



# BIO-PRODUCTS

Canada's competitive advantages

# Innovation in Canada

Canada is a world-leading centre for research and innovation in bio-products. Support for innovation in Canada includes:

- Canada is investing \$2.2 billion over nine years to help support the development of the country's biofuel industry<sup>1</sup>.
- Sustainable Development Technology Canada operates two funds with a combined \$1.09 billion in funding aimed at the development of innovative technological solutions to the issues of climate change and sustainable development.
- Canada supports the industrial commercialization of technologies developed by its academic and research organizations through programs such as the National Bioproducts Program, a joint initiative of the National Research Council of Canada, Agriculture and Agri-Food Canada, and Natural Resources Canada.
- The Canadian Biomass Innovation Network, a network of federal researchers, program managers, policy makers and expert advisors partnered with industry, academia and non-governmental organizations, is working to continually ensure the availability of knowledge, technology and enabling policy required to support the development of a sustainable Canadian bioeconomy.
- Canada is home to FPInnovations, the world's largest private, not-for-profit forest research institute. FPInnovations is actively working with industry and academia to identify new product streams by extracting chemicals and energy from forest biomass.
- Between 2003 and 2011, Canada registered an estimated 5,043 bio-product related patents to the US Patent and Trademark Office<sup>2</sup>.
- Preliminary gross domestic expenditure on R&D in Canada in 2011 is \$30 billion, one of the highest levels in the world<sup>3</sup>.

## INNOVATION CASE STUDIES

### Alberta-Pacific Forest Industries (Al-Pac)

A first-of-its-kind biomethanol project at Al-Pac is benefiting from the support of the federal Investments in Forest Industry Transformation (IFIT) Program. In 2011, Al-Pac announced it was receiving \$4.5 million from IFIT to diversify its product offerings by extracting and purifying biomethanol from its pulping process.

### CelluForce

In 2012, CelluForce opened the world's first nano-crystalline cellulose demonstration plant in Windsor, Quebec. The nanomaterial, extracted from dried wood fibres, is seen as a product that could add value not only to wood fibres, but also to a host of items, ranging from lipstick to textiles to products used in the aviation and construction industries. The \$36 million plant was part financed by the federal and Quebec governments.

### Enerkem

In 2011, Montréal-based Enerkem signed a 25-year agreement with the City of Edmonton, Alberta, to build and operate a plant that will produce and sell next-generation biofuels from non-recyclable and non-compostable municipal solid waste. It is believed to be the first collaboration between a metropolitan centre and a waste-to-biofuels producer to address its waste disposal challenges. The company has been named as one of the world's 50 most innovative companies by Fast Company.

### High North BioResources LP

High North BioResources is a partnership formed by Tolko Industries and Ensyn Technologies in 2010 to build the world's largest commercial fast pyrolysis plant in Alberta. The plant will be capable of producing 75 million litres of pyrolysis oil a year from 400 tonnes per day of sawmill residual biomass, currently being burned with no energy recovery. The oil will be used to produce renewable energy in Tolko's sawmill. Alberta's Climate Change and Emissions Management Corp invested \$5 million into the project.

<sup>1</sup> Agriculture and Agri-Food Canada, Biofuels (2010)

<sup>2</sup> fDi Benchmark estimates based on US Patent and Trademark Office (2011)

<sup>3</sup> Statistics Canada, Research and Development Expenditure (2012)

# Foreign direct investment in Canada

Canada is one of the leading countries in the world for FDI in the bio-product sector:

- Canada is one of the world's top five biotechnology markets<sup>4</sup>.
- Foreign direct investment (FDI) in Canada's chemical manufacturing industry, which includes bio-products, reached an accumulated \$25.5 billion in 2010<sup>5</sup>.
- Almost 100 foreign companies established greenfield FDI projects in the renewable energy, chemicals and plastics sector in Canada between 2003 and 2011<sup>6</sup>.

## RECENT INVESTORS IN CANADA

### BioAmber

BioAmber, a US-based renewable chemistry company, announced that it will establish a new US\$80 million biosuccinic plant in Sarnia, Ontario. Biosuccinic acid is used for various applications, such as plastics, cosmetics, construction materials and pharmaceuticals.

### Archer Daniels Midland Company

Archer Daniels Midland Company, a US-based agricultural commodities company, announced a new biodiesel plant in Lloydminster, Alberta.

### Rentech

Rentech, a US-based alternative energy developer, announced plans to build a US\$500 million biomass plant in White River, Ontario. The company will use crown timber to produce low-carbon jet fuel.

### Metabolix

Metabolix, a US-based manufacturer of biodegradable plastic products, announced that it will establish new operations in Saskatoon, Saskatchewan. The new facility will further develop expression of bioplastics in camelina oilseeds.

### Royal Dutch Shell

Royal Dutch Shell announced additional investments in Canada's Iogen Corp. to accelerate the commercialization of cellulosic ethanol.

### LANXESS

LANXESS, a German based company, opened its new butyl rubber R&D centre at the University of Western Ontario Research Park in London, Ontario. The centre employs 60 scientists with a focus on materials research and emerging technologies. Bio-butyl rubber is made from biomass.

## FOREIGN INVESTORS IN CANADA

- Anaergia
- Archer Daniels Midland Company
- BASF
- BioAmber
- Blue Sphere
- Cargill
- Dominion Energy Services LLC
- Dow Chemical Company
- DuPont
- Harvest Power
- LANXESS
- Louis Dreyfus
- Metabolix
- Naturally Advanced Technologies
- Novozymes
- Plains Industrial Hemp Processors
- Rentech
- Royal Dutch Shell
- Schweitzer-Mauduit
- Suncor Energy

<sup>4</sup> BIOTECCanada (2012)

<sup>5</sup> Foreign Affairs and International Trade Canada, Trade and Economic Statistics (2010)

<sup>6</sup> fDi Markets database, fDi Intelligence, Financial Times Ltd

# Bio-products industry in Canada

## LEADING CANADIAN COMPANIES

- Al-Pac
- Biox
- Domtar
- EcoSynthetix
- Enerkem
- Ensyn
- Himark bioGas
- Husky Energy
- Greenfield Ethanol
- G2Biochem
- Iogen
- Lignol
- Lorama
- Methes Energies Canada
- MCN Bioproducts
- Nexterra Systems Corporation
- Ocean Nutrition Canada
- Permolex International
- Pond Biofuels
- Solanyl Biopolymers
- Stemergy
- Tembec
- Western Biodiesel
- Woodbridge Group
- Woodland Biofuels

The global market for bio-products is an estimated \$200 billion and clean energy technologies are expected to be valued at \$1 trillion by 2030<sup>7</sup>.

Canada is at the forefront of developing alternatives to conventional products through converting energy crops and other biomass feed stocks into biomaterials, bioenergy and biochemicals.

### Bioenergy

The global market for biofuels is forecast to increase from \$82.7 billion in 2011 to \$185.3 billion by 2021<sup>8</sup>. In 2010, Canada produced more than 1,500 million litres of bio-fuels and production is increasing each year<sup>9</sup>. There are 31 ethanol and biodiesel plants in Canada that are operational or under construction and a further eight at the proposal phase. The primary feedstock in eastern Canada is corn for ethanol plants and animal fats for biodiesel plants. Western Canadian plants are primarily focused on wheat for ethanol and canola for biodiesel<sup>10</sup>. As the world's sixth largest exporter of agricultural products, Canada offers a vast supply of agriculture resources. Canadian technologies are being advanced in the fields of combustion, pyrolysis, gasification, anaerobic digestion, landfill biogas utilization, fermentation and catalytic hydrotreating of biomass oils. Canada's commitment to reducing greenhouse gases is also boosting the country's biofuels production. In accordance with the Federal Renewable Fuel Regulations, Canada now blends an average of 5% ethanol into the gasoline pool nationwide and an average of 2% renewable content into the distillate pool.

### Biomaterials<sup>11</sup>

Biomaterials are developing rapidly in Canada, as can be seen by the opening of the first nano-crystalline cellulose plant in the country. Nano-crystalline cellulose composites produced from wood fibres could be used to replace heavier, more expensive non-renewable materials in the aerospace industry. Other biomaterials that are being produced include automotive parts, tires, insulation, textiles and plastic composites. Canada offers an abundant supply of forestry resources, as the world's second largest exporter of primary forest products<sup>12</sup>. The country is a world leader in plant genomics and has a number of centres of excellence in the development of products from oils that form the basis of many bio-products.

### Biochemicals

According to Pike Research, the green chemical industry is to reach US\$98.5 billion by 2020. Canada's biotechnology innovations are creating commercially produced organic chemicals from biomass feed stocks such as corn, soy and wheat and waste. Canada exported more than \$4.3 billion<sup>13</sup> of organic chemicals in 2010, which is three times more than the US on a per capita basis. Canada's chemical industry is actively working to integrate bio-refinery solutions into existing infrastructure.



## CANADA'S KEY ADVANTAGES

### Biomass availability

Canada is home to 10% of the world's forests<sup>14</sup> and abundant supplies of high-quality agricultural raw materials. Combined with manure, municipal and industrial waste, Canada offers more biomass feedstock per capita than any other nation.

### Research and development (R&D)

Canada has one of the most comprehensive innovation ecosystems offering extensive support to companies through programs such as the National Research Council's Industrial Research Assistance Program and the Scientific Research and Experimental Development (SR&ED) Tax Incentive Program. Canada has also signed R&D trade agreements with Brazil, China, India and Israel<sup>15</sup>.

### Logistics

Canada's developed transport infrastructure offers companies access to North American and global markets. Canada-based companies benefit from duty-free access to the world's largest bio-products market, through the North American Free Trade Agreement (NAFTA).

## SKILLS AND RESEARCH

Canada has a world-class higher education system with 22 Canadian universities appearing in the top 500 universities of the world<sup>16</sup>. With \$10 billion of academic R&D<sup>17</sup>, Canada has one of the highest levels of expenditure in the world. Canadian provinces are listed among the top 10 states in North America in academic R&D expenditure<sup>18</sup>.

In 2010, a total of 1.2 million students were enrolled in Canadian universities in degree related programs. Canadian universities offer a number of programs relevant to the industry, including chemical engineering, bio-product sciences, and organic chemistry at the undergraduate, graduate and PhD levels. Specialized research centres and groups based at universities include:

- Agri-Food Discovery Place (University of Alberta, AB)
- Biomass and Bioenergy Research Group (University of British Columbia, BC)
- Biomass Innovation Centre (Nipissing University, ON)
- Bioproducts Discovery and Development Centre (Guelph University, ON)
- Canadian Bioenergy Centre (University of New Brunswick, NB)
- Centre for Biocomposites and Biomaterials Processing (University of Toronto, ON)
- Food and Bioproduct Sciences Program (University of Saskatchewan, SK)
- Institute for Chemicals and Fuels from Alternative Resources (University of Western Ontario, ON)
- McGill Network for Innovations in Bio-fuels and Bio-products (McGill University, QC)
- Sustainable Bioeconomy Centre (Queens University, ON)

Canada has a highly experienced labour force with a total of 81,300 employed in the chemical manufacturing industry<sup>19</sup>. BioTalent, a non-profit national organization, helps skilled, talented individuals enter the bio-economy and offers companies subsidized hiring of recent graduates.

## TESTIMONIAL

"We evaluated a number of possible locations and selected [Canada] for many reasons including low-cost utilities, feedstock availability (first and second generation), a skilled and experienced labour force, existing chemical infrastructure, competitive transportation costs, and attractive government support at the municipal, provincial and federal levels."

**Jean-François Huc**

CEO,

BioAmber

<sup>7</sup> Life Sciences British Columbia, Bioproducts and Bioenergy (2009)

<sup>8</sup> Cleantech Market Intelligence (2011)

<sup>9</sup> US Energy Information Administration, International Energy Statistics (2010)

<sup>10</sup> Canadian Renewable Fuels Association, Growing Beyond Oil: Delivering our Energy Future (2010)

<sup>11</sup> Invest in Canada, Bio-Products (2012)

<sup>12</sup> Natural Resources Canada, Canada's Forest Industry: An Overview (2010)

<sup>13</sup> United Nations, Comtrade database (2010)

<sup>14</sup> Natural Resources Canada (2011)

<sup>15</sup> ISTPCanada (2011)

<sup>16</sup> Shanghai Jiao Tong University, Academic Ranking of World Universities (2011)

<sup>17</sup> Association of Universities and Colleges of Canada (2010)

<sup>18</sup> National Science Foundation, Academic Research and Development Expenditures (2011)

<sup>19</sup> Statistics Canada, Employment, Earnings and Hours (2011)

# Clusters for bio-products<sup>20</sup>

## BRITISH COLUMBIA

### Key strengths

British Columbia is home to more than 250 bio-products companies and has one of the largest supplies of biomass in the world. R&D centres and key organizations include: UBC's Clean Energy Research Centre, Biomaterials Lab and Biomass and Bioenergy Research Group; ARD Corp; Genome BC; LifeSciences BC; the BC Bioenergy Network; and the UNBC Bioenergy Research Hub.

### Bioenergy and bio-products

BC has two operational biodiesel plants and is a leader in the area of softwood to ethanol conversion.

### Biomass resources

BC is home to almost 20% (60 million hectares) of Canada's forest land and produces an estimated 2.5 million tonnes of agricultural crops each year.

### Leading companies

International Composting Corporation, Lignol, Nexterra, Harvest Power and Paradigm Environmental Technologies.

## ALBERTA

### Key strengths

Alberta's bio-products sector has 71 companies using agricultural, forestry or municipal solid waste as biomass feedstock. Biomaterials has 50 companies with another seven in bio-chemicals, and 14 in bioenergy. R&D centres and key organizations include: Alberta Innovates; Alberta Biomaterials Development Centre; the Drayton Valley Bio-Mile; Agri-Food Discovery Place; and the Biorefining Conversions Network at the University of Alberta.

### Bioenergy and bio-products

There are two operational biofuel plants, with a further three proposed plants and two currently under construction. New product focus is on the development of biochemicals, bioenergy and biomaterials and as well as verifiable product attributes such as reduced greenhouse gas emissions.

### Biomass resources

Alberta has a dynamic oil and gas sector, extensive natural resources, and abundant arable and forested lands. Alberta is home to more than 30 million hectares of forest land and is a major agricultural producer, accounting for almost 30% of the country's total crop production.

### Leading companies

Archer Daniels Midland, Dominion Energy Services LLC, Enkern, Ensyn, Himark bioGas, Kyoto Fuels Corporation and Otoka Energy. A number of communities are incubating bioeconomy clusters with the largest being Drayton Valley's Bio-Mile.



## SASKATCHEWAN

### Key strengths

The province is home to almost a third of Canada's agricultural biotechnology industry. R&D centres and key organizations include: NRC's Plant Biotechnology Institute; Ag-West Bio; Innovation Place Bio Processing Centre; POS Bio-Sciences; Feeds Innovation Institute; and the University of Saskatchewan's Thermal Conversion Pilot Plant.

### Bioenergy and bio-products

Areas of focus include: crop fractionation for food, fuel and feed; oilseed production platforms; and thermal and starch-based platforms. Five ethanol plants and one biodiesel plant are operational in the province. About 300 firms are active in the forest-based industries.

### Biomass resources

Saskatchewan has over 40% of the country's agricultural lands. Agricultural residues (sustainably available) total nearly 10 million tonnes annually. The province is home to over 33.9 million hectares of forest land, with 12.7 million hectares being considered commercial forest.

### Leading companies

Novozymes, Linnaeus Plant Sciences, Weyerhaeuser, Husky Energy, Prairie Tide Chemicals, Bio-Fibre Industries, Titan Clean Energy Projects, Metabolix, Prairie BioGas and Milligan Bio-Tech.



## MANITOBA

### Key strengths

Manitoba is home to more than 30<sup>21</sup> bio-product companies. The Manitoba government has committed \$20 million to help the bio-products industry generate \$2 billion in revenues as part of the Manitoba Bioproducts Strategy<sup>22</sup>. R&D centres include the Composites Innovation Centre and the Prairie Agricultural Machinery Institute.

### Bioenergy and bio-products

A total of four biodiesel and ethanol plants are operational in the province as well as several companies producing solid biomass for use as fuel. Several companies are actively producing biofibres using wheat, flax and hemp straw.

### Biomass resources

The province has over 25 million hectares of forested land and more than 7 million hectares of farmed land, producing an estimated 9.5 million tonnes of crops, including wheat, oats, barley, flax and hemp.

### Leading companies

SWM Intl, Husky Energy, Manitoba Hydro and Plains Industrial Hemp Processors.

<sup>20</sup> Biomass Resources: Statistics Canada, Forest land by province and territory, 2011; Statistics Canada

<sup>21</sup> Government of Manitoba, The Manitoba Bioproducts Strategy, 2011

## ONTARIO

### Key strengths

Ontario is home to 70 specialist bio-product companies. R&D centres and key organizations include: Bio-industrial Innovation Centre; Bioproducts Discovery and Development Centre; Institute for Chemicals and Fuels from Alternative Resources; Soy2020; and the Centre for Biocomposite and Biomaterial Processing.

### Bioenergy and bio-products

Bioindustrial R&D and its commercialization is a priority for the Government of Ontario. A total of 10 biodiesel and ethanol plants are operational in the province with a further three proposed plants.

### Biomass resources

Ontario has 71 million hectares of forest land<sup>23</sup>. The province is the largest producer of corn grain (7.2 million tonnes) in Canada.

### Leading companies

Anaergia, BASF, BioAmber, LANXESS, Lorama, Suncor Energy, Vinifera, and the Woodbridge Group.

## QUEBEC

### Key strengths

Quebec is home to 100 specialist bio-product companies. Bio-product research capabilities include the Network for Innovations in Bio-fuels and Bio-products located at McGill University. The *Centre québécois de valorisation des biotechnologies* also stimulates and supports technology transfer across the province.

### Bioenergy and bio-products

A total of four biodiesel and ethanol plants are operational in the province with a further two proposed plants.

### Biomass resources

Quebec has 73 million hectares of forest land. The province is the second largest producer of corn grain (2.9 million tonnes). The burying of organic waste will be banned by 2020.

### Leading companies

BioAmber, Domtar, DuPont, Enerkem, GreenField Ethanol, Innoventé and Tembec.

## ATLANTIC CANADA

Atlantic Canada is comprised of four provinces: New Brunswick (NB), Newfoundland and Labrador (NL), Nova Scotia (NS) and Prince Edward Island (PEI).

### Key strengths

Atlantic Canada is home to 12 specialist bio-product companies. R&D centres and key organizations include: BioAtlantech (NB), University of New Brunswick's Canadian Bioenergy Centre; the Atlantic Centre for Agricultural Innovation (NS); Atlantic BioVentureCentre (NS); AgriTECH Park; and BioAlliance (PEI).

### Bioenergy and bio-products

Atlantec Bioenergy Corporation has an ethanol demonstration facility in Nova Scotia.

### Biomass resources

The four provinces span 21 million hectares of forest land and produce an estimated 1.5 million tonnes of crops.

### Leading companies

ADI Systems (NB), AV Cell (NB), Cavendish Farms (PEI), Chatham Biotec (NB), Atlantec Bioenergy Corporation (NS), Ocean Nutrition Canada Limited (NS), and Tekmash (PEI).

<sup>22</sup> The Manitoba Bioproducts Strategy (2011)

<sup>23</sup> Ministry of Natural Resources (March 2011)

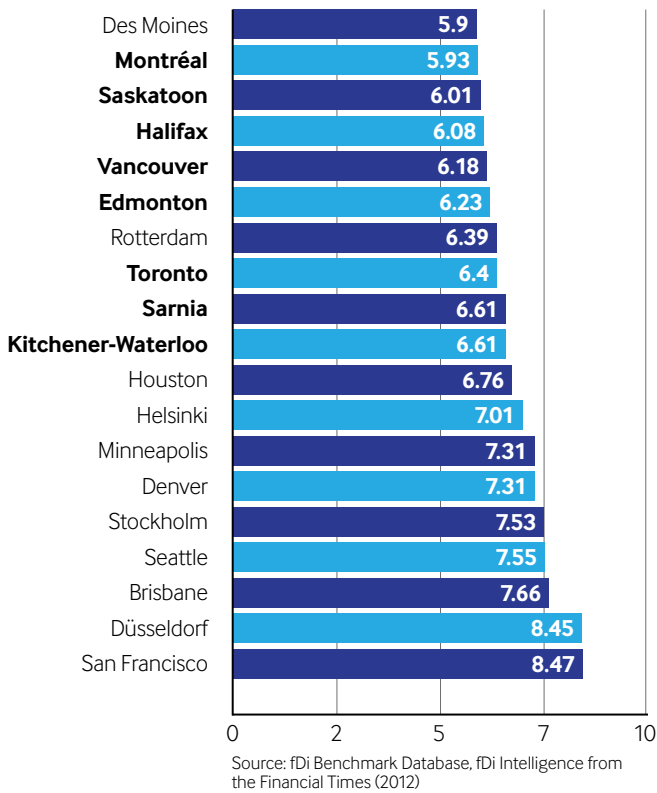
# Canada's cost advantages

## ADVANTAGE: LABOUR COST SAVING

For a typical bio-chemical manufacturing facility, companies can make labour cost savings of more than \$2 million per annum by investing in Canadian cities.

### Annual labour costs (\$ million)

This chart shows the total labour costs per annum for a typical bio-chemical manufacturing plant with a head count of 115 people. The labour costs include wages, statutory social costs, and private healthcare costs in US and Canada.

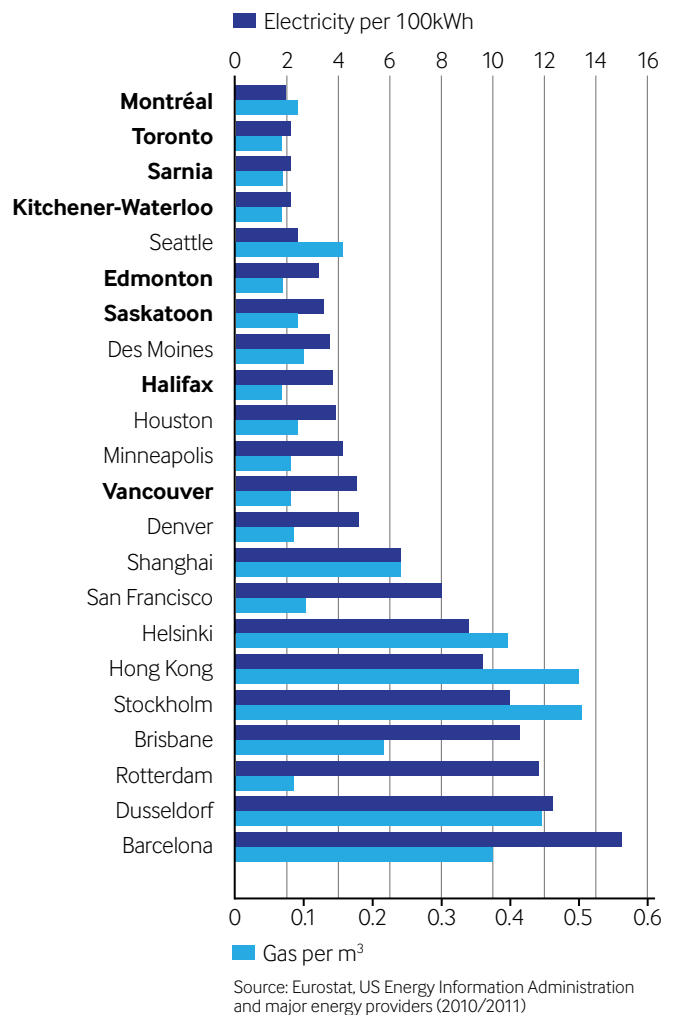


## ADVANTAGE: MOST COMPETITIVE UTILITY COSTS

Electricity costs in Canadian cities can be much lower than in U.S. cities, and more than seven times cheaper than in European locations. Natural gas costs can be less than half of costs in the U.S. and more than seven times cheaper than in Europe. This creates substantial cost savings for companies.

### Utility costs per unit (\$)

The graph shows the unit cost for industrial electricity and gas.





# Canada's competitive advantages

**ADVANTAGE:**  
**FOURTH LARGEST ETHANOL PRODUCER**  
**IN THE WORLD**

In 2010, Canada produced a total of 1,392 million litres of ethanol fuel.

**Fuel ethanol production (millions of litres)**

This table shows total ethanol production in millions of litres.

US	50,314
Brazil	28,190
China	2,146
<b>Canada</b>	<b>1,392</b>
Germany	754
Spain	464
Australia	377
Sweden	203
Netherlands	116
Finland	17

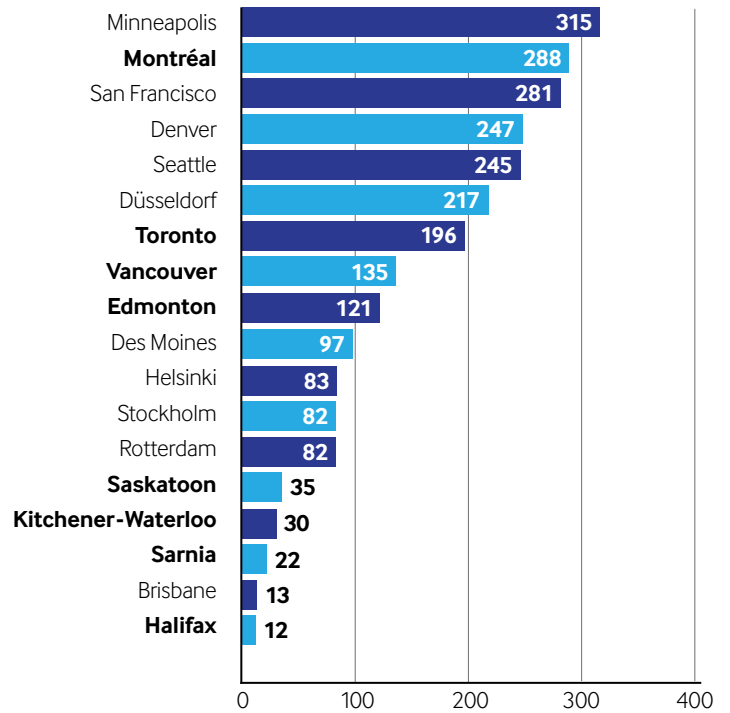
Source: fDi Intelligence estimates from the Financial Times Ltd based on US Energy Information Administration; International Energy Statistics (2010)

**ADVANTAGE:**  
**SIZE OF THE CHEMICAL SECTOR**

Canadian cities have large chemical industries, comparable to major US and European cities.

**Number of chemical companies**

This chart shows the number of chemical companies in January 2012.



Source: Based on Dun & Bradstreet (January 2012); SIC Code: 28

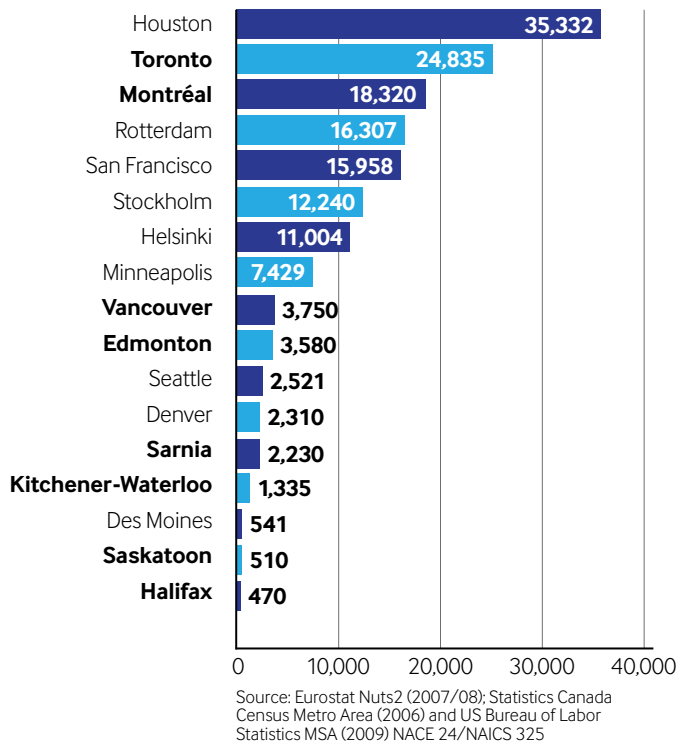
# Canada's competitive advantages

## ADVANTAGE: SIZE OF INDUSTRY-SPECIFIC LABOUR FORCE

Canadian cities offer an experienced skills base, with Toronto and Montréal having among the largest number of chemical workers in the world and other Canadian cities having significant labour pools.

### Employment in the chemical industry

This chart shows the total employment in the chemical manufacturing industry.

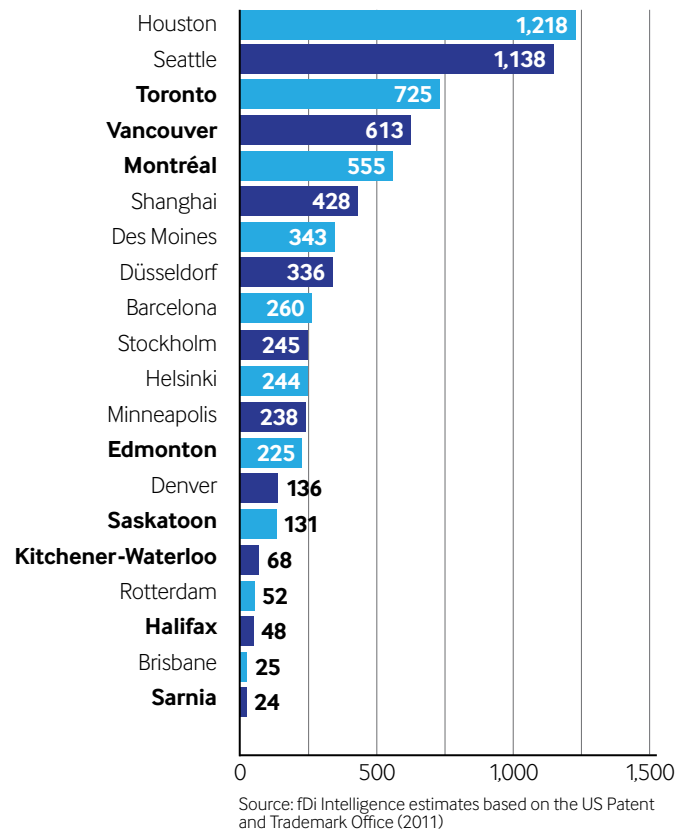


## ADVANTAGE: INNOVATION IN BIO-PRODUCTS

Canada is a leading centre for innovation for the bio-product industry. Canadian cities have among the highest number of patents in bio-product areas.

### Number of patents in bio-products

This chart shows the estimated number of registered patents in bio-products (biochemicals, ethanol, biodiesel and biological materials) from 2003-2011.

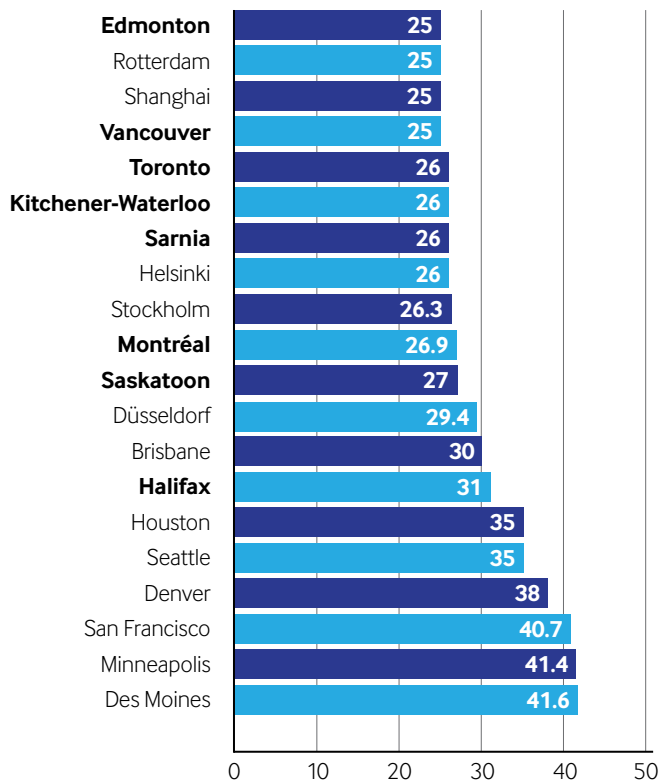


### ADVANTAGE: FAVOURABLE CORPORATE INCOME TAX

Canada offers among the most attractive corporate tax levels of any comparable country. Companies locating in cities in Canada can expect to pay lower taxes than in the US, Australia, Germany, or Sweden and the same level as in the Netherlands.

#### Corporation tax rates (%)

This chart shows the corporate tax rates payable by corporations. Figures are expressed as tax payable as a percentage of companies' gross profit.



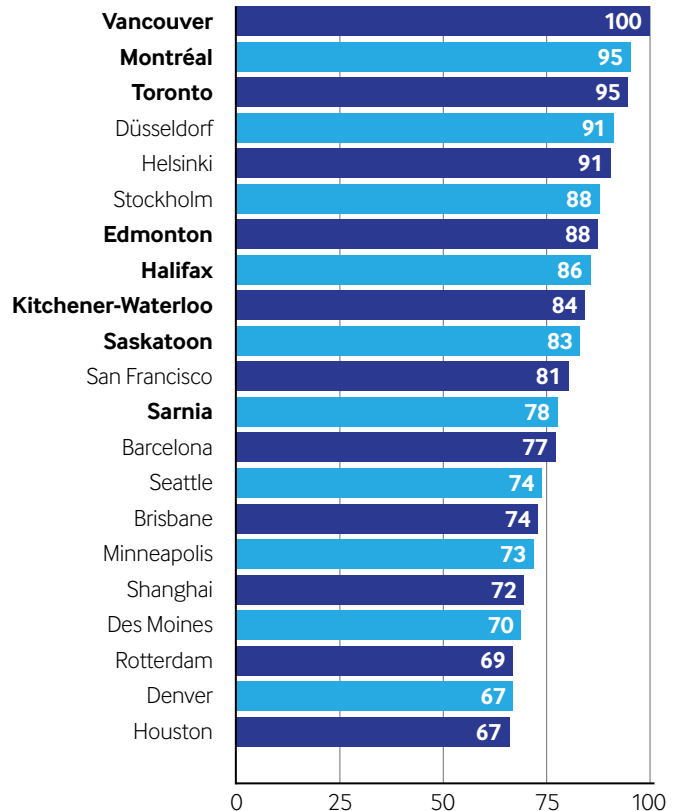
Source: KPMG (Country and Canadian Provinces; 2012) and Tax Foundation (US States; 2011)

### ADVANTAGE: OUTSTANDING QUALITY OF LIFE AT AN AFFORDABLE COST

Canadian cities have the highest quality of living in the world. Vancouver was rated the most liveable city in the world by the Economist Intelligence Unit in 2011 and also tops the fDi Intelligence index. Canadian cities are highest ranking when considering both quality and cost of living.

#### Attractiveness of cities

This chart shows the overall attractiveness of cities based on combining their quality of living and cost of living, with a 50% weight attached to each.



Source: fDi Intelligence from the Financial Times (2011). Vancouver = 100

# Why Canada?

Canada is a place where businesses can achieve excellence on a global scale.

## A welcoming business environment

Canada is the best place to do business in the world. Source: *Forbes Magazine*, October 2011

## A growing economy

Canada has been the top performer among the G-7 in GDP growth over the 2008-11 period.

Source: *Consensus Economics*, April 2012

## A highly educated workforce

Canada has the highest proportion of post-secondary graduates among members of the Organization of Economic Co-operation and Development (OECD). Source: *Education at a Glance 2011*, OECD

## Financial stability

Over the past four years, Canada's banking system has repeatedly been declared the soundest in the world. Source: World Economic Forum (WEF)

## Low tax rates

Canada's combined federal-provincial statutory corporate income tax rate of 26% is more than 13% below the U.S. and among the lowest when compared to G-7 countries.

Source: Department of Finance Canada and the OECD Tax Database 2012

## Scientific research and experimental development

Canada offers some of the most generous R&D tax incentives in the industrialized world, with combined federal and provincial tax credits that can currently save foreign investors, on average, up to 30 cents on the dollar invested in R&D in Canada. Canada also has the G-7's lowest costs in R&D-intensive sectors (up to 10.7% lower than the US).

Source: Department of Finance Canada and KPMG Competitive Alternatives, 2012

## NAFTA

The North American Free Trade Agreement (NAFTA) gives investors access to nearly 457 million consumers and a combined continental GDP of about US\$17.2 trillion. Canada continues to seek more free trade agreements with economic and emerging powers to increase trade. Source: World Bank, World Development Indicators Database

## A great place to invest, work and live

Canada is one of the most multicultural countries in the world and it provides world-class universities, a universal health care system, clean and friendly cities and spectacular scenery. Source: United Nations Development Programme, *Human Development Report 2010*, Economic Intelligence Unit, *Global Liveability Report 2011*

## TESTIMONIAL

"LANXESS chose to invest in Canada because of its highly qualified and talented workforce, its innovative R&D centres and commitment to producing next-generation products."

### Axel Heitmann

Chairman of LANXESS's board of management



## Invest in Canada

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