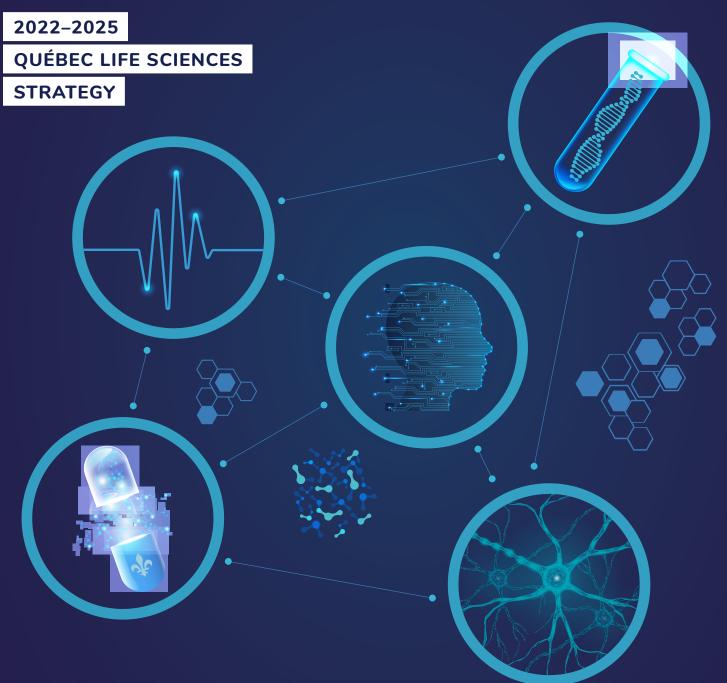
# USING OUR INGENUITY TO PROMOTE HEALTH







## USING OUR INGENUITY TO PROMOTE HEALTH

2022-2025

QUÉBEC LIFE SCIENCES

STRATEGY

# A WORD FROM THE PREMIER



The pandemic has brought to light how strategically important our life sciences industry is. During this extraordinary time, a large number of life sciences industry stakeholders joined forces to propose effective solutions that contributed to fighting COVID-19.

We especially saw how beneficial it is to have the capacity to manufacture medication, vaccines and essential health care products and equipment in Québec. We realized the importance of being more self-sufficient in terms of procurement.

We have the necessary assets and expertise to better meet the demands of the Québec market and to stand out on the world stage. Our life sciences ecosystem is strong and diversified. It is the result of the work of top-level experts and relies on a substantial research and manufacturing capacity.

With the 2022–2025 Québec Life Sciences Strategy, the Québec government is bolstering its support for the sector. We are committed to increasing collaboration between researchers and entrepreneurs to address major health challenges, support the emergence and growth of innovative businesses, attract and execute investment projects more quickly and stimulate the commercialization of our innovations.

Our vision for the next few years is simple: continue to innovate to be more self-sufficient while generating more exports.

Premier of Québec,

Leant

**François Legault** 

## A WORD FROM THE MINISTER OF ECONOMY AND INNOVATION



To support sustainable economic growth in a competitive global environment, Québec must leverage the sectors that are positioned to help it stand out on the international stage.

With a diversified industrial makeup, cutting-edge expertise—in precision medicine, for example—derived from our public research centres, a renowned artificial intelligence ecosystem and a skilled workforce, life sciences are among Québec's strategic niches.

The economic situation is favourable for the sector, but global competition is fierce. The Québec government wishes to adjust how it supports the sector in order to seize all available business opportunities.

With the 2022–2025 Québec Life Sciences Strategy (QLSS), Québec will further stimulate private investment, develop new sectors in next-generation segments and strengthen local and international supply chains. The Strategy also aims to ensure a congruence between labour force needs, training efforts and talent attraction.

The 2022–2025 QLSS will guide our actions and encourage business growth with a budgetary framework of \$211 million over three years. It will spur an estimated \$4 billion in private investment by 2025.

The Strategy will capitalize on the entire ecosystem's synergies, strengths and expertise to move the industry forward and help it to achieve its full potential.

Minister of Economy and Innovation and Minister Responsible for Regional Economic Development,

**Pierre Fitzgibbon** 

## A WORD FROM THE MINISTER OF HEALTH AND SOCIAL SERVICES



One of our objectives with the 2022–2025 Québec Life Sciences Strategy (QLSS) is to support research and innovation in order to provide Quebecers with modern and innovative health care services. With this in mind, we plan to better integrate innovations and make better use of information, as indicated in our health plan.

We have been transparent about our desire to reform the governance of innovation in the health and social services network. We want to accelerate the adoption of innovative products and practices that directly align with our priorities and address the needs of Quebecers.

The pandemic has made us realize the importance of relying on our local ecosystem to increase our self-sufficiency not only in health care, but also in life sciences. To be successful, we must innovate and improve our manufacturing capacities.

We can only achieve these objectives by fostering collaboration among all stakeholders, removing barriers to innovation and encouraging the sharing of best practices among our health care facilities.

Developed further to an extensive consultation process, the 2022–2025 QLSS will meet the needs of businesses and help them to better contribute to our network.

Minister of Health and Social Services,

**Christian Dubé** 

# A WORD FROM GUY LEBLANC



#### Promoting the growth of a promising sector for Québec's economic development

The life sciences industry is one of the most exciting and innovative sectors in Québec.

With the 2022–2025 Québec Life Sciences Strategy, Investissement Québec is committed to supporting the growth of this remarkably innovative and collaborative industry and showcasing Québec as an attractive destination for investment.

By combining our strengths with those of other players in the market and filling gaps in the capital chain, we aim to spur the growth of this strategic sector and expand our presence within it. The Strategy also involves helping Québec businesses by providing them with advice and financial support to accelerate their growth and develop an exhaustive, robust and sustainable ecosystem.

Investissement Québec is determined to play its role as a key growth partner for businesses and make life sciences a true pillar of the Québec economy.

President and CEO of Investissement Québec,

m yle

**Guy Leblanc** 

This is a publication by the Direction des sciences de la vie in partnership with the Direction des communications.

A version of this document is available online at <u>Québec.ca</u>.

If you are having technical issues, please contact the Direction des communications at <u>equipeweb@economie.gouv.qc.ca</u>.

For more information:

Direction des communications Ministère de l'Économie et de l'Innovation 710, place d'Youville, Third Floor Québec, QC G1R 4Y4

Telephone: 418 691-5698 Toll-free: 1 866 680-1884 Fax: 418 644-0118 Email: info@economie.gouv.qc.ca Website: economie.gouv.qc.ca

Legal deposit — May 2022 Bibliothèque et Archives nationales du Québec IBN 978-2-550-91675-8 (electronic version) IBN 978-2-550-91674-1 (print version)

All rights reserved for all countries. © Gouvernement du Québec — 2022

# TABLE OF CONTENTS

A WORD FROM THE PREMIER	V
A WORD FROM THE MINISTER OF ECONOMY AND INNOVATION	VII
A WORD FROM THE MINISTER OF HEALTH AND SOCIAL SERVICES	IX
A WORD FROM GUY LEBLANC	XI
INTRODUCTION	3
The life sciences industry: A growing and connected ecosystem New opportunities A Strategy based on extensive consultation The Strategy at a glance	5 6
STRATEGIC PRIORITIES AND MEASURES	9
<ul> <li>Strategic priority 1 – Generate synergies to address major health challenges</li></ul>	10 15 17 18 20 23 24 25 29 30 32 35 36 39
APPENDIX	41
Québec Life Sciences Strategy — 2017-2022 Budgetary framework (highlights) Québec Life Sciences Strategy — 2022-2025 Budgetary framework	



## INTRODUCTION

#### The life sciences industry at a glance

The life sciences are a major industry in Québec, with shipments worth \$5.7 billion in 2020. This makes up 3.7% of all manufacturing shipments.<sup>1</sup>

The industry includes nearly 715 companies that employ over 36,930 people. It generates almost as many jobs in public research centres and various related service companies.<sup>2</sup>

Nearly 30,000 students are enrolled in life sciences programs in colleges and universities, producing 7,600 graduates per year.<sup>3</sup>

<sup>1.</sup> Statistics Canada, 2020 data, compiled by the Direction générale du développement des industries, Ministère de l'Économie et de l'Innovation, March 2022.

<sup>2.</sup> Statistics Canada, 2020 census data, compiled by the Direction des sciences de la vie, Ministère de l'Économie et de l'Innovation.

<sup>3.</sup> Statistics Canada, 2019 data, special compilation based on a census of the active population and the ministère de l'Éducation et de l'Enseignement supérieur (MEES).

### The life sciences industry: A growing and connected ecosystem

Life sciences businesses develop and market products, platforms, processes as well as specialized and innovative services related to human and animal health.

This industry is very vibrant and strategic even though it operates within a highly regulated environment. Its growth inevitably depends on research and innovation as well as on aligning product development with the needs of healthcare systems. A specialized workforce is also essential.

There is close collaboration between all those involved in the ecosystem, including industry, public research, transfer centres, and intermediation organizations, thus optimizing research, innovation and real-world application. A vast network of specialized product and service suppliers is connected to this industry. The services and expertise of this network include research and development, clinical study management, product manufacturing, regulatory management and distribution to various markets.

Québec's universal public health insurance plan provides free healthcare and hospitalization to all Quebecers. Unlike other industries, this market is largely restricted to a single client. Health and social services institutions therefore play a central role in supporting innovation, since they contribute as partners and, ultimately, as clients. These institutions can also demonstrate advances or showcase new technologies. This role can serve as a springboard for many businesses to export their products internationally.



### New opportunities

The COVID-19 pandemic has brought the critical role of the life sciences ecosystem to the forefront. As soon as the crisis began, the Government of Québec, together with several partners from the scientific and industrial communities,<sup>4</sup> launched a call for proposals to support research and innovation projects that would help fight the virus and mitigate its consequences. Several innovators and research teams responded to the call. In addition, many businesses leveraged their agility to adapt their production lines to produce protective equipment and quickly support workers in the health and social services network.

Around the world, innovative technologies were developed and adopted in months rather than years. Québec took on this challenge brilliantly. The lessons learned from this chapter in history reflect the sector's incredible potential for adaptation. However, they have also highlighted the need to secure local supply chains and improve their reliability, particularly for certain highly strategic products and services. Québec's industrial fabric is already robust, but it must be strengthened by improving its competitiveness. It requires state-of-the-art infrastructure and a complete funding chain to support the development of small and medium-sized enterprises (SMEs). Maintaining a business environment that promotes partnerships between companies of all sizes and the ecosystem's various players must also remain a priority.

Québec innovation is part of the solution to the challenges facing Québec's health and social services system of tomorrow, particularly in terms of promoting healthy lifestyles, prevention, home care, personalized medicine, genomics, proteomics, a mobility framework and the responsible use of health information. Improving access to the local market and deliberately matching supply to the real needs of the health and social services network will make it possible to build on local innovations and better equip Québec companies to conquer international markets.

Expertise, talent and a culture of innovation are Québec's assets for developing the industry, encouraging investment and attracting foreign capital. It is therefore crucial to maintain and strengthen these vital pillars of the life sciences sector.

<sup>4.</sup> Ministère de la Santé et des Services sociaux and its Innovation Office, the Fonds de recherche du Québec, the Consortium québécois sur la découverte du médicament (CQDM), the Industrial Consortium for Research and Innovation in Medical Technologies (MEDTEQ+), PRIMA Québec, Prompt, Génome Québec, the Institut TransMedTech and the Institut de valorisation des données (IVADO).

### A Strategy based on extensive consultation

Québec has had a life sciences strategy since 2017. The achievements attributable to this Strategy are presented in the appendix. In order to adapt its Strategy to the new global context, the Ministère de l'Économie et de l'Innovation, in collaboration with the Ministère de la Santé et des Services sociaux, carried out a consultation process with industry stakeholders. More than 20 briefs were received and nearly 70 representatives were met with throughout 2021 at five workshops. These representatives were from multinationals, SMEs, start-ups, higher education institutions, health and social services institutions, organizations and other ministries.

The renewal of the Strategy stems from the comments and proposals that emerged from this consultation process. The actions it outlines are complementary and in line with those of the Québec Research and Innovation Strategy.

### The Strategy at a glance

The Québec Life Sciences Strategy 2022-2025 is intended to adapt the support for the sector so that it can prepare for other health challenges and strengthen its position in the global environment, which has become highly competitive since the COVID-19 pandemic.

The Strategy has a financial framework of \$211 million over three years, from 2022–2023 to 2024–2025, including \$110 million in new contributions. This will provide \$569 million in funding to support an estimated \$2 billion in direct investment. The Strategy is based on five strategic priorities:

STRATEGIC PRIORITIES	TOTAL CONTRIBUTIONS	FUNDING⁵	TOTAL INVESTMENTS (PUBLIC/PRIVATE)
<b>Strategic priority 1 –</b> Generate synergies to address major health challenges	\$57.0 million	\$57.0 million	\$112.5 million
<b>Strategic priority 2 –</b> Develop human capital and attract talent	\$5.1 million	\$5.1 million	\$10.2 million
<b>Strategic priority 3</b> – Support the creation and growth of innovative businesses	\$37.5 million	\$91 million	\$282 million
<b>Strategic priority 4</b> – Attract and execute investment projects	\$91.4 million	\$396.6 million	\$1,5432 million
<b>Strategic priority 5</b> – Spur the commercialization of innovations	\$19.6 million	\$19.6 million	\$23.6 million
Total	\$210.6 million	\$569.3 million	\$1,971.5 million

<sup>5.</sup> Total amount of government support, including, in particular, non-refundable contributions, loans and equity.

# The following targets are to be achieved:

1 2

2

Generate \$4 billion in private investment over three years.<sup>6</sup>

Develop new industrial sectors in future niches, such as mRNA, artificial intelligence applied to diagnostics and health, precision medicine, cell and gene therapies, and biological product development, including vaccines.

Increase the presence of Québec companies in the local and international supply chains of the health and social services network. A close collaboration between the various participating ministries is central to the success of this Strategy, particularly the Ministère de l'Économie et de l'Innovation and the Ministère de la Santé et des Services sociaux. Both the industry and Québec's population will benefit from this success.

The Strategy will be monitored with the collaboration of industry associations.



<sup>6.</sup> Private investments from 2022 to 2025 include research and development investments by the Patented Medicine Prices Review Board, the identification of capital investments supported or not by the Ministère de l'Économie et de l'Innovation, venture capital investments, other benefits related to the implementation of the Québec Life Sciences Strategy and investments reported by industry.



## STRATEGIC PRIORITIES AND MEASURES

### **Strategic priority 1** Generate synergies to address major health challenges

Life sciences companies frequently work in partnership with universities, colleges and research centres in the health and social services network. The clinical experts and researchers working there are essential resources. Moreover, collaborative research is an opportunity for companies to access the wide range of expertise they require to develop innovations. It also provides initial contact with a potential market.

The government is planning two measures that will promote the development and maturation of Québec innovations. These measures will also address the major health challenges of today and tomorrow by focusing on innovation:

- · Leverage expertise to accelerate innovation
- Innovate through the use of health information

FUNDING	TOTAL INVESTMENT (PUBLIC/PRIVATE)
2022–2025	2022–2025
\$57.0 million	\$112.5 million

## Measure 1 Leverage expertise to accelerate innovation

Québec's world-class research and development capabilities are a major economic driver. Researchers from colleges, universities and the healthcare sector play a key role in discovering and developing innovations in Québec and abroad. The high quality of their work and our state-of-the-art infrastructure also attract considerable private investment. The 2022–2025 Québec Life Sciences Strategy will build on these strengths to foster the emergence and development of industrial innovations.

#### Deployment of the Health Innovation and Evaluation Network

Businesses invest significant amounts of money in product development before going to market. By involving patients and care environments at an early stage, companies can adjust their products quickly, thereby reducing costs and risks while better meeting the needs.

Following a first call for projects, launched in 2021 with a \$3.3 million budget, six health and social services institutions received financial assistance from the Ministère de l'Économie et de l'Innovation and the Ministère de la Santé et des Services sociaux. The projects enable the development of teams with expertise in health technology assessment and the sharing of knowledge and experience. These teams will be called to gain specialized clinical, methodological and administrative knowledge. They will be available to test and measure the value of industrial innovations in real-world settings.

The Health Evaluation and Innovation Network (HEIN) also aims to facilitate contact between businesses and evaluation experts and accelerate their access to the market. Businesses will have access to a catalogue of expert services from the early stages of innovation development to evaluation in a real healthcare setting, including the studies required by regulatory authorities and public insurance plans in Québec and other jurisdictions.

The Québec government will continue to support the first six institutions and is interested in adding new institutions looking to participate in the HEIN. Funds are also available under the Programme innovation to support the evaluation by HEIN institutions of technologies developed by Québec businesses.

#### Efficient, innovative and high-quality — Québec's clinical research environment

Clinical research is one of the pillars of medicine and medical technology development. It simultaneously benefits people, society and the economy. In particular, these benefits:

- Provide faster access to innovative drugs medicine at the experimental stage, particularly when developed to treat rare diseases and diseases for which no treatment exists
- Attract and inject significant private investment; for example, in 2020, pharmaceutical and biopharmaceutical companies invested some \$200 billion in clinical research worldwide<sup>7</sup>

In 2017 and again in 2021, the Strategy supported the implementation and activities of CATALIS to optimize Quebec's clinical research environment thus stimulating private investment, accelerating the development of innovative patient care and improving Québec's global standing. The activities of CATALIS aim to support research teams in health and social services institutions. They are also focused on improving the capacities of these teams by adding adapted IT infrastructure, sharing methodologies, optimizing and harmonizing practices, and developing and implementing innovative approaches. Accordingly, CATALIS is working to establish a centralized service for accelerated evaluation of multicentre clinical studies.

### CATALIS

The CATALIS public-private network is working to create a new FAST TRACK evaluation service that aims to obtain approval for industry-funded clinical studies in less than eight weeks. An initial pilot project, carried out in collaboration with four institutions in the health and social services network, reduced the approval time of a study by 75%. Three of the four institutions approved the start of a study in eight weeks. As a result, they were ranked the fastest sites in the world, ahead of more than 1,000 other institutions in some 40 countries. The fourth also moved quickly, approving the project in ten weeks and ranking fifth globally. CATALIS intends to continue the pilot phase of the service with its public and private members through fall 2022 and will then offer its services to non-member pharmaceutical companies (catalisquebec.com/en/).

<sup>7. &</sup>quot;Total global pharmaceutical R&D spending 2012–2026": https://www.statista.com/statistics/309466/global-r-and-d-expenditure-for-pharmaceuticals/

### The evolution of the clinical study model

Internationally, the COVID-19 pandemic has shifted the traditional clinical trial model to a decentralized one in which a significant proportion of activities are now performed in patients' homes. The traditional study model has given way to telemedicine, the IoT and new tools, such as electronic consent and electronic clinical outcome assessment. The emerging international consensus suggests that this or a hybrid approach may become standard practice. The benefits are numerous and include improvements in study efficiency, financial benefits and participant recruitment and satisfaction. However, there are many issues that need to be resolved, including data quality, site logistics, patient engagement and regulations.

#### Support for industrial innovation

In order to encourage investment in research and promote collaboration between the public and private life sciences sectors, the government intends to extend its support for Regroupements sectoriels de recherche industrielle — RSRI (Industrial Research Sectoral Groups). The mission of these intermediation organizations is to link the technological development of businesses with the work done in Québec research institutions. To this end, the government will increase the budget of the Programme innovation and the Programme de soutien aux organismes de recherche et d'innovation.

#### Programme innovation

The Programme innovation, administered by Investissement Québec, helps companies and business groups carry out innovative projects to develop new products and processes or to significantly improve an existing product or process, from planning to marketing. Expenses associated with carrying out a portion of a company's projects in public research centres are also eligible for the program.

## Facilitating the demonstration of the clinical, societal and economic value of Québec medical technology innovations

Before achieving commercial success, a company must demonstrate the clinical, societal and economic value of its innovation. This demonstration can be done through real-world evidence studies. The evidence obtained can guide the decisions of healthcare administrators and reimbursement agencies.

The government intends to help medical technology companies invest wisely in these studies. It will therefore support the Institut national d'excellence en santé et en services sociaux (INESSS) in carrying out communication activities for Québec developers working on promising technological innovations. These developers will be able to rely on this information for research and development planning.

Investissement Québec also supports entrepreneurs in this process through financing programs that allow them to carry out the necessary studies for eventual local or international marketing.

#### Collaboration to take on the challenges of tomorrow

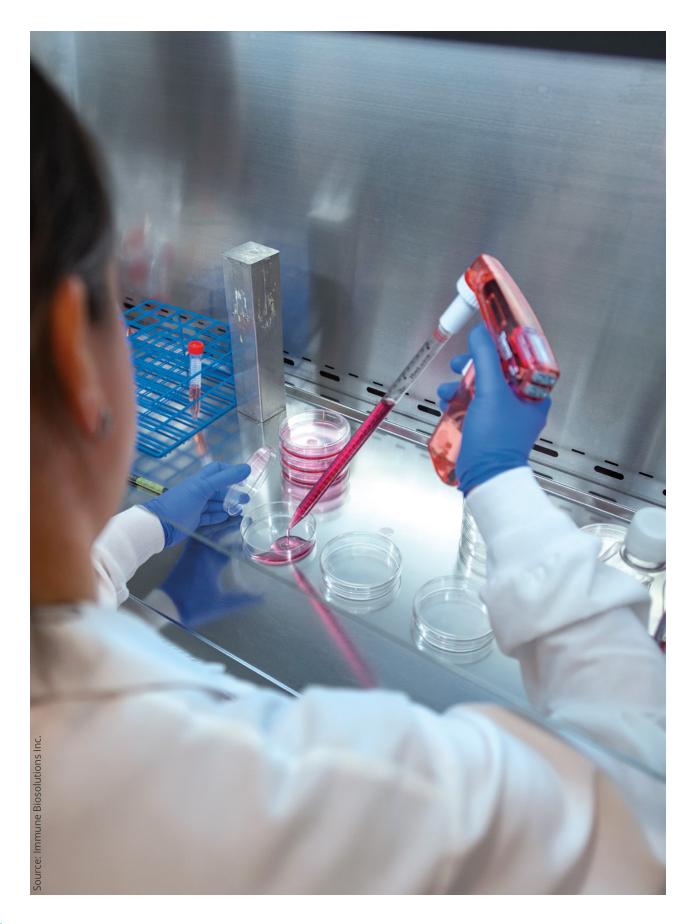
The discovery and development cycle for life sciences innovations is usually very long, so achieving results often takes years. However, the COVID-19 pandemic demonstrated the industry's responsiveness and the effect of better synergy between all players in the ecosystem. This mobilization must now serve as a benchmark for taking on the challenges of tomorrow.

The government will invest in growth-spurring and ambitious projects that will create partnerships between members of the life sciences ecosystem. These projects will aim to enrich Québec's industrial fabric and position it at the forefront of international needs and trends. A multi-party consultation committee including industry, clinicians, and public and para-public partners will establish the themes and potential of considered investments. Antibiotic resistance, future pandemic preparedness and innovative therapy development could be among these themes.

#### Innovation zones

The Québec government is also counting on innovation zones to boost the commercialization of innovations, exports, local and foreign investment, and business productivity. It plans to bring together players from research, industry, education and entrepreneurship. An innovation zone is a hub for a community of interest, located in an attractive and sustainable living environment.

Considering the strategic aspect of the life sciences sector, the Ministère de l'Économie et de l'Innovation and Investissement Québec will provide support for the health innovation zone projects that are being developed. The goal is to make Québec a leader in promising sectors that address key challenges in the healthcare system.



## Measure 2 Innovate through the use of health information

The COVID-19 pandemic has shown the public and government authorities the need for effective access to information held by health and social services institutions, while respecting privacy rights.

With its expertise in digital technology such as artificial intelligence, Québec can leverage health information to also support the advancement of medical research and technology development. These advances accelerate the discovery and development of new treatments. They also facilitate the detection of diseases and improve diagnosis.

#### The development of platforms in health and social services institutions

The realization of pilot projects has demonstrated the ability of the health and social services institutions to mobilize and analyze health and social services information for management, research and innovation. In addition, work has been done on governance, organization and responsible use of data. A community of practice now supports knowledge sharing.

Following this work, the Ministère de l'Économie et de l'Innovation will continue to support the platform development and implementation projects of other institutions in the health and social services network. These projects will act as pilots for the transfer and use of health information under the responsibility of the Ministère de la Santé et des Services sociaux (see box).

Specifically, the Government of Québec will:

- Continue to support the development and management of health information sharing platforms
- Enhance its support for projects promoting insight and experimentation on the ethical and responsible use of health information to ensure social acceptability. The institutions' ethics committees will oversee the implementation of the projects, according to their mandates. These projects will be chosen and carried out under the governance of an inter-ministerial committee including the Ministère de l'Économie et de l'Innovation, the Ministère de la Santé et des Services sociaux and the Fonds de recherche du Québec — Santé (Québec research fund — Health).

### Bill 19 – An Act respecting health and social services information

On December 3, 2021, the Minister of Health and Social Services introduced Bill 19, *An Act respecting health and social services information and amending various legislative provisions*. This bill establishes a framework for the consultation and protection of personal health and social services information throughout its life cycle. It establishes standards for the transfer of this information to improve the quality of public services and benefit research and innovation. It also aims to promote management of the health and social services system based on knowledge of needs and the use of services.



### **Strategic priority 2** Develop human capital and attract talent

A skilled workforce is essential for the expected growth of Québec's life sciences sector. Human capital is the fundamental pillar of the sector's development. The government plans to implement two measures to maintain Québec's competitiveness:

- Attract new life sciences talent
- Develop a workforce specifically trained to meet industry needs

FUNDING	TOTAL INVESTMENT (PUBLIC/PRIVATE)
2022–2025	2022–2025
\$5.1 million	\$10.2 million

## Measure 3 Attract new life sciences talent

Québec has world-class educational institutions to train the next generation of skilled life sciences professionals. However, it will be important to facilitate the integration of newly trained professionals into the labour market. To do so, the government will promote life sciences careers to students and recent graduates and encourage small and medium-sized businesses to hire newly trained professionals to fill open positions.

### Attract international talent to Québec

The Government of Québec has put significant incentives in place to attract world-class talent, including a tax holiday for foreign experts. The measure aims to step up the recruitment of recognized experts to implement innovation projects in private Québec companies. The provincial tax holiday, the direct beneficiary of which is the foreign employee, runs for a maximum period of 60 consecutive months. It applies to the wages paid to the foreign expert on:

- 100% of their taxable income for the first two years
- 75% the third year
- 50% the fourth year
- 25% the fifth year

#### Further promotion of life sciences careers

Career promotion plays an important role in informing the next generation about opportunities in the sector. The Québec government wishes to further promote careers in the life sciences by supporting initiatives to forge links with the industry and by offering lectures on the various professions in the sector. These initiatives will make students better informed.

### Excellence scholarships for international students

In order to attract new talent to Québec, the Fonds de recherche du Québec – Santé offers excellence scholarships to foreign students from all research sectors who wish to begin or continue their studies or research activities in Québec. The program is intended to support the internationalization of research activities in Québec's higher education institutions, attract the best foreign researchers and students and enhance the reputation of Québec universities and College Centres for the Transfer of Technologies.

#### Encourage companies to hire newly trained professionals

To encourage small and medium-sized businesses to call on new recruits to meet their human resources needs, the government will fund a portion of candidates' wages through the NovaScience program, and more specifically through the Soutien à l'emploi en recherche et en innovation (support for research and innovation employment) measure.

## Other initiatives to encourage companies to hire newly trained professionals

#### **Innovation internships**

Internships are crucial for attracting, retaining and integrating workers from here and abroad into Québec businesses. They also contribute to business productivity and success. To this end, the Stages d'innovation en entreprise (innovation business internships) program, in partnership with the Mitacs programs, encourage businesses to collaborate with post-secondary students, post-doctoral fellows and researchers to meet innovation challenges.

#### Tremplin award—Internship in a practice setting

The Fonds de recherche du Québec – Santé supports internships that allow graduate students to acquire a range of skills and explore options to transfer these skills to non-research positions. The Tremplin program fosters collaboration between the university researchers and public, parapublic and private organizations. It also promotes the employability of graduate students.



## Measure 4 Develop a workforce specifically trained to meet industry needs

The advent of new technologies in the life sciences requires expertise and specialized skills from a highly skilled workforce. Education, training and certain key skills are needed to build a talent pool that better meets industry needs.

#### Identifying industry needs

The Québec government, in partnership with stakeholders, must ensure that it can develop specialized talent through close collaboration with industry. It wants to support initiatives that identify the skills that businesses require and encourage the implementation of educational programs adapted to real industry needs.

### A workforce specifically trained to meet biomanufacturing needs

Industrial biomanufacturing projects require highly specialized industrial skills related to using sophisticated equipment in a regulated context. The availability of a highly skilled workforce is critical to attracting private investment projects. To this end, the government is providing a \$2.5 million grant to the Canadian Alliance for Skills and Training in Life Sciences (CASTL) to establish a Québec-based biomanufacturing training institute. The institute will be able to meet the needs of local biomanufacturing businesses.

Carried out in partnership with adMare BioInnovations, the CASTL project will support the development of continuing education adapted to the industrial biomanufacturing sector. CASTL has signed an exclusive agreement for the Canadian distribution of the training courses of the National Institute for Bioprocessing Research and Training, located in Ireland, and intends to establish a network of training centres across Canada.



#### An inter-ministerial working group

Labour-related challenges are complex and require governmental and paragovernmental co-operation and consistency. It is in this context that a Table de concertation interministérielle (inter-ministerial working group)<sup>8</sup> on the life sciences labour force will be set up, led by the Ministère du Travail, de l'Emploi et de la Solidarité sociale. It will bring together the main ministries and governmental and paragovernmental organizations concerned with succession and labour force issues in the life sciences. These include the Ministère de l'Économie et de l'Innovation, the Ministère de l'Enseignement supérieur, the Fonds de recherche du Québec — Santé and Pharmabio Développement. Pharmabio Développement serves as a sectoral committee for Québec's pharmaceutical and biotechnology industries.

The group will establish government strategies specific to the life sciences to address issues related to labour force attraction, initial education, continuing education and requalification over the course of careers. The goal is to ensure a congruence with the needs of the industry.

<sup>8.</sup> The group has the following objectives:

<sup>•</sup> To identify the key occupations in this sector and the occupations for which the Ministère du Travail, de l'Emploi et de la Solidarité sociale predicts a labour shortage within the next five years

<sup>•</sup> To define the labour force issues in this sector and identify the causes of recruitment difficulties

<sup>•</sup> To understand the paths to qualification, in both initial and continuing education, for professions in this sector

<sup>•</sup> To identify potential solutions to ensure that the sector has the labour force it needs, and determine who is responsible for implementing these solutions



## **Strategic priority 3** Support the creation and growth of innovative businesses

The Québec government wants to encourage the creation and growth of innovative businesses in the life sciences sector. To do so, it intends to:

- Strengthen the infrastructure and support
- Ensure the continuity of the funding chain

FUNDING	TOTAL INVESTMENT (PUBLIC/PRIVATE)
2022–2025	2022–2025
\$91 million	\$282.0 million

### Measure 5 Strengthen the infrastructure and support available

#### State-of-the-art shared infrastructure

Start-ups need to use their capital efficiently. In this context, access to shared infrastructure and space is a major asset. They can then focus on their research and development activities. In addition, they benefit from a nearby ecosystem of other businesses from multidisciplinary backgrounds allowing for greater networking that generates new business and technological opportunities.

Some shared infrastructure already exists. However, it is at capacity and is not very present or is non-existent in some areas outside the greater Montréal area. This is why the government intends to support projects involving shared and specialized infrastructure and the maintenance of equipment for sectoral organizations and business ecosystem incubators and accelerators in a number of regions of Québec.

#### Specialized support for developing start-ups

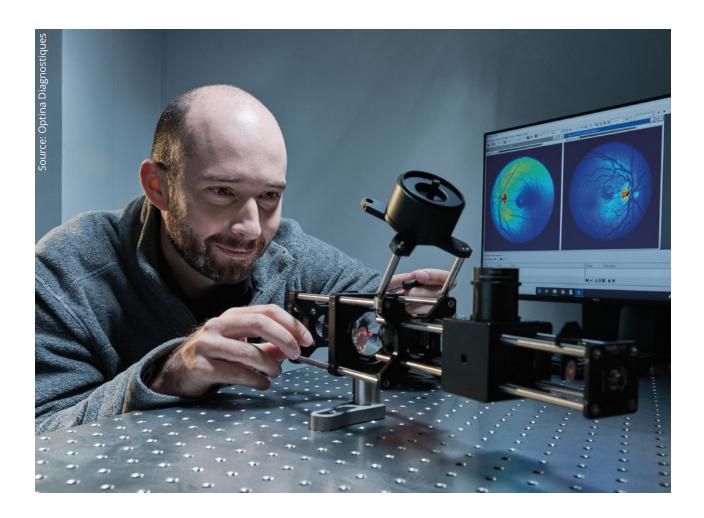
Québec has a wealth of organizations that are experts in supporting innovative start-ups with high growth potential. It offers start-ups high quality incubation and acceleration services and provides access to an extensive network of advisors, mentors, investors and specialists ready to help them with the steps involved in research, intellectual property, commercialization and regulatory compliance. Additional funding is planned to support Québec life sciences incubators and accelerators in their operations.

To complement the services that such organizations provide, the government plans to financially support highly innovative technology start-ups that are in the pre-commercialization phase of their growth by providing them with specialized services and shared infrastructure and platforms. Young Québec companies will thus have access to services otherwise available only to established businesses. This initiative will foster their growth and help to keep them in Québec once they reach further stages in their growth.

### Creation of a consortium of accelerators and incubators

The Ministère de l'Économie et de l'Innovation is supporting the creation of a joint service offering from incubators and accelerators that is specialized and focused on the needs of life sciences start-ups, including those in artificial intelligence in the healthcare field. For example, \$2 million over three years will allow for:

- The improvement of the service offering of life sciences incubators and accelerators
- The creation of a network of incubators and accelerators specialized in the sector
- Advance preparation for the founders of start-ups in the sector to establish business ties with the life sciences ecosystem, both in Québec and elsewhere in the world
- The creation of a life sciences resource-sharing service for the project's partner organizations



### Measure 6 Ensure the continuity of the funding chain

From 2017 to 2021, venture capital investments in life sciences totaled more than \$1.9 billion in Québec, representing 37% of all Canadian investments in the sector.<sup>10</sup> However, companies need access to a continuous supply of financing to develop and grow, and this is especially true for innovative companies that are at the seed stage or in an accelerated expansion phase. The same is true for some sub-sectors for which capital is not as readily available, such as medical technologies.

<sup>10.</sup> Québec Venture Capital and Private Equity Market Overview 2021.

### Recent investment capital initiatives

In collaboration with Investissement Québec, the Ministère de l'Économie et de l'Innovation has recently implemented a number of investment capital initiatives, which it continues to support. They help to meet specific and growing financing needs in the sector:

- A significant portion of the Fonds d'investissement Eurêka (Eureka investment fund), worth \$100 million, will be invested in companies at the pre-seed stage.
- A \$150 million partnership with the Fonds de solidarité FTQ will support financing in life sciences companies.
- Participation in the financing of the Amplitude Ventures Fund I will support the creation, start-up and growth of life sciences businesses, particularly those in precision medicine.
- Participation in the financing of the CTI Life Sciences Fund III will spur investments in innovative companies, in particular biotherapeutics, medical technology and health information technology companies.

### A biopharmaceutical component to the Impulsion PME program

The Impulsion PME program has a \$100 million budget, which was announced as part of the 2022–2027 Québec Research and Innovation Strategy. One of its main objectives is to increase access to investment capital at the seed stage for young innovative companies with strong growth potential.

Financing of the pre-commercialization phase of growth proves especially difficult because of the risks. The program aims to act as a lever to attract private investors upstream in the funding chain. In addition, it provides businesses with added value by involving a support entity, a referral entity and a recognized investor. Together, these partners heighten the quality of applications and increase the chances of success of those companies that do obtain funding through the program.

In order to better address the greater capital requirements needed to develop drugs and factor in their long development cycles, the Québec government will add a biopharmaceutical component to the Impulsion PME program. This new component will increase the probability that companies will make it through the crucial pre-commercialization stage and ultimately attract private investors.

#### **BioMed Propulsion: A renewed program**

The BioMed Propulsion program has supported several high-potential Québec companies. The Government of Québec's funding of almost \$43 million has generated private investments of more than \$180 million.

The program provides financial support to biotechnology and medical technology companies that have made it past the early stages of their growth. It also facilitates the creation of links with investors and strategic partners, favouring the emergence of new flagship Québec companies.

The Québec government is committed to renewing the program with a \$50 million budget.

### Investissement Québec

Investissement Québec is aiding in the effort to build world-class life sciences companies in Québec. With the creation and development of a team dedicated to the sector, Investissement Québec is adding a direct equity investment strategy to its financing and support offer. The strategy has three main thrusts:

- 1. Strengthening the funding chain in the biotechnology sector, from discovery to clinical studies
- **2.** Filling gaps in the funding chain in the medical technology and diagnostic sectors by targeting the commercialization of approved or soon-to-be-approved products
- **3.** Supporting the development and growth of industry leaders in promising segments of the industry

Over a three-year period, this commitment should result in approximately \$200 million from Investissement Québec's capital fund dedicated to funding opportunities, thereby bolstering the Québec Life Sciences Strategy.

# Québec Enterprise Growth Fund: Support for strategic Québec businesses

The Québec government is committed to better supporting strategic Québec companies in the management of their growth, including those in the life sciences sector. It also committed to keeping corporate headquarters in Québec. To this end, a \$1 billion envelope dedicated to the Québec Enterprise Growth Fund was announced in the 2019–2020 budget plan.

The Fund supports companies that carry on their principal activities in Québec and have a high growth potential or are strategic to Québec's economy. It aims in particular to keep corporate headquarters in Québec.



### **Strategic priority 4** Attract and execute investment projects

In the wake of the COVID-19 pandemic, many countries have realized how strategically important their life sciences industries are. The result is heightened competition to attract new projects and investments. In this context of increased global competition, Québec must remain attractive and maintain its enviable position on the international scene. To do so, the government will build on the strengths of the life sciences ecosystem to:

- Strengthen Québec's industrial capacity
- Promote the strength and success of the Québec ecosystem internationally

FUNDING	TOTAL INVESTMENT (PUBLIC/PRIVATE)
2022–2025	2022–2025
\$396.6 million	\$1.5432 billion

### Measure 7 Strengthen Québec's industrial capacity

Québec has local production capacity through its innovative pharmaceutical companies, generic and biosimilar pharmaceutical companies, contract manufacturing companies and medical technology companies.

From 2016 to 2020, the gross domestic product (GDP) of the pharmaceutical manufacturing sector grew at an average annual rate of 9.7% to reach over \$2.1 billion. This figure represents 0.6% of Québec's GDP.<sup>11</sup> In addition, from 2007 to 2020, Québec's pharmaceutical exports grew at an average rate of 6.1%. Their growth outpaced import growth, which reached 5.8%.<sup>12</sup>

The COVID-19 pandemic has brought to light the strategic importance of having local production capacity, in particular to produce vaccines, biopharmaceuticals, medical equipment and personal protective equipment. Québec wishes to strengthen its manufacturing capacity. To do so, it plans to:

- 1. Support strategic investment projects
- 2. Accelerate digital transformation
- 3. Support the Médicament Québec initiative
- 4. Develop and establish new industrial sectors

#### \$375 million in funding to support strategic investment projects

With major funding of \$375 million over three years, the Québec government is determined to support businesses in the life sciences sector that wish to increase their production capacity, acquire new capacities or modernize their facilities to increase their productivity.

This measure is aimed at both existing manufacturing companies and foreign companies wishing to establish themselves in Québec. Through these investments, the government intends to generate, \$1.5 billion in private sector projects in medical technology and biopharmaceuticals, including vaccines, over the next three years.

<sup>11.</sup> Statistics Canada

<sup>12.</sup> Institut de la statistique du Québec

### Accelerating digital transformation in businesses

The Ministère de l'Économie et de l'Innovation has implemented its Digital Transformation Offensive, with the goal of promoting it to businesses of all sectors and supporting them as they accelerate their digital transformation process. In the life sciences sector in particular, the government will finance a collaborative project that will involve outreach and support, which will help businesses in the sector accelerate their digital shift and increase their competitiveness.

### Support for Médicament Québec

In the context of the pandemic, the Québec government allocated \$13 million to the Médicament Québec initiative. This initiative is to capitalize on university and college expertise as well as on their infrastructures to:

- Increase Québec's autonomy in the discovery, development and manufacturing of active ingredients used in drugs and vaccines
- Integrate artificial intelligence into the discovery and development process
- Foster partnerships with innovative, generic and biotechnology pharmaceutical companies as well as contract manufacturing and contract research companies.

Through the Québec Research and Innovation Strategy, the government will bolster its contribution to Médicament Québec in order to further attract businesses to Québec and encourage them to participate in collaborative projects.

The initiative also plans to support a wide range of promising activities, including vaccine and mRNA technologies.

#### Develop and establish new industrial sectors

Québec must focus on developing new industrial sectors, especially in next-generation segments. A concerted life sciences investment prospecting unit was set up as part of the 2017-2022 Québec Life Sciences Strategy. It will continue its work to identify strategic opportunities for the development of new industrial sectors through a targeted and personalized approach with businesses, prioritizing those that specialize in the following segments:

- Precision medicine and cell and gene therapies
- Vaccines
- mRNA technologies
- Artificial intelligence applied to diagnoses and health

The Ministère de l'Économie et de l'Innovation coordinates the activities of this unit. It currently includes representatives from Investissement Québec, Montréal International, Québec International and Sherbrooke Innopole.

#### Support environmental footprint reduction efforts

For businesses, the adoption of clean technologies usually involves a significant investment. In addition, the payback period for such investments is longer than that for a traditional investment. The Québec government is committed to helping Québec businesses acquire and implement clean technologies. It will support investment projects that significantly reduce a company's environmental footprint through its ESSOR program. Multi-sectoral programs will also support initiatives to implement circular economy projects in the life sciences.

### Measure 8 Promote the strength and success of the Québec ecosystem internationally

In order to increase private foreign investment, Québec must better promote its talents and assets. With this goal in mind, the government wishes to polish its international brand image and coordinate targeted promotional activities.

### A polished international brand image

Promoting Québec's assets and strengths is key to attracting private investments. A life sciences promotion network has been set up to do so. It involves the Ministère de l'Économie et de l'Innovation, the Ministère des Relations internationales et de la Francophonie and Investissement Québec International. The significant commitment of those in the life sciences sector has made it possible to launch Québec's international life sciences brand, called "The Coolest Hotspot — TCH" (in French: *Ça se passe ici !*).

The government is determined to ramp up promotion of the sector, including through the Life Sciences Promotion Network. This investment will, among other things, make it possible to:

- Create differentiated content adapted to next-generation sectors, such as gene and cell therapy and mRNA-based therapies
- · Increase the promotion of Québec at international fairs and exhibitions
- · Host foreign journalists and favour the publication of articles in specialized magazines and journals

### The Coolest Hotspot

The Coolest Hotspot initiative represents the entire life sciences ecosystem with the goal of promoting its strengths and attracting investments. Bringing together industry partners, local economic development and investment promotion agencies and research organizations, The Coolest Hotspot aims to showcase Québec's life sciences industry to increase its visibility on the international scene. <u>thecoolesthotspot.com</u>

#### Targeted promotional campaigns

The Strategy supported the development of a process for hosting visits from key players through the economic development agencies. As a result, since 2017, nearly 20 events with pharmaceutical and medical technology industry stakeholders have been held. These efforts have yielded significant results, especially in the area of artificial intelligence. They will be continued in order to prepare visiting programs tailored to meet the needs of foreign companies. A network of resources in key agencies will be established to facilitate and increase the number of such events.





### **Strategic priority 5** Spur the commercialization of innovations

Access to markets is the main growth driver for companies. In its economic vision presented in 2021, the Government of Québec expressed its commitment to promote access to local markets and support exports in order to spur the growth of Québec businesses.

Each year, the industry develops promising innovations to meet the needs of healthcare systems. Other innovations developed have less of a clinical value. In order to penetrate different markets, a company must first demonstrate the clinical and socioeconomic value of its innovation to health technology assessment authorities, public and private payers and healthcare systems.

The government will help businesses reach local, national and international markets by:

- Supporting the domestic commercialization of innovations
- · Helping Québec companies in their export and internationalization projects

FUNDING	TOTAL INVESTMENT (PUBLIC/PRIVATE)	
2022–2025	2022–2025	
\$19.6 million	\$23.6 million	

### **Measure 9** Support the commercialization of innovations in the Québec market

Access to the Québec market is often a first step that paves the way for a company to conquer national and international markets. In addition to generating direct economic spinoffs, the local market offers innovative companies visibility, showcasing Québec's talent, know-how and resources.

For the healthcare system, buying local has clear benefits. Doing so increases the resilience of the supply chain and promotes the acquisition of innovative, more efficient products that are better adapted to Québec's reality. In addition, it represents an opportunity to shrink the industry's environmental footprint by reducing greenhouse gas emissions associated with the transportation of goods, and in some cases, manufacturing.

The Québec government wishes to help Québec companies access the local market in compliance with public procurement liberalization agreements. It is also determined to give the health and social services system a role as an innovator and economic driver for the benefit of patients and all of society. The proposed actions are consistent with the Ministère de la Santé et des Services sociaux's objectives set out in its plan to implement necessary healthcare changes.

#### Accelerate the integration of Québec innovations with high value potential

The mission of the Health and Social Services Innovation Office is to establish a vision and provide guidance for innovation strategies and activities. It coordinates efforts to accelerate the adoption of innovations in the health and social services network and acts as a special liaison with many stakeholders. The Québec government is committed to maintaining and increasing the capacity of the Innovation Office.

In addition, to accelerate the adoption of innovations in the health and social services network, the Ministère de la Santé et des Services sociaux will create the Comité stratégique d'innovation (the Innovation Strategic Committee), an innovation decision-making body. Its members will include chief executive officers of health and social services institutions and assistant deputy ministers of the Ministère de la Santé et des Services sociaux. This body's purpose will be to simplify the process for innovators.

A series of leveraging actions will be taken to guide innovators in their commercialization efforts, including the following:

#### Making needs known

The healthcare system's acquisition of innovations is based on needs. In order to guide the development of innovations and improve access to the public health market for businesses, the Innovation Office will disseminate a map of the health and social services system's needs and priorities and a dynamic digital interface of innovations being evaluated or developed in the system.

#### Financing demonstrations and showcases in real care settings

To support the objectives of the plan to implement the necessary changes in the healthcare system, industry will be called upon to develop technological solutions that address high priority challenges. The Government of Québec, in collaboration with MEDTEQ+, will help to strengthen local supply chains for the benefit of the healthcare system through calls for projects. With this support, it will be possible to develop demonstration projects and showcases in real care settings to evaluate the overall value of Québec innovations for commercialization purposes.

The Strategic Innovation Committee will determine the themes of calls for projects based on high priority issues.

The institutions of the Health Innovation and Evaluation Network will also provide their expertise for evaluation projects related to the Ministère de la Santé et des Services sociaux's innovation governance. In addition, the 2022–2025 Québec Life Sciences Strategy will support organizational innovation projects that aim to facilitate the integration of industry innovations.

#### **Commercializing Québec innovations for the local market**

Life sciences companies must navigate through complex and varied processes to access government contracts. An online tool will be implemented to help them scale up their innovations and have them selected. To support its efforts and ensure ongoing reflection, the Innovation Office will continue the work of the Innovative Procurement Committee with the Secrétariat du Conseil du trésor and other stakeholders.

### The new government procurement Strategy

The Stratégie gouvernementale des marchés publics, announced by the Government of Québec in February 2022, aims to promote the purchase of Québec goods and services through contracts with public organizations.

Over the next few years, the government aims to achieve the following goals:

- Revitalize government procurement subject to the Act respecting contracting by public bodies and adapt it to reflect the Government's Québec-made purchasing and responsible procurement priorities
- Favour innovation in public procurement
- Make public contracts more accessible to Québec companies and expand the proportion awarded to businesses in different regions of Québec
- Make procurement processes more efficient by encouraging public agencies to take advantage of all the regulatory framework's opportunities and make full use of management information

#### Developing innovative approaches to assess healthcare technologies

The Government of Québec has backed important methodological work done by the INESSS aimed at adapting and optimizing evaluation methods for disruptive technologies. In this way, the INESSS supports the mission of the Innovation Office by evaluating the added value of certain disruptive or innovative technologies with groundbreaking impacts, before their implementation. This evaluation can also be done after implementation.

The unit founded with the support of the Strategy will continue its evaluation activities in line with the vision and guidelines established by the Strategic Innovation Committee. The Ministère de la Santé et des Services sociaux will provide ongoing support for the evaluation activities guiding the INESSS's reimbursement or public coverage decisions for non-pharmaceutical technologies.

The 2022–2025 Québec Life Sciences Strategy will also promote the development of a methodology adapted to assessing innovations early. Eventually, this methodology will be used to evaluate the relevance of the innovation and list the information to collect. These activities will support government interventions in the industry.

#### Accelerating access to innovative medicines

The approval process for medicines and advanced therapies is well-defined and involves different organizations that are active in market approval and reimbursement decisions. Several steps in the process may result in delays before entry on the formulary of publicly covered medications.

#### Support ongoing INESSS efforts in assessing medications

Over the past five years, the INESSS conducted nearly one-third of the drug assessments for entry in Québec's public formulary before Health Canada rendered its decision on the commercialization of the product.

The INESSS participates in Health Canada's alignment pathway, which allows manufacturers to file submissions to Health Canada, Canada's Drug and Health Technology Agency (CADTH), and the INESSS almost simultaneously. These options help companies accelerate the evaluation of their innovative therapies.

The INESSS will continue its efforts to reduce the time between Health Canada issuing a Notice of Compliance and entry on the List of Medications in Québec. It will continue refining its processes and updating its submission guide and manufacturer clinical and financial requirements to constantly adapt to the increasing complexity of evaluations. It will also consider disinvestment in products that have become obsolete over time.

### Supporting Québec's competitiveness in listing medicines following their recommendation by the INESSS

Québec boasts some of the best access to medication in North America. Under the *Act respecting prescription drug insurance* (RLRQ, chapter A-29.01), every person living in Québec must be covered by a public or private drug insurance plan. This act also provides for minimum coverage obligations for every private plan, matching the Régime général d'assurance médicaments (RGAM) List of Medications.

In addition, the patient exception measure covers medicines not listed in the RGAM List of Medications under special and exceptional circumstances. It applies to both public and private plans.

The Ministère de la Santé et des Services sociaux intends to devote the required resources for Québec to maintain its position as a Canadian leader in terms of listing speed for innovative medical therapies. In particular, work will be done to reduce the time between the conclusion of a letter of intent between the pan-Canadian Pharmaceutical Alliance (pCPA) and a manufacturer and its subsequent listing on the RGAM List of Medications and the Liste des médicaments fournis en établissements (list of medications provided in institutions).

The Ministère de la Santé et des Services sociaux also intends to support more letter of intent negotiations under the pCPA and supply better documentation for timelines for completing these negotiations. Québec will remain open to considering new listing agreement models for innovative therapies by considering successful therapeutic outcomes.

### Measure 10 Help Québec companies in their export and internationalization projects

Exporting opens new markets and growth opportunities for Québec companies. It creates wealth and helps support over 1.1 million jobs in Québec. Québec's exports (international and interprovincial) have averaged 46% of its GDP over the past ten years.<sup>13</sup> In 2020, life sciences companies' exports totalled \$3.7 billion. This represents 64.7% of total shipments, exceeding the manufacturing sector's average of 56.3%.

Life sciences companies need to know their target markets well, develop strategic planning, establish partnerships, or hire local experts or resources to export their products and services successfully. Developing workspaces or acquiring companies abroad can also be part of growth strategies for larger companies.

<sup>13.</sup> Institut de la statistique du Québec, Québec input-output model, 2016 data and Institut de la statistique du Québec, compilation, Direction des politiques et de l'analyse économiques, Ministère de l'Économie et de l'Innovation, September 2020.

The Ministère de l'Économie et de l'Innovation has set up two complementary programs to grow Québec companies' involvement in global supply chains. The Programme de soutien à la commercialisation et à l'exportation is designed to help entrepreneurs plan and prepare to export, consolidate or diversify on foreign markets. The ESSOR program supports structured and strategic approaches to internationalization projects.

Investissement Québec International supports companies, particularly those in life sciences, wishing to grow and diversify their products and services sales outside Québec. From evaluating a project's export potential to coaching and identifying business opportunities for preparing and organizing meetings with buyers, Investissement Québec International's services, combined with those from its partners, cover every step in the market development process. The organization can count on its team of experts in Québec and abroad, across over 30 offices in 19 countries and six Canadian cities. These offices report to the Ministère des Relations internationales et de la Francophonie (MRIF) and the Secrétariat du Québec aux relations canadiennes (SQRC).

It has many options for providing financial support for export projects, preparation for internationalization and the structuring of internationalization projects to favour the export of their products.

### Conclusion

Building a vibrant life sciences sector in Québec creates social and economic wealth. The spirit of innovation underlying the expansion of this vast sector is behind the vision of an even more innovative and robust Québec economy. The pandemic has shown how important it is to be well-positioned globally in terms of research as well as the development, transfer, manufacturing and distribution of health products and services. The Québec Life Sciences Strategy calls for more collaboration between all stakeholders, the health and social services network, research centres, and the companies and organizations active in the sector.

## APPENDIX

### Québec Life Sciences Strategy — 2017-2022 Budgetary framework (highlights)

In 2017, Québec adopted the Québec Life Sciences Strategy to capitalize on this critical industry in the Québec economy and promote its growth. Several concrete actions were implemented, in keeping with new business models based more on partnerships, outsourcing and the development of integrated solutions.

The first financial framework for the Strategy was an investment of \$205 million. Additional funding totalling \$186.5 million has since been added. This was announced in the March 2018 and March 2020 Québec economic plans and the November 2020 financial update.

Most of the actions planned in 2017 were implemented, and the Strategy's key targets are on track to be met, including the goal of generating over \$4 billion in private investments.<sup>14</sup> We can highlight many major achievements, including: creating funding instruments like BioMed Propulsion and the Fonds d'accélération des collaborations en santé and setting up CATALIS and the Health and Social Services Innovation Office. The following table outlines the goals of these organizations and those of the Innovation Office.

<sup>14.</sup> Private investments from 2017 to 2021 described in the 2017–2027 Québec Life Sciences Strategy include research and development investments by the Patented Medicine Prices Review Board, the identification of capital investments supported or not by the Ministère de l'Économie et de l'Innovation, venture capital investments, other benefits related to the implementation of the Québec Life Sciences Strategy and investments reported by industry.

MESURES PHARES	OBJECTIFS
CATALIS	<ul> <li>Promote Québec's expertise in running clinical trials carried out by companies in Québec.</li> <li>Facilitate collaboration between various stakeholders in the life sciences sector.</li> <li>Accelerate the development of innovative treatments.</li> </ul>
Fonds d'accélération des collaborations en santé	• Support ambitious initiatives to enhance and strengthen public and private collaborative projects.
BioMed Propulsion	<ul> <li>Support Québec companies at critical stages of their growth and ensure they put down roots in Québec.</li> </ul>
Health and Social Services Innovation Office	<ul> <li>Define expectations for the health and social services network.</li> <li>Coordinate innovation integration work.</li> <li>Support demonstrations of the value of the selected innovations to contribute to Québec's growth and competitiveness.</li> </ul>
Fonds de soutien aux innovations en santé et services sociaux	<ul> <li>Accelerate the adoption of promising technologies by supporting impact analyses with clinicians and patients.</li> </ul>

# Québec Life Sciences Strategy — 2022-2025 Budgetary framework

The Québec Life Sciences Strategy has an envelope of \$211 million, including new funding of \$110 million over three years. During the same period, companies in the sector will also be able to access financial support estimated at \$569 million, including \$375 million financed by contributions from the Fonds du développement économique du Québec and \$70 million for the Impulsion PME and BioMed Propulsion programs. Additionally, Investissement Québec's equity contribution will total \$200 million.

STRATEGIC PRIORITIES	NEW CONTRIBUTIONS (\$M)				CURRENT CONTRIBUTIONS (\$M)
	2022-2023	2023-2024	2024-2025	3-YEAR TOTAL	3-YEAR TOTAL
<b>Strategic priority 1 –</b> Generate synergies to address major health challenges	5.4	23.4	19.4	48.2	8.8
<b>Strategic priority 2 –</b> Develop human capital and attract talent	1.3	1.9	1.9	5.1	—
<b>Strategic priority 3</b> – Support the creation and growth of innovative businesses	8.7	14.4	14.4	37.5	_
<b>Strategic priority 4</b> – Attract and execute investment projects	1.6	2.0	2.0	5.6	85.8
<b>Strategic priority 5</b> – Spur the commercialization of innovations	3.0	3.3	7.3	13.6	6.0
GRAND TOTAL — 2022-2025 Strategy	20.0	45.0	45.0	110.0	100.6

