

Greater Montréal boosting innovative manufacturers







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Montréal International's Personalized, Free and Confidential Services

Why innovative manufacturing companies choose Montréal



Manufacturing is the **2**nd **largest** industry in Québec with 500,000 direct jobs



Major public incentives and cutting-edge technologies (5G, IoT, robotics, additive manufacturing) encourage companies to take advantage of Industry 4.0



A world-class hub in artificial intelligence



40,000 university students are enrolled in programs related to innovative manufacturing



The lowest electricity prices in North America for large-power users, 99% from renewable sources



The Canadian government chose Montréal as the headquarters for scale ai, Al supply chain supercluster



Canada's university capital, \$1 billion+ in funding yearly dedicated to university research



An 18% cost advantage compared to most major metropolitan areas in Canada and the U.S. (2019), plus major incentives for R&D and innovative manufacturing



A collaborative environment for industrial automation— Montréal is home to major players, research centres and networks O1
Greater Montréal:
A Leader in Innovative
Manufacturing





Manufacturing in Québec: a core sector



\$2.4B

of governmental incentives announced to support innovative manufacturing over 4 years (2020-2024)



500,000

direct jobs



ond largest industry in Québec



14% of GDP



of exports



Montréal, a hub for manufacturing companies in many sectors



Aerospace and smart transportation manufacturing

- **6,200+** companies
- **74,000+** jobs
- 80% of Québec aerospace production is exported
- 4th largest exporter of aircraft and helicopters in the world





Food processing

- **1,500**+ companies
- \$17.2B+ value of shipments
- **\$6.2B+** of GDP



Fashion manufacturing

- 1,800 companies in Québec
- Sales of \$8B
- 3rd largest North American fashion manufacturing hub

\$2.4B of funding for innovative manufacturers to foster their digital transformation

The Productivity innovation

initiative, launched by the Québec government and Investissement Québec encourages companies to focus on innovation in its various forms and on the adoption of technologies and processes such as digitization, automation, robotization and the use of Al



Provincial strategies:

- Québec Digital Strategy
- Québec Research and Innovation Strategy

Cutting-edge technologies available to support the 4.0 manufacturer:

- IoT Platforms and Connectivity
- Sensing and Imaging
- Robotics
- Additive Manufacturing
- Supply Chain
- Etc.

Many companies provide equipment and services specialized in robotics and automation Jalbert sceller votre qualité **SIEMENS AUTOMATECH** Robotik LECLERC **₩** VENTION[®] WECSDEWIC 🚺 kontron

NGen, strengthening the competitiveness of the manufacturing sector



- Canada's advanced manufacturing supercluster is a constellation of industrial companies and start-ups, researchers and investors and government-funded labs
- \$76.8M investment committed to innovation
- NGen matches manufacturing companies with new technologies to drive advanced manufacturing in Canada
- Funding streams for transformative, applied, collaborative and enduring projects are ranging from \$50,000 to \$20M



Montréal, a world-class Al hub to support innovative manufacturing

- More than \$3 billion in Al investments announced in Greater Montréal since 2016
- Home to major Al players and a thriving ecosystem





ELEMENT













SAMSUNG





Scale AI, an asset for innovative manufacturing companies

- The Canadian government chose Montréal as the headquarters for Scale AI, Canada's AI supply chain supercluster
- Scale AI is dedicated to building the nextgeneration supply chain and boosting industry performance by leveraging AI technologies.
 These technologies will drive growth and innovation in retail, manufacturing, fashion and transport industries
- Up to 40% of financing of eligible costs for collaborative research projects in Al
- Scale Al provides financial support to develop artificial and digital intelligence skills and funds training for talent



Manufacturing stands on a strong IT industry

- 160,000+ IT professionals and 7,000+ companies in Greater Montréal
- Lowest operating costs in North America for software development
- A diverse industry:



Top 3
best places to
Invest in AI in
North America



city in Canada and a world leader in digital creativity



Highest concentrations of tech jobs among Canadian and U.S. metropolitan areas

Top 5



ENCQOR 5G: unlocking technological promise through Canada's 5G corridor



- \$400M invested into Canada's 5G public-private ENCQOR project network over the next five years starting in 2018
- The Canada-Québec-Ontario partnership establishes the first Canadian pre-commercial corridor of 5G digital infrastructure and provides a platform where SMEs can test ideas and technology
- ENCQOR offers various calls for projects and builds adoption projects, collaborative R&D projects, as well as financed IT projects (75 pre-commercial technology projects)

Source : ENCQOR, 2020.



A booming startup ecosystem

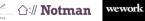
- Canada is the most attractive country in the world for entrepreneurs according to the OECD
- More than US\$2.7 B in VC in Montréal between 2018 and 2020
- Six of Canada's ten most active VCs in 2020 are based in Greater Montréal
- 30+ incubators/accelerators
- 45+ coworking spaces





























Source: OECD Indicators of Talent Attractiveness, 2019; "Global Ecosystem Report" 2018; Credo, "Montréal Startup Ecosystem Report", 2016; "Midterm Report" - Smart City, February 2017; Canadian Venture Capital & Private Equity Association, 2018, 2019 and Q3, 2020.



Centech, accelerating innovation in the manufacturing sector

Part of the top 20 university business incubators in the world by UBI Global 2019. Powered by *École de technologie supérieure* (ÉTS), Centech provides mentoring, coaching and financial support to companies

Centech offers a **Manufacturing 4.0 Acceleration Program** for young companies developing high-impact technological innovations





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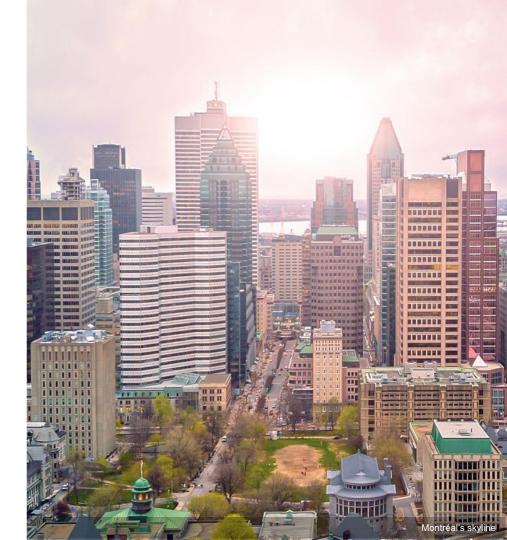
A strong representation of the manufacturing industry

Manufacturers and Exporters of Québec (MEQ) represents 1100 manufacturers in the province of Québec offering various services and programs to tackle the different challenges of the industry



The Grouping of Industrial Automation Companies (REAI) aims to **foster collaboration between smart automation companies** to achieve projects in Québec





A collaborative environment for industrial automation

Many research centers and networks in Greater Montréal are involved in different topics related to innovative manufacturing























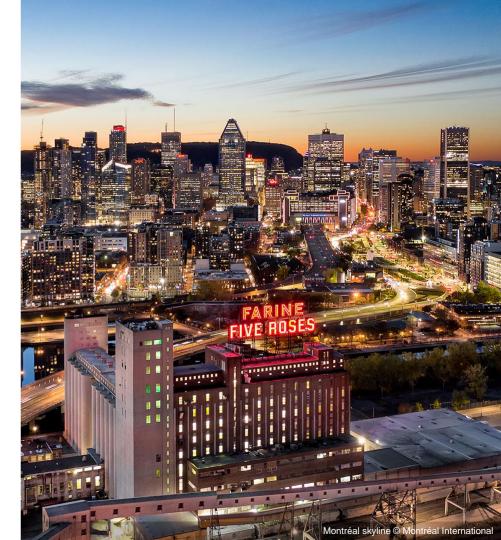












02 A Deep and Growing Pool of Highly Qualified Talent





The best student city in the Americas and Canada's university capital

- Canada's university capital: 15 university institutions and 60 colleges
- 320,000 post-secondary students, including more than 200,000 university students and 35,500 international university students
- 1st in Canada for university research funding with \$1.34+ billion yearly



city in the
Americas
tied with Boston
QS Best Student
Cities Rankings
2022

Best student

1	Montréal tied with Boston
2	Toronto
3	New York
4	Vancouver
5	San Francisco



Dynamic research chairs & labs with a focus on innovative manufacturing



- Canada Research Chair in Precision Robotics
- GREPCI Power Electronics and Industrial Control Research Group
- DYNAMO Research Laboratory in Machine, Process and Structural Dynamics
- ÉTS Research Chair in Interactive Robotics
- LIPPS Products, Processes and Systems **Engineering Laboratory**
- Innovation 4.0 Hub
- Siemens Industrial Chair on Industry 4.0 Technology Integration



McGill • Chair in Automation Engineering



HEC MONTREAL • Canada Research Chair in Distribution Management



- Engineering Design and Manufacturing Lab (EDML)
- Concordia Center for Composites (CONCOM)
- Electrochemical Green Engineering (EGE) Group



- Canada Research Chair on the Creation, Development and Commercialization of Innovation
- The Robotics Laboratory



More than 40,000 students are enrolled in university programs and linked to innovative manufacturing

Innovative manufacturing university programs	Students enrolled 2019-2020	University graduates 2019	
Energy	147	40	
Industrial Design	263	59	
Chemical Engineering	1,039	243	
Production Management	1,093	365	
Industrial and Administrative Engineering	2,480	635	
Electrical, Electronics and Communications Engineering	3,613	731	
Civil Engineering	4,705	1,399	
Mechanical Engineering	5,263	1,211	
Computer Sciences	12,509	2,524	
Business Administration	13,703	4,810	
Total – Greater Montréal	44,815	12,018	



A pool of highly qualified employees

Manufacturing-related occupations in Greater Montréal	Employees in 2020
0911 – Manufacturing Directors	14,100
2141 – Industrial and Manufacturing Engineers	2,700
2132 – Mechanical Engineers	3,600
2133 – Electrical and Electronics Engineers	3,800
2232 – Mechanical Engineering Technologists and Technicians	4,200
2233 – Industrial Engineering and Manufacturing Technologists and Technicians	3,600
7231 – Machinists and Machining and Tooling Inspectors	5,900
0213 - Computer Systems Managers	8,000
9400 – Machine Operators	26,300
Total – Greater Montréal	72,200

Source: Statistics Canada; National Occupational Classification, 2020.



Canada's most bilingual and trilingual population



2.5 million residents speak English, that's 9% more than in Vancouver



55% of the population is bilingual (French and English), compared to 8% in Toronto and 7% in Vancouver



Almost 20% of the population is fluent in three or more languages, compared to 4% in Toronto and 3% in Vancouver

O3 Attractive Operating Costs and Incentives





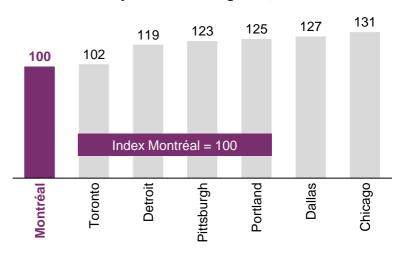




Competitive operating costs for manufacturing companies

 Montréal has a 18% cost advantage compared to the other metropolitan areas in the U.S. and Canada

Operating costs index for major manufacturing hubs, 2019



Note: The annual operating cost calculations are based on labour, property and utility costs in US\$.

Source: fDi Benchmark, 2019.

Tailor-made incentives to support investment projects



Major and Innovative Projects

ESSOR Program

Support to major projects with refundable (interest-free and low interest loans) and non-refundable contributions. Investment projects with eligible expenditures of \$250,000 or more to start a new business or expand (including modernizing) an existing business

Productivity innovation

Term loan of **\$50,000** or more to finance the implementation of innovative projects

Development capital

Equity financing **from \$2M to \$100M** (productivity improvements, growth and equipment upgrades)

Major investment projects

Projects of \$100 million or more may qualify for a **tax holiday equivalent to a maximum of 15%** of the total eligible investment expenditures for 15 years



SME in Action Program – Support for feasibility studies

Non-repayable contribution of up to **40% of eligible project expenses**, up to a maximum of \$100,000 per project

The Investment and Innovation tax credit (C3i) contributing to at least 10% of the acquisition costs of manufacturing equipment, computer equipment and management software packages for a maximum of \$100 million in eligible investment expenditures over 5 years, refundable for corporations whose assets and gross revenue do not exceed \$50 million

Canada's Scientific Research and Experimental Development (SR&ED) tax incentive

14% Québec's tax credit on salaries and subcontractor fees paid in Québec, fully refundable

15% Canada's tax credit on eligible activities and expenditures



Project financing or Collective entrepreneurship financing Financing covering up to 100% of

Financing covering up to **100% of project costs** (machines, buildings or equipments, expansion and exports)

The ÉcoPerformance Program aims to reduce greenhouse gas emissions and energy consumption of businesses by financing projects or measures related to consumption and production (two components: project analysis and project implementation)



100% amortization in the first year for certain capital investment: computer equipment, manufacturing and processing equipment, clean energy production equipment, and intellectual property

The most competitive salaries in the manufacturing industry

Median annual salaries* for nine typical professions in US\$

Selection of seven large metropolitan areas in North America, 2020

	Montréal	Toronto	Pittsburgh	Portland	Detroit	Chicago	Dallas
Machine Operator	\$36,211	\$38,885	\$41,689	\$45,134	\$48,157	\$44,635	\$40,744
Computer-Aided Machinist	\$41,072	\$44,166	\$47,281	\$50,617	\$51,116	\$51,204	\$46,832
Mechanical Engineering Technician	\$51,648	\$55,361	\$59,377	\$64,392	\$64,728	\$67,704	\$64,873
Industrial Engineering Technician	\$55,253	\$59,184	\$62,345	\$67,318	\$67,949	\$70,920	\$68,395
Industrial Engineer	\$68,669	\$73,130	\$85,923	\$89,613	\$93,721	\$94,664	\$95,425
IT Systems Administrator	\$70,215	\$75,599	\$77,311	\$82,805	\$81,948	\$88,226	\$85,672
Mechanical Engineer	\$74,206	\$78,889	\$92,364	\$96,009	\$100,559	\$101,521	\$102,838
Electrical Engineer	\$78,767	\$83,628	\$99,444	\$103,053	\$108,031	\$109,028	\$110,950
Manager (production)	\$87,427	\$94,231	\$104,914	\$103,111	\$110,920	\$112,925	\$114,370

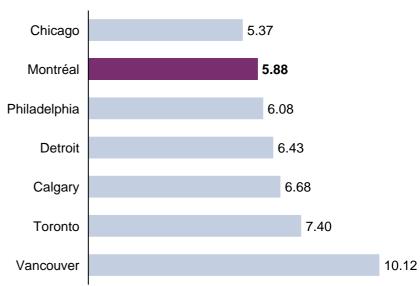
^{*} Salaries based on 5 years of experience. All industries. Currency exchange based on the monthly average of June 2021: US\$1.00 = CA\$1.2219. Source: Economic Research Institute Inc., July 2021.



Competitive rent for industrial space

Industrial spaces are available at highly competitive rates compared to most large cities in North America.

Average asking rent for industrial space (All classes – US\$/sq.ft/yr)



Currency exchange: CA\$1 = US\$0.76. Source: Cushman & Wakefield, Q3 2020.

Clean, renewable, reliable and affordable electricity



No. 1

in North America for electricity rates for large-power customers

Total installed capacity

of 47,222 MW



Thanks to its green, renewable and Québec stable supply of low-cost hydropower, Greater Montréal boasts one of the lowest electricity rates in North America: CA¢4.04/kWh*



- **Stable rates**: Our water resource is a great collective asset, and it helps protect electricity rates from the volatility of oil and gas prices
- Hydro-Québec generates more than 99% of its electricity from water, a source of clean, renewable energy
- The quality and reliability of the power grid are also two major advantages

Source: Hydro-Québec, 2021.

^{*} Rate LG: large power with minimum billing demand of 5,000 kW, transmission and distribution included, for 120-kV supply with 95% load factor, and including the Economic Development Rate reduction (if eligible).

04 Montréal International's Personalized, Free and Confidential Services





Montréal International, a single point of access to a series of personalized, free and confidential services



Long-term strategic support



Economic data and communication services



Government relations facilitation



Incentive programs assistance



Foreign workers immigration assistance



International recruiting solutions



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