# **Innovation, Science and Economic Development Canada**

# 2022-23

# Departmental Results Report

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# From the ministers

It is our pleasure to present the 2022–23 Departmental Results Report for Innovation, Science and Economic Development Canada (ISED).

Over the past year, the ISED Portfolio worked closely with other government departments and agencies following the pandemic to build a more resilient, sustainable and inclusive economy that benefits all Canadians.

With innovation at the core of its mandate, ISED is always working to strengthen emerging industrial sectors, including support for the development of a fully integrated electric vehicle battery supply chain. In 2022–23, this included an agreement with Volkswagen, the largest car manufacturer in the world, to build an electric vehicle battery manufacturing plant in Ontario. Through the Strategic Innovation Fund's Net Zero Accelerator initiative, ISED invested in projects such as a lithium production facility in Alberta and low-carbon emission aluminum smelting in Quebec. With the launch of the Canadian Critical Minerals Strategy, these projects and many others are supporting Canada's transition to a net-zero economy.

Science and research underpins much of the industrial innovation happening within and beyond our borders. On this front, more than \$385 million was invested through the Biomanufacturing and Life Sciences Strategy to support the development of vaccines and therapeutics, develop domestic biomanufacturing capabilities and surveillance systems, and provide training and development opportunities to grow Canada's talent pipeline. The Pan-Canadian Artificial Intelligence Strategy and the National Quantum Strategy invested \$168 million to advance the commercialization of quantum computing and to develop cutting-edge artificial intelligence and wireless technologies to strengthen Canada's digital infrastructure for years to come.

In developing and administering its programs, policies and services, ISED continued to apply a lens of equity, diversity and inclusion. This is highlighted by the Department's work to remove barriers for under-represented entrepreneurs and ensure their long-term prosperity by providing support to women-owned and Black-owned businesses and by making more financial capital available to Indigenous women entrepreneurs. Additionally, ISED worked to improve its data collection and performance reporting related to equity, diversity and inclusion (EDI) and Gender-based Analysis Plus (GBA Plus), to ensure its programs, policies and services are accessible to all Canadians and that investments have an equitable impact across the Canadian population.

Supporting small and medium-sized enterprises (SME) in all sectors of the economy continued to be a primary focus for the Department last year. The Canada Digital Adoption Program accelerated digital literacy among SMEs by providing funding to help them grow and modernize their operations. Complementing this, the Business Development Bank of Canada authorized more than 1,100 loans and disbursed more than 3,300 grants to support the development of digital adoption plans. Furthermore, ISED implemented enhancements to the Canada Small Business Financing Program (CSBFP) through regulatory changes, providing lenders and small businesses with additional financing products, new classes of loans, increased loan amounts and terms, improved loan conditions, and decreased administrative burden.

In collaboration with the regional development agencies, ISED continued to support communities in Canada's rural and remote areas, including Indigenous communities, to achieve sustainable, long-term growth. To close the country's connectivity gap, the Universal Broadband Fund supported the expansion of high-speed Internet and broadband access, connecting households, schools, hospitals and other institutions in unserved and underserved rural, remote and Indigenous communities. Funding from all levels of government and private sector partners has meant that, as of March 2023, 93.5% of Canadian homes have access to high-speed Internet, which is well on the way toward meeting the target of 98% by 2026 and 100% by 2030.

Many beneficiaries of the aforementioned programs operate in Canada's tourism industry. As we are now moving from post-pandemic recovery to prosperity, this industry also received targeted federal support through the Tourism Relief Fund (TRF), including \$485 million in regional funding, \$50 million of which was set aside for Indigenous tourism. Four national tourism organizations also received funding through the TRF's National Priorities Stream to support pan-Canadian or multi-regional activities.

In July 2023, we also launched the new Federal Tourism Growth Strategy following an extensive consultation process involving tourism stakeholders, provincial and territorial counterparts, and Indigenous tourism partners and operators. The goal with this new Strategy is to grow the sector by 40% by 2030. It intends to be a living document that offers a roadmap for federal government partners with many of the levers to support recovery, notably on transportation, labour and housing, to ensure alignment and synchronicity. It will help us seize this opportunity to place Canada firmly on the global tourism map, all while building an economy that works for everyone.

We invite you to read this report to learn more about how the ISED Portfolio is working together with Canadians of all backgrounds and in all regions—urban and rural—to position Canada as a leader in the global economy.











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# Results at a glance

In 2022–23, as Canadians and businesses continued to face post-pandemic socio-economic challenges, ISED remained committed to fostering conditions for investment, enhancing Canadian research and innovation, and driving growth in key sectors to help the Canadian economy recover and meet the global challenges of the future. ISED and its portfolio partners continued to work together to grow the Canadian economy through strategic actions and investments, including providing support for Canadian businesses and entrepreneurs to strengthen their competitiveness and promote their prosperity.

# Shaping a more inclusive Canadian economy

ISED worked to build a more inclusive economy by continuing to foster a culture of diversity, representation and inclusivity in businesses to empower and engage traditionally under-represented groups. In collaboration with the regional development agencies (RDA), ISED supported the development and expansion of services that offer mentorship, networking, financial planning, and business training for Black entrepreneurs through the Black Entrepreneurship Program's (BEP) Ecosystem Fund. The Women Entrepreneurship Strategy (WES) ensured continued support for women-owned businesses and increased the capital available to diverse women entrepreneurs.

Along with regional investments delivered through the RDAs, <u>ISED invested \$15 million</u> of the \$500 million <u>Tourism Relief Fund (TRF)</u> nationally, to help tourism businesses and communities safely welcome back visitors, recover from the impacts of the pandemic and prepare for future growth. Contribution agreements were signed with four national tourism organizations that have the presence and partnerships to maximize the impact of the government investments aimed at addressing national gaps and priorities: the Indigenous Tourism Association of Canada, the Tourism Industry Association of Canada, the Hotel Association of Canada and Tourism HR Canada.

# Facilitating transition to a modern digital economy

To ensure all Canadians can participate fully in the growing digital economy, ISED focused on improving Internet access for consumers, workers, entrepreneurs and businesses, in all sectors and regions. To close the connectivity gap, ISED continues to roll out shovel-ready projects to expand Canada's backbone infrastructure, enabling households, schools, hospitals and other institutions in rural, remote and Indigenous communities across Canada to connect to the Internet. As of March 2023, 93.5% of Canadian homes now have access to high-speed Internet, and ISED is on track to reach the national target to provide high-speed Internet access to 98% of Canadian households by 2026 and 100% by 2030.

ISED also provided accessible technologies as well as programs and services to increase digital literacy, helping Canadians and businesses acquire the vital skills and competencies required to succeed in the digital economy. Through the Canada Digital Adoption Program (CDAP), small

and medium-sized enterprises (SME) are receiving financial support as well as technical guidance to modernize their operations, increase their digital presence and provide short-term work placements for postsecondary students or recent graduates to help small businesses develop their e-commerce footprint.

## Leveraging science and technology to prepare for future health threats

ISED continued to invest in and support the development and manufacture of vaccines, treatment technologies, therapeutics and other specialized supplies. Initiatives such as the Canada Biomedical Research Fund and the Biosciences Research Infrastructure Fund support public health needs while also preparing Canada to respond swiftly and ensuring resiliency in the face of future threats.

ISED is focused on developing a world-class biomanufacturing and life sciences sector, and on reinvesting in science more broadly, in order to meet the needs and challenges of the future. To support the development of vaccines and therapeutics and increase biomanufacturing capacity across Canada, investments in new biomanufacturing projects were made in 2022–23: <a href="the BioAccelerator">the BioAccelerator</a>iii, a new biomanufacturing facility funded through the Atlantic Canada Opportunities Agency (ACOA); Jubilant HollisterStier's project to increase its production capacity for various vaccines, delivered through SIF; and the Canadian Critical Drug Initiative—an integrated research, development and manufacturing initiative led by Applied Pharmaceutical Innovation as a not-for-profit organization—to strengthen the biomedical sector and improve the security of medical supply chains in Canada.

# Modernizing science, technology and research to support the ecosystem

In 2022–23, ISED launched the Advisory Panel on the Federal Research Support System to advise the Minister of Innovation, Science and Industry and the Minister of Health on the structure and governance of the federal systems supporting research and talent development. After consulting with experts and stakeholders, the Panel released its final reportiv in March 2023 which will inform the government's efforts to align and strengthen federal research support systems to benefit Canadian researchers and society.

The Department continued to support research and development in key emerging sectors such as artificial intelligence and quantum computing through the ongoing implementation of the Pan-Canadian Artificial Intelligence Strategy (PCAIS) and the National Quantum Strategy. In 2022–23, PCAIS partners from across Canada implemented initiatives spanning three pillars: commercialization, standards, and talent and research. AI projects announced in 2022–23 include 5G and digital innovation, and Michelin green mobility. Additionally, to advance research, talent and commercialization in quantum technologies, ISED established the National Quantum Strategy Secretariat to oversee the coordination and integration of quantum research and development (R&D) and new innovative technologies.

Additionally, ISED supported initiatives under the Canadian Network for the Advancement of Research, Industry and Education (CANARIE) to enhance opportunities for collaborative

knowledge, creation and innovation. To ensure academic researchers have continuous access to digital tools to conduct world-leading research, ISED continued to monitor and assist the Digital Research Alliance of Canada (DRAC). To promote best practices in research data management and research software adoption, ISED assisted the Alliance in its transition to becoming a digital research infrastructure (DRI) service provider, service coordinator and investor.

# Fostering dynamic and competitive markets

ISED continued to help foster more competitive and innovative markets by introducing a range of modernization measures. These measures included broadening online services that educate and raise awareness on the intellectual property (IP) system, automating processes, and augmenting work tools for IP examination. This entailed faster patent prosecutions that can swiftly protect transformative inventions, catalyzing the momentum of Canadian innovation at large. ISED also conducted market studies, which proposed stronger pro-competitive policies that cultivate a culture of competition and innovation in the health care system. In the increasingly digital health care sector, the Department released several pro-competitive policy recommendations, which included modernizing regulations around privacy, security and datasharing consent. Furthermore, ISED conducted a review of the *Competition Act* to ensure healthy competition among consumers and the fair treatment of both existing and start-up businesses for the future.

## Supporting a green and sustainable economy

Mitigating climate change and supporting environmental protection has been at the forefront of ISED's work to promote a green and sustainable economy. The Department focused on increasing environmental responsibility and competitiveness through several strategic investments toward a cleantech supply chain. This included investments in the sustainable production of critical minerals, totalling \$249 million, and \$1.5 billion in Umicore, a global materials technology and recycling group, to establish a net-zero facility to produce essential components of electric vehicle batteries. The Strategic Innovation Fund (SIF) continued to focus its funding on projects that prioritize the reduction of greenhouse gas emissions (GHG), help accelerate decarbonization, develop Canadian clean technology, and mature the Canadian battery ecosystem. SIF's targeted investments to advance the electronic automotive industry are helping Canada mature its sustainable production of clean technologies, while also creating thousands of highly skilled jobs for Canadians. In 2022–23, through the Strategic Innovation Fund's Net Zero Accelerator initiative, ISED invested \$300 million in a project by Air Products Canada Ltd. to build a hydrogen production and liquefaction facility that uses autothermal reforming and carbon capture technology to advance clean fuels and clean energy in Canada.

## Canadian Industry for Ukraine: A collaborative initiative for humanitarian aid

On May 11, 2022, in response to the military invasion of Ukraine by Russia, ISED partnered with the <u>Canadian Immigrant Settlement Sector Alliance (CISSA-ACSEI)</u><sup>v</sup> - Operation Ukrainian Safe Haven (OUSH) to launch the <u>Canadian Industry for Ukraine</u><sup>vi</sup> donation portal. Through the Government of Canada's online portal, Canadian corporations, businesses and

institutions were invited to offer financial aid and/or large-scale donations of temporary accommodation, transportation, gift cards and other high-priority goods and services to support displaced Ukrainians and other displaced persons arriving in Canada. During fiscal year 2022–23, several companies—including Canadian Tire, Loblaws, Metro, Circle-K/Alimentation Couche-Tard, West Jet, Wuxly, Flair Airlines and VIA Rail Canada—showed their generosity by donating gift cards and cash through the program's associated portal. The portal helped the national network of more than 500 settlement organizations, leveraging fundraising efforts to provide direct and critical support to those in need.

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

Results: what we achieved

**Core responsibilities** 

**People, Skills and Communities** 

**Description** 

Support the creation, transfer and diffusion of knowledge to ensure that Canadians, including under-represented individuals, are equipped with the skills and tools to participate in an innovative, high-growth economy; advance a culture of innovation where they 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's programming supports economic participation through targeted investments that ensure small businesses and entrepreneurs, including those from under-represented groups, can participate in the economy and that all Canadians are connected to the Internet and have the knowledge and tools to use it. Programs such as the Black Entrepreneurship Program (BEP), Futurpreneur, and the Women Entrepreneurship Strategy (WES) support economic participation and resilience through targeted investments in women entrepreneurs, Black and Indigenous entrepreneurs, and young entrepreneurs. The 50–30 Challenge encourages the diversification of senior management and boards of directors, increasing opportunities for growth and leadership for equity-deserving groups in business.

The Canada Digital Adoption Program (CDAP) seeks to help Canadian businesses modernize their operations and enhance their digital presence, ensuring that they can sustain their business in an increasingly digital world. Investments under the Universal Broadband Fund (UBF) and ongoing projects under Connect to Innovate (CTI) and the Connecting Families Initiative seek to ensure that Canadians, including those in rural and remote regions, have access to an Internet connection, while programs like the Digital Literacy Exchange Program (DLEP) and the Accessible Technology Program (ATP) seek to ensure that people have the knowledge and tools to be able to use it. Together, these programs collectively contribute to ensuring that people and communities from all segments of Canadian society can participate fully and meaningfully in the economy.

#### Facilitating participation of under-represented groups in the economy

People from under-represented groups, including women, Black and Indigenous peoples, and youth, face systemic barriers to accessing the support and financial capital they need to start, grow and sustain their businesses. ISED, in collaboration with the regional development agencies (RDA), works to remove barriers for these groups by providing financial and non-financial support to Canadian entrepreneurs who would not typically receive assistance from traditional lending institutions.

# Supporting for women entrepreneurs, business owners, and women aspiring to leadership

Under the WES, the Women Entrepreneurship Knowledge Hub (WEKH) received funding—totalling \$2.8 million in 2022–23—for an additional two years to continue work as a one-stop source of knowledge, data and best practices for women entrepreneurs. WEKH's 2023 report on the State of Women's Entrepreneurship in Canada demonstrated that there has been an increase in the number of businesses majority-owned by women, despite the pandemic's negative impact on women entrepreneurs. Additionally, the report stated that WES' whole-of-government approach continued to raise awareness of gender bias in policies and programs and created new opportunities for women entrepreneurs across sectors. To bolster these gains, ISED continued to support women-owned businesses and make capital available to diverse women entrepreneurs through WES. Under the Women Entrepreneurship Loan Fund, 185 loans of up to \$50,000 were granted to underserved women entrepreneurs, totalling more than \$4.6 million. Further, the WES Ecosystem Fund supported 26,462 women entrepreneurs by disbursing 185 loans.

The WES also launched two calls for proposals totalling \$55 million: one for the WES Ecosystem Fund (\$40 million) and another for the Inclusive Women Venture Capital Initiative (IWVCI) (\$15 million). The intent of both calls was to invite not-for-profit organizations to strengthen the women entrepreneurship ecosystem in Canada by leading projects that provide business supports for women entrepreneurs in relevant industries, including in rural and remote areas, and build a more inclusive risk and venture capital environment for Canadian women.

Diversifying the composition of senior leadership and boards of directors in Canadian businesses is critically important to organizational success, and ultimately to the economic participation of under-represented groups. The 50–30 Challenge encourages businesses to adopt or enhance their equity and diversity practices, with the goal of increasing opportunities for advancement to positions of influence for people from under-represented groups. In 2022–23, ISED launched the What Works Toolkit, which offers concrete actions to help organizations set out policies and approaches for recruiting, mentoring, promoting and retaining board members and employees. The toolkit has since attracted substantial traffic across its English and French websites, with a combined total of more than 6,000 visitors. As of July 2023, more than 2,100 participating organizations of all sizes have signed on to the 50–30 Challenge.

In addition, the 50–30 Challenge Ecosystem Fund selected five Ecosystem Partners to provide Challenge participants with best practices, tools and tailored guidance. These partners are actively collaborating with participants to deliver tools and services to achieve the objectives and targets of the 50–30 Challenge. Northern College has been selected as one of five training hubs

for this initiative and will serve as the national training and consulting hub for the 50–30 Challenge project. Furthermore, the Diversity Institute was selected by the Standards Council of Canada to develop first-party and third-party certification standards for the 50–30 Challenge to measure organizational progress in achieving the program objectives.

# Supporting for Black entrepreneurs and business owners

With the help of the Business Development Bank of Canada (BDC), a financial institution devoted to Canadian entrepreneurs, the \$160 million Black Entrepreneurship Loan Fund—which includes \$130 million in funding from BDC—committed \$12 million in loans of up to \$250,000 to Black entrepreneurs and business owners in 2022–23 through the Federation of African Canadian Economics (FACE).

ISED also worked with the RDAs to implement the new National Ecosystem Fund to support not-for-profit, Black-led organizations in developing new services or expanding existing ones that offer mentorship, networking, financial planning and business training for Black entrepreneurs. Forty-four (44) not-for-profit organizations across the country were selected by the RDAs, with an investment of nearly \$100 million. Additionally, \$17 million in loans was disbursed to Black entrepreneurs through the Black Entrepreneurship Loan Fund, and 5,083 Black-owned businesses were supported through the BEP and Ecosystem Fund.

Through a \$5 million investment, the Department established a new Black Entrepreneurship Knowledge Hub (BEKH) that collects data on the state of Black entrepreneurship in Canada and helps to identify barriers to success for Black entrepreneurs, as well as opportunities for growth. In 2022–23, the Black Entrepreneurship Knowledge Hub established a physical and digital presence as well as six regional hubs across the country. The Hub actively engaged with Black businesses and academic institutions and moved forward with its research proposals to conduct community-based research on the Black entrepreneurship ecosystem in Canada.

## Supporting for young entrepreneurs and business owners

Through Futurpreneur Canada, ISED provides financial support, guidance and mentorship to young people starting businesses. In 2022–23, 883 diverse young entrepreneurs were supported in starting and growing their business. Through this program, 1,149 young entrepreneurs accessed mentorship services, and a total of 883 loans were issued, including 403 loans to young female entrepreneurs, 4 to non-binary entrepreneurs, and 33 to Indigenous entrepreneurs.

# Helping businesses go digital

Access to reliable digital technologies and support to develop relevant skills are key enablers in promoting more diversity in the Canadian economy. However, SMEs often face barriers to digital adoption, including a lack of resources, funding and expertise.

The Canada Digital Adoption Program (CDAP) was established in 2022 to help Canadian businesses modernize their operations and enhance their digital presence. The program consists of two streams: Grow Your Business Online and Boost Your Business Technology. After receiving more than 18,700 applications in 2022–23, the Grow Your Business Online stream

approved approximately \$17 million in grants to more than 7,600 small businesses in addition to disbursing \$16 million in grants to offer digital advice and support through a network of approved e-commerce advisors.

In the program's first year, the Boost Your Business Technology stream provided digital adoption information to more than 20,000 SMEs, disbursed more than 3,300 grants totalling \$47.6 million, and prompted more than 9,000 SMEs to adopt new technologies and advance their digital skills. Moreover, businesses were supported in the implementation of digital technology and the development of digital adoption plans through zero-precent loans from BDC and through wage subsidies. BDC authorized over 1,100 loans totalling \$65.5 million in 2022–23.

Furthermore, 35% of SMEs completing their digital adoption plans sought additional BDC loans for digital implementation, with more than 20% leveraging the youth work placement subsidy, accessing grants of up to \$7,300 to hire students or recent graduates for paid placements. For example, Magnet—a platform that helps businesses and job seekers by providing tools and resources to navigate changing labour markets—received a grant from the federal government to help provide thousands of work placements to students, supporting the delivery of CDAP. Magnet will use this funding for up to 16,800 youth worker placements across Canada over three years.

# Helping Canadians connect to and use the internet

With core institutions like government, banks and retailers increasingly leveraging digital technologies to support their clientele, it is critical for Canadians to access a stable and affordable high-speed Internet connection and have the knowledge and tools to be able to use it. Under Canada's Connectivity Strategy, ISED is working to bring reliable high-speed Internet access to all Canadians by improving connectivity in rural and remote regions. As of March 2023, 93.5% of Canadian homes have access to high-speed Internet. In November 2022, a \$475 million top-up to the now \$3.225 billion UBF continued to help connect rural and remote households across Canada to high-speed Internet and produce tangible results for Canadians. By funding shovel-ready projects that can connect households quickly, as of December 2022, the Rapid Response Stream (RRS) of the UBF had benefitted some 83,000 households across the country, including up to 9,000 Indigenous households

As of 2022–23, more than \$2.2 billion in UBF funding has been announced, including 262 projects and six broadband co-funding agreements with provinces, leveraging an additional \$2 billion in provincial funding. These partnerships will allow for more households to be connected, while helping to deliver on national connectivity targets faster. Further, ISED has secured capacity in Telesat's low Earth orbit satellite constellation (Telesat Lightspeed), which intends to connect up to 40,000 rural and remote households across Canada to high-speed Internet. Thanks to projects and investments under the UBF, members of various communities have reported significant improvements in their day-to-day lives as a result of having access to high-speed Internet. For example, in Sylvan Lake, Alberta, residents are now able to work from home and the office, increasing their productivity and flexibility, as well as being able to stay in touch with family overseas.

ISED's Connect to Innovate (CTI) program has invested in backbone fibre infrastructure to bring improved Internet speeds to rural and remote communities and connect public institutions like schools, hospitals, and provide some last-mile infrastructure for underserved households and anchor institutions. While all CTI funding has been allocated, projects continue to roll out across the country. As of March 2023, 227,550 households in 946 communities, including 116 Indigenous communities, have improved Internet speeds as a result of CTI projects. Additionally, 731 anchor institutions, such as hospitals and schools, now have improved Internet speeds. By the end of the program, CTI will have delivered new or improved high-speed Internet access to more than 975 rural and remote communities—more than triple the 300 communities initially targeted.

Through the Connecting Families Initiative, ISED ensured that low-income families and seniors who face affordability barriers could access improved home Internet service of 50/10 Mbps and 200 GB of data at affordable monthly rates. As of March 2023, 85,354 families and seniors are now receiving a Connecting Families Internet package, an increase of 10,214 from the previous year.

In addition to helping improve Internet access, ISED, through the Computers for Schools Plus (CFS+) program, has worked to ensure Canadians have access to the technological devices required to participate in the digital economy. CFS+ and its companion program, the Computers for Schools Internship program, support organizations and youth internships to refurbish and deliver ready-to-use computers and other digital devices to schools, libraries, non-profits, Indigenous communities and low-income individuals, reducing electronic waste and ensuring those most in need have access to the digital world. In 2022–23, CFS+ distributed 58,805 computers to schools, libraries and non-profit organizations, among others. Over the life of the program, CFS+ has distributed more than 1.97 million devices.

ISED's Digital Literacy Exchange Program (DLEP) continued to support not-for-profit organizations in the development and delivery of digital literacy skills training to Canadians who face barriers to participating in the digital economy. Applications for the second round of DLEP were accepted until September 2022, and contribution agreements were signed in March 2023.

Furthermore, ISED prioritized providing accessible technologies to Canadians by supporting the development of assistive technologies to increase Internet accessibility and enable Canadians with disabilities to participate fully in the digital economy. The Accessible Technology Program accepted applications for funding to support persons with disabilities in accessing the digital economy. In May 2023, 11 projects were selected to receive funding.

ISED tackles systemic barriers to economic participation on multiple fronts, with a focus on people from traditionally under-represented communities and people in rural and remote areas of the country, by providing access to financial capital and mentorship to businesses and entrepreneurs and by building Internet infrastructure and ensuring that people are equipped to use it. ISED's achievements in 2022–23 have continued to move us toward our goal of ensuring that people and communities from all segments of Canadian society can participate fully and meaningfully in the economy.

### Gender-based Analysis Plus

The programs under the People, Skills, and Communities core responsibility provide direct and indirect benefits to women and girls, Indigenous peoples, youth, Black and racialized people, Canadians with disabilities, members of 2SLGBTQI+ communities, and individuals in rural and remote areas by providing knowledge, tools and opportunities to participate in the economy. Further, many under-represented entrepreneurs received assistance from entrepreneurial support programs including knowledge building, mentorship and funding.

Women entrepreneurs have benefitted from targeted initiatives such as the Women Entrepreneurship Strategy (WES), which provides women with support services and financing to reduce barriers for women in Canada's entrepreneurship ecosystem. Additionally, to address existing data gaps, ISED recently requested that WES recipient organizations (third-party not-for-profit organizations) collect more granular data about the women entrepreneur clients accessing their WES-funded programming. The recipient organizations will then provide ISED with aggregate data concerning the clients that they serve—including data by region and equity group—to provide greater insight into the intersectionality of those accessing WES-funded programming.

Diverse people in all segments of the economy benefitted from ISED's digital service programs that provide fair and equitable access to the Internet and increase people's capacity to benefit from digitally enabled technologies. Through the Accessible Technology Program, ISED focuses on eliminating and reducing barriers to participation for persons with disabilities. The Digital Literacy Exchange Program aims to equip Canadians with the necessary skills to use computers, mobile devices and the Internet safely, securely and effectively. The program directly serves Indigenous peoples, persons with disabilities, individuals who do not speak English or French at home, seniors, individuals who have not completed high school, individuals who have low-income, residents of rural and remote areas, newcomers to Canada, and individuals from official language minority communities, allowing them to participate more fully in the digital economy. As a result of the Connecting Families Initiative, low-income families and seniors can now enjoy improved home Internet access and services at affordable rates. As a result of ISED's many programs and initiatives, rural and remote communities, including Indigenous populations, have directly benefited from access to high-speed Internet at home, improved Internet access to rural anchor institutions, and more reliable mobile connectivity.

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

ISED is a key player in Canada's efforts to develop and implement the United Nations (UN) 2030 Agenda and the Sustainable Development Goals (SDG). Under Canada's 2030 Agenda National Strategy, ISED is the lead on SDG 9—Industry, Innovation and Infrastructure—to "build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation." ISED's programs and initiatives that support this SDG include the Universal Broadband Fund (UBF), Connect to Innovate (CTI) and the Canada Digital Adoption Program (CDAP). Recognizing the importance of accelerating the transition to a low-carbon, inclusive,

clean growth economy, ISED will continue to help Canadians and Canadian businesses embrace sustainability as a core value over the short, medium and longer term through commitments to develop environmental sustainability plans.

#### **Innovation**

ISED has continued to support the use of experimentation and build capacity in this area to inform evidence-based decision making. In this past year, the Department worked to identify opportunities in all sectors of its programming for ways to improve service, focused on user research and experimentation as part of ISED's broader digital transformation roadmap. ISED continued its work with Infrastructure Canada (INFC) to explore how the National Broadband Internet Service Availability Map<sup>vii</sup> can be integrated into INFC's project to develop a Government of Canada Infrastructure Project Map, focusing on the connection across data communities that manage infrastructure data to better coordinate the data. The Department has also explored and tested user-centred methods for measuring diversity among ISED clients to improve program reporting on the uptake of services by equity-seeking groups.

# Key risks

An efficient digital infrastructure can address the issue of the digital divide that separates those with access to computers and the Internet and those without such access. Broadband Internet access continues to be fragmented across Canada, with access based largely on location and affordability. Given the current supply chain challenges, equipment and labour shortages, and inflation, coupled with the complexity of broadband infrastructure projects and unforeseen weather, climatic and environmental factors, there is a risk that projects aimed at bridging Canada's digital divide, particularly in rural and remote areas, could take longer than anticipated, thereby limiting full participation in the digital economy for some Canadians. To mitigate this risk, ISED worked closely with funding recipients to review project timelines and sources of additional funding where required, to ensure that these projects can connect Canadians as quickly as possible.

In addition, ISED continued to mitigate the risk through appropriate and tailored project planning. For example, all UBF projects are required to consider resiliency in their network design and construction. ISED program officers and engineers assessed the technical merit of projects on this basis and monitored them throughout the implementation phase. Additionally, ISED worked closely with recipients to ensure that they do not miss key milestones that would jeopardize the overall success of their projects by, for example, providing them with key tools and processes to support efficient and effective project development and management. As programs launch new initiatives to connect families and seniors to the Internet, the most significant risk that arises is low uptake of the new offering. To mitigate this risk, the programs worked with their non–profit partners to raise awareness of the programs through non-profit organizations across Canada that work with these populations.

# Results achieved

The following table shows, for People, Skills and Communities, the results achieved, the performance indicators, the targets and the target dates for 2022–23, and the actual results for the three most recent fiscal years for which actual results are available.

| Departmental results  | Performance indicators <sup>1</sup>   | Target                                    |                   | 2020–21<br>actual<br>results | 2021–22<br>actual results | 2022–23<br>actual results                            |
|---|---|---|-------------------|------------------------------|---------------------------|--|
| People and communities from all segments of Canadian society participate in the economy | Number of<br>small and<br>medium-sized<br>enterprises<br>supported by<br>ISED<br>programs | Year-over-<br>year<br>growth <sup>2</sup> | March<br>31, 2023 | 20,832                       | 21,246                    | 71,386 <sup>3</sup><br>(43,336<br>excluding<br>CDAP) |

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

<sup>&</sup>lt;sup>2</sup> The actual results will fluctuate from year to year based on budget decisions, funding allocations, and shifting priorities, which may impact the achievement of the target.

<sup>&</sup>lt;sup>3</sup> In 2022–23, data from the new Canada Digital Adoption Program (CDAP) was included in the calculation for this indicator for the first time, resulting in a significant increase to the overall total number of SMEs supported by ISED. The total is also impacted by changes to regional development agency (RDA) data collection and reporting for the WES Ecosystem Fund to more accurately capture the total number of SMEs supported. Additionally, CanNor and FedNor are included in the WES Ecosystem Fund data for the first time.

| Departmental results | Performance indicators <sup>1</sup>   | Target  | Date to<br>achieve<br>target | 2020–21<br>actual<br>results  | 2021–22<br>actual results   | 2022–23<br>actual results   |
|----------------------|---|---|------------------------------|---|---|---|
|                      | small and medium-sized enterprises supported by Innovation, Science and Economic Development Canada programs that are led or majority—owned by Indigenous Peoples, women, visible minorities, persons with disabilities and youth | Indigenous peoples: 1.8% Persons with disabilities: 0.3% Women: 50% Youth: 23% Visible minorities: 17.5%4 | March 31, 2023               | Indigenous peoples: 2.5% Persons with disabilities: 0.4% Women: 64.9% Youth: 25.3% Visible minorities: 18.1% <sup>5</sup> | Indigenous peoples: 1%  Persons with disabilities: 4.0%  Women: 60.3%  Youth: 13.0%  Visible minorities: 12.1%6 | Indigenous peoples: 1% (2.7% excluding CDAP)  Persons with disabilities: 0.7% (1.3% excluding CDAP)  Women: 46.9% (73.2% excluding CDAP)  Youth: 15.4%  Visible minorities: 7.8% (13.1% excluding CDAP <sup>7</sup> |
|                      | Percentage of<br>small and<br>medium-sized<br>enterprises<br>that are<br>majority-<br>owned by  | Women:<br>25%<br>Visible<br>minorities:<br>14%  | December<br>31, 2025         | Women:<br>18.6%<br>Visible<br>minorities:<br>16.0%  | Women: 18.2% Visible minorities: 15.7%  | Women: 19% Visible minorities: 17.6%  |

<sup>&</sup>lt;sup>4</sup> The target for each equity-seeking group was set by calculating the average of the following figures: (1) the percentage of ISED-supported businesses that are led or majority-owned by the equity-seeking group; (2) the percentage of ISED-supported businesses that are led or majority-owned by the equity-seeking group, excluding businesses supported by FedNor, which is now a separate agency and will no longer be calculated as part of ISED's totals; and, (3) the percentage of businesses that are majority-owned by the equity-seeking group, nationally.
<sup>5</sup> The denominator was derived by totalling the figures for ISED's programs that collect disaggregated data for this equity-seeking group. Programs that do not currently collect disaggregated data for this equity-seeking group were removed from the totals to avoid skewing the percentage. The percentage was calculated by dividing the program-level total for businesses that are led or majority-owned by the equity-seeking group by the total number of businesses supported by those same programs. Collecting disaggregated data is a priority for ISED and the Government of Canada. As such, more programs will be added to this indicator as disaggregated data becomes available.

<sup>&</sup>lt;sup>6</sup> Programs that do not currently collect disaggregated data for this equity-seeking group were removed from the totals to avoid skewing the percentage. Furthermore, actual results are subject to fluctuation as a result of changes to ISED's programming that targets equity-deserving groups and the reliance on persons from these groups to voluntarily self-identify.

| Departmental results | Performance indicators <sup>1</sup>  | Target                    | Date to achieve target | 2020–21<br>actual<br>results |                            | 2022–23<br>actual results   |
|----------------------|--|---------------------------|------------------------|------------------------------|----------------------------|-----------------------------|
|                      | women and visible minorities   |                           |                        |                              |                            |                             |
|                      | Percentage of<br>Canadian<br>households<br>with an<br>internet<br>subscription | Year–over–<br>year growth |                        | 94% (2020)8                  | Not available <sup>9</sup> | Not available <sup>10</sup> |

The financial, human resources and performance information for ISED's program inventory is available in GC InfoBase. viii

# **Budgetary financial resources (dollars)**

The following table shows, for People, Skills and Communities, budgetary spending for 2022–23, as well as actual spending for that year.

|                  | spending         | authorities      | spending<br>(authorities used) | 2022–23 difference<br>(actual spending<br>minus planned<br>spending) |
|------------------|------------------|------------------|--------------------------------|--|
| \$ 1,387,077,048 | \$ 1,387,077,048 | \$ 1,387,245,461 | \$ 479,010,077                 | \$ (908,066,971)   |

Variance primarily represents unused funding in the following programs: Canada Digital Adoption Program: Stream 1 as a result of delay in overall launch of the program which required lengthy negotiations with many delivery partners across the country as well as a reasonable time to ramp up operations; and Small Business and Entrepreneurship Development Program, Women

<sup>&</sup>lt;sup>7</sup> In 2022–23, data from the new Canada Digital Adoption Program (CDAP) was included in the calculation for this indicator for the first time, resulting in a significant increase to the overall total number of SMEs supported by ISED. Given the program does not specifically target equity-deserving groups, the percentage of ISED-supported SMEs majority-owned by people from the various equity-deserving groups is lower than in previous years. For comparative purposes, the percentages excluding CDAP are included in brackets.

<sup>&</sup>lt;sup>8</sup> The data for this indicator is derived from the Canadian Radio-Television and Telecommunications Commission's (CRTC) Communications Marketing Report (CMR). The most recent CMR reports that 93% (14.2 million) of Canadian households had an Internet subscription in 2020.

<sup>&</sup>lt;sup>9</sup> The data for this indicator is derived from the Canadian Radio-Television and Telecommunications Commission's (CRTC) Communications Marketing Report (CMR). In 2021, we reported the total number of Canadian households with an Internet subscription (11.98 million), as the CRTC had not yet published the percentage. The CMR now reports that 93.7% (14.6 million) of Canadian households had an Internet subscription in 2021.

<sup>&</sup>lt;sup>10</sup> The data for this indicator is derived from the Canadian Radio-Television and Telecommunications Commission's (CRTC) Communications Marketing Report (CMR). The 2022 CMR has not been published at the time of our reporting; however, the CRTC reports current trends that are updated every three months. As of November 2022, 12.38 million Canadian households had an Internet subscription.

Entrepreneurship Strategy and the Universal Broadband Fund as a result of extensive proposal assessments and contribution agreement negotiations with applicants. Unused funding for all programs has been identified to be moved to future years to better align the funding profiles with anticipated cash flow forecasts from recipients.

The financial, human resources and performance information for ISED's program inventory is available in GC InfoBase. ix

# **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 2022–23.

| 2022–23 planned full–time equivalents | equivalents | 2022–23 difference (actual full–<br>time equivalents minus planned<br>full–time equivalents) |
|---------------------------------------|-------------|--|
| 193                                   | 195         | 2  |

The financial, human resources and performance information for ISED's program inventory is available in GC InfoBase.<sup>x</sup>

# 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 (STI) research contributes to knowledge transfer.

ISED plays an important role in supporting Canada's science and technology policy agenda. The Department promotes the advancement of scientific knowledge by investing in training and skills development for highly qualified personnel, developing leadership competencies and business expertise among researchers, supporting research programs that address emerging fields of discovery, and developing research infrastructure to increase Canada's research capacity. In 2022–23, ISED continued to maintain and strengthen Canada's knowledge foundation and research excellence by positioning researchers and businesses to make scientific breakthroughs and innovations on the world stage. Ultimately, ISED's science and research programs strive to ensure that federal investments in scientific research and infrastructure lead to an innovative economy, which provides socio-economic benefits for Canadians.

#### **Investing in research ecosystem**

ISED continues to connect and enable the research capacity of Canadian universities, colleges, research hospitals and non-profit research institutions by investing in physical and digital research infrastructure. Investments in physical infrastructure provide researchers in Canada with state-of-the art equipment and modern facilities to respond to ongoing and emerging challenges. Investments in digital infrastructure and cybersecurity initiatives allow Canada's researchers, educators and innovators to connect safely to each other and to global data, technology and colleagues.

In 2022–23, ISED continued to invest in research infrastructure through the Canada Foundation for Innovation (CFI). The CFI awarded over \$127 million to post-secondary institutions and research hospitals in the first competition of the Biosciences Research Infrastructure Fund (BRIF). This initiative aligns with Canada's Biomanufacturing and Life Sciences Strategy, which fosters a vibrant domestic life sciences sector and strengthens pandemic readiness and response. Additionally, the CFI launched the second BRIF competition in partnership with the tri-agency Canada Biomedical Research Fund (CBRF). This collaboration supported multidisciplinary and applied research, talent development, and the associated research infrastructure requirements. Together, CBRF and BRIF expedited the translation of promising

research into commercially viable products and processes to combat future pandemics and emerging health threats. In stage 1 of the joint CBRF-BRIF competition, five research hubs were selected, representing cross-sector and cross-disciplinary partnerships that will spearhead these research activities.

To facilitate collaboration on digital research infrastructure, ISED continued to support CANARIE, which connects researchers and research institutions across the country through the National Research and Education Network (NREN), a collective of people, tools and infrastructure that supports access to a high-speed digital network. ISED supported CANARIE's management and the evolution of its network operations, particularly NREN, an essential research infrastructure. In 2022–23, ISED oversaw CANARIE's initiatives that focused on advancing next-generation technology, innovation in research software, and research data management. This included their role in supporting private sector innovation and facilitating the commercialization of products and services through the Digital Accelerators for Innovation and Research (DAIR) program.

Furthermore, ISED continued to assist the Digital Research Alliance of Canada (the Alliance) to ensure continuous access to digital tools for academic researchers. The Alliance continued to coordinate and deliver national services in advanced research computing (ARC), research data management (RDM) and research software (RS), while also funding digital research infrastructure (DRI) activities that promote innovation and expand the network of support and resources that are available to academic and research communities. ISED actively collaborated with the Alliance in its transition into the role of a DRI service provider, coordinator and investor, while also aiding in the development of programs to promote best practices in research data management and software adoption. Moreover, ISED supported the Alliance in establishing a service classification model, delineating the scope of services at the national, regional and local levels, along with outlining the responsibilities and funding requirements for effective service delivery. ISED remained dedicated to working alongside the Alliance to design and implement risk mitigation measures that would prevent service disruptions for advanced research computing services.

#### Investing in artificial intelligence and quantum research

To support Canada's world-leading capabilities in key disruptive technology areas, ISED continued to support strategic investments under the Pan-Canadian Artificial Intelligence Strategy (PCAIS) and the National Quantum Strategy (NQS), which focus on attracting, retaining and developing talent, investing in research, and translating research into commercial applications in emerging fields of discovery for the benefit of Canadians and our economy.

The PCAIS, announced in Budget 2021, with an investment exceeding \$443 million, seeks to drive the adoption of artificial intelligence (AI) across the Canadian economy and society and to build a stronger Canadian talent pipeline. As part of this strategy, in 2022-23, ISED maintained its support for three national artificial intelligence institutes: Amii in Edmonton, Mila in Montréal, and the Vector Institute in Toronto. These institutes played a pivotal role in training

and upskilling Canadian businesses and organizations by increasing IP awareness and offering assistance through applied projects, proof-of-concept initiatives and validation services. They also helped Canadian businesses and organizations develop their capacity to adopt commercial AI, especially with respect to promoting AI technology in critical sectors such as health, energy and the environment.

ISED's investments through the Canadian Institute for Advanced Research (CIFAR) also continued to advance the PCAIS by focusing on fortifying AI talent, research and collaboration. The Canada-CIFAR Artificial Intelligence (CCAI) Chairs program played a central role in this endeavor, attracting and retaining top AI researchers in Canadian universities, supporting their efforts to advance cutting-edge research and cultivating the next generation of AI leaders. Over 120 researchers, including more than 50 recruited from abroad, were appointed as Canada—CIFAR Artificial Intelligence Chairs. These Chairs were distributed across various universities in Canada, from Dalhousie University in Halifax to the University of British Columbia in Vancouver.

The NQS, announced with an investment of \$360 million in Budget 2021, seeks to amplify Canada's strength in quantum research, fosters the growth of quantum-ready technologies, and consolidates global leadership in this field. In accordance with the 2021 ministerial mandate letter, ISED's launch of the NQS in 2022–23 included several initiatives: a call for quantum internships led by Mitacs, quantum-related procurement calls led by Innovative Solutions Canada (ISC), and a new contribution agreement with Quantum Industry Canada (QIC), a consortium of Canadian quantum technologies companies. ISED also established the NQS Secretariat to oversee as well as support the complex task of integrating and coordinating quantum R&D. Efforts are currently under way to establish a Quantum Advisory Council, which will be responsible for providing impartial advice on strategy implementation. Additionally, ISED conducted bibliometric studies and collaborated with Statistics Canada to consolidate information on Canadian quantum firms.

## Investing in research and innovation

As part of Budget 2021 commitments to invest a total of \$2.2 billion over seven years, ISED continued to maintain and strengthen Canada's research excellence in its domestic life sciences sector, particularly including support for programs such as adMare Bioinnovations, Stem Cell Network and Genome Canada. In 2022–23, ISED's funding for adMare BioInnovations supported the establishment of new companies and the scale-up of operations, the translation of early-stage technology into practical applications, and training activities in the life sciences sector. Additionally, funding for the Stem Cell Network helped it expand its focus to encompass stem cell and regenerative medicine.

ISED also continued to support third-party organizations that advance fundamental research, including the Perimeter Institute for Theoretical Physics and CIFAR. The Perimeter Institute conducted research, training initiatives and outreach activities within the realm of theoretical physics and associated scientific fields. In 2022–23, the Institute continued its mandate as a world-leading centre for research by training more graduate students, especially through its

Perimeter Scholars International Program, and expanding its outreach program online. Similarly, CIFAR sustained its efforts in fostering interdisciplinary knowledge creation, supporting the long-term growth of emerging research leaders through knowledge mobilization across various domains in the sciences and humanities. In addition, the Perimeter Institute for Theoretical Physics and CIFAR remained focused on bolstering Canada's pandemic preparedness, enhancing food systems, advancing fundamental research and supporting knowledge mobilization.

Under the Pan-Canadian Genomics Strategy, ISED renewed support to Genome Canada, which initiated a genomics initiative in climate-smart agriculture and food systems in 2022–23. This new initiative allocated funding to a portfolio of interdisciplinary genomics research and innovation projects aimed at reducing the carbon footprint of Canadian agriculture and food production. ISED led stakeholder roundtable discussions, held online public consultations and published a What We Heard Report. The report informed the development of a comprehensive and collaborative genomics strategy that aligns with the needs and aspirations of stakeholders, ultimately leading to more coordinated and impactful genomics research and innovation in Canada.

#### Modernizing the science and research support ecosystem

In recent years, the Government of Canada has placed significant emphasis on modernizing the federal system supporting research and talent development and improving the effectiveness of federal investments in this sphere. As a leading department for policy direction and investments in the science and research ecosystem, ISED plays an important role in modernization programming through improvements to funding models and governance structures, coordination of investments, and interdepartmental collaboration.

The Strategic Science Fund (SSF), jointly led by ISED and Health Canada, aims to improve the effectiveness of federal investments in third-party science and research organizations (TPO) by applying a set of principles and a merit review to investment decisions under a competitive process. Federal investments in TPOs help advance the Department's priorities by leveraging the government's diverse mandates and areas of expertise related to R&D, the provision of evidence for policy-making, and the promotion of Canada's science and technology culture, including its innovation ecosystem. In 2022–23, 34 applications were received and underwent an external merit review by an expert panel, consisting of 18 members from academia, not-for-profit organizations, private industry and the public sector. Funding decisions are anticipated to be announced in 2023–24, with initial disbursements scheduled for early 2024–25.

In October 2022, ISED and Health Canada established the Advisory Panel on the Federal Research Support System. The Panel was mandated to provide independent advice on how the Government of Canada can modernize the way it supports academic research to position Canadian researchers to be more successful and maximize the benefits of research to Canadians. In March 2023, the Panel published its <u>final report</u>, xii proposing recommendations to the Minister of Innovation, Science and Industry and the Minister of Health. The report recommended enhancing coordination between ISED and Health Canada to ensure greater alignment and efficiency across research support, promoting inclusivity and diversity, increasing funding

flexibility, modernizing programming, reinvesting in research and talent, and improving accountability and evaluation mechanisms. These recommendations will inform future decisions surrounding the creation, evaluation and renewal of science and research programs.

ISED is also a member of the Canada Research Coordinating Committee (CRCC)<sup>xiii</sup>, which advances federal research priorities, coordinates policies and programs among research funding agencies and the Canada Foundation for Innovation (CFI) and strengthens Canada's research enterprise. In 2022–23, the CRCC advanced the Tri-Agency New Frontiers in Research Fund (NFRF) program, which funds interdisciplinary and international research that has high-risk, high-reward potential and that addresses significant challenges in the Canadian economy. The CRCC also launched the second Horizon Global Platform competition<sup>xiv</sup> under the international stream, delivered the fifth Exploration competition,<sup>xv</sup> participated in a joint International Initiative on Climate Change Adaptation and Mitigation,<sup>xvi</sup> and concluded a third special call for research on post-pandemic recovery.

ISED continued to support the granting agencies—the Natural Sciences and Engineering Research Council of Canada (NSERC), the Social Sciences and Humanities Research Council of Canada (SSHRC) and the Canadian Institutes of Health Research (CIHR)—through the provision of policy advice and program support. Furthermore, in collaboration with the three granting agencies, ISED supported the fourth evaluation of the Canada Research Chairs program and administered the fourth competition of the Canada Excellence Research Chairs (CERC) program as well as the third competition of the Canada First Research Excellence Fund (CFREF) in 2022–23. Through such initiatives, Canada aims at attracting and retaining world-class talent in engineering and the natural sciences, health sciences, humanities, and social sciences to achieve research excellence.

## Providing evidence-based policy recommendations

The Office of the Chief Science Advisor (CSA), appointed by the Prime Minister, plays a crucial role in ensuring that science is considered in public policy decisions and that scientific research, in support of Government of Canada programs, will be open and transparent to Canadians. To enhance research collaboration, in 2022–23 ISED supported the CSA in its engagement with international leaders and the provision of evidence and recommendations on issues of public interest.

Recognizing the potential long-term impacts of COVID-19, the CSA established a multidisciplinary task force in July 2022 to investigate and provide advice on managing post-COVID-19 conditions in Canada, including potential long-term economic, social and health impacts. On March 9, 2023, the task force released a comprehensive report and recommendations on post COVID-19 conditions, including recommendations for mitigating its long-term effects.

In April 2022, the CSA published the second report on <u>The Status of Federal Scientific Integrity Policies<sup>xvii</sup></u> (SIP), presenting the progress achieved in SIP implementation across the 25 federal departments and agencies, including ISED. The report helped identify areas where improvements

can be made to ensure the integrity and credibility of scientific research within the federal government. By addressing gaps or weaknesses in the policies, the evaluation contributed to strengthening the scientific integrity framework, promoting transparency, and maintaining public trust in the scientific work carried out by federal agencies and departments.

Additionally, the CSA made progress on the implementation of the Roadmap for Open Science, which seeks to promote open and secure research at the national and international levels. The Federal Open Science Repository of Canada (FOSRC) transitioned from a pilot phase to production, and its leadership was transferred to the Federal Science Libraries Network. The Roadmap for Open Science DM steering committee, with the CSA's office serving as the secretariat, maintained oversight of progress and provided strategic guidance.

In collaboration with the CSA, ISED evaluated proposals for the Council of Canadian Academies (CCA) to ensure the scientific integrity and merit of the research being considered. The CCA, a non-profit organization, supports the provision of evidence to inform decision making and public policy development in Canada by bringing together leading experts to examine complex scientific subjects of public interest. The program covers a wide range of disciplines, including natural, social and health sciences, engineering, and humanities.

## **Gender-based Analysis Plus (GBA Plus)**

In line with ISED's dedication to promoting diversity, certain programs under the Science, Technology, Research and Commercialization core responsibility, such as the national AI institutes (Amii, Mila and the Vector Institute) and the Digital Research Infrastructure Strategy (DRI), require recipients to participate in the 50–30 Challenge, which aspires toward balanced and diverse representation on its boards and throughout organizations.

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

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 SDG 9, Industry, Innovation and Infrastructure, 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 and SDG 13.

#### **Innovation**

In 2022–23, ISED found new ways to innovate, enhance science and research programs and services, and strengthen a culture of evidence-based decision making to benefit Canadians. ISED provided funding to CANARIE's cybersecurity program, and, as part of its Annual Report to ISED, CANARIE highlighted its integration with the Canadian Shared Security Operations

Centre (CanSSOC) as one of its achievements. CanSSOC connects Canadian educational institutions to cybersecurity resources and services to mitigate risks across the landscape and lay the groundwork for common cybersecurity awareness, knowledge and tools. This collaborative and innovative approach helps to secure Canada's research and education (R&E) sector through a national, federated system based on a principle of stronger coordination and partnership among local, regional and national cybersecurity experts. The partnership creates a more robust defence against cybersecurity threats within Canada's higher education community by simplifying processes to access national cybersecurity services, integrating data sources to build actionable intelligence, and increasing regional and national investments in cybersecurity.

# Key risks

While most research partnerships are beneficial to all parties involved, some activities by foreign governments, militaries and other actors pose risks to Canada's national security and the integrity of Canada's research ecosystem. Canada's open, collaborative research environment is increasingly targeted by espionage and foreign interference activities. These activities pose threats to the integrity of Canada's research enterprise as well as the country's national security, long-term economic competitiveness and prosperity.

In light of these risks, ISED, in collaboration with Public Safety Canada (PS), took action to protect Canadian research and intellectual property through the introduction of the National Security Guidelines for Research Partnerships in July 2021, which integrate national security considerations into the development, evaluation and funding of research partnerships. Under the Guidelines, grant applications assessed to present an unacceptable risk to national security and/or risks that cannot be appropriately mitigated, will not be funded. In March 2023, the Guidelines were applied to the Canada Biomedical Research Fund-Biosciences Research Infrastructure Fund's joint competition to safeguard Canadian investments in science and innovation. Budget 2022 announced additional investments to support the application of these Guidelines across all relevant federal research programs with goal of strengthening capacity within Canada's post-secondary institutions and federal security agencies to identify, assess and mitigate risks to research security. This includes dedicated research security funding, which began in 2022–23, through the Research Support Fund (RSF) for eligible post-secondary institutions.

#### Results achieved

The following table shows, for the Science, Technology, Research and Commercialization core responsibility, the results achieved, the performance indicators, the targets and the target dates

for 2022–23, and the actual results for the three most recent fiscal years for which actual results are available.

| Departmental results  | Performance indicators   | Target  | Date to<br>achieve<br>target | 2020–21<br>actual<br>results | 2021–22<br>actual results | 2022–23<br>actual results   |
|---|--|---|------------------------------|------------------------------|---------------------------|-----------------------------|
| Canadian<br>science,<br>technology<br>and innovation<br>research<br>contributes to<br>knowledge<br>transfer | Percentage of<br>Canada's<br>higher<br>education<br>research and<br>development<br>(HERD)<br>financed by<br>the business<br>sector   | Canada<br>remains<br>higher than<br>the OECD<br>average <sup>11</sup> | December 31, 2025            | 7.84% (2020)                 | 7.96% (2021)              | 7.2%12 (2022)               |
|   | Canada's rank among Organisation for Economic Co-operation and Development nations on the average relative citation (ARC) score of science research publications <sup>13</sup> | In the top<br>10  | December<br>31, 2025         | 18 (2020)                    | 18 (2021)                 | Not available <sup>14</sup> |

The financial, human resources and performance information for ISED's program inventory is available in GC InfoBase.xviii

<sup>&</sup>lt;sup>11</sup> OECD average: 6.2% (2017).

<sup>&</sup>lt;sup>12</sup> Statistics Canada data for 2022 is considered provisional. Actual results for 2022 will be available in 2024.

<sup>&</sup>lt;sup>13</sup> This ranking is based on a relative index of the number of citations obtained for Canadian scientific articles compared to those from other OECD countries. Statistical revisions are carried out regularly in the data source for this indicator. Therefore, in this table, past years' values may differ from those published in previous ISED reports.

<sup>14</sup> There is a two-year lag for actual results data. 2022 figures will be available by 2024.

# **Budgetary financial resources (dollars)**

The following table shows Science, Technology, Research and Commercialization budgetary spending for 2022–23, as well as actual spending for that year.

|                  | spending         | authorities      | spending<br>(authorities used) | 2022–23 difference<br>(actual spending<br>minus planned<br>spending) |
|------------------|------------------|------------------|--------------------------------|--|
| \$ 1,115,862,115 | \$ 1,115,862,115 | \$ 1,097,453,510 | \$ 721,499,560                 | \$ (394,362,555)   |

The variance between planned and actual spending primarily represents unused funding from the following programs: Digital Research Infrastructure Strategy, as the Digital Research Alliance recipient needed additional time to develop critical governance documents required to support the implementation of major projects, and the Canada Foundation for Innovation, for which associated funding required a realignment with the CFIs anticipated cashflow requirements. Unused funding in both programs has been reprofiled to future years.

The financial, human resources and performance information for ISED's program inventory is available in GC InfoBase. xix

# **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 2022–23.

| 2022–23 planned full-time equivalents | equivalents | 2022–23 difference (actual full-<br>time equivalents minus planned<br>full-time equivalents) |
|---------------------------------------|-------------|--|
| 104                                   | 106         | 2  |

The financial, human resources and performance information for ISED's program inventory is available in <u>GC InfoBase.</u> xx

# 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

# Boosting Canada's economy and advancing national priorities by driving Canadian innovation

Innovation Canada<sup>xxi</sup> is a collection of government programs and services that are designed to help businesses innovate and grow in Canada's economy. Flagship programs like the Strategic Innovation Fund (SIF), the Global Innovation Clusters (GICs) and Innovative Solutions Canada (ISC) are instrumental in fostering industrial innovation and growth, while advancing other governmental priorities, like reducing greenhouse gas (GHG) emissions and increasing the representation of women and equity-deserving groups in management and leadership roles. Services like BizPaL, the Business Benefits Finder and the Accelerated Growth Service (AGS) make it easier for businesses, innovators and entrepreneurs to access the information and resources they need to innovate and grow.

Since its inception in 2017, SIF has committed \$7.2 billion to Canadian businesses, catalyzing a total investment of \$63.7 billion in the economy and supporting more than 106,000 jobs, \$17 billion in R&D investments and 26,000 co-op positions.

In 2022–23, SIF funded 15 new projects worth \$2 billion in federal funding, stimulating an economic contribution of approximately \$13 billion. The program backed \$4.5 billion in R&D investments, creating 5,560 jobs while preserving 13,439 existing positions and 4,072 co-op opportunities. Through the 15 new projects, SIF committed \$171 million to bolster five IP-rich projects valued at \$702 million. For example, among these investments was a \$36 million contribution to Ranovus Inc. that advanced the domestic production and manufacturing of semiconductor products and services as well as strengthened Canadian innovative firms, generating notable economic benefits and 40 new patents.

To target the green economy, SIF pledged \$1.6 billion toward five new projects under the Net Zero Accelerator (NZA) initiative, which helps transition Canadian industries to a low-carbon economy. A notable example was the \$259 million investment in General Motors of Canada Company's new electric vehicle production facility. The year also saw SIF's call to action under the NZA, targeting high-emitting sectors and identifying ten large-scale decarbonization projects. SIF continued its commitment to Canada's Biomanufacturing and Life Sciences Strategy with a \$23.8 million contribution to Jubilant HollisterStier, creating and preserving numerous jobs in the sector while strengthening Canada's defences against future health threats.

In addition, ISED signed four agreements worth \$185 million to enhance Canada's digital industries and promote clean growth in natural resources and manufacturing sectors. The department also championed gender equality and inclusive workplaces, supporting projects with inclusive business and hiring practices.

The GICs, formerly known as the Innovation Superclusters Initiative, continued to grow their innovation ecosystems by leveraging their networks of partnerships in academia, research institutions and private and public sectors. The GICs proactively engaged Canadian industries through projects affecting, among other sectors, the automotive, transportation and digital sectors, including the semiconductor industry. The department received renewed support of \$750 million over the next five years and allocated funding based on its financial track record and program metrics. As of March 2023, more than 500 projects have been approved, including more than 2,500 partnerships, primarily involving small and medium-sized enterprises (SMEs). With a total co-investment of more than \$2.37 billion, the program is on track to exceed the target of \$1.50 leveraged from partners for every dollar of program funding allocated. With more than 8,000 members across all clusters, this model allows SMEs to connect with large businesses and their supply chains, creating business opportunities beyond the clusters.

In 2022–23, Innovative Solutions Canada (ISC) continued to play an important role in advancing the growth and commercialization of R&D for Canadian SMEs. ISC collaborated with other government departments to identify market needs and create procurement opportunities, utilizing an interdepartmental taskforce model. This approach resulted in higher matching rates and increased investment in the commercial success of SMEs. Priority areas for funded projects included Environment and Clean Technology (25%), Digital and Enabling Technologies (17%), Health (11%) and Military (10%). ISC, alongside the GICs, also supported horizontal initiatives such as the National Quantum Strategy, with 11 quantum-related projects funded in 2022–23, including quantum computing for climate, quantum-enhanced radiofrequency sensing, and stabilization of quantum measurements. ISC also partnered with Public Services and Procurement Canada to develop an interim framework for the Pathway to Commercialization, facilitating the acquisition of successfully developed ISC innovations by departments. In 2022–

23, seven companies qualified for this phase, and one company was awarded a procurement contract with Transport Canada.

# Providing businesses with access to tools and resources to innovate and grow

ISED provides a variety of business support services and platforms to ensure that businesses have access to the tools and support needed to achieve their innovation and growth objectives.

BizPal is an online service supported by ISED that facilitates business access to relevant licences and permits from all levels of government. In 2022–23, BizPaL received 370,000 visits, resulting in an estimated cost savings of \$24 million for Canadian businesses. Notably, BizPaL reviewed over 80% of the 12,000+ business permits and licences available through the portal to ensure accurate and up to date information, with efforts under way to complete the remaining 20%. In addition, BizPaL introduced the pilot phase of the BizPaL Service for Regulators, enabling users to search through regulations and bylaws from three levels of government. This initiative marked the first of its kind in Canada, and BizPaL aims to expand the database by collaborating with existing partners to include more jurisdictions' compliance requirements for businesses.

Along with providing advisory services and support to Canadian businesses, the Business Benefits Finder was used to convene and connect businesses with government programs at the federal, provincial and territorial levels to innovate and grow. Canadians have visited the Business Benefits Finder over 4.4 million times since its launch in 2018, including 866,000 times this year, to access a tailored list of programs and services. Following a client-centric approach, web accessibility enhancements were made to better serve people with disabilities and those who use assistive devices. Lastly, through intergovernmental collaboration, search results were enhanced for businesses whose goal is to scale up by selling internationally.

In 2022–23, the Accelerated Growth Services (AGS) assisted 2,595 firms in navigating government supports and securing advisory services to support their innovation and growth. AGS piloted its new scale-up service known as the Global Hypergrowth Project (GHP) with the aim of developing Canada's next anchor firms, by providing tailored support and facilitating connections with government partners. It received 86 expressions of interest that were evaluated by an independent private sector-led selection panel that provided recommendations with respect to firms in the inaugural cohort of the GHP.

# Maximizing the social and economic benefits that Canadians derive from radio frequency spectrum

ISED plays an important role in the management of spectrum, a vital national resource, through research, regulation of spectrum and telecommunications equipment, and collaboration with other organizations, such as the International Telecommunication Union (ITU), on the safety and

security of existing and future telecommunications infrastructure. The ITU is a United Nations specialized agency that shapes the global telecommunications landscape through cooperation, standards and policies, with a focus on bridging the digital divide and promoting digital connectivity worldwide. The ITU's work influences the development and deployment of telecommunications networks, broadband access and emerging technologies, which are essential for Canadians' access to reliable and affordable digital services. In 2022–23, ISED participated in the ITU's Plenipotentiary Conference. At the conference, Canada was re-elected to the ITU Council and had a representative re-elected to the ITU Radio Regulations Board. ISED advocated for a multistakeholder model of Internet governance, supported proposals to enhance the ITU's accountability and transparency, and promoted meaningful youth engagement. All Canadian priorities toward the ITU 2022 World Telecommunication Development Conference (WTDC) were accomplished, including advancing key priorities on youth engagement and gender equality.

In 2022–23, ISED also continued to take steps to meet spectrum demand to support existing services, enable the deployment of next generation wireless services such as 5G, and improve connectivity in rural and remote communities. More specifically, on January 17, 2023, ISED held an auction of spectrum licences, mostly in rural areas, that had been returned to the department or were unsold in previous auctions. Additionally, on June 30, 2022, ISED published the rules and key dates for the 3800 MHz spectrum auction, which will start on October 24, 2023, and includes ISED's strongest deployment requirements to date to ensure that providers "use or lose" the spectrum they hold. ISED also continued developing the millimetre wave spectrum auction planned for 2024.

In 2022–23, ISED remained steadfast in its commitment to modernizing spectrum management through advancements in technology and processes. The focus was on preparing the department to regulate spectrum in the context of new 5G terrestrial wireless networks and emerging satellite technologies. A key milestone was the development release (beta release) of the Spectrum Cloud Platform (SCP), a new, innovative tool for ISED employees that leverages cloud technology. This tool provides staff with the ability to efficiently access multiple spectrum data sources to analyze, display and report on spectrum usage to support efforts to connect Canadians across the country and ensure that licensed spectrum is put to use.

Additionally, the Communications Research Centre Canada (CRC) led efforts to address wireless demand using modern technologies to explore innovative solutions, such as cloud-based spectrum management platforms, drone use for spectrum compliance monitoring, and artificial intelligence (AI)/machine learning (ML) based simulation and propagation mmWave band measures for future potential wireless broadband use. In addition, the CRC continued to provide evidence-based advice and technical support on priority files, such as the Universal Broadband Fund (UBF) program, and worked with other government departments, academia and industry to

advance R&D to support the government's priority of providing broadband services to all Canadians.

#### Focusing on the growth and recovery of Canada's tourism sector

In 2022–23, ISED focused on reinforcing the tourism sector's path to recovery with new measures to support the sector. This included an investment of \$20 million, through Budget 2022, in support of a new Indigenous Tourism Fund to help the Indigenous tourism industry recover from the pandemic and position itself for long-term, sustainable growth. Also, through Budget 2022, the Minister of Tourism was entrusted with the task of collaborating with industry stakeholders, provincial and territorial counterparts, and Indigenous tourism operators to develop a post-pandemic Federal Tourism Growth Strategy that will chart a course for long-term growth, investment and stability in the sector.

To ensure an informed and comprehensive strategy that would address the challenges and opportunities in the tourism sector, ISED organized an extensive engagement and consultation process from May to August 2022. This involved round-table discussions with stakeholders and an online consultation with the Canadian public. Approximately 220 stakeholders participated in the round tables, and nearly 200 individuals, companies and organizations responded to the online consultation. ISED's analysis of the consultation findings will inform the development of the Strategy, which is anticipated to be launched in 2023–24.

Given that tourism falls under the purview of both federal and provincial/territorial governments, intergovernmental collaboration is crucial. ISED supported the convening of the Canadian Council of Tourism Ministers in October 2022. During this meeting, the ministers considered workforce challenges, destination access and economic growth in the sector, setting the future direction for collaborative work between federal, provincial and territorial officials in these areas.

Budget 2021 introduced a \$15 million funding initiative to advance the Federal Tourism Growth Strategy called the National Priorities Stream (NPS). In 2022–23, ISED signed contribution agreements totalling \$14,6 million with four recipients: the Indigenous Tourism Association of Canada, the Tourism Industry Association of Canada, the Hotel Association of Canada and Tourism HR Canada. The funding provided opportunities to leverage the national tourism organizations' reach and expertise to expand and diversify tourism offerings, as well as address the challenges faced by the sector in its ongoing recovery from the impact of COVID-19.

#### Growing small and medium-sized enterprises in Canada

ISED supports the growth of small and medium-sized enterprises (SMEs) in Canada by making it easier for them to get loans from financial institutions by sharing the risk with lenders, and

improving access to venture capital and advisory services. ISED also contributed to the review of legislation and regulations that impact borrowing and lending for SMEs.

Through the Canada Small Business Financing Program (CSBFP), ISED implemented enhancements through regulatory amendments that were published in the <u>Canada Gazette</u>, <u>Part II</u>, <sup>xxii</sup> on July 6, 2022. The changes included introducing a new line of credit of up to \$150,000, expanding eligible loan classes to include intangible assets and working capital costs, and increasing the maximum loan amount for non-real property loans to \$500,000 and the associated term to 15 years.

The <u>Venture Capital Catalyst Initiative version</u> (VCCI) was granted a budget of up to \$450 million in Budget 2021 to expand access to capital for entrepreneurs. The program includes a special allocation of \$50 million to support investments in life sciences technologies and another \$50 million toward a novel inclusive growth stream that strives to enhance capital access for groups traditionally under-represented. The balance, a sum of \$350 million, is earmarked for investment in a funds-of-funds stream. In 2022–23, ISED defined the program parameters and initiated the process to select the recipients. Recipients for the funds-of-funds stream were announced in October 2022, followed by the recipients of the life sciences stream in April 2023. The evaluation and selection process for the inclusive growth stream is ongoing.

# Supporting business growth and innovation through talent development

ISED also supports business growth and innovation through a collection of programs that strive to equip youth, students and graduates with industry-relevant experience to enhance their professional experience and preparedness.

To target the digital literacy skills and expertise needed for participation in the digital economy, ISED offered several programs in support of the interdepartmental Youth Employment and Skills Strategy led by Employment and Social Development Canada. <u>Digital Skills for Youth\*\*</u>
(DS4Y) 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. In 2022–23, the program was extended by a year and received an additional \$10.8 million, enabling the delivery of 374 internships. In December 2022, 468 youth participated in the program—of whom 52% were females, 43% were visible minorities, 6% were Indigenous and 6% had disabilities—exceeding the program's target.

The <u>Computers for Schools Internship</u><sup>xxv</sup> (CFSI) program, in operation since 1997, offers internship opportunities aimed at advancing digital skills among eligible youth. To date, it has provided more than 8,500 opportunities nationwide. In 2022–23, 187 youth participated in the program, with the pandemic limiting the number of hires due to safety protocols. The participant

demographics included 18% girls and young women, 40% visible minorities, 6% Indigenous people and 13% individuals with disabilities.

In 2022–23, ISED continued to support the Prime Minister's Awards, which celebrate outstanding Canadian teachers who equip their students with the skills required for a digital and innovative economy. Self-reported data from the nomination forms indicate the diversity of the awardees. In the 2022 competition, 70% of the Teaching Excellence and Excellence in STEM recipients were women, 10.5% were Indigenous and 15.8% were part of a visible minority group, reflecting Canada's diverse population.

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

ISED showcased resilience and adaptability in its commitment to fostering a robust and confident marketplace, catering to businesses, investors and consumers. Central to this mandate was the emphasis on enhancing and modernizing intellectual property (IP) products and services, coupled with fostering awareness and education about IP. Amid the evolving digital landscape, ISED also made strides in the areas of digital health care, competition law and the integration of artificial intelligence in its operations. ISED's approach in reviewing foreign investments underscored its commitment to economic growth, while balancing national security considerations.

# Accelerating innovation and economic growth through strengthened intellectual property (IP) services

In 2022–23, ISED's Canadian Intellectual Property Office (CIPO) maintained its focus on delivering high-quality IP products and services in a timely manner. A range of measures were implemented to ensure that the services offered by CIPO are modern, efficient and of the utmost quality. These measures encompassed the expansion of online services, automation of processes, and enhancement of work tools for IP examination.

As demand for IP services continued to increase, CIPO conducted a record number of trademark examinations in 2022–23 (about 75,000 first actions, including an examiner's first report or approval) and approved more than 53,000 trademark applications. Further, the inventory of domestic applications awaiting examination was successfully reduced from its peak of close to 192,000 in June 2022 to 184,000 in March 2023.

CIPO placed significant emphasis on delivering IP awareness and education services through digital and virtual means. The mandate was to assist Canadian businesses, entrepreneurs, creators, innovators and under-represented groups, such as women and Indigenous people, in developing an informed view on IP and recognizing its significance in business growth. By

successfully transitioning toward digital IP awareness and education tools and resources, CIPO then concentrated on expanding IP outreach by strengthening existing partnerships and collaborations. The IP Village, a collaboration between CIPO and leading Canadian IP organizations, played a vital role in helping Canadian small and medium-sized enterprises (SMEs) gain a better understanding of how to effectively utilize IP.

As a special operating agency of the Government of Canada, CIPO operates solely on revenues generated from its clients. To account for inflation over the past two decades and ensure it can maintain its service standards, CIPO proposed a 25% fee increase for most services. On March 31, 2022, CIPO launched an online consultation, and a draft of the Regulations was prepublished in Canada Gazette, Part I, on December 31, 2022, allowing for a 30-day public comment period. Feedback from this consultation was taken into consideration when finalizing the proposed regulations. The final regulations are expected to be published in the Canada Gazette, Part II, in summer 2023, and the adjusted fee amounts are proposed to be effective January 1, 2024.

In 2022–23, ISED's IP Legal Clinics program focused on enhancing the knowledge of law students in the field of IP, assisting businesses in identifying their IP requirements and facilitating entry into IP-related professions. Five applicants, including three new recipients, received funding for projects that added IP services and learning opportunities to existing clinics, offering clinic-led trademark workshops for local entrepreneurs and expanding and enhancing chatbot services, particularly for under-represented groups.

ISED's Patent Collective Pilot Program further assisted participating SMEs with their patent and IP needs, enabling members to leverage IP for scaling their businesses in the data-driven clean tech sector. In this context, the program provided a range of services to nearly 200 members and associate members, including the introduction of new educational tools and learning opportunities, assistance in advancing patent-related activities, production of IP landscape reports, and acquisition of patents for the patent pool.

Following its initial launch in 2018–19, the Indigenous Intellectual Property Program (IIPP) grant has addressed IP capacity building, education and awareness-raising for Indigenous organizations. The application period for the IIPP grant ran from the end of June to the start of September 2023, during which the program received sixteen applications from thirteen Indigenous organizations with requests totalling over \$550 thousand for 2022–23. Of the 16 applicants, 14 were deemed eligible, and of those, six received grants for a total of close to \$148 thousand. The funds went to launching a variety of projects that are expected to be completed by April 2024, with many planned to be made available to other Indigenous Peoples and to the public at large, thus increasing the benefits of their work. These projects focus on exploring the intersections between Indigenous knowledge (IK) and IP; promoting IP capacity

building and IK transfer as well as IP protection for a mobile app for Indigenous communities to collect and monitor data based on IK; developing policies, procedures and protocols for the ethical collection, management and storage of traditional knowledge; and developing an indigenized protocol for working with culturally important plants in a lab-based setting.

ISED continued to administer the *Investment Canada Act*, which serves as a key component of Canada's framework for reviewing foreign investments by non-Canadians. This framework aims to encourage investment, foster economic growth and generate employment opportunities within Canada. Additionally, the Act facilitates the evaluation of investments in Canada by non-Canadians that may pose risks to national security. In 2022–23, a total of 1,015 filings were received and certified under the Act. Among these filings, five applications were subject to review, and all were approved based on their potential net benefit to Canada. These applications encompassed Canadian businesses valued at \$22.5 billion.

ISED continued to provide IP services and support to Canadian innovators and businesses, supporting the priorities set out in the <u>Intellectual Property Strategy</u>. \*xxvi In Budget 2021, the government announced \$90 million over four years starting in 2022–23 to create Elevate IP, which supports business accelerators and incubators (BAIs) in providing the tools Canadian start-ups need to understand, strategically manage and leverage their IP. In 2022–23, Elevate IP launched a call for proposals open to BAIs and selected five recipients to provide IP services to start-ups nationwide.

ISED also administered Explore IP, a searchable database and inventory of public sector IP held by government, academia or other institutions. The tool is intended to help businesses, creators, entrepreneurs and innovators discover and leverage IP held by public sector institutions and to stimulate collaboration. In 2022–23, Explore IP facilitated connections between businesses and public sector IP holders, increased licensing and collaboration opportunities, and formed partnerships with key innovation stakeholders. The program facilitated more than 180 outreach activities, expanded its platform's organizations to 62, increased licensing opportunities by 12% and received 374 contact requests.

The department also provided IP support, training, advisory and collaboration services to other federal organizations through the IP Centre of Expertise (IP CoE) to drive industrial innovation, productivity and commercial success. In 2022–23, the IP CoE provided these services to 43 federal organizations. It also grew the Federal Intellectual Property Partnership community, enabling IP discussions among 299 public servant members from 34 federal organizations, and established an informal IP management working group to encourage collaboration and best practice sharing among IP managers. Additionally, the IP CoE launched a new website tailored to federal public servants, providing IP services, resources, training registration and information on joining the Federal Intellectual Property Partnership.

# Promoting fair competition and advancing regulatory modernization in digital and emerging sectors

In 2022–23, the Competition Bureau (the Bureau) continued to protect and promote competition for the benefit of Canadian consumers and businesses by advancing three strategic pillars from its 2020–2024 Strategic Vision: protecting Canadians through enforcement action; promoting competition in Canada; and investing in the organization and its ability to serve Canadians.

The Bureau grew its new intelligence-generating efforts by expanding its Digital Enforcement and Intelligence Branch, known as Competition through Analytics, Research and Intelligence (CANARI). CANARI functions as a centre of expertise on digital business practices, technologies and intelligence, and provides specialized skills to the entire organization. Additionally, the Bureau continued to deepen domestic and international relationships through the hosting of the Competition and Green Growth Summit. \*xxvii\* The summit, attended by nearly 400 participants from over 30 countries, emphasized the importance of collaboration between competition agencies and policymakers in crafting legislation and regulations that support sustainability initiatives without inadvertently undermining competition.

With an ongoing commitment to safeguarding Canadians, the Bureau persisted in protecting the interests of the public in cases where mergers had the potential to harm competition within Canada.

The Bureau also continued to champion the adoption of policies aimed at building a culture of competition in Canada. As health care has become increasingly digitized, the Bureau took notice and released several recommendations through its <u>Digital Health Care Market Study</u> aimed at improving the health care sector within Canada through pro-competitive policies. These included modernizing regulations around privacy, security and consent to enable greater sharing of data between health care providers and researchers.

The Bureau played an important role in advancing the ongoing modernization of Canada's competition laws. To assist Canadians in understanding changes to the law that have already taken place, the Bureau released the <u>Guide to the 2022 amendments to the Competition Act</u>. <sup>xxix</sup> The Bureau also made a submission in response to the government's consultation on the future of competition policy in Canada. The <u>submission</u> included over 50 recommendations to help modernize and strengthen Canada's *Competition Act*.

## Promoting consumer confidence and effective regulation

ISED delivered the federal portion of the funding to support the Internal Trade Secretariat (ITS), which continued to play an important role in delivering operational and administrative support to the Committee on Internal Trade, internal trade representatives, all other Canadian Free Trade

Agreement committees and working groups, as well as the Agreement's dispute settlement processes, with collective efforts to facilitate trade across jurisdictions in Canada. This included direct support for the first in-person Committee on Internal Trade meeting in December 2022, which was attended by federal-provincial-territorial ministers responsible for internal trade.

Measurement Canada (MC) continued to deliver on its legislated mandate to approve and oversee all measuring devices used in financial transactions in the Canadian marketplace. In 2022–23, MC established requirements allowing electric vehicle (EV) chargers already installed in the marketplace to bill based on the amount of energy (kilowatt-hour) delivered during a charging session. MC's commitment to international collaboration was evident through its ongoing work with the U.S. National Conference on Weights and Measures and the International Organization of Legal Metrology in developing international standards for billing by kilowatt—hour at EV charging stations. By actively participating in this work, MC ensured that Canadian interests were represented as part of the development of these standards. MC engaged external stakeholders in consultations to modernize legislation by proposing amendments to the *Weights and Measures Act* and the *Electricity and Gas Inspection Act*—establishing a forward-looking framework for smaller businesses, enhancing consumer protection measures and improving service delivery effectiveness.

The Office of the Superintendent of Bankruptcy (OSB) continued to deliver on its legislative mandate to supervise all estates and matters to which the *Bankruptcy and Insolvency Act* (BIA) applies, as well as certain matters under the *Companies' Creditors Arrangement Act* (CCAA). In 2022–23, the OSB carried on with its work to recommend and implement amendments to directives, forms and regulations under the BIA and CCAA to modernize the regulatory framework, reduce unnecessary burden on those it regulates and support confidence in the Canadian marketplace. It updated online tools to help Canadian consumers in financial distress find the right debt solution and partnered with other entities to promote these tools. The OSB also launched its new Debtor Compliance Management System with AI capabilities to more efficiently and effectively detect and address debtor non-compliance using a risk-based approach in a manner that protects the integrity of the insolvency system.

Through Corporations Canada, ISED continued to make progress on digitally connecting Canada's business registries with the Multi–jurisdictional Registry Access Service (MRAS). Ontario and Nova Scotia adopted the MRAS digital solution to connect their business registries to Canada's Business Registries search service, a free online search platform for Canadian businesses originally launched in 2018.

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

ISED remains committed to addressing environmental challenges associated with climate change by actively transitioning toward a more sustainable and clean growth economy. This commitment is demonstrated through dedicated federal programs and initiatives aimed at fostering the growth of Canada's clean technology sector. As Canada positions itself to be a global leader in this sector through innovation, commercialization and adoption of clean technologies, Canadians and Canadian businesses are expected to reap the benefits of high-quality jobs and higher productivity.

#### Investing in clean technologies and industrial transformation

In support of Canada's goal of transitioning to a clean economy, SIF continued to fund project proposals that prioritize the reduction of greenhouse gas (GHG) emissions, especially through the Net Zero Accelerator (NZA) initiative. The program focused on projects that help accelerate decarbonization and the development of Canadian clean technology, especially the Canadian battery ecosystem. In November 2022, the program committed \$27 million to the construction of a demonstration plant specializing in lithium production, a mineral critical to technologies such as EV batteries that helps reduce GHG emissions, create jobs in the Canadian economy and ultimately, help Canada achieve net-zero carbon emissions by 2050. Furthermore, Canada announced in the fall of 2022 an investment of \$300 million through the NZA, to support a \$1.6 billion project by Air Products Canada Ltd. to construct a net-zero hydrogen energy complex in Alberta. The NZA executed five contribution agreements, securing \$1.4 billion in NZA funding toward projects totalling \$11.2 billion. These initiatives will aid Canadian industries in adapting to the green economy, foster the growth of domestic clean technology and contribute to GHG reductions aligned with Canada's climate objectives. Additionally, an NZA call to action was launched to engage large emitters, resulting in the identification of ten large-scale decarbonization projects currently undergoing review.

ISED supports the advancement of clean technology innovation in Canada through Sustainable Development Technology Canada (SDTC), which funds the development and demonstration of new sustainable development technologies related to climate change, clean air, clean water and clean soil.

## Improving access to federal programs, services and data

Along with mitigating the impacts of climate change, ISED further prioritizes the development of clean technology and transition to a low-carbon economy by acting as a co-lead for the Clean Growth Hub. Under its mandate, the Clean Growth Hub fulfilled three key functions: help clean technology stakeholders identify and navigate federal programs and services most relevant to their needs; improve federal clean technology program coordination; and strengthen federal capacity to track clean technology outcomes. The Hub is focused on delivering on its mandates as the federal clean technology focal point, specifically helping stakeholders navigate the available federal programs and supports across 17 departments and agencies that help advance clean technology innovation and adoption. The Hub supported 355 clients in 2022–23 through its

single-window service, including by proactively engaging clean tech companies that are poised to be leaders in the clean technology sector. The Hub also maintained ongoing relationships with provincial and regional partners to exchange information and facilitate collaboration on clean technology.

Clean technology in Canada contributes to economic growth and accelerates the country's transition to a low-carbon economy. Established in 2017, The Clean Technology Data Strategy (CTDS) is an interdepartmental initiative aimed at enhancing the collection and analysis of clean technology data to assess the economic, environmental and social impacts of the clean tech sector in Canada. The CTDS encompasses three data pillars, each led by different entities: authoritative macroeconomic statistics led by Statistics Canada, industry data led by Natural Resources Canada (NRCan) and administrative data led by the Clean Growth Hub, a joint initiative of ISED and NRCan.

Within the administrative data pillar of the CTDS, the Clean Growth Hub collaborated with federal clean technology programs to ensure consistent data collection practices, particularly in measuring greenhouse gas outcomes resulting from federal investments and incorporating equity, diversity and inclusion considerations. The Hub also established a database of federal clean technology investments to facilitate comprehensive analysis and understanding of how government policies and programs contribute to clean growth.

# **Gender-based Analysis Plus**

ISED has made significant strides in incorporating GBA Plus across its programs to ensure inclusive outcomes for Canadians. These efforts align with the commitment to advancing gender equality, diversity and inclusion. Throughout the department's various initiatives, GBA Plus considerations are integrated into program design, data collection, reporting and decision-making processes.

Innovation Canada (IC) has put in place dedicated resources for GBA Plus data collection. An Inclusion, Diversity, Equity, and Accessibility (IDEA) Performance Management Framework (PMF) was implemented, which includes IDEA-specific key performance indicators and guidelines for data collection and reporting. Consultations were conducted, and a pilot IDEA report is being developed, focusing on resolving data limitations and establishing accurate baselines for meaningful analysis.

The Strategic Innovation Fund (SIF) assesses the potential public benefits of projects through a GBA Plus lens. Recipients of SIF funding were required to develop gender, diversity and inclusion (GDI) plans, outlining objectives to increase the representation of under-represented groups. Data on GDI progress was collected and analyzed to inform program delivery decisions

and address GDI concerns. SIF also required recipients of funding to participate in the 50–30 Challenge.

The ElevateIP program incorporates GBA Plus considerations when evaluating proposals. Recipients are expected to address barriers faced by under-represented groups and outline strategies to increase their participation, as outlined in their IDEA action plans.

The Canada Digital Adoption Plan (CDAP) includes GBA Plus considerations in its performance measurement tools, indicators and targets. The Boost Your Business Technology stream of the program also collected disaggregated data on equity-deserving groups during the application stage to monitor program demographics and identify any barriers faced by under-represented groups. GBA Plus analysis was conducted to evaluate decision-making processes.

In various programs such as the Global Innovation Clusters (GICs), Venture Capital Catalyst Initiative (VCCI), 50–30 Challenge, Canada Small Business Financing Program (CSBFP), the Business + Higher Education Roundtable, the Upskilling for Industry Program, the Industrial and Technological Benefits Policy, IP awareness and education initiatives, the Digital Services Program and talent development initiatives, GBA Plus principles are integrated into activities, including data collection, evaluation, policy development and reporting.

Through these comprehensive efforts, ISED aims to ensure that its programs consider the diverse needs and experiences of Canadians, fostering inclusivity, equity and diversity across sectors and industries. The department's commitment to GBA Plus supports its mandate of advancing gender equality and creating a more inclusive and prosperous Canada.

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

ISED contributes to Canada's efforts to implement the United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs). While ISED supports all 17 SDGs, ISED's policies, programs and initiatives most directly advance action on SDG 9 – Industry, Innovation and Infrastructure to "build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation." ISED's programs and initiatives that support this SDG include the Global Innovation Clusters, the SIF, Innovative Solutions Canada, the Universal Broadband Fund (UBF), and CDAP.

Other SDGs supported by ISED include SDG 7 – Affordable and Clean Energy; SDG 8 – Decent Work and Economic Growth; SDG 12 – Responsible Consumption and Production; and SDG 13 – Climate Action. Examples of key departmental policies, initiatives and programs that support these SDGs include Sustainable Development Technology Canada (SDG 7 and SDG 13) and the Accelerated Growth Service (SDG 8).

#### **Innovation**

An example of innovation in 2022–23 at ISED involved incorporating experienced retired trademark agents into the Trademarks Opposition Board (TMOB). The experts made decisions on a temporary basis to speed up the process of handling the backlog of pending cases. This led to a 43% reduction in pending cases, with these decision makers accounting for 16% of TMOB's decisions during the same period. Their involvement eliminated backlog and reduced decision turnaround time by 50%. TMOB also hired and trained additional decision makers to ensure timely case resolution. To enhance trademark application processes, the New Examiner Training Program was restructured, enabling faster progression for new examiners and contributing to reduced backlogs. The program's group coaching approach has proved effective, fostering diverse perspectives and early goal attainment. ExploreIP's efforts to enhance functionality and usability using new tools also demonstrated an innovative approach. The successful beta launch of the "Industry Needs Call-out" enabled businesses to communicate challenges to public sector partners, fostering connections. A functional "collaboration button" followed, enhancing accessibility. The IP Centre of Expertise furthered innovation by expanding service delivery, offering an IP intelligence service beyond the pilot phase. CDAP's streamlined application process for Boost Your Business Technology saw a 17% improvement in completion rates, ensuring faster approvals. These initiatives collectively embodied a commitment to innovation within ISED.

## **Key risks**

With innovation at the core of its mandate, ISED is always working to strengthen emerging industrial sectors, including support for the development of a fully integrated electric vehicle battery supply chain. However, Canada is currently facing intense global competition to maintain or achieve strategic leadership in emerging sectors aligned with its resources, domestic capabilities and economic and natural security. This pressure is magnified by new, competing incentives from peer and competitor jurisdictions pursuing the same investments.

As ISED continues to support the development of industrial capabilities in critical areas that are in direct competition with other nations that are using government funding to subsidize these investments, there is a risk that Canada will struggle to remain competitive with countries where the costs of doing business are lower.

In response to these pressures, ISED continued to make timely strategic investments in large-scale projects to secure domestic manufacturing capacity in key sectors, including battery manufacturing. In 2022–23, this included an agreement with Volkswagen, the largest car manufacturer in the world, to build an electric vehicle battery manufacturing plant in Ontario. In addition, the Canadian Critical Minerals Strategy included projects to support upstream investments and leverage Canada's competitive advantage by providing access to key resources required to support a domestic mineral supply chain.

Another risk pertained to the GIC program, where insufficient industry uptake of this innovative new model could put at risk objectives. However, the GIC program demonstrated its ability to secure industry financial commitments, exceeding funding leverage targets and maintaining robust project pipelines. Valuable insights gained during the first phase of the program facilitated improvements in oversight, execution and risk mitigation measures, enhancing overall program delivery despite economic uncertainties, COVID-19 impacts and supply chain disruptions.

Lastly, ISED focused on mitigating risks related to client service experience, stakeholder engagement and the protection of Canadian research and intellectual property against foreign interference. By collecting and utilizing user feedback, strengthening digital and service governance, and implementing research security measures outlined in the National Security Guidelines for Research Partnerships, ISED aimed to adapt its services to meet the evolving needs of Canadian businesses and safeguard Canada's research assets.

## Results achieved

The following table shows, for Companies, Investment and Growth, the results achieved, the performance indicators, the targets and the target dates for 2022–23, and the actual results for the three most recent fiscal years for which actual results are available.

| Departmental results                       | Performance indicators <sup>15</sup>   |   | achieve              |                                   | -                                 | 2022–23<br>actual results          |
|--|--|---|----------------------|-----------------------------------|-----------------------------------|------------------------------------|
| Canada has a clean and sustainable economy | Value of<br>Canada's total<br>sales in clean<br>technologies<br>(in dollars) <sup>16</sup> | * | December<br>31, 2025 | \$23,567,471 <sup>17</sup> (2020) | \$25,659,293 <sup>18</sup> (2021) | Not available (2022) <sup>19</sup> |

<sup>&</sup>lt;sup>15</sup> Some results are reported by calendar year as indicated within brackets.

<sup>&</sup>lt;sup>16</sup> Statistical revisions are carried out regularly in the data source for this indicator. Therefore, in this table, past years' values may differ from those published in previous ISED reports (Departmental Plan, Departmental Results Report). The target could be subject to future adjustments to align with the statistical revisions. Actual results are displayed in thousands of dollars. The true value of clean technology sales is in billions of dollars. Therefore, the actual results for each fiscal year should be multiplied by 1000 to reflect the true value.

<sup>&</sup>lt;sup>17</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 (SEGS) release from March 2022. Please use 2020 results with caution as instructed in the SEGS release. Actual results are displayed in thousands of dollars. The true value of clean technology sales is in billions of dollars. Therefore, the actual results for each fiscal year should be multiplied by 1000 to reflect the true value. The actual result for 2020 is \$23,567,471,000.

<sup>&</sup>lt;sup>18</sup> Actual results are displayed in thousands of dollars. The true value of clean technology sales is in billions of dollars. Therefore, the actual results for each fiscal year should be multiplied by 1000 to reflect the true value. The actual result for 2021 is \$25,659,293,000.

<sup>&</sup>lt;sup>19</sup> Preliminary results for this indicator for the 2022 calendar year are anticipated to be published in April 2024.

| Departmental results | Performance indicators <sup>15</sup>   | Target  | Date to<br>achieve<br>target | 2020–21<br>actual<br>results  | 2021–22<br>actual results  | 2022–23<br>actual results   |
|----------------------|--|---|------------------------------|---|--|---|
|                      | Clean<br>technology<br>employment<br>in Canada (in<br>numbers) <sup>20</sup>   | 230,000 <sup>21</sup>   | December<br>31, 2025         | 176,080 <sup>22</sup> (2020)  | 188,794 <sup>23</sup> (2021)                                     | Not available <sup>24</sup>   |
|                      | Annual incremental reductions in GHG emissions attributable to ISED programs <sup>25</sup>                               | Reductions<br>are<br>increased<br>by 1<br>megatonne<br>per annum<br>through<br>2025 | December<br>31, 2025         | 22.4<br>megatonnes<br>estimated<br>reduction in<br>GHG<br>emissions <sup>26</sup> | 28.6<br>megatonnes<br>estimated<br>reduction in<br>GHG emissions | 30.7<br>megatonnes<br>estimated<br>reduction in<br>GHG<br>emissions <sup>27</sup> |
|                      | Number of<br>ISED–funded<br>projects with a<br>clean<br>technology<br>component<br>that are in<br>progress <sup>28</sup> | 172 active projects <sup>29</sup>   | March 31,<br>2023            | 214 active projects   | 308 active projects  | 271 active projects   |

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<sup>&</sup>lt;sup>20</sup> Statistical revisions are carried out regularly in the data source for this indicator. Therefore, in this table, past years' values may differ from those published in previous ISED reports (Departmental Plan, Departmental Results Report). The target is also subject to adjustments, to align with the statistical revisions.

<sup>&</sup>lt;sup>21</sup> This target may be modified in the future to reflect changes in the methodology used by Statistics Canada to assess employment in the Canadian clean technology sector.

<sup>&</sup>lt;sup>22</sup> ISED previously reported 210,237 jobs in Canada's clean tech sector in 2020 (fiscal year 2020–21). This value has been updated in this report to reflect a new methodology adopted by Statistics Canada in 2021 for determining the number of jobs in the Canadian clean tech sector.

<sup>&</sup>lt;sup>23</sup> Preliminary data for 2021 calendar year, as published by Statistics Canada in March 2023.

<sup>&</sup>lt;sup>24</sup> Results for the 2022 calendar year will be available in April 2024.

<sup>&</sup>lt;sup>25</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). GHG reductions are presented as estimates due to the fact that differences across projects make it difficult to determine exact reductions.

<sup>26</sup> 2020–21 actual results include only SDTC program data.

<sup>&</sup>lt;sup>27</sup> 2022–23 actual results includes 24.7 megatonnes from SDTC and 6 megatonnes from SIF.

<sup>&</sup>lt;sup>28</sup> Indicator is comprised of aggregate project-level data from various ISED-supported programs, including SIF and SDTC.

<sup>&</sup>lt;sup>29</sup> "Active projects" are defined as projects with a work phase start or end date that overlaps with 2022–23 fiscal year.

| Departmental results  | Performance indicators <sup>15</sup>   | Target   | Date to<br>achieve<br>target | 2020–21<br>actual<br>results                         | 2021–22<br>actual results                       | 2022–23<br>actual results   |
|---|--|--|------------------------------|--|---|-----------------------------|
| Canadian businesses and industries are innovative and growing | Value of<br>business<br>expenditures<br>on research<br>and<br>development<br>(BERD) by<br>firms receiving<br>ISED program<br>funding | \$900,000,0<br>00  | March 31,<br>2023            | \$2,661,360,0<br>00 (2020) <sup>30</sup>             | Not available <sup>31</sup>                     | Not available <sup>32</sup> |
|   | Revenue<br>growth rate of<br>firms<br>supported by<br>ISED<br>programs   | ISED-<br>supported<br>firms grow<br>faster than<br>the national<br>average | March 31,<br>2023            | -8.6% <sup>33</sup> (2020) (national average: -3.1%) | 16.8% (2021)<br>(national<br>average:<br>14.7%) | Not available <sup>34</sup> |
|   | Canada's rank<br>on the World<br>Intellectual<br>Property<br>Organization's<br>Global<br>Innovation<br>Index                         | Improve or<br>maintain<br>rank<br>(17/129)                                 | March 31,<br>2023            | 17 (2020)  | 16 (2021)                                       | 15 (2022)                   |
|   | Percentage of<br>business<br>expenditures<br>on research<br>and<br>development<br>(BERD)<br>funded by the<br>federal<br>government   | At least 5%  | March 31,<br>2023            | 4.2% (2020)  | 4.2% (2021)                                     | 5.7% <sup>35</sup> (2022)   |

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<sup>&</sup>lt;sup>30</sup> The target for this indicator is set using the most recent available data from Statistics Canada, which has a 3-year lag for actual, non-preliminary results. The target will be revisited in the next Departmental Plan based on the most recent actual results.

<sup>&</sup>lt;sup>31</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>&</sup>lt;sup>32</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. 2022 actual results will be available in August, 2025.

<sup>&</sup>lt;sup>33</sup> Decline in revenue growth from 2019 to 2020 can be attributed to the global COVID-19 pandemic. Statistical revisions were made for the 2020 figure.

<sup>&</sup>lt;sup>34</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 2022 will be available in August, 2024.

<sup>&</sup>lt;sup>35</sup> Statistics Canada data for 2022 is considered provisional. Actual results for 2022 will be available in 2024.

| Departmental results  | Performance indicators <sup>15</sup>   | Target  | Date to<br>achieve<br>target | 2020–21<br>actual<br>results   | 2021–22<br>actual results  | 2022–23<br>actual results   |
|---|--|---|------------------------------|--|--|---|
|   | Percentage of<br>professional,<br>science and<br>technology-<br>related jobs in<br>Canada's<br>economy | 40%   | December<br>31, 2025         | 36.9% (2020)   | 37.4% (2021)   | 37.7% (2022)  |
| Businesses, investors and consumers are   | Total business investment in Canada <sup>36</sup>  | At least<br>\$260,000,0<br>00,000   | December<br>31, 2025         | \$204,600,000<br>,000  | \$218,300,000,0<br>00  | \$233,000,000,0<br>00   |
| confident in<br>the Canadian<br>marketplace,<br>including the<br>digital<br>economy | Canada's score on the World Economic Forum's Global Competitivene ss Index                             | Maintain or improve score   | March 31,<br>2023            | Not<br>available <sup>37</sup>   | Not available <sup>38</sup>  | Not available <sup>39</sup>   |
|   | Growth in patent application filings, trademark filings and industrial                                 | Patents:<br>34,645<br>Trademarks: 81,314<br>Industrial<br>designs:<br>9,142 | March 31,<br>2023            | Patents:<br>37,164<br>Trademarks:<br>76,168<br>Industrial<br>designs:<br>8,161 | Patents: 39,<br>709<br>Trademarks:<br>79,808<br>Industrial<br>designs: 9,067 | Patents:<br>40,702<br>Trademarks:<br>72,445<br>Industrial<br>designs: 8,895 |

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<sup>&</sup>lt;sup>36</sup> This indicator measures the "non-residential structures, machinery and equipment" and "intellectual property products," both of which fall under the "Business gross fixed capital formation" of Statistics Canada's Gross Domestic Product (GDP) (expenditure-based). Statistical revisions are carried out regularly in the Canadian System of Macroeconomic Accounts in order to incorporate the most current information from censuses, annual surveys, administrative statistics, public accounts, etc. 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>&</sup>lt;sup>37</sup> In 2020, a special edition of the Global Competitiveness Report indicated a temporary pause on the long-standing Global Competitiveness Index rankings due to the economic circumstances brought about by COVID-19. The most recent available ranking is 79.6/100 in 2019.

<sup>&</sup>lt;sup>38</sup> In 2020, a special edition of the Global Competitiveness Report indicated a temporary pause on the long-standing Global Competitiveness Index rankings due to the economic circumstances brought about by COVID-19. The most recent available ranking is 79.6/100 in 2019.

<sup>&</sup>lt;sup>39</sup> In 2020, a special edition of the Global Competitiveness Report indicated a temporary pause on the long-standing Global Competitiveness Index rankings due to the economic circumstances brought about by COVID-19. The most recent available ranking is 79.6/100 in 2019. For comparative purposes, Canada ranked 52nd out of 77 economies on the Global Business Complexity Index in 2022, which provides an authoritative overview of the complexity of establishing and operating businesses around the world based on 292 different indicators relating to business complexity (e.g., legislation, compliance, accounting procedures, tax regimes). Canada's rank demonstrates that it is one of the less complex economies for conducting business and investing.

| Departmental results | Performance indicators <sup>15</sup>      | Target   | Date to<br>achieve<br>target | 2020–21<br>actual<br>results              | 2021–22<br>actual results  | 2022–23<br>actual results  |
|----------------------|---|--|------------------------------|---|--|--|
|                      | design filings<br>in Canada <sup>40</sup> |  |                              |   |  |  |
|                      | Canadians                                 | At least<br>75% of<br>Canadians<br>are banking<br>online<br>At least<br>90% of<br>Canadians<br>are<br>shopping<br>online | December<br>31, 2025         | 82%<br>purchased<br>goods and<br>services | Banking online:<br>Not available <sup>41</sup><br>Shopping<br>online: 88% of<br>Canadians<br>shopped online<br>in 2022 <sup>42</sup> | Banking online:<br>77.6%<br>Shopping<br>online: Not<br>available <sup>43</sup> |

The financial, human resources and performance information for ISED's program inventory is available in GC InfoBase. xxxi

# **Budgetary financial resources (dollars)**

The following table shows, for Companies, Investment and Growth, budgetary spending for 2022–23, as well as actual spending for that year.

|                  | spending         | authorities      | spending<br>(authorities used) | 2022–23 difference<br>(actual spending<br>minus planned<br>spending) |
|------------------|------------------|------------------|--------------------------------|--|
| \$ 3,093,700,887 | \$ 3,093,700,887 | \$ 3,160,563,937 | \$ 2,212,931,393               | \$ (880,769,494)   |

Variance primarily represents unused funding in the following programs: Strategic Innovation Fund, Innovation Superclusters Initiative and Sustainable Development Technology Fund, as a result of the lingering effects of the pandemic (e.g. supply chain distributions, high energy and commodity prices); Canada Digital Adoption Program, stream 2, as a result of slower than

<sup>&</sup>lt;sup>40</sup> The related targets for this indicator represent forecasted application volumes based on historical trends and expected future Canadian and US economic growth. Therefore, their achievement is not aspirational but is based on the economic conditions that drive IP demand in Canada.

<sup>&</sup>lt;sup>41</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.

<sup>&</sup>lt;sup>42</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.

<sup>&</sup>lt;sup>43</sup> The 2022 Canadian Internet Use Survey results did not include data for online shopping.

anticipated program uptake; New Generation Wireless Technology - 5G initiative, as a result of continued pandemic-related procurement delays; and Canada Small Business Financing Program, as a result of the fact that claim payments on defaulted loans were expected to increase significantly with the negative economic impacts of the pandemic, but did not, resulting in lower than expected claim payment expenses for 2022–23. Unused funding will be moved to future years to allow recipients to complete contracted projects, and to align the funding profile with the anticipated cashflow requirements of these programs.

The financial, human resources and performance information for ISED's program inventory is available in GC InfoBase. xxxii

# **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 2022–23.

|       | equivalents | 2022–23 difference (actual full-<br>time equivalents minus planned<br>full-time equivalents) |
|-------|-------------|--|
| 4,039 | 4,129       | 90   |

The financial, human resources and performance information for ISED's program inventory is available in GC InfoBase. xxxiii

## **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 refer 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 2022–23, ISED's internal services supported the department across a broad range of functions. The various internal services functions were key players as ISED implemented the Common Hybrid Model for the Federal Public Service, adapted its workplace, supported its workforce and evolved its work practices and processes to deliver results for Canadians. For the fifth consecutive year, ISED was recognized as one of Canada's Top 100 Employers, and one of Canada's Best Diversity Employers.

# Our workplace

To prepare employees for the transition to the hybrid work model, ISED established a Future of Work Office (FOWO), which facilitated collaboration among key functional areas (IT, security, real property, facilities, human resources, etc.) to ensure that managers and employees were provided with the necessary facilities, equipment, tools and training required and support them through the transition.

While managing this large-scale change, ISED ensured that its employees had the appropriate technology to work in a hybrid environment by retrofitting workstations to ensure device compatibility and equipping meeting rooms with technology to facilitate hybrid meetings. In addition to equipment, ISED provided guidance, tools and training to help employees work successfully in the hybrid environment (e.g., setting up telework agreements, how to use hybrid meeting technology effectively). ISED also worked with Shared Services Canada (SSC) to

identify investments that would be required to meet future work requirements with respect to bandwidth consumption and digital tools.

ISED was an early adopter of the hybrid work model as executives started to return to the office part-time in July 2022. Piloting the model with executives allowed ISED to measure the effectiveness of its workplace modifications and course correct as required prior to full implementation. Employees then returned two to three days a week in waves starting in September 2022. As a result of this proactive approach, ISED was a leader within the federal government, and was well positioned to comply with the <u>Direction on prescribed presence in the workplace<sup>xxxiv</sup></u> by the deadline of March 31, 2023.

ISED implemented sound change management practices, establishing clear governance through a dedicated senior manager committee and by engaging managers across the organization and collecting feedback from managers and employees through a number of avenues (e.g., surveys, feedback forms, a suggestion inbox, town halls). This allowed the department to make adjustments to the workplace based on real-time feedback.

ISED continued with the implementation of its 5-year Workplace Modernization Plan, progressing on projects to support the transition to a hybrid work environment and align with GCworkplace standards. New hotelling workstations and lockers were installed in some ISED facilities, and a new booking and reservation system was implemented to ensure optimal use of facilities. ISED prioritized the health and safety of employees by equipping the workplace with protective health measures (mask distributers, hand sanitizer stations, physical distancing corridors, etc.) to prevent the spread of COVID-19 once employees began returning to the office.

To better support employees in ISED buildings, the department addressed 62% of barriers identified in ISED's 2020–2023 Accessibility Plan and commenced work on another 35%. This work has led to more than 1,500 accessibility barriers being removed in ISED's 55 locations across the country.

#### Our workforce

In 2022–23, ISED finalized consultations on its departmental Equity, Diversity and Inclusion (EDI) Strategy to take meaningful, concrete and realistic actions to eliminate the systemic bias, racism and discrimination that have excluded marginalized members of our organization, and to implement new structures and practices in the design and delivery of ISED's programs and services. The department also launched its new Accessibility, Diversity and Equity and Inclusion (ADEI) Learning Centre, to enhance employees' knowledge and application of ADEI concepts and practices in the workplace through self-guided learning and development. Additionally, ISED organized and hosted its first EDI Summit, bringing together more than 100 ISED employees from senior management, EDI governance committees and employee networks, fostering meaningful discussion and promotion of diversity and inclusion.

ISED conducted an employee systems review in collaboration with BDO Canada to identify barriers for equity-seeking groups and provide recommendations for management to consider in future decisions regarding recruitment, retention, career advancement and other related workplace initiatives. The information gathered during this process will play a central role in

informing ISED's Equity, Diversity and Inclusion Strategy and Action Plan, which will be launched in 2023.

ISED continued to leverage its EDI networks, such as the Black Employees Network (BEN), the 2SLGBTQIA+ Network, the Women's Network and the Persons with Disabilities Network, to support departmental EDI priorities, especially with respect to eliminating systemic barriers to inclusion and supporting efforts to build a more diverse, safe, respectful, accessible, healthy and inclusive workplace.

In response to its commitment to work toward a more accessible environment for everyone, ISED developed an Accessibility Ambassadors Program, which trains volunteer employees (at any level) to support their colleagues to practice accessibility in all its forms, and an Accessibility Feedback Panel—a group of volunteers (both persons with disabilities and their allies) who participate in documented consultations where existing and potential barriers are identified and suggestions are made. These consultation opportunities help employees learn about ways in which they can make their workplace accessible and inclusive of everyone. In December 2022, in compliance with the *Accessible Canada Act*, ISED published the 2023–2025 ISED Accessibility Plan, xxxv which serves as the department's road map to building a barrier-free culture and a creating an inclusive environment at ISED. The plan, which was recognized as one of the top 5 in the public service, identifies the specific initiatives and commitments in each of the seven priority areas under the Act.

Moreover, the department implemented targeted resources, comprehensive reports and innovative tools to support senior management in addressing employment equity (EE) gaps within the executive cadre. An interactive tool to establish sector-specific hiring targets and set employment equity representation goals was also introduced to enable a more inclusive and diverse workforce. The department also held EX-level talent management and succession-planning discussions conducted with an equity, diversity and inclusion lens, and implemented the innovative Getting EX Ready program, targeting equity-seeking groups to support the closing of EX representation gaps.

ISED continued to strengthen staff recruitment and retention by implementing innovative tools to improve talent management, onboarding and retention. The program equips employees with essential skills and knowledge for the advancement of their careers. To improve organizational agility and enable the department to rapidly adjust to pivoting mandates, ISED also expanded its use of standardized organizational models and job descriptions.

With respect to official languages, ISED continued to create an environment that is favourable to the use of both official languages by promoting linguistic duality and continuing to raise the linguistic profile of supervisors and managerial positions in bilingual regions.

In 2022–23, ISED's Office of the Ombud for Mental Health and Employee Well-Being supported public servants during the pandemic and the transition to hybrid work. It provided tools, workshops and coaching, and promoted the Employee Assistance Program (EAP) to address mental health and safety concerns. The Canadian Innovation Centre for Mental Health in the Workplace, led by ISED's Ombud's Office, empowered employees and managers through

workshops, reaching over 50,000 participants from 32 departments. These initiatives fostered a healthy work environment and supported well-being, promoting inclusive access to services for diverse communities.

ISED continued to enhance mental health awareness by conducting workshops and training sessions for employees. The Department focused on areas including psychological health and safety, workplace harassment and violence, and the promotion of Employee Assistance Program services and LifeSpeak. ISED's Corporate Mental Health Program (CMHP) provided valuable support to management in various sectors to develop action plans that prioritize mental health. This assistance aimed to create a more supportive and understanding environment.

To ensure that mental health was understood and managed effectively, the CMHP created informative videos and guides. These resources covered essential topics such as establishing healthy boundaries, preventing burnout, increasing mental health awareness, accessing support during challenging times, managing crises and effectively handling clients in distress, including those who may present a threat.

#### Our work

ISED continued to pursue several initiatives to modernize its financial management functions and improve financial stewardship by prioritizing the enhancement and standardization of tools and processes, strengthening its financial management governance. The implementation of the Financial Management Modernization Initiative continued to reinforce accountabilities within the department, centralizing key functions to ensure better alignment under the Chief Financial Officer and that timely financial information is available to make informed decisions.

In alignment with ISED's priority to transition to a digital economy, the department recently implemented the Procurement Process Modernization Initiative (PPMI)—an automation process that enables the electronic processing of financial commitments, invoices and procurement authorization transactions. The PPMI now enables financial managers and functional experts to digitally approve most transactions, and to date, the functionality has more than 2,000 users and has successfully processed more than 15,000 transactions.

To proactively manage fraud risk and to demonstrate ISED's commitment to establishing a zero-tolerance environment for fraud, ISED developed a comprehensive Fraud Risk Management (FRM) Framework. The implementation of the framework revealed new and innovative ways to detect anomalies within the quality assurance framework by using data analytics, which created better insights and helped identify potential areas of risk that would require closer attention. Furthermore, articulating a departmental FRM framework helped in clarifying roles, responsibilities and accountabilities as they relate to fraud risk management and governance.

ISED continued to implement greening government initiatives to modernize its fleet and is committed to investing in greener technologies to decrease GHG emissions and reach the netzero emissions target by 2050. ISED implemented its Green Land Vehicle Policy, which ensured that all fleet vehicles purchased by ISED must be zero-emission vehicles (ZEVs) and any non-battery electric vehicle (BEV) fleet purchases require deputy minister approval.

ISED continued to implement its Departmental Data Strategy, advancing ISED's data culture by introducing program-specific data and reporting strategies, including the development of dashboards to facilitate real-time reporting. ISED continued to mature its data strategy by developing a data quality framework, refining departmental data governance and clarifying roles and responsibilities associated with internal data decisions. In addition to co-hosting the 2023 Government of Canada Data Conference, ISED advanced the development of data skills within the Department by leveraging learning events and other key activities through the Data Science Community of Practice, including the development of the Data Science Talent Plan.

ISED continued with its workload migration initiative, maturing its cloud operations and investing in its foundations to deliver better digital services to Canadians. In 2022–23, ISED migrated over 30% of its legacy applications (250+ total) to the cloud, mitigating risks associated with ISED's aging IT, while continuing to modernize the efficiency, accessibility, reliability and security of the Department's digital capabilities and data assets.

# **Contracts awarded to Indigenous businesses**

#### Section A

ISED is a Phase 1 department and as such must ensure that a minimum 5% of the total value of its contracts is awarded to Indigenous businesses by the end of 2022–23. In its 2023–24 Departmental Plan, the department forecasted that, by the end of 2022–23, it would award 5% of the total value of its contracts to Indigenous businesses.

As shown in the following table, ISED awarded more than 5% of the total value of its contracts to Indigenous businesses in 2022–23.

| Contracting performance indicators  | 2022-23 Results  |
|---|--|
| Total value of contracts* awarded to Indigenous businesses* (A)                   | \$5,044,726.96 (This figure does not include acquisition card purchases as ISED is unable to track this data at this time) |
| Total value of contracts awarded to Indigenous and non-Indigenous businesses‡ (B) | \$217,437,906.61   |
| Value of exceptions approved by deputy head (C)                                   | \$124,938,413.08   |
| Proportion of contracts awarded to Indigenous businesses [A / (B-C)×100]          | 5.46%  |

<sup>\*</sup>Includes contract amendments with Indigenous businesses. May include subcontracts.

<sup>&</sup>lt;sup>†</sup>For the purposes of the 5% target, Indigenous businesses include Elders, band and tribal councils; businesses registered in the <u>Indigenous Business Directory</u>xxxvi for contracts under the <u>Procurement Strategy for Aboriginal Business</u>; and businesses registered in a beneficiary business list for contracts with a final delivery in a modern treaty or self-government agreement area with economic measures as defined by Indigenous Services Canada.

<sup>‡</sup>Includes contract amendments.

- ▶ ISED provided vendor guidance on how to register to the Indigenous Business Directory where there's opportunity.
- ▶ ISED implemented its internal Indigenous Procurement Policy to show leadership in this important initiative and its Annual Procurement Planning Exercise. The Annual Procurement Planning Exercise facilitated early client engagement and enabled the Department to apply the federal Procurement Strategy for Indigenous Business to the maximum extent possible.

#### **Section B**

Not applicable to Phase 1 departments.

#### **Section C**

- ▶ 100% of procurement functional specialists (PGs) completed the mandatory course Indigenous Considerations in Procurement (COR409) from the Canada School of Public Service. This is an ongoing requirement for new PGs to obtain procurement delegation authority.
- ▶ 100% of procurement functional specialists (PGs) completed the mandatory course Procurement in the Nunavut Settlement Area (COR410) from the Canada School of Public Service. This is an ongoing requirement for new PGs to obtain procurement delegation authority.

# **Budgetary financial resources (dollars)**

The following table shows, for internal services, budgetary spending for 2022–23, as well as spending for that year.

| 2022–23 main estimates | 2022–23 planned spending | 2022–23 total<br>authorities<br>available for use | 2022–23 actual spending (authorities used) | 2022–23<br>difference (actual<br>spending minus<br>planned<br>spending) |
|------------------------|--------------------------|---|--|---|
| \$ 187,874,963         | \$ 187,874,963           | \$ 245,036,245                                    | \$ 230,230,892                             | \$ 42,355,929   |

The variance between planned and actual spending mainly reflects additional funding allocated in the year to support various projects related to workplace migration and the Future of Work Hybrid Pilot Project, in order to provide an appropriate level of corporate services to key initiatives, and to meet increased departmental communications needs. Also reflected was the

transfer of the Rural Economic Development Secretariat (a Management and Oversight function) from Infrastructure Canada.

# **Human resources (full-time equivalents)**

The following table shows, in full-time equivalents (FTEs), the human resources the department needed to carry out its internal services for 2022–23.

|       | equivalents | 2022–23 difference (actual full-<br>time equivalents minus planned<br>full-time equivalents) |
|-------|-------------|--|
| 1,672 | 1,852       | 180  |

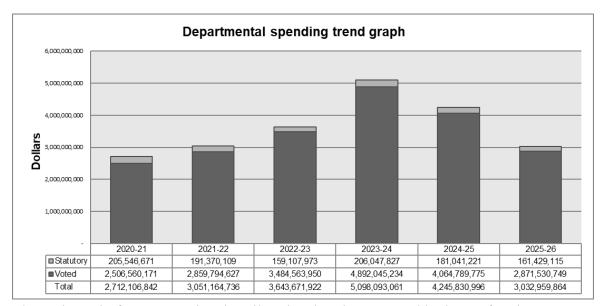
The variance between planned and actual FTEs is primarily due to funding reallocated internally to support various projects such as diversity and inclusion, the Workplace Accommodation Centre and the Future of Work Hybrid Pilot Project. Also reflected was the transfer of the Rural Economic Development Secretariat (a Management and Oversight function) from Infrastructure Canada.

# Spending and human resources

# **Spending**

# Spending 2020–21 to 2025–26

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



The variance in future years is primarily related to the approved budgets of various grants and contributions programs.

# 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<br>responsibiliti<br>es and<br>internal<br>services                      | 2022–23 main estimates | 2022–23<br>planned<br>spending | 2023–24<br>planned<br>spending | 2024–25<br>planned<br>spending | 2022–23 total<br>authorities<br>available for<br>use | 2020–21<br>actual<br>spending<br>(authorities<br>used) | 2021–22<br>actual<br>spending<br>(authorities<br>used) | 2022–23<br>actual<br>spending<br>(authorities<br>used) |
|---|------------------------|--------------------------------|--------------------------------|--------------------------------|--|--|--|--|
| People, Skills<br>and<br>Communities <sup>1</sup>                             | \$ 1,387,077,048       | \$ 1,387,077,048               | \$ 972,377,203                 | \$ 605,924,887                 | \$<br>1,387,245,461                                  | \$ 191,176,099   | \$ 566,362,187   | \$ 479,010,077   |
| Science,<br>Technology,<br>Research and<br>Commercializ<br>ation <sup>2</sup> | \$ 1,115,862,115       | \$ 1,115,862,115               | \$ 980,646,670                 | \$ 824,411,919                 | \$<br>1,097,453,510                                  | \$ 579,415,137   | \$ 572,939,686   | \$ 721,499,560   |
| Companies,<br>Investment<br>and Growth <sup>3</sup>                           | \$ 3,093,700,887       | \$ 3,093,700,887               |                                | \$<br>2,642,058,473            | \$<br>3,160,563,937                                  | \$<br>1,750,970,521                                    | \$<br>1,708,233,528                                    | \$<br>2,212,931,393                                    |
| Subtotal  | \$ 5,596,640,050       | \$ 5,596,640,050               |                                | \$<br>4,072,395,279            | \$<br>5,645,262,908                                  | \$<br>2,521,561,756                                    | \$<br>2,847,535,401                                    | \$<br>3,413,441,031                                    |
| Internal<br>services <sup>4</sup>   | \$ 187,874,963         | \$ 187,874,963                 | \$ 174,149,797                 | \$ 173,435,717                 | \$ 245,036,245                                       | \$ 190,545,086   | \$ 203,629,335   | \$ 230,230,892   |
| Total   | \$ 5,784,515,013       | \$ 5,784,515,013               |                                | \$<br>4,245,830,996            | \$<br>5,890,299,153                                  | \$<br>2,712,106,843                                    | \$<br>3,051,164,736                                    | \$<br>3,643,671,922                                    |

Note 1: For more information, please refer to the variance explanation under People, Skills and Communities section, Budgetary financial resources (dollars).

<u>Note 2:</u> For more information, please refer to the variance explanation under Science, Technology, Research and Commercialization section, Budgetary financial resources (dollars).

Note 3: For more information, please refer to the variance explanation under Companies, Investment and Growth section, Budgetary financial resources (dollars).

<u>Note 4:</u> For more information, please refer to the variance explanation under Internal Services section, Budgetary financial resources (dollars).

# 2022–23 Budgetary actual gross spending summary (dollars)

The following table reconciles gross planned spending with net spending for 2022–23.

| Core responsibilities and internal services               | 2022–23 actual gross<br>spending | 2022–23 actual revenues netted against expenditures | 2022–23 actual net spending (authorities used) |
|---|----------------------------------|---|--|
| People, Skills and<br>Communities                         | \$ 479,010,077                   | 0   | \$ 479,010,077                                 |
| Science, Technology,<br>Research and<br>Commercialization | \$ 721,499,560                   | 0   | \$ 721,499,560                                 |
| Companies, Investment and Growth                          | \$ 2,491,650,399                 | \$ 278,719,006                                      | \$ 2,212,931,393                               |
| Subtotal  | \$ 3,692,160,036                 | \$ 278,719,006                                      | \$ 3,413,441,031                               |
| Internal services   | \$ 258,353,079                   | \$ 28,122,187                                       | \$ 230,230,892                                 |
| Total   | \$ 3,950,513,115                 | \$ 306,841,193                                      | \$ 3,643,671,922                               |

ISED's 2022–23 budgetary actual gross spending is approximately \$3.95 billion, which includes \$307 million in vote-netted revenues, accounting for total planned net spending of approximately \$3.64 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 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

e) services and regulatory processes for mergers and merger-related matters, including premerger 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               | 2020–21<br>actual full-<br>time<br>equivalents | 2021–22<br>actual full-<br>time<br>equivalents | 2022–23<br>planned full-<br>time<br>equivalents | 2022–23<br>actual full-<br>time<br>equivalents | time  | 2024–25<br>planned full-<br>time<br>equivalents |
|---|--|--|---|--|-------|---|
| People, Skills and<br>Communities                         | 101  | 167  | 193   | 195  | 159   | 132   |
| Science, Technology,<br>Research and<br>Commercialization | 86   | 96   | 104   | 106  | 104   | 95  |
| Companies, Investment and Growth                          | 3,594  | 3,832  | 4,039   | 4,129  | 4,042 | 4,028   |
| Subtotal  | 3,781  | 4,095  | 4,336   | 4,430  | 4,304 | 4,255   |
| Internal services   | 1,554  | 1,702  | 1,672   | 1,852  | 1,657 | 1,652   |
| Total   | 5,336  | 5,797  | 6,008   | 6,282  | 5,962 | 5,907   |

# **Expenditures by vote**

For information on ISED's organizational voted and statutory expenditures, consult the <u>Public</u> Accounts of Canada. \*\*xxviii\*

# Government of Canada spending and activities

Information on the alignment of ISED's spending with Government of Canada spending and activities is available in GC InfoBase. xxxix

# Financial statements and financial statements highlights

## **Financial statements**

ISED financial statements (unaudited) for the year ended on March 31, 2023, are available on the ISED website.<sup>xl</sup>

# Financial statement highlights

Condensed Statement of Operations (unaudited) for the year ended March 31, 2023 (dollars)

| Financial<br>information                 | 2022–23 planned results | 2022–23 actual results | 2021–22<br>actual results | Difference<br>(2022–23<br>actual results<br>minus<br>2022–23<br>planned<br>results) | Difference<br>(2022–23<br>actual results<br>minus<br>2021–22<br>actual results) |
|--|-------------------------|------------------------|---------------------------|---|---|
| Total                                    |                         |                        | ¢2 004 420 00             | \$  | \$  |
| expenses                                 | \$ 5,907,675,654        | \$ 3,863,137,661       | 1                         | (2,044,537,993  | 978,998,680   |
| Total revenues                           | \$<br>270,230,737       | \$ 251,924,866         | \$<br>239,348,597         | \$<br>(18,305,871)  | \$<br>12,576,270  |
| Net cost of operations before government |                         |                        |                           | \$  |   |
| funding and transfers                    | \$<br>5,637,444,917     | \$ 3,611,212,795       | \$<br>2,644,790,384       | (2,026,232,122  | \$<br>966,422,410   |

The 2022–23 planned results information is provided ISED's <u>Future–Oriented Statement of</u> Operations<sup>xli</sup> and Notes 2022–23.

Condensed Statement of Financial Position (unaudited) as of March 31, 2023 (dollars)

| Financial information      | 2022–23          | 2021–22          | Difference (2022–23 minus 2021–22) |
|----------------------------|------------------|------------------|------------------------------------|
| Total net liabilities      | \$ 1,907,099,616 | \$ 1,836,287,084 | \$ 70,812,532                      |
| Total net financial assets | \$ 1,192,015,684 | \$ 1,247,924,462 | \$ (55,908,778)                    |
| Departmental net debt      | \$ 715,083,932   | \$ 588,362,622   | \$ 126,721,310                     |

| Financial information               | 2022–23          |                  | Difference (2022–23 minus 2021–22) |
|-------------------------------------|------------------|------------------|------------------------------------|
| Total non-financial assets          | \$ 157,518,450   | \$ 157,428,945   | \$ 89,505                          |
| Departmental net financial position | \$ (557,565,482) | \$ (430,933,677) | \$ (126,631,805)                   |

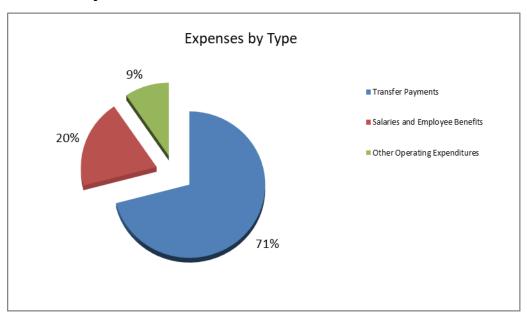
#### Planned results

The \$2 billion variance between the 2022–23 Planned Results and the 2022–23 actuals is primarily due to differences in transfer payments. ISED transferred funding to future years via reprofiling requests for existing grants and contributions (G&C) programs; in particular under the Universal Broadband Fund, the Strategic Innovation Fund, the Canada Foundation for Innovation (CFI) and the Canada Digital Adoption Program.

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.

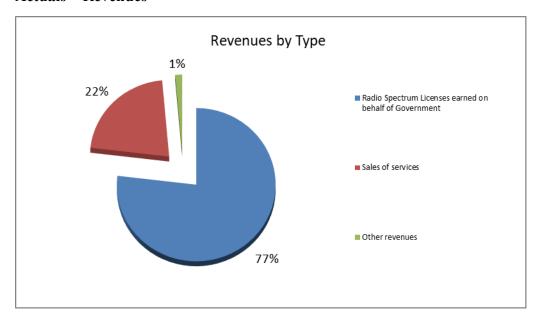
The 2022–23 planned results information is provided in Innovation, Science and Economic Development Canada's Future–Oriented Statement of Operations<sup>xlii</sup> and Notes 2022–23.

## Actuals – Expenses



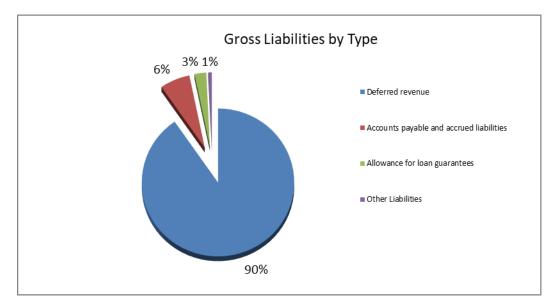
Total expenses were \$3.9 billion in 2022–23, an increase of \$979 million from 2021–22. This increase is mainly attributable to transfer payment programs, such as the Strategic Innovation Fund, the Canada Small Business Financing Program and the Canada Foundation for Innovation, and to Mitacs. Other operating expenses saw increases to salary expenses consistent with an increase to full-time equivalent hiring, in support of increased transfer payment program activity.

#### Actuals - Revenues



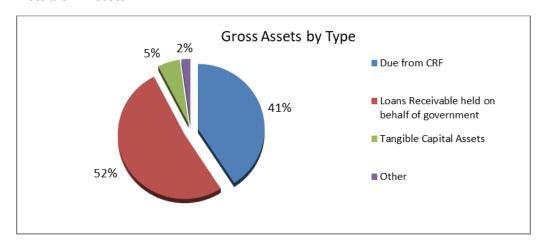
Total gross revenues were \$1.7 billion in 2022–23, an increase of over \$348 million compared to 2021–22, while net revenues of \$252 million in 2022–23 increased by \$13 million compared to the previous fiscal year. The net revenue increase is mostly attributable to an increase in service requests for CIPO, whereas the gross revenue increase is attributable to radio spectrum licence revenue recognition. Those revenues are reported as revenues earned on behalf of the government, as they cannot be accessed by the department.

# **Actuals – Liabilities**



Total gross liabilities were \$18 billion for 2022–23, a decrease of \$1 billion year over year, while net liabilities were \$1.9 billion, an increase of \$70 million compared to 2021–22. The decrease in gross liabilities is mainly attributable to the recognition of spectrum auction deferred revenues. As these are earned on behalf of the government, the associated deferred revenues balance is not included in the net liabilities balance of the Department. The increase in net liabilities is attributable to an increase in the loan guarantee provision.

#### Actuals – Assets



Total gross financial assets amounted to \$2.7 billion for 2022–23, a decrease of \$82 million from 2021–22, while net financial assets were \$1.2 billion, a decrease of \$56 million year over year. The decrease in net financial assets is primarily due to lower 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 decreased proportionately with the decrease in accounts payable.

# **Corporate information**

# Organizational profile

## Minister of Innovation, Science and Industry

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

## Minister of Export Promotion, International Trade and Economic Development

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

# Minister of Tourism and Minister responsible for the Economic Development Agency of Canada for the Regions of Ouebec

The Honourable Soraya Martinez Ferrada, P.C., M.P.

# Minister of Rural Economic Development and Minister responsible for the Atlantic **Canada Opportunities Agency**

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

#### **Minister of Small Business**

The Honourable Rechie Valdez, P.C., M.P.

## **Deputy ministers:**

Simon Kennedy

Catherine Blewett

Francis Bilodeau

Ministerial portfolio: Innovation, Science and Economic Developmentxliii

Enabling instrument(s): Innovation, Science and Economic Development Canada's founding

legislation is the Department of Industry Act, S.C. 1995, c.1. xliv

Year of incorporation / commencement: 1892

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

"Raison d'être, mandate and role: who we are and what we do" is available on Innovation, Science and Economic Development Canada's website.

For more information on the department's organizational mandate letter commitments, see the Minister's mandate letter<sup>xlv</sup>.

# **Operating context**

Information on the operating context is available on Innovation, Science and Economic Development Canada's website.

# **Reporting framework**

Innovation, Science and Economic Development Canada's departmental results framework and program inventory of record for 2022–23 are shown below.

| <b>Core responsibility</b> | People, Skills and Communities   |  |  |  |
|----------------------------|--|--|--|--|
| Departmental result        | People and communities from all segments of Canadian society   |  |  |  |
|                            | participate in the economy   |  |  |  |
| Departmental result        | Percentage of Canadian households with an Internet   |  |  |  |
| indicators                 | subscription   |  |  |  |
|                            | <ul> <li>Percentage of SMEs in Canada that are majority-owned by<br/>women and visible minorities</li> </ul> |  |  |  |
|                            | Number of SMEs supported by ISED programs  |  |  |  |
|                            | Percentage of SMEs supported by ISED programs that are led   |  |  |  |
|                            | or majority-owned by women, visible minorities, Indigenous   |  |  |  |
|                            | people, youth and persons with disabilities  |  |  |  |
| Program inventory          | Support for Under-represented Entrepreneurs  |  |  |  |
|                            | 2. Bridging Digital Divides  |  |  |  |
|                            | 3. Economic Development in Northern Ontario  |  |  |  |
|                            | (Note: FedNor became a standalone agency on August 12, 2021. Activities                                      |  |  |  |
|                            | previously reported under the "Economic Development in Northern Ontario"                                     |  |  |  |
|                            | program are now reported in FedNor's Departmental Results Report. ISED's                                     |  |  |  |
|                            | reporting structure has been updated for future years to reflect this change.)                               |  |  |  |

| <b>Core responsibility</b>        | Science, Technology, Research and Commercialization   |  |  |
|-----------------------------------|---|--|--|
| Departmental                      | Canadian science, technology and innovation (STIn) research   |  |  |
| Result                            | contributes to knowledge transfer   |  |  |
| Departmental<br>Result Indicators | <ul> <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>          | 4. Science and Research   |  |  |

| <b>Core Responsibility</b> | Companies, Investment and Growth  |  |  |
|----------------------------|---|--|--|
| Departmental               | Canadian businesses and industries are innovative and growing                     |  |  |
| Result                     |   |  |  |
| Departmental               | Value of BERD by firms receiving ISED program funding                             |  |  |
| Result Indicators          | Revenue growth rate of firms supported by ISED programs                           |  |  |
|                            | relative to the national average  |  |  |
|                            | Canada's rank on WIPO's Global Innovation Index                                   |  |  |
|                            | <ul> <li>Percentage of professional and S&amp;T-related jobs in Canada</li> </ul> |  |  |
|                            | Percentage of BERD funded by the federal government                               |  |  |
| <b>Program Inventory</b>   | 5. Business Innovation  |  |  |
|                            | 6. Spectrum and Telecom   |  |  |
|                            | 7. Digital Service  |  |  |
|                            | 8. Economic Outcomes from Procurement   |  |  |
|                            | 9. Tourism  |  |  |
|                            | 10. Support for Small Business  |  |  |
|                            | 11. Talent Development  |  |  |

| <b>Core Responsibility</b> | Companies, Investment and Growth  |  |  |
|----------------------------|---|--|--|
| Departmental               | Canada has a clean and sustainable economy  |  |  |
| Result                     |   |  |  |
| Departmental               | <ul> <li>Number of ISED-funded projects with a clean technology</li> </ul>  |  |  |
| Result Indicators          | component that are in progress  |  |  |
|                            | <ul> <li>Annual incremental reduction in GHG emissions attributable<br/>to ISED-supported technologies</li> </ul> |  |  |
|                            | Value of Canada's total sales in clean tech (in dollars)  |  |  |
|                            | Clean technology employment in Canada (in numbers)  |  |  |
| <b>Program Inventory</b>   | 12. Clean Technology and Clean Growth   |  |  |

| <b>Core Responsibility</b> | Companies, Investment and Growth  |  |  |
|----------------------------|---|--|--|
| Departmental               | Businesses, investors and consumers are confident in the Canadian   |  |  |
| Result                     | marketplace, including the digital economy  |  |  |
| Departmental               | Total business investment in Canada (in dollars)  |  |  |
| Result Indicators          | <ul> <li>Growth in patent application filings, trademark filings and<br/>industrial design filings in Canada</li> </ul> |  |  |
|                            | <ul> <li>Canada's score on the World Economic Forum's Global<br/>Competitiveness Index</li> </ul>                       |  |  |
|                            | Percentage of Canadians who shop and bank online  |  |  |
| <b>Program Inventory</b>   | 13. Intellectual Property   |  |  |
|                            | 14. Competition Law Enforcement and Promotion   |  |  |
|                            | 15. Marketplace Protection and Promotion  |  |  |

# Supporting information on the program inventory

Financial, human resources and performance information for Innovation, Science and Economic Development Canada's program inventory is available in <u>GC InfoBase</u>. xlvi

# **Supplementary information tables**

The following <u>supplementary information tables</u> are available on Innovation, Science and Economic Development Canada's website:

- ▶ Reporting on Green Procurement
- ▶ Details on transfer payment programs
- ▶ Gender-based Analysis Plus
- ▶ Horizontal initiatives
- ▶ Up front multi year funding
- ▶ United Nations 2030 Agenda and the Sustainable Development Goals
- ▶ Response to parliamentary committees

# 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. \*Iviii\* 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 assessments 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

**Telephone:** 613-954-5031

TTY: 1-866-694-8389

**Fax:** 613-954-2340

Email: ic.info-info.ic@ised-isde.gc.ca

Website(s): http://www.ic.gc.ca/eic/site/icgc.nsf/eng/homexlix

# **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 3year 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.

## 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 2022–23 Departmental Results Report, government-wide priorities are the high-level themes outlining the government's agenda in the <u>November 23, 2021, Speech from the Thronel</u>: building a healthier today and tomorrow; growing a more resilient economy; bolder climate action; fighter harder for safer communities; standing up for diversity and inclusion; moving faster on the path to reconciliation; and fighting for a secure, just and equitable world.

## 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.

## nonbudgetary 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.

## Indigenous business (enterprise autochtones)

For the purpose of the *Directive on the Management of Procurement Appendix E: Mandatory Procedures for Contracts Awarded to Indigenous Businesses* and the Government of Canada's commitment that a mandatory minimum target of 5% of the total value of contracts is awarded to Indigenous businesses, an organization that meets the definition and requirements as defined by the Indigenous Business Directory.<sup>II</sup>

#### 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**

<sup>i</sup> Government of Canada announces recipients of national tourism support, https://www.canada.ca/en/innovationscience-economic-development/news/2022/09/government-of-canada-announces-recipients-of-national-tourismsupport.html

https://www.ic.gc.ca/app/scr/sittibc/web/bbmap?lang=eng#!/map

- 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. GC InfoBase, https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- xi Pan-Canadian Genomics Strategy: What We Heard Report, https://ised-isde.canada.ca/site/genomics/en/pancanadian-genomics-strategy-what-we-heard-report
- xii Report of the Advisory Panel on the Federal Research Support System, https://ised-isde.canada.ca/site/panelfederal-research-support/en/report-advisory-panel-federal-research-support-system
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