEC Leader in the general manufacturing sector, employs 220 full-time staff working at about 125 workstations with various equipment in an 11 600 m² facility.

The dust collection system uses large air conveyors that suck wood dust away from workstations. Most of Miralis’

workstations do not operate continuously, but conventional dust collection systems operate all the time to stop dust from accumulating. Drills and band saws, for instance, are generally used only about 25 percent of the time during the day, while panel saws and wide belt sanders are used up to 80 percent of the time.

To address these variable ventilation requirements and the related energy demand, Miralis hired SyENERGY Integrated Energy Solutions to study the system and implement a solution. Ecogate technology offered the best solution, because it addresses ventilation needs for individual equipment, while maintaining the required airflow in the ventilation ducts.

The consultants isolated each individual workstation and then considered the workstation network as a whole. The Ecogate automation program was adapted to the workstations’ operating schedules. Ecogate’s central control can reduce ventilation for equipment that operates only 20 to 30 percent of the day, while increasing ventilation speed to sweep the entire collection system regularly. With Ecogate technology, Miralis saved 650 000 kilowatt hours per year of the 1.32 million kilowatt hours consumed by the dust collector motors.

The fan’s motor power consumption is significantly reduced and motors run quieter, cooler and with less mechanical stress. Noise at the fan and inside the factory is significantly reduced. “Employees appreciate the upgrade because the air is cleaner and the facility is quieter,” Brisson says.

The computerized Ecogate System is completely automated thanks to sensors and controllers. When a machine is turned on, the sensor signals the controller to open the right gate and turn on the dust collector. When the machine stops, the gate





“IN THE WINTER, WE HAVE TO HEAT AIR THAT IS BROUGHT IN TO REPLACE THE VENTED AIR. WE ARE LOOKING AT THINGS LIKE VARIABLE DRIVES TO REDUCE AIR EXHAUST, HEAT EXCHANGERS AND EVEN A SOLAR WALL.”

Donald Brisson, Director of Operations

closes and the dust collector stops. By closing unused outlets, there is higher air-velocity at the machines' outlets, resulting in better sawdust extraction and cleaner air.

The Ecogate System monitors all of the machines in the Miralis plant and, through a variable speed drive, continually optimizes the amount of power supplied to dust collection. The system is also designed to maintain minimum airflow in the duct system by opening additional gates when necessary to avoid sawdust settling in the duct system.

The technology is relatively new to Canada, with only Miralis and a Manitoba-based company now using it. However, the

technology has the potential to reap energy savings in the wood and printing industries, and also in welding operations.

Miralis also invested \$45,000 in a complete refit of the lighting system. These lighting upgrades cut electricity consumption related to lighting by about 45 percent.

Brisson plans to build on the success of the lighting and ventilation projects by improving energy efficiency in the paint shop. “In the winter, we have to heat air that is brought in to replace the vented air. We are looking at things like variable drives to reduce air exhaust, heat exchangers and even a solar wall.”

FASTFACTS

(Rimouski, Quebec)

Winning edge: Increasing production and decreasing energy consumption simultaneously

- *Miralis manufactures mid- and high-end custom kitchen cabinets.*
- *Reductions in energy consumption represent annual savings of 2300 gigajoules or around \$50,000 in electricity costs.*
- *The upgrade reduced the system's energy consumption by 50 percent.*
- *Lighting upgrades cut electricity consumption related to lighting by about 45 percent.*
- *An on-demand HVAC control handles the ventilation needs of 125 work stations.*

CIPEC Leadership Awards for **Process and Technology Improvements**

McCain Foods (CANADA)

RECOVERING WASTE HEAT

With more than 17 000 truckloads of potatoes coming into the plant every year, and emerging as tasty french fries, McCain Carberry already knew a lot about running an efficient operation. When it came to energy efficiency, plant managers realized there was an opportunity to recover heat from fryer vapour. They installed a two-stage energy recovery system, and now the plant uses 9 percent less natural gas.

“There are measurable savings in natural gas, which in turn result in reductions in emissions. The system cost about \$1.8 million, and we expect it to pay for itself in energy savings within two or three years,” says Len Bull, the Maintenance Supervisor for utilities at McCain’s Carberry, Manitoba, plant, located 170 km west of Winnipeg. He also acts as the plant’s energy champion, a position found in every McCain plant.

The system came online in February 2008. The installation – coordinated closely between production, maintenance and engineering – was completed over several months.

Before the new system was installed, fryer exhaust vapour at 125°C was going up the stack instead of energizing the bottom line. Now, the plant uses this waste heat to heat water in pre-heaters. This is allowing the plant to be among the lower-cost facilities in the McCain Food family, which is already a Canada-wide corporate leader in energy efficiency. The plant is a CIPEC Leader in the food and beverage sector.

“All the staff understand that energy efficiency is about being competitive. Not only do we have to compete against other companies, but we also have to bid on work within the McCain family,” Bull says.

The new process relies on an energy-recovery system which uses computerized controls.

The system also records energy data every day so staff can benchmark performance and investigate when numbers are out of line or determine what’s behind unusually strong performance. “We set a record in March. The energy recovery system is helping us figure out how to perform that strongly again,” Bull says.

The energy recovery system is also used in other McCain plants. “We are using a third- or fourth-generation version. It definitely helps being part of a larger company like McCain, where we can benefit from other plants’ experience,” Bull says.

“IN THE McCAIN WORLD, IF AN ENERGY EFFICIENCY PROJECT HAS A PAYBACK OF UNDER TWO YEARS, THE ATTITUDE USUALLY IS ‘GET BUSY AND DO IT’.”

Len Bull, Maintenance Supervisor for utilities





“WE WILL CONTINUE OUR ENERGY EFFICIENCY EFFORTS. IN MARCH, WE STARTED USING BIOGAS GENERATED FROM POTATO WASTE IN THE CARBERRY PLANT BOILERS, WHICH WILL HELP TO FURTHER REDUCE ENERGY REQUIREMENTS. WE ARE ALSO UPGRADING HVAC SYSTEMS.”

Len Bull, Maintenance Supervisor for utilities

Bull is planning to use some of the spare capacity of the energy recovery system to run equipment in other areas.

This impulse to push for more energy savings is part of the McCain culture. “In the McCain world, if an energy efficiency project has a payback of under two years, the attitude usually is ‘get busy and do it.’ The company is also open to good ideas with longer paybacks,” Bull says.

When it comes to ideas, CIPEC is an obvious source for Bull. “The Energy 2009 conference was a great opportunity for networking and picking up new ideas. We’re looking at

adapting some of the ideas we picked up from cement industry contacts,” Bull says.

He also notes that McCain’s commitment to continuous improvement through the Japanese management philosophy of kaizen means the heat recovery project is just one step in a longer journey. “We will continue our energy efficiency efforts. In March, we started using biogas generated from potato waste in the Carberry plant boilers, which will help to further reduce energy requirements. We are also upgrading HVAC systems.”

FASTFACTS

(Carberry, Manitoba)

Winning edge: Recovering waste heat

- *McCain Foods (Canada) processes an average of about 1 million lbs. of potatoes per day in Carberry.*
- *The system cost about \$1.8 million and is expected to have a payback of under three years.*
- *Recovering heat from fryer vapour is saving the plant an average of about 9 percent in energy costs.*
- *The Carberry plant is one of the lower-cost facilities in the McCain Food family.*

CIPEC Leadership Awards for Monitoring and Tracking



REDPATH SUGAR LTD.

BENCHMARKING ENERGY USE

Redpath Sugar Ltd. uses energy benchmarking to stay lean and green. Redpath's \$15-million annual natural gas bill motivated staff and management to produce a sophisticated monitoring and tracking system that targets energy efficiency.

"The energy benchmarking system includes regression analysis, as well as meters for the plant and for key individual processes. We also review energy targets every day," says George Carter, the Process Manager.

The Toronto plant tracks annual energy consumed divided by the total sugar melted. "This approach has a bias toward production because as production rates increase, the energy intensity reduces, and if production falls, then energy intensity climbs," Carter says.

Redpath added regression analysis into its benchmarking. The effect on the energy efficiency is analyzed against process variables. The key is to examine the processes for inefficiencies. Regression analysis can also test new ways of operating to find efficiency benefits.

"Basically, we can see how we performed daily and even hourly, and then learn from our good days and bad days," Carter says. "You can use this information to answer basic but important questions like 'Is this pump working effectively?', 'Are we returning the correct amount of condensate to the

boilers.'" The system gives a minute-by-minute picture of energy consumption compared with how much sugar is being processed. This real-time benchmarking provides objective, reliable information on energy use and the benefits of continuous improvements.

"We don't accept the idea of using energy once. If we cannot eliminate the need to use the energy, then we want to use it again and again," Carter says. Redpath has been able to fine tune and upgrade equipment to recycle energy. For example, when a storage tank overflowed, releasing hot water into the sewer, the tank control system was modified so that overflow is diverted to another part of the process, capturing the lost energy in the hot water.

"We are fortunate because even though our refinery operates in some ways like an oil refinery, sugar liquors and syrups are not dangerous, and we can adjust and experiment with equipment without being forced to first use complex simulation models," Carter says. "Being part of Domino Brands, which is a much larger organization, is also allowing us to share our energy saving techniques and ideas with other refineries, and learn from good practices elsewhere in the group."

Carter estimates that Redpath has invested \$100,000 in metering and tracking. "This is a small amount compared to the \$1 million per year we are saving in natural gas. The control systems developed by our own engineers are really at the heart of our system," he says. Redpath tracks water and steam consumption, heat loss into Lake Ontario and condensate. A condensate flash heat-recovery system, process upgrades, changes in operating practices and insulation projects reduced natural gas consumption by 67 000 gigajoules a year.



Metering and energy targets allow staff to start and stop equipment more efficiently, having learned that there are right and wrong ways to shutdown and start up the plant.

Carter and Narayanan Seshadri, Redpath's energy manager, attended the CIPEC Energy 2009 conference.

"It was a worthwhile conference. The networking was very positive, and now we are keen to benchmark ourselves against others and see where we stand," Carter says. "It was also good

to be able to focus exclusively on energy efficiency for two days. We learned a lot about new technologies; we are excited to bring this knowledge to the refinery in order to keep Redpath at the forefront of energy efficiency."

Carter's focus on energy efficiency extends beyond monitoring and tracking to studying energy integration with the help of CIPEC and Enbridge Gas and exploring generating power from biogas.

"THIS REFINERY IS A COMPLEX OPERATION. WE HAVE SO MANY OPPORTUNITIES FOR ENERGY EFFICIENCY LEFT TO EXPLORE. THIS IS A VERY EXCITING TIME FOR ENERGY CONSERVATION; WE ARE ON THE EDGE OF AN ENERGY REVOLUTION AND THE ORGANIZATION IS DETERMINED TO BE AT THE FOREFRONT."

George Carter, Process Manager.

FASTFACTS

(Toronto, Ontario)

Winning edge: Benchmarking energy use

- *Canada's largest sugar manufacturing site.*
- *Refines 2000 tonnes of sugar a day.*
- *Benchmarking energy use has saved \$1 million per year in natural gas.*
- *Produces its own electricity with a steam-powered generator.*
- *The most energy-efficient cane sugar refinery in North America.*

CIPEC Leadership Awards for **Monitoring and Tracking**

ALCOA CANADA PRIMARY METALS

MONITORING AND TRACKING FURNACE ENERGY CONSUMPTION

Alcoa, a global aluminum giant with significant operations in Quebec, lives by the old adage that if you can't measure it, you can't manage it. Staff monitor and track the energy consumption of Alcoa's 34 industrial furnaces at its four facilities and report monthly to regional management and a regional energy committee. High or unusual patterns of energy use are investigated, and corrective action is taken.

The resulting annual energy savings are around 27 percent – worth about \$2 million in natural gas costs in 2009. These savings are also helping Alcoa, a CIPEC Leader in the aluminum sector, cut around 15 000 tonnes of greenhouse gas emissions annually.

"We started certifying best practices for furnace performance in the fall of 2008. Every furnace is scored on a scale of zero to three; scores below 2.0 are unacceptable," says Francis Caron, Alcoa Canada's Project Manager from the research and development group. Caron is based in the Deschambault smelter near Québec City, but his responsibilities for supporting deployment of best practices in furnace management have him on the road in Quebec and at Alcoa smelters across North America.

The furnace best-practices program uses measurable criteria like rates of natural gas use and pressure levels in the combustion chamber. To be certified at the best-practice level, a plant must earn a score of 2.5. To put this score in perspective, Caron says that moving from a score of 1.7 to 2.5 would mean a drop in natural gas consumption of about 35 percent.

"In some cases, we've seen natural gas savings of 60 percent. This program is getting a lot of attention and spreading across our global operations. People understand that it represents real savings," Caron says.

After initial assessment and scoring, each plant conducts a two-day kaizen session focused on continuous improvement. Kaizen is a Japanese management philosophy. Caron kicks off the two-day session with a two-hour training class. The kaizen team then produces action items for the group to work on over the next two days. At the end of the two days, the plant presents an action plan to bring furnaces in line with best practices.

"Once the action plan is ready, they get 90 days to close the gap and apply for a final assessment," Caron says. Within 45 days of the application, an assessment team rescores the plant.

Once a plant has earned a score of 2.0 or higher, it becomes part of a follow-up system. Operators check at least one furnace per day to verify whether it is operating within control limits. If the furnace is outside control limits, corrective action is taken. Monthly performance reports are generated to identify trends and problem areas.

By the end of 2010, the best practice team and the regional energy committee are planning to roll out an automated information system. It will allow managers to access daily





performance data for every furnace. There will also be automatic assessment features to alert managers if a furnace is operating outside control limits.

Caron is part of a corporate culture that values energy efficiency from the shop floor to the executive suite. And the Deschambault smelter's energy efficiency record makes it an international benchmark in its own right. Avant-garde management techniques, where input and responsibility are shared equally, have placed it among the top 100 employers in Canada according to Maclean's magazine. The smelter was the first aluminum producer in Quebec to achieve ISO 9002 certification in 1996. In 1997, it was the first to obtain ISO 14001 certification in Canada.

Award-winning approaches to energy efficiency have seen Alcoa included in the Dow Jones Sustainability Index and named one of the most sustainable companies in the world at the World Economic Forum in Davos. The Energy 2009 CIPEC Leadership Award is the latest in an impressive list of achievements for Alcoa.

"IN SOME CASES, WE'VE SEEN NATURAL GAS SAVINGS OF 60 PERCENT. THIS PROGRAM IS GETTING A LOT OF ATTENTION AND SPREADING ACROSS OUR GLOBAL OPERATIONS."

Francis Caron, Project Manager, Research and Development Group

"The Energy 2009 conference and awards ceremony was a good thing for us to participate in. We made connections with people from the CanmetENERGY lab in Ottawa, and are looking at collaborating with them," Caron says. He is exploring the possibility of leveraging Canmet expertise to use carbon residue to produce energy and cut down on Alcoa's use of landfills. Alcoa's future as an industrial energy innovator looks secure.

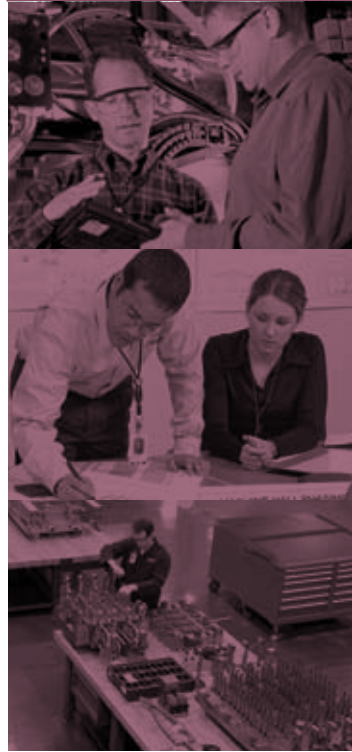
FASTFACTS

(Four locations in Quebec)

Winning edge: Monitoring and tracking furnace energy consumption

- *Alcoa has an annual production capacity of over 1 million tonnes of ingots, castings, billets and aluminum rods.*
- *A furnace best-practices system is being rolled out across Alcoa locations.*
- *Monitoring and optimizing the performance of 34 furnaces is saving Alcoa about \$2 million a year in fuel (gas and oil).*

CIPEC Leadership Awards for **Employee Awareness and Training**



HUSKY INJECTION MOLDING SYSTEMS

DRIVING ENERGY EFFICIENCY THROUGHOUT THE MANUFACTURING PROCESS WITH EMPLOYEE AWARENESS AND TRAINING

Husky – one of the world’s leading suppliers of injection-molding equipment and services to the global plastics industry – is shaping winning attitudes on energy efficiency among its employees. A three-pronged approach to employee awareness and training helped Husky reduce energy use on its Bolton campus by around 17 percent between June 2007 and August 2009.

“Management’s commitment to energy efficiency training shows everyone at Husky how serious we are about saving energy. The bottom line is that employees, managers and our executive team realize energy efficiency not only benefits the environment, but also benefits business,” says Al Fiacco, Facilities Manager at Husky’s main manufacturing campus in Bolton, Ontario, just north of Toronto.

Good energy management practices are a priority for Husky, a CIPEC Leader in the plastics sector. Husky has set a corporate goal of reducing energy use by 3 percent annually. Husky’s plant in Bolton is spread across a 54-acre campus with five buildings. Peak energy demand at the site averages 6.5 megawatts in the winter and 8 megawatts in the summer.

Enhanced employee awareness has led to projects like installing sub-metering and equipment operations scheduling, which realized annual energy savings in electricity consumption of 19 000 gigajoules. Discussions at energy team meetings

prompted the company to install variable frequency drives on a number of HVAC systems and large process motors. This resulted in significant energy reduction.

Husky’s employee awareness and training uses three elements – energy-awareness, an energy challenge and engineering engagement – to drive energy efficiency throughout its manufacturing process.

Energy awareness and education

Husky relies on mandatory energy training, and it reports training progress to corporate and production team leaders. With the help of a customized Dollars to \$ense Energy Management Workshop offered by Natural Resources Canada, the Husky Awareness Training program was launched in May 2007. New Husky employees also receive sustainability training as part of their orientation.

By August 2007, more than 900 employees at the Bolton plant had been trained, including equipment operators who were given the tools to spot energy efficiency opportunities. These operators now rely on a detailed checklist before ending their shifts. Using the checklist has ingrained actions like shutting off equipment not required for the next shift. Husky also translated energy awareness training materials into Mandarin and trained Husky employees in Shanghai.

Husky employees are also able to earn GreenShares, which is a company-wide program to encourage environmental responsibility in employees at home and at work. “GreenShares is especially positive because it encourages employees to participate in sustainability and demonstrates the ongoing commitment to proactive environmental responsibility that Husky maintains as one of its core values,” Fiacco says.



Energy challenge

Husky also relies on friendly competition between employees to spur energy efficiency gains. In the most recent competition, manufacturing plants in Bolton, Luxembourg, Vermont and Shanghai worked from November 2009 to January 2010 to reduce energy consumption. The Shanghai campus edged out Bolton for first place with a drop in electricity consumption of 10.9 percent. The Bolton campus achieved a 10.7 percent reduction.

The energy challenge also had an employee engagement component - from boards where employees could sign a public declaration of environmental stewardship, to lunch and learn events on composting and a green auto show in which auto dealers brought hybrid vehicles to the plant.

Engineering engagement program

Husky is also dedicated to helping its customers become more energy efficient. Husky's Manufacturing Advisory Services team provides operational consulting, design and project

management services to help customers increase the operating efficiency of their facilities. Husky also offers customers a Total Energy Management program that uses a holistic approach to achieve continuous and sustainable energy reduction in an injection molding operation.

An ongoing goal for Husky is to develop technologies that increase sustainability and reduce the environmental footprint of packaging. For example, the company offers solutions to help develop lighter beverage packages. Husky is also investing in technology that is enabling customers to make plastic packaging with a higher percentage of post-consumer recycled resins, leading to a smaller carbon footprint.

Looking to the future, Fiacco expects employee awareness and training on energy efficiency to play an even greater role. "Our goal of carbon neutrality by 2025 means sustainable energy use will remain a priority. Fortunately, we have a number of visionary thinkers and talented engineers who are dedicated to keeping Husky on the leading edge of environmental stewardship."

FASTFACTS

(Bolton, Ontario)

Winning edge: Driving energy efficiency throughout the manufacturing process with employee awareness and training

- *Husky Injection Molding Systems is one of the world's leading suppliers of injection molding equipment to the global plastics industry.*
- *Its Bolton plant reduced energy use by around 17 percent between June 2007 and August 2009.*
- *The corporate goal is to reduce energy use by 3 percent annually.*
- *Husky plants around the world compete with each other on energy efficiency.*

CIPEC Leadership Awards for **Employee Awareness and Training**

MOLSON COORS CANADA

INCREASING EMPLOYEE AWARENESS AND ENERGY MANAGEMENT SKILLS WITH AN ENERGY CONSERVATION PROGRAM



It takes great employees to make great-tasting beer. Molson Coors Canada recognizes that its employees are key to its success, which is why the brewery focused on engaging employees in order to energize the bottom line with energy efficiency.

The brewery energy conservation program – known as the Power to Make a Difference – increases employee awareness of their role in day-to-day energy efficiency. Energy targets and results are reported monthly by e-mail and on scoreboards throughout the brewery.

“I get ideas every day from employees. One thing leads to another, and an idea becomes an energy-saving project,” says Scott Gordon, Chief Engineer at the Molson Coors Canada brewery in Vancouver, a CIPEC Leader in the brewery sector. Gordon also serves as the brewery’s energy manager and is part of a company-wide network of energy managers who report through a national energy committee. “We get big ideas and small ideas. It all goes into the mix – whether it’s people letting me know a light’s on when it shouldn’t be, or something that affects production.”

The brewery’s 150 staff have long shown their passion for saving energy, but since the Power to Make a Difference was launched in April 2008, there has been a renewed focus on

energy efficiency. Redesigning the brewing kettle steam systems reduced the plant’s overall steam pressure. This cut annual energy use by 5800 gigajoules and avoided 288 tonnes of carbon dioxide. A refrigeration study, in partnership with BC Hydro’s Power Smart program, identified opportunities that saved 6000 gigajoules of electricity per year. Replacing the incandescent light bulbs in the Molson sign with LED bulbs saved 700 gigajoules per year.

“The Power to Make a Difference is really an innovative way to drive employee awareness on energy efficiency and company results at the same time,” Gordon says. Before the program was launched, Molson’s approach to energy efficiency was more ad hoc. The brewer scored some big wins, but now the focus is on tackling energy efficiency challenges in a more systematic way.

The program’s goal is to build on existing environmental initiatives and to reduce energy consumption related to gas, electricity and water in Molson’s breweries by at least 5 percent every year. Ultimately, the idea is for all employees to think of conserving energy as essential for doing a good job.

Scott also cites senior management support as key to Molson Coors’ ongoing success. He adds that being part of an international corporation offers important opportunities to learn about energy efficiency. “No matter how committed you are, we all wear blinders. To get around that, I have monthly calls with other energy managers and we meet face to face twice a year.”

Energy managers like Gordon also welcomed the resources offered by the Power to Make a Difference program. It’s a comprehensive guide to motivating employees to become energy



efficient. It sets the tone with a recorded message from Daniel Pelland, Chief Brewing Officer at Molson, who asks employees to “make Molson one of the most environmentally conscious and energy efficient breweries in the world.”

Program tools also include posters, tent cards, advertisements and t-shirts. One of the more innovative ideas is a snag tag. Employees can use these red tags emblazoned with the words “Energy Alert!” to write notes to fellow employees and supervisors about equipment and processes that are wasting energy. A PowerPoint presentation, e-mail templates and briefing notes round out the program tools.

Another key element of the program is its focus on employee energy habits outside work. The rationale is that the more people think about energy, whether at home or work, the more inclined they will be to become energy efficient.

Molson Coors Canada also intends to continue to take advantage of other energy efficiency training and awareness opportunities

beyond the Power to Make a Difference. Spot the Energy Savings Opportunities Workshops from Natural Resources Canada have garnered interest in the past, and Gordon is open to holding more workshops. He was also pleased with the content and learning opportunities at the Energy 2009 conference. “The award was important to staff and executives. And networking with people at the conference really helped us step outside our box,” Gordon says. He was particularly interested in a session on optimization of combustion systems. “Advanced burner concepts like flame shape and how temperatures fluctuate are something we can apply here.”

Gordon is optimistic that employee awareness and energy management skills will continue to move from strength to strength at Molson Coors. “We want to move to a best-in-class level in energy management, where people are tracking their own usage, knowing their energy targets and responding proactively.”

FASTFACTS

(Vancouver, B.C.)

Winning edge: Increasing employee awareness and energy management skills with an energy conservation program

- *Molson Coors Canada produces about 900 million litres of beer annually.*
- *A company-wide network of energy managers report through a national energy committee.*
- *The Power to Make a Difference program aims to reduce energy consumption by at least 5 percent every year.*
- *Redesigning the brewing kettle steam systems cut annual energy use by 5800 gigajoules and avoided 288 tonnes of carbon dioxide.*

CIPEC Leadership Awards for Integrated Energy Efficiency Strategy

ALBERTA NEWSPRINT COMPANY

ESTABLISHING AN INTEGRATED ENERGY EFFICIENCY STRATEGY TO REDUCE ELECTRICITY CONSUMPTION

Alberta Newsprint Company, a leading manufacturer of premium newsprint, runs a mill 24 hours a day, seven days a week, year-round. Meanwhile, the company's energy conservation team is just as busy focusing on energizing the bottom line with energy efficiency.

"We have an integrated energy efficiency strategy that is proactive. Our energy conservation team looks for solutions instead of waiting to be blindsided by problems," says Grant Belke, a Control Room Operator and Chairman of Alberta Newsprint's energy conservation team.

Alberta Newsprint Company, a CIPEC Leader in the pulp and paper sector, understands that integrated energy efficiency includes everything from regular cleaning and maintenance to adopting innovative technologies. The energy team includes the mill's general manager. Part of a company of about 200 employees, the 10-member energy team is able to maintain a high profile and keep the company's strategic focus on energy efficiency.

The company, located in Whitecourt, Alberta, about 175 km northwest of Edmonton, also integrates all employees into the energy efficiency culture. Leadership and ideas come from beyond the energy team. "A lot of our big ideas come from the mill floor. One of our machine operators has come up with two years' worth of energy efficiency projects,"

says Surendra Singh, the company's Energy Manager. Employees are motivated by prizes, draws and other benefits, but Grant says fundamentally everyone understands that energy efficiency "is saving money and keeping people working."

The energy team's initial focus is on reducing electricity consumption because it represents 40-45 percent of the cost of manufacturing. Reduction targets are clearly defined and published mill wide. Presentations are made to each department to ensure buy-in throughout the mill. Time lines and energy team responsibilities are included to ensure everyone knows what is expected of them. Each project has a champion to keep it on track and secure necessary approvals.

Since 2008, 35 projects have been implemented. Most projects fall into one of two categories: modifying conventional manufacturing processes and reconfiguring centrifugal machines.

Modifying conventional manufacturing involved evaluating major energy-consuming units and their role in the overall process. Technology upgrades since the 1980s had rendered many units redundant, yet they were still using energy. Some energy-intensive pulp cleaners, a secondary pulp screen and a major tank were removed. The pulp mixing and agitation process was optimized.

Overall, compared with 2008, plant operations are using about 5300 fewer horsepower and saving 100 000 gigajoules per year. The combined annual savings from all these projects is \$2.2 million. The capital and other costs to implement these projects was \$250,000 – producing a simple payback of under two months. From 2000 to 2009, Alberta Newsprint Company cut annual natural gas use in half – saving 500 000 gigajoules annually.





“Reducing the cost of manufacturing without large capital investments is critical, given the challenging economic situation the pulp and paper industry faces,” Singh says.

The project costs were low because Alberta Newsprint Company adopted an integrated energy efficiency strategy that focused on taking full advantage of existing resources. “A good example of our integrated approach was to run pumps and blowers on

“A LOT OF OUR BIG IDEAS COME FROM THE MILL FLOOR. ONE OF OUR MACHINE OPERATORS HAS COME UP WITH TWO YEARS’ WORTH OF ENERGY EFFICIENCY PROJECTS.”

Surendra Singh, Energy Manager

demand instead of continuously. We already had most of the instruments needed for controls, and we did the automation in-house,” Singh says.

Achievements like these from Alberta Newsprint Company are earning recognition not just from CIPEC’s Leadership awards. Pulp and Paper Canada magazine – the premier publication for the Canadian pulp and paper industry – has accepted technical papers from Alberta Newsprint Company. These peer-reviewed papers reflect some of the more innovative ideas at the company. In the spring of 2010, an article outlined how natural gas costs were cut in half at the mill over the last decade.

The ultimate goal shared by Singh, Belke and their colleagues is to leave a profitable legacy for their co-workers and management. “We want to save even more energy and make more paper. To get there, we will have people in this company taking it for granted that you constantly assess energy efficiency at the production level,” Belke says.

FASTFACTS

(Whitecourt, Alberta)

Winning edge: Establishing an integrated energy efficiency strategy to reduce electricity consumption

- *Alberta Newsprint Company is a leading manufacturer of premium newsprint.*
- *Since 2008, 35 energy efficiency projects have been implemented.*
- *Combined annual savings from all these projects are \$2.2 million, for a simple payback of two months.*
- *From 2000 to 2009, Alberta Newsprint cut annual natural gas use in half – saving 500 000 gigajoules annually.*

CIPEC Leadership Awards for Integrated Energy Efficiency Strategy

BROAN-NUTONE CANADA

REDUCING PROCESS ENERGY CONSUMPTION WITH A CROSS-FUNCTIONAL TEAM

The difficult will be done immediately. The impossible will take a while. These sentiments sum up the attitude of the cross-functional energy team in Broan-NuTone's Mississauga plant. This can-do attitude and an integrated energy reduction strategy drove Broan-NuTone's plant in Mississauga to the top of the energy efficiency rankings among the company's 11 plants around the globe.

"If you never stop doing what's difficult, you may eventually achieve what was once thought impossible. We wouldn't have guessed that our results would have been strong enough to take us this far," says John Martinovic, Director of Engineering and Quality and a member of the cross-functional energy team at Broan-Nutone, North America's largest producer of residential ventilation products. The Mississauga plant is a CIPEC Leader in the general manufacturing sector.

The cross-functional energy team draws members from key departments, which virtually guarantees an integrated approach to energy efficiency. The team's advice enables executive management to prioritize and implement the most cost-effective energy efficiency projects – to move from the difficult to the impossible.

A telling example of moving from the difficult to the impossible was the team's recommendation to redesign the paint process

to reduce air pressure. Once this was accomplished, the team was able to eliminate two of the plant's three compressors and cut air-compressor horsepower by 56 percent. Had the project started with the seemingly impossible premise of cutting two compressors, it might never have been started.

Overall, the team reduced the plant's \$600,000 utilities bill by 37.5 percent. This equals an annual savings of about \$225,000 when comparing 2009 to a 2006 base year. "It's like a cheque that writes itself every year," Martinovic says. To realize these savings, the team cut electricity consumption by 31 percent, natural gas by 33 percent and water by 85 percent. The reductions in natural gas and electricity consumption are equal to 4 500 gigajoules per year.

At the heart of Broan-NuTone's integrated energy efficiency strategy is a seven-step process:

1. Understand where and how energy is used
2. Understand when energy is used
3. Monitor and track energy use
4. Analyze data analysis
5. Identify, quantify and prioritize opportunities by justifying costs
6. Reduce consumption through implemented projects
7. Repeat

The energy team also enlisted expertise from outside the company. In 2007, a Dollars to \$ense Energy Management Workshop introduced the energy team to CIPEC. "Now I wouldn't hesitate to call people at CIPEC if I needed help," Martinovic says. In the spring of 2010, after an introduction from CIPEC, Broan-NuTone began exploring ways to become involved with Partners in Project Green – a growing community of businesses working together to green their bottom line by creating an internationally recognized eco-business zone around Toronto Pearson International Airport.





Broan-NuTone also worked with an energy solutions consultant through Enbridge Gas. He helped the company develop integrated solutions and implement metering to monitor the final benefit of each project. Four major natural gas projects were completed.

Reusing water between wash tanks

Broan-NuTone was using fresh city water to replenish wash tanks. This meant heated water had to be reheated. Now water is cascaded from rinse tanks to significantly reduce the amount of fresh make-up water fed into the chemical tanks. This saves energy because the rinse water is maintained at 21°C versus city water at 15°C.

“A week after we made the switch to the new system, a Peel Water and Wastewater technician arrived. The utility thought our meter was broken,” Martinovic says.

Reducing wash temperature

The energy team worked with chemical suppliers to specify the correct low temperature chemical for the wash process. The goal was to reduce the operating temperature from 60°C to 43°C. The energy team actually reduced the operating

temperature to 21°C by immersing parts from a spot-welding process. Integrating this waste heat meant new chemicals that can clean at lower temperatures could be used.

Reducing dry-off oven temperature

The existing dryer for parts exiting the washer was an expensive compressed air system. It was replaced with a recirculating air blow-off assembly, which dries the products more effectively and significantly reduces gas consumption.

Recovering heat from compressors and chillers

The team modified venting from the compressor room and chiller equipment to allow outside venting of warm air in the summer and inside venting to the plant in cold weather – saving almost 13 000m³ of natural gas per year.

Despite their impressive results so far, the energy team expects to deliver even more energy efficiency gains in the future. Another 20-25 percent in energy savings is on the agenda by 2012.

“Coming soon – expect the impossible,” Martinovic says.

FASTFACTS

(Mississauga, Ontario)

Winning edge: Reducing process energy consumption with a cross-functional team

- *Broan-NuTone is North America's largest producer of residential ventilation products.*
- *Integrated energy efficiency strategy uses a seven-step process.*
- *The plant's \$600,000 utilities bill were cut by 37.5 percent.*
- *Electricity consumption was cut by 31 percent.*
- *Natural gas consumption was cut by 33 percent.*

ENERGY EFFICIENCY PROGRAMS AND TOOLS FOR INDUSTRY

NATURAL RESOURCES CANADA 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

EMPLOYEE-TRAINING ASSISTANCE

Dollars to \$ense Energy Management Workshops

FINANCIAL SUPPORT

ecoENERGY Retrofit: small and medium-sized organizations

ecoENERGY for Industry: assessment incentive

Tax incentives: Classes 43.1, 43.2 and 29, and Canadian Renewable and Conservation Expenses (CRCE) tax incentives program

TECHNICAL SUPPORT

Canadian Industry Program for Energy Conservation

Canadian Industry Program for Energy Conservation (CIPEC)

CIPEC is a voluntary industry-government partnership that promotes improvements in energy efficiency and reductions in greenhouse gas emissions across Canada's industrial sectors. CIPEC, which is funded under the ecoENERGY for Industry initiative, comprises 26 sector taskforces involving over 50 trade associations. (For more information, including how to join CIPEC, see page 5.)

ecoENERGY Retrofit for Small and Medium-Sized Organizations

Small and medium-sized industrial facilities (with fewer than 500 employees) that are considering energy efficiency improvements can benefit from the ecoENERGY Retrofit Incentive for industry. The program covers up to 25 percent of project costs, to a maximum of \$50,000 per application and \$250,000 per corporate entity.

The incentive helps companies overcome financial barriers to energy efficiency retrofits. It applies to energy-saving projects that modify or upgrade existing industrial buildings, equipment, systems and processes.

Since December 2, 2009, industrial clients who have already successfully completed a retrofit project are no longer required to wait 12 months before applying for a second project at the same facility.

Fax: 613-992-3161

info.ind@nrcan-rncan.gc.ca

oee.nrcan.gc.ca/industrial/financial-assistance/retrofit/index.cfm

ecoENERGY for Industry – Assessment Incentives

NRCan offers a financial incentive to help industrial companies conduct process integration (PI) and computational fluid dynamics (CFD) studies that go beyond conventional energy audits.

PI studies focus on the efficiency of overall plant processes and systems and their interactions while CFD studies simulate process flows and reactions to improve the efficiency of specific processes and systems.

The ecoENERGY Assessment Incentive covers up to 50 percent of the cost of these studies to a maximum of \$50,000 for a PI study or \$30,000 for a CFD study. The incentive can be used to help defray the cost of hiring technical experts to identify and assess the most effective and efficient energy-saving

opportunities in a large or moderately complex industrial process. The studies are applicable to the design of new production units and modifications to existing facilities.

Fax: 613-992-3161

info.ind@nrcan-rncan.gc.ca

oee.nrcan.gc.ca/industrial/financial-assistance/assessment/

Classes 43.1, 43.2 and 29 and CRCE Tax Incentives

Canadian tax law makes energy-efficient systems and alternative energy sources, such as solar, wind and biofuels, more fiscally attractive for industry.

Under classes 43.1 and 43.2 of the *Income Tax Regulations*, certain capital expenditures on systems that produce heat or electric power efficiently from fossil fuels or from alternative renewable energy sources are eligible for accelerated capital cost write-offs, at 30 percent and 50 percent respectively on a declining balance basis.

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*. It provides a 50 percent straight line accelerated capital cost allowance for certain manufacturing and processing equipment.

Without these accelerated write-offs, many of these assets would be depreciated at annual rates of only 4 percent, 6 percent, 8 percent or 20 percent. Natural Resources Canada is the technical authority for classes 43.1 and 43.2.

Budget 2010: Leading the Way on Jobs and Growth expanded eligibility for the Accelerated Capital Cost Allowance for Clean Energy Generation. The expanded allowance includes heat recovery equipment and distribution equipment for a district energy system.

In addition to the Class 43.1 or Class 43.2 capital cost allowance, the *Income Tax Regulations* allow expenses incurred during the development and startup of renewable energy and energy conservation projects (i.e., Canadian Renewable and Conservation Expenses, CRCE) to be fully deducted 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 for equipment described in Class 43.1 or 43.2.

Tel: 613-996-0890

oee.nrcan.gc.ca/industrial/financial-assistance/tax-incentives.cfm

Dollars to \$ense Energy Management Workshops

Hundreds of organizations have cut operating costs by adopting energy-saving practices offered through Natural Resources Canada's Dollars to \$ense Energy Management Workshops. The workshops are facilitated by leading energy efficiency experts. They give owners, managers and operators of industrial facilities a competitive edge in managing energy costs in their operations.

There are four one-day Dollars to \$ense workshops:

- ***Energy Management Planning shows you how to get support and identify cost-saving opportunities in many places you might not have considered.***
- ***Spot the Energy Savings Opportunities shows participants 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, and skills in, obtaining financing for energy efficiency projects.***

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

Register online by visiting the website below or contact Natural Resources Canada to find out more about workshop customization.

Tel: 613-996-6585

Fax: 613-943-5380

**[Dollarsto\\$enseWorkshops@nrcan-rncan.gc.ca](http://Dollarsto$enseWorkshops@nrcan-rncan.gc.ca)
oe.e.nrcan.gc.ca/industrial/training-awareness**

Energy Benchmarking and Best Practices

CIPEC offers a benchmarking and best practices program for Canada's industrial sectors. The program provides quantitative and qualitative indicators for companies to compare their energy use and energy management practices with similar operations. The indicators are based on the collection and analysis of energy-related data and energy management practices. The program is designed to help industry achieve significant energy efficiency gains.

Tel: 613-996-6891

Fax: 613-992-3161

**cipec.peeic@nrcan-rncan.gc.ca
oe.e.nrcan.gc.ca/industrial/technical-info/benchmarking**

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. It is also a performance management system that helps reduce energy consumption and cost.

ISO 50001 – New Energy Management Systems Standard

Scheduled for publication in 2011, the *ISO 50001 Energy Management Systems Standard* will establish an energy management framework for all types of organizations and companies. This new voluntary energy management standard could quickly become a de facto requirement for businesses competing in today's globalized world.

ISO 50001 highlights:

- ***standardizes energy management practices***
- ***measures current energy use***
- ***documents, reports and validates continuous improvement in energy management***
- ***guides procurement of energy-using equipment and systems***
- ***provides direction for emissions reduction projects***

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 around ISO 50001. CIPEC members can begin to leverage CIPEC resources now to prepare to implement ISO 50001.

Tel: 613-947-1594

Fax: 613-992-3161

bob.fraser@nrcan-rncan.gc.ca

THE YEAR IN REVIEW

Thanks to strong leadership, the dedicated efforts of the Executive Board, the Task Force Council, the 26 task forces and excellent support from the Office of Energy Efficiency, companies under the CIPEC umbrella continued to make advances in energy efficiency during the past year.

These advances are reflected in a number of statistics:

- *Completed comprehensive studies on the energy efficiency potential of the upstream oil and gas sector and thermal power generating sector.*
- *173 additional companies are receiving funding from the ecoENERGY Retrofit Incentive for Industry program and saving an estimated 454 000 gigajoules of energy annually.*
- *330 organizations signed on as CIPEC Leaders, bringing the total to over 2100 CIPEC Leaders.*
- *Dollars to \$ense Energy Management Workshops were delivered to 2600 people, bringing the total to 20 000 since the workshops were first offered.*
- *Over 18 000 publications were distributed.*
- *CIPEC's total estimated annual energy savings exceeded 4.2 petajoules.*
- *CIPEC's estimated greenhouse gas emissions reductions totalled 412 kilotonnes.*



INDUSTRY SECTOR PROFILES

ACCURATE MEASUREMENT AND MEANINGFUL DATA ARE FUNDAMENTAL TO MEASURING ENERGY IMPROVEMENTS.

Data used in this report are collected by Statistics Canada, with funding from Natural Resources Canada (NRCan) and Environment Canada, and supplemented by information received from associations participating in the Canadian Industry Program for Energy Conservation (CIPEC) as well as other private and government organizations.

“ENERGY IMPACTS THE BOTTOM LINE”

Statistics Canada manufacturing sector data are collected through the annual *Industrial Consumption of Energy (ICE)** survey, which covers approximately 4300 establishments in the manufacturing sector. The survey gathers information by establishment on energy fuel consumption in natural units for 13 fuel types in 87 manufacturing industries. Survey results are used to track energy efficiency improvements, calculate carbon-dioxide emissions and inform the Canadian public about energy conservation.

Statistics Canada began streamlining the questionnaire and data collection process in data reference year 2004. The changes included standardizing some special industry questionnaires, making provisions for respondents to explain major changes in energy consumption to minimize follow-up inquiries, and converting fuels to a standard unit of measure.

Data analysis and interpretation involves the collective effort of NRCan's Office of Energy Efficiency (OEE), CIPEC trade associations and the Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC) at Simon Fraser University in Burnaby, British Columbia. CIEEDAC produces energy intensity indicators for each sector based on production and gross

domestic product. Primary funding for CIEEDAC comes from the OEE, with additional contributions from industry associations that participate in CIPEC and from the provinces of Quebec and British Columbia.

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, by North American Industry Classification System (NAICS)*; and CANSIM table 128-0006 – *Energy fuel consumption of manufacturing industries in gigajoules, by North American Industry Classification System (NAICS)*.

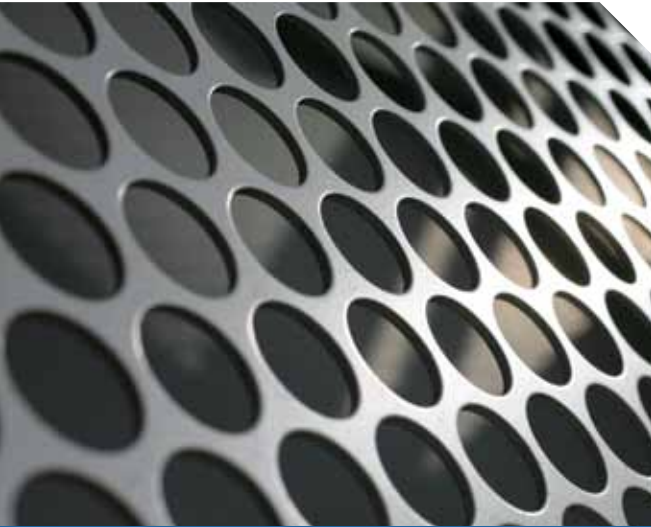
The link to Statistics Canada is
cansim2.statcan.ca

The OEE publishes *Energy Efficiency Trends in Canada* on an annual basis at
oee.nrcan.gc.ca/corporate/statistics/neud/dpa/data_e/publications.cfm

Data from CIEEDAC is available at
www.cieedac.sfu.ca/CIEEDACweb/mod.php?mod=userpage&menu=16&page_id=9

**The data from the ICE survey (preliminary) relate to the 2008 calendar year.*

SECTOR REPORTS ALUMINUM



PROFILE

Canada's aluminum sector is a world leader in aluminum production. Outputs of the industry's plants in the provinces of Quebec and British Columbia significantly contribute to Canada's national and local economies.

HIGHLIGHTS

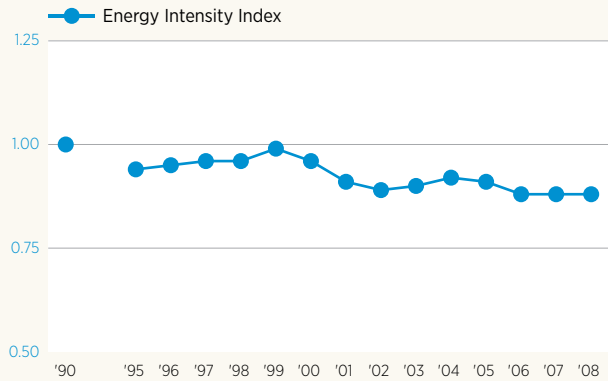
Energy consumed in the aluminum sector increased by 1.5 percent in 2008 (over 2007).

However, both the energy intensity and energy intensity index remained virtually unchanged due to the sector's increase in production by 1.2 percent.

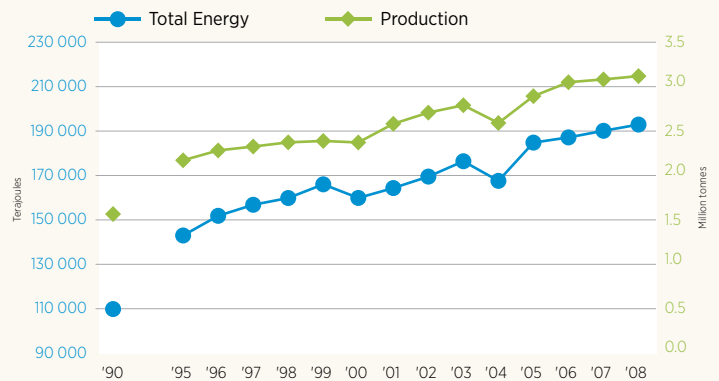
Electricity is the preferred source of energy in the aluminum sector at 91 percent of fuels used, followed by natural gas at 5 percent.

ALUMINUM SECTOR - NAICS 331313

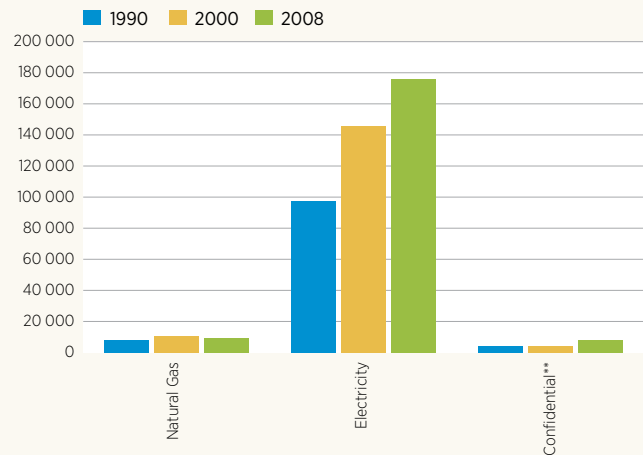
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Production (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data source:

Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey*, Ottawa, December 2009.
Production - Natural Resources Canada, *Production of Canada's Leading Minerals* December 2009.

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

BREWERY SECTOR - NAICS 31212

SECTOR REPORTS
BREWERY



PROFILE

The Canadian brewing industry prides itself on its world-class beers, leadership in educating consumers to drink responsibly, three-century history in Canada, diversity and, finally, its impressive environmental record.

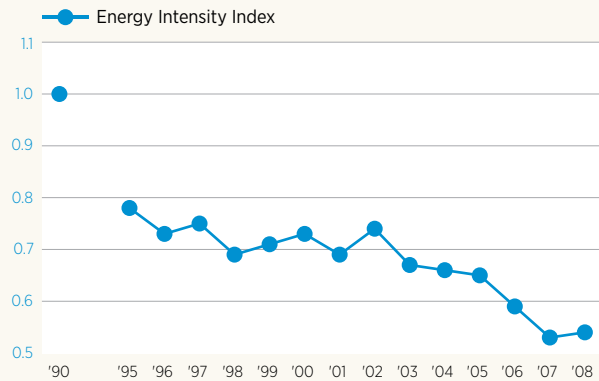
HIGHLIGHTS

Energy usage in the brewery sector increased less than 1 percent in 2008 (over 2007).

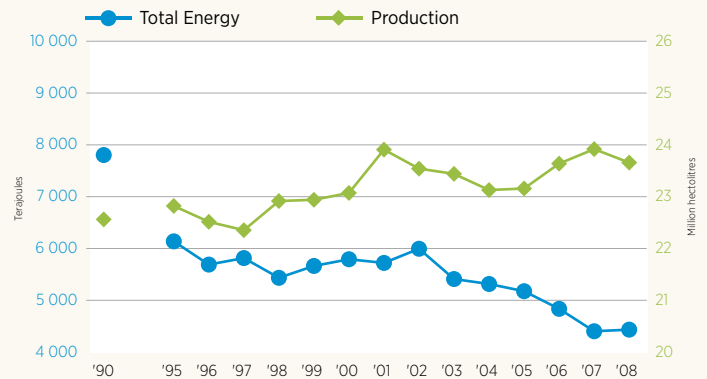
Concurrently, a corresponding drop in the sector's output by 1 percent caused energy intensity to edge upwards by close to 2 percent.

Natural gas remains the preferred fuel in the brewery sector at 65 percent; electricity comes in second at 24 percent. It is observed that while the sector's natural gas consumption decreased by 1 percent, its electricity consumption increased by over 6 percent. This change, however, appears consistent with that in most other sectors in Canadian manufacturing.

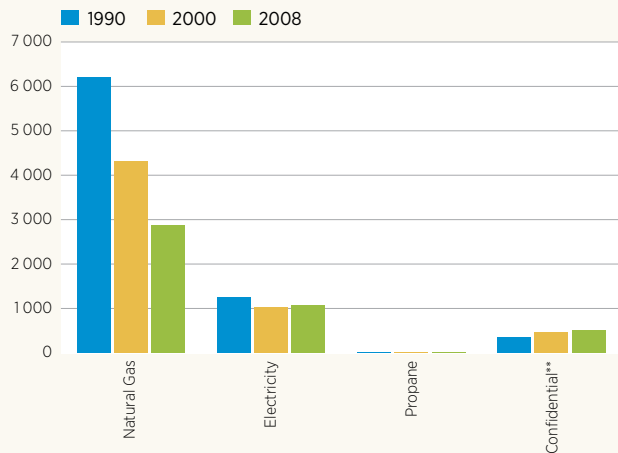
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Production Output (1990-2008)



Energy Sources in TeraJoules per Year (TJ/yr)



Data sources:
Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995 - 2008*. Ottawa, December 2009
Production - Brewers Association of Canada, Ottawa, October 2009.

**Confidential includes: Heavy Fuel Oil (HFO) and Middle Distillates (LFO)

SECTOR REPORTS CEMENT



PROFILE

The cement industry is the cornerstone of Canada's domestic construction industries and a significant exporter, contributing substantially to the country's balance of payments.

Cement is the active component in the manufacturing of concrete, comprising 10 to 15 percent of finished concrete products. Concrete is the second most consumed product, next to water.

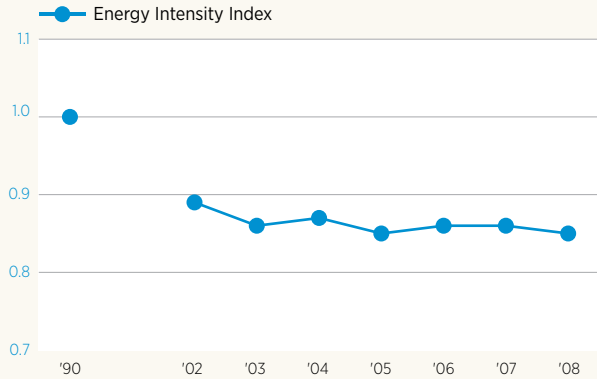
HIGHLIGHTS

Energy intensity in the cement industry has shown a downward turn after highs in the early 2000s.

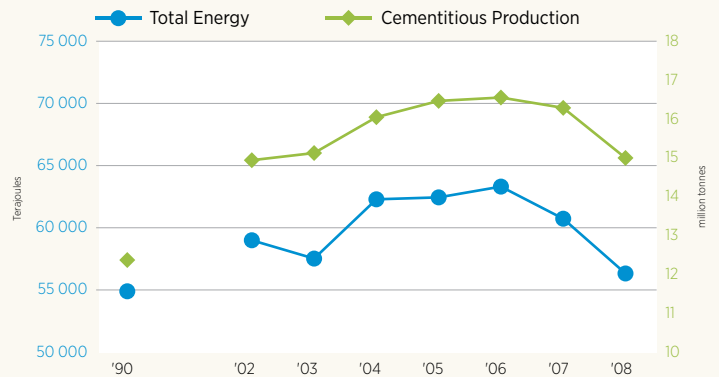
Heat consumption of kilns remains the largest source of energy consumption in this sector.

CEMENT SECTOR - NAICS 327310

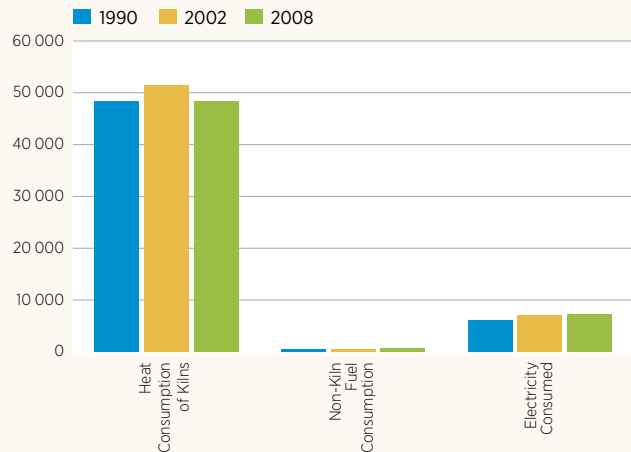
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy Consumption and Production Output (1990-2008)



Energy Consumption in TeraJoules per Year (TJ/yr)



Data sources:
Fuel Consumption and Cementitious Production - Portland Cement Association (PCA)
Spring 2010

SECTOR REPORTS

CHEMICAL



PROFILE

The chemical sector encompasses a diverse industry producing organic and inorganic chemicals, plastics and synthetic resins. The Chemistry Industry Association of Canada (CIAC) is the trade association that represents manufacturers in this sector. Its member companies produce more than 90 percent of industrial chemicals manufactured in Canada.

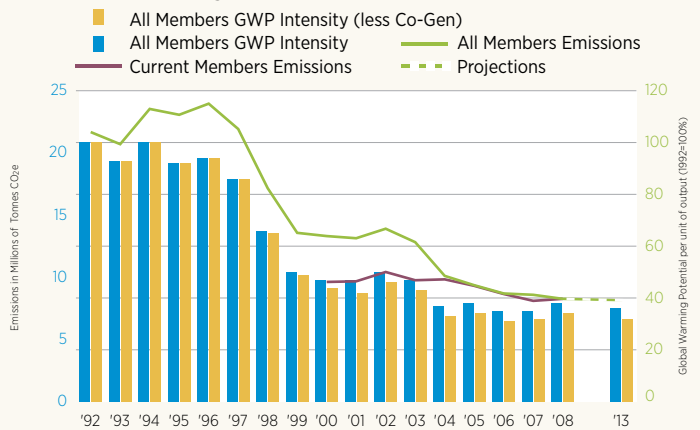
HIGHLIGHTS

Total CO₂ emissions for all members from 1992 to 2008 have decreased by 31 percent.

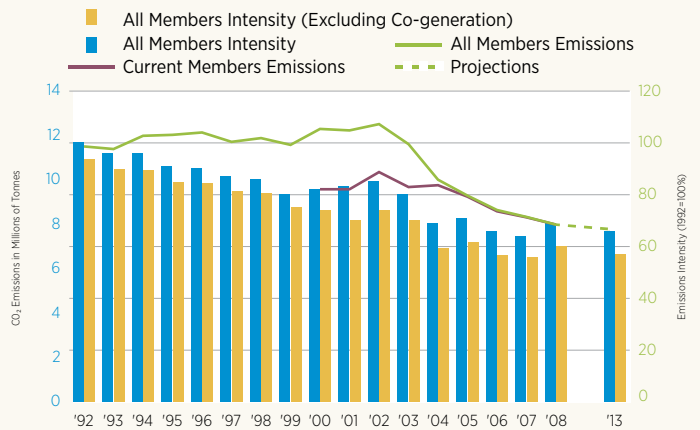
In terms of global warming potential, member companies' GHG emissions—in millions of tonnes of CO₂e emissions—have declined in 2008 by 62 percent compared to 1992 amounts.

CHEMICAL SECTOR - NAICS 331313

Global Warming Potential vs. Production



Carbon Dioxide Emissions vs. Production



SECTOR REPORTS CONSTRUCTION



PROFILE

Construction is Canada's largest industry, composed of a diverse array of companies whose work touches every economic sector and region of the country.

HIGHLIGHTS

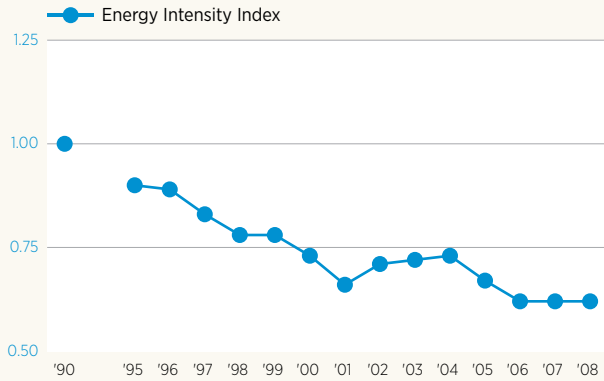
Energy intensity in the construction sector remained unchanged in 2008 (over 2007). Decline in both energy consumption and GDP by an almost identical percentage (3 percent) caused the intensity to remain unchanged.

Middle distillates remain the preferred fuel at 64 percent, followed by natural gas at 30 percent.

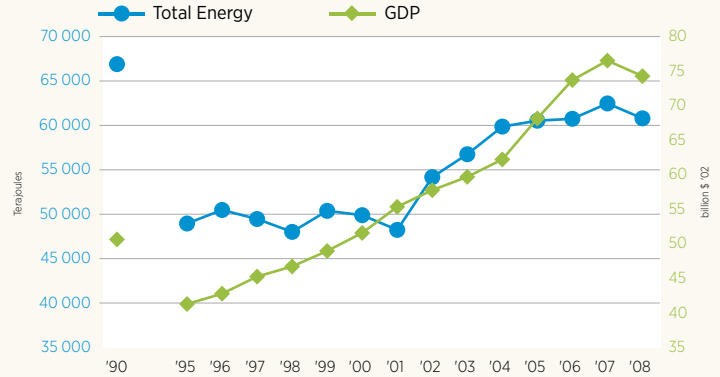
Propane showed the highest percentage decline at 28 percent even though propane's share as a fuel source is a mere 5 percent.

CONSTRUCTION SECTOR - NAICS 23

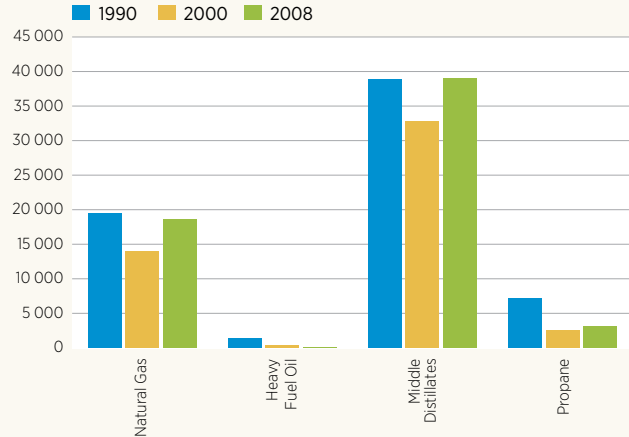
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Economic Output (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data sources:
 Energy Use - Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC).
 Development of Energy Intensity Indicators for Canadian Industry 1990-2008.
 Simon Fraser University, March 2010.
 Output - Informetrica Limited, TI Model and National Reference Forecast, November 2009.

SECTOR REPORTS DAIRY



PROFILE

Canada's dairy product processing sector operates facilities and employs people across the country.

HIGHLIGHTS

An increase of 4 percent in energy consumption in 2008 (over 2007) caused the energy intensity to edge upwards by the same percentage, given the virtually unchanged production level.

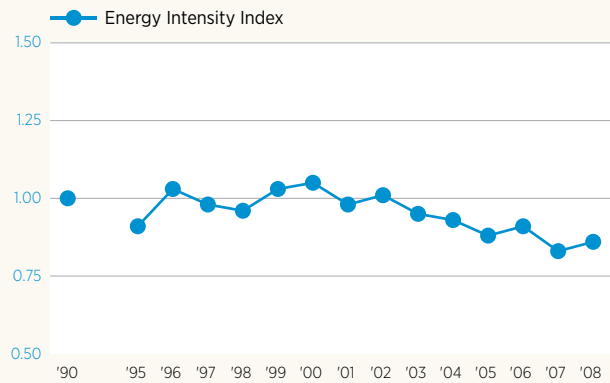
Most of the energy consumption increase is due to an increase in electricity consumption.*

Natural gas remains the preferred fuel at 62 percent, followed by electricity at 34 percent.

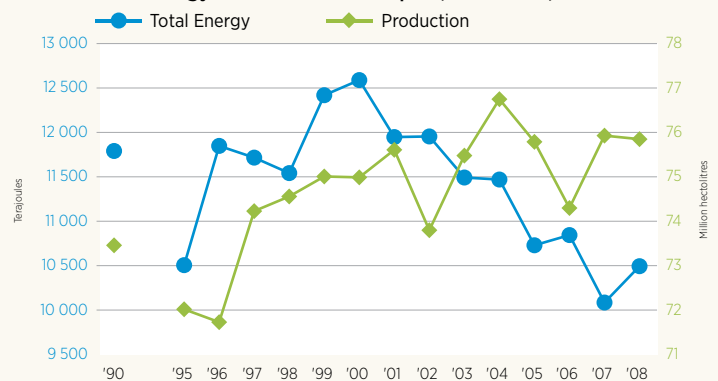
* The electricity consumption figure for 2008 is in contrast to production, and is being reviewed.

DAIRY SECTOR - NAICS 3115

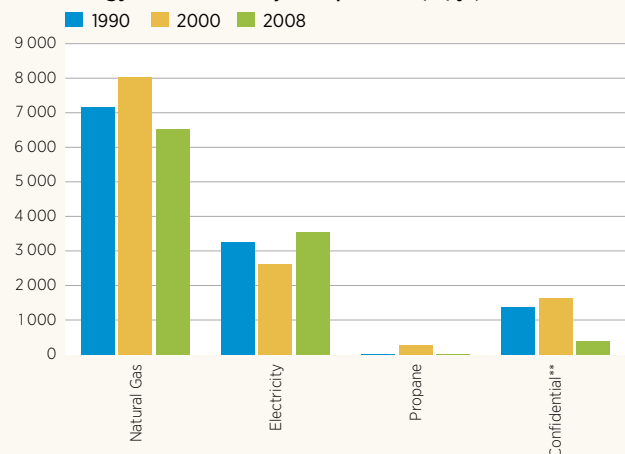
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Production Output (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data source: Energy Use - Statistics Canada, Industrial Consumption of Energy Survey, Ottawa, December 2009. Production - GDP - Infometrics Limited, T1 Model and National Reference Forecast, November 2009.

**Confidential includes: Heavy Fuel Oil (HFO) and Middle Distillates (LFO)

SECTOR REPORTS

ELECTRICAL AND ELECTRONICS



PROFILE

The electrical and electronics sector includes companies that produce electrical appliances, lighting, consumer electronics, communications and electronic equipment, cabling, office equipment, industrial equipment and other electrical products. The industry is a major exporter and a growing contributor to the national economy.

HIGHLIGHTS

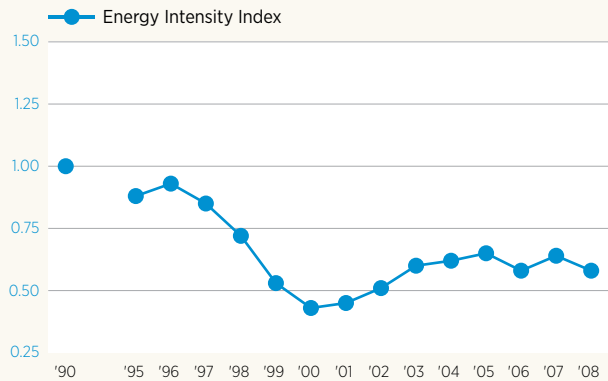
Energy intensity in the electrical and electronics sector improved by 8 percent in 2008 (over 2007), primarily due to a drop in energy consumption by 6 percent and a concurrent increase in the sector's GDP by 3 percent.

Most of the energy improvements resulted from a significant reduction in natural gas consumption as a fuel source in 2008 – the drop in natural gas consumption being 12 percent.

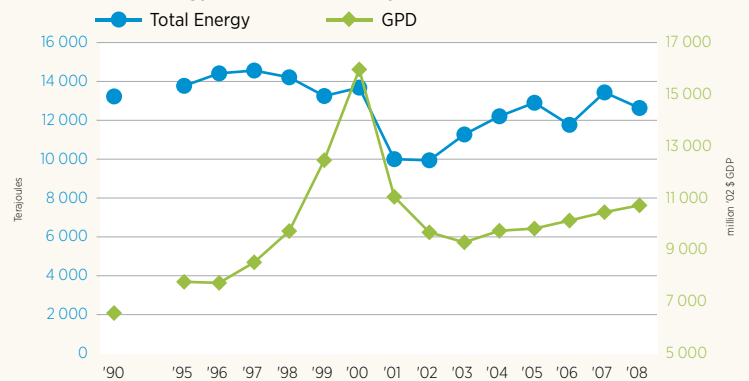
Electricity share, as a fuel source, increased from 58 percent in 2007 to 62 percent in 2008.

ELECTRICAL AND ELECTRONICS SECTOR - NAICS 334, 335

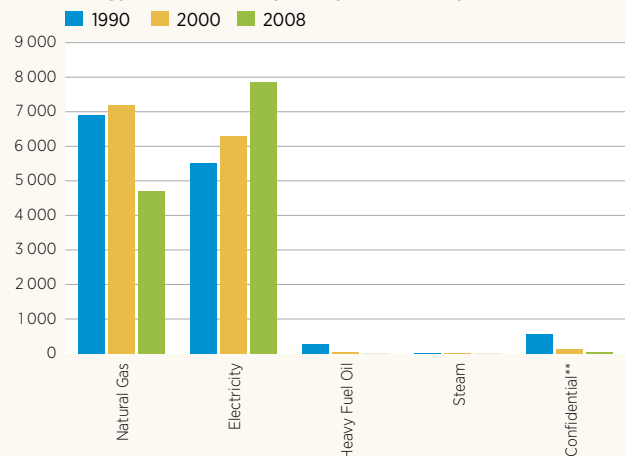
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Economic Output (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data source: Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey*, Ottawa, December 2009
Output - GDP: Informetrica Limited, *T1 Model and National Reference Forecast*, November 2009.

**Confidential includes: Middle Distillates (LFO), Propane (LPG) and Wood Waste.

SECTOR REPORTS

ELECTRICITY GENERATION

UTILITY GENERATION ONLY***



PROFILE

Electricity is a major driver of the Canadian economy. Approximately one-quarter of the energy used by Canadians is electricity, and there is no substitute in most applications. Canadians use electricity generated in residential, commercial, industrial and utility sectors.

HIGHLIGHTS

Energy intensity in utility electricity generation improved by 3 percent in 2008 compared to 2007.

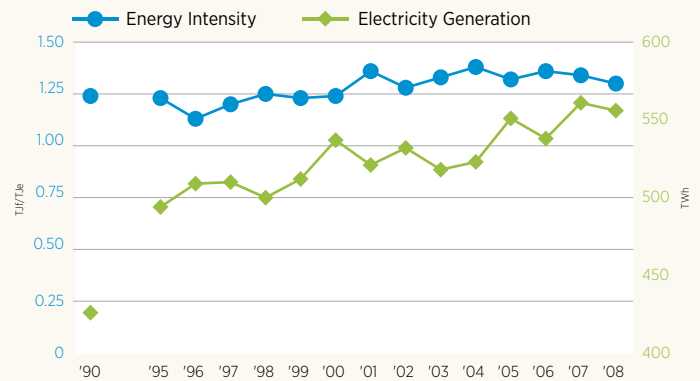
The improvement in energy intensity in 2008 is attributable to an increasing use of hydroelectric power as a fuel source, relative to fossil fuels.

GHG emissions decreased by 2.6 percent in 2008 compared to 2007. The decrease is largely attributable to the decline in generation from fossil fuels.

*** This sector excludes industrial electricity generation

ELECTRICITY GENERATION - NAICS 22111

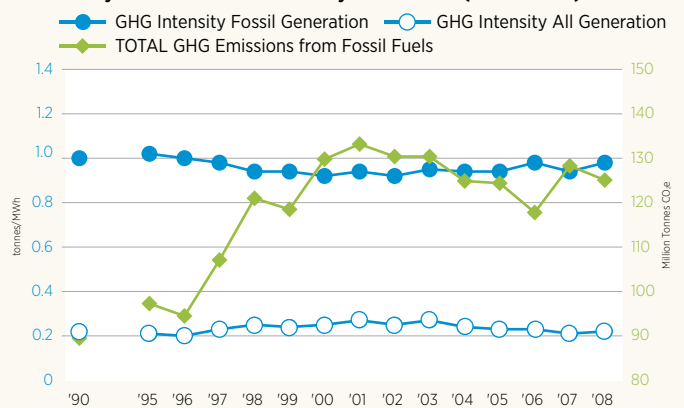
Utility Production and Energy Intensity (1990-2008)***



Data source: Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC). A Review of Energy Consumption and Production Data: Canadian Electricity Generation Industry 1990-2008. March 2010.

*** this sector excludes industrial electricity generation

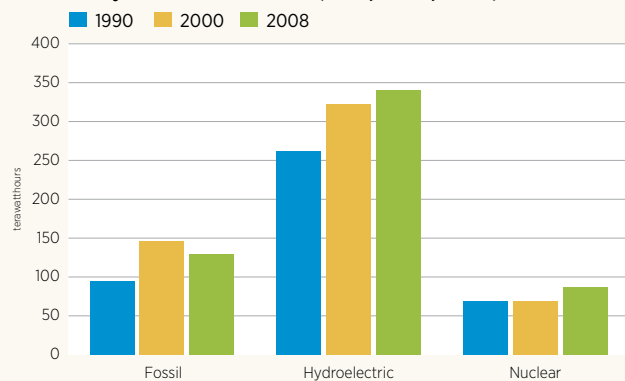
Utility GHG Emissions vs Utility Production (1990-2008)***



Data source: Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC). A Review of Energy Consumption and Production Data: Canadian Electricity Generation Industry 1990-2008. March 2010.

*** this sector excludes industrial electricity generation

Utility Generation Sources (1990, 2000, 2008)***



Data source: Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC). A Review of Energy Consumption and Production Data: Canadian Electricity Generation Industry 1990-2008. March 2010.

*** this sector excludes industrial electricity generation

SECTOR REPORTS FERTILIZER



PROFILE

Canada's fertilizer industry is one of the world's major producers and exporters of nitrogen, potash and sulphur fertilizers.

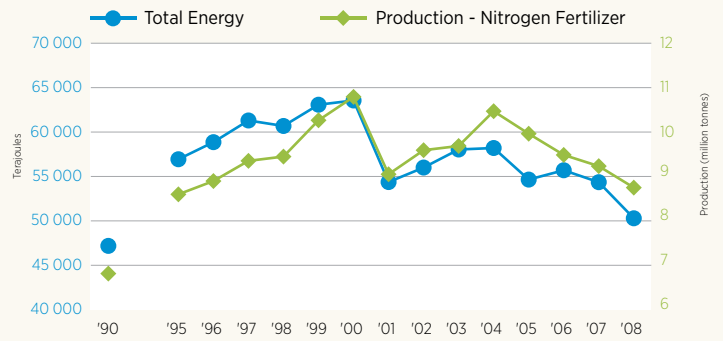
HIGHLIGHTS

The sizeable reductions in energy consumption in both the nitrogenous fertilizer and potash sectors, by 7 percent and 6 percent respectively, were accompanied by a 5-percent drop in output of nitrogenous fertilizer and a 3-percent drop in output of potash.

Energy intensities in both sectors improved by 2 and 3 percent respectively. The declines in production precluded further improvements in energy efficiency.

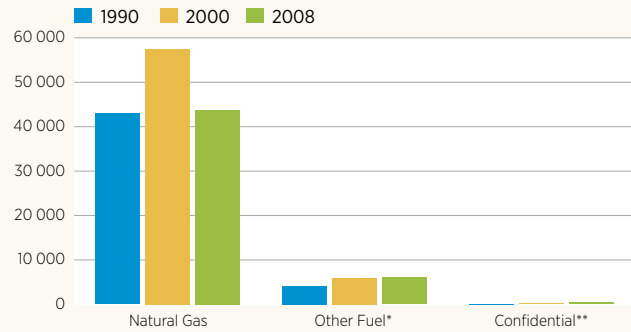
FERTILIZER SECTOR (NITROGENOUS) - NAICS 325313

Total Energy and Physical Output (1990-2008)



Data sources:
Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995-2008*. Ottawa, December 2009.
Production - GDP - Informetrica Limited, *TI Model and National Reference Forecast*, November 2009.

Energy Sources Terajoules per Year

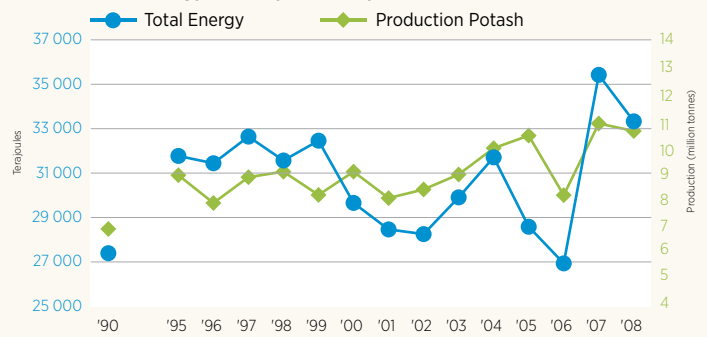


Data sources:
Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995-2008*. Ottawa, December 2009.
Production - GDP - Informetrica Limited, *TI Model and National Reference Forecast*, November 2009.

*Other Fuel includes: Electricity, LFO (Middle Distillates) and LPG (Propane)
**Confidential includes: HFO (heavy fuel oil) and Steam

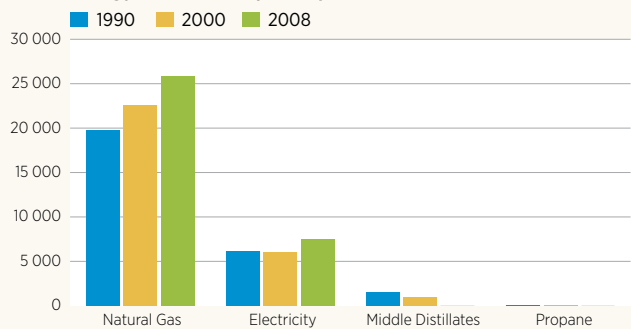
FERTILIZER SECTOR (POTASH MINES) - NAICS 212396

Total Energy and Physical Output (1990-2008)



Data sources:
Canadian Fertilizer Institute (CFI), 1990, 1999-2008, November 2009. Canadian Fertilizer Institute (CFI), 1995-1998, March 2006. Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC), *Development of Energy Intensity Indicators for Canadian Industry 1990-2008*. Simon Fraser University, March 2010.

Energy Sources Terajoules per Year



Data sources:
Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC), *Development of Energy Intensity Indicators for Canadian Industry 1990-2008*. Simon Fraser University, March 2010.
(1) Natural Gas - 1990, 1999-2006, Canadian Fertilizer Institute, November 2009.
(2) Natural Gas - 1995-1998, Canadian Fertilizer Institute, March 2010. Other Fuels 1990-2005. Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC), *Indicators for Canadian Industry 1990-2008*. Simon Fraser University, March 2010.

FOOD & BEVERAGE SECTOR - NAICS 311, 3121

SECTOR REPORTS 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.

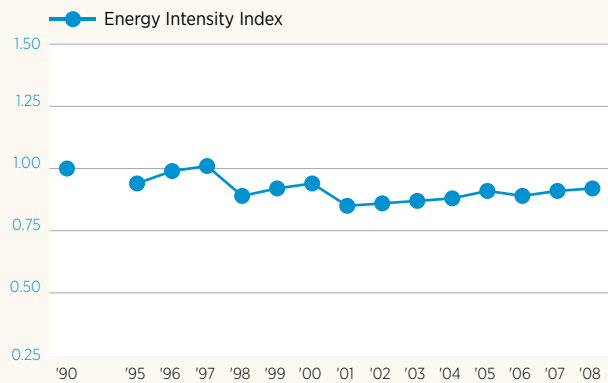
HIGHLIGHTS

The 1 TJ (1.1 percent) of reduction in energy consumption in the food and beverage sector was more than offset by the almost \$600-million decline in the sector's GDP.

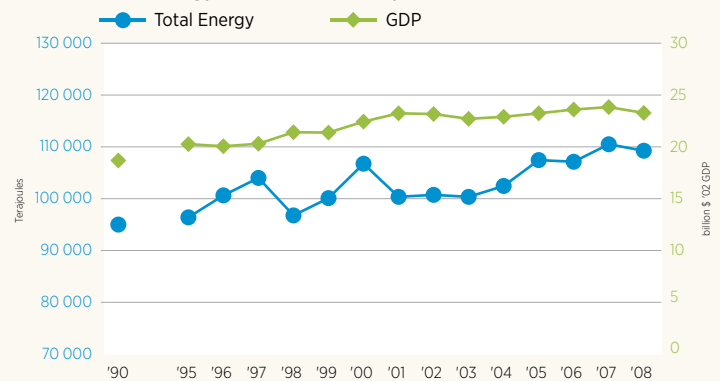
As a result, the food and beverage sector energy intensity index showed a marginal 1.3-percent increase, given the sector's 2.4-percent drop in GDP.

In the food and beverage sector, where energy consumption declined, the share of natural gas consumed by the sector showed a decrease from 62 percent in 2007 to 60 percent in 2008. Electricity consumption in the sector, however, displaced natural gas by almost the same amount. The share of electricity consumed in the food and beverage sector increased in 2008 to 32 percent, from 29 percent in 2007. In an energy-reducing world, the displacement of natural gas by electricity consumption is an important signal and represents a major "switch." The current level of natural gas consumption in 2008 is comparable to levels in the 1990s.

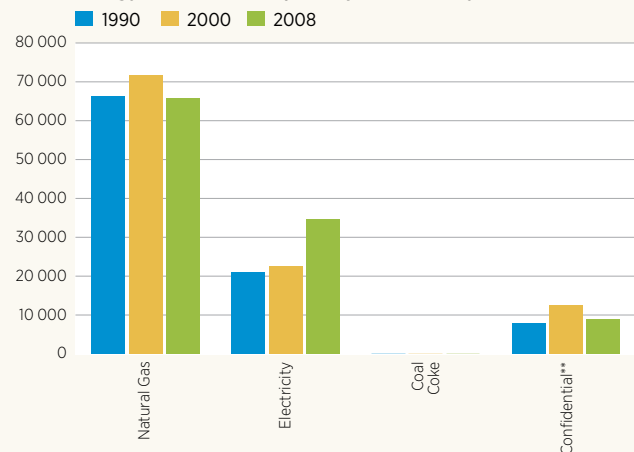
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Economic Output (1990-2008)



Energy Sources in TeraJoules per Year (TJ/yr)



Data sources: Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey*, Ottawa, December 2009. Production - Informetrica Limited, *TI Model and National Reference Forecast*, November 2009.

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

SECTOR REPORTS

FOUNDRY



PROFILE

Metal castings are the first step in the value-added manufacturing chain and are utilized in the manufacturing of most durable goods. Markets and industries served by foundries include the automotive sector, construction, agriculture, forestry, mining, pulp and paper, heavy industrial machinery and equipment, aircraft and aerospace, plumbing, soil pipe, municipal road castings, defence, railway, petroleum and petrochemical, electricity distribution and a myriad of specialty markets.

HIGHLIGHTS

Energy intensity in the foundry sector improved significantly: by 12 percent in 2008 (over 2007).

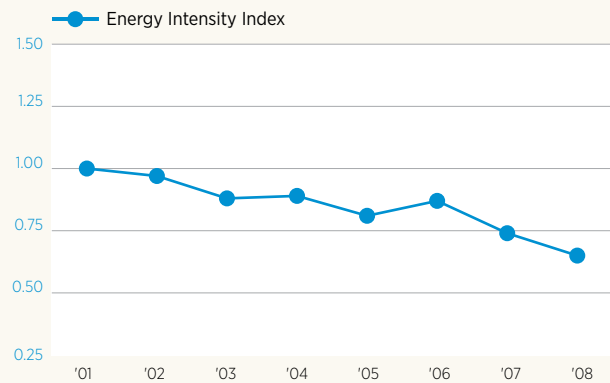
The improvement is primarily due to the reduced energy consumption in the sector: energy consumption in the sector decreased by 14 percent. However, the associated decrease in the sector's 2008 GDP by 2 percent slightly mitigated the energy intensity improvements.

The foundry sector adjusted its energy usage downward in anticipation of the impending reduction in aggregate demand in the economy. The sector thus achieved significant industrial efficiency through gains in energy intensity improvements.

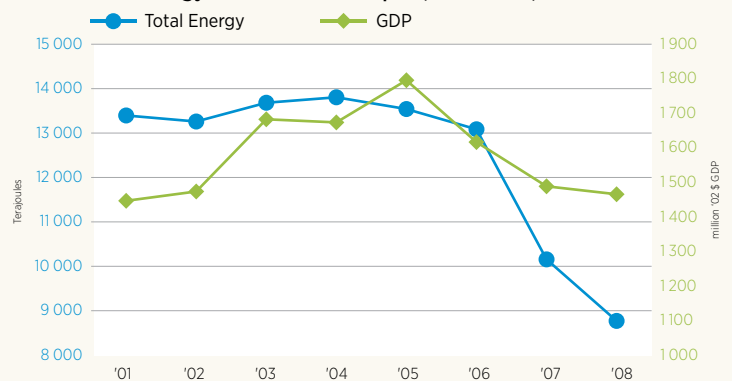
Natural gas remains the preferred fuel in the foundry sector at 58 percent, followed by electricity at 38 percent.

FOUNDRY SECTOR - NAICS 3315

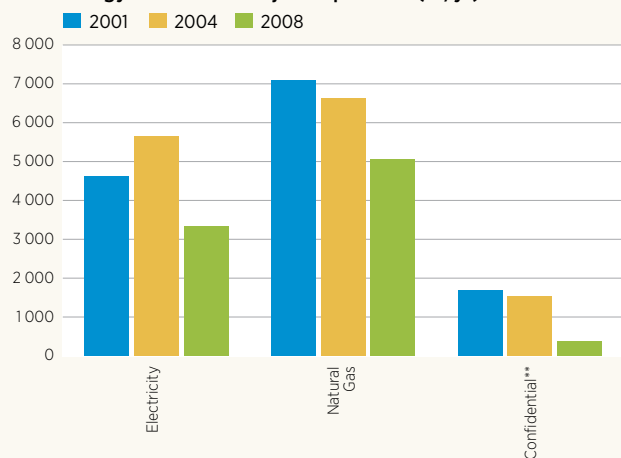
Energy Intensity Index (2001-2008) Base Year 2001 = 1.00



Total Energy and Economic Output (2001-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data sources:

Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995-2008*. Ottawa, December 2009. Production - Informetrica Limited, *T1 Model and National Reference Forecast*, November 2009.

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

Note: 2004 and 2005 data are subject to verification.

SECTOR REPORTS

GENERAL MANUFACTURING



PROFILE

The general manufacturing sector consists of a variety of industries, including leather, clothing, furniture, printing activities, construction materials, floor coverings, insulation, glass and glass products, adhesives, and pharmaceuticals. The sector includes approximately 2000 small, medium-sized and large companies.

HIGHLIGHTS

Energy consumption in the general manufacturing sector increased by 12 percent in 2008 (over 2007).

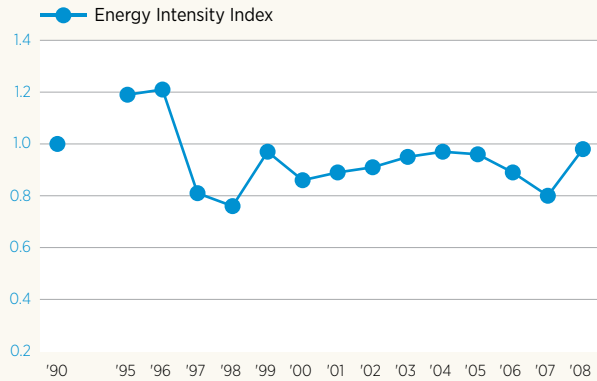
Increased energy consumption and a deteriorating economic environment that preempted Canada's export markets and caused declines in GDP in virtually all sub-sectors of Canadian manufacturing, contributed to a deterioration in energy intensity by as much as 22 percent in 2008.

***NAICS Category Name

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

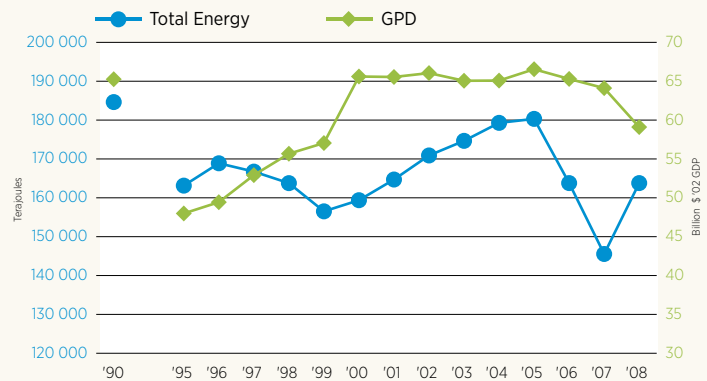
GENERAL MANUFACTURING SECTOR - NAICS ***

Energy Intensity Index (1990-2008) Base Year 1990 = 1.00

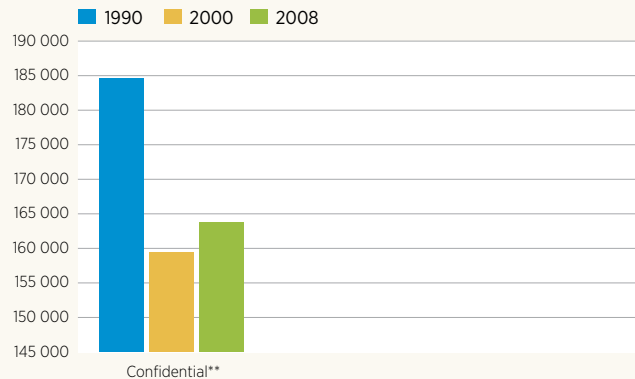


Data source: Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey*, December 2009
Production - Informetrica Limited, *TI Model and National Reference Forecast*, November 2009; Statistics Canada National Accounts: Industry-based

Total Energy and Economic Output (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



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

SECTOR REPORTS LIME



PROFILE

Canada's merchant lime sector supplies essential raw materials for the steel and mining industry, the pulp and paper industry, water treatment, environmental management and other basic industries.

HIGHLIGHTS

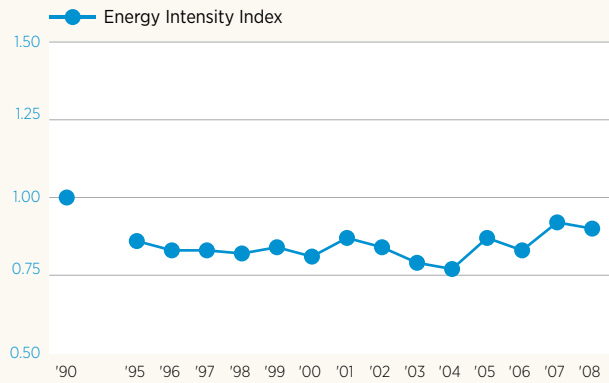
In 2008, energy consumption in the lime sector decreased over the 2007 levels by a considerable 6 percent.

However the decline in production – due to competitive pressures and shrinking markets – by as much as 4 percent almost offset the efficiency gains achieved due to reduction in energy savings.

Despite the adversity in markets, the energy intensity index improved in 2008 by almost 3 percent indicating major efficiency gains in the lime sector.

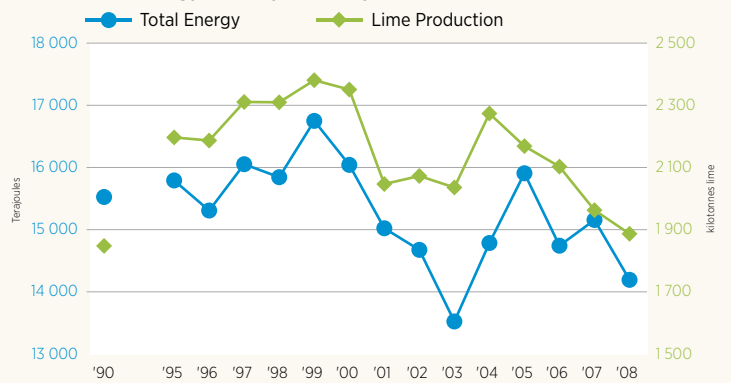
LIME SECTOR - NAICS 327410

Energy Intensity Index (1990-2008) Base Year 1990 = 1.00

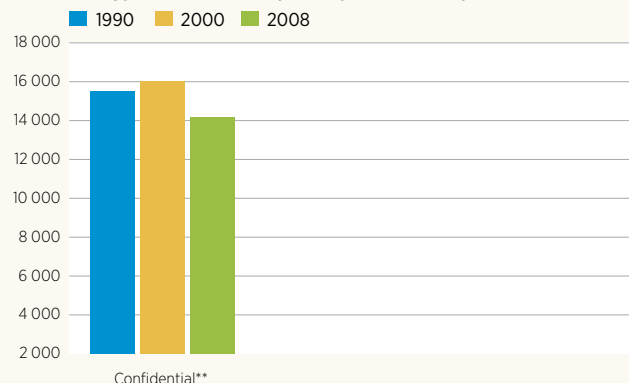


Data source: Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey 1990, 1995-2008*. Ottawa, December 2009. Production: Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC), *Development of Energy Intensity Indicators for Canadian Industry 1990-2008*. Simon Fraser University, October 2009.

Total Energy and Physical Output (1990-2008)



Energy Sources in TeraJoules per Year (TJ/yr)



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

SECTOR REPORTS MINING



PROFILE

Canada's metal mining industry produces minerals and metals for domestic and export markets.

HIGHLIGHTS

Energy consumption in the mining sector increased by 8 percent in 2008. Increase in production was however much less: 5 percent.

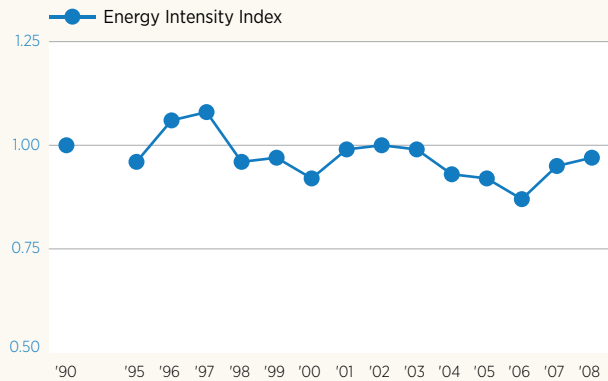
Energy intensity, as a result, increased by 3 percent in 2008 (over 2007).

Electricity consumption in the sector, at almost 40 percent of all fuels, increased in 2008 by 3 percent.

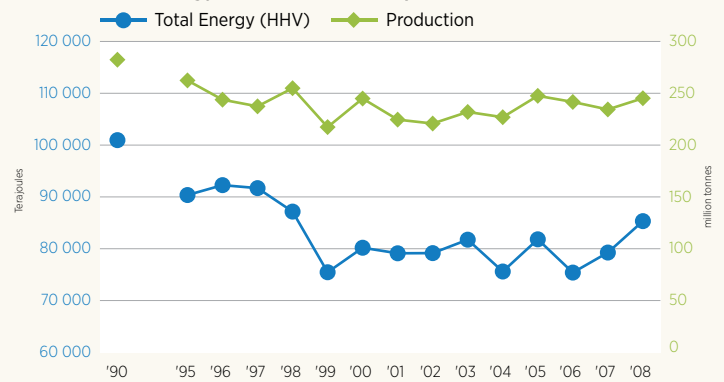
Most other fuels also showed increases in 2008 over 2007. However, the largest percentage increases occurred in middle distillates and heavy fuel oil, at 12 percent and 16 percent respectively.

METAL MINING SECTOR - NAICS 2122

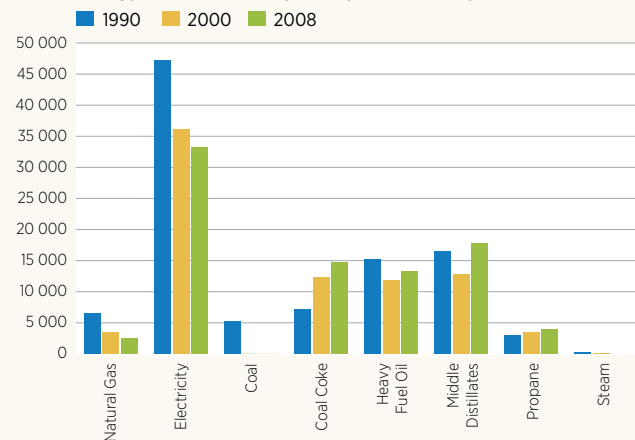
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Production Output (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data source:
Energy Use - Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC).
Development of Energy Intensity Indicators for Canadian Industry 1990-2008.
Simon Fraser University, January 2010.

SECTOR REPORTS OIL SANDS



PROFILE

Canada's oil sands sector includes plants in northern Alberta and one heavy oil upgrader in Saskatchewan. The sector is a major employer and a significant contributor to Canada's exports and GDP.

HIGHLIGHTS

Energy intensity in the oil sands sector improved in 2008, from the 2007 levels.

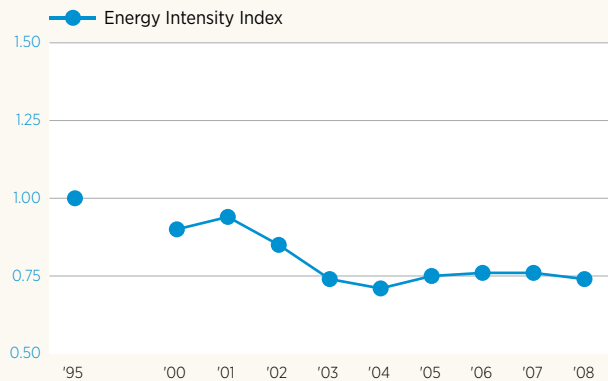
The significant drop in total energy use by 10 percent was mitigated by an associated 7-percent decline in net bitumen production, limiting energy intensity improvements to only 3 percent.

Natural gas remains the prime source for energy at 51 percent of total energy sources (from 44 percent in 2007), followed by process gas at 25 percent. These two fuels combined make up over three quarters of all energy sources in the oil sands sector.

The largest improvements in energy reduction occurred in electricity, process gas and coke at 53 percent, 23 percent and 12 percent respectively.

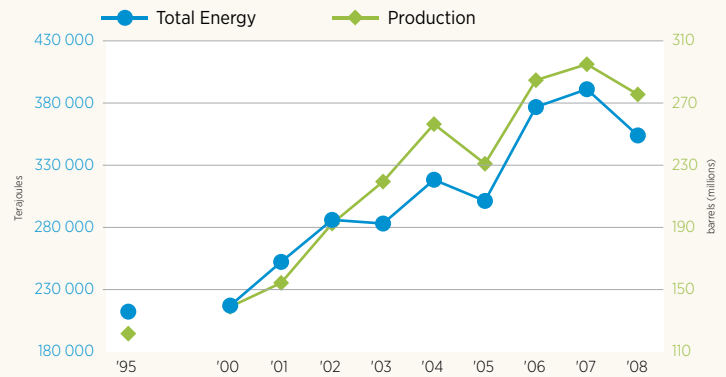
OIL SANDS SECTOR - NAICS 211114

Energy Intensity Index (1990-2008) Base Year 1990 = 1.00

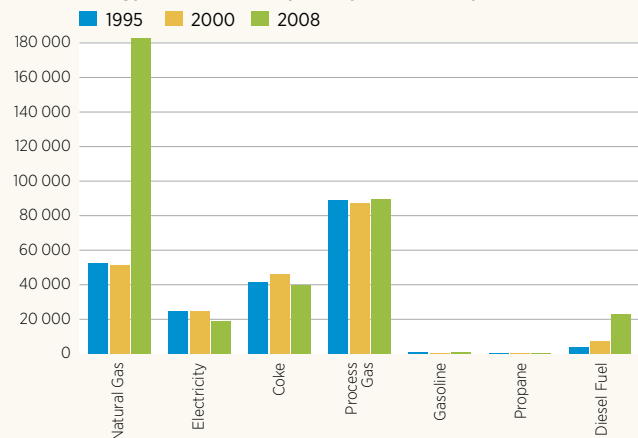


Data sources: Alberta Energy and Utilities Board 2009 (Fort McMurray office)

Total Energy and Production (1995-2008)



Energy Sources in Terajoules per Year (TJ/yr)



SECTOR REPORTS

PETROLEUM PRODUCTS



PROFILE

Canada's petroleum products sector markets gasoline, diesel, heating oil, jet fuels, lubricating oil and other related products through a network of approximately 15 000 wholesale and retail outlets.

HIGHLIGHTS

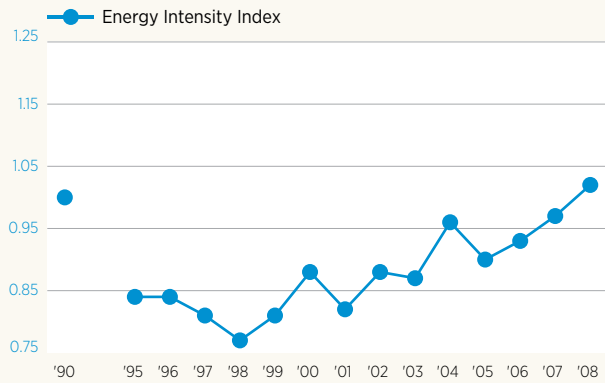
The 2008 energy intensity index in the petroleum products sector moved upwards over 2007.

Despite a 3-percent decline in energy consumption in 2008, the precipitous decline in the GDP of the petroleum products sector by 8 percent resulted in a shift in the energy intensity index.

Refinery fuel gas remained the main source of energy in the sector in 2008.

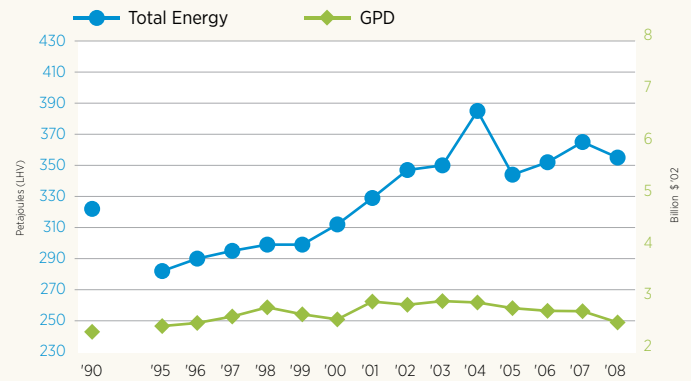
PETROLEUM PRODUCTS - NAICS 324110

Energy Intensity Index (1990-2008) Base Year 1990 = 1.00

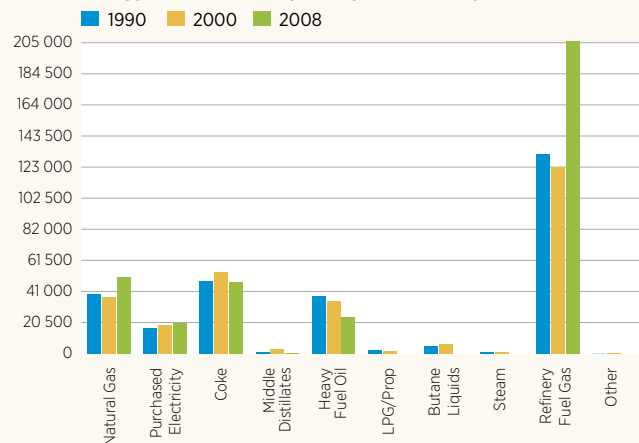


Data source:
 Review of Energy Consumption in Canadian Oil Refineries: 1990, 1994 to 2008. Prepared for the Canadian Petroleum Products Institute (CPPI) and Canadian Industry Program for Energy Conservation by John Nyboer.
 Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC).
 Development of Energy Intensity Indicators for Canadian Industry 1990-2008. Simon Fraser University, March 2010.

Total Energy and GDP (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr) (LHV)



SECTOR REPORTS PLASTICS



PROFILE

The Canadian plastics processing sector is characterized by many processes and applications that use an ever-increasing variety of raw materials. The major markets served by the plastics industry are packaging, construction and automotive. This sector includes more than 113 000 people employed by approximately 3400 companies.

HIGHLIGHTS

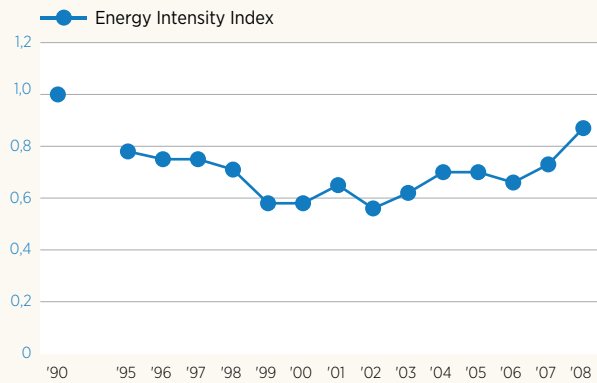
In 2008, a marginal increase in energy consumption in the plastics sector was accentuated by the precipitous decline in the sector's GDP - to the tune of 14 percent - partly due to imports.

As a result of the significant decline in GDP, the energy intensity index increased in 2008. The sector's GDP declined three years in a row (2006, 2007 and 2008), from a high of 8.1 billion in 2005 to 6.4 billion in 2008.

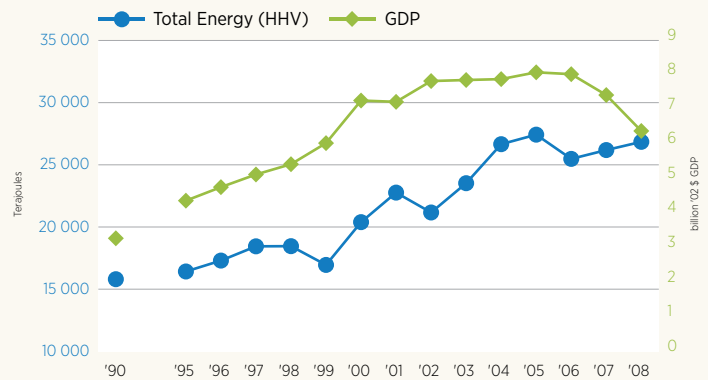
Electricity remained as the major preferred fuel in 2008, while natural gas consumption declined.

PLASTICS SECTOR - NAICS 3261

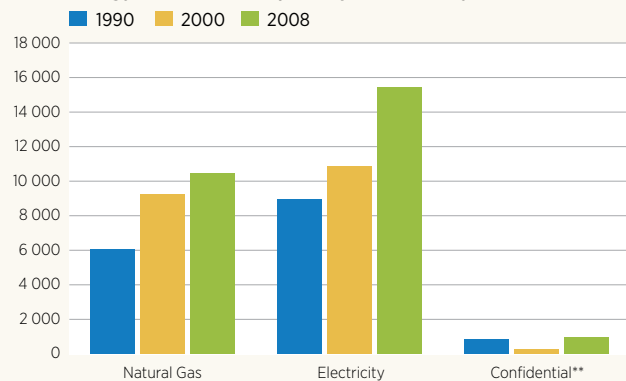
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Economic Output (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data sources: Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995-2008*. Ottawa, December 2009. Production - GDP - Informetrica Limited, *T1 Model and National Reference Forecast*, November 2009.

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

SECTOR REPORTS PULP AND PAPER



PROFILE

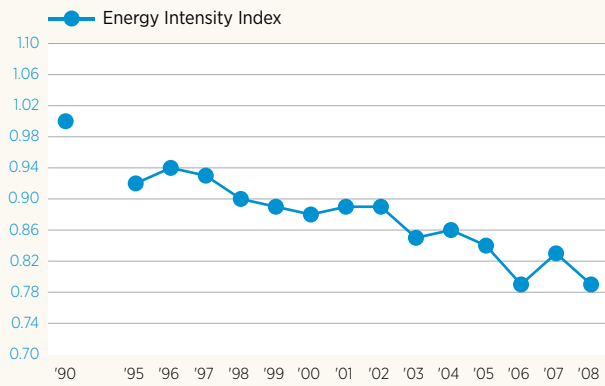
Pulp and paper, a key component of the forest products industry, is a major contributor to Canada's economy. In addition to market pulp, the sector produces newsprint, specialty papers, paperboard, building board and other paper products. It is the largest industrial energy consumer, representing 25 percent of industrial energy consumption in Canada.

HIGHLIGHTS

Although additional rationalization occurred in the sector during 2008, the overall energy intensity improved, regaining lost ground from the previous year.

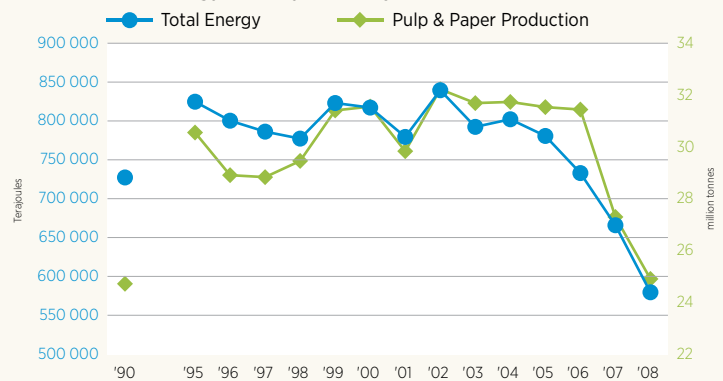
PULP AND PAPER SECTOR - NAICS 3221

Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



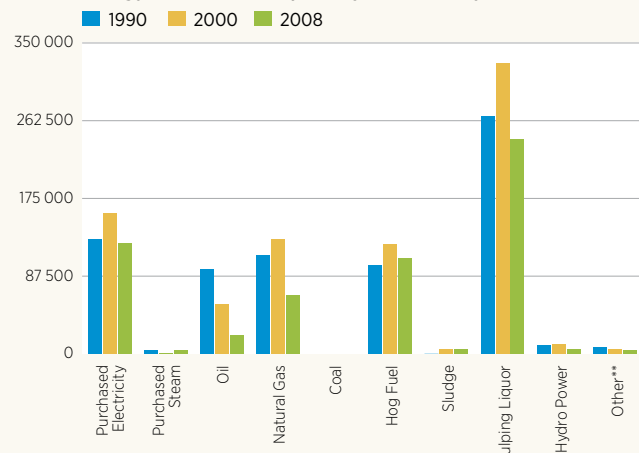
Data sources:
Forest Products Association of Canada's Annual Energy Survey, 1990-2008.

Total Energy and Physical Output (1990-2008)



Data sources:
Forest Products Association of Canada's Annual Energy Survey, 1990-2008.

Energy Sources in Terajoules per Year (TJ/yr)



Data sources:
Forest Products Association of Canada's Annual Energy Survey, 1990-2008.

**Other includes coal, distillates, diesel, LPG, other purchased energy and other self-generated energy

SECTOR REPORTS RUBBER



PROFILE

The rubber products industry is a major contributor to the Canadian economy. It represents approximately \$6 billion in shipments and employs approximately 25 700 people. The industry is also very active in international trade, with imports of \$4.2 billion and exports of \$3.4 billion.

HIGHLIGHTS

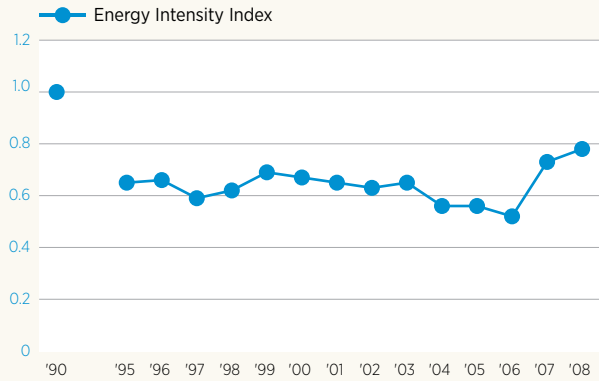
Reduction in energy consumption in the rubber sector by 4 percent in 2008 (over 2007) was overshadowed by a larger 10-percent decline in GDP, resulting in a 7-percent increase in energy intensity in the rubber sector.

Electricity consumption – the largest fuel source in the sector at 45 percent – declined in 2008 by over 3 percent. However, natural gas consumption increased.

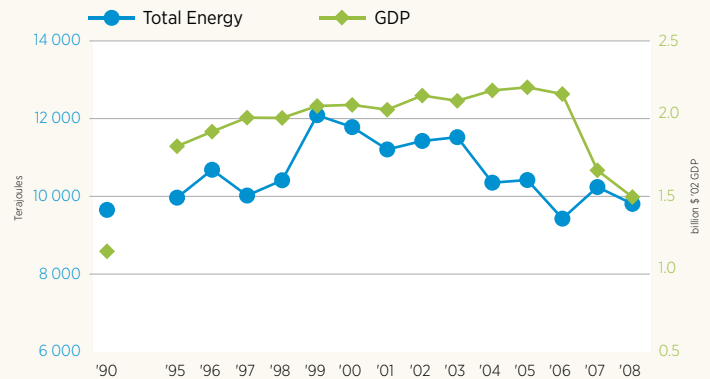
Consumption of fuels other than electricity and natural gas have declined in 2008 relative to 2000 levels.

RUBBER SECTOR - NAICS 3262

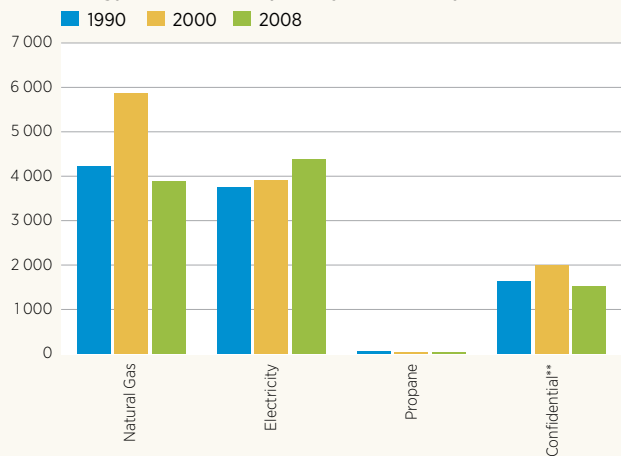
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Economic Output (1990-2008)



Energy Sources in TeraJoules per Year (TJ/yr)



Data sources:
 Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995-2008*. Ottawa, December 2009.
 Production - GDP - Informetrica Limited, *T1 Model and National Reference Forecast*, November 2009.

**Confidential includes: Heavy Fuel Oil (HFO) and Middle Distillates (LFO)

SECTOR REPORTS STEEL



PROFILE

Canada's steel sector is one of the country's major industries. The industry employs more than 30 000 Canadians. The sector produces more than 15 million tonnes of steel annually, supplying flat-rolled (sheet and plate), long (re-bar and structural steel), and specialty and alloy (stainless and tool steels) products for major markets in the automotive, appliance, oil and gas, machinery, construction, and packaging industries.

HIGHLIGHTS

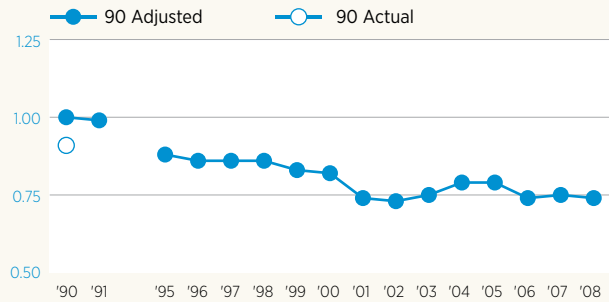
Steel industry output went up over 17 percent between 1990 and 2008. Following a strong first half of 2008, the industry entered the global downturn, with substantial reductions in output and associated energy consumption.

Energy intensity in the sector declined from 20.93 to 15.52 (26 percent) during the same period.

Energy intensity improved from 2007 to 2008, by approximately 1.6 percent. Both increases in output and reductions in energy consumed contributed to this improvement.

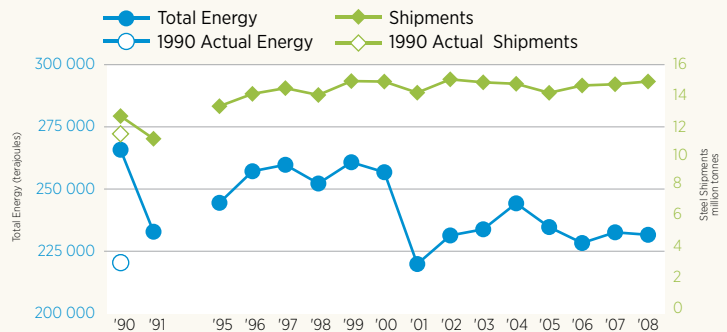
STEEL SECTOR - NAICS 331100

Energy Intensity Index (1990-2008) Base Year 1990 (adjusted) = 1.00



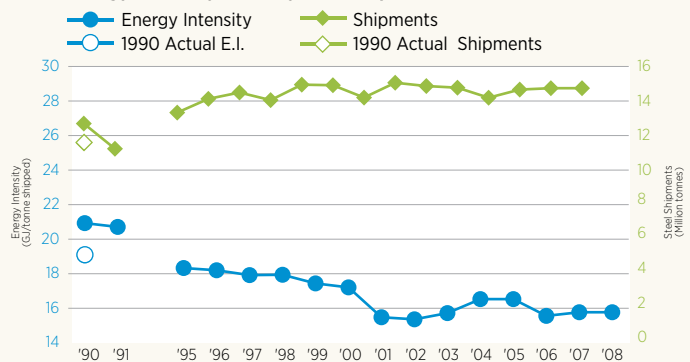
Data source:
 1990 Adjustments for Energy, Shipments & Intensity: *A Review of Energy Consumption and related Data Canadian Iron and Steel and Ferro-alloy Manufacturing Industries 1990-2006*; Canadian Industrial Energy End-use Data and Analysis Centre (CIEEDAC) March 2008, Section 5.1 Table 5.1
 Intensities 1991-2005: Canadian Industrial Energy End-use Data and Analysis Centre (CIEEDAC) NAICS 331100 accessed July 2008
 2006 Intensity: *Coke 2006: Coal & Coke Statistics Catalogue 45-002-XPB HFO 2006: Report on Energy Supply & Demand*, Catalogue 57-003-XIB All Others; CIEEDAC Energy Consumption and Energy Intensity Indicators NAICS 331100 accessed July 2008
 2007 Intensity: *Coke 2007: Coal & Coke Statistics Catalogue 45-002-XPB COG 2007: Report on Energy Supply & Demand*, Catalogue 57-003-XIB All Others; StatCan ICE, March 2010
 2008 Intensity: *Coke 2008: Coal & Coke Statistics Catalogue 45-002-XPB COG 2008: Report on Energy Supply & Demand*, Catalogue 57-003-XIB All Others; StatCan ICE, March 2010

Total Energy and Physical Output (1990-2008)

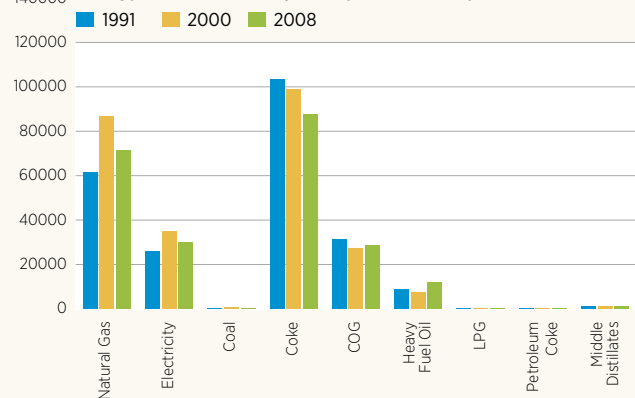


Data source:
 Energy: *Coke 2006, 2007, 2008; Coal & Coke Statistics Catalogue 45-002-XPB COG 2007, 2008: Report on Energy Supply & Demand*, Catalogue 57-003-XIB All Others; CIEEDAC Energy Consumption and Energy Intensity Indicators NAICS 331100 accessed March 10, 2010
 Shipments: Primary iron & steel; Statistics Canada Catalogue 41-001-XIB Steel, tubular products and steel wire; Statistics Canada, Cat. No. 41-019-XIE
 1990 Adjustments for Energy & Shipments: *A Review of Energy Consumption and related Data Canadian Iron and Steel and Ferro-alloy Manufacturing Industries 1990-2006*; Canadian Industrial Energy End-use Data and Analysis Centre (CIEEDAC) March 2008, Section 5.1 Table 5.1

Energy Intensity and Physical Output (1990-2006)



Energy Sources in Terajoules per Year (TJ/yr)



SECTOR REPORTS TEXTILES



PROFILE

Canada's textile industry produces fibres, yarns, fabrics and textile articles purchased by users and customers as diverse as the automotive manufacturing, clothing, construction, environmental protection, road-building and retail sectors.

HIGHLIGHTS

Textiles sector's energy intensity improved by 6 percent in 2008 (over 2007).

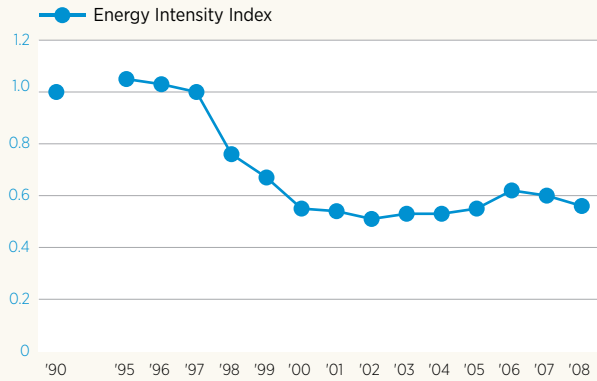
Improvement in energy intensity in the sector was primarily due to reduction in total energy consumption by 17 percent. Both natural gas consumption and electricity consumption were reduced by 19 percent and 13 percent respectively.

The corresponding decline in the sector's GDP by 11 percent precluded further gains in energy intensity improvements.

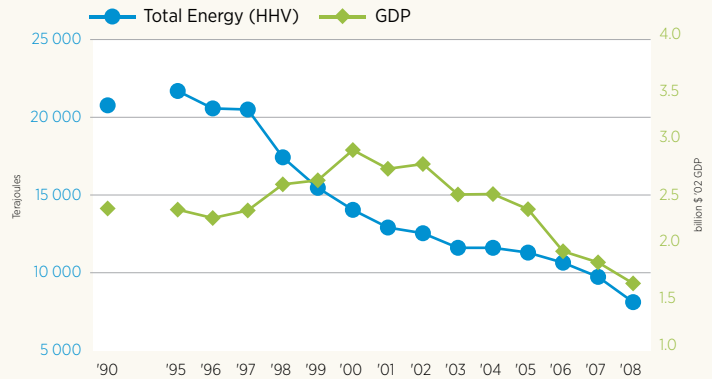
Natural gas remained as the preferred fuel in the textiles sector with a 54 percent share. Electricity was second at 43 percent of all fuel consumed.

TEXTILES SECTOR - NAICS 313, 314

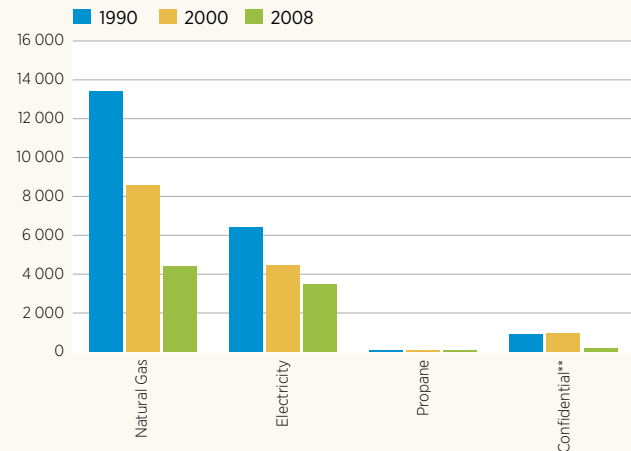
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Economic Output (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data sources:
 Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995-2008*. Ottawa, December 2009.
 Production - GDP - Informetrica Limited, *T1 Model and National Reference Forecast*, November 2009.

**Confidential includes: Heavy Fuel Oil (HFO), Middle Distillates (LFO) and Steam

SECTOR REPORTS

TRANSPORTATION EQUIPMENT MANUFACTURING



PROFILE

The Canadian transportation equipment manufacturing sector includes companies that manufacture aircraft, aircraft parts, automobiles, motor vehicle parts, trucks, buses, trailers, ships, and railroad rolling stock.

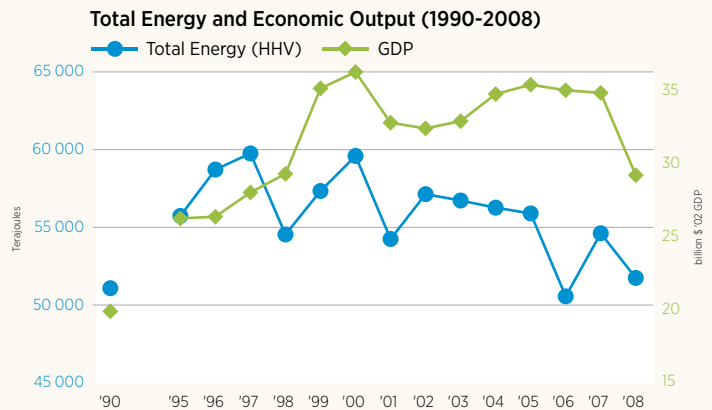
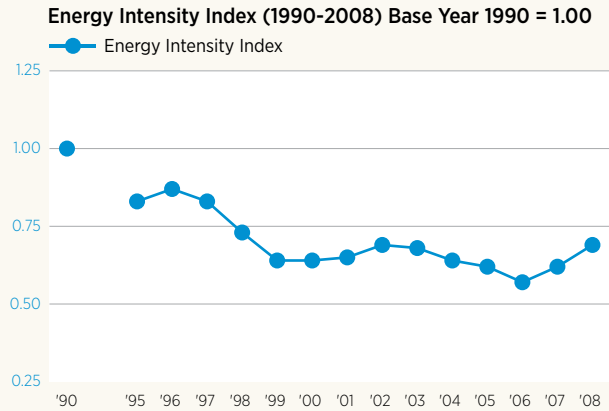
HIGHLIGHTS

Despite an energy reduction in the transportation equipment manufacturing sector by 5 percent in 2008, energy intensity in the sector increased by about 13 percent over 2007.

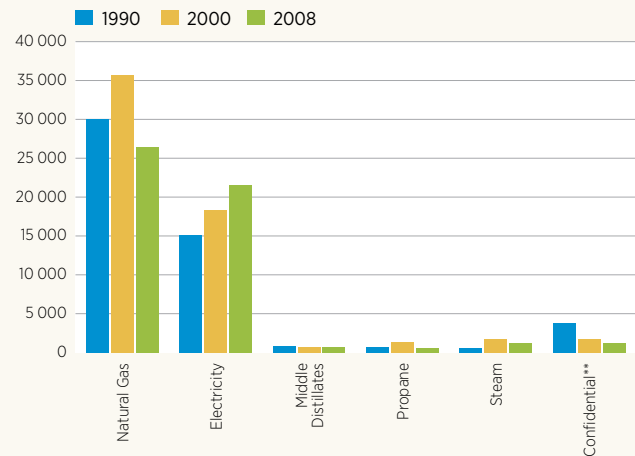
Increase in energy intensity was primarily due to the unprecedented decline in the fortunes of the automobile manufacturing sector. Overall, the sector's GDP declined by as much as 16 percent, resulting in the reduction in consumption of natural gas and electricity, at 7 percent and 4 percent respectively.

Natural gas represents over 51 percent of all fuel consumed; electricity accounts for 42 percent.

TRANSPORTATION EQUIPMENT MANUFACTURING SECTOR - NAICS 336



Energy Sources in Terajoules per Year (TJ/yr)



Data sources:
 Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995-2008*. Ottawa, December 2009.
 Production - GDP - Informetrica Limited, *T1 Model and National Reference Forecast*, November 2009.

**Confidential includes: Coal, Coal Coke, Heavy Fuel Oil (HFO) and Wood

SECTOR REPORTS

UPSTREAM OIL AND GAS*



PROFILE

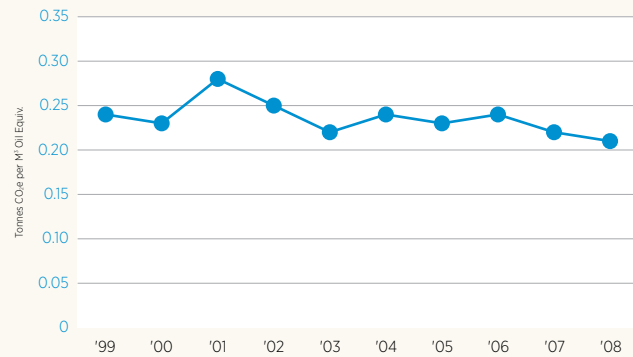
The upstream oil and gas sector includes the companies that find and develop Canada's vast oil and gas resources. The sector is broadly divided into conventional oil and gas production, and oil sands production and upgrading. This section discusses the conventional oil and gas sector. The oil sands sector is covered separately elsewhere in this 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 vital medicines. The exploration and production industry is represented by the Canadian Association of Petroleum Producers (CAPP) and the Small Explorers and Producers Association of Canada (SEPAC).

CAPP represents companies, large and small, that explore for, 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's members and associate members are an important part of a \$110-billion-a-year national industry that provides essential energy products. CAPP's mission is to enhance the economic sustainability of the Canadian upstream petroleum industry in a safe and environmentally and socially responsible manner, through constructive engagement and communication with governments, the public and stakeholders in the communities in which CAPP operates.

** This section deals with the conventional oil and gas sector. The oil sands sector is covered separately elsewhere in this report.*

UPSTREAM OIL & GAS SECTOR - NAICS 211113

GHG Emission Intensity Conventional Oil and Gas



Note:

*2008 data represents 75 companies comprising 92.5 percent of CAPP production.

Data source:

The CAPP Stewardship Report 2009 - Canadian Association of Petroleum Producers.

HIGHLIGHTS

Analyses of trends from the CAPP Stewardship data on greenhouse gas (GHG) emissions intensity cannot be performed due to shifting mixes of production, variations in CAPP's coverage of total conventional oil and gas production, and an incomplete dataset on GHG emissions for 1999–2006. However, as of the 2007 reporting year, all CAPP members are required to report direct GHG emissions through the Stewardship program.

SECTOR REPORTS

WOOD PRODUCTS



PROFILE

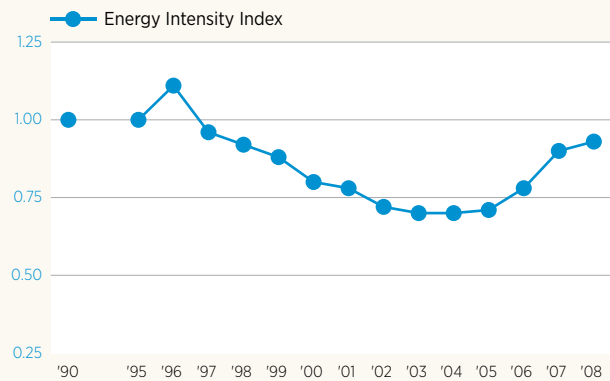
The wood products sector has as many as 7000 facilities in primary and secondary manufacturing. The primary grouping includes commodity-based production facilities such as lumber and structural panels, and more specialized production facilities such as engineered wood products and assemblies. The secondary grouping encompasses a diverse range of facilities that make prefabricated buildings, windows and doors, flooring, mouldings, containers and pallets, other millwork, and numerous other products. The energy data presented here focuses on the primary manufacturing grouping.

HIGHLIGHTS

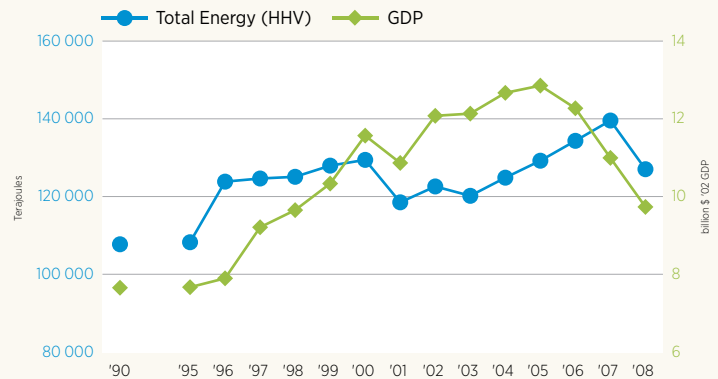
Further deterioration in the U.S. housing market had a cascading negative effect on the Canadian wood products sector. More rationalization occurred through 2008, further eroding earlier improvements in the energy intensity of the sector. However, the sector continued its adoption of renewable biomass for energy needs. This can be seen in the sizable declines in fossil fuel use while wood waste use was stable.

WOOD PRODUCTS SECTOR - NAICS 321

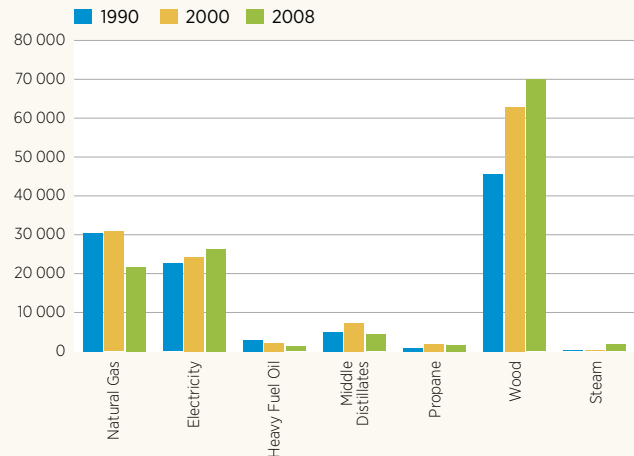
Energy Intensity Index (1990-2008) Base Year 1990 = 1.00



Total Energy and Economic Output (1990-2008)



Energy Sources in Terajoules per Year (TJ/yr)



Data sources:
 Energy Use - Statistics Canada, *Industrial Consumption of Energy Survey, 1990, 1995-2008*. Ottawa, December 2009
 Production - GDP - Informetrica Limited, *T1 Model and National Reference Forecast*, November 2009.

CIPEC EXECUTIVE BOARD MEMBERS

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CIPEC Executive Board

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Coyle & Greer Awards Canada Limited

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Graymont Western Canada Inc.

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ArcelorMittal Dofasco

Sirio De Luca*President and Chief Executive Officer*

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Senior Specialist

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ArcelorMittal Dofasco

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Chemistry Industry Association of Canada

Construction Sector Task Force

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Canadian Construction Association

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Electro-Federation Canada

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Canadian Electricity Association

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Science and Risk Management
Canadian Fertilizer Institute

Food and Beverage Sector Task Force

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Managing Chief Engineer

Cadbury Adams Canada Inc.

Forestry Sector Task Force

Yves Provencher

Business Development

FP Innovations - Feric Division

Foundry Sector Task Force

Judith Arbour

Executive Director

Canadian Foundry Association

General Manufacturing Sector Task Force - Atlantic

John Woods

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General Manufacturing Sector Task Force - Central

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Director of Technical Operations

UGL Unico

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Corporate Energy Manager

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Regional Environmental Manager
Carmeuse Lime Canada Limited (Beachville Operation)

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Vice President, Economic Affairs
The Mining Association of Canada

Oil Sands Sector Task Force**Alisa M. Caswell**

Energy Conservation Leader
Syn crude Canada Limited

Petroleum Refining Sector Task Force**Gilles Morel**

Director, Eastern Canada and National
Canadian Petroleum Products Institute

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Climate Change and Energy Efficiency Specialist
Spectra Energy

Plastics Sector Task Force**Graham Knowles**

Consultant
Canadian Plastics Industry Association

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Director, Taxation and Business Issues
Forest Products Association of Canada

Rubber Sector Task Force**Ralph Warner**

Director of Operations
Rubber Association of Canada

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Textiles Sector Task Force**Bruce Cochran**

Director of Manufacturing
Lincoln Fabrics Ltd.

Transportation Equipment Manufacturing Sector Task Force**Zenon Petriw**

Manager, Recycling and Energy
Magna International Inc.

Upstream Oil and Gas Sector Task Force**Krista Phillips**

Policy Analyst, Environment, Health and Safety
Canadian Association of Petroleum Producers

Wood Products Sector Task Force**Paul Lansbergen**

Director, Taxation and Business Issues
Forest Products Association of Canada

CIPEC LEADER COMPANIES BY SECTOR

ALUMINUM

Alcan Inc., *Montréal*
 Alcan Specialty Aluminas, *Brockville*
 Alcoa Canada Primary Metals, *Montréal*
Alcoa Ltée, Aluminerie de Baie-Comeau, Baie-Comeau
Alcoa Ltée, Usine de Tige de Bécancour, Bécancour
Alcoa, Aluminerie de Bécancour Inc., Bécancour
 Almag Aluminum Inc., *Brampton*
 Alsa Aluminum Canada Inc., *Bécancour*
 Alumicor Limited, *Toronto*
 Aluminerie Alouette Inc., *Sept-Îles*
 Indalex Limited, *Port Coquitlam*
Indalex Limitée, Pointe-Claire
Indalloy, a division of Indalex Limited, North York
 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, *Toronto, Edmonton, London, St. John's*
La Brasserie Labatt, LaSalle
 Les brasseurs du Nord, *Blainville*
 Molson Canada, *Edmonton, Ontario, Montréal*
Molson Coors Canada, Vancouver
 Moosehead Breweries Limited, *St. 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
 Steelback Brewery Inc., *Tiverton*

CEMENT

Advanced Precast Inc., *Bolton*
 Arriscraft International Inc.,
Saint-Étienne-des-Grès, Cambridge
 ESSROC Canada Inc., *Picton*
 Gordon Shaw Concrete Products Ltd., *Windsor*
 Groupe Permacon Inc., *Ville d'Anjou*
Permacon Group Inc., Milton
Permacon Ottawa, Stittsville
Permacon Group Inc., Bolton, Oshawa

Groupe Permacon Inc., *Division Trois-Rivières, Trois Rivières*
 Groupe Permacon (Sherbrooke), *Division des Matériaux de Construction Oldcastle Canada Inc., Sherbrooke*
 Decor Precast, *Division of Oldcastle Building Products Canada, Stoney Creek*
 Groupe Permacon-Div. des Matériaux de Construction, *Oldcastle Canada Inc., Ville d'Anjou, Quebec*
 Holcim (Canada) Inc., *Mississauga, Joliette*
 Dufferin Concrete, *Concord*
 International Erosion Control Systems,
West Lorne, Rodney
 Lafarge Canada Inc., *Montréal*
 Lehigh Inland Cement Limited, *Edmonton*
 Lehigh Northwest Cement Limited
 Pre-Con Inc., *Brampton*
 St Marys Cement Inc., *Bowmanville*

CHEMICALS

A. Schulman Canada Ltd., *St. Thomas*
 Abrex Paint & Chemical Ltd., *Oakville*
 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., *Toronto, Collingwood*
 Commercial Alcohol Inc., *Chatham, Tiverton, Varennes*
 Dominion Colour Corporation, *Ajax, Toronto*
 Dyno Nobel Nitrogen Inc., *Maitland, North Bay*
 Eka Chimie Canada Inc., *Salaberry-de-Valleyfield, Magog*
 Eli Lilly Canada Inc., *Scarborough*
 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*
 Huntsman Corporation Canada Inc.- Guelph
 ICI Canada Inc., *Concord*
 International Group Inc. (The), *Toronto*
 Jamieson Laboratories Ltd., *Windsor*
 Kronos Canada Inc., *Varennes*
 L'Oréal Canada Inc., *Montréal*
 Les Emballages Knowlton Inc., *Knowlton*
 Mancuso Chemicals Limited, *Niagara Falls*
 Nacan Products Limited, *Brampton*
 Nalco Canada Co., *Burlington*
 NOVA Chemicals Corporation, *Calgary, Corruna, Joffre, Moore Township, St. Clair River*
 Oakeside Chemicals Limited, *London*
 Orica Canada Inc., *Brownsburg*
 Osmose-Pentox Inc., *Montréal*
 Oxy Vinyls Canada Inc., *Niagara Falls*
 Petro-Canada, *Oakville*
 Pharmascience Inc., *Montréal*
 PolyOne Canada Inc., *Niagara Falls, Orangeville*
 Powder Tech Ltd., *Brampton*
 PPG Canada Inc., *Beauharnois*
 Procter & Gamble Inc., *Brockville*
 Prolab Technologies Inc., *Thetford Mines*
 Purdue Pharma, *Pickering*
 Reagens Canada Ltd., *Bradford*
 Rohm and Haas Canada Inc., *Scarborough*
 Saskatchewan Minerals Inc., *Chaplin*
 Sifto Canada Corp., *Goderich, Unity*
 Tech Blend s.e.c., *St-Jean-sur-Richelieu*
 Tri-Tex Co. Inc., *Saint-Eustache*
 Trillium Health Care Products Inc., *Perth, Brockville, Prescott, Newmarket*
 Wyeth-Ayerst Canada Inc., *St-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*
 Lockerbie & Hole Industrial Inc., *Edmonton*
 M J Roofing & Supply Ltd., *Winnipeg*
 Mira Timber Frame Ltd., *Stoney Plain*
 Moran Mining & Tunnelling Ltd., *Lively*
 Northland Building Supplies Ltd., *Edmonton*
 Production Paint Stripping Ltd., *Toronto*
 Whitemud Iron Works, *Edmonton*

DAIRY

Agrilait Cooperative Agricole, *Saint-Guillaume*
 Agropur Coopérative, *Beauceville*
 Agropur Coopérative, *division Natrel, Don Mills*
 Amalgamated Dairies Limited, *Summerside*
 ADL O'Leary, *Summersville*
 ADL St. Eleanors, *Summerside*
 ADL West Royalty, *Charlottetown*
 O'Leary and Perfection Foods, *Summerside*
 Atwood Cheese Company, *Atwood*
 Avalon Dairy Ltd., *Vancouver*
 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 (Quebec) Inc., *Sainte-Claire*
 Laiterie Chagnon Ltée, *Waterloo*
 Laiterie Charlevoix Inc., *Baie-Saint-Paul*
 Neilson Dairy Ltd., *Georgetown, Halton Hills, Ottawa*
 Nutrinor (Laiterie Alma), *St-Bruno*
 Parmalat Dairy & Bakery Inc., *Etobicoke*
 Pine River Cheese & Butter Co-operative, *Ripley*
 Roman Cheese Products Limited, *Niagara Falls*
 S.C.A. de L'Isle-aux-Grues, *L'Isle-aux-Grues*
 Salerno Dairy Products Ltd., *Hamilton*
 Saputo Inc., *Montréal*
 Saputo Foods Limited, *Brampton, Tavistock*
 Saputo Cheese, *G.P., Saint-Léonard*
 Silani Sweet Cheese Ltd., *Schomberg*

ELECTRICAL & ELECTRONICS

ABB Inc., *Lachine, Québec, 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*
 BreconRidge Corporation, *Ottawa*
 C-Vision Limited, *Amherst*
 Candor Industries Inc., *Toronto*
 Circuits GRM Enr., *Ville St-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*
 Eclairages PA-CO Inc. (Les), *Laval*
 Ecopower Inc., *London*
 Electrolux Canada Corp., *L'Assomption*
 Energizer Canada Inc., *Walkerton*
 EPM Global Services Inc., *Markham*
 Ferraz Shawmut Canada Inc., *Toronto*
 Firan Technology Group, *Scarborough*

G.E. Energy, *Lachine*
 General Electric Canada, *Peterborough*
 General Dynamics Canada, *Ottawa, Calgary*
 GGI International, *Lachine*
 Honeywell, *Mississauga*
 IBM Canada Ltd., *Markham*
 Ideal Industries (Canada) Corp., *Ajax*
 Master Flo Technology Inc., *Hawkesbury, North Vancouver*
 MDS Nordion Inc., *Kanata*
 Milplex Circuit (Canada) Inc., *Scarborough*
 Moloney Electric Inc., *Sackville, Spruce Grove, Toronto*
 Nexans Canada Inc., *Fergus*
 Osram Sylvania Ltd., *Mississauga*
 Osram Sylvania Ltd., *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*
 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*
 Sound Design Technologies Ltd., *Burlington*
 Southwire Canada, *Stouffville*
 Surrette 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

GenerationOntario Power Generation, *Toronto*
 Qulliq Energy Corporation, *Iqaluit*

FERTILIZER

Agrium Inc., *Redwater*
 Canadian Fertilizers Limited, *Medicine Hat*
 Mosaic Potash Belle Plaine, *Belle Plaine*
 Mosaic Potash Colonsay, *Colonsay*
 Mosaic Potash Esterhazy, *Esterhazy*
 Sherritt International Corporation, *Fort Saskatchewan*
 Tourbières Berger Ltée (Les), *Saint-Modeste*

FOOD & BEVERAGE

A. Harvey & Company Limited, *St. John's*
 Argentia Freezers, *Dunville*
 Browning Harvey Limited, *St. John's, Corner Brook, Grand Falls, Windsor*

Abattoir Louis Lafrance & Fils Ltée, *St-Séverin de Proulxville*
 Abattoir Saint-Germain inc, *Saint-Germain-de-Grantham*
 ACA Co-operative Limited, *Kentville*
 Eastern Protein Foods Limited, *Kentville*
 AgEnergy Co-operative Inc., *Guelph*
 Agri-Marché Inc., *St-Isidore*
 Alberta Processing Co.- *Calgary*
 Alex Coulombe Ltée, *Québec*
 Aliments Ouimet-Cordon Bleu Inc., *Anjou*
 Aliments Reinhart Foods Ltd./Ltée, *Stayner*
 Aliments Ultima Foods Inc., *Granby*
 Andrés Wines Ltd., *Grimsbey*
 Aljane Greenhouses Ltd., *Pitt Meadows*
 Alkema Greenhouses Ltd., *Grimsbey*
 Allen's Fisheries Limited, *Benoit's Cove*
 Amco Farms Inc., *Leamington*
 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*
 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
 Breakwater Fisheries Limited, *Cottleville*
 Brookdale Treeland Nurseries, *Niagara-on-the-Lake*
 Browning Harvey Limited, *St. John's, Corner Brook, Grand Falls, Windsor*
 Bunge Canada, *Montréal*
 Burnbrae Farms Limited, *Lyn, Brockville, Calgary, Mississauga, Pandora, Winnipeg*
 Ferme St-Zotique, *Saint-Zotique*
 Island Egg, *Westholme*
 Maple Lyn Foods Ltd., *Strathroy*
 Oeufs Bec-O Inc. (Les), *Upton*
 C & M Seeds, *Palmerston*
 Cadbury Adams Canada Inc., *Toronto*
 Café Vittoria Inc., *Sherbrooke*
 Campbell Company of Canada, *Listowel, Toronto*
 Canbra Foods Ltd., *Lethbridge*
 Canada Bread Company Ltd., *Beauport, Calgary, Chicoutimi, Concord, Delta, Edmonton, Etobicoke, Grand Falls, Hamilton, Langley, Laval,*

- Lévis, London, Moncton, Mont-Laurier, Montréal, North Bay, Québec, Scarborough, St. John's, Saint-Côme-Linière, Toronto, Woodstock
- 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, Winnipeg, Sarnia
- Cargill AgHorizons, Melbourne, Princeton, Shetland, Staples, Strathroy, Talbotville, Brandon, Dauphin, Elm Creek, Winnipeg, Canora, Nicklen Siding, North Battleford, Rosetown, Yorkton, Albright, Edmonton, Lethbridge, Rycroft, Vegreville
- Cargill Meats Canada, London
- Cargill Meat Solutions, Guelph
- Casco Inc., Etobicoke, Cardinal, London, Port Colborne
- Cavendish Farms, New Annan
- Cedar Beach Acres Ltd., Kingsville
- Cedar Field Greenhouses Ltd., Freelon
- 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 Lesters 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 Bottling Company, Toronto, Calgary
- Cold Springs Farm Limited, Thamesford
- Colonial Florists Ltd., St. Catharines
- Commercial Alcohols Inc., Toronto, Brampton
- 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
- Crowley Farms Norwood Ltd., Norwood
- Dallaire Spécialités Inc., Rouyn-Noranda
- Debono Greenhouses Limited, Waterford
- Dairytown Products Ltd., Sussex
- Diageo Canada Inc., Gimli
- Domric International Ltd., Ruthven
- Don Chapman Farms Ltd./Lakeview Vegetable Processing Inc., Queensville
- Dykstra Greenhouses, St. Catharines
- E.D. Smith and Sons LP, Seaforth, Winoma
- Ed Sobkowich Greenhouses, Grimsby
- East Side Acres, Leamington
- Erievue Acres Inc., Kingsville, Leamington
- Exceldor Coopérative Avicole, St-Anselme
- Export Packers Foods Limited, Paris
- Family Muffins & Desserts Inc., Sherwood Park
- Fancy Pokket Corporation, Moncton
- Federated Co-operatives Limited, Saskatoon
- Reif Estate Winery Inc., Niagara on the Lake
- Ferme Daichemin s.e.n.c, St-Damase, St-Pie
- Ferme Gilles et Francine Lahaie enr., St-Michel-de-Napierreville
- Ferme Hum-An-Son, Saint-Malachie
- Ferme La Rouquine Inc., Chicoutimi
- Fermes Lufa Inc. (Les), Montréal
- Fernlea Flowers Limited, Delhi
- Fishery Products International Limited, St. John's, Port Union, Triton
- 1266094 Ontario Limited o/a Five Star Farms, Ruthven
- Fleischmann's Yeast, Calgary
- Flora Park Inc., Sherrington
- 1600798 Ontario Inc.-Flower Ranch (The), Strathroy, London
- Fresh Sprout International Ltd., Mississauga
- Freybe Gourmet Foods Ltd., Langley
- Frisia Flora Greenhouses, Beamsville
- Frito Lay Canada, Mississauga, Cambridge, Lethbridge, Lévis, New Minas, Pointe-Claire, Taber
- 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
- Froese Vegetables Inc., Vienna
- Furlani's Food Corporation, Mississauga
- G.E. Barbour Inc., Sussex
- Ganong Bros. Limited, St. Stephen
- General Mills Canada Corporation, Midland, St-Hubert, Winnipeg
- George Sant & Sons Greenhouses, Kleinburg
- Gonderflex International Inc., Longueuil
- Good Taste Food Products Inc., Scarborough
- Green Mountain Gardens, Stoney Creek
- Greenfield Gardens (Niagara) Inc., Fenwick
- Greenwood Mushroom Farm, Ashburn, Greenwood
- 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
- Homeland Grain Inc., Burgessville
- Hq Fine Foods, Edmonton
- HSF Foods Ltd., Centreville
- Hubberts Industries, Brampton
- Humpty Dumpty Snack Foods Inc., Summerside
- Ice River Springs Water Co. Inc., Feversham
- Icewater Seafoods Inc., Arnold's Cove
- Imperial Tobacco Canada Ltd, Montréal
- Inovata Foods Corp., Edmonton
- Jadee Meat Products Ltd., Beamsville
- Jeffery's Greenhouses Plant II Limited, Jordan Station
- Jolly Farmer Products Inc., Northampton
- JTI-Macdonald Corp., Montréal
- Kapital Produce Limited, Leamington, Ruthven
- Kejay Farms Inc., Chatham
- Kraft Canada Inc., Vile Mont-Royal, East York, Chambly, Toronto
Kraft Canada Inc., Biscuiterie Montréal
- Kuyvenhoven Greenhouses Inc., Brampton, Halton Hills
- La Coop Fédérée, Montréal, Joliette, St-Romuald
- La Corporation d'aliments Ronzoni du Canada, Montréal
- La Rocca Creative Cakes, Thornhill
- Landmark Feed Inc., Abbotsford, Brossard, Claresholm, Landmark, Medicine Hat, Otterburne, Rosenort, Strathmore, Winnipeg
- Laprise Farms Ltd., Pain Court
- Larsen Foods -Berwick
- Lassonde Beverages Canada, Toronto
- Leahy Orchards Inc., Franklin, Saint-Antoine Abbé
- Legacy Cold Storage Ltd., Chilliwack
- Legal Alfalfa Products Ltd., Legal
- Les Aliments Dainty Foods, Windsor
- Les Aliments Dare Limitée, Sainte-Martine
- Les Cuisines Gaspésiennes Ltée, Matane
- Les Distilleries Schenley Inc., Salaberry-de-Valleyfield
- Les Jardiniers du Chef, Blainville
- Les Luzernes Belcan du Lac St-Jean Inc., Hébertville Station
- Les Oeufs d'Or, Val d'Or
- Les Productions Horticoles Demers Inc., Saint-Nicolas
- Les produits Zinda Canada Inc., Candiac
- Les Serres Daniel Lemieux Inc., Saint-Rémi
- Les Serres Florinove, St-Paulin
- Les Serres Gola, Mont-St-Grégoire
- Les Serres Granby Inc., Granby
- Les Serres Maedler (1989) Inc., Nyon
- Les Serres R. Bergeron Inc., St. Apollinaire
- Les Serres Riel Inc., St-Rémi
- Les Serres Sagami (2000) Inc., Chicoutimi, Sainte-Sophie
Les Serres Nouvelles Cultures Inc., Sainte-Sophie
- Les Serres Serge Dupuis, St-Élie-de-Caxton
- Les Serres St-Benoît-du-Lac Inc., Austin
- Les Viandes du Breton Inc., Rivière-du-Loup
- Lilydale Cooperative Ltd., Edmonton
- Lindy's Flowers, Dunnville
- Link Greenhouses, Bowmanville
- Linwell Gardens Ltd., Beamsville
- Lucerne Foods, Calgary

- Lyalta Gardens, *Lyalta*
 Lyo-San Inc., *Lachute*
 Madelimer Inc., *Grande-Entrée*
 Maison des Futailles, *St-Hyacinthe*
 Maple Leaf Consumer Foods Inc., *Hamilton, Laval, Lethbridge, Mississauga, North Battleford, Surrey, Weston, Winnipeg*
 Maple Leaf Foods Inc., *Burlington, Kitchener*
 Maple Leaf Fresh Foods, *Brandon, Burlington, Charlottetown, Lethbridge, Stoney Creek, Winnipeg*
 Maple Leaf Poultry, *Brampton, Edmonton, Kentville, Mississauga, New Hamburg, Toronto, Wataskiwin*
 Maple Lodge Farms Ltd, *Norval*
 Marish Greenhouses, *Dunnville*
 Mars Canada Inc., *Bolton, Newmarket*
 Marsan Foods Limited, *Toronto*
 Mastronardi Estate Winery, *Kingsville*
 McCain Foods Limited, *Florenceville, Grand Falls*
 McCain Foods (Canada), *Portage la Prairie, Carberry, Toronto, Mississauga, Borden-Carleton*
 Wong Wing, *Division of McCain Foods Limited, Montréal*
 Charcuterie La Tour Eiffel, *Division of McCain Foods Limited, Québec, Blainville*
 Menu Foods, *Streetsville*
 Meyers Fruit Farms and Greenhouses, *Niagara-on-the-Lake*
 Minor Bros. Farm Supply Ltd, *Dunnville*
 Mitchell's Gourmet Foods Inc, *Saskatoon*
 Montréal Pita Inc., *Montréal*
 Mother Parkers Tea & Coffee Inc., *Ajax, Mississauga*
 Mt. Lehman Greenhouses (1999) Ltd., *Mt. Lehman*
 Nadeau Poultry Farm Ltd., *St-François-de-Madawaska*
 Nanticoke Greenhouses Limited, *Simcoe*
 Nature Fresh Farms, *Leamington*
 Nature's Finest Produce Ltd., *Pain Court*
 Nestlé Canada Inc., *London, Toronto*
 Nestlé Purina PetCare, *Mississauga*
 Nestlé Waters Canada, *Guelph*
 Nicol Florist Ltd., *Brantford*
 Noël Wilson & Fils S.N.C., *Saint-Rémi*
 Norfolk Greenhouses Inc., *Courtland*
 Norman Jobin Farms, *Maidstone*
 Northern Alberta Processing Co., *Edmonton*
 Northumberland Co-operative Limited, *Miramichi*
 Nunavut Development Corporation, *Rankin Inlet*
 Kitikmeot Foods Ltd., *Cambridge Bay*
 Kivalliq Arctic Foods Ltd., *Rankin Inlet*
 Pangnirtung Fisheries Ltd., *Pangnirtung*
 Oakrun Farm Bakery Ltd, *Ancaster*
 Ocean Legacy, *L'Étang*
 Ocean Nutrition Canada Ltd., *Dartmouth*
 Okanagan North Growers Cooperative, *Winfield*
 Old Dutch Foods Ltd., *Winnipeg*
 Olymel S.E.C. / LP, *Red Deer*
 Olymel S.E.C., *Princeville, St-Hyacinthe, Trois-Rivières, St-Damase, St-Jean-sur-Richelieu, Anjou*
 Machinerie Olymel (1998) Inc., *St-Valérien-de-Milton*
 Omstead Foods Limited, *Wheatley*
 Orangeline Farms Limited, *Leamington*
 Orchard Park Growers Ltd., *St. Catharines*
 Otter Valley Foods Inc., *Tillsonburg*
 Oxford Frozen Foods Limited, *Oxford*
 Hillaton Foods, *Port Williams*
 P. Ravensbergen & Sons. Ltd., *Smithville*
 Palmerston Grain, *Palmerston*
 Paradise Hill Farms Inc., *Nanton*
 Parrish & Heimbecker Limited, *Glencoe*
 Parkway Gardens Ltd., *London*
 Pelee Hydroponics, *Leamington*
 Pepe's Mexican Foods Inc., *Etobicoke*
 Pepsi-Cola Canada Beverages, *Mississauga*
 PepsiCo Foods Canada Inc., *Peterborough, Trenton*
 Pernod Ricard Canada, *Windsor*
 Planet Bean Coffee Inc., *Guelph*
 Poinsettia Plantation (The), *Bothwell*
 Prairie Mushrooms (1992) Ltd., *Sherwood Park*
 Principality Foods Ltd., *Edmonton*
 Production Serres Yargeau Inc., *Sherbrooke*
 Pyramid Farms Ltd., *Leamington*
 Quark Farms Ltd., *Mossbank*
 Redpath Sugar Ltd., *Toronto*
 Regal Greenhouses Inc., *Virgil*
 Rekker Gardens Ltd., *Bowmanville*
 Rhema Health Products Limited, *Coquitlam*
 Rich Products of Canada Limited, *Fort Erie*
 Rol-land Farm Limited, *Campbellville*
 Rootham's Gourmet Preserves Ltd., *Guelph*
 Rosa Flora Limited, *Dunnville*
 Rothmans, *Benson & Hedges Inc., North York*
 Rothsay, *Dundas, Moorefield, Québec, St-Boniface, Truro*
 Sakai Spice (Canada) Corporation, *Lethbridge*
 Sanimax ACI Inc., *Lévis*
 Sanimax Lom Inc., *Montréal*
 Scotia Garden Seafood Inc., *Yarmouth*
 Scotian Halibut Limited, *Clarks Harbour, Lower Woods Harbour*
 Schenck Farms & Greenhouses Co. Limited, *St. Catharines*
 Schneider Foods, *Ayr, 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*
 Sepallo Operations LP, *Barrhead*
 Sepp's Gourmet Foods Ltd, *Delta, Richmond Hill*
 Serres du Marais, Inc. (Les), *Ste-Martine*
 Serres Sylvain Cléroux (Québec) Inc. (Les), *Laval*
 Shah Trading Company Limited, *Scarborough*
 Shur Grain, *Brossard, Burtt's Corner, Highgate, Port Williams, St-Félix-de-Valois, St-Hugues, St-Hyacinthe, St Marys, St-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*
 Soil Less Growing Systems Inc., *Calgary*
 Sovereign Farms, *Waterford*
 Spring Valley Gardens Niagara Inc., *St Catherines*
 St. David's Hydroponics Ltd., *Niagara-on-the-Lake, Beamsville, St Davids*
 Stag's Hollow Winery and Vineyard Ltd., *Okanagan Falls*
 Stratus Vineyards Limited, *Niagara-on-the-Lake*
 Streef Produce Ltd., *Princeton*
 Sucre Lantic Limitée, *Montréal*
 1710086 Ontario Limited-Sun Harvest Greenhouses, *Glenburnie*
 Suntech Greenhouses Ltd., *Manotick*
 Sunny Crunch Foods Ltd., *Markham*
 Sunrise Bakery Ltd., *Edmonton*
 Sunrise Farms Limited, *Kingsville, Leamington*
 Sunrise Greenhouses Ltd., *Vineland Station*
 Sun-Rype Products Ltd., *Kelowna*
 SunSelect Produce (Delta) Inc- Aldergrove, *Delta*
 Sunshine Peaks, *Leamington*
 Sunterra Meats Ltd., *Innisfail*
 Sunwold Farms Ltd., *Acme*
 Largie Farm, *Dutton*
 Peterborough Farms, *Indian River*
 Sysco Canada, Inc., *Acheson, Calgary, Etobicoke, Lakeside, Kelowna, Kingston, Milton, Mississauga, Moncton, Montréal, Mount Pearl, Peterborough, Port Coquitlam, Sturgeon Falls, Thunder Bay, Toronto, Regina, Vancouver, Victoria, Winnipeg*
 Target Marine Products Ltd, *Sechelt*
 Thomson Meats Ltd., *Melfort*
 Tidal Organics Inc., *Pubnico*
 Town Line Farms/Processing Ltd., *Wellington*
 Transfeeder Inc., *Olds*
 Trevisanutto's Greenhouses, *Thunder Bay*
 Trochu Meat Processors, *Trochu*
 Trophy Foods Inc., *Calgary*
 Unifeed & Premix, *Lethbridge*
 Unilever Canada, *Rexdale, Brampton*
 968502 Ontario Inc-United Floral Greenhouse, *Fenwick*
 Valleyview Gardens, *Scarborough, Markham*
 Van Geest Bros. Limited, *Grimsby, St. Catharines*
 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*
 Versacold Corporation, *Vancouver*
 Viandes Kamouraska Inc., *St-Pascal*
 Vincor International Inc., *Niagara Falls*
 Virgil Greenhouses Ltd., *Niagara-on-the-Lake*
 Vitoeuf Inc., *St-Hyacinthe*

Voogt Greenhouses Inc, *Niagara on the Lake*
 Voortman Cookies Ltd., *Burlington*
 W.J. O'Neil & 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*
 Westglen Milling Ltd., *Barrhead*
 Westland Greenhouses (Jordan) Ltd.,
Jordan Station
 Weston Foods Inc., *Etobicoke*
 Weston Bakeries Limited, *Toronto, Kingston,
 Kitchener, Orillia, Ottawa, Sudbury, Winnipeg*
 Bronson Bakery Limited, *Ottawa*
 Crissa Bakery, *Barrie*
 Golden Mill Bakery, *Hamilton*
 Pepe's Mexican Foods Inc., *Etobicoke*
 Sir Bagel, *Concord*
 Weston Fruit Cake Co., *Cobourg*
 Ready Bake Foods Inc., *Mississauga*
 Maplehurst Bakeries Inc., *Brampton*
 Willow Spring Hydroponics Farms Ltd.,
Bothwell
 Willy Haeck et Fils Inc., *St-Rémi*
 Willy's Greenhouses Ltd, *Niagara-on-the-Lake*
 Windset Greenhouses Ltd., *St. Delta*
 Witzke's Greenhouses Ltd., *Courice*
 Woodhill Greenhouses Inc., *Lynden*

FOUNDRY

Ancast Industries Ltd, *Winnipeg*
 Bibby-Ste-Croix, *Sainte-Croix*
 Breyer Casting Technologies Inc., *Brampton*
 Canadian Specialty Castings Incorporated,
Niagara Falls
 Century Pacific Foundry Ltd., *Surrey*
 Crowe Foundry Limited, *Cambridge*
 Deloro Stellite Inc., *Belleville*
 Elkem Métal Canada Inc- Chicoutimi
 ESCO Limited, *Port Coquitlam, Port Hope*
 Gamma Foundries Limited, *Richmond Hill*
 Grenville Castings Limited, *Merrickville, Perth,
 Smith Falls*
 J & K Die Casting Ltd., *Scarborough*
 M.A. Steel Foundry Ltd., *Calgary*
 Magotteaux Ltée, *Magog*
 Mueller Canada, *St-Jérôme*
 Norcast Castings Company Ltd., *Mont-Joli*
 Ramsden Industries Limited, *London*
 Supreme Tooling Group, *Toronto*
 Vehcom Manufacturing, *Guelph*
 Wabi Iron & Steel Corporation, *New Liskeard*
 Wabtec Foundry-Div. of Watec Canada Inc.,
Wallaceburg

GENERAL MANUFACTURING

2527-4572 Québec Inc (Les Serres Bergeron),
*Notre-Dame-du-Laus,
 Notre-Dame-de-la-Salette*
 30852030 Québec Inc (Serres Maryvon),
L'Ascension
 3M Canada Company, *London, Brockville,
 Etobicoke, Morden, Perth*
 A1 Label Inc., *Toronto*
 ABCO Industries Limited, *Lunenburg*
 Aberfoyle Metal Treaters Ltd, *Guelph*
 Acuity Innovative Solutions, *Richmond Hill*
 Acadian Platers Company Limited, *Etobicoke*
 Accuride Canada Inc., *London*
 Active Burgess Mould & Design Ltd., *Windsor*
 Advanced Ag and Industrial Ltd., *Biggar*
 AirBoss Produits d'Ingénierie Inc., *Acton Vale,
 Airex Industries Inc.,
 Montréal, Drummondville, Mississauga*
 Airia Brands Inc., *London*
 Airtek Systems Inc., *Edmonton*
 Airworks Compressors Corp., *Edmonton*
 Alcan Packaging Canada Limited, *Weston*
 Aluminum Surface Technologies, *Burlington*
 American Color Graphics Inc., *Stevensville*
 Anchor Lamina Inc., *Cambridge, Mississauga,
 Windsor*
 Anchor Lamina Inc., *Reliance Fabrications,
 Tilbury*
 A.P. Plasman Inc., *Tecumseh, Tilbury, Windsor*
 APC Coatings Limited, *Dartmouth*
 A.R. Thomson Group, *Edmonton*
 Armtec Limited Partnership, *Woodstock*
 Art Design International Inc., *Saint-Hubert*
 Artopex Plus Inc., *Granby, Laval*
 Arva Industries Inc., *St. Thomas*
 Associated Tube Industries, *Markham*
 Atlas Industries Ltd., *Saskatoon*
 Automatic Coating Limited, *Scarborough*
 Babcock & Wilcox Canada Ltd., *Cambridge*
 Baron Metal Industries Inc, *Woodbridge*
 BASF The Chemical Company, *Georgetown*
 Batteries Power (Iberville) Ltée,
St-Jean-sur-Richelieu
 B.C. Instruments, *Schomberg, Barrie*
 Bentofix Technologies Inc., *Barrie*
 Bernard Breton Inc., *St. Narcisse-de-Beaurivage*
 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*
 Broan-Nutone Canada Inc., *Mississauga*
 Builders Furniture Ltd., *Winnipeg*
 Building Products of Canada Corp., *Ville LaSalle,
 Edmonton, Pont-Rouge*

Burnco Manufacturing Inc., *Concord*
 Butcher Engineering Enterprises Limited (The),
Brampton
 Byers Bush Inc., *Mississauga*
 CAE Inc., *Saint-Laurent*
 Canada Mold Technology, *Woodstock*
 Cancoil Thermal Corporation, *Kingston*
 Cambridge Brass Inc., *Cambridge*
 Canada's Best Store Fixtures Inc., *Woodbridge*
 Canwood Furniture Inc., *Penticton*
 Carrière Union Ltée, *Québec*
 Casavant Frères s.e.c., *St-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 Ltée, *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*
 Colonial Tool Group Inc., *Windsor*
 Canada Colors and Chemicals Limited-Plastics
 Division, *Colborne*
 Colourific Coatings Ltd., *Mississauga*
 Columbia Industries Limited, *Sparwood*
 Comp-Tech Mfg. Inc., *North York*
 Compagnies du Groupe DATA (Les), *Granby*
 Conference Cup Ltd., *London*
 Control Skateboards Inc., *St-Nicolas*
 Cosella-Dorken Products Inc., *Beamsville*
 Coyle & Greer Awards Canada Ltd., *Mossley*
 Créations Verbois Inc., *Rivière-du-Loup*
 Crown Metal Packaging Canada LP, *Concord,
 Ville St-Laurent*
 CUMI Canada Inc., *Summerside*
 D. Repol Enterprises Inc., *Whitby*
 Data Group of Companies (The), *Brampton,
 Drummondville, Brockville*
 Davis Wire Industries Ltd., *Delta*
 Dawn Canadian Labels Inc., *Markham*
 DCR Holdings Inc., *Stoney Creek*
 Delta Elevator Co. Ltd., *Kitchener*
 Descor Industries Inc., *Markham*
 DEW Engineering and Development Limited,
Miramichi, Ottawa
 Dipaolo CNC Retrofit Ltd., *Mississauga*
 Display Merchandising Group Inc., *Scarborough*
 Dixie Electric Ltd., *Concord*
 Dortec Industries, *Newmarket*
 Durable Release Coaters Limited, *Brampton*
 Dura-Chrome Limited, *Wallaceburg*
 Dutch Industries Ltd., *Pilot Butte, Regina*
 EHC Global, *Oshawa*
 Emballages Alcan Lachine, *Lachine*
 Emerson Process Management, *Edmonton*
 Engauge Controls Inc., *Lakeshore*

- Enstel Manufacturing Inc., *Concord*
 Entreprises Dauphinais Inc. (Les), *Sheerbrooke*
 Envirogard Products Ltd., *Richmond Hill*
 Ezeflow Inc., *Granby*
 Fabrication S Houle Inc., *St-Germain-de-Grantham*
 Fileco Inc., *Division of Teknion Furniture Systems, Concord*
 Floform Industries Ltd., *Winnipeg, Edmonton*
 Custom Countertops Ltd., *Regina*
 Custom Countertops Ltd., *Saskatoon*
 Futuretek-Bathurst Tool Inc., *Oakville*
 Garaga Inc., *Barrie*
 Garant, *Saint-François*
 Garland Commercial Ranges Limited, *Mississauga*
 Garrtech Inc, *Stoney Creek*
 General Dynamics Produits de défense et Systèmes tactiques-Canada Inc., *Saint-Augustin-de-Desmaures*
 Genfoot Inc., *Montréal*
 George A. Wright & Son General Services Inc., *Kingston*
 Georgia-Pacific Canada, Inc., *Thorold*
 Global Casegoods Inc, *Concord*
 Global Wood Concepts Ltd., *North York*
 Greif Bros. Canada Inc., *Oakville, Stoney Creek*
 Groupe Altech 2003 Inc., *Pointe-Claire*
 Gunnar Manufacturing Inc., *Calgary*
 H. Beck Machinery Ltd., *Windsor*
 Hallink RSB Inc., *Cambridge*
 Harber Manufacturing Limited, *Fort Erie*
 Hartmann Canada Inc., *Brantford*
 Hendrickson Spring, *Stratford*
 Henkel Canada Corporation, *Consumer Adhesives, Brampton*
 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 & Associés Inc. (Fruits & Passion), *Candiac*
 Hydroform Solutions, *Brampton*
 Imprimerie Interweb inc, *Boucherville*
 Indal Technologies Inc., *Mississauga*
 Independent Mirror Industries Inc., *Toronto*
 Industrie Bodco Inc., *St-François-Xavier*
 Industries Graphiques Cameo Crafts Limitée, *Montréal*
 Integria Inc., *Saint-Laurent*
 Interface Flooring Systems (Canada) Inc., *Belleville*
 J.A. Wilson Display Ltd., *Mississauga*
 Jay Ge Electroplating Ltd., *Laval*
 Jervis B. Webb Company of Canada Ltd., *Hamilton*
 John Gavel Custom Manufacturing Ltd, *Emo*
 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*
 Kwalify Labels Inc., *Richmond Hill*
 KWH Pipe (Canada) Ltd., *Huntsville, Saskatoon*
 Kuntz Electroplating Inc., *Kitchener*
 La Compagnie Américaine de Fer et Métaux Inc., *Montréal*
 Larsen & D'Amico Manufacturing Ltd, *Edmonton*
 Laser Impressions Inc., *Saskatoon*
 Laval Tool & Mould Ltd., *Maidstone*
 Lee Valley Tools Ltd., *Ottawa, Carp*
 Les Distributions Option Kit Inc., *Québec*
 Les industries Peinteck Inc., *Chesterville*
 Les Productions Ranger (1988) Inc., *Granby*
 Les Technologies Fibrox Ltée, *Thetford Mines*
 Linamar Corporation, *Guelph*
 Cemtol Mfg., *division of Linamar Corporation, Guelph*
 Skyjack Inc., *Guelph*
 Lincoln Electric Compy of Canada LP, *Toronto*
 L'Oréal Canada Inc., *Ville St-Laurent*
 Lowe-Martin Group (The), *Ottawa, Mississauga*
 Ludlow Technical Products Canada, Ltd., *Gananoque*
 Luzenac Incorporated, *Timmins*
 Maclean Engineering & Marketing Co. Limited, *Collingwood*
 Magnum Signs Inc., *Kent Bridge*
 Maksteel Service Centre, *Mississauga*
 Manor Tool & Die Ltd.- Oldcastle
 Mansour Mining Inc., *Sudbury*
 Manufacturier TechCraft Inc., *Laval*
 Marcel Depratto Inc, *Saint-Louis-de-Richelieu*
 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*
 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., *St-Hubert*
 Metroland Printing, *Publishing & Distributing, Mississauga*
 Meubles Idéal Ltée, *Saint-Charles-de-Bellechase*
 Meubles Canadel Inc., *Louiseville*
 MIRALIS Inc., *St-Anaclet-de-Lessard*
 MLT International, *Saint Pie*
 Mobilier MEQ Ltée, *La Durantaye*
 Moli Industries Ltd., *Calgary*
 Momentum, *Newmarket*
 Mondo America Inc., *Laval*
 Montebello Packaging, *Hawkesbury*
 Multy Industries Inc., *North York*
 Nahanni Steel Products Inc. o/a Jancox Stampings, *Brampton*
 Nexans Canada Inc. - Montréal East
 NODMAN Automation Systems, *Rockwood*
 Nord Gear Limited, *Brampton*
 North American Decal, *Markham*
 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 Insulating Sys, *Toronto*
 P. Baillargeon Ltée, *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 Ltée, *Jonquière*
 Piddi Design Associates Limited, *Mississauga*
 Pinnacle Finishing, *Chatham*
 Pinnacle Mold Inc., *Tecumseh*
 Placage Chromex inc., *Sainte-Foy*
 Plastiques Cellulaires Polyform inc., *Granby*
 Polycote Inc, *Concord*
 Polytainers Inc. Toronto
 Pomatek Inc., *Delson*
 Poutrelles Delta Inc., *Sainte-Marie*
 Powell PowerComm Inc., *Edmonton, Grande Prairie, Hardisty, Lloydminster, Nisku, Olds, Provost*
 Powercast Manufacturing Inc., *Saint Eustache*
 Premier Horticulture Ltée, *Rivière-du-Loup*
 Prémoulé Comptoirs, *Saint-Augustin-de-Desmaures*
 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*
 Portes Novatech Inc., *Sainte-Julie*
 Pullmatic Manufacturing, *Unionville*
 Railtech Ltd., *Baie d'Urfe*
 Ramstar Carbide Tool Inc., *Oldcastle*
 Ready Rivet & Fastener Ltd., *Kitchener*
 Reko International Group Inc., *Oldcastle*
 Reko Tool & Mould (1987) Inc., *Oldcastle*
 Reko Automation & Machine Tool, *Tecumseh*
 Concorde Machine Tool, *Tecumseh*
 Resco Canada Inc., *Grenville-sur-la-Rouge*
 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*
 Saint-Gobain Ceramic Materials Canada Inc.,
Niagara Falls, Paris
 Samuel Strapping Systems, *Scarborough*
 Sandvik Materials Technology Canada, *Arnprior*
 Sandvik Mining and Construction Canada Inc.,
Burlington
 Sandvik Tamrock Canada Inc., *Lively*
 Sani Métal Ltée, *Québec*
 Sarjeant Company Ltd. (The), *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*
 SMS Siemag Ltd., *Oakville*
 Snap-on Tools of Canada Ltd., *Newmarket*
 Société Laurentide Inc., *Shawinigan*
 SOFAME Technologies Inc., *Montréal*
 Sonaca NMF Canada, *Mirabel*
 Soprema Inc., *Drummondville*
 Soudure Germain Lessard Inc., *Boucherville*
 Spartek Systems, *Sylvan Lake*
 Spec Furniture Inc., *Toronto*
 Specialty Porcelain Products Inc., *Burlington*
 Sportspal Products, *North Bay*
 Steelcase Canada Ltd., *Markham*
 Stepan Canada Inc., *Longford Mills*
 Suntech Heat Treating Ltd., *Brampton*
 Superior Radiant Products Ltd., *Stoney Creek*
 Supremex Inc., *Lasalle*
 Techform Products Limited, *Penetanguishene*
 Teknion Furniture Systems Ltd., *Toronto*
 Teknion Roy & Breton Inc., *St-Romauld*
 RBLogistek, *St-Romauld*
 RBTek, *St-Romauld*
 Roy & Breton, *St-Vallier*
 Teknion Concept, *Lévis*
 Teknion Form, *Concord*
 Teknion Québec, *Montmagny*
 ThermetCo Inc., *Montréal*
 Timken Canada LP, *St. Thomas*
 Times Fiber Canada Limited, *Renfrew*
 Top Grade Molds Ltd., *Mississauga*

Tri-Graphic Printing (Ottawa) Ltd., *Ottawa*
 TransContinental Interweb Toronto, *Mississauga*
 Imprimerie Interglobe Inc., *Beauceville*
 Imprimeries TransContinental S.E.N.C.,
Boucherville, St-Hyacinthe
 TransContinental Gagné, *Louiseville*
 TransContinental RBW Graphics,
Owen Sound
 TransContinental Printing 2005 G.P.,
Saskatoon
 Trenergy Inc., *St. Catharines*
 Tri-Service Metal Products Inc., *Ajax*
 Tube-Fab Ltd., *Mississauga, Charlottetown*
 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 & Granite Ltd., *Ottawa*
 V.N. Custom Metal Inc., *North York*
 VicWest Steel, *Oakville*
 Vulcan Contenants (Quebec) Ltée, *Lachine*
 Wabash Alloys Mississauga, *Mississauga*
 Waiward Steel Fabricators Ltd., *Edmonton*
 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*
 World Color Press, *Islington, Aurora, Concord,
 Port Coquitlam, Dartmouth, LaSalle, Edmonton,
 Richmond Hill*
 ZENON Environmental Inc., *Oakville*

LIME

Carmeuse Beachville (Canada) Limited,
Blind River
 Carmeuse Lime (Canada) Limited, *Dundas,
 Ingersoll*
 Chemical Lime Company of Canada Inc., *Langley*
 Graymont (NB) Inc., *Havelock*
 Graymont (QC) Inc., *Bedford, Boucherville,
 Joliette, Marbleton*

Graymont Western Canada Inc., *Calgary,
 Richmond (C.O.), Cache Creek, Summit Plant,
 Coleman, Exshaw Plant, Exshaw, Faulkner Plant,
 Faulkner*

MINING

Aerosion Ltd., *Aldersyde*
 Barrick Gold Corporation, *Rouyn-Noranda*
 BHP Billiton Diamonds Inc., *Yellowknife*
 Canadian Salt Company Limited (The),
Pugwash
 Compagnie Minière Québec Cartier (La), *Montréal*
 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*
 Douglas Barwick Inc., *Brockville*
 Fosco Canada Inc., *Guelph*
 Goldcorp Inc., *Vancouver*
 Goldcorp Canada Ltd.-Musselwhite Mine,
Thunder Bay
 Hillsborough Resources Limited, *Campbell River*
 Hudson Bay Mining & Smelting Co. Ltd., *Flin Flon*
 Hy-Tech Drilling Ltd., *Saskatoon*
 Iron Ore Company of Canada, *Labrador*
 Johnson Matthey Limited, *Brampton*
 Métallurgie Noranda Inc, *Fonderie Horne*
 Mines et exploration Noranda Inc, *Division
 Matagami*
 Mines Wabush, *Sept-Îles*
 Newmont Canada Ltd., *Marathon*
 Teck Metals Ltd., *Toronto, Trail*
 Teck Resources Limited, *Vancouver*
 Tourbières Berger Ltée (Les), *Baie Sainte Anne,
 Baie-du-Vin*
 Williams Operating Corporation, *Marathon*
 Vale Inco, *Toronto, Birchtree, Copper Cliff,
 Creighton, Garson, McCreedy East, Mississauga,
 Murray, Port Colborne, Stobie, Thompson,
 Totten, Victor, Voisey's Bay, Xstrata Canada
 Corporation, Toronto*
 Xstrata Coal Canada Donkin, *Glance Bay*
 Xstrata Copper Canada, *CCR, Montréal*
 Kidd Creek, *Timmins*
 Horne, *Rouyn-Noranda*
 Xstrata Nickel Canada, *Sudbury Operations,
 Falconbridge*
 Fraser Morgan, *Sudbury*
 Fraser Mine, *Sudbury*
 Montcalm, *Timmins*
 Nickel Rim, *Sudbury*
 Raglan, *Nunavik Territory*
 Sudbury Mines, *Sudbury*
 Xstrata Zinc Canada, *Brunswick Mine, Bathurst*
 Brunswick Smelter, *Belledune*
 Fonderie General, *Lachine*
 Noranda-Matagami, *Matagami*
 CEZ Refinery, *Valleyfield*

OIL SANDS

Suncor Energy Inc., *Suncor Group, Sarnia*
 Syncrude Canada Ltd. (Oil Sands),
Fort McMurray

PETROLEUM PRODUCTS

ABC Rive-Nord Inc., *Labelle*
 Asphalte Générale Inc., *Saint-Pierre*
 BA Blacktop Ltd., *North Vancouver*
 Bitumar Inc., *Hamilton, Montréal*
 Canadian Tire Petroleum, *Toronto*
 Chevron Canada Limited, *Vancouver, Burnaby*
 Construction DJL Inc., *Montréal, Carigan, Canton de Hatley, Saint-Bruno*
 Pavages Beau-Bassin, *division de Construction DJL Inc., New Richmond, Cascapédia*
 Demix Construction, *Une Division de Holcim (Canada) Inc., Laval*
 Husky Energy Inc., *Calgary*
 Husky Oil Operations Ltd., *Rainbow Lake*
 IKO Industries Ltd., *Brampton, Hawkesbury*
 Imperial Oil Limited, *Calgary*
 Inter-Cité Construction Ltée, *Chambord, Saint Honoré*
 Irving Oil Limited, *Saint John*
 Pavage Centre Sud du Québec Inc., *Thetford Mines*
 Pavage Roxboro Inc./Roxboro Paving Inc., *Vaudreuil-Dorion, Dorval*
 Pavage Sartigan Ltée., *Saint-Georges*
 Pavages Abénakis Ltée, *Saint Georges Est, Saint-Léon-de-Standon*
 Petro-Canada, *Calgary*
 Pound-Maker Agventures Ltd., *Lanigan*
 Safety-Kleen Canada Inc., *Breslau*
 Sarjeant Company Ltd. (The), *Barrie*
 Shell Canada Limited, *Calgary*
 Ultramar Ltée, *Montréal*

PIPELINES

Enbridge Pipelines Inc., *Calgary, Edmonton*
 Floating Pipeline Company (The), *Halifax, Saint John*

PLASTICS

Source Design Ltd., *Wallaceburg*
 ABC Group Inc, *Toronto*
 ABC Air Management Systems Inc, *Rexdale, Ronson*
 ABC Plastic Moulding, *Brydon, Orlando*
 MSB Plastics Manufacturing Ltd., *Etobicoke*
 PDI Plastics Inc., *Etobicoke*
 Polybottle Group Limited, *Edmonton, Vancouver*
 Salflex Polymers Ltd, *Weston*
 Salga Associates, *Concord*
 ADS Groupe Composites Inc., *Thetford Mines*
 Advanced Panel Products Ltd., *Nisku*
 AMCOR PET Packaging, *Moncton*
 American Biltrite (Canada) Ltée, *Sherbrooke*

Amhil Enterprises, *Burlington*
 A.P. Plasman Inc., *Windsor*
 Armstrong World Industries Canada Ltd., *Montréal*
 Armtec Limited Partnership, *Orangeville*
 Associated Packaging Enterprises Canada Inc., *Cambridge*
 Atlantic Packaging Products Ltd., *Scarborough*
 BainUltra inc, *Saint-Nicolas*
 Baytech Plastics Inc., *Midland*
 Berry Plastics Canada Inc., *Waterloo*
 Berry Plastics, *Belleville*
 Blue Falls Manufacturing Ltd., *Coleman, Thorsby*
 Camoplast Inc., *Richmond*
 Canplas Industries Ltd., *Barrie*
 Cascades Inopak, *Drummondville*
 CKF Inc., *Etobicoke, Langley, Rexdale*
 Clorox Company of Canada Ltd. (The), *Brampton, Orangeville*
 D & V Plastics Inc., *Acton*
 DDM Plastics, *Tillsonburg*
 Domfoam International inc, *Saint-Léonard*
 Downeast Plastics Ltd., *Cap-Pelé*
 Dura-Tech Industrial & Marine Limited, *Dartmouth*
 DynaPlas Ltd., *Scarborough*
 Emballage St-Jean Ltée, *Saint-Jean-sur-Richelieu*
 Emballages Poliplastic Inc., *Granby*
 Fabrene Inc., *North Bay*
 Fenplast, *Delson*
 Fibres Armtex Inc., *Magog*
 Flexahopper Plastics Ltd., *Lethbridge*
 Formica Canada Inc., *St-Jean-sur-Richelieu*
 FRP Systems Ltd., *Thunder Bay*
 Genpak Limited Partnership, *Mississauga*
 Greif Bros. Canada Inc., *Belleville*
 Groupe Accent-Fairchild Inc., *Saint-Laurent*
 GSW Building Products, *Barrie*
 High-Q Design Ltd., *Edmonton*
 Horizon Plastics International Inc., *Cobourg*
 Husky Injection Molding Systems Ltd., *Bolton*
 Hymopack Ltd., *Etobicoke*
 Les industries de moulage Polytech Inc., *Granby*
 Imaflex Inc., *Montréal*
 Injection Technologies Inc., *Windsor*
 Intertape Polymer Group, *Truro*
 IPEX Inc., *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*
 Camtac Manufacturing, *division of Linamar Holdings Inc., Guelph*
 Les industries de Moulages Polymax Inc., *Granby*

Masternet Ltd., *Mississauga*
 Matrix Packaging Inc., *Mississauga*
 Mold-Masters Limited, *Georgetown*
 1674571 Ontario Inc. o/a Molded Plastic Consultants, *Shanty Bay*
 Neocon International, *Dartmouth*
 Newdon Industries Ltd., *Fergus*
 Newell Rubbermaid, *Calgary, Mississauga*
 Nigon Techonologies 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., *St-Félix-de-Valois*
 Plastiques Novaprofil Inc., *Sainte-Julie*
 Plasmade Industries Limited, *Mississauga*
 Plastube Inc., *Granby*
 PM Plastics Ltd., *Windsor*
 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, *St-Laurent*
 Prince Plastics Co., *Woodbridge*
 Regal Plastics Co., *Woodbridge*
 Residential Building Products, *St-Lambert-de-Lauzon*
 Royal EcoProducts Co., *Concord*
 Royal Flex-Lox Pipe Ltd., *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 Ltd., *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., *Mississauga*
 Sonoplastics Inc., *Boucherville*
 Tarkett Inc., *Farnham*
 Truefoam Limited, *Dartmouth*
 Vifan Canada Inc., *Montréal, Lanoraie d'Autray*
 Vulsay Industries Ltd., *Brampton*
 W. Ralston (Canada) Inc., *Brampton*
 Winpak Heat Seal Inc., *Vaudreuil-Dorion*
 Winpak Portion Packaging Ltd., *Toronto*

PULP AND PAPER

AbitibiBowater Inc., *Montréal, Alma, Amos, Baie-Comeau, Beaupré, Bridgewater, Brooklyn, Clermont, Dolbeau-Mistassini, Fort Frances, Girardville, Grand Falls-Windsor, Grand-Mère, Iroquois Falls, Jonquière, Maniwaki, Mistassini, Price, Saint-Félicien, Saint-Raymond, Thorold, Thunder Bay*
 Abzac Canada Inc., *Trois-Rivières, Drummondville*
 Alberta-Pacific Forest Industries Inc., *Boyle*
 Atlantic Packaging Products Ltd., *Agincourt, Brampton, Don Mills, Ingersoll, Mississauga, Scarborough*
 Alberta Newsprint Company, *Whitecourt*
 British Confectionery Company Limited, *Mount Pearl*
 Canfor Pulp Limited Partnership, *Intercontinental, Prince George, Northwood, Prince George, Prince George, Prince George*
 Cariboo Pulp and Paper Company Limited, *Quesnel*
 Caraustar Industrial & Consumer Products Group, *Kingston*
 Cascades Inc., *Kingsey Falls*
 Cascades Boxboard Group, *Montréal, East Angus, Jonquière, Toronto, Mississauga*
 Cascades Fine Paper Group, *Saint-Jérôme, Breakeyville*
 Converting Center, *Saint-Jérôme*
 Cascades Tissue Group, *Candiac, Kingsey Falls, Lachute*
 Cascades Speciality Products Group, *Kingsey Falls*
 Cascades Enviropac, *Berthierville*
 Cascades Lupel, *Cap-de-la-Madelaine*
 Cascades Multi-Pro, *Drummondville*
 Cascades East Angus, *East Angus*
 Cascades Papier Kingsey Falls, *Kingsey Falls*
 Cascades Conversion Inc., *Kingsey Falls*
 Catalyst Paper Corporation, *Campbell River*
 CKF Hantsport, *Hantsport*
 Daishowa-Marubeni International Ltd., *Peace River*
 Domtar Inc, *Montréal, Dryden, Espanola, Terrebonne, Windsor*
 Easy Pack Corporation, *Markham*
 Emballages Mitchel-Lincoln Ltée, *Saint-Laurent, Drummondville*
 Emballages Festival Inc., *Montréal*
 Emballages Smurfit-Stone Canada Inc., *La Tuque*

Smurfit-Stone, *Pontiac*
 F.F. Soucy Inc., *Rivière-du-Loup*
 Greif Bros. Canada Inc., *LaSalle, Niagara Falls*
 Howe Sound Pulp and Paper Limited Partnership, *Port Mellon*
 Industries Ling Inc., *Warwick*
 Interlake Paper, *St. Catharines*
 Irving Forest Services Limited, *St. John*
 Irving Paper Ltd., *St. John*
 Irving Tissue Corporation, *Dieppe*
 Irving Tissue Inc., *Dieppe*
 Kord Products Inc., *Brampton*
 Kruger Inc., *Montréal*
 Corner Brook Pulp & Paper Limited, *Corner Brook*
 Division Emballages, *LaSalle*
 Division Emballages, *Brampton*
 Division Carton, *Montréal*
 Division de Papiers Journal, *Sherbrooke*
 Division Bromptonville, *Sherbrooke*
 Gérard Crête & Files Inc., *St-Severin-de-Proulxville, St-Roch-de-Mekinac*
 Kruger Products Ltd., *Gatineau, Calgary*
 Manufacturing Region East, *Crabtree, Sherbrooke*
 Manufacturing Resion West, *New Westminster*
 Kruger Wayagamack Inc., *Trois-Rivières*
 Longlac Wood Industries Inc., *Mississauga*
 Longue-Rive Planing and Drying Mill, *Longue-Rive*
 Produits Kruger Limitée, *Lennoxville*
 Scierie Manic, *division de Kruger Inc., Ragouneau*
 Scierie Parent Inc., *division de Kruger Inc., Parent*
 Lake Utopia Paper, *Utopia*
 Les Cartons Northrich Inc., *Granby*
 Maritime Paper Products Limited, *Dartmouth*
 Master Packaging Inc, *Dieppe*
 Neucel Specialty Cellulose, *Port Alice*
 NewPage Port Hawkesbury Limited, *Port Hawkesbury*
 Norampac Inc., *St-Bruno, Burnaby, Cabano, Calgary, Drummondville, Moncton, St. Marys, Vaughn*
 Norampac Lithotech, *Scarborough*
 Norampac Inc. OCD, *Mississauga*
 Norampac Inc.-Viau, *Montréal*
 Paper Source Converting Mill Corp., *Granby*
 Papiers White Birch, *division Stadacona SEC, Québec*
 Peterboro Cardboards Limited, *Peterborough*
 Rosmar Litho Inc., *Baie D'Urfé*
 SAC Drummond Inc., *St-Germain-de-Grantham*
 Smurfit-MBI, *Burlington, Guelph, Milton*
 Sonoco Canada Corporation, *Trois-Rivières*
 Tembec Paper Group, *Spruce Falls*
 Terrace Bay Pulp Inc., *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
 UPM-Kymmene Miramichi Inc., *Miramichi*
 West Fraser Timber Co. Ltd
 Eurocan Pulp and Paper Co., *Kitimat*
 Hinton Pulp, *Hinton*
 Quesnel River Pulp Co., *Quesnel*
 Slave Lake Pulp Corporation, *Slave Lake*
 Zellstoff Celgar Limited Partnership, *Catelgar*

RUBBER

AirBoss Rubber Compounding, *Kitchener*
 Bérou International inc, *Anjou*
 Brenntag Canada inc, *Mississauga*
 Compagnie Henry Canada Inc., *Lachine*
 Fuller Industrial Corporation, *Lively*
 GDx Canada Inc., *Welland*
 Goodyear Canada Inc., *Napanee*
 Hamilton Kent, *Toronto*
 Johnsonite Canada Inc., *Waterloo*
 Lanxess Inc., *Sarnia*
 Michelin North America (Canada) Inc., *New Glasgow*
 National Rubber Technologies Corp., *Toronto*
 NGF CANADA Limited, *Guelph*
 Soucy Techno Inc., *Forest Rock*
 Technologies Veyance Canada Inc, *Saint-Alphonse de Granby*
 Trent Rubber Corp., *Lindsay*
 Waterville TG Inc., *Waterville*

STEEL

Abraham Steel Service Ltd., *Woodbridge*
 Algoma Steel Inc., *Sault Ste. Marie*
 AltaSteel Ltd., *Edmonton*
 ArcelorMittal Mines Canada, *Hamilton*
 ArcelorMittal Contrecoeur, *Contrecoeur*
 ArcelorMittal Contrecoeur-Ouest, *Contrecoeur*
 ArcelorMittal Hamilton East, *Hamilton*
 ArcelorMittal Longueuil, *Longueuil*
 ArcelorMittal St-Patrick, *Montréal*
 ArcelorMittal Tubular Products, *Woodstock*
 Armtec Limited Partnership, *Guelph*
 Gerdau Ameristeel Corporation, *Cambridge*
 Gerdau Ameristeel Whitby, *Whitby*
 Gerdau Ameristeel Manitoba, *Selkirk*
 Infasco, *Marieville*
 Ivaco Rolling Mills LP, *L'Original*
 Laurel Steel, *Burlington*
 Nelson Steel, *Naticoke, Stoney Creek*
 Ontario Chromium Plating Inc., *Oakville*
 Peninsula Alloy Inc., *Stevensville, Fort Erie*
 QIT, *Fer et Titane Inc., Tracy*
 Samuel Plates Sales, *Stoney Creek*
 Spencer Steel Ltd., *Ilderton*
 U.S. Steel Canada Inc., *Hamilton, Naticoke*
 Stelco-AltaSteel Ltd., *Edmonton*
 Lakeside Steel Corp., *Welland*

TEXTILES

Accessoires d'ameublement Aérés AHF Ltée, *Ville Saint-Laurent*
 Albany International Canada Inc., *Perth*
 Albarrie Canada Limited, *Barrie*
 American & Efid Canada Inc., *Montréal*
 Annabel Canada Inc., *Drummondville*
 Avanti Apparel Inc., *Plessisville*
 AYK Socks Inc., *Saint-Leonard*
 Barrday Inc., *Cambridge*
 Beaulieu Canada Inc, *Acton Vale*
 Bennett Fleet (Quebec) Inc., *Ville-Vanier*
 Bridgeline Ropes Inc, *Deseronto*
 Calko (Canada) Inc., *Montréal, Ville d'Anjou*
 Cambridge Towel Corporation (The), *Cambridge*
 Canadian General-Tower Limited, *Cambridge*
 Cannon Knitting Mills Limited, *Hamilton*
 Cansew Inc., *Saint-Michel*
 Collingwood Fabrics Inc., *Collingwood*
 Colorama Dyeing and Finishing Inc., *Hawkesbury*
 Consoltex Inc., *Montréal, Cowansville*
 Délavage National inc, *Asbestos*
 Dentex, *Montréal*
 Di-tech Inc., *Montréal*
 Doubletex Inc., *Montréal*
 Garlock du Canada Ltée, *Sherbrooke*
 Geo. Sheard Fabrics (1994) Ltd, *Coaticook*
 Hafner Inc., *Sherbrooke*
 J.L. de Ball Canada Inc., *Granby*
 Jack Spratt Mfg inc, *Montréal*
 Kraus Carpet Mills Limited, *Waterloo*
 Strudex Fibres Limited, *Waterloo*
 Lac-Mac Limited, *London*
 Lainages Victor Ltée, *Saint-Victor*
 Lanart Rug Inc., *Saint-Jean-sur-Richelieu*
 Les Produits Belt-Tech Inc., *Granby*
 Les Tricots Confort Absolu Inc, *Montréal*
 Lincoln Fabrics Ltd., *St. Catharines*
 Manufacturier de bas de nylon Doris Ltée, *Montréal*
 Marimac Group (The), *Montréal, Iroquois*
 Modern Dyers, *Hamilton*
 Mondor Ltée, *Saint-Jean-sur-Richelieu*
 Montréal Woollens (Canada) Ltd, *Cambridge*
 Morbern Inc., *Cornwall*
 PGI-DIFCO Performance Fabrics Inc., *Magog*
 Prescott Finishing Inc., *Prescott*
 Rayonese Textile Inc., *St-Jéôme*
 Spinrite LP, *Listowel*
 St. Lawrence Corporation, *Iroquois*
 Stanfield's Limited, *Truro*
 Stedfast Inc., *Granby*
 Télío & Cie, *Montréal*
 Textiles Monterey (1996) Inc., *Drummondville*
 Vitafoam Products Canada Ltd., *Downsview*
 VOA Canada Inc., *Collingwood*
 Waterloo Textiles Limited, *Cambridge*

TRANSPORTATION EQUIPMENT MANUFACTURING

EquipmentA.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*
 LCF Manufacturing Ltd., *Weston*
 Aalbers Tool & Mold Inc., *Oldcastle*
 Affinia Canada ULC, *Guelph*
 Alcoa Wheel Products Collingwood, *Collingwood*
 Anton Mfg., *Concord*
 Arcon Metal Processing Inc., *Richmond Hill*
 ArvinMeritor Canada, *Tilbury*
 Avcorp Industries Inc., *Delta*
 Aviation Lemex Inc., *St-Hubert*
 B & W Heat Treating Canada ULC, *Kitchener*
 Blau Autotec Inc., *Brampton*
 Bombardier Aerospace, *Downsview*
 Bombardier Produits Récréatifs, *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*
 Chrysler Canada Inc., *Windsor*
 Citerne Almac International Inc., *Lanoraie*
 Corvex Mfg., *division of Linamar Corporation, Guelph*
 CSI Gear Corporation, *Mississauga*
 DaimlerChrysler Canada Inc., *Brampton, Mississauga*
 Daimler Buses North America, *Mississauga*
 Daimler Trucks North America, *St. Thomas*
 Dana Canada Corporation, *Brantford, Burlington, Cambridge, Oakville*
 Dana Thermal Products, *Mount Forest*
 Dortec Industries-Division of Magna International, *Newmarket*
 Dresden Industrial, *Rodney, Stratford*
 Dura-Lite Heat Transfer Products Ltd., *Calgary*
 DYNA-MIG Mfg. of Stratford Inc., *Stratford*
 Edscha of Canada L.P., *Niagara Falls*
 Eston Manufacturing, *division of Linamar Corporation, Guelph*
 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, Red Deer, Rivière-des-Prairies, Sarnia, Montréal*

General Motors of Canada Limited, *Oshawa, St. Catharines, Windsor*
 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*
 Kingsville Stamping Ltd., *Kingsville*
 Hitachi Construction Truck Manufacturing Ltd., *Guelph*
 Honda of Canada Mfg., *Alliston*
 Honeywell Limited, *Stratford*
 Lafrate Machine Works Ltd., *Thorold*
 International Truck and Engine Corporation Canada, *Chatham*
 Jefferson Elora Corporation (JEC), *Elora*
 Johnson Controls LP, *Lakeshore, London, Milton, Mississauga, Orangeville, Shelburne, Tillsonburg*
 Lear Corporation, *Mississauga*
 Leggett & Platt London, *London*
 Schukra of North America, *Lakeshore*
 Linex Manufacturing, *division of Linamar Corporation, Guelph*
 Litens Automotive Partnership, *Woodbridge*
 LPP Manufacturing, *division of Linery 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*
 Montupet Ltée, *Rivière-Beaudette*
 National Steel Car Limited, *Hamilton*
 Nemak of Canada, *Windsor*
 Neptunus Yachts Inc., *St. Catharines*
 Niagara Piston Inc., *Beamsville*
 Northstar Aerospace (Canada) Inc., *Milton*
 NTN Bearing Mfg. Canada, *Mississauga*
 Omron Dualtec Automotive Electronics Inc., *Oakville*
 Ontario Drive & Gear Limited, *New Hamburg*
 Orenda Aerospace Corporation, *Mississauga*
 Orlick Industries Limited, *Hamilton*
 Pilkington Glass of Canada, *Collingwood*
 Platinum Tool Technologies Inc., *Oldcastle*
 Portec Produits Ferroviaires Ltée, *St-Jean-sur-Richelieu*
 Pratt & Whitney Canada Inc., *Longueuil, Enfield, St-Hubert*
 Presstran Industries, *St. Thomas*
 Prévoist Car Inc., *Ste-Claire*
 Prince Metal Products Ltd, *Windsor*
 Procor Limited, *Oakville, Edmonton, Joffre, Regina, Sarnia*
 Quadrad Manufacturing, *division of Linamar Holdings Inc., Guelph*
 Remtec Inc., *Chambly*
 Roctel Manufacturing, *division of Linamar Holdings Inc., Guelph*

Rollstamp Mfg., *division of Decoma International Inc., Concord*
 Simcoe Parts Service Inc., *Alliston*
 Spinic Manufacturing, *division of Linamar Corporation, Guelph*
 Stackpole Limited, *Mississauga*
 Standard Aero Ltd., *Winnipeg*
 STT Technologies Inc., *Concord*
 Summo Steel Corp., *Burlington*
 Sydney Coal Railway Inc., *Sydney*
 Tool-Plas Systems Inc., *Oldcastle*
 Toral Cast Integrated Technologies, *Concord*
 Toyota Motor Manufacturing Canada Inc., *Cambridge*
 Traxle Mfg, *division of Linamar Corporation, Guelph*
 TRW Automotive, *St. Catharines, Woodstock*
 TS Tech Canada Inc., *Newmarket*
 UBE Automotive North America Sarnia
 Plan Inc., *Sarnia*
 Unison Engine Components, *Orillia*
 Vehcom Manufacturing, *division of Linamar Corporation, 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, *Ridgeway*
 Ventra Plastics Kitchener, *Kitchener*
 Ventra Plastics Peterborough, *Peterborough*
 Ventra Plastics Windsor, *Windsor*
 Volvo Cars of Canada Ltd., *Toronto*
 Wallaceburg Preferred Partners, *Wallaceburg*
 Woodbridge Foam Corporation, *Mississauga*
 ZF Heavy Duty Steering Inc. *St. Thomas*

UPSTREAM OIL AND GAS

AltaGas Services Inc., *Wabasca*
 Baytex Energy Ltd., *Taber*
 BP Canada Energy Company, *Calgary, Edson, Grande Prairie, Rocky Mountain House*
 Chevron Canada Resources, *Calgary*
 Connacher Oil and Gas Ltd., *Calgary*
 Conocophillips Canada, *Calgary, Deep Basin, Wembley, Rimbey/O'biese, Southern Plains, Big Valley, Jenner, Morrin, Vulcan, Kaybob/Edson, Edson, Northern Plains, Foothills, Mackenzie Delta, Atlantic French Corridor*
 Crescent Point Energy Trust, *Calgary, Sounding Lake*
 Devon Canada Corporation, *Calgary, Central, Deep Basin, Foothills, Lloydminster, Peace River, Fairview, Northern Plains, Fort McMurray, NE British Columbia/NW Alberta, Fort St-John*
 Duke Energy Gas Transmission, *Calgary, Chetwynd, Fort Nelson, Hope, Mile 117, Mile 126, Pink Mountain, Taylor, Vancouver*
 Cenovus Energy Inc., *Calgary*

Keyera Energy, *Rocky Mountain House*
 Newalta Corporation, *Abbotsford, Airdrie, Amelia, Brooks, Calgary, Cranbrook, Drayton Valley, Drumheller, Eckville, Edmonton, Elkpoint, Fort St. John, Gordondale, Grande Prairie, Halbrite, Hays, Hughenden, Nisky, Niton Junction, Nanaimo, North Vancouver, Pigeon Lake, Prince George, Raymond, Red Earth, Redwater, Regina, Richmond, Sparwood, Stauffer, Stettler, Surrey, Taber, Valleyview, West Stoddart, Willesden Green, Winfield, Zama*
 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 (AB), Chauvin (SK), Chetwynd, Edson, Grande Prairie, Lac La Biche, Shaunavon, Turner Valley, Warburg, Windsor*
 TAQA North Ltd., *Calgary, Niton Junction*

WOOD PRODUCTS

9008-6760 Québec Inc. (CDEX), *Val d'Or*
 AbitibiBowater Inc., *Bridgewater, Girardville, Maniwaki, Mistassini, Price, Saint-Félicien, Saint-Raymond*
 Baytree Logging Ltd., *Baytree*
 Bois-Francs Div. de 2730-8303 Québec, *Saint-Phillippe-de-Néri*
 Canfor Corporation, *Vancouver*
 Canadian Forest Products Ltd., *Bear Lake*
 Coldstream Lumber, *Vernon*
 Columbia Forest Products, *Saint-Casimir*
 Commonwealth Plywood Co. Ltd., *Sainte-Thérèse*
 Corporation Internationale Masonite Inc. (La), *Berthierville*
 Dava Inc., *Tring Junction*
 Domtar Inc., *Ear Falls, Elk Lake, Kamloops, Ostrom, Matagami, Nairn Centre, Sainte-Marie, Sault*
 Ste-Marie, *Timmins, Val-d'Or Sawmill, Val-d'Or, Sullivan Mill, Waswanipi*
 Entreprises Interco Inc., *Saint-Germain-de-Grantham*
 Erie Flooring and Wood Products, *West Lorne*
 Finewood Flooring & Lumber Limited, *Baddeck*
 Fiready Inc., *Clair*
 Flakeboard Company Limited, *St. Stephen*
 George Guenzler & Sons Inc., *Kitchener*
 Grant Forest Products Inc., *Earlton*
 Granules L.G. Inc, *St-Félicien*
 Greif Bros. Canada Inc., *Maple Grove*
 Groupe Label (2004) Inc., *Rivière-du-Loup, Cacouna*
 Bois Traitel Ltée, *Saint-Joseph de Kamouraska*
 Groupe Savoie Inc., *St-Quentin*
 J.H. Huscroft Limited, *Creston*
 Harring Doors Ltd, *London*

Industries Maibec Inc., *St-Pamphile*
 Interforest Ltd., *Durham*
 J.D. Irving, Limited, *St. John, Deersdale*
 K&C Silviculture Ltd., *Red Deer, Oliver*
 Loger Toys Ltd., *Brantford*
 Louisiana-Pacific Canada Ltd., *East River, Bois Franc, Dawson Creek, Golden, Swan River*
 Madawaska Doors Inc., *Bolton*
 MacTara Limited, *Upper Musquodoboit*
 Marcel Lauzon Inc., *East Hereford*
 Marwood Ltd., *Tracyville*
 MDF La Baie Inc., *La Baie*
 Norbord Inc., *Plaster Rock*
 Papiers Fraser Inc., *Pâtes Thurso*
 Palliser Lumber Sales Ltd, *Crossfield*
 Planchers Mercier Inc, *Montmagny*
 Poutres et Poteaux Val-Morin Inc., *Sainte-Agathe-des-Monts*
 Rip-O-Bec Inc., *St-Appollinaire*
 Riverside Forest Products Limited, *Armstrong*
 Roland Boulanger & Cie Ltée., *Warwick*
 Scierie Girard Inc, *Shipshaw*
 Tembec Inc., *Témiscaming*
 Tembec Industries Inc, *Chapleau*
 Tembec-Huntsville Sawmill Division, *Huntsville*
 West Fraser Timber Co. Ltd., *Vancouver*
 Alberta Plywood Ltd., *Slave Lake*
 Blue Ridge Lumber, *Whitecourt*
 Chetwynd Forest Industries, *Chetwynd*
 Fraser Lake Sawmills, *Fraser Lake*
 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 Sawmill, *Quesnel*
 Ranger Board, *Whitecourt*
 Skeena Sawmills, *Terrace*
 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*

CIPEC TRADE ASSOCIATIONS

Aerospace Industries Association of Canada
Alberta Food Processors Association
Aluminium Association of Canada
Atlantic Dairy Council
Automotive Parts Manufacturers' Association
Baking Association of Canada
Brewers Association of Canada
Canadian Association of Metal Finishers
Canadian Association of Petroleum Producers
Canadian Chamber of Commerce
Canadian Construction Association
Canadian Council of Grocery Distributors
Canadian Electricity Association
Canadian Energy Pipeline Association
Canadian Fertilizer Institute
Canadian Foundry Association
Canadian Gas Association
Canadian Healthcare Engineering Society
Canadian Lime Institute
Canadian Manufacturers & Exporters
 Alberta Division
 British Columbia Division
 Manitoba Division
 New Brunswick Division
 Newfoundland Division
 Nova Scotia Division
 Ontario Division
 Prince Edward Island Division
Canadian Meat Council
Canadian Petroleum Products Institute
Canadian Plastics Industry Association
Canadian Steel Environmental Committee
(Canadian Steel Producers Association)
Canadian Textiles Institute
Canadian Vehicle Manufacturers' Association
Cement Association of Canada
Chemistry Industry Association of Canada
Council of Forest Industries
Electro-Federation Canada
Fisheries Council of Canada
Food and Consumer Products Manufacturers of Canada
Forest Engineering Research Institute of Canada
Forest Products Association of Canada
Forintek Canada Corporation
Mining Association of Canada
NAIMA Canada
Ontario Agri Business Association
Ontario Food Processors Association
Québec Forest Industry Council
Rubber Association of Canada
Small Explorers and Producers Association of Canada
The Packaging Association
Wine Council of Ontario

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