

2023 to 2027 Sustainable Development Strategy The Jacques Cartier and Champlain Bridges Incorporated

Canada

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Executive summary

The Jacques Cartier and Champlain Bridges Incorporated (JCCBI or the Corporation) was added to the Schedule to the *Federal Sustainable Development Act* (FSDA) by virtue of the "Order Amending the Schedule to the *Federal Sustainable Development Act*: SOR/2019-177," which came into force on December 1, 2020. This 2023 to 2027 Sustainable Development Strategy (SDS) is the second SDS for the Corporation. A first SDS for 2020 to 2023 was tabled, on a voluntary basis, before the Corporation became subject to the FSDA.

JCCBI can contribute to 6 of the 17 goals of the 2022 to 2026 Federal Sustainable Development Strategy (FSDS), which is framed by the 17 United Nations (UN) Sustainable Development Goals (SDGs). This 2023 to 2027 SDS includes actions that address the following FSDS goals and strategies:



Foster innovation and green infrastructure in Canada

- Invest in green infrastructure



Advance reconciliation with Indigenous peoples and take action on inequality

- Implement the *United Nations*Declaration on the Rights of Indigenous

Peoples Act



Improve access to transportation and green spaces

- Invest in active transportation
- Develop green spaces close to urban centres
- Promote access to green space



Reduce waste and transition to zero-emission vehicles

- Maximize diversion of waste from landfill
 - Transform the light-duty fleet
 - Strengthen green procurement criteria
 - Remediate high-priority contaminated sites



Take action on climate change and its impacts

- Reduce greenhouse gas emissions and improve climate resilience
- Reduce risks posed by climate change



Protect and recover species, conserve Canadian biodiversity

- Better understand lands and forests
- Deliver enhanced conservation action

Introduction to the Sustainable Development Strategy

The 2022 to 2026 FSDS presents the Government of Canada's sustainable development goals and targets, as required by the *Federal Sustainable Development Act (FSDA)*. This is the first FSDS to be framed using the 17 Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda and provides a balanced view of the environmental, social and economic dimensions of sustainable development.

In keeping with the purpose of the Act, to make decision-making related to sustainable development more transparent and accountable to Parliament, JCCBI supports 6 of the 17 goals laid out in the FSDS through the activities described in this Sustainable Development Strategy (SDS).

The Federal Sustainable Development Act also sets out 7 principles that must be considered in the development of the FSDS and the SDSs. These basic principles have been considered and incorporated in this JCCBI SDS, particularly the importance, to ensure sustainable development, of environmental, economic and social factors in decisions, as well as protecting ecosystems, openness, transparency, collaboration and involving Indigenous peoples.



Sustainable Development Vision of The Jacques Cartier and Champlain Bridges Incorporated

As a manager of important infrastructure, JCCBI is a federal Crown corporation established in 1978 and is responsible for the Jacques Cartier Bridge, the original Champlain Bridge (currently being deconstructed), the Estacade, the Île des Sœurs Bypass Bridge (which is decommissioned and will be deconstructed in the short term), the federal sections of the Bonaventure Expressway and the Honoré Mercier Bridge, as well as the Melocheville Tunnel. JCCBI's mission is to ensure user mobility, safety, and infrastructure longevity using a systemic management approach based on sustainable development. The Corporation's vision is to become a leader in major infrastructure management as an innovative expert, a mobility leader and a social and urban contributor.

To this end, JCCBI adopted its first sustainable development strategy in 2015 with the objective of positioning itself as a leader in the responsible and sustainable management of its infrastructure. Since then, the Corporation has put in place the governance and internal monitoring and reporting processes required to integrate the concept of sustainable development into its operational and administrative activities. In 2020, JCCBI published its first 2020 to 2023 SDS on a voluntary basis.

JCCBI recognizes the importance of a sustainable development approach in its asset management and its operations. An environment and sustainable development internal policy governs day-to-day activities. This policy is based on guiding principles in line with the following concepts:

- Governance;
- Compliance with applicable laws and regulations;
- Integrity and financial management;
- Environmental management.
- Human capital;

- Sustainable infrastructure design;
- Protection, preservation and enhancement of biodiversity;
- Management of environmental liabilities;

- Relations with stakeholders and communities;
- Relations with partners;
- Socio-economic contribution;
- Communication.

JCCBI's overall environment and sustainable development activities thus support FSDS goals and targets. While JCCBI's sustainable development actions may concurrently contribute to multiple goals of the 2022 to 2026 FSDS, they will only be presented once in this document to avoid duplication.

Listening to Canadians

As required by the *Federal Sustainable Development Act*, JCCBI has taken into account comments on the draft 2022 to 2026 FSDS made during the public consultation held from March 11 to July 9, 2022. During the public consultation, more than 700 comments were received from a broad range of stakeholders, including governments, Indigenous organizations, non-governmental organizations, academics, businesses, and individual Canadians in different age groups and of various backgrounds. The draft FSDS was also shared with the appropriate committee of each House of Parliament, the Commissioner of the Environment and Sustainable Development, and the Sustainable Development Advisory Council for their review and comment.

What we heard

Across the submissions received, JCCBI identified sustainable development priorities and issues that affect the Corporation. Climate action and increased action to advance the circular economy are key priorities identified during public consultations and which are related to JCCBI's mission and vision.

What we did

JCCBI took these key priorities into consideration in this SDS. Climate-change-related risks will be part of the prioritized corporate risks and will be factored in infrastructure rehabilitation and maintenance projects at their planning stage, where applicable. The Corporation is currently developing a greenhouse gas (GHG) reduction and decarbonization plan to meet federal GHG reduction targets. In addition, JCCBI is developing processes to monitor the waste generated by its operations to promote the circular economy by diverting this waste from landfill as much as possible.

More information on the FSDS public consultation and its results can be found in the FSDS Consultation Report.

Commitments of The Jacques Cartier and Champlain Bridges Incorporated















GOAL 9 FOSTER INNOVATION AND GREEN INFRASTRUCTURE IN CANADA

SDS context:

Innovation is in JCCBI's DNA and the Corporation has been fostering innovation and green infrastructure through research and development projects since 2016. These projects study and assess green alternatives to certain materials and practices. Such alternatives include adding glass powder to concrete as a replacement for a portion of the cement, using alternative materials to traditional de-icing salts and improving snow removal methods across the JCCBI network.

Modernizing and adapting infrastructure to make it sustainable is another goal pursued by the Corporation. To this end, JCCBI evaluates the seismic performance of its structures as part of sound asset management to extend their service life.

Target theme: Green infrastructure and innovation

Target: By fiscal year 2027 to 2028, the federal share of the value of green infrastructure projects approved under the Investing in Canada Plan will reach \$27.6 billion (Minister of Housing, Infrastructure and Communities)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Invest in green	Develop knowledge on the use of	Performance indicator:	The environmental footprint of glass has been a major issue for
infrastructure	glass powder in concrete through the	% of completion of the development and	a number of years in Quebec: most of the recovered glass
	participation of JCCBI in the	internal communication of an information sheet	cannot be appropriately processed by the sorting centres and
	SAQ Chair for the Valorization of	on the use of glass powder in concrete	as a result, is routed to landfill sites.
	Glass in Materials and carry out		
	2 pilot projects	% of completion of pilot projects	The SAQ Chair is studying the possibility of replacing a fraction
			of the cement that enters concrete so as to develop glass
		Starting point:	recovery and reduce the environmental impact of concrete
		No information sheet on the use of glass powder	manufacturing. The results of this work could allow JCCBI to
		in concrete in 2023–2024	improve its future projects and make them greener.

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
	Study alternatives to conventional de-icing salts, particularly potassium formate	No pilot project carried out in 2023–2024 Target: Development of employee knowledge on the use of glass powder in concrete by developing and communicating an information sheet by March 31, 2027 Completion of 2 pilot projects by March 31, 2027 Performance indicator: % of study completion Starting point: 25% in 2023–2024 Target: 100% of the study completed by December 31, 2024	The adverse effects of de-icing salts on the environment, and on infrastructure concrete and steel surfaces are known. Studying the use of potassium formate as conventional de-icing salt replacement will make it possible to validate its performance, lower environmental impact, and its effects on the various elements of the structures managed by JCCBI. Reduced use of conventional de-icing salts on the assets in the future will slow down their deterioration, thereby reducing the repair and maintenance work required.
	Continue seismic performance evaluation studies and analysis of the environmental benefits of seismic performance improvement scenarios (consolidation vs. reconstruction) for the Jacques Cartier Bridge	Performance indicator: % of completion of seismic performance evaluation studies Starting point: 50% in 2023–2024 Target: 100% of the seismic performance evaluation studies completed by March 31, 2027	Through these studies, knowledge will be acquired to determine the actions to be implemented, if necessary, to improve the seismic performance of the Jacques Cartier Bridge, thereby reducing the adverse impact of such natural events on the infrastructure.



GOAL 10 ADVANCE RECONCILIATION WITH INDIGENOUS PEOPLES AND TAKE ACTION ON INEQUALITY

SDS context:

For a number of years, JCCBI has been collaborating with the Mohawk First Nation of Kahnawà;ke in planning the rehabilitation and maintenance work on the federal section of the Honore Mercier Bridge. Work on this section of the bridge is carried out by First Nations contractors and workers, in line with Order in Council P.C. 2675 dated December 7, 1932. Supporting First Nations in developing and promoting their expertise is of utmost importance to JCCBI.

Increasing awareness of internal collaborators to issues related to Indigenous peoples and developing their cultural competency skills and knowledge in this regard, as well as JCCBI's collaborative and inclusive approach with the Mohawk Council of Kahnawà:ke, Indigenous contractors and the community are examples of actions to facilitate reconciliation.

Target theme: Advancing reconciliation with First Nations, Inuit, and the Métis communities

Target: Between 2023 and 2026, and every year on an ongoing basis, develop and table annual progress reports on implementing the *United Nations Declaration on the Rights of Indigenous Peoples Act* (Minister of Justice and Attorney General of Canada)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Implement the United Nations Declaration on the Rights of Indigenous Peoples Act	Enhance knowledge about Indigenous peoples through training for internal collaborators	Performance indicator: % of completion of training plan Starting point: New initiative scheduled to be launched in April 2024	With a view to facilitating exchanges with First Nations, JCCBI aims to develop the cultural knowledge and competency skills of employees and their awareness of issues related to Indigenous peoples through training in the form of information sessions, guides, etc.
		Target: 100% of training plan completed by March 31, 2026	

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
	Maintain communication with the Mohawk Council of Kahnawà:ke (MCK) and/or the community in the planning of work on the Honore Mercier Bridge and development projects on land bordering Mohawk territory	Performance indicator: Release of a review of the collaborative meetings with the MCK and the community in JCCBI's annual report Starting point: First review included in the 2023-2024 Annual report Target:	The principle of free, prior and informed consent (FPIC) of the <i>United Nations Declaration on the Rights of Indigenous Peoples</i> is to work with Indigenous peoples in partnership and respect and aims in particular to achieve the effective and meaningful participation of Indigenous peoples in decisions that affect them.
		1 review annually in JCCBI's annual report	Promoting communication and collaboration mechanisms with a view to maintaining a relationship of mutual respect allows JCCBI to advance reconciliation with Indigenous peoples and implement the <i>United Nations Declaration on the Rights of Indigenous Peoples Act</i> .
	Plan and implement artistic projects highlighting the skills of First Nations artists	Performance indicator: Number of artistic projects implemented Starting point: 1 project launched in 2017	JCCBI promotes the development of Indigenous peoples' cultural expression through visual arts designed by First Nations artists.
		Target: 3 projects by March 31, 2027 including the project launched in 2017	
	Collaborate with contractors from the Mohawk First Nation of Kahnawà;ke on Honore Mercier Bridge maintenance and rehabilitation work	Performance indicator: % of contracts awarded to contractors from the Mohawk First Nation of Kahnawà;ke for Honore Mercier Bridge maintenance and rehabilitation work Starting point: Ongoing	JCCBI helps drive the Mohawk First Nation of Kahnawà;ke's economy through its Honore Mercier Bridge maintenance and rehabilitation contracts, which are performed by Kahnawà:ke contractors and workers.
		Target: 100% of contracts awarded to contractors from the Mohawk First Nation of Kahnawà;ke	



GOAL 11 IMPROVE ACCESS TO AFFORDABLE HOUSING, CLEAN AIR, TRANSPORTATION, PARKS, AND GREEN SPACES, AS WELL AS CULTURAL HERITAGE IN CANADA

SDS context:

Developing active mobility lanes and public spaces is now an essential component of infrastructure rehabilitation projects, including JCCBI projects under development or in progress. Over the next few years, JCCBI will undertake a number of major projects, including the Bonaventure Expressway reconfiguration, which will propose a waterfront promenade and active mobility lanes, and the development of freed up shoreland following the deconstruction of the original Champlain Bridge (Héritage Champlain project). JCCBI will also carry out studies to enhance the active mobility offering in the axis of the Clément Bridge. The objective of these projects is for a better connection with nature and green spaces and to provide Canadians with reliable, fast and affordable ways to get around.

Target theme: Public Transit and Active Transportation

Target: By 2030, 22% of commuters use public transit or active transportation (Minister of Housing, Infrastructure and Communities)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Invest in public transit and active transportation	Build a bike link on the south approach of the Samuel De Champlain (SDC) Bridge in Brossard to connect the existing local bicycle path network to the SDC Bridge multifunctional path	Performance indicator: % of completion of bike link construction Starting point: Construction not started. Work scheduled to begin in May 2025	Transportation modes are changing, and users need various transportation alternatives to choose those that best suit their needs. JCCBI conducts studies to assess potential active mobility improvements on its structures and, as the case may be, build them subject to the required approvals.

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
	Increase the Estacade active mobility offering and traffic	Target: 100% of bike link is built by December 31, 2025 Performance indicator: % of completion of the project to transfer the Estacade bike link to its main deck, to increase the service offering % of increase in traffic Starting point: The bike link transfer project is not yet underway in 2023-2024 135,810 active mobility crossings in 2022-2023 Target: 100% completion of the project to transfer the Estacade bike link to the main deck by March 31, 2027 15% increase in mobility crossings by March 31, 2029	
	Conduct preliminary project studies to develop a new active mobility lane built mainly out of deconstruction materials in the axis of the Clément Bridge, to connect the SDC Bridge bicycle path to the bicycle path on the future Bonaventure urban boulevard promenade	Performance indicator: % of completion of preliminary project studies Starting point: Studies not underway Studies scheduled to begin in October 2023 Target: 100% of studies completed by March 31, 2026	

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
	Propose the development of a new	Performance indicator:	
	bike link on the Clément Bridge to the	Progress in integrating the business case proposal	
	authorities through a business case	into JCCBI's Corporate Plan	
		Starting point: Development of the business case in 2021–2022	
		Development of the business case in 2021–2022	
		Target:	
		Propose the business case in JCCBI's Corporate Plan	
		for 2024–2025 to 2028–2029	
	Propose the development of bicycle	Performance indicator:	
	and pedestrian paths along the	% of completion of bicycle and pedestrian path design	
	St. Lawrence River as part of the		
	Bonaventure Expressway	Starting point:	
	reconfiguration	Design not underway	
		Bicycle and pedestrian path design scheduled to begin	
		in 2024–2025	
		Target:	
		100% of bicycle and pedestrian path design	
		completed by March 31, 2027	

Target theme: Green spaces, Cultural and Natural Heritage

Target: Designate national urban parks as part of a network, with a target of up to 6 new national urban parks by 2026 and a total of 15 new national urban parks by 2030 (Minister of Environment and Climate Change)

Target: By 2026, support at least 23.7 million visitors annually to Parks Canada places (Minister of Environment and Climate Change)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Develop green	Propose the development of a	Performance indicator:	JCCBI promotes the development of, and access to, green
spaces close to urban centres	waterfront promenade along the	% of completion of promenade design	spaces through projects that return the banks of the St.
ar barr certifies	St. Lawrence River as part of the Bonaventure Expressway	Starting point:	Lawrence River to Canadians by planning public spaces and active mobility lanes. The Corporation undertakes greening
	reconfiguration	Design not underway	initiatives for the land under its management and to enhance
	1 000111911 11011	Promenade design scheduled to begin in 2024–	ecosystems.
		2025	
		Target:	
		100% of promenade design completed by	
		March 31, 2027	
Promote access to green space, cultural	Develop freed up shoreland following	Performance indicator:	
and natural heritage	the deconstruction of the original Champlain Bridge as part of the	% of completion of development work	
	Héritage Champlain project	Starting point:	
	morreage disamplam project	Work not underway	
		Work scheduled to begin in April 2024	
		Target:	
		100% by March 31, 2026	



GOAL 12 REDUCE WASTE AND TRANSITION TO ZERO-EMISSION VEHICLES

SDS context:

In recent years, JCCBI has been developing an environmental management system (EMS). The goal is to enable the Corporation to assess the consequences of its operations on the environment to reduce their negative impacts. The EMS is scheduled to be deployed gradually starting in 2023–2024. Once implemented, the EMS will allow for the monitoring of the waste generated by JCCBI maintenance and rehabilitation projects and facilitate monitoring of contaminated sites.

In transforming its light-duty fleet to a greener fleet, JCCBI has opted for a strategy of extending service lives and optimizing vehicles currently in operation before considering purchasing hybrid or electric vehicles.

Target theme: Federal Leadership on Responsible Consumption

Target: By 2030, the Government of Canada will divert from landfill at least 75% by weight of non-hazardous operational waste (All Ministers)

Target: By 2030, the Government of Canada will divert from landfill at least 90% by weight of all construction and demolition waste (All Ministers)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Maximize diversion of waste from landfill	Continue selective collection (recycling) in JCCBI offices	Performance indicator: % of JCCBI offices with selective collection	Implementing selective collection in the administrative offices is feasible and allows waste to be diverted from landfills. JCCBI offices are distributed in 3 locations, 2 of which have selective
		Starting point: 66% of offices have selective collection in 2023–2024	collection. To date, JCCBI maintenance centre is not equipped with selective collection. For 2023–2024, the goal will be to implement and monitor this action.

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
		Target: 100% of offices have selective collection by March 31, 2024	
	Ensure 2 types of waste (metal and construction debris) generated by Operations and Maintenance team activities are properly disposed of	Performance indicator: % of completion of the implementation of a traceability system to ensure proper disposal of the 2 types of waste Starting point: New initiative scheduled for launch in May 2024	The Corporation uses recyclers for the responsible diversion of metal and construction debris (e.g., asphalt and concrete) from the Operations and Maintenance Division activities. In 2024–2025, the Corporation will follow up with these recyclers to ensure recycling processes comply with best practices in the field.
		Target: 100% of the traceability system implemented by March 31, 2025	
	Implement environmental management system (EMS) component systems to collect data on waste generated by administrative activities	Performance indicator: % of completion of the data collection process Starting point: New initiative launched in September 2023	To date, data on waste generated by JCCBI activities is not consolidated in a common registry. Without an overall snapshot of the quantity of waste generated, it is not possible to set diversion rates to maximize waste diversion.
		Target: 100% completion of the data collection process by March 31, 2027	Implementing an environmental management system (EMS) over the next few years will facilitate establishing a registry for monitoring the amount of waste generated. This work will be performed collaboratively across the Corporation's various divisions.

Target theme: Federal Leadership on Responsible Consumption

Target: The Government of Canada's procurement of goods and services will be net-zero emissions by 2050, to aid the transition to a net-zero, circular economy (All Ministers)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Transform the federal light-duty fleet	Extend and optimize the service life of the light-duty fleet	Performance indicator: % of fleet vehicles that are light-duty vehicles over 7 years old Starting point: 33% (6 out of 18 vehicles) of fleet vehicles are light-duty vehicles over 7 years old in 2023–2024	Before replacing combustion vehicles with new electric or hybrid vehicles, the Corporation will first take steps to maximize fleet vehicle service lives through regular preventive maintenance. The goal is to minimize the environmental impact of the fleet vehicle life cycle. Gradual purchases of electric and/or hybrid vehicles will be considered in a second phase to replace combustion vehicles.
	Favour the purchase of electric and/or hybrid vehicles over combustion vehicles for fleet renewal where deemed appropriate for the intended use	Target: 44% (8 out of 18 vehicles) by March 31, 2025 83% (15 out of 18 vehicles) by March 31, 2027 Performance indicator: % of fleet vehicles that are hybrid and/or electric light-duty vehicles Starting point: 28% (5 out of 18 vehicles) in 2023–2024 Target: 50% (9 out of 18 vehicles) by March 31, 2027	

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Strengthen green procurement criteria	Ask suppliers to submit their environmental or sustainable development policy when bidding on construction contracts	Performance indicator: % of suppliers targeted by the action who have submitted a policy Starting point: New initiative scheduled for launch in 2025–2026	This action strives to ensure JCCBI suppliers are engaged in and ready for environment and sustainable development continuous improvement.
		Target: 75% of suppliers targeted by the measure to have submitted a policy by 2027–2028	
	Update the green procurement criteria catalogue	Performance indicator: % of completion of catalogue update Starting point: New initiative scheduled for launch in 2024–2025	Inspired by Public Services and Procurement Canada (PSPC) criteria, improving green and responsible procurement criteria involves incorporating environmental and social criteria into contracts where possible.
		Target: 100% of the catalogue update completed by March 31, 2025	
	Integrate green procurement criteria into standardized construction specifications	Performance indicator: % of green procurement criteria that have been integrated into JCCBI standardized construction specifications	
		Starting point: New initiative scheduled for launch in 2024-2025	
		Target: 80% of green procurement criteria to have been integrated into JCCBI standardized construction specifications by 2027–2028	

Implementation strategies supporting the goal

This section is for implementation strategies that support the goal "Reduce waste and transition to zero-emission vehicles" but not a specific FSDS target.

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Remediate high- priority contaminated sites	Take action so that the sites registered on the Federal Contaminated Sites Inventory (FCSI) progress within the decision-making framework (1 to 10) of the Federal approach to contaminated sites	Performance indicator: Number of sites having progressed to Stage 6 or higher of the decision-making framework Starting point: 6 out of 19 sites in 2022–2023 Target: 19 sites by March 31, 2027	The Corporation is one of the custodians that obtain funding from the Federal Contaminated Sites Action Plan (FCSAP). The Corporation carries out an inventory of all the land under its management to classify its environmental condition and prioritize interventions when required. In 2022–2023, the Corporation's portfolio had 19 sites whose soils may be contaminated beyond acceptable criteria: the remediation of 1 site was completed in 2021–2022. The actions listed in this section will either remediate these high-priority contaminated sites or implement a risk management strategy and long-term monitoring, with the aim of reducing and better managing risks to human and environmental health.
	Close or ensure that JCCBI-managed contaminated sites are subject to long-term monitoring	Performance indicator: Number of contaminated sites closed or under long-term monitoring Starting point: 1 site was closed or under long-term monitoring in 2021–2022 Target: 6 contaminated sites are subject to a closure report or long-term monitoring by March 31, 2027	
	Take action to reduce 2022–2023 environmental liabilities	Performance indicator: % reduction in environmental liabilities Starting point: \$143,645,000 in 2022–2023 Target: The target for this action will be determined in the coming years	



GOAL 13 TAKE ACTION ON CLIMATE CHANGE AND ITS IMPACTS

SDS context:

In order to set greenhouse gas (GHG) reduction targets, JCCBI must first have an overall and comprehensive snapshot of the GHGs emitted by its operations. Accordingly, over the past 3 years, a snapshot has been drawn up to first identify key GHG generators: a GHG reduction plan will be developed in a second phase, thereby supporting the Government of Canada's commitment to achieve net-zero emissions by 2050. Awareness-raising and training activities are also planned to make internal collaborators aware of the environmental impacts related to human activities.

Ensuring that the assets under its management are resilient to climate change remains a growing concern for JCCBI. An approach to integrating climate-change-related risks into JCCBI business processes, based on the Task Force on Climate-related Financial Disclosures (TCFD) framework, is being implemented.

Target theme: Federal Leadership on Greenhouse Gas Emissions Reductions and Climate Resilience

Target: The Government of Canada will transition to net-zero carbon operations for facilities and conventional fleets by 2050 (All Ministers)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Implement the Greening Government Strategy through measures that reduce greenhouse gas emissions, improve climate	Disclose JCCBI Scope 1 and Scope 2 greenhouse gas (GHG) emissions data on JCCBI website	Performance indicator: Data disclosed annually Starting point: New initiative scheduled for launch in November 2023	To reduce its GHG emissions, JCCBI must first draw up a GHG emissions snapshot. JCCBI will develop a GHG reduction and decarbonization plan, and actions will have to be prioritized and implemented to achieve the Government of Canada's reduction targets.

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
resilience, and green the government's overall operations	Develop a decarbonization action plan to reduce GHG Scopes 1 and 2 Organize awareness-raising activities with employees on environment and sustainable development themes	Target: 100% of data disclosed annually Performance indicator: % of completion of the decarbonization action plan Starting point: 0% as at May 1, 2023 Target: 100% completion of the action plan with 3 to 5 specific decarbonization actions by March 31, 2027 Performance indicator: Gauge employees' understanding of environment and sustainable development issues following awareness-raising activities by conducting a survey Starting point: New initiative scheduled to be launched in April 2024 Target: Gauge employee understanding of environment and sustainable development issues through a survey to be conducted by March 31, 2027	Building environment and sustainable development best practices into JCCBI operations particularly hinges on raising employee awareness. Employee environment and sustainable development engagement is achieved when employees grasp the meaning and impact of their potential contributions. Awareness-raising activities on 4 themes will be organized: GHG reduction, biodiversity, contaminated land management and climate resilience.
	Participate in environment and sustainable development communities of practice	Performance indicator: Number of information sheets developed and communicated internally based on the knowledge acquired as part of the communities of practice	JCCBI employee participation in communities of practice with municipalities and provincial departments, First Nations, the transportation and mobility industry, academia, and other institutional partners to achieve common environmental goals helps the Corporation share and stay abreast of environment and sustainable development best practices.

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
		Starting point: New initiative scheduled for September 2024 Target: 4 factsheets communicated by March 31, 2027	JCCBI employees participate in the following communities of practice: - SAQ Chair for the Valorization of Glass in Materials, Université de Sherbrooke; - Table d'expertise Mobilité durable, Association québécoise des transports (AQTr); - Table d'expertise ferroviaire, AQTr; - Canadian Highway Bridge Design Code (CSA S6) Regulatory Authority Committee; - Envision Community of Practice; - Crown Corporations Greening Community of Practice, Treasury Board of Canada.

Target: The Government of Canada will transition to climate resilient operations by 2050(All Ministers)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Reduce risks posed by climate change to federal assets, services and operations	Update the climate-change-related risks for JCCBI assets	Performance indicator: % of update completion Starting point: 50% as at May 1, 2023	Reviewing the risks posed by climate change to JCCBI infrastructure and their integration into prioritized corporate risks will optimize risk monitoring and implementing appropriate mitigation measures.
		Target: 100% by December 31, 2023	
	Integrate climate-change-related risks into JCCBI's prioritized corporate risks	Performance indicator: % of completion of the integration process Starting point:	
		New initiative launched in September 2023 Target:	
	Integrate climate-change-related risks into projects factsheets at the	100% by March 31, 2025 Performance indicator: % of completion of the integration process	
	planning stage, where applicable	Starting point: New initiative launched in September 2023	
	Develop a climate change resilience	Target: 100% by March 31, 2026 Performance indicator:	JCCBI's climate change resilience plan, which will be developed
	plan as part of JCCBI's climate-related financial disclosures, based on the	% of completion of resilience plan	in accordance with TCFD recommendations, will help reduce climate-change-related risks and increase the climate change
	framework of the Task Force on Climate-related Financial Disclosures (TCFD)	Starting point: 5% in May 2023–2024	resilience of JCCBI assets.
		Target: 100% by December 31, 2024	



GOAL 15 PROTECT AND RECOVER SPECIES, CONSERVE CANADIAN BIODIVERSITY

SDS context:

The first step in reducing the environmental impacts of JCCBI's operations is to understand the environment the assets are operated in. Every 5 years, plant and wildlife inventories are carried out by teams of biology specialists. Biological monitoring is also carried out on ecosystem compensation projects for wildlife habitats, including the fish habitat, to assess the effectiveness and sustainability of the initiatives implemented over time. Biodiversity management action plans aimed at restoring and protecting wildlife and flora are scheduled in the next few years.

Target theme: Conservation of Land and Fresh Water

Target: Between 2023 and 2026, Canada's sustainable wood supply level (guided by sustainable forest management policies to reflect the current unique social, environmental and economic characteristics of managed forests), exceeds the annual timber harvests (Minister of Natural Resources)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Better understand	Monitor special-interest species	Performance indicator:	Biodiversity inventories carried out by JCCBI every 5 years
lands and forests		Number of species monitored	enhance ecosystem health knowledge. They allow monitoring
			of special-interest species, namely cliff swallows, peregrine
		Starting point:	falcons and eventually brown snakes, to learn about their
		2 species monitored in 2022–2023	behaviour and populations and measure the effectiveness of
			the compensation and protection measures put in place.
		Target:	
		3 species monitored by March 31, 2027	

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
	Carry out biological monitoring of	Performance indicator:	Biological monitoring of restored sites subsequent to
	restored sites	Number of biological monitoring campaigns	JCCBI construction activities aims to assess mitigation and
		carried out	compensation measure effectiveness and sustainability to
			better understand land and forests and how projects impact
		Starting point:	the environment.
		New initiative scheduled to be launched in	
		April 2024	
		Target:	
		3 campaigns by March 31, 2028	

Target theme: Species Protection and Recovery

Target: By 2026, increase the percentage of species at risk listed under federal law that exhibit population trends that are consistent with recovery strategies and management plans to 60%, from a baseline of 42% in 2019 (Minister of Environment and Climate Change; Minister of Fisheries, Oceans and the Canadian Coast Guard)

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
Deliver enhanced	Continue to monitor nesting, and	Performance indicator:	Since 2012, JCCBI has been monitoring the populations of cliff
conservation action	develop an annual management	Develop an annual management plan	swallows and peregrine falcons that nest on its infrastructure.
	plan for cliff swallows and		An annual management plan helps protect and conserve these
	peregrine falcons that is adapted to	Starting point:	species.
	the construction work	1 management plan has been developed annually	
		since 2012	
		Target:	
		1 management plan developed annually	

IMPLEMENTATION STRATEGY	ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET
	Carry out fish habitat compensation	Performance indicator:	The original Champlain Bridge deconstruction work, which has
	projects near the original	% of compensation projects completion	been ongoing since 2020, has had important impacts on fish
	Champlain Bridge deconstruction		habitat, owing notably to the installation of temporary jetties.
	area	Starting point:	Compensation projects are planned to create and restore calm
		New initiative scheduled to begin in	water habitats for fish in 2 areas, namely at the Estacade and
		September 2024	Brossard piers.
		Target:	
		100% of the projects completed by	
		December 31, 2025	

Integrating sustainable development

Integrating sustainable development depends above all on corporate culture: successful integration relies on all employees being aware of and knowledgeable about sustainable development concepts.

Sustainable development in projects

JCCBI's mandate is to manage, maintain and rehabilitate infrastructure such as bridges, highways and tunnels, as well as properties, to ensure a safe passage for users. The Corporation's mission is to fulfill this mandate using a systemic management approach based on sustainable development.

Accordingly, for each asset, sustainable development opportunities are analyzed at the master plan development stage. Specific sustainable development programs are then integrated into the project factsheets that define the scope of the work to be carried out. Multidisciplinary teams are set up for each project, allowing projects to be planned and carried out with a 360° view.

In terms of environmental protection, JCCBI strives to minimize operational environmental impacts and seize opportunities to improve practices. JCCBI assesses project environmental effects at the planning stage and develops and updates processes taking into account, in particular, best practices and *Impact Assessment Act* requirements.

Sustainable development decision-making tools are used in planning preliminary project studies, as well as in the design of construction and land development work. These tools include lists of criteria based, in particular,



on Envision criteria, which are used to assess the environmental, social and economic performance of various work design scenarios.

The original Champlain Bridge deconstruction project exemplifies how sustainable development principles, including the circular economy, are integrated into JCCBI projects. The deconstruction of this bridge will generate 287,000 tonnes of materials, 90% of which will be recovered or reused. One reuse initiative launched by the Corporation in 2021 is a Canadawide Material Reuse Competition to give a second life to 400 steel bridge components. Ultimately, 11 projects were confirmed and will allow the original Champlain Bridge to remain in the collective memory.

In addition, sustainable development best practices are standardized through their integration into JCCBI's standardized construction specifications.

Improving our sustainable development maturity posture

JCCBI aims to improve its sustainable development maturity posture. To this end, a three-year environment and sustainable development strategic planning is used to better direct and readjust priorities. Implementing an environmental management system (EMS) also allows JCCBI to better gauge and quantify existing practices to set short-, medium- and long-term environmental performance targets.

External corporate profile

An external communication campaign is deployed annually to promote the Corporation's expertise and share its transportation, civil engineering, mobility and sustainable development knowledge and innovations.

