



2021–22  
**Departmental Results Report**

**Innovation, Science and Economic  
Development Canada**

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## From the Ministers

It is our pleasure to present the 2021–22 Departmental Results Report for Innovation, Science and Economic Development Canada (ISED).

Over the past year, the various teams and organizations in the ISED Portfolio have worked hard together to make Canada a global innovation leader and build an economy that works for everyone.

Throughout the COVID-19 pandemic, supporting individual Canadians and Canadian businesses remained ISED's highest priority. The Strategic Innovation Fund (SIF), the largest direct to business innovation program in the Government of Canada, delivered strategic and targeted investments to promising firms, investing in cutting-edge, flexible and rapid-production capabilities to significantly strengthen Canada's health security while creating resilient supply chains. These included three new projects in 2021-22 that represented \$267.9 million in SIF contributions towards total project costs of \$519.8 million. Further long-term investments will be realized, with the Government of Canada committing in Budget 2021 to continue the growth of the life sciences sector, directing SIF to dedicate \$1 billion over seven years towards supporting state-of-the-art domestic life sciences and bio-manufacturing firms—important components of Canada's plan to build domestic capacity and long-term pandemic preparedness while driving economic growth, competitiveness, and job creation.

As Canada's economy continued to recover, ISED worked to ensure that no community was left behind. From the outset of the pandemic, Canada's Regional Development Agencies (RDAs) have helped businesses weather COVID-19's economic impacts and find innovative solutions to pursue their growth. Through the \$2 billion Regional Relief and Recovery Fund, the RDAs provided needed support to help businesses face pandemic hardships and preserve more than 156,000 jobs. As regional economies emerged from the pandemic in 2021-22, the RDAs shifted their focus to recovery, including delivering over \$2 billion through a series of recently launched initiatives from Budget 2021. As RDAs transitioned out of the ISED portfolio in Fall 2021, these initiatives remain drivers for a diverse and inclusive recovery by supporting hard-hit sectors, businesses and communities across Canada. To further support small businesses across the country, the Canada Small Business Financing Program facilitated access to more than 5,000 loans worth more than \$1 billion for start-ups and small businesses that might otherwise have difficulty accessing capital to expand and grow.

Canada's tourism sector and related travel, entertainment and hospitality industries were particularly hard-hit by the COVID-19 pandemic. Budget 2021 established the Tourism Relief Fund (TRF) with a \$485 million regional stream—delivered by the Regional Development Agencies (RDAs)—to support tourism businesses and

organizations across Canada as they adapt their operations to meet public health requirements while investing in products and services to facilitate their future growth.

ISED also implemented several prominent measures to ensure that all sectors across Canada can participate in the digital economy. Access to—and confidence in—digitally enabled technologies are absolutely vital for economic opportunity, competitiveness and growth. To put Canada on a faster digital track, ISED launched the \$1.4-billion Canada Digital Adoption Program, aimed at helping up to 160,000 businesses to take their business online, improve their e-commerce presence and digitalize their operations.

In addition, the department continued to support the unique needs of rural communities across Canada to work towards long-term and sustainable growth. Increasing access to reliable high-speed Internet helps every Canadian's quality of life—especially those living in rural, remote and underserved communities. ISED continued to support the expansion of high-speed internet and broadband access, with a special emphasis on rural, remote and Indigenous communities. For example, the Connect to Innovate Program (CTI) projects continue to roll-out across the country. As of March 31, 2022, more than 199,000 households in 766 communities are experiencing the benefits of improved connectivity, including 93 Indigenous communities. Through the Universal Broadband Fund, ISED also partnered with the Governments of Ontario, British Columbia, Alberta and Newfoundland and Labrador to co-invest in connectivity projects which will help achieve the national target of connecting 98% of Canadians by 2026 and 100% by 2030. These partnerships represent over \$1.7 billion towards delivering universal connectivity.

A sustainable, green and growing economy is also a key ISED priority. SIF continues to accelerate the transition to a low-carbon future by supporting the development of green technologies and improving manufacturing processes. To this end, the Net-Zero Accelerator (NZA) was launched as an \$8-billion initiative to decarbonize high industrial emitters, accelerate industrial transformation, and help Canada achieve a net-zero economy by 2050. With early wins, the NZA initiative has already contributed roughly \$1 billion towards these funding priorities through eight projects that will help position Canada as a net-zero economy leader. These projects will enable the development and acceleration of greener aircraft, cleaner steel production, carbon capture technology, electric vehicles, and emerging nuclear technology for Canada.

A diverse economy is a strong economy, yet entrepreneurs and business owners from under-represented segments of the population face systemic barriers to growing their businesses. To overcome these barriers, ISED continued to promote and deliver initiatives such as the Women Entrepreneurship Strategy, the Black Entrepreneurship Program, and tailored support for Indigenous peoples. The Futurpreneur Canada initiative provided mentorship to 1,237 young entrepreneurs across Canada. It also issued 934 loans, 413 of which were to young female entrepreneurs and 39 were to

Indigenous entrepreneurs. These programs facilitate access to capital, support professional development and mentoring, and enable the scaling up of businesses for these groups, helping to ensure that economic growth benefits all Canadians.

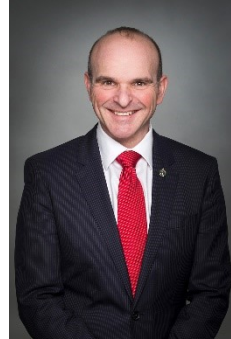
We invite you to read this report to learn more about how ISED and its portfolio partners are working with and for Canadians to position Canada as a leader in the global economy.



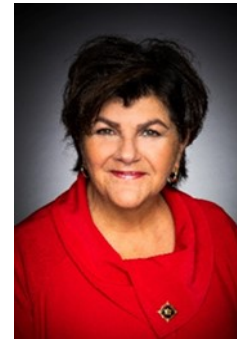
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Minister of Innovation,  
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**The Honourable  
Mary Ng**  
Minister of Small  
Business, Export  
Promotion and  
International Trade



**The Honourable  
Randy Boissonnault**  
Minister of Tourism,  
Associate Minister of  
Finance



**The Honourable  
Gudie Hutchings**  
Minister of Rural  
Economic Development





## **Results at a glance**

As Canadians continued to face—and prepared to move beyond—the global COVID-19 pandemic, ISED remained committed to fostering conditions for investment, enhancing Canadian innovation, and driving growth in key sectors to progress through recovery and meet global challenges of the future. ISED and Portfolio partners also continued to work together to future-proof the Canadian economy through strategic actions and investments, including support for Canadian businesses and entrepreneurs to strengthen their competitiveness in the digital economy.

### **Leveraging science excellence and technology to protect the health of Canadians**

In 2021–22 ISED contributed to government-wide efforts to foster recovery in key areas, such as health, green economy, competitiveness, and inclusion. Key initiatives to protect the health of Canadians and be prepared to fight future pandemics included leveraging science excellence to support Made-In-Canada biomanufacturing technologies and domestic facilities, and supporting industries all along the health product development and manufacturing value chain.

### **Supporting the sustainability and growth of Canadian SMEs**

In 2021–22, ISED prioritized the recovery, growth and sustainability of Canadian businesses of all sizes. The Department supported Canadian businesses from every sector in their efforts to rebuild and renew following the impacts of the pandemic. ISED invested in innovation ecosystems across the country to help industries bolster job creation, adopt new technologies, and scale-up growth and marketing opportunities to compete globally. The Department also continued investing in training for workers to help build a stream of talent needed by Canadian businesses to strengthen their competitiveness and innovation. Key initiatives in recovery and growth included several programs to support Canada’s tourism and related travel, hospitality and entertainment sectors that were particularly hard hit by the pandemic.

### **Future-proofing the Canadian economy**

In 2021–22 ISED focused on strategic initiatives to strengthen and support areas of Canadian advantage to help industries transition to a stronger economic future. The Department supported high growth potential and innovative firms to help them stabilize, grow and compete on the global scale, while also continuing to work with Canada’s traditional economic sectors to preserve their competitive edge in the global economy. ISED’s Strategic Innovation Fund (SIF) continued to serve as a flagship program to support large-scale initiatives that create high impact collaboration and foster a culture of innovation.

## **Shaping a more equitable and diverse Canadian economy**

The Department prioritized actions in 2021–22 to build a more inclusive Canadian economy, to maximize the contribution of all population sectors, and ensure that no one gets left behind as Canada rebuilds. This entailed continuing to foster a culture of diversity, representation and inclusivity in businesses to empower and engage traditionally underrepresented groups. The Department continued to implement the 50-30 Challenge as a framework to accelerate diversity actions already taking place in many Canadian organizations and to encourage other Canadian organizations to adopt practices that improve equity. Measures in 2021–22 were aimed at fostering the development of Canadian talent. They included programs to support work-integrated learning for post-secondary students and recent graduates in participating businesses. This built effective partnerships between employers and training providers and facilitated the acquisition of skills to meet changing demands in the workplace.

## **Fostering a more resilient and sustainable economy**

Enabling a resilient economy includes accelerating the transition to sustainability and net-zero greenhouse gas emissions. ISED will prioritize bold recovery measures to build a more competitive, sustainable and resilient economy. In 2021–22, the Department rolled-out the Strategic Innovation Fund's (SIF) Net Zero Accelerator, a \$8 billion federal investment over five years, which aims to rapidly expedite decarbonization projects with large emitters, scale up clean technology and accelerate Canada's industrial transformation across all sectors. The Department leveraged economic benefits from defence and major Canadian Coast Guard procurements through the Industrial and Technological Benefits (ITB) Policy to support the growth of Canadian companies, including SMEs, drive innovation and R&D, and promote skills development and training to advance employment opportunities for Canadians in the new economy. ISED also continued to implement the National Shipbuilding Strategy Value Proposition (NSS VP) to accrue Canadian employment and industrial capacity benefits from investments in federal fleet expansion and modernization. Through Sustainable Development Technology Canada (SDTC), ISED continued to help Canadian companies develop and deploy globally competitive clean technology solutions that address environmental challenges related to climate change, clean air, clean water, and clean soil. The Clean Growth Hub was also renewed for three years to service as the federal clean technology focal point.

## **Supporting Canada's transition to the digital economy**

The COVID-19 pandemic rapidly brought a new paradigm for Canadian businesses, drastically changing how they connect with clients, do business and receive government services. ISED supported the transition towards a digital economy: enhancing the digital services it provides to Canadian businesses; helping Canadians acquire vital digital skills; supporting the adoption of emerging digital technologies; and modernizing and simplifying regulations to help businesses shift towards digital ways of doing business.

To facilitate access to Government services, ISED supported implementation of the Canada Business Account—a single common service window for business-facing services across the Government of Canada. To support the growing reliance of Canadian consumers on Canada’s digital networks, ISED increased investments in digital infrastructure and services. In 2021–22, ISED continued to manage spectrum to ensure that Canada meets evolving spectrum demands, including the deployment of next generation wireless services such as 5G. Increased funding for the Universal Broadband Fund (UBF) delivered on commitments to improve rural and remote Internet infrastructure to help ensure all Canadians have access to fast and reliable Internet, no matter where they live. ISED continued to implement the \$585 million Connect to Innovate (CTI) program that is bringing improved Internet speeds to rural and remote communities in Canada.

### **Advancing the biomanufacturing and life sciences industry in Canada**

At the outset of the COVID-19 pandemic, Canada had limited domestic capacity for the development and manufacturing of vaccines, therapeutics and other medical countermeasures. To strengthen Canada’s biomanufacturing sector, ISED has been working closely with Health Canada, the Public Health Agency of Canada (PHAC), the National Research Council (NRC) and federal research funding organizations to deliver the Biomanufacturing and Life Sciences Strategy. Announced in 2021, this Strategy aims to grow a strong, competitive domestic life sciences sector with cutting edge biomanufacturing capabilities, helping to ensure preparedness for pandemics and other health emergencies. The Strategy has five pillars: strong and coordinated governance; strengthening research systems and talent pipelines; growing companies by investing in existing and emerging areas of Canadian strength in the industry; building public assets to increase Canada's domestic biomanufacturing capacity; and enabling innovation through Canada’s best-in-class regulatory system and world-class expertise and infrastructure for clinical trials.

Through this Strategy, in 2021–22, ISED continued to support Canada's long-term pandemic preparedness via funding to SIF projects that targeted investments in clinical trials and increased bio-manufacturing capacity. Furthermore, ISED helped to launch the Biosciences Research Infrastructure Fund (BRIF) via the CFI to address bioscience infrastructure needs of postsecondary institutions and research hospitals.

ISED also helped to establish the necessary interdepartmental/interagency governance to execute the Strategy, as well as needed oversight, guidance and progress-tracking mechanisms for the ongoing roll-out of the Strategy and the next phases of its activities.

<b>Total actual spending for 2021–22</b>	<b>Total actual full-time equivalents for 2021–22</b>
<b>3,094,863,744</b>	<b>5,826</b>

For more information on ISED’s plans, priorities and results achieved, see the “Results: what we achieved” section of this report.

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## Results: what we achieved

### Companies, Investment and Growth

#### Description

Provide support to help grow small, medium and large Canadian businesses into globally competitive, high-impact firms; ensure a fair and competitive marketplace; promote the conditions that support competitive prices and product choices, including in the telecommunications sector; simplify government programming, promote efforts to reduce red tape for businesses, putting in place the right conditions for market-driven innovation and promoting inclusive growth and an economy that works for everyone; reduce barriers to the movement of goods, services, capital and labour; and grow Canada's tourism sector.

#### Results

**Departmental Result:** Canadian businesses and industries are innovative and growing

#### Investing in strategic innovations to strengthen Canada's productivity and competitiveness

ISED plays an important role in supporting business research and development (R&D) to foster innovation across the country.

The Strategic Innovation Fund (SIF) is one of the flagship ISED programs to support Canadian innovation. SIF funds large-scale, transformative and collaborative projects that help position Canada to prosper in the global knowledge-based economy. Since the program's launch in 2017, SIF has entered into agreements to invest \$5.1 billion towards projects totaling \$54 billion. These projects have secured commitments by Canadian businesses to create and maintain more than 97,000 jobs, invest more than \$17 billion in R&D and fill more than 23,000 four-month co-op student positions.

In 2021–22, SIF signed 16 new contribution agreements representing \$1.76 billion in federal government funding towards \$8.34 billion in total project costs. These projects secured approximately \$4 billion in R&D investments and commitments to create and maintain 18,000 jobs and 4,000 four-month co-op student positions.

In support of the Government's Biomanufacturing and Life Sciences Strategy, in 2021–22 SIF continued funding projects to strengthen Canada's long-term pandemic preparedness through targeted investments in clinical trials and increased bio-manufacturing capacity. In 2021–22, SIF executed three new projects to support the development of Canada's biotechnology sector, representing total SIF contributions of \$267.9 million toward total project costs of \$519.8 million. These targeted investments contributed to developing made-in-Canada solutions such as vaccines and treatments

in preparation for future pandemics, while also helping to commercialize made-in-Canada solutions to COVID-19.

In 2021–22, SIF also sharpened the requirements for funding recipients to advance gender parity and inclusive workplaces as well as environmental sustainability. As part of the Gender and Diversity Plan, the program now encourages participation in the 50/30 Challenge by providing firms with greater prescription on gender and diversity plans and expectations for applicants.

### **Some examples of SIF investments in Canadian innovation, productivity and growth:**

- \$131.6 million towards Honda Canada Inc.'s \$1.4 billion project to retool its manufacturing operations to launch the next generation of hybrid-electric vehicles in Alliston, Ontario.
- \$190 million towards CAE Inc.'s \$858 million project to implement a global research and development program in digital technology, electric aviation, and health care over the next five years.
- \$50 million towards The Lion Electric Co.'s \$184.3 million project for the establishment of a highly automated battery-pack assembly plant in Saint-Jérôme, Quebec.

### **Improving federal support to business through improved digital service delivery**

Canadian businesses, inventors and entrepreneurs depend on convenient, secure and reliable digital access to federal programs and services that offer information, advice and support vital to innovation, competitiveness and growth.

In 2021–22, ISED continued to make improvements in the design and delivery of digital government for businesses under its Canada Digital Adoption Program. To ensure that digital offerings reflect the rapidly evolving needs and expectations of users of government services, the Department worked extensively with businesses across Canada to research and document service needs. This led to the design of a “Service to Business Experience Vision” to set priorities for digital service improvement and innovations. This included measures to implement the Canada Business Account, which enables users to navigate government service sites, authenticate their identity for access to services, and manage a broad range of transactions. The Department also implemented an automated Digital Identity Verification Service in support of the March 3, 2022 launch of the Canada Digital Adoption Program. By the end of the fiscal year, more than 2,033 small and medium-sized enterprises (SMEs) were registered to successfully authenticate their identity to ISED.

ISED also continued to support the adoption of the Canada Revenue Agency (CRA) Business Number (BN) as a standard identifier for services to business across the Government of Canada. By March 31, 2022, a total of 47 federal departments and agencies—including ISED—had signed agreements to access BN information from

CRA. In addition, 19 departments were using ISED's BN Validation Lookup Tool to validate BNs—a process that enables federal services to be obtained more efficiently through a simple “tell-us-once” approach.

### **Maximizing Canadian employment and industrial benefits through procurement**

As part of Canada’s Defence Procurement Strategy, ISED continued to apply the Industrial and Technological Benefits (ITB) Policy to leverage economic benefits from defence and major Canadian Coast Guard procurements to contribute to jobs, innovation and economic growth across the country. In that regard, the portfolio in 2021–22 amounted to close to \$44 billion of economic benefit obligations, of which \$28.9 billion was complete by the end of the fiscal year. Resulting activities include direct work for Canadian firms on platforms and services being procured, export opportunities, and R&D with Canadian post-secondary institutions and SMEs. This helps support a strong and globally competitive Canadian defence industry underpinned by Canada's Key Industrial Capabilities. More broadly, the Policy is making an impact from coast to coast and is estimated to contribute approximately 41,000 jobs and more than \$4.6 billion annually to Canada’s gross domestic product.

ISED also continued to implement the National Shipbuilding Strategy Value Proposition (NSS VP) to accrue Canadian employment and industrial capacity benefits from federal investments in fleet expansion and modernization. As of December 2021, Irving Shipbuilding Inc. (ISI) and Seaspan’s Vancouver Shipyards (VSY) had accrued more than \$31 million in combined NSS VP obligations, and had identified or completed more than \$36 million in investments. These investments have focused in particular on skills development to support the sustainability of Canada’s shipbuilding industry.

### **Developing and managing modern, secure telecommunications and internet systems for Canada**

Local and global business is increasingly being conducted online, so high-speed Internet access is the foundation of a modern digital economy. Many Canadian consumers increasingly rely on the Internet to work from home, learn from a distance, buy essential products, and access social services. This continuing shift to an online world has reinforced the need for reliable and well-regulated telecommunications.

As Canada’s spectrum regulator, ISED continues to regulate the use of wireless frequencies and enable the roll-out of high-quality networks for the benefit of all Canadians. Under the “Preparing for a New Generation of Wireless Technology” initiative, ISED is modernizing its equipment and developing innovative tools and systems for spectrum management, particularly in the context of fifth-generation terrestrial wireless networks (5G) and new satellite technology. To ensure that ISED’s regulatory functions and system monitoring capabilities keep pace with evolving technologies, in 2021–22, ISED took initial delivery of 5G compatible spectrum field monitoring equipment. ISED’s Spectrum Management Officers also received training on

how to properly use 110 new handheld spectrum analyzers. The Department also established the requirements and designed the system architecture for cloud-based infrastructure and continued with development of cloud-based systems and tools to improve spectrum management processes and streamline workload through such applications as automated data validation and dynamic spectrum access.

In 2021–22, ISED continued to manage spectrum to ensure that Canada meet evolving spectrum demands, including the deployment of next generation wireless services such as 5G. This included holding a 3500 MHz spectrum auction and preparing for 3800 MHz and mmWave spectrum. The 3500 MHz auction is a key milestone in the deployment of 5G services in Canada. The increased number of connections and data-intensive applications expected with 5G will require large amounts of spectrum in a variety of frequency bands. In Canada, the 3500 MHz band has historically been used to provide fixed wireless Internet services, but in the past few years, it has been globally recognized as key for 5G networks as it provides both coverage and capacity for a wide array of new applications.

ISED also supported Canada's signing of the General Coordination Agreement Treaty with the U.S. on modernized spectrum coordination, designed to provide timely and responsive updates to spectrum coordination agreements along the Canada-U.S. border.

Through the Communications Research Centre, ISED developed a geospatial platform-based tool which is being used to assess the expected broadband Internet performance of proposed fixed wireless access deployment applications to the Universal Broadband Fund program, focused on Canadians in rural and remote areas.

Under the CyberSecure Canada program, ISED worked to improve cyber security among micro and small organizations, as well as SMEs that have some IT capacity. In total, ISED reached more than 400 stakeholders and held 300 meetings and webinars throughout the year. It also launched a new e-learning series to help SMEs increase their knowledge of cyber security and be better prepared for certification.

Canada's success in the digital economy depends on leveraging the country's diverse talent and helping young people prepare for studies in digital-relevant disciplines. In support of this, CanCode received new funding of \$80 million over three years starting in 2021–22. In the four years since its initial launch, the program has reached more than 4.5 million students and 220,000 teachers across Canada, to equip Canadian youth with the skills they need to be prepared for further studies, including advanced digital skills and science, technology, engineering and math (STEM) courses.

In 2021–22, the Digital Skills for Youth (DS4Y) program—which connects underemployed post-secondary graduates with small businesses and not-for-profit organizations where they can gain meaningful work experience to help them transition to career-oriented employment—received an additional \$50.5 million to support youth



who were significantly impacted and faced unprecedented challenges due to the COVID-19 pandemic. The total funding for the program was \$64.3 million and supported more than 2,620 youth internships—well beyond the original target of 630 youth interns. During the pandemic, the program increased its support to employers to up to 100% of the eligible wage costs and increased the funding for internships to \$30,000, up from the \$15,000 that was planned as part of the Youth Employment and Skills Strategy (YESS) modernization. This allowed employers who were struggling financially the opportunity to hire youth to help their businesses grow while also covering the cost of training and developing youth interns.

In 2021–22, ISED continued to support the annual Prime Minister's Awards for Teaching Excellence and Teaching Excellence in STEM, which have recognized exceptional elementary and secondary school teachers in all disciplines since 1994. Teaching Excellence Award recipients are honoured for their remarkable achievements in education and for their commitment to preparing their students for a digital and innovation-based economy. The Teaching Excellence in STEM Awards, which were introduced in 2017, celebrate outstanding Science, Technology, Engineering, and Mathematics teachers who help develop the culture of innovation Canada needs today, and in the future. More than 1,700 teachers have been honoured to date.

### **Helping Canadian businesses and entrepreneurs stay at the forefront of innovation and competitiveness**

Supporting enhanced competitiveness and leveraging key sectors where Canada has a competitive advantage is key to paving the way to economic recovery and future growth and prosperity. By embracing areas of economic opportunity across key sectors and building on existing strengths through dedicated funding and support to Canadian businesses, ISED in 2021–22 continued to move Canada towards recovery and a stronger economy.

ISED's Global Innovation Clusters (GIC), formerly known as the Innovation Superclusters Initiative, continued to co-invest with industry to build accelerated, innovative ecosystems that will take innovators further, faster through collaboration. The Global Innovation Clusters bring together experts in their respective fields to invest in promising projects, help firms scale up, create high-quality jobs, and position Canada as a global leader in the innovation space. Budget 2022 provided an additional \$750 million over six years for the program. As of March 31, 2022, the clusters have approved more than 490 projects involving more than 2,100 partners across all five clusters, more than 75 percent of which were small and medium sized enterprises (SMEs). Through these projects, the Clusters were able to leverage \$1.60 of non-GIC funding for every dollar contributed by the program (exceeding the program's original target of \$1.20 for every dollar contributed by the program). As of March 31, 2022, the Clusters are on track to create 23,877 full-time equivalent jobs by the end of 2022–23 (surpassing the program's five-year target of 15,000 jobs created by 2023). In addition to creating thousands of high-quality jobs, the Clusters are anticipating the generation of more than 850

Intellectual Property rights, such as patent applications, copyright, trademarks and trade secrets, across 114 cluster projects.

In 2021–22, Innovative Solutions Canada (ISC) continued to create pathways to increase procurement opportunities for innovative Canadian businesses including small and medium sized enterprises (SMEs). An area of focus for the program was supporting the response to the COVID-19 pandemic. ISC partnered with the National Research Council, the Public Health Agency of Canada, Health Canada and others to develop COVID-19-themed challenges to meet the immediate needs of the health care system and launch Calls for Proposals for prototype testing and bringing their innovations to both commercial markets and Government acquisition programs.

As part of the pandemic response, ISC programming was successful in leveraging Canadian innovations, such as: recycling technologies for used, disposable personal protective equipment (PPE) like masks, gloves, gowns; home diagnostic kits for Covid-19; and low-cost sensor systems for Covid-19 patients to monitor temperature, blood pressure, pulse, respiration rates and peripheral capillary oxygen saturation. In addition, prototypes were tested by government organizations, including: reusable plastic PPE face masks; a laser disinfection system ideal for high traffic gateway places (e.g. airports, train stations) and an artificial intelligence system to respond to cyber-security threats amplified by the pandemic due to remote work.

In 2021–22, ISED supported the launch of the Canada Digital Adoption Program (CDAP), a \$4 billion initiative designed to help businesses cover the costs of implementing new digital technologies and thereby enhance their productivity and competitiveness. Comprised of \$1.4 billion in grants and advisory services to SMEs and up to \$2.6 billion in loans from the Business Development Bank of Canada, CDAP is designed to reach up to 160,000 Canadian SMEs over four years, with funding and services tailored to their digital adoption needs. Under CDAP, the Boost Your Business Technology grant stream achieved an operational foothold with over 2,600 SME accounts created prior to year's end and 116 qualified digital advisory firms ready to offer their services, representing nearly 700 digital advisors.

Canadian businesses and consumers are interacting in an increasingly global, borderless and digital marketplace. With growing competition, Canadian businesses must protect and leverage their capital, including their intellectual property (IP).

The Intellectual Property (IP) Centre of Expertise (CoE) continued to provide training, advisory, and collaboration services to a total of 36 federal organizations, to equip their program staff with IP knowledge that enables them to support their business clients and innovators while also meeting the internal needs of their organization. In 2021–22, ISED's IP CoE delivered 20 IP training sessions to over 940 public servants, drawn from 24 different federal organizations. The IP CoE also expanded the Federal Intellectual Property Partnership (FIPP) community of practice to facilitate important IP

conversations and exchange of insights and best practices among 215 public servant members representing 33 federal organizations.

ISED also continued to operate ExploreIP: Canada's IP Marketplace, an online tool for businesses, entrepreneurs and innovators that makes it easier for them to search for and discover IP held by public sector institutions. This enables them to leverage ground-breaking research and discoveries while also facilitating collaboration among enterprises and entrepreneurs. More than 60 public sector organizations now use ExploreIP to showcase more than 4,700 IP assets.

ISED also launched ElevateIP, a new \$90 million, four-year program that is helping Business Accelerators and Incubators (BAIs) to provide start-ups with access to professional Intellectual Property (IP) services.

In 2021–22 ISED enhanced its Business Benefits Finder—a single window for Canadian businesses to discover relevant federal, provincial and territorial programs and services that can support business innovation and growth. The Finder was expanded, in collaboration with the U15 Group of Canadian Research Universities, to help business identify researchers and facilities at Canadian post-secondary institutes who are available to help businesses with research and development.

Via the Accelerated Growth Service (AGS), ISED also continued to provide tailored support to Canadian businesses by working with partners across government to connect firms to the key supports they need. In 2021–22 AGS assisted more than 2,400 firms in their efforts to navigate government supports and secure advisory services that will support their innovation and growth.

ISED also continued to support BizPaL, a convenient nationwide intergovernmental service to help business find and gain access to business licences and permits from all levels of government. In 2021-22, BizPaL had a total of 320K visits and based on those projections, it helped save a total of \$19.7Million to Canadian businesses.

The Canada Small Business Financing Program (CSBFP) continued to be an important part of the government's support for small and medium-sized businesses across Canada, including those in the tourism and related sectors. In 2021–22, the CSBFP facilitated access to 5,004 loans worth \$1.23 billion in financing to small businesses. Start-ups and businesses operating less than one year continued to receive the majority of loans at \$822.8 million (67%). Accommodation and food services and retail trade were the two largest industry sectors, representing 58% percent of the value of loans registered.

The Venture Capital Catalyst Initiative (VCCI) continued to play an important role in supporting innovative new business ventures by increasing the availability of capital for Canada's high-potential innovative firms, including those in the life sciences sector and for entrepreneurs from underrepresented groups, such as women and racialized communities. This is being advanced through three new streams under VCCI: a funds-

of-funds stream—a type of investment vehicle—investing up to \$350 million in funds-of-funds; a life sciences stream investing up to \$50 million in VC funds primarily focused on investing in high-growth potential technology companies in Canada's life sciences sector; and an inclusive growth stream, investing up to \$50 million to support increased access to VC for underrepresented groups, such as women and racialized communities.

### **Reviving Canadian tourism based on regional strengths**

Canada's tourism sector—which generated \$105.1 billion in revenue in 2019—and related travel, entertainment and hospitality industries were particularly hard-hit by the COVID-19 pandemic. Following government measures in 2020–21 to support the basic survival of these vital sectors across Canada, and with successes against the pandemic enhancing the prospects of more favourable travel, in 2021–22, ISED began a transition toward recovery, focusing on the most critical needs of the sector.

Budget 2021 established the Tourism Relief Fund (TRF) with a \$485 million regional stream—delivered by the Regional Development Agencies (RDAs)—to support tourism businesses and organizations across Canada as they adapt their operations to meet public health requirements while investing in products and services to facilitate their future growth. This was complemented by a \$15 million national priorities stream to be delivered by ISED.

In 2021–22 ISED engaged with stakeholders in the tourism sector to begin developing a new post-pandemic Federal Tourism Growth Strategy. The strategy will build on the Canadian Experiences Fund (CEF) that finances projects and supports communities as they develop destinations and create and enhance tourism products.

**Departmental Result:** Businesses, investors and consumers are confident in the Canadian marketplace, including in the digital economy

Throughout 2021–22, ISED—through the Competition Bureau (the Bureau)—continued to focus on protecting and promoting competitive markets in Canada. This included action by the Bureau against more than a dozen businesses to stop potentially deceptive marketing practices, such as false and misleading environmental claims, anti-competitive activity and deceptive claims related to the pandemic, and bid-rigging in the public and private sectors. It also included review of mergers to protect the integrity of a competitive marketplace, in such prominent fields as the oil and gas, waste, agricultural and retail gasoline industries. The Bureau also took action to strengthen competition in pharmaceuticals and telecommunications.

With an ongoing commitment to champion policies aimed at building a culture of competition, the Bureau hosted an international Competition and Growth Summit, bringing together thought leaders to discuss the pivotal role competitive markets play in fostering inclusive economic growth. ISED wrapped up its role as President of the International Consumer Protection and Enforcement Network—a global group tackling

key issues in the digital economy, and continued work with the Organisation for Economic Co-operation and Development (OECD) to advance global understanding of gender-inclusive competition policy.

The Bureau also established a new Digital Enforcement and Intelligence Branch known as CANARI (Competition through Analytics, Research and Intelligence), which strengthens the ability to protect and promote competition across Canada by leveraging proactive intelligence gathering, data analytics, behavioural economics, and insights.

The Department also continued to administer the Investment Canada Act, the central element of Canada's framework to provide for the review of foreign investments in Canada by non-Canadians in a manner that encourages investment, economic growth and employment opportunities in Canada, and to provide for the review of investments in Canada by non-Canadians that could be injurious to national security. In 2021–22, 1,255 filings were submitted and certified under the Act, up from 825 in 2020–21 and 1,032 in 2019–20. This included eight applications for net benefit review, all of which were approved as being of likely net benefit to Canada, and covering Canadian businesses valued at \$31.5 billion.

Through the Contribution Program for Non-Profit Consumer and Voluntary Organizations, ISED provided funding to 15 consumer advocacy organizations across Canada to carry out research on matters of consumer and business concern such as: digital consumer protection; emerging consumer issues as a result of COVID-19; sustainable consumption; and other factors that to help inform consumer protection and awareness priorities.

Through Corporations Canada, ISED continued to make progress in 2021–22 on digitally connecting Canada's business registries with the Multi-jurisdictional Registry Access Service (MRAS). Quebec and Corporations Canada adopted the MRAS digital solution to connect their business registries and exchange information, joining British Columbia, Alberta, Saskatchewan and Manitoba, who adopted the MRAS digital solution in 2020. The MRAS system is making it easier for businesses to register to operate in those provinces, and is supports Canada's Business Registries, a free online search platform of Canadian businesses launched in 2018, that now provides the public with information on over 97% of business corporations in Canada.

In 2021–22, the Office of the Superintendent of Bankruptcy (OSB) continued to maintain an effective Canadian insolvency system, and supported virtual service delivery and compliance oversight given continuing social distancing practices in place due to COVID-19. It concluded consultations on a Comprehensive Review of Directives and Regulations and began to analyze stakeholders' feedback, so as to lay a foundation for future modernization and streamlining of policies and procedures. The OSB also readied its new risk-based and artificial intelligence (AI)-enabled Debtor Compliance Management System for launch early in 2022–23 and delivered a new AI-enabled tool to help Canadians experiencing financial difficulties find the right debt solution.

Measurement Canada continued to protect consumers and businesses and promote economic growth by verifying the accuracy of devices and systems used by business across the country to measure goods throughout various supply chains. In 2021–22, the agency continued its review of the legislation and regulations governing trade measurement to prepare it for future technologies and commercial practices, enable innovation, and reduce regulatory burden, particularly for small businesses. Significant progress was made in drafting requirements for electric vehicle (EV) charging device assessment, approval and certification, supported by consultations with industry, which included 2,900 consumers, monitoring of standards development in other countries, and collaboration with the Organisation Internationale de Métrologie Légale (OIML). Work also continued on the development of requirements for the assessment and approval of other new clean trade measurement technologies. Measurement Canada has engaged with leading European metrology companies and organizations on hydrogen testing methodologies and knowledge sharing testing equipment so that it can increase its capacity to properly approve new clean hydrogen trade measurement technologies. Additionally, Measurement Canada entered into a multi-year agreement with Natural Resources Canada’s Canmet testing facility to accurately test devices for type approval of hydrogen trade measurement equipment.

The Internal Trade Secretariat (ITS) Results continued to provide operational and administrative support to the Committee on Internal Trade, the Internal Trade Representatives, all other CFTA committees and working groups, as well as the Agreement’s dispute settlement processes, in support of efforts to facilitate trade across jurisdictions in Canada.

### **Strengthening Canada’s competitive advantage through advancement of home-grown intellectual property**

The recognition and protection of Canadian-developed intellectual property (IP) is vital to industrial innovation and competitiveness of Canada’s industries and entrepreneurs. In 2021–22, ISED’s Canadian Intellectual Property Office (CIPO) continued to focus on improving the quality and timeliness of its IP services. CIPO’s innovations and service improvements included becoming one of the first IP offices in the world to issue entirely electronic patents, and several operational improvements to support faster and more accurate patent searching and processing.

CIPO also successfully transferred the responsibility of regulating the patent and trademark agent profession to the College of Patent and Trademark Agents (CPATA). In July and August 2021, CIPO conducted a formal public consultation in Canada Gazette, Part I, on a series of amendments to the Patent Rules designed to support the implementation of Canada’s patent term adjustment (PTA) obligation in the Canada-United States-Mexico Agreement (CUSMA), contributing to a better alignment of the Canadian patent framework with international norms by streamlining the patent examination process and reducing overall patent pendency.

To better understand the important role that IP and innovation play in the Government and industry's response to the COVID-19 pandemic, CIPO partnered with the National Research Council of Canada to publish a report – Patenting to Fight Pandemics – which brings to light Canadian patented inventions in the areas of therapeutics and vaccine development, rapid detection and diagnosis, and digital health. The report highlights Canadian innovation undertaken during prior outbreaks, both domestically and abroad, and identifies institutions that have patented inventions related to pandemic mitigation technologies.

Through CIPO, ISED maintained continued collaboration with international counterparts, advocating for Canada's IP interests, advancing IP harmonization, and sharing best practices on pandemic recovery planning. For example, CIPO signed an agreement with France for a Patent Prosecution Highway (PPH) pilot program which allows applicants to speed up the examination of their patent applications in the partner country.

In 2021–22 ISED continued its support to Canadian inventors and entrepreneurs in unlocking the value of their IP when growing to scale. ISED granted funding to three Canadian law schools under the Intellectual Property Legal Clinics Program, one of the elements of Canada's Intellectual Property Strategy. This funding supported the recipients in developing Intellectual Property (IP) legal client activities and services, helping to make IP advisory services more accessible to Canadian businesses, entrepreneurs and innovators while also helping to foster the development of future IP experts by increasing the exposure of university students to IP issues.

ISED also provided funding for the Innovation Asset Collective under the Patent Collective Pilot Program—a \$30 million contribution program aimed at assisting participating SMEs in the data-driven clean tech sector with their IP needs. The Collective has more than 100 full and associate members who, through their participation enjoy access to IP learning activities and resources, advisory services and intelligence reports as well as a patent pool.

Following its initial launch in 2018–19, the Indigenous Intellectual Property Program (IIPP) Grant has continued to support capacity building, education, and awareness-raising activities related to the protection of conventional IP as well as Indigenous knowledge (IK) and Indigenous cultural expressions (ICEs). In 2021–22, funding was provided to five Indigenous organizations to: develop education resources; create new tools, guidance, and policies on the protection of IP, IK and ICEs; engage with their members and communities; and conduct research on domestic and international issues, laws, and policies.

**Departmental Result:** Canada has a clean and sustainable economy

The Government's Strengthened Climate Plan: A Healthy Environment and a Healthy Economy, announced in December 2020, set out a number of measures to help achieve Net Zero emissions in 2050, many of which touch on ISED's portfolio. A growing clean technology sector represents greater opportunities for high quality jobs for Canadians,

and adoption of clean production technologies helps boost Canadian productivity and competitiveness.

Through Sustainable Development Technology Canada (SDTC), ISED continued to help Canadian companies develop and deploy globally competitive clean technology solutions that address environmental challenges related to climate change, clean air, clean water, and clean soil. In 2021–22, SDTC invested \$101 million in clean technology projects and supported a total of 109 new projects across Canada. This included 45 start-up and scale-up projects and 64 firms through SDTC's Seed Fund, which partners with accelerators across Canada to provide grants of \$50,000 to \$100,000 for development, testing and adoptions of clean technologies. SDTC-supported companies collectively raised close to \$3 billion in 2021—as much as the previous three years combined.

In 2021–22, the Clean Growth Hub was renewed for three years and continued to deliver on its mandate as the federal clean technology focal point, helping stakeholders navigate available federal programs and supports across 17 departments and agencies that help advance clean technology innovation and adoption. Last year, Hub supported new 422 clients through its single-window service, proactively engaging clean tech companies that are poised to be leaders in the clean technology sector. The Hub also maintained ongoing relationships with provincial partners such as British Columbia and Nova Scotia to exchange information and facilitate collaboration on clean technology, and developed a Reconciliation, Equity, Diversity, and Inclusion (REDI) Action Plan to provide tailored advice to equity-seeking groups and increase opportunities for diverse stakeholders in the clean technology sector.

In 2021–22, ISED continued to advance the Government's priorities to support decarbonization and grow Canadian cleantech through a variety of initiatives, including the launch of an Integrated Climate Lens Pilot, a Government-wide analytical framework designed to ensure that climate, economic and social considerations are integrated throughout government decision-making. In the year, ISED also established an Industrial Decarbonization Team (IDT) to facilitate the development and financing of transformative projects in Canada's industrial sectors that will help Canada meet its 2030 and 2050 emission reduction targets, while building a more competitive and low-carbon economy for Canada.

ISED also continued to implement the Clean Technology Data Strategy (CTDS) which supports evidence-based decision making on investments and strategies in the clean technology sector. This includes generation, analysis and sharing of data on the contribution of the clean technology sector to the Canadian economy, analysis of federal investments in cleantech projects, and information on Canadian cleantech firms.

To support Canada's transition to a clean economy, SIF continued to emphasize project proposals that support IP-rich firms, help Canada meet its greenhouse gas (GHG) reduction objectives and position Canada's economy to be at the forefront of clean technology development. In 2021–22, SIF made significant progress on objectives of



the new Net Zero Accelerator (NZA) initiative by executing eight contribution agreements, representing \$956 million in federal government funding towards total project costs of \$4 billion. These projects will help Canadian industry adapt to the green economy, support the development of Canadian clean technology, and secure GHG reductions that support Canada's climate objectives. For example, Algoma and ArcelorMittal Dofasco have committed to a GHG reduction of 6 megatonnes per year as a result of their SIF projects. The program also launched a Call to Action for high-emitting sectors in March 2022 to identify and select large, ambitious and innovative proposals that substantially reduce near-term GHG emissions while positioning Canada's industry to be competitive in a global low-carbon economy.

### **Gender-based analysis plus**

In 2021–22, ISED provided support to help grow small, medium and large Canadian Businesses into competitive enterprises in the Canadian and global economy. This especially supported women and underrepresented groups as the investment programs ensured the diverse groups were included and represented. For example, the program Innovative Solutions Canada (ISC) collected the necessary diversity data on the profiles of applicants to the program so they could take the results and focus their efforts on outreach and engagement to underrepresented groups. This resulted in engagements and support to 90 women-owned businesses and 40 indigenous organizations for solutions to COVID-19 challenges their businesses faced across Canada.

### **United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals**

ISED is a key contributor to Canada's efforts to develop the 2030 Agenda National Strategy in support of the UN's 2030 Agenda for Sustainable Development and the UN SDGs. While ISED supports all 17 SDGs, ISED's mandate, programs and initiatives advance action on Industry, Innovation and Infrastructure (SDG 9) to: "build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". Additional SDGs relevant to ISED include Climate Action (SDG 13), Responsible Consumption and Production (SDG 12), Sustainable Cities (SDG 11), and Partnership for the Goals (SDG 17). This core responsibility supports mainly SGD 9, SGD 11, SGD 12, SGD 13 and 17.

### **Experimentation**

ISED has continued to support the use of experimentation as a mechanism to help enhance services and programs, as well as strengthen a culture of evidence-based decision making to the benefit of Canadians. In 2021-22, the Department utilized innovative ways of delivering services and programs to Canadian businesses to better face challenges brought by the pandemic.

ISED also continued to leverage the use of experimentation to foster research collaboration discussions between industry intellectual property holders and relevant stakeholders.

## Results achieved

The following table shows, for Companies, Investment and Growth, the results achieved, the performance indicators, the targets and the target dates for 2021–22, and the actual results for the three most recent fiscal years for which actual results are available.

Departmental results <sup>1</sup>	Performance indicators	Target	Date to achieve target	2019–20 actual results	2020–21 actual results	2021–22 actual results
Canada has a clean and sustainable economy	Clean technology employment in Canada (in numbers)	190,000	December 31, 2025	220,138 <sup>2</sup>	210, 237 <sup>3</sup>	Not available <sup>4</sup>
	Annual incremental reductions in GHG emissions attributable to ISED-supported technologies <sup>5</sup>	Reductions are increased by 1 megatonne per annum through 2025	December 31, 2025	19.3 megatonnes estimated reduction of GHG emissions <sup>6</sup>	22.4 megatonnes estimated reduction in GHG emissions	28.6 megatonnes estimated reduction in GHG emissions <sup>7</sup>

<sup>1</sup> Some results are reported by calendar year as indicated within brackets.

<sup>2</sup> 2019 actual results are preliminary, as identified in Statistics Canada's Environmental and Clean Technology Product Account release from January, 2022.

<sup>3</sup> 2020 actual results are preliminary, as identified in Statistics Canada's Environmental and Clean Technology Product Account release from January 2022

<sup>4</sup> 2021 results expected in December, 2022. Results are provided by Statistics Canada based on a fixed schedule.

<sup>4</sup> Indicator is comprised of aggregate project-level figures from various ISED-supported programs, including the Strategic Innovation Fund (SIF) and Sustainable Development Technology Canada (SDTC).

<sup>6</sup> 2019-20 actual results include only SDTC program data. GHG reductions are presented as estimates due to the fact that differences across projects makes it difficult to determine exact reductions. As a result, forecasts are based on sales, which are not always exact.

<sup>7</sup> 28.6 includes 22.6 megatonnes from STDC and 6 megatonnes from SIF

	Value of Canada's total sales in clean technologies (in dollars)	Year-over-year increase	December 31, 2025	\$21,699,637 <sup>8</sup>	\$23,567,471 <sup>9</sup>	Not available <sup>10</sup>
	Number of ISED-funded projects with a clean technology component that are in progress <sup>11</sup>	172 active projects	March 31, 2022	162 active projects	214 active projects	308 active projects
Canadian businesses and industries are innovative and growing	Value of Business Expenditures on Research and Development (BERD) by firms receiving ISED program funding	Target not specified <sup>12</sup>	Date not set	\$2,240,928,000 (2019)	Not available <sup>13</sup>	Not available <sup>14</sup>
	Revenue growth rate of firms supported by ISED programs, compared to the national average	ISED-supported firms grow faster than the national average	March 31, 2022	7.5% (2019)	-12.1% (2020) <sup>15</sup>	Not available <sup>16</sup>

<sup>8</sup> Results are based on calendar years and include sales in environmental technologies and exclude waste management services. Note that the 2019 sales figure has been updated based on the most recent Survey of Environmental Goods and Services release from March 2022.

<sup>9</sup> Results are based on calendar years. Results include sales in environmental technologies and should exclude waste management services. However, the estimate for waste management services for 2020 is not available, as identified in Statistics Canada's Survey of Environmental Goods and Services release from March 2022. Please use 2020 results with caution as instructed in the SEGS release.

<sup>10</sup> 2021 results expected in April 2023. Results are provided by Statistics Canada based on a fixed schedule.

<sup>11</sup> Indicator is comprised of aggregate project-level data from various ISED-supported programs, including SIF and SDTC. "Active projects" are defined as projects with a work phase start or end date that overlaps with 2021-22 fiscal year.

<sup>12</sup> A target of \$900,000,000 by March 31, 2023 was set through ISED's 2022-23 Departmental Plan.

<sup>13</sup> Data is collected through Statistics Canada's Business Innovation and Growth Support (BIGS) process. There is a 3-year lag for actual, non-preliminary results. 2020 actual results will be available in August, 2023.

<sup>14</sup> Data is collected through Statistics Canada's Business Innovation and Growth Support (BIGS) process. There is a 3-year lag for actual, non-preliminary results. 2021 actual results will be available in August, 2024.

<sup>15</sup> Decline in revenue growth from 2019 to 2020 can be attributed to the global COVID-19 pandemic.

<sup>16</sup> Data is collected through Statistics Canada's Business Innovation and Growth Support (BIGS) process. There is a 2-year lag for actual, non-preliminary results. Actual results for 2021 will be available in August, 2023.

	Canada's rank on the World Intellectual Property Organization's Global Innovation Index	Improve or maintain rank (17/129)	March 31, 2022	17 (2019)	17 (2020)	16 (2021)
	Percentage of BERD funded by the federal government	At least 5%	March 31, 2022	4.2%	4.2%	4.2% <sup>17</sup> (2021)
	Percentage of professional, science and technology-related jobs in Canada's economy	40%	December 31, 2025	34.6%	36.9%	37.4% (2021)
Businesses, investors and consumers are confident in the Canadian marketplace, including the digital economy	Total Business Investment in Canada (in dollars) <sup>18</sup>	\$260 Billion	December 31, 2025	\$228,813,000,000	\$204,636,000,000	Not available <sup>19</sup>
	Canada's score on the World Economic Forum's Global Competitiveness Index	Maintain or improve score	Date not set	79.6%	Not available <sup>20</sup>	Not available <sup>21</sup>
	Growth in patent application filings, trademark filings and industrial	Patents: 35,346 Trademarks: 70,066 Industrial	March 31, 2022	Patents: 37,999 Trademarks: 68,385 Industrial Designs: 7,408	Patents: 37,164 Trademarks: 76,168 Industrial Designs: 8,161	Patents: 39,669 Trademarks: 79,995 Industrial

<sup>17</sup> Statistics Canada data for 2021 is considered provisional. Actual results for 2021 will be available in 2023.

<sup>18</sup> Statistical revisions are carried out regularly in the data source for this indicator. As a result, the target and results are subject to adjustments, and past years' values may differ from those published in previous ISED reports.

<sup>19</sup> 2021 data will be released in late 2022.

<sup>20</sup> A new iteration of the Global Competitiveness Report has not been released since 2019.

<sup>21</sup> A new iteration of the Global Competitiveness Report has not been released since 2019.

	design filings in Canada <sup>22</sup>	Designs: 7,301 <sup>23</sup>				Designs: 9,067
	Percentage of Canadians who shop and bank online	75% of Canadians are banking online by 2025  60% of Canadians are shopping online by 2025	December 31, 2025	Not available <sup>24</sup>	Banking online: 74.9% of Canadians banked online in 2020  Shopping online: 82% of Canadians shopped online in 2020	Banking online: Not available <sup>25</sup>  Shopping online: 88% of Canadians shopped online in 2021 <sup>26</sup>

Financial, human resources and performance information for ISED's Program Inventory is available in [GC InfoBase](#).<sup>i</sup>

### Budgetary financial resources (dollars)

The following table shows, for Companies, Investment and Growth, budgetary spending for 2021–22, as well as actual spending for that year.

2021–22 Main Estimates	2021–22 planned spending	2021–22 total authorities available for use	2021–22 actual spending (authorities used)	2021–22 difference (actual spending minus planned spending)
2,175,130,142	2,174,630,142	2,910,503,905	1,708,233,528	(466,396,614)

Financial, human resources and performance information for ISED's Program Inventory is available in [GC InfoBase](#).<sup>ii</sup>

Variance is primarily due to unused funding for the Strategic Innovation Fund and Innovation Superclusters Initiative, due to timing differences between the original

<sup>22</sup> To ensure all relevant patent applications filed are included in the fiscal year count, applications received have to be processed, captured and accounted for in the system, followed by the data set being reviewed and validated. The entire process currently takes approximately eight weeks or more.

<sup>23</sup> Targets represent forecasted application volumes based on historical trends and expected future Canadian and US economic growth. As such, their achievement is not aspirational, but is based on the economic conditions that drive IP demand in Canada.

<sup>24</sup> The Canadian Internet Use Survey (CIUS) is occasional and was not conducted in 2019.

<sup>25</sup> The Canadian Internet Use Survey (CIUS) is occasional and was not conducted in 2021. There are no comparable sources of data for the percentage of Canadians banking online. Data will be updated upon the release of the next CIUS, which is slated for 2023.

<sup>26</sup> The CIUS is occasional and was not conducted in 2021. In lieu of CIUS data, data for online shopping was derived from Canada's Internet Factbook 2021, produced by the Canadian Internet Registration Authority (CIRA), which reports on the percentage of Canadians shopping online.

funding profiles, recipient claims and finalizing of contribution agreements. This funding has already been moved to future years to align with program cash flows. This is offset by new funding received in-year for the Mitacs Inc., Youth Employment Strategy, Cyber Security Innovation Network, CanCode and the Sustainable Development Technology Fund.

### Human resources (full-time equivalents)

The following table shows, in full-time equivalents, the human resources the department needed to fulfill this core responsibility for 2021–22.

2021–22 planned full-time equivalents	2021–22 actual full-time equivalents	2021–22 difference (actual full-time equivalents minus planned full-time equivalents)
3,581	3,832	251

Financial, human resources and performance information for ISED’s Program Inventory is available in [GC InfoBase](#).<sup>iii</sup>

Variance is related to new funding received in-year for the Cyber Security Innovation Network, Net Zero Accelerator, Canada Digital Adoption Program: Stream 2, the Youth Recovery Strategy, and to support Intellectual property-rich Canadian firms.

## People, Skills and Communities

### Description

Support the creation, transfer and diffusion of knowledge to ensure that Canadians, including underrepresented individuals: are equipped with the skills and tools to participate in an innovative, high-growth economy; advance a culture of innovation where Canadians are motivated to address local, regional, national and/or global challenges; benefit from growth of the middle class across communities; have increased access to affordable broadband and mobile Internet, including in rural and remote regions; and are protected and informed consumers.

### Results

**Departmental Result:** People and communities from all segments of Canadian society participate in the economy

ISED invests in building an inclusive Canadian economy by fostering the participation of all people and communities across the country. By aiming to create an environment where Canadian entrepreneurship is inclusive and diverse by default, ISED works to remove barriers for businesses owners of all backgrounds, from city centers to rural towns across Canada.

### An inclusive and sustainable economy for all Canadians

In 2021–22, ISED worked with the Regional Development Agencies (RDAs) to address barriers to entrepreneurship and support entrepreneurs—including those from underrepresented groups—as their businesses develop and grow. Through programs such as the Indigenous Entrepreneurship program, Futurpreneur, and the Women Entrepreneur Fund, ISED and the RDAs provide support to Canadian entrepreneurs who would not typically be supported by traditional lending institutions, and other business support services. Co-operatives are also supported as an important business model that advances sustainable and inclusive growth. The programs engage with diverse groups, including women, youth, and Indigenous people, and work to ensure that Canada's economic development, and innovation policies and programs, reflect their needs. These programs continue to strengthen Canada's social enterprise community, which includes federal, provincial and territorial partners, the academic community, and Canadian social enterprise practitioners. Futurpreneur provides financial support, guidance and mentorship to young people as they start businesses. In 2021–22, 934 loans were disbursed to young entrepreneurs. A total of 413 loans (44%) were issued to female entrepreneurs, 2 loans (less than 1%) to non-binary people, and 39 loans (approximately 4%) to Indigenous entrepreneurs.

ISED is committed to supporting an economic recovery that is inclusive and equitable for all Canadians. ISED aims to provide Black business owners and entrepreneurs with the supports they need to move forward and recover from the COVID-19 pandemic, and

it aims to lay a foundation that will enable them to grow their business in the months and years to come. The Black Entrepreneurship Loan Fund (BELF) was launched in May 2021 representing a new source of fund for Black entrepreneurs. As of March 25, 2022, \$20 million (of the committed \$30 million) has been disbursed to the loan fund administrator in support of BELF. Among the clients who were approved for a loan, 37% were women, 11% were youth (18-30 years old), 77% were newcomers to Canada and 4% were LGBTQ2+.

Furthermore, on December 13, 2021, the Government awarded \$5 million to Carleton University's Sprott School of Business and the Dream Legacy Foundation to establish the Black Entrepreneurship Knowledge Hub (BEKH). The BEKH conducts large-scale qualitative and quantitative research on Black entrepreneurship in Canada, provides a detailed map of Black business ecosystems across the country, and identifies critical gaps where Black entrepreneurs are facing the greatest challenges. This publicly available research aims to benefit the Black entrepreneurship ecosystem in Canada. The governance structure of BEKH includes a Lead Hub and Regional Hubs to ensure coverage across Canada. The recipients continue to work on building capacity and outline their operational and research plans.

Furthermore, ISED continued work to deliver the National Ecosystem Fund, which aims to strengthen the entrepreneurship ecosystem for Black entrepreneurs and business owners across Canada. It allows not-for-profit Black-led organizations to develop new services or expand those they already offer such as mentorship, networking, financial planning, and business training for Black entrepreneurs. Forty not-for-profit business organizations have been selected by the regional development agencies to deliver the National Ecosystem Fund which represents nearly \$95 million.

Through the Women Entrepreneurship Strategy (WES), the Department continued to help women start and grow their businesses with various growth and financing initiatives. In 2021–22, ISED and the RDAs worked collectively to deliver the WES Ecosystem Fund—a total of up to \$100 million over five years (2018–19 to 2022–23)—to help not-for-profit organizations support women-led businesses.

In 2021–22, FedNor continued its work to promote economic development and diversification, job creation, and sustainable, self-reliant communities in Northern Ontario. The agency was previously part of ISED, but [Budget 2021 announced](#) that it would become a standalone agency as of August 12, 2021. FedNor provides funding to SMEs and not-for-profit organizations in Northern Ontario, including municipalities, municipal organizations, community development organizations and research institutions, in the following priority areas: community economic development, business growth and competitiveness, and innovation.

FedNor continues to engage and work collaboratively with numerous stakeholders from Ontario's Francophone communities in support of enhancing service delivery and



expanding economic opportunities. For example, FedNor participates in the Table de concertation du Nord de l'Assemblée de la francophonie de l'Ontario (AFO) and also regularly meets with Community Futures Development Corporations (CFDCs) managers and directors. As many CFDC managers and board members are from Official Language Minority Communities, including those along the Highway 11 corridor, these meetings are opportunities to stay informed about issues affecting Ontario's Francophone communities and their priorities. FedNor is also in regular contact with other stakeholders, including the Société économique de l'Ontario, the Cooperation Council of Ontario, the Fédération des gens d'affaires francophones de l'Ontario, the Réseau de soutien à l'immigration francophone du Nord de l'Ontario and the Centre d'éducation et de formulation pour adultes of Sault Ste. Marie.

As a result of imposed COVID-19 public health measures, all engagement activities during the 2021–22 fiscal year were transitioned to virtual platforms.

### **Equipping Canadians with digital skills and making reliable telecommunications and high speed internet accessible everywhere**

Access to reliable technology and support to develop relevant skills is a fundamental requirement for Canadians to fully participate in today's digital and globalized economy. The COVID-19 pandemic further exposed gaps in the access, affordability and accessibility of digital technologies, in particular among people from various underrepresented groups. ISED has a number of programs that work to address these gaps.

For example, many Canadians in rural and remote communities still lack access to high-speed Internet. The Universal Broadband Fund (UBF) provides \$2.75 billion to connect rural and remote households across Canada to high-speed Internet. The program includes a Rapid Response Stream (RRS), which funds shovel-ready projects that can connect households quickly: up to \$750 million for large, high-impact projects; and up to \$50 million for mobile projects that primarily benefit Indigenous peoples. As of March 31, 2022 under the RRS, 171 projects have been announced, providing \$168 million to connect up to 82,000 households, in addition to the more than 26,000 households that have already been connected through RRS projects. Under the program's mobile stream, construction commenced in December 2021 on a project to provide complete mobile connectivity along British Columbia's remote "Highway of Tears", entailing federal-provincial co-funding of \$4.5 million total.

Under the core UBF stream, significant federal-provincial partnership agreements were announced with Quebec, Ontario, Alberta, British Columbia and Newfoundland and Labrador. The additional provincial funding leveraged through these partnerships means that UBF funding will be able to connect even more households to high-speed Internet. Overall, more than \$2 billion in UBF funding has been announced (including RRS) to connect up to 900,000 households.

ISED also supported the roll-out of high-speed Internet to rural and remote communities with the \$585 million Connect to Innovate (CTI) program. The goal of the program is to connect institutions like schools and hospitals, with a portion of funding available for system upgrades and "last-mile" infrastructure to households and businesses. In 2021-22 specifically, CTI provided Internet access to more than 41,000 households in 70 communities (13 Indigenous communities) and 192 anchor institutions.

In August 2021, an Agreement-in-Principle was announced for a \$1.44 billion debt and equity investment in Telesat's Project Lightspeed to support the rollout of high-speed connections to 40,000 households in rural and remote communities

In 2021–22, ISED's Digital Literacy Exchange Program continued to provide basic digital literacy training to Canadians from under-represented groups across Canada to equip them with skills and confidence to participate in the digital economy and society. Since its initial launch in 2018-19, the program has funded 36 non-profit organizations who delivered training to a total of 407,147 participants.

Through the Connecting Families initiative, ISED continued to support affordable high-speed Internet for Canadians who need it most. The program was expanded to offer significantly faster speeds (50/10 Mbps) and increased data usage (200 GB) for \$20 per month. The new phase of the program also broadened eligibility beyond low-income families to include low-income seniors. ISED also worked to encourage the participation of other ISPs across the country, which resulted in the onboarding of 5 new service providers, bringing the total to 19 ISP participants.

In 2021–22, the Computers for Schools Plus (CFS+) program continued to refurbish devices donated from government, private business and individuals, for use by schools, libraries, not-for-profit organizations, Indigenous communities and eligible low-income Canadians. CFS+ also provides students and recent graduates with paid, practical on-the-job experience in refurbishment centres across Canada. The program faced various challenges during the pandemic, such as the program affiliates shutting down in accordance with public health restrictions and in recruiting interns. Despite this, the program supported 261 interns who helped refurbish and distribute more than 50,000 devices last year.

To help persons with disabilities benefit from digital technologies, ISED's Accessible Technology Program (ATP) invested in 28 projects to develop assistive technologies, leading to the commercialization of 10 unique technologies. As examples of funded projects, The Neil Squire Society's Makers Making Change project created an open-source solution to support Canadians in developing devices for persons with disabilities in their communities to help them participate in the digital economy. To date, the project has developed 30 technology solutions which are all made available for free online. Over 2,000 units were provided to users during the project. Technologies HumanWare developed a new low-cost braille cell technology that resulted in the development of three new affordable braille readers. The devices have been distributed nationally

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through the Canadian National Institute for the Blind, and internationally with over 5,000 devices sold over the course of the project to the National Library Services for the Blind and Print Disabled (NLS) and the American Printing House.

### **Gender-based analysis plus**

In addition, many programs delivered by the department focused on ensuring people and communities from all segments of Canadian society are able to participate in the economy- including access and improvements to digital services. Diverse groups of men and women in all segments of the economy benefitted from ISED's digital service programs, including persons with disabilities, Seniors, Newcomers to Canada and rural and remote areas with Indigenous populations. Further, many underrepresented entrepreneurs including women, youth, LGBTQ+ members and Indigenous peoples received supports from entrepreneurial support programs such as Futurpreneur, Women Entrepreneurship and Indigenous Entrepreneurship which included mentorship programs and funding.

### **United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals**

ISED is a key contributor to Canada's efforts to develop the 2030 Agenda National Strategy in support of the UN 2030 Agenda for Sustainable Development and the UN SDGs. While ISED supports all 17 SDGs, ISED's mandate, programs and initiatives advance action on Industry, Innovation and Infrastructure (SDG 9) to: "build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". Additional SDGs relevant to ISED include Climate Action (SDG 13), Responsible Consumption and Production (SDG 12), Sustainable Cities (SDG 11), and Partnership for the Goals (SDG 17). This core responsibility supports mainly SGD 9.

### **Experimentation**

ISED has continued to utilize experimentation as a way to keep improving services and programs delivered to Canadians. In 2021-22, ISED expanded its use of experimentation to strengthen a culture of evidence-based decision making. The Department also worked on better leveraging innovative ways of collecting data and better understanding the people it serves to continue improving programs and initiatives for Canadians.

## Results achieved

The following table shows, for People, Skills and Communities, the results achieved, the performance indicators, the targets and the target dates for 2021–22, and the actual results for the three most recent fiscal years for which actual results are available.

Departmental results <sup>1</sup>	Performance indicators	Target	Date to achieve target	2019–20 actual results	2020–21 actual results	2021–22 actual results
People and communities from all segments of Canadian society participate in the economy	Percentage of Canadian households with an internet subscription	Year-over-year growth	March 31, 2022	91%	94%	Not available <sup>27</sup>
	Percentage of small and medium-sized enterprises that are majority owned by women and visible minorities	Women: 25% Visible Minorities: 14%	December 31, 2025	Not available	Women: 18.6% Visible Minorities: 16%	Women: 18.2% Visible Minorities: 15.7%
	Number of small and medium-sized enterprises supported by Innovation, Science and Economic Development Canada programs, including those that are majority owned by women, Indigenous	Year-over-year growth	March 31, 2022	Total SMEs supported by ISED program: 11,744  Majority-owned by women: 3,709  Majority-owned by Indigenous peoples: 405	Total SMEs supported by ISED programs: 20,832  Majority-owned by women: 13,254  Majority-owned by Indigenous peoples: 154	Total SMEs supported by ISED programs: 21,246 (Note 1)  Majority-owned by women: 12,262  Majority-owned by Indigenous peoples: 95

<sup>27</sup> The data for this indicator is derived from the Canadian Radio-Television and Telecommunications Commission's (CRTC) Communications Monitoring Report. In 2021, the report provided the total number of internet subscriptions in Canada, rather than the percentage of Canadians with an internet subscription. The total number of Canadians with an internet subscription is 11.98 Million.

	people, youth, visible minorities and persons with disabilities			Majority-owned by youth: 1,303 Majority-owned by visible minorities: 1,265 Majority-owned by persons with disabilities: 2	Majority-owned by youth: 1,549 Majority-owned by visible minorities: 905 Majority-owned by persons with disabilities: 21	Majority-owned by youth: 1,263 Majority-owned by visible minorities: 951 Majority-owned by persons with disabilities: 29
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Note 1: The actual results will fluctuate year to year based on budget decisions, funding allocations, and shifting priorities, which may impact the achievement of the target.

Financial, human resources and performance information for ISED's Program Inventory is available in [GC InfoBase](#).<sup>iv</sup>

### Budgetary financial resources (dollars)

The following table shows, for People, Skills and Communities, budgetary spending for 2021–22, as well as actual spending for that year.

2021–22 Main Estimates	2021–22 planned spending	2021–22 total authorities available for use	2021–22 actual spending (authorities used)	2021–22 difference (actual spending minus planned spending)
579,216,766	579,716,766	891,035,751	610,061,195	30,344,429

Financial, human resources and performance information for ISED's Program Inventory is available in [GC InfoBase](#).<sup>v</sup>

Variances are primarily related to new funding received in-year for the Universal Broadband Fund, the Black Entrepreneurship Program, the Community Futures Program, and the Women's Entrepreneurship Strategy. This increase was partially offset by the transfer of authorities to the Federal Economic Development Agency of Northern Ontario, which was established as an independent department on August 12, 2021. Unused funding will be moved to future years.

## Human resources (full-time equivalents)

The following table shows, in full-time equivalents, the human resources the department needed to fulfill this core responsibility for 2021–22.

2021–22 planned full-time equivalents	2021–22 actual full-time equivalents	2021–22 difference (actual full-time equivalents minus planned full-time equivalents)
279	196	(83)

Financial, human resources and performance information for ISED's Program Inventory is available in [GC InfoBase](#).<sup>vi</sup>

Variance is primarily related to the transfer of FTEs to the Federal Economic Development Agency of Northern Ontario, which officially became an independent agency on August 12, 2021, and to anticipated staffing plans that did not materialize under the Universal Broadband Fund. These decreases are offset by new funding received in-year for the Diverse and Inclusive Economy Program, the Black Entrepreneurship Loan Fund and the Canada Digital Adoption Program: Stream 1.

## Science, Technology, Research and Commercialization

### Description

Support and enable business-led investment and strategic collaborations for leading-edge technology development and commercialization; maintain and strengthen Canada's research excellence, including support for fundamental science, experimentation and exploration to address global challenges.

### Results

**Departmental Result:** Canadian science, technology and innovation research (STIn) contributes to knowledge transfer

In 2021–22, the COVID-19 pandemic brought many challenges for Canadians. Leveraging and mobilizing Canada's scientific and technological excellence was essential to a timely and well-informed response. ISED continued to maintain and strengthen Canada's knowledge foundation and research excellence by supporting researchers and businesses, and equip them to makes scientific and innovation breakthroughs and advancements on the world stage.

### Supporting collaboration and innovation on science and innovation

To develop Canada's world-leading research capacity, ISED continued to invest in third-party science and research organizations, which help deliver a wide range of innovation-related research activities across Canada. These contributions help foster research collaboration between postsecondary research institutions, industry and not-for-profit organizations, as well as advance areas of strategic interest (e.g. COVID-19, emerging technologies, and industrial trends and innovations).

In Budget 2021, the Government of Canada renewed funding for Genome Canada, including support for the transition to a new challenge-driven approach for the new Pan-Canadian Genomics Strategy (PCGS) to complement the government's existing genomics research and innovation programming. Genomics is helping to advance precision health, improve the productivity and resiliency of forests, crops and livestock, create more sustainable energy and biomaterials, bioremediate contaminated sites and protect the environment. Most notably, genomics research has played an important role in Canada's ability to track and fight COVID-19. The PCGS will outline Canada's approach to supporting the commercialization and adoption of genomic technologies and innovations across sectors and regions. It will help position Canada as a leader in genomics and ensure its long-term success in the global bioeconomy

ISED also continued to support the operation, safeguarding and maintenance of Canada's high-speed digital network for research and education through implementation of the renewed contribution agreement with CANARIE, with an enhanced cybersecurity mandate. Initiatives in 2021–22 included maintenance and expansion of the Network Operations for the National Research and Education Network (NREN) as essential

research infrastructure, including the replacement of the western section of the national Research and Experimentation backbone's optical fibre system. CANARIE continued to support private sector innovation and commercialization of products by launching and promoting to SMEs its fifth BoosterPack, which are packages of cloud computing resources and curated knowledge to help SMEs use emerging technologies.

In 2021–22, ISED also continued to implement the Digital Research Infrastructure (DRI) Strategy to provide Canadian researchers, scientists and scholars with the digital tools and services they need to conduct world-leading research. ISED continued to monitor and support the Digital Research Alliance of Canada (the Alliance). The Alliance launched a number of data management projects aiming to provide a robust and secure Canadian repository to support the needs of researchers generating or working with sensitive data (e.g., health researchers). Furthermore, the Alliance supported the COVID-19 Data Curation Pilot which supported the curation of data of COVID-19 research projects into recognized repository storage for future reuse.

ISED continued to play a liaison and coordination role with the National Research Council (NRC) and contributed to the Institute on Governance's Government Science and Innovation in the New Normal (GSINN) initiative, a multi-year collaborative research initiative designed to support medium-term planning in the federal science and innovation departments and agencies. ISED also contributed to development of the Canada Research Coordinating Committee's refreshed version of the Tri-Agency Equity, Diversity and Inclusion Action Plan, detailing how the granting agencies can influence the development of a more inclusive post-secondary research system and culture in Canada.

International collaboration on science and research initiatives and sharing of insights and best practices in 2021–22 included ISED's participation in a Global Forum on Productivity (GFP) conference on enterprise data, and a joint Banque de France and GFP workshop on telework and productivity. The Department continued to use the OECD Grants Program to support projects of mutual interest, such as work of the Global Forum on Steel Excess Capacity, research on "Measuring Financial Consumer Detriment in e-Commerce", which includes Canada as part of the pilot implementation of the methodology and survey analysis which better shed light on unfair economic practices for consumers. Other notable work included the exploration of ways to build more resilient tourism and facilitate the transition to green tourism.

The second year of the COVID-19 pandemic saw the widespread rollout of vaccines. The Chief Science Advisor further engaged with the public to help Canadians understand the science behind vaccine effectiveness and safety, while continuing to inform the public about virus testing, community monitoring and the scientific evidence behind public health measures.



In 2021–22, the Chief Science Advisor and the federal science community continued their progress on the implementation of the Roadmap for Open Science. In addition to having an open science leader or champion, the science-based departments and agencies have published their respective open science action plans. The Chief Science Advisor also hosted a series of Open Science Dialogues with university researchers, Canadian funders, and international leaders to solicit practical approaches and suggestions to achieve open and secure science in Canada.

In 2021–22, the Chief Science Advisor also continued her ongoing review of the methods and integrity of the science used in decision making under the 2019 Impact Assessment Act, with a focus on developing tools to evaluate the integrity, credibility and transparency of science submitted by proponents, third parties, stakeholders or rightsholders.

### **Preparing young Canadians for the jobs of tomorrow**

Knowing that Canada's industrial productivity, innovation and competitiveness depend heavily on the knowledge and talent of its people, ISED continued to offer a suite of programs that support skill development, work experience and job readiness, with a particular emphasis on ensuring Canadian businesses have the talent they need to innovate and grow.

In 2021–22 ISED signed a new funding agreement with Mitacs to support its implementation of a new five-year strategic plan to provide 85,000 work-integrated learning (WIL) opportunities in participating businesses for post-secondary students and recent graduates, in support of Canada's economic recovery. Mitacs created 15,547 WIL opportunities in 2021-22.

In March 2022, ISED launched a new Upskilling for Industry Initiative (UII) to place employers at the forefront of identifying the skills needs of high-growth industries. By fostering partnerships between employers and training providers, the UII seeks to scale-up proven approaches to upskilling and deliver demand-driven short-cycle programs to meet the needs of employers. A merit-based call for applications was announced in March 2022 to select one or a limited number of projects to allocate up to \$250 million over three years. The initiative will help businesses in high-growth industries adjust to changing skills requirements by providing access to a competitive workforce. It is expected to help 15,500 Canadians—including those from underrepresented groups—connect with new work opportunities.

ISED also supported employers, post-secondary students and recent graduates during the pandemic through the Business + Higher Education Roundtable (BHER). In November 2021, BHER launched the WIL Hub which contains easy-to-use, evidence-based tools and resources aimed at helping employers create quality WIL placements. BHER also worked with 42 partners to secure commitments for the delivery of 13,640 additional WIL placements for students, bringing the total to 37,574 since it first received funding from ISED in 2019.

## **Investing in research and innovation**

To respond to the recommendations arising from the 2020 evaluation of ISED's contribution to the Canada Foundation for Innovation (CFI), a revamped College Fund was launched that expanded infrastructure funding opportunities to support a broader, more diverse range of research in colleges across various disciplines (e.g., industry-relevant, social sciences and humanities, health and social innovation) and types of partners (e.g., private and non-profit sectors). In 2021–22, the CFI also administered ongoing programming and launched new competitions to address the research infrastructure needs of Canadian researchers. The CFI awarded more than \$96 million to support 430 projects through the John R. Evans Leaders Fund. The CFI also awarded more than \$36 million to support 35 projects through the College-Industry Innovation Fund, which helps colleges foster strategic partnerships with the private sector. These investments included funding awarded under the Infrastructure Operating Fund to support maintenance and operation of research infrastructure.

The CFI also launched the 2023 competitions for its flagship programs, the Innovation Fund and the Major Science Initiatives Fund. These programs support large, innovative and transformative research infrastructure projects, and operations and maintenance costs associated with national research infrastructure. In addition, as part of Canada's Biomanufacturing and Life Sciences Strategy, the CFI launched the new Biosciences Research Infrastructure Fund (BRIF) to address bioscience infrastructure needs of postsecondary institutions and research hospitals, as well as an integrated competition with the tri-agency Canada Biomedical Research Fund (CBRF) to advance the Government of Canada's biomanufacturing and life sciences priorities.

In 2021–22, ISED renewed funding agreements with several key institutions undertaking innovative work of benefit to Canadian industries. A new funding agreement was established with the Perimeter Institute to continue to support the institute's mandate to deliver research, training and outreach activities related to theoretical physics and related scientific fields. Similarly, new funding agreements were secured with adMare and with the Stem Cell Network (SCN) to support delivery on commitments made in Budget 2021 as part of the Biomanufacturing and Life Sciences Strategy, including the addition of adMare seed-funding and follow-on investments to industry recipients as a new activity to support company creation, scale up, and training activities in the life sciences sector, and an increase in funding and scope for SCN to support stem cell and regenerative medicine research. In 2021–22, funding was also renewed with the Canadian Institute for Advanced Research (CIFAR), which continued its work on advancing interdisciplinary knowledge creation, supporting long-term growth of next-generation research leaders, and driving societal impact through knowledge mobilization.

As a member of the Canada Research Coordinating Committee (CRCC), ISED continued to participate in a range of initiatives to support greater harmonization,

integration and coordination of research-related programs and policies. In 2021–22, the CRCC continued to advance the implementation of its tri-agency New Frontiers in Research Fund (NFRF) program, including a fourth NFRF Exploration stream competition to build strength in high-risk, high-reward and interdisciplinary research and launch of a second Transformation competition. It also completed a special funding call on Innovative Approaches to Research in the Pandemic Context and launched a second special call on Research for Post-Pandemic Recovery.

ISED also continued to support the Council of Canadian Academies (CCA)—with a mandate and interests spanning the natural, social and health sciences as well as engineering and the humanities, which continued to conduct and publish science-based, expert assessments of policy relevant issues to inform public policy development in Canada. Similarly, the Pierre Elliott Trudeau Foundation continued to support conferences, lectures and symposia, and to offer scholarships to doctoral candidates, fellowships to researchers at Canadian universities, and mentorships to seasoned professionals who are able to counsel the scholars.

### **Investing in artificial intelligence capacities and applications**

As part of the enhanced second phase of the Pan-Canadian Artificial Intelligence Strategy (PCAIS), a new program was launched in 2021–22 to support work of Canada's National Artificial Intelligence Institutes. This program is designed to accelerate the translation of artificial intelligence research into commercial or other innovations; grow the capacity of Canadian businesses, not-for-profit organizations, health providers (including hospitals) and other public corporations and agencies to develop, adopt, use, or commercialize artificial intelligence; and, encourage the responsible development and use of artificial intelligence based in human rights, inclusion, diversity, innovation and economic growth. In 2021–22, the Government of Canada signed funding agreements with the Institutes to support programs including training and professional development; applied projects, testing and proof-of-concept services; intellectual property awareness and education; and support for talent retention and recruitment.

ISED continued to monitor the implementation of the Advanced Research Computing Expansion Program across the five national host sites. The equipment procured under the Program continued to be installed and operated, allowing any delays caused by the COVID-19 pandemic to be addressed. As one of its final activities prior to transitioning to a national delivery model through the Digital Research Alliance of Canada (DRAC), a cybersecurity action plan was implemented. In 2021-2022, this plan culminated with two national incidence response exercises being conducted, which successfully detected and responded to attacks on the National ARC Platform. Further, a new asset discovery system was established to support the Government of Canada's national security policy objectives related to the monitoring and auditing of systems.

In 2021–22, ISED continued to provide significant investments in third-party science and research organizations, in addition to working across government and internationally to enhance collaboration on science and research. ISED and Health Canada jointly launched the inaugural competition of the Strategic Science Fund, a new competitive, merit-based and transparent approach for allocating federal funding to these third-party science and research organizations. The competition will conclude in 2022-23, with funds to successful applicants starting to flow in 2024-25. The Department worked closely with Global Affairs Canada on the process to seek a negotiation mandate to become an associate member of Horizon Europe for 2021–27, the largest globally collaborative science, research and innovation program with a budget of \$130 billion over seven years.

### **Gender-based analysis plus**

Finally, an important result ISED aimed to achieve through its programs and funding in 2022 was the delivery of programs to Canadians that contributed to science and research initiatives. The groups GBA+ identified as impacted by these programs were many, including women, indigenous peoples, and visible minorities. The Digital Research Infrastructure Strategy (DRI), for example, actively strived (and continues to strive) for gender balance on its board and for representation by a diversity of relevant stakeholder groups, including with respect to researchers, scientists and scholars, to help ensure these communities are provided with the digital tools and services needed to conduct world-leading research.

### **United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals**

ISED is a key contributor to Canada's efforts to develop the 2030 Agenda National Strategy in support of the UN's 2030 Agenda for Sustainable Development and the UN SDGs. While ISED supports all 17 SDGs, ISED's mandate, programs and initiatives advance action on Industry, Innovation and Infrastructure (SDG 9) to: "build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". Additional SDGs relevant to ISED include Climate Action (SDG 13), Responsible Consumption and Production (SDG 12), Sustainable Cities (SDG 11), and Partnership for the Goals (SDG 17). This core responsibility supports mainly SDG 9, SDG 13.

### **Experimentation**

The Department has continued to foster an environment of innovation and continuous improvement. In 2021-22, ISED continued to use experimentation as a way to improve services and programs. ISED progressed on a number of promising experimentations by leveraging its foundational investments in design, data and technology.

## Results achieved

The following table shows, for Science, Technology, Research and Commercialization, the results achieved, the performance indicators, the targets and the target dates for 2021–22, and the actual results for the three most recent fiscal years for which actual results are available.

Departmental results	Performance indicators	Target	Date to achieve target	2019–20 actual results	2020–21 actual results	2021–22 actual results
Canadian science, technology and innovation research contributes to knowledge transfer	Canada's rank among the Organization for Economic Cooperation and Development (OECD) nations on the average relative citation score (ARC) of science research publications	At most 10th	December 31, 2025	16 <sup>28</sup>	18 (2020) <sup>29</sup>	Not available <sup>30</sup>
	Percentage of Higher Education expenditure on Research and Development financed by the business sector	Canada remains higher than the OECD average (6.2%, 2017).	December 31, 2025	7.95%	7.84%	7.96%

Financial, human resources and performance information for ISED's Program Inventory is available in [GC InfoBase](#).<sup>vii</sup>

<sup>28</sup> Data for 2019 have been revised and Canada's ranking was downwardly revised to 17 in 2019 based on these revised data

<sup>29</sup> Canada's ranking declined in 2020. Data for 2019 have been revised and Canada's ranking was downwardly revised to 17 in 2019 based on these revised data. The yearly decline in ranking is not considered significant.

<sup>30</sup> There is a two-year lag for actual, non-preliminary data. Data for 2021-22 will be available by 2024.

## Budgetary financial resources (dollars)

The following table shows, for Science, Technology, Research and Commercialization, budgetary spending for 2021–22, as well as actual spending for that year.

2021–22 Main Estimates	2021–22 planned spending	2021–22 total authorities available for use	2021–22 actual spending (authorities used)	2021–22 difference (actual spending minus planned spending)
807,922,193	807,922,193	829,075,989	572,939,686	(234,982,507)

Financial, human resources and performance information for ISED’s Program Inventory is available in [GC InfoBase](#).<sup>viii</sup>

Variance is primarily related to unused funding for CANARIE, Canada Foundation for Innovation and Digital Research Infrastructure due to the impact of COVID-19 on the execution of projects. Funding will be moved to future years to align with project milestones and cashflow requirements in order to meet commitments under signed contribution agreements. This is offset by new funding received in year from Budget 2021 for the Canadian Institute for Advanced Research, the Canadian Institute for Advanced Research - Pan-Canadian Artificial Intelligence Strategy, the National Artificial Intelligence Institutes and adMare BioInnovations.

## Human resources (full-time equivalents)

The following table shows, in full-time equivalents, the human resources the department needed to fulfill this core responsibility for 2021–22.

2021–22 planned full-time equivalents	2021–22 actual full-time equivalents	2021–22 difference (actual full-time equivalents minus planned full-time equivalents)
83	96	13

Financial, human resources and performance information for ISED’s Program Inventory is available in [GC InfoBase](#).<sup>ix</sup>

Variance is related to additional staffing to support the Strategic Science Fund, the National Quantum Strategy, the Pan-Canadian Artificial Intelligence Strategy and the Genomics Secretariat, for which the funding was reallocated internally.

## Internal services

### Description

Internal services are those groups of related activities and resources that the federal government considers to be services in support of programs and/or required to meet corporate obligations of an organization. Internal services refers to the activities and resources of the 10 distinct service categories that support program delivery in the organization, regardless of the internal services delivery model in a department. The 10 service categories are:

- ▶ acquisition management services
- ▶ communication services
- ▶ financial management services
- ▶ human resources management services
- ▶ information management services
- ▶ information technology services
- ▶ legal services
- ▶ material management services
- ▶ management and oversight services
- ▶ real property management services

### Results Highlights

In 2021–22, ISED's internal actions continued to remain centered on Renewal at ISED's three areas of focus: being agile and purpose-driven, inclusive and healthy, and equipped and capable. Last year, ISED built on the progress achieved in past years by applying organizational growth strategies from high-performing organizations to pursue improvements across the Department. This progress is demonstrated by the recognition of ISED as one of Canada's Top 100 Employers again in 2021, for the 3rd consecutive year. ISED was also named one of the National Capital Region's Top Employers for 2021, as well as one of Canada's Best Diversity Employers.

#### Agile and Purpose-Driven

ISED responded to rapidly-evolving impacts of the COVID-19 pandemic to protect its staff while ensuring continuity of service for Canadians and uncompromised delivery on the Department's mandate. Building on insights and momentum from the response to the first waves of the pandemic in the preceding year, the department adjusted its office space across Canada, shared information materials and guidance tools to ensure adherence to health protocols and established a rapid testing centre and voluntary testing program for employees wishing to check their health status.

## **Building a data culture for evidence-based decisions**

Additionally, ISED continued to progressively build a data culture through the implementation of components of the departmental data strategy, ensuring that data is valued as a strategic asset to enable informed decisions that lead to better outcomes and services for Canadians and Canadian businesses. This progress was demonstrated through the integration of data experts and analysts from the Chief Data Office within the design and implementation team for the Canadian Digital Adoption Program (CDAP). The stewardship model of data governance was embraced by champions in each sector who acted as representative data stewards who participated in regular department-wide data focused discussions and raised opportunities to improve data management while also disseminating data standards, practices and tools to program-level data stewards. Data stewards from across the department also contributed to the ISED Data Catalogue, improving visibility and accessibility of departmental data assets. Implementation of the ISED data strategy will continue to improve accountability, identify next steps and scale solutions appropriately.

## **Return to the workplace and the Future of Work**

In 2021–22, ISED emphasized planning and preparation for the return of employees to the office, even as it proceeded with development and testing of innovations in work environments and support systems needed to meet the demands of the evolving nature of work. ISED maintained flexibility in its workplace arrangements, given the need to ensure operational requirements are met, while also balancing the workplace preferences of employees (remote, office or hybrid). ISED also continued to advance plans and arrangements for workplace modernization. In addition to provisions for modern workplace environments and technologies (including telework), ISED continued to implement standards for improved security and accessibility as well as environmental performance.

### **Inclusive and Healthy**

In 2021–22, ISED maintained a strong focus on promoting and facilitating diversity and inclusion in the workplace, including recruitment and career advancement of underrepresented Employment Equity groups, particularly Black and Indigenous employees, persons with disabilities, and racialized employees, and the maintenance of a positive, welcoming and respectful work environment. Over the year, ISED made steady progress towards meeting representation goals in employment equity groups in the senior ranks. In addition, ISED Executives were held accountable for closing representation gaps at all levels and creating a psychologically safe workplace through their Performance Management Agreements. ISED has seen gains in senior leadership roles for Women and Racialized Persons overall while 22 of 25 external executive hires over the last year were from one of the employment equity groups.



Furthermore, to support the advancement of diversity and inclusion at ISED, the Department continued to implement its Building Greater Diversity Plan. This included the establishment of a Chief Equity and Inclusion Officer, new Assistant Deputy Minister and Director General Committees on Equity, Diversity and Inclusion, and a Tri-Weekly Committee of employee network Champions and Chairs to lead and champion supportive policies and practices throughout the Department. ISED also initiated an Employment Systems Review focused on identifying and overcoming systemic barriers to equity, diversity and inclusion in hiring practices, career development, retention, and addressing racism, ableism and discrimination.

The Department also continued its partnership agreement with the not-for profit group LiveWorkPlay, supported by a Workplace Accommodation Centre to promote and support inclusive employment in the public service, focused on persons with intellectual disabilities, autistic persons and individuals with a dual diagnosis.

ISED continued to support implementation of the *Accessible Canada Act*, which came into force in 2019 with the aim of realizing a barrier-free Canada by 2040. ISED is making progress on developing a three-year Departmental Accessibility Plan to be published by December 31, 2022. ISED established an Accessibility Secretariat to develop the Accessibility Plan, in consultation with employees and clients, as well as set the conditions for identifying, preventing and removing workplace barriers to accessibility at ISED. As well, in the spring of 2022, ISED launched the 'Accessibility Matters at ISED' training, which is mandatory for all ISED employees. The virtual training teaches employees about their responsibilities to create a more accessible workplace, and provides practical knowledge about creating accessible products and services.

ISED's network of champions played an important role in the delivery of priorities. From promoting the charitable campaign to advocating for diversity and inclusion, champions took an active role in supporting key departmental priorities. By actively engaging with departmental champions and through strong communications support, initiatives and training to better support mental health, official languages, accessibility, and diversity, to name a few, were put in place.

### **Wellness and employee assistance**

Mental health and the well-being of managers and staff—and access to meaningful resources and support—are priorities for ISED. This has become particularly significant as a result of the upheaval and stresses brought on by the COVID-19 pandemic, continuing supporting employees with options for return to work, and the onboarding, orientation and accommodation of new employees.

The Office of the Ombudsman for Mental Health and Employee Well-Being at ISED continued to provide an accessible safe space for employees to address difficulties in the workplace and offered expanded tools. Information sessions, resources and mental health supports for managers and staff needing support. The department launched a

pilot Workplace Mental Health Leadership Program through LifeWorks, which was delivered to 135 managers and executive members. The program helps managers and supervisors know how to address situations where employees are suffering from mental health issues, and help them return to the workplace safely. ISED also continued to take a government-wide leadership role in the operation of the Canadian Innovation Centre for Mental Health in the Workplace, which accommodated 62,000 registrants and ran 140 events over the course of the year. The Ombud's Office also conducted an Employee Assistance Program (EAP) survey to help understand needs and especially barriers facing prospective users of the services.

## **Equipped and Capable**

### **Financial Management**

In 2021–22 ISED implemented a number of measures to improve the Department's financial management, including the establishment of a new Financial Management Advisory Model for Grants and Contributions programs to improve standardization, efficiency, as well as forecasting and reporting capacities to facilitate financial planning and analysis.

### **Procurement**

ISED proceeded with a Procurement Process Modernization Initiative (PPMI) designed to make procurement processes more efficient, more secure against fraud, and supportive of the government's green procurement and Indigenous procurement policies.

### **Information Management / Information Technology Services**

ISED continued with its initiatives to modernize, upgrade and strengthen its IM/IT infrastructure and tools. This included measures to modernize the cyber resiliency of ISED's systems, including establishment of a dedicated security operations centre for monitoring, detecting and responding to cyber threats across ISED's growing cloud platforms and cloud-based operations.

### **Experimentation**

In 2021–22, ISED continued building its expertise to support in-house experimentation. One project—started in the previous year—was completed in partnership with the Treasury Board Secretariat. The experiment was designed to increase click-through rates of businesses after they newly incorporate, focused on understanding and responding to factors that may hinder client users from completing their self-ID when engaging on government programs. This experiment provided important user research to understand barriers in completing their self-identification.

## Budgetary financial resources (dollars)

The following table shows, for internal services, budgetary spending for 2021–22, as well as spending for that year.

2021–22 Main Estimates	2021–22 planned spending	2021–22 total authorities available for use	2021–22 actual spending (authorities used)	2021–22 difference (actual spending minus planned spending)
171,841,741	171,841,741	222,343,754	203,629,335	31,787,594

Variances are due primarily to new funding received in-year for corporate services to support the implementation of various initiatives such as the Canada Digital Adoption Program, the Net Zero Accelerator, and to support intellectual property-rich firms.

## Human resources (full-time equivalents)

The following table shows, in full-time equivalents, the human resources the department needed to carry out its internal services for 2021–22.

2021–22 planned full-time equivalents	2021–22 actual full-time equivalents	2021–22 difference (actual full-time equivalents minus planned full-time equivalents)
1,573	1,702	129

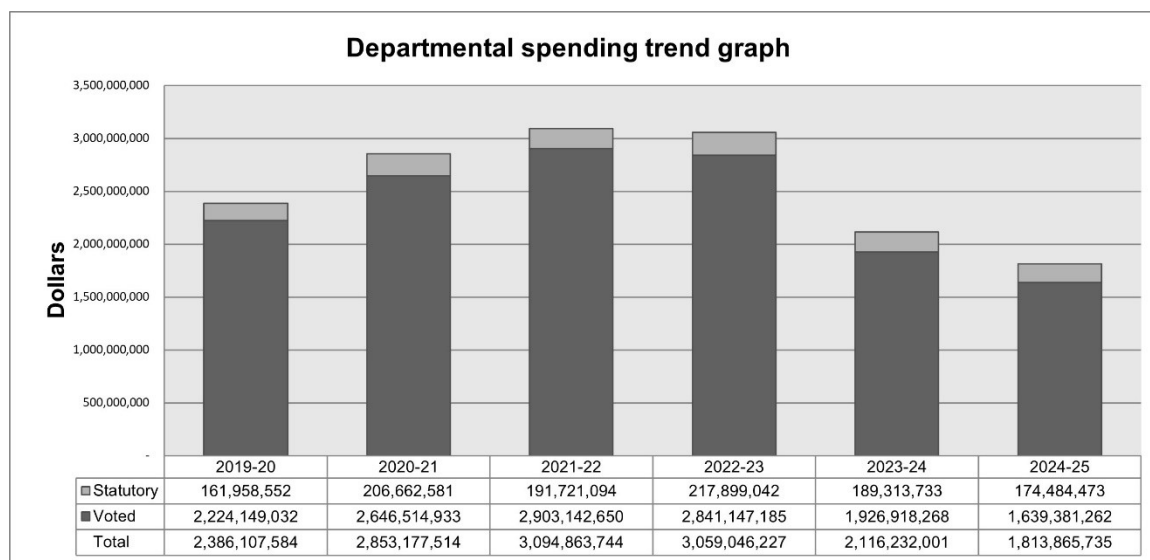
Variances are due primarily to new funding received in-year for corporate services to support the implementation of various initiatives such as the Canada Digital Adoption Program, the Net Zero Accelerator, and intellectual property-rich firms.

# Spending and human resources

## Spending

### Spending 2019-20 to 2024-25

The following graph presents planned (voted and statutory spending) over time.



### Description of graph

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
<b>Statutory</b>	161,958,552	206,662,581	191,721,094	217,899,042	189,313,733	174,484,473
<b>Voted</b>	2,224,149,032	2,646,514,933	2,903,142,650	2,841,147,185	1,926,918,268	1,639,381,262
<b>Total</b>	2,386,107,584	2,853,177,514	3,094,863,744	3,059,046,227	2,116,232,001	1,813,865,735

The variance in future years is primarily related to the variance in cashflow profiles of Grants and Contributions. The impact of sunseting items in future years is not material.

## Budgetary performance summary for core responsibilities and internal services (dollars)

The “Budgetary performance summary for core responsibilities and internal services” table presents the budgetary financial resources allocated for ISED’s core responsibilities and for internal services.

Core responsibilities and internal services	2021–22 Main Estimates	2021–22 planned spending	2022–23 planned spending	2023–24 planned spending	2021–22 total authorities available for use	2019–20 actual spending (authorities used)	2020–21 actual spending (authorities used)	2021–22 actual spending (authorities used)
People, Skills and Communities (Note 1)	579,216,766	578,716,766	603,521,286	492,321,860	891,035,751	332,829,790	551,479,827	610,061,195
Science, Technology, Research and Commercialization (Note 2)	807,922,193	807,922,193	802,476,329	602,658,205	829,075,989	813,170,459	819,387,717	572,939,686
Companies, Investment and Growth (Note 3)	2,175,130,142	2,174,630,142	1,483,799,775	853,784,997	2,910,503,904	1,066,852,443	1,294,565,498	1,708,233,528
<b>Subtotal</b>	<b>3,562,269,101</b>	<b>3,562,269,101</b>	<b>2,889,797,390</b>	<b>1,948,765,062</b>	<b>4,630,615,644</b>	<b>2,212,852,692</b>	<b>2,665,433,042</b>	<b>2,891,234,409</b>
Internal services (Note 4)	171,841,741	171,841,741	169,248,837	167,466,939	222,343,756	173,254,892	187,744,471	203,629,335
<b>Total</b>	<b>3,734,110,842</b>	<b>3,734,110,842</b>	<b>3,059,046,227</b>	<b>2,116,231,995</b>	<b>4,852,959,400</b>	<b>2,386,107,584</b>	<b>2,853,177,513</b>	<b>3,094,863,744</b>

Note 1: Variances are primarily related to new funding received in-year for the Universal Broadband Fund, the Black Entrepreneurship Program, the Community Futures Program, and the Women's Entrepreneurship Strategy. This increase was partially offset by the transfer of authorities to the Federal Economic Development Agency of Northern Ontario, which was established as an independent department on August 12, 2021. Unused funding will be moved to future years.

Note 2: Variance is primarily related to unused funding for CANARIE, Canada Foundation for Innovation and Digital Research Infrastructure, due to the impact of COVID-19 on the execution of projects. Funding will be moved to future years to align with project milestones and cashflow requirements in order to meet commitments under signed contribution agreements. This is offset by new funding received in year from

Budget 2021 for the Canadian Institute for Advanced Research, the Canadian Institute for Advanced Research - Pan-Canadian Artificial Intelligence Strategy, the National Artificial Intelligence Institutes and adMare BioInnovations.

Note 3: Variance is primarily due to unused funding for the Strategic Innovation Fund and Innovation Superclusters Initiative, which has been moved to future years to better align with anticipated recipients' cash flows. This is offset by new funding received in-year for the Mitacs Inc., Youth Employment Strategy, Cyber Security Innovation Network, CanCode and the Sustainable Development Technology Fund.

Note 4: Variances are due primarily to new funding received in-year for corporate services to support the implementation of various initiatives such as the Canada Digital Adoption Program, the Net Zero Accelerator, and intellectual property-rich firms.

### 2021–22 Budgetary actual gross spending summary (dollars)

The following table reconciles gross planned spending with net spending for 2021–22.

Core responsibilities and internal services	2021–22 actual gross spending	2021–22 actual revenues netted against expenditures	2021–22 actual net spending (authorities used)
People, Skills and Communities	610,061,195	-	610,061,195
Science, Technology, Research and Commercialization	572,939,686	-	572,939,686
Companies, Investment and Growth	1,972,643,173	264,409,644	1,708,233,528
<b>Subtotal</b>	<b>3,155,644,053</b>	<b>264,409,644</b>	<b>2,891,234,409</b>
Internal services	229,558,729	25,929,393	203,629,335
<b>Total</b>	<b>3,385,202,783</b>	<b>290,339,037</b>	<b>3,094,863,744</b>

ISED's 2021-22 Budgetary Actual Gross Spending is \$3.4 billion, which includes \$290 million in vote netted revenues, accounting for total actual net spending of \$3.1 billion.

The ISED vote netted revenue authorities are those referred to in paragraph 29.1(2)(a) of the Financial Administration Act (i.e. revenue received by the department in a fiscal year through the conduct of its operations, which the department is authorized to expend in order to offset expenditures incurred in that fiscal year) from the following sources:

(a) the provision of internal support services under section 29.2 of that Act, and the provision of internal support services to the Canadian Intellectual Property Office;

(b) activities and operations related to communications research at the Communication Research Centre;

(c) services and insolvency processes under the Bankruptcy and Insolvency Act at the Office of the Superintendent of Bankruptcy;

(d) activities and operations carried out by Corporations Canada under the Canada Business Corporations Act, the Boards of Trade Act, the Canada Cooperatives Act and the Canada Not-for-profit Corporations Act; and

(e) services and regulatory processes for mergers and merger-related matters, including pre-merger notifications, advance ruling certificates and written opinions, under the Competition Act at the Competition Bureau.

## Human resources

The “Human resources summary for core responsibilities and internal services” table presents the full-time equivalents (FTEs) allocated to each of ISED’s core responsibilities and to internal services.

### Human resources summary for core responsibilities and internal services

Core responsibilities and internal services	2019–20 actual full-time equivalents	2020–21 actual full-time equivalents	2021–22 planned full-time equivalents	2021–22 actual full-time equivalents	2022–23 planned full-time equivalents	2023–24 planned full-time equivalents
People, Skills, and Communities (Note 1)	153	176	279	196	254	238
Science, Technology, Research and Commercialization (Note 2)	86	86	83	96	83	83
Companies, Investment and Growth (Note 3)	<b>3,528</b>	3,594	<b>3,581</b>	<b>3,832</b>	<b>3,561</b>	<b>3,550</b>
<b>Subtotal</b>	<b>3,767</b>	<b>3,856</b>	<b>3,943</b>	<b>4,124</b>	<b>3,898</b>	<b>3,871</b>
Internal services (Note 4)	1,572	1,554	1,573	1702	1,572	1,572
<b>Total</b>	<b>5,339</b>	<b>5,410</b>	<b>5,516</b>	<b>5,826</b>	<b>5,470</b>	<b>5,442</b>

Note 1: Variance is primarily related to the transfer of FTEs to the Federal Economic Development Agency of Northern Ontario, which officially became an independent agency on August 12, 2021 and to anticipated staffing plans that did not materialize under the Universal Broadband Fund. These decreases are offset by new funding received in-year for the Diverse and Inclusive Economy Program, the Black Entrepreneurship Loan Fund and the Canada Digital Adoption Program: Stream 1.

Note 2: Variance is related to additional staffing to support the Strategic Science Fund, the National Quantum Strategy, the Pan-Canadian Artificial Intelligence Strategy and the Genomics Secretariat, for which the funding was reallocated internally.

Note 3: Variance is related to new funding received in-year for the Cyber Security Innovation Network, Net Zero Accelerator, Canada Digital Adoption Program: Stream 2, the Youth Recovery Strategy, and to support Intellectual property-rich Canadian firms.

Note 4: Variances are primarily related to new funding received in-year for corporate services to support the implementation of various initiatives such as the Canada Digital Adoption Program, the Net Zero Accelerator, and intellectual property-rich firms.

## **Expenditures by vote**

For information on ISED's organizational voted and statutory expenditures, consult the [Public Accounts of Canada 2021](#).<sup>x</sup>

## **Government of Canada spending and activities**

Information on the alignment of ISED's spending with Government of Canada's spending and activities is available in [GC InfoBase](#).<sup>xi</sup>

## **Financial statements and financial statements highlights**

### **Financial statements**

ISED's financial statements (unaudited) for the year ended March 31, 2022, are available on the [departmental website](#).<sup>xii</sup>

### **Financial statement highlights**

#### **Summary of 2021–22 Financial Results**

The financial results are shaped by the Department's programs and internal services that aim to help make Canada a world-leading centre for innovation, to help create better jobs, to strengthen and grow the middle class and to provide better opportunities for all Canadians.



## Condensed Statement of Operations (unaudited) for the year ended March 31, 2022 (dollars)

Innovation, Science and Economic Development Canada Condensed Statement of Operations (unaudited) For the year ended March 31, 2022 (dollars)					
Financial Information	2021–22 Planned Results*	2021–22 Actual	2020–21 Actual	Difference (2021–22 actual minus 2021–22 planned)	Difference (2021–22 actual minus 2020–21 actual)
Total expenses	3,825,702,808	2,884,067,559	2,915,075,339	(941,635,249)	(31,007,780)
Total net revenues	252,755,800	239,348,597	222,218,781	(13,407,203)	17,129,816
Net cost of operations before government funding and transfers	3,572,947,008	2,644,718,962	2,692,856,558	(928,228,046)	(48,137,596)

\* 2021–22 Future-Oriented Statement of Operations; adjusted to remove FedNor, who became a separate entity on August 12, 2021

## Condensed Statement of Financial Position (unaudited) as of March 31, 2022 (dollars)

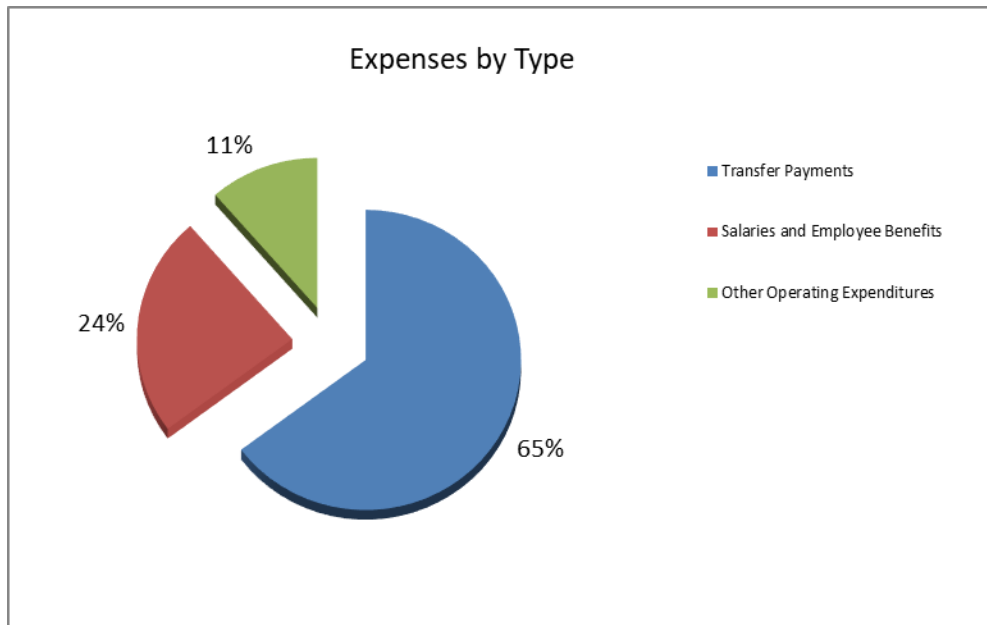
Innovation, Science and Economic Development Canada Condensed Statement of Financial Position (unaudited) As at March 31, 2022 (dollars)			
Financial Information	2021–22	2020–21	Difference (2021–22 minus 2020–21)
Total net liabilities	1,835,604,612	1,782,566,756	53,037,856
Total net financial assets	1,247,924,462	858,790,790	389,133,672
Departmental net debt	587,680,150	923,775,966	(336,095,816)
Total non-financial assets	157,032,629	152,234,275	4,798,354
Departmental net financial position	(430,647,522)	(771,541,691)	340,894,169

### Planned Results

The \$928 million variance between the 2021–22 planned results and the 2021–22 actual results is primarily due to differences in transfer payments. ISED transferred some funding to future years via a reprofiling request for existing Grants and Contribution (G&C) programs; in particular under the Strategic Innovation Fund and the Canada Foundation for Innovation (CFI). Additionally, the Allowance for Loan Guarantees (a liability representing the potential liability ISED has for future defaulted loans under the Canada Small Business Financing Act) was reduced to better represent the true potential for defaults since the pandemic started.

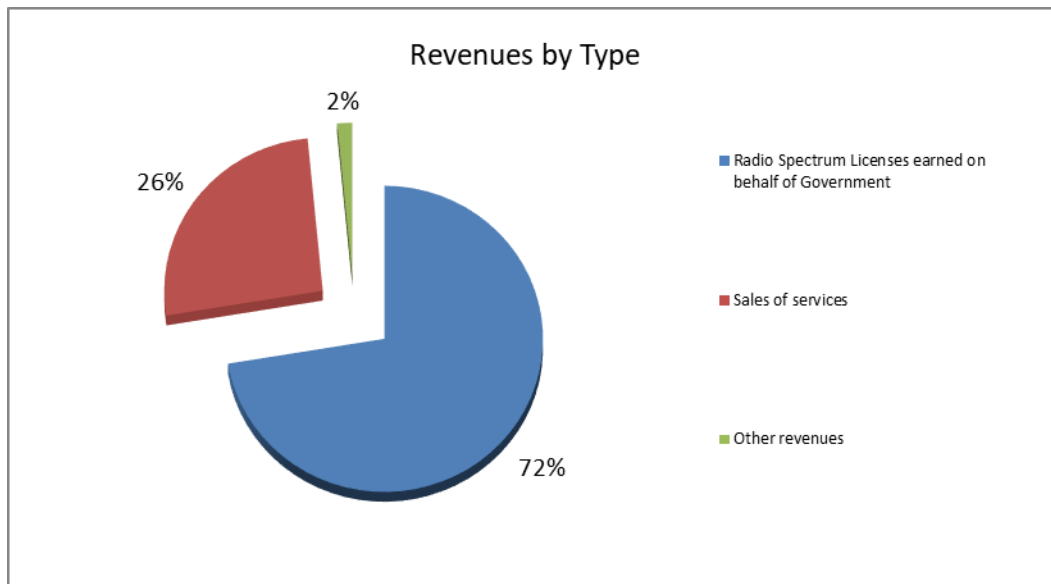
The variance in total net revenues is attributable to lower service revenues than planned. Some of this variance can be attributed to reduced production capacity as a result of the pandemic.

## Actuals - Expenses



Total expenses were \$2.89 billion in 2021–22, a decrease of \$31 million from 2020–21. This decrease is mainly attributable to the reduction in the Allowance for Loan Guarantees (a credit to the expense) which offsets an increase year-over-year in program spending, largely for expenses related to the Universal Broadband Fund. Other operating expenses were consistent with the prior fiscal year.

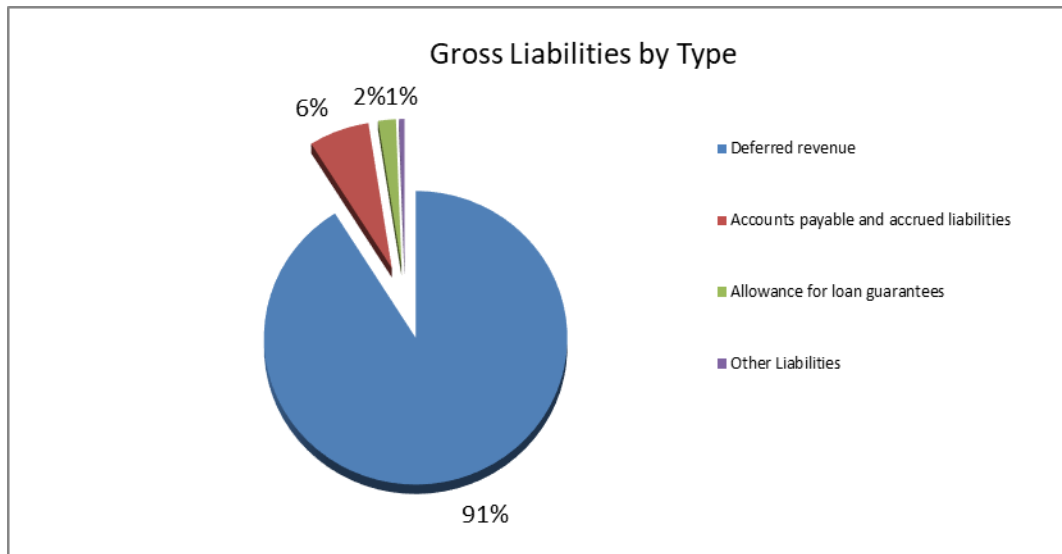
## Actuals - Revenues



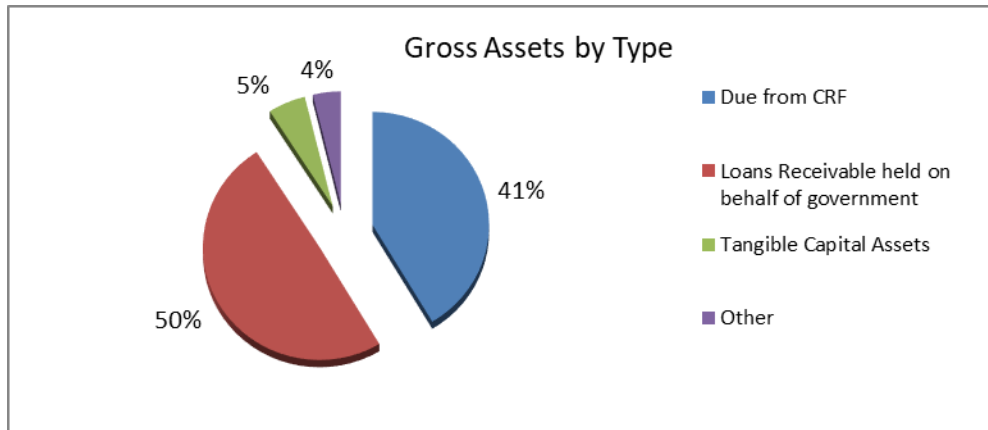
Total gross revenues were \$1.4 billion in 2021–22, an increase of \$100 million compared to 2020–21, while net revenues of \$239 million in 2021–22 increased by \$17 million compared to the previous fiscal year. The net revenue increase is mostly attributable to an increase in service requests for CIPO whereas the gross revenue increase is attributable revenue from radio spectrum licences and is due to new long-term spectrum licence (3500 MHz range) revenue recognition. Those revenues are reported as revenues earned on behalf of Government, as they cannot be accessed by the Department.

<b>Innovation, Science and Economic Development Canada Condensed Statement of Financial Position (unaudited)</b>			
As at March 31, 2022 (dollars)			
<b>Financial Information</b>	<b>2021–22</b>	<b>2020–21</b>	<b>Difference (2021–22 minus 2020–21)</b>
Total net liabilities	1,835,604,612	1,782,566,756	53,037,856
Total net financial assets	1,247,924,462	858,790,790	389,133,672
Departmental net debt	587,680,150	923,775,966	(336,095,816)
Total non-financial assets	157,032,629	152,234,275	4,798,354
Departmental net financial position	(430,647,522)	(771,541,691)	340,894,169

## Actuals - Liabilities



Total gross liabilities were \$18.9 billion for 2021–22, an increase of \$11 billion year-over-year, while net liabilities were \$1.8 billion, an increase of \$53 million compared to 2020–21. The increase in gross liabilities is mainly attributable to the receipt of fees for the 3500 MHz spectrum auction, received in July 2021. As spectrum revenues are earned on behalf of government, the associated deferred revenues are removed from the gross liabilities of the department. The increase in net liabilities is a combination of increased accounts payable for grants and contributions programs consistent with the increase in expenses, offset by the reduction to loan guarantee provision.

**Actuals - Assets**

Total gross financial assets amounted to \$2.9 billion for 2021–22, an increase of \$446 million from 2020–21, while net financial assets were \$1.2 billion, an increase of \$389 million year-over-year. The increase in net financial assets is primarily due to higher amounts due from the consolidated revenue fund. This asset account represents the department's access to the consolidated revenue fund for discharging its liabilities and this amount has increased proportionately with the increase in accounts payables.

## Corporate information

### Organizational profile

#### **Minister of Innovation, Science and Industry**

The Honourable François-Philippe Champagne, P.C., M.P.

#### **Minister of International Trade, Export Promotion, Small Business and Economic Development**

The Honourable Mary Ng, P.C., M.P.

#### **Minister of Tourism, Associate Minister of Finance**

The Honourable Randy Boissonnault, P.C., M.P.

#### **Minister of Rural Economic Development**

The Honourable Gudie Hutchings, P.C., M.P.

#### **Deputy ministers:**

Simon Kennedy

Catherine Blewett

Francis Bilodeau

#### **Ministerial portfolio:**

[Innovation, Science and Economic Development](#)<sup>xiii</sup>

#### **Enabling instrument(s):**

Innovation, Science and Economic Development Canada's founding legislation is the [Department of Industry Act](#), S.C. 1995, c.1.<sup>xiv</sup>

#### **Year of incorporation / commencement:**

1892

### **Raison d'être, mandate and role: who we are and what we do**

Information on ISED's raison d'être, mandate and role is available on ISED's [website](#).<sup>xv</sup>

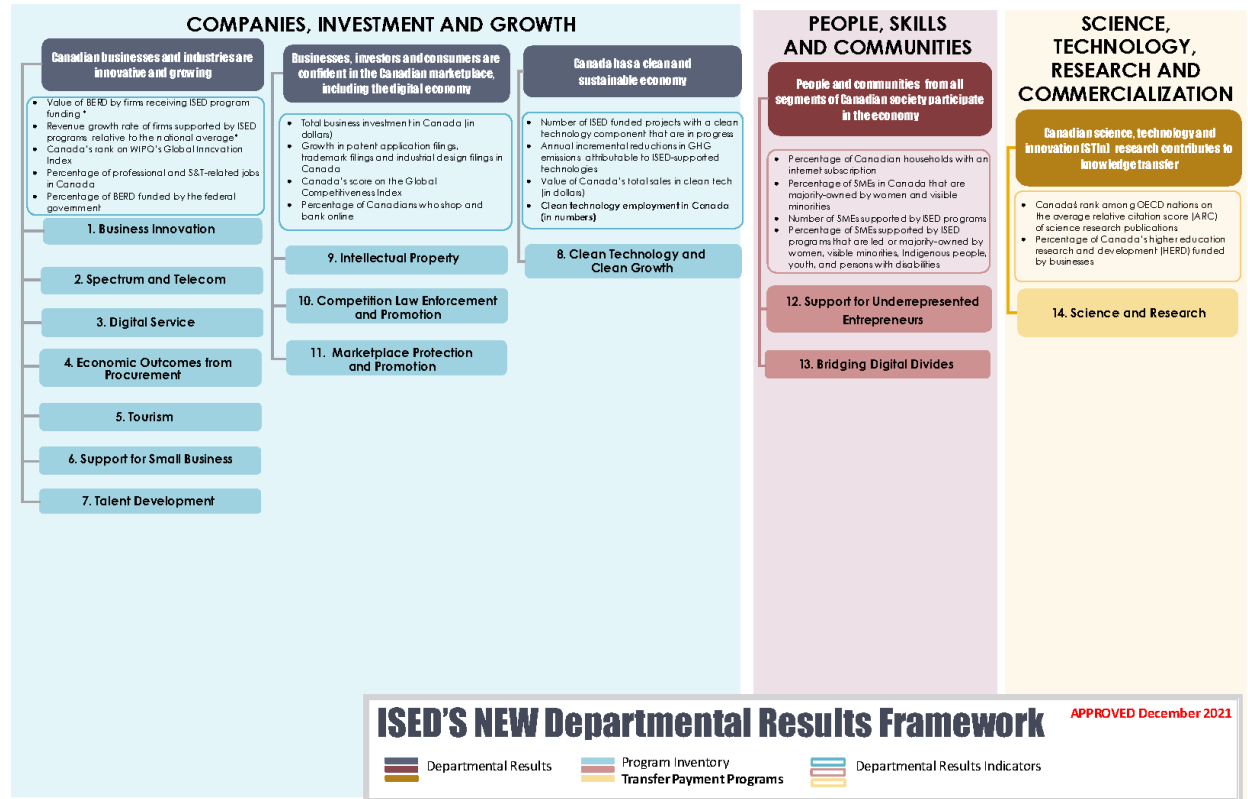
For more information on the department's organizational mandate letter commitments, see the [Ministers' mandate letters](#).<sup>xvi</sup>

### **Operating context**

Information on the operating context is available on [ISED's website](#).<sup>xvii</sup>

## Reporting framework

ISED’s Departmental Results Framework and Program Inventory of record for 2021–22 are shown below.



<b>Core Responsibility</b>	<b>Companies, Investment and Growth</b>
<b>Departmental Result</b>	Canadian Businesses and industries are innovative and growing
<b>Departmental Result Indicators</b>	<ul style="list-style-type: none"> <li>Value of BERD by firms receiving ISED program funding</li> <li>Revenue growth rate of firms supported by ISED programs relative to the national average</li> <li>Canada's rank on WIPO's Global Innovation Index</li> <li>Percentage of professional and S&amp;T-related jobs in Canada</li> <li>Percentage of BERD funded by the federal government</li> </ul>
<b>Program Inventory</b>	<ol style="list-style-type: none"> <li>Business Innovation</li> <li>Spectrum and Telecom</li> <li>Digital Service</li> <li>Economic Outcomes from Procurement</li> <li>Tourism</li> <li>Support for Small Business</li> </ol>

	7. Talent Development
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<b>Core Responsibility</b>	<b>Companies, Investment and Growth</b>
<b>Departmental Result</b>	Canada has a clean and sustainable economy
<b>Departmental Result Indicators</b>	<ul style="list-style-type: none"> <li>• Number of ISED funded projects with a clean technology component that are in progress</li> <li>• Annual incremental reduction in GHG emissions attributable to ISED to ISED-supported technologies</li> <li>• Value of Canada’s total sales in clean tech (in dollars)</li> <li>• Clean technology employment in Canada (in numbers)</li> </ul>
<b>Program Inventory</b>	8. Clean Technology and Clean Growth

<b>Core Responsibility</b>	<b>Companies, Investment and Growth</b>
<b>Departmental Result</b>	Businesses, investors and consumers are confident in the Canadian marketplace, including the digital economy
<b>Departmental Result Indicators</b>	<ul style="list-style-type: none"> <li>• Total business investment in Canada (in dollars)</li> <li>• Growth in patent application filings, trademark filings, and industrial design filings in Canada</li> <li>• Canada’s score on the World Economic Forum’s Global Competitiveness Index</li> <li>• Percentage of Canadians who shop and bank online</li> </ul>
<b>Program Inventory</b>	9. Intellectual Property 10. Competition Law Enforcement and Promotion 11. Marketplace Protection and Promotion

<b>Core Responsibility</b>	<b>People, Skills and Communities</b>
<b>Departmental Result</b>	People and communities from all segments of Canadian society participate in the economy
<b>Departmental Result Indicators</b>	<ul style="list-style-type: none"> <li>• Percentage of Canadian household with an internet subscription</li> <li>• Percentage of SMEs in Canada that are majority-owned by women and visible minorities</li> <li>• Number of SMEs supported by ISED programs that are led or majority-owned by women, visible minorities, indigenous people, youth and persons with disabilities</li> </ul>
<b>Program Inventory</b>	12. Support for Underrepresented Entrepreneurs



	13. Bridging Digital Divides 14. Economic Development in Northern Ontario
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<b>Core Responsibility</b>	Science Technology, Research and Commercialization
<b>Departmental Result</b>	Canadian science, technology and innovation (STIn) research contributes to knowledge transfer
<b>Departmental Result Indicators</b>	<ul style="list-style-type: none"> <li>• Canada's rank among OECD nations on the average citation score (arc) of science research publications</li> <li>• Percentage of Canada's higher education research and development (HERD) funded by business</li> </ul>
<b>Program Inventory</b>	15. Science and Research

## Supporting information on the program inventory

Financial, human resources and performance information for ISED's Program Inventory is available in [GC InfoBase](#).<sup>xviii</sup>

## Supplementary information tables

The following supplementary information tables are available on ISED's website:

- ▶ Departmental Sustainable Development Strategy/Reporting on Green Procurement
- ▶ Details on transfer payment programs
- ▶ Gender-based analysis plus
- ▶ Response to parliamentary committees and external audits
- ▶ Up-front multi-year funding
- ▶ United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals

## Federal tax expenditures

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures each year in the [Report on Federal Tax Expenditures](#).<sup>xix</sup> This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to related federal spending programs as well as evaluations and GBA Plus of tax expenditures.

## Organizational contact information

### Mailing address

Corporate Management Sector  
Innovation, Science and Economic Development Canada  
235 Queen Street  
2nd Floor, East Tower  
Ottawa, ON K1A 0H5

**Fax:** 613-954-2340

**Email:** [ic.info-info.ic@ised-isde.gc.ca](mailto:ic.info-info.ic@ised-isde.gc.ca)

**Website:** <http://www.ic.gc.ca/eic/site/icgc.nsf/eng/home><sup>xx</sup>

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## Appendix: definitions

### **appropriation** (*crédit*)

Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

### **budgetary expenditures** (*dépenses budgétaires*)

Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

### **core responsibility** (*responsabilité essentielle*)

An enduring function or role performed by a department. The intentions of the department with respect to a core responsibility are reflected in one or more related departmental results that the department seeks to contribute to or influence.

### **Departmental Plan** (*plan ministériel*)

A report on the plans and expected performance of an appropriated department over a 3-year period. Departmental Plans are usually tabled in Parliament each spring.

### **departmental priority** (*priorité*)

A plan or project that a department has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired departmental results.

### **departmental result** (*résultat ministériel*)

A consequence or outcome that a department seeks to achieve. A departmental result is often outside departments' immediate control, but it should be influenced by program-level outcomes.

### **departmental result indicator** (*indicateur de résultat ministériel*)

A quantitative measure of progress on a departmental result.

### **departmental results framework** (*cadre ministériel des résultats*)

A framework that connects the department's core responsibilities to its departmental results and departmental result indicators.

### **Departmental Results Report** (*rapport sur les résultats ministériels*)

A report on a department's actual accomplishments against the plans, priorities and expected results set out in the corresponding Departmental Plan.

### **experimentation** (*expérimentation*)

The conducting of activities that seek to first explore, then test and compare the effects and impacts of policies and interventions in order to inform evidence-based decision-

making, and improve outcomes for Canadians, by learning what works, for whom and in what circumstances. Experimentation is related to, but distinct from innovation (the trying of new things), because it involves a rigorous comparison of results. For example, using a new website to communicate with Canadians can be an innovation; systematically testing the new website against existing outreach tools or an old website to see which one leads to more engagement, is experimentation.

**full-time equivalent** (*équivalent temps plein*)

A measure of the extent to which an employee represents a full person-year charge against a departmental budget. For a particular position, the full-time equivalent figure is the ratio of number of hours the person actually works divided by the standard number of hours set out in the person's collective agreement.

**gender-based analysis plus (GBA Plus)** (*analyse comparative entre les sexes plus [ACS Plus]*)

An analytical tool used to support the development of responsive and inclusive policies, programs and other initiatives; and understand how factors such as sex, race, national and ethnic origin, Indigenous origin or identity, age, sexual orientation, socio-economic conditions, geography, culture and disability, impact experiences and outcomes, and can affect access to and experience of government programs.

**government-wide priorities** (*priorités pangouvernementales*)

For the purpose of the 2021–22 Departmental Results Report, government-wide priorities refers to those high-level themes outlining the government's agenda in the 2020 Speech from the Throne, namely: Protecting Canadians from COVID-19; Helping Canadians through the pandemic; Building back better – a resiliency agenda for the middle class; The Canada we're fighting for.

**horizontal initiative** (*initiative horizontale*)

An initiative where two or more federal organizations are given funding to pursue a shared outcome, often linked to a government priority.

**non-budgetary expenditures** (*dépenses non budgétaires*)

Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

**performance** (*rendement*)

What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve, and how well lessons learned have been identified.

**performance indicator** (*indicateur de rendement*)

A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

**performance reporting** (*production de rapports sur le rendement*)

The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

**plan** (*plan*)

The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally, a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead to the expected result.

**planned spending** (*dépenses prévues*)

For Departmental Plans and Departmental Results Reports, planned spending refers to those amounts presented in Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their Departmental Plans and Departmental Results Reports.

**program** (*programme*)

Individual or groups of services, activities or combinations thereof that are managed together within the department and focus on a specific set of outputs, outcomes or service levels.

**program inventory** (*répertoire des programmes*)

Identifies all the department's programs and describes how resources are organized to contribute to the department's core responsibilities and results.

**result** (*résultat*)

A consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

**statutory expenditures** (*dépenses législatives*)

Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

**target** (*cible*)

A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

**voted expenditures** (*dépenses votées*)

Expenditures that Parliament approves annually through an appropriation act. The vote wording becomes the governing conditions under which these expenditures may be made.

## Endnotes

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- i. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - ii. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - iii. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - iv. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - v. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - vi. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - vii. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - viii. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - ix. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - x. Public Accounts of Canada, <http://www.tpsgc-pwgsc.gc.ca/recgen/cpc-pac/index-eng.html>
  - xi. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - xii. 2021–22 Departmental Financial Statements, [http://www.ic.gc.ca/eic/site/017.nsf/eng/h\\_00226.html](http://www.ic.gc.ca/eic/site/017.nsf/eng/h_00226.html)
  - xiii. Innovation, Science and Economic Development portfolio, [https://www.ic.gc.ca/eic/site/icgc.nsf/eng/h\\_00022.html](https://www.ic.gc.ca/eic/site/icgc.nsf/eng/h_00022.html)
  - xiv. Department of Industry Act, <https://laws-lois.justice.gc.ca/eng/acts/i-9.2/>
  - xv. Innovation, Science and Economic Development, <http://www.ic.gc.ca/eic/site/icgc.nsf/eng/home>
  - xvi. Mandate Letters, <https://pm.gc.ca/en/mandate-letters>
  - xvii. Innovation, Science and Economic Development, <http://www.ic.gc.ca/eic/site/icgc.nsf/eng/home>
  - xviii. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
  - xix. Report on Federal Tax Expenditures, <https://www.canada.ca/en/department-finance/services/publications/federal-tax-expenditures.html>
  - xx. Innovation, Science and Economic Development, <http://www.ic.gc.ca/eic/site/icgc.nsf/eng/home>