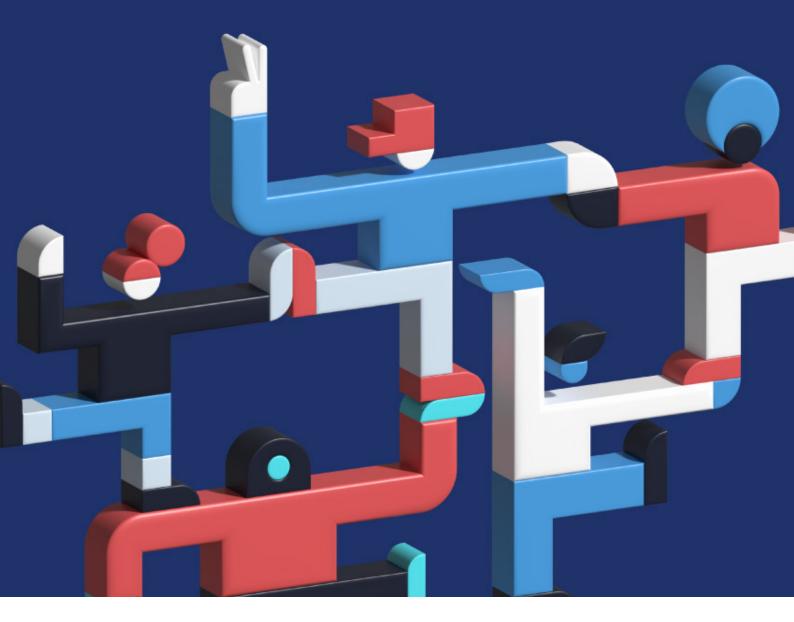
# Impact and Innovation Unit

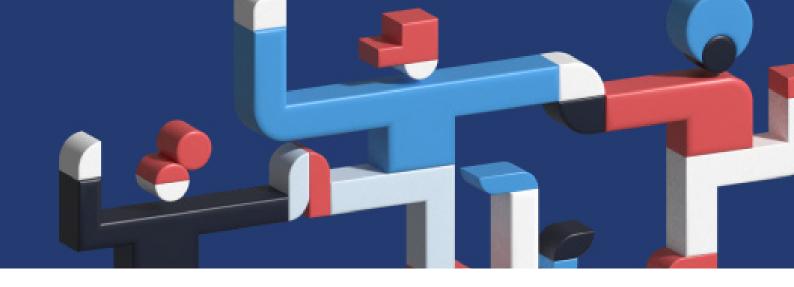
# 22 Annual 23 Report





# **TABLE OF CONTENTS**

1.	INTRODUCTION	3
2.	KEY FINDINGS	4
3.	ABOUT IMPACT CANADA	5
4.	RESULTS FROM OUR 5-YEAR COMPREHENSIVE	7
	PROGRAM ASSESSMENT	
5.	GOING FORWARD	20



# 1. INTRODUCTION

Since its launch in 2017, the Impact and Innovation Unit (IIU) has remained focused on working with federal departments, other levels of government, and external partners to support the implementation of inventive programs and services. Impact Canada was established with a clear goal in mind – **develop new policy and program methods to better address government priorities and make meaningful impacts in the lives of Canadians**. To this end, we have continued to expand our portfolio of Challenges and world-leading behavioural science programs of research in key government priority areas, including climate action, health & public health, housing & infrastructure, and trust & misinformation.

Over the past fiscal year, Impact Canada underwent an independent comprehensive 5-year assessment which aimed to determine whether Impact Canada has:

- met or is on track to meet its strategic objectives,
- efficient and effective processes in place to achieve goals and objectives, and
- systems-level impact, including the demand for services, client satisfaction, public sector capacity, and continued need for the work.

A three-layered approach to data collection and analysis was utilized by the independent evaluators. The lines of evidence included: an extensive review of organizational documentation, interviews with key stakeholders, and a high-level analysis of governance best practices as they pertain to Impact Canada. Further, as part of Impact Canada's ongoing impact measurement efforts, three surveys, conducted between March – April 2022 to assess the impact and effectiveness of Impact Canada Challenges and the Impact Canada Centre of Expertise, were included in the analysis.

#### These surveys included:

### **Department survey:**

Government of Canada staff from departments implementing Challenges (n=47/141)

#### **Jury survey:**

Members of expert panels that reviewed and evaluated Challenge applicants (n=93/303)

### **Challenge applicant survey:**

Applicants and participants in Challenges including successful and unsuccessful applicants (n=426/2,521)

We are proud to share the key findings of the comprehensive assessment in our 2022-2023 Annual Report.



# 2. KEY FINDINGS

### The key findings of the 5-year comprehensive assessment are as follows:

- Impact Canada represents a **unique and effective approach** to solving the increasingly complex policy issues of the 21st century run by an agile, high-performing team of dedicated individuals, with efficient and effective processes in place;
- Impact Canada is **on track** to meet its strategic objectives and is **well placed to lead and support policy priorities** through the use of advanced policy research, behavioural science, and Challenge-based methods as evidenced by its substantial positive impact on numerous critical policy spheres;
- Impact Canada's Challenge program continues to **fill a gap in the Canadian innovation ecosystem**, experiencing rapid growth from 2 challenge streams valued at \$375M to 30 active or completed outcomesbased funding projects valued over \$735M, spanning economic, environmental, and social policy domains;
- Built upon world-leading data-driven models of research, Impact Canada's portfolio of behavioural science (BeSci) projects inform the design and implementation of priority programs, services, and initiatives - understanding human behaviour and decision-making in a real-world context to support the implementation of key government priorities;
- Feedback from departments via key informant interviews and surveys overwhelmingly emphasize the importance of Impact Canada's support, with high demand and satisfaction for Impact Canada's Centre of Expertise, Fellowship program, resources, and the Impact Canada portal;
- Impact Canada is a **positive story for government**, demonstrating strong accountability, value for dollar, and concrete results for Canadians; and
- Impact Canada is an **effective approach that should be scaled up** more broadly across government.

# 3. ABOUT IMPACT CANADA

# 3.1 Raison d'être

Established in 2017, Impact Canada (Impact and Innovation Unit, Privy Council Office) uses novel public methods to address identified gaps in effectively translating policy objectives into meaningful and measurable outcomes for Canadians.

# 3.2 Key Business Lines

# **Impact Canada Challenges**

Impact Canada's funding methods focus on more effectively deploying Grants and Contributions – a traditionally under-optimized, yet highly influential level – shifting from paying for expenditures or activities to rewarding the achievement of outcomes.

Challenges use financial and non-financial incentives to encourage participants to tackle problems where solutions are not apparent, or current responses are not achieving the desired results.

### Applied behavioural science and advanced policy research

World-leading data-driven programs of applied behavioural science research inform policy development, program interventions and strategic communications through rigorous analysis and research methods. Overall, this work is leading to a better understanding of what works and for whom through advanced behavioural segmentation.

# 3.3 Methodology

We use rigorously designed and evidence-based methodologies that are continuously refined and adapted.



### 1. Identify/understand

Initial research to identify and define the specific problem that needs to be addressed or target outcomes of interest and key behaviours to target.



#### 2. Design/test

Developing and validating the design, or set of designs, and interventions with our partners.



#### 3. Scale

Analysis, evaluation, and broad dissemination of results and solutions.

For more information on our design processes, visit the Impact Canada <u>Challenges</u> and <u>Behavioural Science</u> web pages.

### **Impact Canada Centre of Expertise**

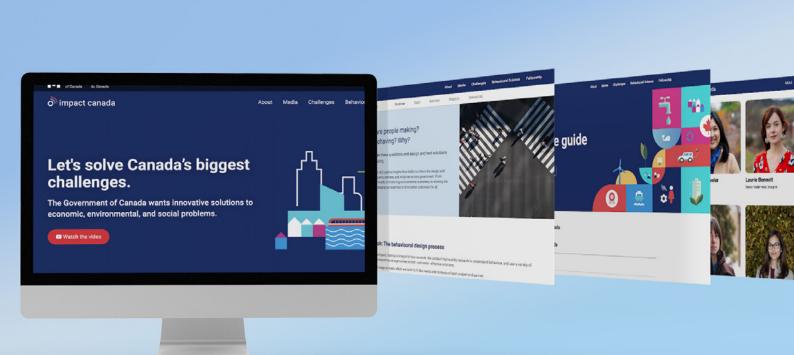
The Impact Canada Centre of Expertise is a team of subject matter and technical experts that support the development and implementation of innovative approaches to address complex public policy problems. The Centre of Expertise provides access to key resources that support federal partners to implement innovative methods, including providing support to help federal organizations use the Impact Canada Terms and Conditions or alternative flexible funding mechanism, the Impact Canada Fellowship program, and a centralized web platform supported by in-house visual and graphic design experts.

### Fellowship program

Impact Canada conceptualized and implemented the Fellowship program to attract external talent with specialized skills in key disciplines to increase capacity and upskill the existing workforce. At present, 31 Fellows are working with partner departments to support both Impact Canada Challenges and behavioural science projects.

### **Impact Canada Platform**

The Impact Canada platform creates a highly transparent one-stop shop for our partners, clients, and innovators, enabling communication, implementation and data collection to drive strong stakeholder engagement that is inclusive and relevant to the public.



# 4. RESULTS FROM OUR 5-YEAR COMPREHENSIVE PROGRAM ASSESSMENT

# 4.1 Impact Canada Challenges

By more effectively deploying grants and contributions funding, shifting from paying for expenditures or activities to rewarding the achievement of outcomes, and by using a combination of financial and non-financial incentives, Impact Canada has been successful in encouraging participants to tackle well defined problems where solutions are not apparent or current responses are not achieving the desired results.

### **Impact Canada Challenges:**

- Create solutions for societal challenges;
- · Increase the innovation ecosystem; and
- Build capacity within the government of Canada and expand the public sector toolkit.

# Impact Canada Challenges create solutions for societal challenges

### Solutions developed through Impact Canada Challenges to date include:

- A game-changing device that can accurately and quickly test illegal street drugs for multiple substances, including hard-to-detect fentanyl. Since winning the grand prize of \$1M, the Scatr founders have improved their ability to manage operational and purchasing costs by developing the technology in-house, purchasing a 3D printer and other critical equipment, and making improvements to their sample library and digital display. Never having applied for funding from the GC in the past, Scatr pivoted work they were completing on a blood-typing device to align with this important need an example of the ability of Challenges to attract new solvers, create new technologies, and impact societal outcomes reducing opioid overdose and death due to fentanyl poisoning.
- A mining technology designed to selectively break particles and sort waste from desired minerals, reducing crushing and grinding requirements and reaching over 35 percent energy savings across several commodities.
- A battery technology for storing energy in zinc metal. Its low-cost, flexible, and long-duration energy storage solution could help increase the share of the world's energy markets powered by renewable energy.
- A bio jet fuel that converts municipal solid waste, as well as forestry and agricultural biomass, into sustainable chemicals and advanced biofuels, including sustainable aviation fuel.

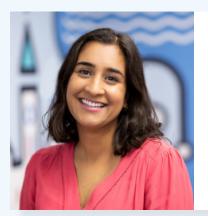
• Indigenous housing innovation resulting in the building of an eight-unit residential facility that provides safe, transitional, emergency housing with professional and culturally sensitive support for community members escaping violence. The facility also includes six hotel units accessible from a separate entrance for those visiting the community to generate revenue to support the operation and maintenance.

The success of Impact Canada Challenges has led to a substantial increase in the number of interested partner departments and organizations. The Challenge portfolio of projects and programs has grown significantly, from 2 program streams in 2017 valued at \$375M to now over \$730M in funding for 30 initiatives.

In implementing a diverse portfolio of challenges, Impact Canada has helped prove this method in several domains. Based on key lessons learned to date, Impact Canada has begun to cluster challenges in select priority policy areas to accelerate progress:

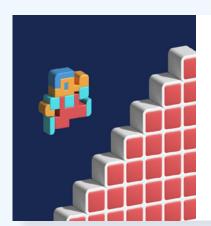
- Clean Technology and Climate
- · Housing Supply and Smart Infrastructure
- Food Waste Reduction
- Space-based Technologies
- · Heath and Public Health

This has involved working across ten federal departments, with over 2,500 applicants to Impact Canada challenges, and collaborating with over 300 external experts acting as jury members to assess solutions and recommend winners for funding.



# **Measuring the impact of Impact Canada Challenges**

In a <u>recent blogpost</u>, Kiran Toor of the Impact and Innovation Unit highlights how theoretical concepts and research on impact measurement have been put into practice over the last year at Impact Canada.



# How effective are Challenges? Results from Impact Canada Challenge surveys

This <u>summary report</u> focuses on one line of inquiry that Impact Canada is using for impact measurement of Challenges: Stakeholder surveys.



### **New Challenges coming soon!**

In the coming year, together with Agriculture and Agri-Food Canada, Impact Canada will be launching a challenge looking to advance innovative, low-cost and scalable practices and technologies that contribute to the net reduction of enteric methane emissions from cattle. Up to twenty semi-finalists will be awarded up to \$250,000 each. Ten finalists will receive up to \$500,000 each. In the end, two winners will receive up to \$1 million each to grow and commercialize their solution. All semi-finalists and finalists will also benefit from non-financial investments such as mentorship, trainings, and access to facilities.

Announced in Budget 2023, a new round of Infrastructure Canada's Smart Cities Challenge will be focusing on connected technologies, data, and innovative approaches to improve climate resiliency and help communities reduce the risks and impacts posed by weather-related events and disasters. The first round, launched in 2017, resulted in the awarding of \$75 million in prizes across four winning applicants: Montreal, Quebec; Guelph, Ontario; communities of Nunavut; and Bridgewater, Nova Scotia.

Work is ongoing with the Canadian Space Agency to develop a potential new Challenge relating to In-situ Resource Utilization on the lunar surface, more particularly in water purification to remove contaminants from water extracted from lunar regolith that may also have benefits to support water purification here on Earth. This Challenge is currently in the Design and Understand phase, with an unconfirmed potential launch in November of 2023.

# Impact Canada Challenges encourage innovative solutions, enhance skills, and build the capacity of solvers

At a systems level, Challenges are contributing to achieving outcomes of encouraging innovative solutions, enhancing skills and capacity of solvers, and increasing investments in problem areas. Nearly 90% of applicants indicate they are still advancing their solutions submitted as part of the Challenge and most have already taken several actions to advance their solutions – including developing a business plan (68%), making R&D investments (62%), and building prototypes for their solutions (57%).

Findings from a social media analysis indicate that the influence of Challenges reaches far beyond the Challenge itself. For example, engagement on the topic/problem of sustainable food sources in space increased from ~350 tweets prior to the Deep Space Food Challenge to over 17,000 tweets following the launch of the Challenge.



# How effective are Challenges? Using Social Network Analysis to Measure Impact

Learn more about how we use social network analysis for measuring the impact of Impact Canada Challenges in this <u>summary report</u>.



(Christopher Kindratsky/Western Communications)

# Scatr is being rolled out at 11 supervised consumption sites thanks to a new grant from Health Canada

Since winning the grand prize of \$1M, the Scatr founders have improved their ability to manage operational and purchasing costs by developing the technology in-house, purchasing a 3D printer and other critical equipment, and making improvements to their sample library and digital display. Never having applied for funding from the GC in the past, Scatr pivoted work they were completing on a blood-typing device to align with this important need – an example of the ability of Challenges to attract new solvers, create new technologies, and impact societal outcomes – reducing opioid overdose and death due to fentanyl poisoning.

In April 2023, it was reported that SCATR is being rolled out at 11 safe, consumption sites across Ontario, Nova Scotia, and British Columbia thanks to a new grant from Health Canada's Substance Use and Additions Program. "So, this really is a game changer. It will provide people who use drugs a way to have more information at their fingertips and empower them in their decision making," says Sonja Burke, director of harm reduction services at Regional HIV-AIDS Connection.

https://news.westernu.ca/2023/04/health-canada-grant-funds-innovative-drug-checking-technology/

### Innovators value both financial as well as non-financial incentives

A critical component of the Impact Canada Challenge design and delivery methodology is to use "non-financial" incentives to support innovators as they progress through challenge stages, ranging from access to Government science and technology (S&T) experts or infrastructure, regulators, business development, communication supports, networking, and engagement across the cohort. Impact Canada innovators highly value these types of incentives, which are built into the challenge design. A survey administered to all Impact Canada Challenge applicants, jurors and lead departments clearly demonstrated that the further an innovator progresses through their Challenge, the more highly they rate the non-financial incentives in terms of value.

### **Non-Financial Incentives**

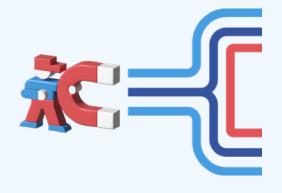
During the Challenge design process, Impact Canada works with partners to determine Challenge assessment criteria and judging tools, as well as plans to validate innovator data or results submitted, or to generate new data in order to aid solution assessment. For example, innovators in the Deep Space Food Challenge have access to testing on their food products, nutritional qualities, palatability, and safety. Innovators have access to northern/remote heath-care sites and practitioners as required. In a second example, the Boat Hull Design Challenge, innovators had access to National Research Council's marine testing lab to build and test scale models of their proposed solutions. This testing is supported by the host department of the Challenge, in accordance with the Challenge budget. Impact Canada will continue to encourage and support the use of non-financial incentives to test and validate solutions and continue to broker helpful partnerships to facilitate this.

### Potential area for improvement

Evaluation findings indicated that an area for improvement is increasing these types of non-financial incentives, including more access to Government of Canada facilities for more frequent non-graded testing opportunities. This evidence, along with findings indicating interest by the majority of participants in capacity building, coaching and mentoring (68%), and that significantly fewer respondents (26%) have secured post-Challenge investments, suggests a future area of work for consideration could be exploring and linking participants to increased testing facilities during Challenges and post-Challenge support leveraging government programming.

### Challenges mobilize new and diverse talent to problem areas

There is evidence that Impact Canada challenges have contributed to mobilizing new talent to solve complex problems. Nearly one fourth of participants indicated that the Challenge was the sole motivation for them to work on the specific problem area and an additional 48% indicated that the Challenge motivated them to work on the problem to a large extent. Impact Canada Challenges are succeeding in attracting a wide range of applicants – at the time of application only about half are businesses, 22% are not-for-profits, and 18% are groups of individuals. Among applicants, more than two thirds have never applied to government funding before. Impact Canada Challenges have a higher proportion of women-owned and youth-owned businesses than the average in the Canadian economy. There is also a relatively large proportion of Impact Canada applicants that are visible minorities, indigenous and persons living with a disability.



Mobilizing new talent is just one of a number of potential impacts of Impact Canada Challenges, learn more.

# Overwhelming importance of Impact Canada resources and supports

Results indicate that the Impact Canada Challenge model is an effective policy approach for delivering on government priorities and intended outcomes. Overall, the majority of jury members and departments indicate that a Challenge was the appropriate mechanism to address the problem area to a very large or large extent, indicating that the authorities / Terms & Conditions that allow for Challenges are useful tools in the Government of Canada's toolkit, alongside other tools such as the Generic Terms & Conditions, for departments working towards solving complex problems. Most notably, findings indicate that implementation supports, such as the Centre of Expertise, Impact Canada Platform, and Fellowship program, supporting departments to launch and run Challenges are critical to implementation and impact.

Overall, there is high demand for Impact Canada advisory services with the majority of departments placing a high value on advice from Impact Canada on applying Impact Canada Terms and Conditions, implementing outcomes-based funding, understanding how to use Challenges as a tool to achieve policy and program objectives, and sharing best practices. Since inception, there has been an increase in the extent departments have sought support from Impact Canada to design and implement Challenges, as well as a significant increase in the use of resources and materials developed by Impact Canada. Moreover, levels of satisfaction with Impact Canada support have been increasing over the years – with 100% satisfaction reporting in 2021 - in part because of the high value placed on team expertise and advice, as well as the use of the Impact Canada portal by departments and jury members.

In 2018 or 2019, only 16% of respondents reporting having used resources / materials developed by Impact Canada. This proportion increased to 50% for respondents from departments that launched Challenges in 2020 or 2021.

There is a very high level of satisfaction from jury members with regards to their experience:



**95%** 

Expressed that they were satisfied or very satisfied



**77**%

Most confirmed that they would participate again as a jury member in another Challenge



**52%** 

Would recommend the experience to a friend or colleague

# **Building capacity within government**

Within government, the majority of departments indicated that the use of a Challenge contributed to strengthening staff capacity to a large or very large extent, by encouraging staff and departments to be more innovative in their work. Most departments also believed that following their experience with Challenges, department staff have greater readiness to work on similar programs in the future. Challenges have also been effective in increasing government engagement with stakeholders, including expanding the department's network of stakeholders and partners, in part due to the use of an external jury. Both departments and jury members indicated the importance of Challenges in bringing a greater diversity of perspectives into government decision-making, higher credibility and recognition to solutions, better aligning funding with industry needs, and increasing transparency/ democratizing funding decision-making.

The majority of respondents from departments (64%) reported that after working on Challenges and outcomes-based programming the staff in their department are more prepared to work on similar programs in the future, a clear indication of strengthening capacity in departments. Current partner departments having already executed a Challenge or Challenge program with Impact Canada are looking to scale their approaches and departmental capacity. New Challenge programs are being developed with CSA (in situ resource utilization), AAFC (agri clean tech), PHAC (AMR, data solutions), and NRCan (hydrogen).

# **Demand for experienced Challenge Prize fellows**

There continues to be high demand for Impact Canada Fellows across departments with their role seen as important in bringing lessons learned and best practices, providing technical expertise in Challenge design, bringing new skills to the team/department and contributing to the promotion of Challenges. For departments that have recruited Impact Canada Fellows, levels of satisfaction with the Fellow's contributions were very high, with nearly half of respondents indicating they would not have been able to launch a Challenge successfully without the expertise of an Impact Canada Fellow.



# 4.2 Impact Canada's Applied Behavioural Science Research Programs

Building on the foundation of the Centre of Expertise, Impact Canada designed and completed a significant portfolio of behavioural science (BeSci) projects and research to improve results across a number of priority areas. Applied to the work of government, Impact Canada behavioural scientists and practitioners are found to successfully leverage insights and methodologies from BeSci to inform the design and implementation of priority programs, services, and initiatives - understanding human behaviour and decision-making in a real-world context to support the implementation of government priorities.

### **Supporting the government's COVID-19 response**

In the early years of the IIU, focus was placed on running proof-of-concept trials alongside socializing the discipline within the federal public service. From 2017-19, the IIU ran six demonstration projects - the majority of which were field experiments – that showcased the value of the application of behavioural science insights, and the science's ability to improve public program implementation.

At the request of the Deputy Clerk and Deputy Minister of Health, the IIU rapidly pivoted to support the Government of Canada's COVID-19 response at the earliest stages of he pandemic. Recognizing that human behaviour was at the core of the pandemic response, for example, willingness to comply with public health measures, the IIU undertook advanced policy research resulting in a world-leading behavioural science program that helped inform the Government's policy, communication and program efforts (i.e., adherence to public health measures, vaccination acceptance and uptake, borders, misinformation and disinformation, etc.).



### **Applying BeSci to the COVID-19 Response**

Impact Canada played and continues to play an important role in supporting the government's COVID-19 response. At the outset of the pandemic, the team launched a large (n=2,000) longitudinal tracking study to better understand the evolving knowledge, risk perceptions and behaviours of Canadians over the course of the pandemic.

Data collected underwent rapid analysis and dissemination (e.g. CPHO, Health Minister, NACI, PTs, etc.) to support decision-making in the pandemic response:

- Longitudinal data acted as 'early warning' signals (e.g. vaccine hesitancy before vaccines approved; misinformation);
- Behavioural science insights on vaccine hesitancy, mask-wearing and importation risk directly
  informed policy development, program interventions and communications (e.g. vaccine deep dive
  study informed MC on vaccine injury compensation program; behaviourally-informed border signage
  at POEs);
- Increased understanding of the importance of operational transparency and trusted messengers informed strategic communications/communicators; and
- Advanced statistical modelling produced novel behavioural profiles which showed strong predictors of outcomes compared to traditional demographic characteristics allowing for tailored interventions (e.g. identification of moveable middle).

Work continued post-pandemic to provide evidence-based, behaviourally informed data on Canadian's attitudes and behaviours related to COVID-19, including information on the diverse experiences and barriers related to post-COVID recovery.

#### This includes:

- Return to activities engaged in before the pandemic;
- Adherence to and perceptions of new or ongoing public health measures and restrictions;
- Vaccination rates and vaccine acceptance/hesitancy;
- Exposure and susceptibility to misinformation/disinformation;
- Barriers/drivers to re-integrating to society (e.g. health, work, financial); and,
- Differential impacts of the pandemic on health and wellbeing.

# **Expanding into new areas of applied behavioural science research**

Leveraging this newfound research architecture developed through the COVID-19 response work, the IIU has expanded into a variety of new policy areas and is working with departments to support priority areas including climate action and protecting democracy and misinformation, as well as experimenting and translating findings for functional communities (i.e., Communications).

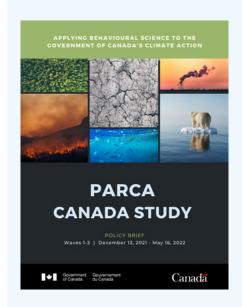


## **Increasing demand for Behavioural Science Fellows**

The unique nature of the work undertaken by the IIU has resulted in attracting significant external talent, allowing departments to secure resources quickly, and ensuring high methodological standards both within and across departments. Over the past fiscal year, the IIU conducted the largest recruitment campaign for behavioural science fellows to meet the surging demand, placing 16 new Fellows within 7 departments.

### **Climate Action**

In September 2021, in partnership with Environment and Climate Change Canada (ECCC) and Natural Resources Canada (NRCan), the Impact and Innovation Unit launched a multi-year program of research on climate change. The Program of Applied Research on Climate Action in Canada (PARCA) applies behavioural science (BeSci) insights and methods with robust policy analysis to support climate and environmental action by generating evidence on how Canadians think, feel, and act in response to climate change, its impacts, and related Government policies, programs, and communications. Activities include scoping and population-based research to understand the national context, in-depth studies in key policy areas to evaluate specific challenges and opportunities, and in-field experimentation to test solutions before scaling. PARCA's Longitudinal Study has now completed its eighth and final wave of data collection, and planning is underway for ongoing national surveying.



### The PARCA Longitudinal Study

Beginning in December of 2021, Impact Canada implemented a longitudinal study (public opinion research) with a large and nationally representative sample of Canadians to gather data and track changes over time in how Canadians think, feel, and act in response to climate change and its impacts. The robust, quantitative evidence generated by this study has helped to identify where there is potential for promoting greater individual climate and environmental action, and build support for stronger collective action.

There have now been 8 data collection waves (December 2021 to March 2023). Results indicate that while Canadians widely express belief in climate change, a troubling proportion of those who believe in it still express confusion about its human causes. This has a significant implication for government policies and interventions that

rely on understanding that link (e.g., programs that encourage people to take pro-climate actions that reduce their carbon footprint; support for carbon pricing). Advanced statistical analyses also identified, for instance, five unique ways in which Canadians think about climate change, as well as an implicit trade-off that Canadians make between environment-focused and economic-focused policies.

#### Key trends and signals from Wave 8 include:

- Belief in climate change has remained high and stable, while risk perceptions have varied and appear linked to extreme weather events. Willingness to act, the perceived impact of individual actions, and perceived social norms have fluctuated, but all have declined over time.
- Canadians value the repairability of home appliances, power tools, and other electronics, and overwhelmingly support a right-to-repair law. Among four home energy saving measures, respondents are more willing to engage in those they see as more effective; however, their perceptions of effectiveness notably differ from expert judgments.

- Two thirds of Canadians say they have experienced more extreme weather than usual in the past two years, with higher levels among respondents living in BC and the Atlantic provinces. Only one fifth of Canadians think their communities are prepared for climate change, but twice as many think their households are prepared. Three quarters have a cooling system in their home, the most common adaptation-related feature. Over 40% have experienced first- or second-hand wildfire impacts in the past two years, but most have taken no wildfire-related actions and are not familiar with the FireSmart program.
- Most Canadians think of carbon pricing as costing their households more than they receive in payments, but people express more support for a carbon pricing system that uses revenues to fund environmental projects instead of making payments to households (i.e., the current approach).
- Only a third of Canadians trust the federal government to make good decisions on climate change. Even among those who believe in climate change and/or are worried about it, fewer than half trust the government on the issue.

Plans are now well underway for ongoing national surveying that will continue to track changes in the national context over time, establish baseline data for new and emerging topics, analyze key factors predicting intentions, behaviours, and policy support, and track changes over time in attitude-based segments of the Canadian population. Ongoing national surveying will comprise two survey series: (1) a tracking series fielded once every three months, with a pre-established set of questions, and (2) an emerging topics series fielded as needed, comprising 2-4 topics of timely value to PARCA partners. The first tracking series is expected to launch in June 2023.

PARCA's Behavioural Science Fellows have now designed and launched 8 rapid online studies or Randomized Controlled Trials (RCTs) with large samples of Canadians (N = 2,000+ per study) to examine drivers of and barriers to specific pro-environmental behaviours identified as priorities by departmental policy leads. Topics include heat pump adoption among homeowners and landlords, zero emission vehicle adoption, leveraging emotions in climate change communications, home energy labelling, home energy retrofits, and eco-product labelling. Behavioural Science Fellows have also conducted qualitative interviews and surveys to understand drivers and barriers to engagement in government programs.

In January 2023, small teams of IIU Behavioural Science Fellows began planning a series of in-field studies designed and implemented in collaboration with trusted partners, internal and external to Government, to test behavioural science-informed solutions in real-world settings. These projects will continue throughout 2023 and into 2024. Effective solutions will be prioritized for scaling up. Projects are currently in development related to three high-impact climate topics: heat pump adoption, zero emission vehicle adoption, and climate literacy.

### Work is continuing to explore and identify drivers and barriers to pro-climate behaviours, this includes:

- improving heat pump adoption among landlords;
- increasing land recognition and land donation among Canadian land trust and conservancy organizations;
- reducing home energy costs though home energy label recommendations
- making it easier for Canadians to switch to electric vehicles;
- empowering consumers to make safer purchases for themselves and the environment; and
- improving government communications about climate change and action.



# Is there any optimal way to communicate about climate change to inspire pro-climate action?

Read Katie's Blog!

### **Trust and Misinformation**

In continued partnership with PHAC, the IIU launched the Trust, Information, and Digital Ecosystems Study (TIDES), a multi-wave survey examining the role and impact of public trust and misinformation across policy priorities such as public health, climate action, and immigration. TIDES will offer a mechanism to build generalizable knowledge within and across policy contexts by examining several issue domains in a singular study, including new domains (e.g., public health beyond COVID-19, new environment and climate change topics, and immigration and citizenship). It will be comprised of four waves, collecting data from a cross-sectional sample of 3,500 Canadians per wave using a probability-based sampling approach. At the culmination of the study, the sample will comprise 14,000 distinct Canadians.

#### **TIDES**

To date, 2 data collection waves (December 2022 and March 2023) have provided valuable insights into stressors to trust in government, news consumption habits, and information literacy. Key findings include:

- Confidence in Canada's democracy was the strongest predictor of trust in the Government of Canada (higher confidence predicts more trusting). However, confidence is relatively low. Most do not trust government to make good decisions.
- A range of measures related to democratic confidence and democratic health show worrying signs
  that warrant further analysis, including: over half of respondents do not feel like they have a voice in
  Canada's democracy, only 12% say that people like them have a significant influence on politics, and
  18% of participants do not report supporting the outcome of Canadian elections, regardless of the
  winner.
- Resistance to misinformation was a strong predictor of trust in the Government of Canada (higher resistance predicts more trusting).
- Many in Canada are unaware of social media algorithms and their influence on the content they are presented with online.
- COVID-19- and climate-related misinformation remain prevalent and impact different communities unequally (e.g., individuals identifying as 2SLGBTQI+ report encountering misinformation online more frequently than others but demonstrate better discernment of reliable information from misinformation related to COVID-19 and climate change).

• Applying a machine learning-based approach for population segmentation, individuals exhibiting the lowest use of all information sources on average (particularly government and news media) were found to have the highest conspiratorial mindset and significantly greater susceptibility to misinformation across multiple topic areas (COVID-19, climate change, and immigration).

The Behavioural Science Office and Office of Public Confidence in the Public Health Agency of Canada, supported by the IIU, are also examining the relationship between trust in public health institutions and belief in health and public health misinformation among young adults in Canada (aged 18–30) via a series of focus groups.

# Misinformation and Disinformation: An international effort using behavioural science to tackle the spread of misinformation

To better understand and reduce the spread of misinformation with insights and tools from behavioural science, in partnership with the OECD, behavioural science experts from Impact Canada and from the French Direction interministérielle de la transformation publique (DITP) launched a first-of-its-kind international collaboration. This exercise in sharing best practices between governments and academics initiated a study conducted in Canada using a randomised controlled trial – embedded within the longitudinal COVID-19 Snapshot Monitoring Study COSMO Canada.

The study, published in 2022, tested on 1,872 people across Canada, assessed the impact of two behaviourally-informed interventions – an attention accuracy prompt and a set of digital media literacy tips – on intentions to share true and false news headlines about COVID-19 on social media.

https://www.oecd-ilibrary.org/governance/an-international-effort-using-behavioural-science-to-tackle-the-spread-of-misinformation\_b7709d4f-en

# A new and unique operating model within the Privy Council Office

The findings from Impact Canada's applied research have been integrated across a multitude of Government of Canada governance bodies, at the most senior levels, both within the Privy Council Office and departments, feeding into Government of Canada and Provincial-Territorial decision-making at the highest levels. This experience has shifted the IIU's operating model in a new and impactful way. The IIU's role sits in an otherwise unoccupied space – supporting both PCO's mandate, as well as generating evidence and providing advice to key federal organizations, other orders of government, non-governmental stakeholders, and international organizations.

## 4.3 Overall Conclusions

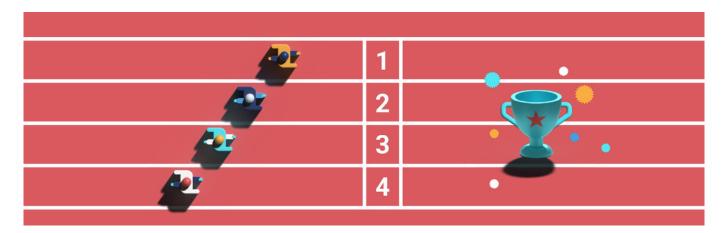
The comprehensive evaluation concluded that Impact Canada is well placed to lead and support policy priorities through the use of advanced policy research, behavioural science, and Challenge-based funding models, and that it has successfully delivered on its strategic objectives to date. Further, the review concluded that there were no serious gaps in documented processes with respect to effectiveness and efficiency.

Impact Canada is regarded as an important asset within the ecosystem that can be leveraged in a strategic manner and as such is working to fulfil demands from departments to support agricultural climate change solutions, future advances and challenges in health care (e.g., innovations in personal testing, antimicrobial resistance), space exploration and utilization solutions, and adoption of digital technology by small and medium enterprises.

It represents a unique and effective approach to solving the increasingly complex policy issues of the 21st century run by an agile, high-performing team of dedicated individuals, with efficient and effective processes in place.

The evaluation also highlighted that both the Challenge model and the behavioural science approach have produced substantial, visible and positive outcomes in numerous critical policy spheres that include public health, climate action, online misinformation, and infrastructure among others.

# 5. GOING FORWARD



Since launching in 2017, Impact Canada has remained focused on working with federal departments, other levels of government, and external partners to support the implementation of inventive programs and services designed to improve social, economic, and environmental outcomes for citizens.

### Moving forward, Impact Canada will continue to:

- Seek to engage a diverse range of actors to help solve societal problems, focusing on initiatives/ experiments that lend themselves to measuring impact in a rigorous way, and strive to maintain high standards and validity in applying these instruments;
- Explore new opportunities to apply our behavioural science research model and Challenge approaches to emerging areas such as misinformation, agri-clean tech, space, infrastructure, and public health;
- Leverage the Fellowship program to attract external talent and fill internal skills gaps; and
- Evolve and scale our proven methodologies for increased impact in key priorities areas.

# **LINKS**

Impact Canada Challenges https://impact.canada.ca/en/challenges

**Behavioural Science** 

https://impact.canada.ca/en/behavioural-science

Measuring the impact of Impact Canada Challenges - blog post by Kiran Toor <a href="https://medium.com/impact-canada/from-theory-to-practice-measuring-the-impact-of-challenges-656eef52b71d">https://medium.com/impact-canada/from-theory-to-practice-measuring-the-impact-of-challenges-656eef52b71d</a>

How effective are Challenges? Results from Impact Canada Challenge surveys <a href="https://impact.canada.ca/en/reports/how-effective-are-challenges">https://impact.canada.ca/en/reports/how-effective-are-challenges</a>

### **SCATR**

https://news.westernu.ca/2023/04/health-canada-grant-funds-innovative-drug-checking-technology/

How effective are Challenges? Using Social Network Analysis to Measure Impact <a href="https://impact.canada.ca/en/reports/how-effective-are-challenges-social-network-analysis">https://impact.canada.ca/en/reports/how-effective-are-challenges-social-network-analysis</a>

Is there any optimal way to communicate about climate change to inspire pro-climate action? - blog post by Katie Harper

https://medium.com/impact-canada/is-there-any-optimal-way-to-communicate-about-climate-change-to-inspire-pro-climate-action-2d076a4ca21f

COVID-19 Snapshot Monitoring Study COSMO Canada https://impact.canada.ca/en/cosmo-canada

**Misinformation and Disinformation - OECD Library** 

 $\frac{https://www.oecd-ilibrary.org/governance/an-international-effort-using-behavioural-science-to-tackle-the-spread-of-misinformation\_b7709d4f-en$ 

French Direction interministérielle de la transformation publique <a href="https://www.transformation.gouv.fr/">https://www.transformation.gouv.fr/</a>