

**FOR ENVIRONMENTAL
JUSTICE IN QUEBEC:
FACTS,
ARGUMENTS,
COURSES OF
ACTION**

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Credits

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About the David Suzuki Foundation:

Founded in 1990, the David Suzuki Foundation is a national, bilingual non-profit organization headquartered in Vancouver, with offices in Toronto and Montréal. The Foundation's mission is to protect the environment and our quality of life, now and in the future. The Foundation's work contributes to solving the climate crisis and the mass extinction of species, by focusing on three key areas: zero carbon emissions, a thriving nature and sustainable communities. Through science, awareness-raising, public policy analysis and public engagement supported by partnerships with businesses, governments and civil society, the Foundation works to identify and implement solutions to live in balance with nature. The David Suzuki Foundation counts on the support of more than 300,000 supporters across Canada, including nearly 100,000 in Quebec.

In 2022, the David Suzuki Foundation created the Climate Conscience Lab to break down silos in climate science. The purpose of the Laboratory is to make climate science more accessible and inspire collective action through research and engagement initiatives rooted in art, culture, ecology and law. With projects initially designed for Quebec, the Lab will connect and support creative communities to contribute to the restoration and regeneration of human habitats, the protection and restoration of the biosphere, and the promotion of environmental justice for all.

The David Suzuki Foundation acknowledges that its offices are located in Tiohtià:ke (Montréal), the traditional and unceded territory of the Kanien'kehá:ka (Mohawk) Nation as the steward of the lands and waters of this location having long served as a gathering and trading site for many First Nations.

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List of Abbreviations

BAPE	Bureau d'audiences publiques sur l'environnement
CLSC	Centres locaux de services communautaires
EPA	Environmental Protection Agency
FNQLHSSC	First Nations of Quebec and Labrador Health and Social Services Commission
GBA+	Gender-based and Intersectional Analysis Plus
GDA	Gender-differentiated Analysis
GHG	Greenhouse Gas
HIA	Health Impact Assessment
HLE	Healthy Life Expectancy
IA	Impact Assessment
INSPQ	Institut national de santé publique du Québec
IPCC	Intergovernmental Panel on Climate Change
MeHg	Methylmercury
MELCC	Ministère de la Santé et des Services sociaux Ministère de l'Environnement et de la Lutte contre les changements climatiques
MSSS	Ministère de la Santé et des Services sociaux
PGE	Plan for a Green Economy
PGPS	Politique gouvernementale prévention en santé
UN	United Nations
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
VRAC-PARC	Évaluation de la vulnérabilité régionale aux changements climatiques et conception de plans d'adaptation régionaux au climat de santé publique

Glossary

Colonialism: Attempted or actual imposition of policies, laws, mores, economies, cultures or systems and institutions put in place by settler governments to support and continue the occupation of Indigenous territories, the subjugation of Indigenous Nations, and the resulting internalized and externalized thought patterns that support this occupation and subjugation.¹

Decolonization: A socio and political process aimed at resisting and undoing the multi-faceted impact of colonization and re-establishing strong contemporary Indigenous Nations and institutions based on traditional values, beliefs and knowledge systems.²

Determinants of health: Factors influencing a population's health without being the direct cause of its health problems. Determinants of health can involve individual factors (e.g., biological and genetic traits, lifestyle) or social, economic and environmental factors (social determinants of health).³

Discrimination: A distinction, exclusion or preference based on the grounds set out in the Quebec Charter of Human Rights and Freedoms that impairs or undermines the exercise of these rights and freedoms. Such grounds include race, colour, sex, pregnancy, sexual orientation, marital status, age (except to the extent provided by law), religion, political beliefs, language, ethnic or national origin,

social condition and disability or use of a means to overcome this disability. Discrimination can take the form of exclusion, harassment or adverse treatment.⁴

Environmental justice: The fair treatment and significant participation of all concerned persons, regardless of race, gender, nationality or income, in the development, implementation and enforcement of environmental laws, regulations and policies.⁵

Environmental racism: Environmental policies or practices that disproportionately affect racialized or Indigenous communities either intentionally or unintentionally, such as the establishment of polluting or environmentally hazardous industries in their environment. It also refers to the lack of democratic involvement of these communities in decision-making processes regarding the location of such facilities in their environment.⁶



¹ National Inquiry into Missing and Murdered Indigenous Women and Girls (2018). *Lexicon of Terminology*. Available at https://www.mmiwg-ffada.ca/wp-content/uploads/2018/02/NIMMIWG_Lexicon_ENFR-1.pdf

² Ibid.

³ Collaborating Centre for Determinants of Health (2022). *Glossary of Essential Health Equity Terms*. Available at <https://nccdh.ca/learn/glossary/>

⁴ Ministère de l'Immigration, de la Diversité et de l'Inclusion (2015). *Politique québécoise en matière d'immigration, de participation et d'inclusion : Glossaire*. Available at http://www.mifi.gouv.qc.ca/publications/fr/dossiers/Glossaire_ImmigrationParticipationInclusion.pdf

⁵ Waldron, I.R.G. (2018). *Re-thinking Waste: Mapping Racial Geographies of Violence on the Colonial Landscape*. *Environmental Sociology*. Available at <https://www.tandfonline.com/doi/full/10.1080/23251042.2018.1429178>

⁶ Ibid.

Health equity: Health equity means that everyone (individuals, groups of people and communities) has equal opportunities to achieve optimal health without being disadvantaged by social, economic, environmental, and cultural conditions due to socially constructed factors, such as race, gender, sexual orientation, religious beliefs and social status. Achieving health equity involves recognizing that not all groups of people are on an equal footing when it comes to health. Correcting the factors that lead to such inequities is imperative. Health equity occurs when social inequalities in health are offset.⁷

Health inequalities: Differences between individuals or groups of individuals in health status, presence of diseases, access to health care and impact on health, regardless of what causes such differences.⁸

Indigenous Peoples: As keepers of unique traditions, Indigenous Peoples (also called Aboriginal Peoples in some official federal government documents and other parts of the world) have different social, cultural, economic and political characteristics than those of the dominant societies with which they live side by side. Spread across the world, from the Arctic to the Pacific, they are the descendants - by common understanding - of those who inhabited a country or geographic area at the time when peoples of different cultures or ethnic origins arrived.⁹ Canada legally recognizes three Indigenous groups on its territory: First Nations, Métis and Inuit.

Marginalization: The process by which people are excluded because of their social identity (gender, race, social class or sexuality) and the unfair distribution of social, economic, physical and psychological resources.¹⁰

Racialized person: A person who allegedly or actually belongs to a group that has suffered a process of racialization. Racialization is a political, social and mental process of othering. The term *racialized* highlights the socially constructed character of differences and their essentialization. It emphasizes the fact that race is neither objective nor biological, but that it is an idea constructed to represent, categorize and exclude the "Other."¹¹ Members of racialized groups may be born in Canada and belong to a cultural, linguistic, social or religious minority or race group.

Reconciliation: Building and maintaining a mutually respectful relationship between Indigenous and non-Indigenous peoples in Canada. This process requires the people involved to know the past, recognize the harm inflicted, repent of the causes and take action to change behaviour.¹²

Social determinants of health: Circumstances in which individuals are born, grow, live, work and age and the health care systems available to them. These circumstances depend on a broader set of drivers, such as economy, social policies and politics (structural determinants of health).¹³

⁷ Collaborating Centre for Determinants of Health (2022). *Glossary of Essential Health Equity Terms*. Available at <https://nccdh.ca/learn/glossary/>

⁸ Public Health Agency of Canada (2018). *Key Health Inequalities in Canada: A National Portrait*. Available at <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/science-research/key-health-inequalities-canada-national-portrait-executive-summary/hir-full-report-eng.pdf>

⁹ United Nations Permanent Forum on Indigenous Issues (n.d.). *Who are Indigenous Peoples?* Available at https://www.un.org/esa/socdev/unpfii/documents/5session_factsheet1.pdf

¹⁰ Collaborating Centre for Determinants of Health (2022). *Glossary of Essential Health Equity Terms*. Available at <https://nccdh.ca/learn/glossary/>

¹¹ Ligue des droits et libertés (n.d.). *Personne racisée ou racialisée*. Available at <https://liguedesdroits.ca/lexique/personne-racisee-ou-racialisee/>

¹² Truth and Reconciliation Commission of Canada (2015). *What We Have Learned: Principles of Truth and Reconciliation*. Available at https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Principles_English_Web.pdf

¹³ Morrison, V. (2017). National Collaborating Centre for Healthy Public Policy. *Approches politiques de réduction des inégalités de santé : Déterminants sociaux de la santé et déterminants sociaux des inégalités de santé*. Available at https://www.inspq.qc.ca/sites/default/files/publications/2760_approches_politiques_reductions_inegalites_sante.pdf

Social health inequalities or health inequities:

Differences in health status related to a structural and social disadvantage that is amendable, unfair, avoidable and systemic. Social inequalities in health care are rooted in social, economic and environmental conditions and the uneven distribution of power. This puts already disadvantaged population groups at a higher risk of poorer health conditions.¹⁴

Structural determinants of health: Factors, also known as social determinants of health inequalities, referring to political, cultural, economic and social structures, such as the natural environment, ongoing colonialism and structural or systemic racism. They shape processes that create social inequities in terms of money, power and resources. Also known as structural drivers, structural determinants generate and reinforce social stratification based on socio-economic position, which shapes the living conditions that determine health status, such as education, work, income, social security, housing, environment and access to healthcare systems.¹⁵

Structural or systemic racism: A social production of race-based inequality in the decisions people are subjected to and the treatments they receive. Racial inequality is the result of the organization of a society's economic, cultural and political life. It is the result of a combination of the following: the social construction of races as real, different and unequal (racialization), the norms, processes, and service delivery of a social system (structure) and the actions and decisions of the people who work for these social systems (personnel).¹⁶

Systemic discrimination: The sum of disproportionate exclusionary effects that result from the combined effect of prejudiced and stereotypical attitudes, often unconscious, and policies and practices that are generally adopted without regard to the characteristics of members of groups prohibited from discrimination¹⁷.

Vulnerability: (In the context of climate change): The propensity or predisposition to be affected by the adverse impact of climate change. The vulnerability of individuals or groups to the health impact of climate change is determined by exposure to three elements: climate change hazards, potential impact sensitivity and the ability to face them.¹⁸



¹⁴ Collaborating Centre for Determinants of Health (2022). *Glossary of Essential Health Equity Terms*. Available at <https://nccdh.ca/learn/glossary/>

¹⁵ Ibid.

¹⁶ Commission des droits de la personne et des droits de la jeunesse du Québec (2019). *Mémoire à l'Office de consultation publique de Montréal dans le cadre de la consultation publique sur le racisme et la discrimination systémiques*. Available at https://www.cdpcj.qc.ca/storage/app/media/publications/memoire_OCPM_racisme-systemique.pdf

¹⁷ Ibid

¹⁸ Government of Canada (2022). Glossary. In P. Berry (ed.), R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/glossary/>

Executive Summary

Taking an interest in the environment from the health perspective helps us to realize that many injustices shape the link between these two elements. Environmental racism highlights such injustices, which are twofold. On the one hand, there are distributional injustices; that is, certain communities bear an unfair and disproportionate burden of environmental damage and risk. Examples of this are the populations of Rouyn-Noranda, Limoilou, in Québec City, the East Island of Montréal and many First Nations and Inuit communities that are overexposed to multiple contaminants or that are more exposed to climate change impacts and whose life expectancy, for instance, is lower than in neighbouring cities or boroughs. On the other hand, procedural injustices refer to the fact that communities affected by such risks often have no access to information, participation in decision-making or shared decision-making power when decisions likely to affect their health and environment are taken. What do these groups have in common? They are also vulnerable to other forms of social and economic inequality. Thus, environmental justice aims to address the underlying mechanisms that explain why certain communities are exposed to multiple forms of injustice, in other words, the processes that lead them to experience marginalization. Some Quebec authorities are starting to recognize the existence of social health inequalities related to the environment, but much remains to be done to tackle them. This recognition must translate into action focused on environmental justice principles.

To take action, profiles of vulnerability to environmental risks must first be better described. There are obvious cases, such as those covered by the media, and there are all the others never heard about. It is known that not all population groups are equally vulnerable to environmental risks. Certain health determinants interact and accumulate risks within certain population groups due to existing inequalities. To identify vulnerability profiles, Quebec should work on an index and indicators of socio-environmental vulnerability, combined with specific climate vulnerability issues. In a changing climate, environmental injustice can be insidious: while the presence of polluting industries, for example, can easily indicate risks to the health of nearby populations, the absence of vegetation or air conditioning also poses a threat to health, particularly during heat waves.

Environmental justice aims to address the underlying mechanisms that explain why certain communities are exposed to multiple forms of injustice.

To take action, profiles of vulnerability to environmental risks must first be better described.

To take further action, it is essential to ensure that marginalized communities are heard and involved in decision-making processes. This involves making efforts to reach out to them or the groups representing them to counter the exclusions that prevent them from participating. For example, respecting the free, prior and informed consent of Indigenous Peoples in all assessment and response processes is imperative to ensuring environmental justice. The environmental injustice experienced by Indigenous Peoples is exacerbated by specific colonializing processes to which they are subjected, the denial of their right to self-determination on a historical basis, pre-existing health conditions and health care access issues. Their knowledge and their relationship to health and nature must guide us, just as we must let them show us the way and recognize their expertise and experience in ecological and environmental issues.

Environmental justice provides an opportunity to take action to reduce the social health inequalities related to the environment, which are shaped by the structural determinants of health, meaning the overall context in which people live: the political, cultural, economic and social structures populated by dynamics of structural racism and exclusion. To take action, these elements must be addressed, but the health determinants must also be improved to, in turn, reduce vulnerabilities. An equal right of access, without any discrimination, to all social and health services must be guaranteed to everyone, health impact assessments must be systematized when projects are planned on a given territory, and intersectoral collaboration in health prevention and promotion must be ensured and improved. Overall, the risk factors that increase people's vulnerability must be addressed, not only the risks themselves. The environment and climate change are not separate from the dynamics that dominate society: they are intertwined.

Now is the time for action. The latest climate knowledge emphasizes the importance of environmental justice to achieve more effective and sustainable outcomes, specifically in terms of adaptation. Conversely, ignoring environmental justice considerations could undermine Quebec's adaptation efforts and prosperity in the medium and long term. Several jurisdictions are taking action and Quebec must follow suit and lead by example. The challenges are significant, but the health and well-being of the entire population is also at stake, if not much more.

The environmental injustice experienced by Indigenous Peoples is exacerbated by specific colonializing processes to which they are subjected,

Several jurisdictions are taking action and Quebec must follow suit and lead by example.

Introduction

Where do Environmental Racism and the Environmental Justice Movement Come from? History, Definitions and Contemporary Issues

In the 1930s, the United States government assessed neighbourhoods in nearly 200 cities across the country according to their “residential security” (the assumed relative risk of a neighborhood to mortgage lenders like banks) and created maps based on those assessments. The most poorly rated neighbourhoods were described as “dangerous” areas. They were mainly home to immigrants and low-income or racialized people. Those areas were identified by red lines, which gave rise to the term “redlining”. For the population living there, access to bank loans and mortgage rates were increased to compensate for a social risk exacerbated by an administrative decision. Almost a century later, the legacy of redlining is still being felt in those neighbourhoods: household income is lower and health problems like asthma and premature births are higher. Continued disinvestment in residential real estate coupled with investment in industries and businesses within or near those neighbourhoods has contributed to environmental vulnerabilities, such as higher numbers of impervious surfaces and urban heat islands as well as increasing pollution.¹⁹

Later, in the early 1980s, the State of North Carolina in the United States chose Warren County to build a landfill to dispose of soil contaminated with highly toxic industrial compounds. Warren County was one of the poorest counties in the state at the time, and the community that lived there was predominantly African American.²⁰ Concerned that the toxic materials would contaminate the groundwater supply, the people, supported by the National Association for the Advancement of Colored People (known as the NAACP²¹), organized protests against the proposed landfill. More than 500 environmentalists and civil rights activists were arrested, but the mobilization did not stop the construction. It was not until two decades later, in 2001, that the dump was cleaned up.²²

What is described here is an example of **environmental racism**. Environmental racism is racial discrimination that materializes in the disproportionate location of polluting industries and other environmentally hazardous activities in the vicinity of Indigenous or racialized communities, the greater exposure of these communities to ensuing

¹⁹ Digital Scholarship Lab (n.d.). *The Lines that Shape our Cities. Connecting Present-day Environmental Inequalities to Redlining Policies of the 1930s*. Available at <https://storymaps.arcgis.com/stories/0f58d49c566b486482b3e64e9e5f7ac9>

²⁰ Environmental Justice Atlas (2015). *PCB Contamination in Warren County, USA*. Available at <https://ejatlas.org/conflict/pcb-contamination-in-warren-county-usa>

²¹ Website: <https://naacp.org/>

²² EPA (n.d.). *Environmental justice. How Did the Environmental Justice Movement Arise?* Available at <https://www.epa.gov/environmentaljustice>

contamination and pollution, the lack of political power available to these communities to resist the establishment of polluting industries in their communities, the poor implementation of policies that penalize the harmful and, in many cases, fatal presence of poisons in these communities, the disproportionate negative impact of environmental policies that result in differential rates of clean-up of environmental contaminants in those communities, and the history of exclusion of Indigenous and racialized communities from major environmental groups, decision-making boards, commissions and regulatory bodies.²³

Two dimensions of injustice can be seen:

- Geographic or **distributional** injustices of environmental risks, and more specifically, the way injustice is **constructed**, i.e., why communities already exposed to other forms of social and economic inequality are also subject to environmental risks (e.g., landfills and polluting industries located near these communities);
- Unfair **participation** and procedural justice, i.e., access to information, participation in decision-making, sharing of decision-making power. Exclusion from decision-making causes, among other things, an unfair distribution of environmental risks.²⁴

The Warren events, where the environmental and civil rights movements met, are generally considered the catalyst for the **environmental justice** movement. The movement has a very tangible vision of the environment as the place where people live, work and play. The movement focuses on how environmental threats jeopardize **the daily lives and the health** of

racialized communities subjected to environmental racism. Moreover, Indigenous worldviews regarding the relationship between human beings and non-human nature are involved at the onset of the movement, making Indigenous sovereignty and self-determination a core principle.²⁵

Thus, a solid framework for environmental justice should be able to address the dimensions of injustices mentioned above. We define it as the **fair treatment** and **significant participation** of all persons, regardless of race, gender, nationality or income, in the development, implementation and enforcement of environmental laws, regulations and policies.

Fair treatment means that no group of people should bear an unfair and disproportionate burden of environmental damage and risk, including those resulting from the adverse environmental impacts of industrial, government and commercial operations, programs and policies. Significant participation means that:

- Those in power actively seek and facilitate the participation of vulnerable populations in the decision-making process regarding any activity likely to affect their environment and/or health, and they have an obligation to consult the Indigenous Peoples concerned;
- The contributions and concerns of all those involved are considered in the decision-making process and influence regulatory agencies' decisions;²⁶
- The right to self-determination and the free, prior and informed consent of Indigenous Peoples²⁷ are respected throughout the decision-making process.

²³ Bullard, R. (1993). *Confronting Environmental Racism: Voices from the Grassroots*. Boston: South End Press.

²⁴ Schlosberg, D. and Collins, L. (2014). From Environmental Justice to Climate Justice: Climate Change and the Discourse of Environmental Justice. Available at <https://wires.onlinelibrary.wiley.com/doi/abs/10.1002/wcc.275>

²⁵ Natural Resources Defense Council (1991). *The Principles of Environmental Justice*. Available at <https://www.nrdc.org/sites/default/files/ej-principles.pdf>

²⁶ Definition adapted from the U.S. Environmental Protection Agency.

²⁷ These rights are recognized by the United Nations Declaration on the Rights of Indigenous Peoples. A free, prior and informed consent means:

"Free" implies that there is no coercion, intimidation or manipulation.

"Prior" implies that consent is to be sought sufficiently in advance of any authorization or commencement of activities and respect is shown to time requirements of indigenous consultation/consensus processes.

"Informed" implies that information is provided that covers a range of aspects, including the nature, size, pace, reversibility and scope of any proposed project or activity; the purpose of the project as well as its duration; locality and areas affected; a preliminary assessment of the likely economic, social, cultural and environmental impact, including potential risks; personnel likely to be involved in the execution of the project; and procedures the project may entail. Available at <https://www.ohchr.org/en/indigenous-peoples/consultation-and-free-prior-and-informed-consent-fpic>

What about climate justice? Putting climate change on the political agenda in the 1990s (subject to international governance under the aegis of the United Nations) extended the issues considered up to then by environmental justice to encompass **climate justice** issues. It has been acknowledged that climate change has the potential to create or exacerbate many inequalities. Some elements of climate justice have been addressed:

- Poor and racialized communities are the least responsible for climate change. They produce lower greenhouse gas (GHGs) emissions than the general population.
- Those very communities are already disproportionately affected by the health impact of climate change.
- Measures to reduce GHGs could either generate significant health and economic benefits or lead to unequal consequences for racialized communities, depending on how they are structured.^{28,29}

Furthermore, populations facing the most significant climate change impact are those already exposed to environmental disturbances and other forms of injustice. In this report, we essentially used of the concept of environmental justice, since it encompasses the concept of climate justice. **Climate injustice is a form of environmental injustice.** We would also like to clarify that our angle of analysis for this report is that of health, specifically health inequalities reinforced by environmental injustice. We are aware that environmental justice covers much broader issues than health, all of which cannot be covered by a single report.

While originating in the United States, environmental and climate justice issues are seen all over the world, including Quebec. **And yet, these terms are barely mentioned in public discourse. There is an urgent need to address them and find solutions.**

The climate crisis is not only an environmental problem, but above all a matter of public health, social justice and reconciliation. Indigenous Peoples in Quebec, in Canada and around the world have led the movement for environmental justice by defending the lands and waters against colonialism and extractive development for centuries.³⁰ As stated by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP): “Indigenous Peoples have suffered from historic injustice as a result of, inter alia, their colonization and dispossession of their lands, territories and resources, thus preventing them from exercising, in particular, their right to development in accordance with their own needs and interests.”³¹ We recognize, as stated in the UNDRIP, that their traditional knowledge, cultures and practices are of paramount importance in informing and implementing effective solutions for climate change mitigation and adaptation. Respect for their rights is a prerequisite for the attainment of any climate and environmental justice and is a core statement of this report.

✓ Takeaways:

Environmental racism highlights the existence of inequities in the distribution of environmental risks and injustices regarding participation faced by poor, racialized and indigenous communities. **The environmental justice movement advocates for the fair treatment and meaningful participation of all affected people in the development, implementation and enforcement of environmental laws, regulations and policies.** Communities facing these injustices are also exposed to other forms of social and economic inequities. Environmental justice aims to address the underlying mechanisms that explain why some communities are exposed to multiple forms of injustice.

²⁸ Congressional Black Caucus Foundation (2004). *African Americans and Climate Change: An Unequal Burden*. Available at https://www.ebony.com/wp-content/uploads/2013/02/CBCF_REPORT_F.pdf

²⁹ Waldron I.R.G. (2021). *Centring Social Justice is Sound Climate Policy*. Available at <https://climateinstitute.ca/centring-social-justice-is-sound-climate-policy/>

³⁰ Indigenous Environmental Network and Oil Change International (2021). *Indigenous Resistance Against Carbon*. Available at <https://www.ienearth.org/wp-content/uploads/2021/09/Indigenous-Resistance-Against-Carbon-2021.pdf>

³¹ United Nations General Assembly (2007). *United Nations Declaration on the Rights of Indigenous Peoples*. Available at https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

Context

Public Health, Environment and Social Inequalities

“In Canada, your postal code determines your health.”

Ingrid Waldron

The environmental justice movement was originally motivated by the health risks faced by marginalized communities. Indeed, the quality of water, soil, air and food greatly influences the health of populations.

In public health, different indicators are used to measure the health status of an individual or a population. These indicators are based on conditions that enable individuals to achieve and maintain good health and are called **determinants of health**. They distinguish between individuals (e.g., age, gender), their various living environments (e.g., workplace), systems (e.g., health and social services system) and the overall context in which they live (e.g., natural environment). The indicators associated with the overall context are also referred to as the **structural determinants of health**, in that they influence the overall determinants of health. These refer to political, cultural, economic and social structures such as the natural environment, ongoing colonialism and structural or systemic racism. They shape the processes that create social inequalities in money, power and resources. Structural determinants of health generate and reinforce social stratification based on socioeconomic position, which shapes the living conditions that determine health status, such as education, work, income, social security, housing, environment, and access to health systems (see graphic on page 20).

While the concept of social determinants of health has long been used to describe the conditions in which people are born, grow up, live, and work, structural determinants of health is a term increasingly used to refer to the structurally embedded inequalities (social, economic, political, and environmental inequalities) that inform decisions and policies within our social structures (e.g., education, labor, employment, public infrastructure, etc.), and that contribute to disease and illness.

The determinants of health are associated with a number of health inequalities. **Social health inequalities** (SHI) are differences in health condition related to structural and social disadvantage that are amendable, unfair, avoidable and systemic. SHIs are created by the structural determinants of health because they are rooted in social, economic and environmental conditions and power imbalances. Thus, the link between the environment as a global context, as a living environment, and SHIs becomes very clear. This introduces the concept of environment related SHIs.

Climate Change as a Threat Multiplier for the Health of Vulnerable Populations

The worsening climate crisis and loss of biodiversity has had its toll on the health of many communities in Quebec who are experiencing direct consequences on their health. On average, Canada is getting warmer twice as fast as the rest of the world,³² and the World Health Organization has made **climate change one of the top public health issues of the 21st century**.³³ The relationship between climate change and health is complex but has been established, and so is the fact that they exacerbate SHIs^{34,35}. Indeed, the impacts of climate change are not evenly distributed. Climate change is seen as a “threat multiplier,” since it exacerbates existing social health inequalities and **generates conditions conducive to the emergence of new inequalities**. The Government of Quebec acknowledges this in its Plan d’action interministériel 2022-2025 under the Politique gouvernementale de prévention en santé (PGPS): “To ensure the health and well-being of the entire population, we must face many challenges related to climate change that may exacerbate social health inequalities. The fight against climate change is a **crucial opportunity** to address many health determinants.³⁶” Moreover, climate change is only one component of environmental disturbances affecting health. The next section focuses on describing the environment-related dimensions of SHI.

Identifying Environmental Injustices: Environment-Related Social Inequalities in Health and their Multiple Dimensions

Many forms of injustice shape humans’ relationship to environmental threats. To identify them, **vulnerability** is assessed, i.e., the predisposition of a person or a group to be negatively affected by the impacts of these disturbances. Three elements shape vulnerability:

- **Exposure** to environmental hazards, meaning the extent to which individuals or populations experience environmental health issues (e.g., living in a neighbourhood with high levels of air pollution);
- **Sensitivity** to potential impact, i.e., the extent to which individuals are affected by environmental health risks (e.g., untreated diabetes can increase an individual’s sensitivity to heat waves);
- The **ability to respond** or cope, or adaptability, refers to the ability to avoid, prepare for and deal with exposure and sensitivity (e.g., low-income households in flood-prone areas may not be able to afford to move, thus increasing their risk of exposure to flooding). It also refers to access to appropriate care if need arises.

³² Environnement and Climate Change Canada (2019). *Canada’s Changing Climate Report. Headline Statements*. Available at https://changingclimate.ca/site/assets/uploads/sites/2/2019/03/CCCR_HeadlineStatements.pdf

³³ World Health Organization (2018). *COP24 Special report: Health and climate change*. Available at <https://www.who.int/publications/i/item/9789241514972>

³⁴ Government of Canada (2022). Climate Change and Health Equity. In P. Berry and R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

³⁵ Clark, D. et al. (2021). *The Health Costs of Climate Change. How Canada Can Adapt, Prepare, and Save Lives*. Canadian Institute for Climate Choices. Available at https://climatechoices.ca/wp-content/uploads/2021/06/ClimateChoices_Health-report_Final_June2021.pdf

³⁶ Gouvernement du Québec (2022). *Un projet d’envergure pour améliorer la santé et la qualité de vie de la population. Plan d’action interministériel 2022-2025 de la Politique gouvernementale de prévention en santé*. Available at <https://publications.msss.gouv.qc.ca/msss/fichiers/2022/22-297-05W.pdf>

It is important to specify that determinants of health condition vulnerability, thus meaning that SHIs are of a **systemic nature**. Many communities that are the first to be affected by climate change have been and continue to be active drivers of change; they show a strong capacity to adapt and be resilient despite the fact that they live in **marginalizing situations**.³⁷ It is imperative not to stigmatize certain groups by labelling them as vulnerable and instead highlight the processes by which such groups are driven into vulnerability.

Examples of Inequalities in Exposure

Listed below are current situations in Quebec and studies carried out that show the disproportionate exposure of populations to environmental risks:

- Indigenous communities in Canada face a disproportionate burden of health problems and exposure to environmental contaminants.³⁸
- In Montreal, low-income individuals and, to a lesser extent, visible minorities often live near major highways and in areas with higher concentrations of pollutants.³⁹
- Low-income individuals and visible minorities in Montreal are often in areas with the most noise pollution due to road traffic.⁴⁰
- In Toronto, Montreal and Vancouver, areas with a higher proportion of non-English- and non-French-speaking tenants and residents are exposed to disproportionately higher ambient concentration levels of nitrogen dioxide (an air pollutant).⁴¹
- There are heat islands in 73% of Montreal's neighbourhoods with the lowest socio-economic status, compared with only 20% in Montréal neighbourhoods with the highest socio-economic status. The majority of Montrealers who died from the overwhelming heat of summer 2018 lived in a heat island.⁴² The temperature difference can be up to 12°C between a heat island (e.g., parking lot) and an island of freshness (e.g., a parc).⁴³
- In Montreal, the Trans-Northern pipeline crosses the North and East of Montreal, the most disadvantaged boroughs of the island. It was built more than 65 years ago and has caused several incidents. In 2018, the Bureau d'audiences publiques sur l'environnement (BAPE) had highlighted Trans-Northern Pipelines Inc.'s history of continuous non-compliance over the past several years, particularly with regard to the risks of overpressure and watercourse crossings.⁴⁴

³⁷ Government of Canada (2022). Climate Change and Health Equity. In P. Berry and R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

³⁸ Ibid.

³⁹ Carrier, M. et al. (2014). *The application of three methods to measure the statistical association between different social groups and the concentration of air pollutants in Montreal: A case of environmental equity*, *Transportation Research Part D*, 30, 38-52. Available at <https://espace.inrs.ca/id/eprint/2324/1/Carrier-2014-The%20application%20of%20three%20methods1.pdf>

⁴⁰ Carrier, M. et al. (2016). *Road traffic noise in Montreal and environmental equity: What is the situation for the most vulnerable population groups?* Available at <https://www.sciencedirect.com/science/article/abs/pii/S0966692315002021?via%3Dihub>

⁴¹ Canadian Association of Physicians for the Environment (CAPE). 2021. *Mobilizing Evidence: Activating Change on Traffic-Related Air Pollution (TRAP) Health Impacts*. Available at <https://cape.ca/wp-content/uploads/2022/05/CAPE-TRAP-2022-2.pdf>

⁴² INSPQ (2021). *Réduire les vulnérabilités et les inégalités sociales : tous ensemble pour la santé et le bien-être*. Available at <https://www.inspq.qc.ca/sites/default/files/publications/2781-reduire-vulnerabilite-inegalites-sociales.pdf>

⁴³ Drapeau, L. et al. (2021). *Mesures de lutte contre les îlots de chaleur urbains : mise à jour 2021*. Institut national de santé publique du Québec. Available at <https://www.inspq.qc.ca/sites/default/files/publications/2839-mesures-lutte-ilots-chaleur-urbains.pdf>

⁴⁴ Bureau d'audiences publiques sur l'environnement (2018). *Projet de construction d'un terminal d'approvisionnement de carburant aéroportuaire à Montréal-Est*. Available at <https://www.bape.gouv.qc.ca/fr/dossiers/projet-construction-termina-approvisionnement-carburant-aeroportuaire-montreal/>

- Open burning of waste materials in landfills in northern Quebec (north of the 55th parallel) is potentially harmful for the health of local human populations due to the large number of potentially toxic contaminants released and the smoke that can reach inhabited areas. This practice is known to likely generate high health risks for exposed populations. Local Inuit and Naskapi communities repeatedly raised this concern during the BAPE Commission of Inquiry's consultations on the assessment and management of final waste. However, **no research** has been conducted to date to document the level of exposure of northern communities living in the vicinity of landfills where open burning of final waste is a mandatory practice. The Commission of Inquiry believes that the government should make every effort to identify alternatives to open burning with the consent of local and regional communities.⁴⁵
- The Lower Town, Limoilou and Vanier boroughs of Québec City is home to a predominantly low-income population, who face persistent problems of noise, dust, odours, trucking and contaminants (nickel, lead, mercury, dioxins and furans) generated by heavy industries and the region's industrial past. This area is also located near busy major roads and many industrial parks, and is threatened by industrial, port and road system expansion projects. Raising the nickel air level standards poses an even greater threat to public health.⁴⁶
- In Rouyn-Noranda, the population of the Notre-Dame neighborhood (the area closest to the Horne Foundry and one of the most disadvantaged in the city⁴⁷) is overexposed to many air pollutants emitted by the Horne Foundry (arsenic, heavy metals, etc.) in quantities far exceeding the standards set by the Ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC). The Regional County Municipality (RCM) of Rouyn-Noranda is reporting an increase in cancer rates, intrauterine growth retardation and chronic obstructive pulmonary disease and an overall drop in life expectancy.⁴⁸

All of these examples reveal situations of inequities in exposure to environmental risks. **We note that Indigenous People, low-income people and racialized people are the most affected by these injustices.** Other cases are presented throughout the report, and many are not yet properly documented in Quebec.

Inequalities in Sensitivity

Sensitivity is determined not only by age or genetics, but mainly by social determinants of health. Among disadvantaged groups, the prevalence of underlying health problems increases sensitivity to the impacts of environmental hazards, i.e., it results in greater health risks for equivalent hazards.⁴⁹ So, given that Indigenous, low-income and racialized communities already suffer from poorer health than others due to the structural determinants of health (food insecurity,

⁴⁵ Bureau d'audiences publiques sur l'environnement (2022). *L'état des lieux et la gestion des résidus ultimes. Rapport d'enquête et d'audience publique*. Available at https://www.bape.gouv.qc.ca/fr/dossiers/etat-lieux-et-gestion-residus-ultimes/?start_date=2021-02-21&end_date=2021-02-21

⁴⁶ Direction de santé publique du CIUSSS de la Capitale-Nationale (2018). *Mon environnement, ma santé : volet de la qualité de l'air extérieur. Cadrage du projet*. Available at https://www.ciusss-capitalenationale.gouv.qc.ca/sites/d8/files/docs/ProfSante/SPU/dsp_mems_cadrage_v.2019-02-25_vf.pdf

⁴⁷ Direction de santé publique du CISSS de l'Abitibi-Témiscamingue (2022). *Comité consultatif de suivi de l'étude de biosurveillance. Données de surveillance de l'état de santé de la population*. Available at https://www.ciass-at.gouv.qc.ca/partage/BIOSURVEILLANCE/2022-05-11_CC-PRESENTATION-SANTE.pdf

⁴⁸ Lemieux, M. (2022). *Ce qui est bon pour le Québec est bon aussi pour Rouyn-Noranda*. Le Devoir. Available at <https://www.ledevoir.com/opinion/idees/729543/idees-ce-qui-est-bon-pour-le-quebec-est-bon-aussi-pour-rouyn-noranda>

⁴⁹ Clark, D. et al. (2021). *The Health Costs of Climate Change. How Canada Can Adapt, Prepare, and Save Lives*. Canadian Institute for Climate Choices. Available at https://climatechoices.ca/wp-content/uploads/2021/06/ClimateChoices_Health-report_Final_June2021.pdf

income insecurity and poverty, low education, lower access to health care, discrimination and exclusion, lower social safety net etc.), environmental pollutants and climate-related illness will further compromise their health and well-being.⁵⁰ Note that in Quebec, healthy life expectancy (HLE) progresses along a social gradient; the more disadvantaged individuals are materially and socially, the lower the HLE.⁵¹ For example, in the case of the Lowertown, Limoilou and Vanier sectors of Québec City, life expectancy is six years lower in the territory of the Local Community Service Centres (CLSC) Québec - Lowertown and premature mortality is almost twice as frequent in the territories of the CLSC Limoilou-Vanier and Québec - Lowertown.⁵²

Inequalities in Access to Adaptation Measures

Factors that contribute to adaptability are particularly related to access to economic resources, technology, information, skills, and decision-making power.⁵³ When it comes to climate change, adaptability can be defined as the process of adjusting to the current or expected climate and to its consequences, in order to lessen the negative impacts and take advantage of the beneficial ones.⁵⁴ Once again, existing social and health inequalities contribute to differences in

adaptability among individuals and communities in Quebec: the more resources people have, the more adaptable they are. Adaptation measures to climate change are multiple. For example, access to cool islands, to swimming spots, to shelters during forest fires, to evacuation places in case of heavy rains. Because of the exclusion mechanisms present in our society or the rules of access that rely on the acquisition of skills and resources, these measures are not available to certain communities, particularly to the most disadvantaged or to immigrants because of a language barrier. Furthermore, access to health and social services plays a key role in adapting to climate hazards, yet this access is highly inequitable among the population. For example, communities living far from medical centres are more vulnerable in case of emergencies. Also, because of structural racism in healthcare, Indigenous Peoples are less likely to have their health issues taken seriously or receive culturally sensitive care.⁵⁵ Numerous studies and four recent large-scale surveys provide evidence of the presence of racism in healthcare: the Report of the Public Inquiry Commission on relations between Indigenous Peoples and certain public services in Quebec (Viens Commission)⁵⁶ (2019), the Truth and Reconciliation Commission Report⁵⁷

⁵⁰ Waldron, I.R.G. (2021). *Environmental Racism and Climate Change: Determinants of Health in Mi'kmaw and African Nova Scotian Communities*. Available at <https://climateinstitute.ca/publications/environmental-racism-and-climate-change/>

⁵¹ INSPQ (2019). *Les inégalités sociales de santé au Québec - L'espérance de vie en bonne santé*. Available at <https://www.inspq.qc.ca/santescope/suivre-les-inegalites-sociales-de-sante-au-quebec/esperance-vie-bonne-sante>

⁵² Direction de santé publique du CIUSSS de la Capitale-Nationale (2018). *Mon environnement, ma santé : volet de la qualité de l'air extérieur. Cadrage du projet*. Available at https://www.ciusss-capitalesnationale.gouv.qc.ca/sites/d8/files/docs/ProfSante/SPU/dsp_mems_cadrage_v.2019-02-25_vf.pdf

⁵³ IPCC (2022). Summary for policy makers. In *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Available at https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf

⁵⁴ IPCC (2018). Annex I: Glossary [Matthews, J.B.R. (ed.)]. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. Available at https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SR15_AnnexI.pdf

⁵⁵ Phillips-Beck, W. et al. (2020). *Confronting Racism within the Canadian Healthcare System: Systemic Exclusion of First Nations from Quality and Consistent Care*. *Environmental Research and Public Health*. Available at <https://www.mdpi.com/1660-4601/17/22/8343>

⁵⁶ Public Inquiry Commission on Relations Between Indigenous Peoples and Certain Public Services (2019). *Public Inquiry Commission on Relations Between Indigenous Peoples and Certain Public Services in Québec: Listening, Reconciliation, and Progress*. Bibliothèque de l'Assemblée nationale du Québec. Available at <https://www.bibliotheque.assnat.qc.ca/guides/fr/les-commissions-d-enquete-au-quebec-depuis-1867/7738-commission-viens>

⁵⁷ National Centre for Truth and Reconciliation (n.d.). *Truth and Reconciliation Commission Reports*. Available at <https://nctr.ca/records/reports/>

(2015), the Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls⁵⁸ (2019) and the Report of the Special Commission on the Rights of the Child and Youth Protection (Laurent Commission)⁵⁹ (2021) all include recommendations for the healthcare system or governance systems that have a major impact on the health of Indigenous Peoples. The evidence is overwhelming.

For instance, it is a known fact that environmental threats can exacerbate SHIs and threaten health equity. **In addition, the inequities described are accompanied by another form of inequity:** those groups most exposed to air contaminants or to the effects of climate change contribute the least to this form of pollution or to the production of GHGs: in Canada, the poorer the people, the fewer GHGs they emit.⁶⁰ However, there are few initiatives and approaches in Quebec and across Canada aiming at gaining a better understanding of how determinants of health and numerous existing health inequities can impact current and future health vulnerabilities to environmental threats.⁶¹ Global knowledge, including that developed by the World Health Organization, reveals that structural determinants of health create social inequalities and increase vulnerability. The appeal to connect health equity and environmental issues, especially climate change, was made years ago.⁶² **How does this knowledge translate concretely into the way the climate issue is addressed in Quebec? To what extent**

is the impact of GHG mitigation and adaptation strategies on determinants of health and SHIs assessed? Knowing that structural determinants of health influence SHIs, can they be measured?

Studies and public health data reveal that low-income individuals, children, the elderly, immigrants, people with chronic illnesses, the homeless and outdoor workers are among the groups vulnerable to climate change (more specifically, to the phenomena of heat islands,⁶³ heat waves⁶⁴ and air pollution⁶⁵). However, there are major flaws regarding the following:

- Consideration of persons with disabilities;⁶⁶
- The **role of upstream factors in social health inequalities** (structural determinants of health) and how they interact with environmental risks;
- Individual influence of determinants of health and other identity factors on vulnerability to the health impact of climate change, and their **cumulative effect**.



⁵⁸ National Inquiry into Missing and Murdered Indigenous Women and Girls (2019). *Final Report*. Available at <https://www.mmiwg-ffada.ca/final-report/>

⁵⁹ Special Commission on the Rights of the Child and Youth Protection (2021). *Building a Caring Society for our Children and Youth: Report of the Special Commission on the Rights of the Child and Youth Protection*. Bibliothèque de l'Assemblée nationale du Québec. Available at <https://www.bibliotheque.assnat.qc.ca/guides/fr/les-commissions-d-enquete-au-quebec-depuis-1867/7738-commission-viens>

⁶⁰ Chancel, L. et al. (2022). *World inequality report 2022*. World Inequality Lab. Available at <https://wir2022.wid.world/>

⁶¹ Government of Canada (2022). *Climate Change and Health Equity*. In P. Berry and R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

⁶² Commission on Social Determinants of Health (2009). *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health: Final Report of the Commission on Social Determinants of Health*. World Health Organization. Available at <https://www.who.int/publications/i/item/WHO-IER-CSDH-08.1>

⁶³ INSPQ (n.d.). Îlots de chaleur. *Mon climat, ma santé*. Available at <http://www.monclimatmasante.qc.ca/%C3%AElots-de-chaleur.aspx>

⁶⁴ INSPQ (n.d.). Vagues de chaleur. *Mon climat, ma santé*. Available at <http://www.monclimatmasante.qc.ca/vagues-de-chaleur.aspx>

⁶⁵ INSPQ (n.d.). Smog et particules. *Mon climat, ma santé*. Available at <http://www.monclimatmasante.qc.ca/smog-et-particules.aspx>

⁶⁶ Jodoin, S. et al. (2021). *Les personnes handicapées dans le contexte de la crise climatique*. Le Climatoscope. Available at <https://climatoscope.ca/article/les-personnes-handicapees-dans-le-contexte-de-la-crise-climatique/>

The importance of **improving data collection** should be noted, particularly data disaggregated by sex, gender, race or sexual orientation and cross-referencing the data to better identify vulnerability profiles (e.g., sex-based differences are often identified when examining the impact of climate change on specific populations, but gender-based vulnerability analysis is rare⁶⁷). The groups identified above as being vulnerable are not homogeneous. Income is known to be an excellent indicator of the **cumulation of inequalities**. In addition, racialized people represent a higher proportion of the population in low-income neighbourhoods compared to other neighbourhoods in Canada.⁶⁸ Thus, concerns about environmental racism emerge from this analysis of vulnerability, particularly in the urban context in Quebec.



Figure 1 – Representation of health and its determinants

Source: Institute for Future Studies, Stockholm

The Plan for a Green Economy: A Wasted Opportunity

The government's roadmap to 2030, the Plan for a Green Economy (PGE), does not mention issues of equity and environmental injustice. It states that "Certain individuals and groups are more vulnerable to climate change and its impact because of their geographic location, physical or financial limitations, or lack of social support. This is particularly true for northern and Indigenous communities. Children, seniors, and people with certain chronic illnesses are also more vulnerable. Climate change can exacerbate existing inequalities."⁶⁹ A box presents the concept of a just transition but there are no measures to implement it in the 2022-2027 PGE Implementation Plan.⁷⁰ We welcome the fact that the Implementation Plan injects more funds in conducting climate change-related health risk analyses and developing adaptation plans, but this is insufficient to ensure environmental justice. In short, mentioning these realities but not proposing anything to deal with them is a serious failure. We may ask ourselves whether the government has a good understanding of the potential impacts, both positive and negative, of the PGE on vulnerable communities. For example, the government relies primarily on electrification to achieve its GHG reduction targets. A state of knowledge on inequality issues related to climate change adaptation solutions presented to Ouranos and the Observatoire québécois des inégalités reported that certain subsidies, such as subsidies for the purchase of electric vehicles which are available in Quebec, can exacerbate several

⁶⁷ Government of Canada (2022). Climate Change and Health Equity. In P. Berry and R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

⁶⁸ Direction régionale de santé publique de Montréal (2020). *Inégaux face à la pandémie : populations racisées et la Covid-19*. Available at http://emis.santemontreal.qc.ca/fileadmin/emis/Sant%C3%A9_des_Montr%C3%A9alais/D%C3%A9terminants/conditions_sociales/Populations_racis%C3%A9es/Populations-Racisees-Covid-19_26_a%C3%BBt_2020.pdf

⁶⁹ Gouvernement du Québec (2020). *Plan pour une économie verte 2030. Politique-cadre d'électrification et de lutte contre les changements climatiques*. Available at <https://cdn-contenu.quebec.ca/cdn-contenu/adm/min/environnement/publications-adm/plan-economie-verte/plan-economie-verte-2030.pdf?1653502403>

⁷⁰ Gouvernement du Québec (2022). *Plan pour une économie verte 2030. Plan de mise en œuvre 2022-2027*. Available at <https://cdn-contenu.quebec.ca/cdn-contenu/adm/min/environnement/publications-adm/plan-economie-verte/plan-mise-oeuvre-2022-2027.pdf?1652278896>

types of inequalities among low-income households, and people from culturally diverse backgrounds.⁷¹ A 2018 study in the United States has shown that electric vehicle subsidies are disproportionately beneficial to wealthier communities: 79% of electric vehicle tax credits were allocated to households earning more than \$100,000 annually.⁷² Another U.S. study exploring which population groups have better access to electric vehicle programs found that people of Hispanic and African American ancestry accounted respectively for only 8.4% and 1.4% of new battery-powered electric vehicle and plug-in hybrid electric vehicle owners.⁷³ Moreover, in addition to increasing social inequalities, this subsidy does nothing to address the structural determinants of health by maintaining a harmful lifestyle habit (private automobile use) that has been shown to have negative consequences for cardiovascular health, physical inactivity⁷⁴ and urban sprawl.

A climate plan that ignores the principles of health, subsidiarity and equity (three principles set out in the *Sustainable Development Act*⁷⁵) and the needs and voices of the most vulnerable communities is an incomplete climate plan whose measures will risk exacerbating social inequalities and deteriorating the quality of life of the Quebec population.

✓ Takeaways:

Environmental injustices exist in Quebec but too little is done to properly identify and counter them. **Climate change exacerbates these injustices and threatens the health of vulnerable populations even more. Some authorities in Quebec recognize that certain communities are more severely affected than others by environmental risks.** This recognition must be translated into concrete actions that are centred on the principles of environmental justice.



⁷¹ Després, E. (2021). *État des connaissances sur les enjeux d'inégalités associées aux solutions d'adaptation aux changements climatiques*. Report presented to Ouranos and to the Observatoire québécois des inégalités. Available at <https://www.ouranos.ca/wp-content/uploads/RapportStagelnegalites2021.pdf>

⁷² Winegarden, W. (2018). *Costly Subsidies for the Rich: Quantifying the Subsidies Offered to Battery Electric Powered Cars*. Pacific Research Institute. Available at https://www.pacificresearch.org/wp-content/uploads/2018/02/CarSubsidies_final_web.pdf

⁷³ Rubin, D and St-Louis, E. (2016). *Evaluating the Economic and Social Implications of Participation in Clean Vehicle Rebate Programs: Who's In, Who's Out?* Transportation Research Record. Available at <https://journals.sagepub.com/doi/10.3141/2598-08>

⁷⁴ Panter, J. et al. (2018). *Using alternatives to the car and risk of all-cause, cardiovascular and cancer mortality*. Heart. Available at <https://heart.bmj.com/content/104/21/1749.citation-tools>

⁷⁵ Sustainable Development Act, CQLR c D-8.1.1, art. 6.

A Momentum to Seize

The manifestations of climate change and its disproportionate impacts on certain populations are increasingly visible in Quebec, as are those of environmental disturbances in general. For several years, the public health sector has been calling for equitable measures to tackle and adapt to climate change. The environmental and economic stakeholders have also been speaking up to avoid placing the burden of environmental measures on populations living in conditions that already make them vulnerable to environmental risks. The most recent knowledge on climate stresses the importance of environmental justice in order to obtain more effective and sustainable results, especially in terms of adaptation. There is momentum to seize and Quebec can act.

Aim for a Just Action to Avoid Maladaptation

In its 2022 *Impacts, Adaptation and Vulnerability report*, the Intergovernmental Panel on Climate Change (IPCC) highlights climate change adaptation solutions that are effective, feasible and consistent with principles of justice. It emphasizes that inclusive governance that prioritizes equity and justice in adaptation planning and implementation leads to more effective and sustainable adaptation

outcomes.⁷⁶ Indeed, ignoring the links between climate change and social inequalities could be detrimental to adaptation efforts and to Quebec's prosperity in the medium and long term. The IPCC has warned that planning and implementing adaptation plans that do not consider the negative impact on individual groups can lead to **maladaptation**.⁷⁷ As a result, the exposure of certain socio-economic groups to risks can be greater, marginalizing them and exacerbating inequalities. Maladaptation particularly affects marginalized and vulnerable groups, thus reinforcing and consolidating existing inequalities.⁷⁸ Conversely, well executed measures have the potential to generate significant benefits for Quebec society.

In this sense, since 2019, most regional public health directorates in Quebec have endeavoured to carry out a regional assessment of vulnerability to a changing climate, in order to design a regional health adaptation plan⁷⁹ (VRAC-PARC). This process helps key regional players to reduce the health impact of a changing climate, especially on the most vulnerable populations; it provides a great opportunity to improve health equity while promoting a participatory and inclusive approach. Adaptation actions that achieve equitable outcomes result from equitable adaptation processes, where meaningful

⁷⁶ IPCC (2022). *Summary for policy makers. In Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Available at https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf

⁷⁷ Maladaptation is defined by the IPCC as inadequate adaptation measures that can lead to an increase in the risk of adverse climate-related consequences, an increase or displacement of vulnerability to climate change or a deterioration in living conditions, now or in the future.

⁷⁸ IPCC (2022). *Summary for policy makers. In Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Available at https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf

⁷⁹ INSPQ (2022). *Évaluation de la vulnérabilité régionale aux changements climatiques et conception de plans d'adaptation régionaux au climat de santé publique (VRAC-PARC)*. Available at <https://www.inspq.qc.ca/adaptation-aux-changements-climatiques/vrac-parc>

participation and inclusion of diverse voices at all stages of the adaptation process are ensured, allowing for improved planning, development, and effectiveness of actions.⁸⁰

Leading the way to Federal Legislation in Development

The Parliament of Canada has been working for several months on Bill C-226, *An Act respecting the development of a national strategy to assess, prevent and address environmental racism and to advance environmental justice*.⁸¹ The bill was approved at second reading in June 2022 and is with committee now. This enactment requires the Minister of Environment and Climate Change, in consultation or cooperation with interested individuals, communities, agencies and organizations, to develop a national strategy meant to promote initiatives across Canada with a view to addressing the harms caused by environmental racism and establish strategy reporting requirements.

Such a strategy should include both a study to include an assessment of links between race, socio-economic status and environmental risk and the production of data and statistics on the location of environmental hazards. The strategy should also include measures to make progress in terms of environmental justice and assess, prevent and address environmental racism, such as potential amendments to federal laws, policies and programs, involvement of local groups in environmental policy development, compensation to individuals or communities and the collection of health data and statistics in communities in the vicinity of environmental hazards. Quebec has everything to gain by taking a proactive position on this issue by legislating at its level.

Achieving a Fair Energy Transition

The climate crisis forces us to rethink our modes of energy production and consumption in order to move towards a decarbonization of the economy. However, energy and industrial exploitation (**renewable or non-renewable**) cause a wide range of local environmental and social impact (e.g., noise, pollution, water contamination, lack of consent). Very often, the affected populations are not random. For instance, a 2020 study that mapped 649 cases of resistance movement to fossil fuel and low-carbon energy projects around the world reveals that the latter are **as conflicting as** the former and that both have a **disproportionate impact on vulnerable groups, such as Indigenous Peoples**.⁸² The study states that resistance movements are driven by demands for localization, democratic participation, climate justice considerations in governance and respect for the rights of Indigenous Peoples.

Another 2016 study assessing the future impact of hydropower development on exposure to methyl mercury (the toxic form of mercury, stimulated especially in newly flooded soils) in Canada's Indigenous communities found that the 22 Canadian hydropower facilities being considered for short-term development are located within 100 km of Indigenous communities. For the now completed Muskrat Falls hydroelectric power plant in Labrador, the research team probabilistically modelled the maximum methylmercury (MeHg) enrichment relative to baseline conditions in the Muskrat River, downstream estuary, locally harvested fish, birds and seals and three Inuit communities. The results show an expected 10-fold increase in MeHg levels in the river and 2.6-fold in estuary surface waters. Concentrations of MeHg in locally caught species increase 1.3- to 10 fold, depending on the time spent

⁸⁰ Government of Canada (2022). Climate Change and Health Equity. In P. Berry and R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

⁸¹ C-226. *An Act respecting the development of a national strategy to assess, prevent and address environmental racism and to advance environmental justice*. Available at <https://www.parl.ca/legisinfo/fr/projet-de-loi/44-1/c-226>

⁸² Temper, L et al. (2020). *Movements shaping climate futures: A systematic mapping of protests against fossil fuel and low-carbon energy projects*. Available at <https://iopscience.iop.org/article/10.1088/1748-9326/abc197/meta#erlabc197fn7>

looking for food in different environments. The study predicts that the average exposure of Inuit to MeHg will double after a flood and that MeHg levels in more than half of women of childbearing age and young children in the northernmost community will exceed the U.S. Environmental Protection Agency (EPA) reference dose. Aqueous concentrations of MeHg equal to or greater than Muskrat Falls are predicted at eleven sites in Canada.⁸³ The MeHg example demonstrates that decarbonizing the economy can be just as damaging, if not more so, to the environment and the people who live there as a status quo powered by fossil fuels if the actions posed are not combined with a coherent SHI reduction plan.

Another critical sector on which the government has indicated its desire to become a leader is that of strategic minerals needed for the energy transition, notably lithium (a metal needed to manufacture batteries). As with any other industrial development, there are concerns surrounding this sector, some of which have already been raised by the Long Point First Nation in relation to lithium mines in Abitibi-Témiscamingue (see section on “Respect the Self-Determination of Indigenous Peoples”). Quebec also has the momentum to seize here to ensure the full participation of the communities concerned, to obtain their free, prior and informed consent and to take all possible measures to avoid burdening them with significant environmental damage and risks. Such an approach also commits the authorities to act upstream to inform the populations concerned of the potential risks of certain projects. In short, if the government wishes to avoid the emergence of resistance to its projects, it must make environmental justice a priority.

Building on American Environmental Justice Principles

The United States began to take up the issue of environmental justice politically in the early 1990s as a result of the mobilization of the environmental justice movement. EPA established the **Office of Environmental Justice** in 1992 to coordinate its efforts expended to address the needs of vulnerable populations by reducing environmental damage, increasing environmental benefits and working collaboratively to build healthy, sustainable communities. The Office works with local, state and federal governments, tribal governments, community organizations, business and industry, and academia to build partnerships meant to ensure that all people are protected from environmental and health risks, regardless of race, colour, national origin or income. To support this work, the National Environmental Justice Advisory Council (NEJAC), a federal advisory committee to the EPA, was established in 1993.⁸⁴

This work led to the signing of Executive Order 12898 by President Clinton, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*⁸⁵, in 1994. This Executive Order still in effect directs each federal agency to “make the pursuit of environmental justice a component of their mission” and develop and report on environmental justice strategies. Such strategies must identify and address any disproportionate adverse health or environmental effects of government programs, policies and activities on minority and low-income populations. The executive order also provides for the collection of data on health and environmental risks by race, origin and income and has established a high-level Interagency Environmental Justice Task Force formed by the heads of eleven federal agencies and the White House.

⁸³ Calder, R. et al. (2016). *Future Impacts of Hydroelectric Power Development on Methylmercury Exposures of Canadian Indigenous Communities*. Environmental Science & Technology. Available at <https://pubs.acs.org/doi/full/10.1021/acs.est.6b04447>

⁸⁴ EPA (n.d.). *Environmental justice. How Did the Environmental Justice Movement Arise?* Available at <https://www.epa.gov/environmentaljustice>

⁸⁵ White House (1994). *Executive order 12898. Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Available at https://www.epa.gov/sites/default/files/2015-02/documents/exec_order_12898.pdf

In January 2021, President Biden signed Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*.⁸⁶ The Executive Order created the White House Environmental Justice Advisory Council (WHEJAC) to advise the Chairman of the Council on Environmental Quality (CEQ) and the new White House Environmental Justice Interagency Council (WHEJIC), in order to further federal efforts to address environmental injustice and support NEJAC. The Executive Order also announced the creation of a geospatial climate and economic justice diagnostic tool (a more advanced version of the EJ-Screen – see page 36 of the report) and the publication of annual interactive maps highlighting disadvantaged communities.

Furthermore, the Executive Order provided for the creation of the U.S. Office of Environmental Justice within the Department of Justice to coordinate environmental justice activities between components of the Department of Justice and U.S. Attorneys' offices across the country. The Office was established in May 2022, allowing the Department to compensate victims of environmental injustice and remedy violations of federal environmental laws, with racialized, Indigenous and low-income communities often the most affected by environmental crime, pollution and climate change.

EPA has also produced three key documents to guide action on environmental justice:

- **Guidance on Considering Environmental Justice During the Development of Regulatory Actions:**⁸⁷ This guide is designed to assist EPA staff in incorporating environmental justice into EPA's regulating process.
- **Technical Guidance for Assessing Environmental Justice in Regulatory Analysis:**⁸⁸ The purpose of this guide is to introduce specific technical

approaches and methods to assist Agency analysts in assessing potential environmental justice concerns for regulatory actions.

- **Legal Tools for Environmental Justice:**⁸⁹ This document provides an overview of a number of discretionary legal bodies that are or may be available to the EPA to support the Agency in its efforts to further environmental justice by addressing environmental justice considerations in federal laws and programs.

The work developed by the United States must inspire us to go further in terms of environmental justice in Quebec. Scientific calls for progress on this issue are multiplying and we have the opportunity to set an example in Quebec. We must act quickly: the full realization of the right to health, recognized by several international texts, first and foremost the Paris Agreement, is threatened by the consequences of injustices exacerbated by environmental degradation.

Takeaways:

The latest climate knowledge is unanimous on the importance of environmental justice and many jurisdictions are taking action. There is a momentum to seize and Quebec can act. **The risks of maladaptation are significant if environmental justice considerations are ignored.** This can threaten the health and well-being of Quebec's population. As the federal government prepares to take action to advance environmental justice, Quebec must set an example, especially since the energy transition raises concerns related to environmental justice. The work done in the United States can inspire us to act and go further.

⁸⁶ White House (2021). Executive Order on Tackling the Climate Crisis at Home and Abroad. Available at <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

⁸⁷ EPA (2015). *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*. Available at <https://epa.gov/sites/default/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf>

⁸⁸ EPA (2016). *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*. Available at https://www.epa.gov/sites/default/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf

⁸⁹ EPA (2014). *Plan EJ 2014. Legal Tools*. Available at <https://www.epa.gov/sites/default/files/2016-07/documents/ej-legal-tools.pdf>

Courses of Action: Measure, Let Decide, Decolonize

“In this country, health is defined more by a person’s postal code than their genetic code.”

The Health Costs of Climate Change Report, Canadian Climate Institute

Environmental injustices occur when groups are disproportionately exposed to environmental risks and are not involved, or their concerns are not taken into account, in decision-making processes that may affect their health and environment. Thus, ensuring environmental justice implies placing equity at the heart of its action, identifying where the most vulnerable populations are, and to review its consultation procedures by actively promoting the participation of these populations. It is also fundamental to work on the structural determinants of health, without which the health of populations will only be increasingly threatened by environmental risks.

Describing the Cumulation of Inequalities

As understanding of vulnerability to environmental hazards evolves, we have increasing evidence that characterizing vulnerability to the health impacts of these hazards must include considerations of how **multiple existing inequities may interact, shape,**

and broaden experiences and responses to these hazards.⁹⁰ We talk about cumulative inequities in order to avoid generalizations within certain population groups, among other things. For example, it is often said that the elderly are vulnerable to climate change. However, not all elderly people have the same degree of vulnerability to climate change. Differences exist within population categories.

Thus, intersectionality, a concept developed by professor and lawyer Kimberle Crenshaw in the 1990s⁹¹ highlights the multidimensional nature of the realities experienced by marginalized people and the complex interaction between forms of discrimination related to, for example, sex, gender, ethnicity, race, religion, disability or sexual orientation, in the face of prevailing social norms and systems of power and oppression. **The relevance of applying an intersectional approach to public health measures has been clearly recognized to improve health equity.** Its entry into the world of public health is recent and its practical application is still in its early

⁹⁰ Government of Canada (2022). Climate Change and Health Equity. In P. Berry and R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

⁹¹ Crenshaw, K. (1989). *Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics*. University of Chicago Legal Forum. Available at <https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1052&context=uclf>

His article shows how legal conceptions of discrimination have overlooked the experiences of black American women, who are at the intersection of different systems of oppression that cannot be summed up, but that overlap and are co-constituted.

stages, particularly because it lacks specific data to assess it.⁹² Several models have been developed in Canada, including the Intersectionality-Based Policy Analysis Framework developed as one of the most comprehensive models particularly relevant to social and health policies by the Institute for Intersectionality Research and Policy of Simon Fraser University.⁹³ For its part, the federal government uses the Gender-based and Intersectional Analysis in many of its policies and programs. It is another tool for integrating intersectionality (see next box).

GBA+ in Canada and GDA in Quebec

Gender-based and Intersectional Analysis (GBA+) is an internationally recognized analytical process that provides a rigorous method to assess systemic inequalities and a means to determine how distinct groups of women, men and people of different gender identities can experience policies, programs and initiatives. The Government of Canada is committed to applying GBA+ to current and future policies, programs and initiatives. It is required for key government and budgetary processes. GBA+ is integrated into the framework of impact assessments.⁹⁴

Gender Differentiated Analysis (GDA) is an analysis process that promotes equality between women and men through the orientations and actions of society's decision-making bodies at the local, regional and national levels. In Quebec, GDA has been included since 2006 as a governance tool in government policy for equality between women and men. The Government acknowledges that despite having adopted this approach several years ago, there have been many obstacles to its widespread

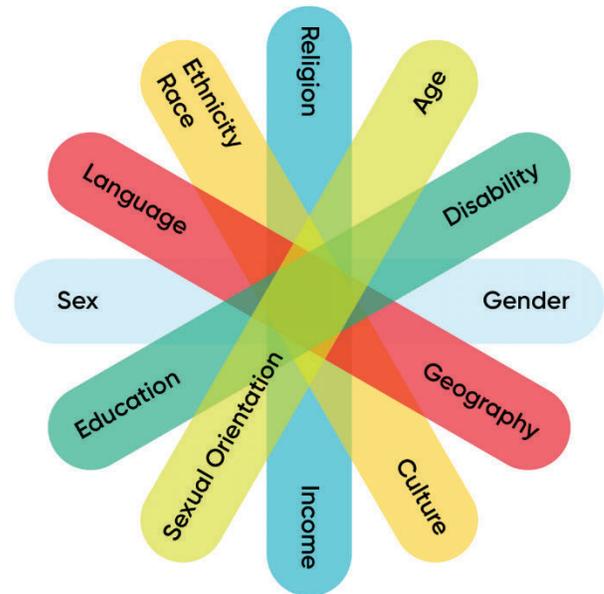


Figure 2 - Examples of intersecting identity factors.

Source: Health of Canadians in a Changing Climate: Advancing our Knowledge for Action. <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

⁹² Government of Canada (2022). *Climate Change and Health Equity*. In P. Berry and R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

⁹³ Morrison, V. (2015). *Health Inequalities and Intersectionality*. National Collaborating Centre for Health Public Policy. Available at https://ccnpps-nchpp.ca/docs/2015_Ineg_Ineq_Intersectionnalite_En.pdf

⁹⁴ Impact Assessment Agency of Canada (2022). *Gender-Based Analysis Plus in Impact Assessment*. Available at <https://www.canada.ca/fr/agence-evaluation-impact/services/politiques-et-orientation/analyse-comparative-sexes-plus-evaluation-impact-fiche-renseignements.html>

implementation.⁹⁵ In addition, understanding of sex and gender differences still has many blind spots, including how gender intersects with other identity factors like visible minority status, ethnicity, socio-economic status and other structural conditions. This tool is incomplete in assessing how structural factors intersect to produce specific effects on the health of individuals. The 2022-2027 Government Strategy for Gender Equality introduced the GDA+ approach (a synonym for GBA+) which will be implemented in the form of pilot projects.⁹⁶

In the US, the EPA created a mapping tool to support its environmental justice work, the **EJ-Screen**,⁹⁷ which provides it with a nationally consistent dataset and approach to combining environmental and demographic indicators. All indicators used are then geo-located and publicly accessible through detailed mapping. The EJ-Screen is based on the work of the California Office of Environmental Health Hazard Assessment, which created indicators that measure vulnerability in four broad groups: exposures, environmental effects, sensitive populations, and socioeconomic factors.⁹⁸ **Quebec has fertile ground to carry out this work and become a leader in developing its own socio-environmental vulnerability index, coupled with specific climate vulnerability issues.**

Several tools and data that can be used as a basis for developing such an index already exist:

- The Plan national de surveillance en santé environnementale with geographic indicators identified using geomatics. The Géoportail de santé publique du Québec,⁹⁹ a public mapping platform where the geographical variation of health and environmental indicators across the territory of Quebec can be viewed, is an excellent tool likely to support the detailed analysis of environmental injustice by combining environmental and social indicators.
- Numerous data from different ministries and agencies of the Quebec government are geolocated and made available on a mapping platform. For example, the location of industrial sites, the road network.¹⁰⁰
- The MELCC produces data on contaminated land, industrial sites, fixed and mobile contaminant production sources.
- We already produce data on socio-economic factors.
- The Institut National de Santé Publique du Québec (INSPQ) already tracks SHIs, as do the regional public health directorates for certain indicators.

There are gaps, particularly in the monitoring of the health status of the First Nations known as “non-agreement” by the Quebec government, who are not, or are only marginally, consulted by the government authorities. In terms of public health, the Cree, Naskapi and Inuit are involved because of their link to the Quebec network (signing of

⁹⁵ Secrétariat à la condition féminine (2022). *Stratégie gouvernementale pour l'égalité entre les femmes et les hommes 2022-2027*. Available at <https://cdn-contenu.quebec.ca/cdn-contenu/adm/min/education/publications-adm/SCF/publications/plans-strategiques/Strategie-egalite-2022-2027.pdf?1655999595>

⁹⁶ Ibid.

⁹⁷ EPA (n.d.). *EJScreen: Environmental Justice Screening and Mapping Tool*. Available at <https://www.epa.gov/ejscreen>

⁹⁸ OEHHA (n.d.). *Learn more about the indicators that make up CalEnviroScreen*. Available at <https://oehha.ca.gov/calenviroscreen/indicators>

⁹⁹ INSPQ (n.d.). Géoportail de santé publique du Québec. Available at <https://cartes.inspq.qc.ca/geoportail/>

¹⁰⁰ Ministère de la Sécurité publique (n.d.). Infrastructure géomatique ouverte. Available at <https://geoegl.msp.gouv.qc.ca/igo2/portail/>

agreements), but there is a need to ensure that the other Nations are consulted in the same way for all matters concerning them, by having a permanent voice at the table of public health directors. The INSPQ's offer of expertise and skills development is currently accessible to partners in non-treaty territories in Quebec through collaboration with the First Nations of Quebec and Labrador Health and Social Services Commission (FNQLHSSC)¹⁰¹ and other organizations. Nevertheless, in order to fill the gaps in the monitoring plans set up by the Quebec authorities, the FNQLHSSC has developed a portal on the monitoring of the health status of its populations and develops indicators annually, which should be integrated into such an index.¹⁰²

Covid-19 and Specific Data

The regional public health directorate of Montréal collected data according to very specific characteristics (racialized people, black people, material deprivation) that highlight the presence of inequalities in the impacts of the Covid-19.^{103,104} The same type of data is needed to identify environmental injustice and implement adequate climate change adaptation measures aimed at the most vulnerable communities.

Thus, a lot of data is already produced but is not cross-referenced to identify situations of environmental injustice or at risk of becoming so. Quebec has many tools to build a socio-environmental and climate vulnerability index. Climate change, SHIs and population ageing are identified as major cross-cutting issues today by the Programme national de santé publique 2015-2025.¹⁰⁵ Identifying such inequities would yield many benefits: better planning for extreme events due to climate change (e.g., heat waves), implementation of solutions tailored to the needs of vulnerable populations, fewer deaths and a better overall quality of life. As an example, we welcome the fact that the Plan d'action interministériel 2022-2025 under the Politique gouvernementale de prévention en santé (PGPS) has launched a workstream to document the health consequences of the combination of risk factors related to poor indoor and outdoor air quality, environmental noise, and social inequities, and then to identify avenues for mitigation.¹⁰⁶ As the climate crisis continues to worsen, we need to generalize this type of approach to guide environmental decision-making.

¹⁰¹ INSPQ (n.d.). Indigenous Health. Available at <https://www.inspq.qc.ca/en/indigenous-health>

¹⁰² FNQLHSSC (n.d.). Health status surveillance and determinants. Available at <https://cssspnql.com/en/services-en/surveillance-de-letat-de-sante-et-de-ses-determinants/>

¹⁰³ Direction régionale de santé publique de Montréal (2020). *Inégaux face à la pandémie : populations racisées et la Covid-19*. Available at http://emis.santemontreal.qc.ca/fileadmin/emis/Sant%C3%A9_des_Montr%C3%A9alais/D%C3%A9terminants/conditions_sociales/Populations_racis%C3%A9es/Populations-Racisees-Covid-19_26_a%C3%BBt_2020.pdf

¹⁰⁴ Direction régionale de santé publique de Montréal (2021). *Inégaux face à la pandémie : des écarts qui persistent*. Available at <https://santemontreal.qc.ca/fileadmin/fichiers/Campagnes/coronavirus/situation-montreal/point-sante/inegalites-montreal/Inegaux-Pandemie-EcartsQuiPersistent-FR.pdf>

¹⁰⁵ Gouvernement du Québec (2015). *Programme national de santé publique 2015-2025*. Available at <https://publications.msss.gouv.qc.ca/msss/fichiers/2015/15-216-01W.pdf>

¹⁰⁶ Gouvernement du Québec (2022). *Un projet d'envergure pour améliorer la santé et la qualité de vie de la population. Plan d'action interministériel 2022-2025 de la Politique gouvernementale de prévention en santé*. Available at <https://publications.msss.gouv.qc.ca/msss/fichiers/2022/22-297-05W.pdf>

✓ TAKEAWAYS

Not all population groups have the same degree of vulnerability to environmental risks. Certain health determinants interact to form an accumulation of risks within certain population categories, due to existing inequalities. **To identify vulnerability profiles, Quebec should work on an index and indicators of socio-environmental vulnerability, combined with specific climate vulnerability issues.**

Promote the Specific Participation of Marginalized Groups

As shown in the first part of the report, the communities most vulnerable to environmental disturbances very often live in situations that marginalize them. They are therefore more difficult to reach. However, in order to achieve just environmental governance, it is not only important to describe the cumulation of inequalities and identify vulnerable populations, but also to **couple this work with participatory processes**, listening to them and including them in decision-making processes. In particular, it is essential to support their self-determination and to bring decision-making as close as possible to the communities concerned.

Ensure Effective Access to Information and an Inclusive Participation Process

First, there are many situations where local populations are consulted at the bare minimum, or not even informed, when a project is planned in their living environment. In the borough of Mercier-Hochelaga-Maisonneuve in Montréal, a project to set up a cargo transfer platform by Ray-Mont Logistique near a residential and long-term care centre (CSHLD) and social housing, likely to cause numerous environmental disturbances, is under development without

consultation of the borough population by the MELCC. Despite the Borough's attempt to create a space for dialogue, it does not have decision-making power in this matter. In June 2022, the mobilized citizens asked that the project be examined through an environmental impact assessment and review procedure, which would allow for public hearings to be held by the BAPE.¹⁰⁷

The BAPE in a Few Words

In the south of Quebec, the *Environment Quality Act* prescribes the steps to be taken when a proponent wants to carry out certain projects likely to have environmental impacts. Depending on the environmental risk associated to a project or an activity, a government authorization must then be issued. Projects considered to have a high environmental risk (determined by by-law) are subject to assessment procedure and environmental impact assessment. The promoter must then conduct an impact study, the scope and extent of which is set out by the MELCC. A public information period follows, during which any individual, group or municipality may request public consultation or mediation on the project by stating the reasons for such a request and interest in the environment affected by the project. In response, a public audience is initiated, with the purpose of informing government decision-making by providing the Ministère de l'Environnement et de la Lutte contre les changements climatiques with findings and insights that take consider public concerns. The BAPE conducts enquiries on general environmental issues and public consultations on projects subject to the environmental impact assessment and review procedure.¹⁰⁸ It establishes rules of procedure for public consultation. For activities considered to have no environmental risk (exempted by law of all obligations), low risk (possible if a statement of compliance is provided) or moderate risk (ministerial approval required), no public participation procedure is required.

¹⁰⁷ Paré, J. (2022). *Ray-Mont Logistiques: le recours à un BAPE de nouveau demandé*. *Journal Métro*. Available at <https://journalmetro.com/local/hochelaga-maisonneuve/2849000/ray-mont-logistiques-recours-bape-nouveau-demande/>

¹⁰⁸ Environment Quality Act, CQLR c Q-2, art. 6.3.

Moreover, when they exist, participation spaces are not accessible to everyone. Access to participation spaces is not the same for everyone. Well-known social phenomena, such as stigmatization, discrimination, self-exclusion and access barriers (financial, organizational, physical, social or literacy) marginalize certain groups, and as a result the spaces for citizen participation are themselves structured by inequalities.¹⁰⁹ To combat these phenomena, several examples of **community engagement practices for health equity** have been shown to be relevant. Community engagement for equity is about letting the voices of community members undergoing SHIs influence and inform decisions about population and public health initiatives.¹¹⁰ For example, under the health component of the Plan d'action québécois sur les changements climatiques 2006-2012, the INSPQ was commissioned by the Ministère de la Santé et des Services sociaux (MSSS) to support projects that reduce the impact of climate change on the health of vulnerable populations. The participatory approach was used to mobilize and involve the community in the implementation of strategies to reduce the number of urban heat islands in the Montréal region. The involved parties were invited to participate in developing the approach and implementing and interpreting the results. The findings revealed that the projects were positively received by communities, especially those living in vulnerable situations.¹¹¹

The principle of culturally relevant **participatory democracy** is also an important approach to addressing the knowledge systems of Indigenous, racialized and immigrant communities in order to engage them in environmental issues. Participatory democracy provides people with the education

and skills to understand and communicate in the technical terms often used by environmental professionals. If implemented in a culturally relevant way, it can provide these communities with more opportunities and avenues for meaningful public participation and consultation in decision-making processes related to environmental assessments and other environmental issues affecting them. In other words, it can ensure that the people most affected by these decisions are involved from the outset and throughout the entire process.¹¹²

This type of approach should be developed in connection with the major projects submitted to the BAPE to improve the participation of marginalized communities in the consultation process. A study conducted for the BAPE in 2018 reveals that only 25.4% of respondents believe that the BAPE offers sufficient support to citizens to encourage their participation. The solution most frequently mentioned to encourage participation is to effectively reach out to the citizens concerned by the project at issue.¹¹³ Working with organizations that represent affected and vulnerable populations is a good way to gather their concerns.

Thus, Quebec must review its current consultation procedures, which do not sufficiently take into account the local issues of people in vulnerable situations nor prioritize them in subsequent decision-making mechanisms. This can only be done by devoting time and resources to building relationships and cultivating trust, creating spaces and processes of engagement that are culturally relevant, inclusive, and safe for populations experiencing marginalization. In return, only through

¹⁰⁹ Godrie, B. et al. (2018). *Participation citoyenne et recherches participatives dans le champ des inégalités sociales*. Nouvelles pratiques sociales, 30(1). Available at <https://www.erudit.org/fr/revues/nps/2018-v30-n1-nps03972/1051406ar.pdf>

¹¹⁰ Collaborating Centre for Determinants of Health (2022). *Glossary of Essential Health Equity Terms*. Available at <https://nccdh.ca/learn/glossary/>

¹¹¹ Diallo, T. (2021). *Tools and Methods for Integrating Health into Climate Change Adaptation and Mitigation Policies and Strategies*. National Collaborating Centre for Healthy Public Policy. Available at <http://www.ncchpp.ca/docs/2021-Climat-Change-Tools-And-Methods-Integrating-Health.pdf>

¹¹² Waldron, I.R.G. (2018). *There's something in the water: Environmental racism in Indigenous & Black communities*. Halifax: Fernwood Publishing.

¹¹³ Observatoire de la consommation responsable (2018). *Le BAPE et la participation citoyenne*. Available at <https://voute.bape.gouv.qc.ca/dl?id=00000047779>

an adapted process, effective and people-centred policies can be developed. Effective community participation helps to democratize decision-making processes, empower communities, ensure informed decision-making based on local knowledge and develop sustainable recommendations.¹¹⁴

Respect the Self-Determination of Indigenous Peoples

Letting communities affected by projects that may affect their health and environment decide is essential to achieving environmental justice. Meaningful community participation through the principle of participatory democracy, the right to self-determination and free, prior and informed consent are central to environmental justice. And yet, the rights of many Indigenous communities are actively violated when projects are planned or developed in their territories. For example, the Sayona Mining Company's Tansim lithium mining project affecting the unceded ancestral territory of the Long Point First Nation in Abitibi-Témiscamingue. The Council specifically requested carrying out its own impact assessment, as the project is in a highly culturally significant site on their ancestral territory, still little affected by resource exploitation.¹¹⁵ In fact, in April 2022, the Assembly of First Nations Quebec-Labrador's announced the creation of a Self-Determination and Self-Government Committee to support First Nations governments in implementing their right to self-determination.

For the Quebec government, adopting UNDRIP would be a first step towards redressing environmental injustice that is only being exacerbated by inaction. It is worth noting that on October 8, 2019, the National Assembly of Quebec unanimously adopted a motion

asking the government to "recognize the principles and to commit to negotiate the implementation of the United Nations Declaration on the Rights of Indigenous Peoples with the First Nations and Inuit."¹¹⁶ It is also worth noting that the Declaration has legal implications for national and international law, as well as for regional human rights systems. It was precisely because of the common failure of international, national and subnational legal systems to consider the interests of Indigenous Peoples that the text was created. Its adoption, originally supported by 143 countries, essentially denounced a secular global trend of systemic injustice that, on the national scale, included employer legislation, guardianship systems, forced assimilation and other forms of government aggression and neglect. As we will see in the next section, the consequences of colonialism are part of the structural determinants that must be worked on to achieve environmental justice in Quebec.

✓ TAKEAWAYS

The participation of marginalized communities in decision-making processes is essential to achieving environmental justice. **This means making an effort to reach out to them or the groups that represent them to counteract the patterns of exclusion that prevent them from participating.** Respecting the free, prior and informed consent of Indigenous Peoples is also imperative to achieving environmental justice.

¹¹⁴ Gauvin, F. and Ross, M. (2012). *Citizen Participation in Health Impact Assessment: An Overview of Issues*. National Collaborating Centre for Healthy Public Policy. Available at http://www.ncchpp.ca/docs/EIS-HIA_ParticipationOverview_En.pdf

¹¹⁵ Mining Watch Canada (2022). *Long Point First Nation Requests Indigenous-Led Impact Assessment and a Cumulative Impact Assessment on All Sayona Mining Lithium Activities*. Available at <https://miningwatch.ca/news/2022/3/21/long-point-first-nation-requests-indigenous-led-impact-assessment-and-cumulative>

¹¹⁶ Assemblée nationale du Québec (2019). *Journal des débats de l'Assemblée nationale*. Available at http://www.assnat.qc.ca/fr/travaux-parlementaires/assemblee-nationale/42-1/journal-debats/20191008/254021.html#_Toc21534834

Working on the Structural Determinants of Health

Several studies show that despite the numerous appeals for more structural action to reduce health inequalities (regarding structural determinants of health, e.g., market economy, impact of colonialism, social policies), policies have more generally focused on promoting healthy lifestyles and behaviour (regarding individual determinants of health).¹¹⁷ This has the consequence of accentuating the responsibility for health and halt the reduction of inequalities or even increase them.¹¹⁸ There is a need to recognize the systemic problems that expose some communities to greater environmental risks, and to work at that level to effectively reduce vulnerability to environmental risks. This includes decolonizing practices and changing our relationship to the environment, and to the economy.

Decolonizing our Practices and our Relationship with the Environment

The environmental injustices experienced by Indigenous Peoples are amplified by specific social processes associated with colonialism, the denial of their right to self-determination on a historical basis, pre-existing health conditions and issues of access to health care. Indeed, structural racism, which includes past and present colonialism, historical and cultural trauma, systemic discrimination and social exclusion is an important factor in health inequities and environmental injustice. Governments, health care providers and policy makers cannot assess the current health of Indigenous Peoples without

considering the colonial context in which they were dislodged from their territories, imposed Western patriarchy and prohibited their cultural and spiritual practices. Indigenous Peoples have been forcibly stripped of their traditional forms of governance, legal systems, economic systems and social structures through violent policies of eradication, dispossession and land theft.¹¹⁹ During his visit in 2019, the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes made clear conclusions about the prevalence of discrimination in Canada's laws and policies on hazardous substances and waste: marginalized groups, particularly Indigenous Peoples are disproportionately exposed to toxic substances and subjected to conditions that would be unacceptable elsewhere in Canada.¹²⁰

This finding also reflects the reality that Indigenous Peoples face a disproportionate burden of health problems, such as higher rates of infant mortality, tuberculosis and infectious diseases, injury, mortality among children and adolescents, obesity and diabetes, youth suicide and exposure to environmental contaminants.¹²¹ As Quebec Native Women pointed out: "The effects of colonization persist when Indigenous Peoples continue to face the devaluation of their holistic health."¹²² The **holistic view of health** emphasizes a global view of the world that recognizes and respects the interactions between all the elements that make up the Universe and its complexity: the health of communities, the health of the environment and the

¹¹⁷ Morrison, V. (2017). *Policy Approaches to Reducing Health Inequalities: Social Determinants of Health and Social Determinants of Health Inequalities*. National Collaborating Centre for Healthy Public Policy. Available at https://www.inspq.qc.ca/sites/default/files/publications/2760_approches_politiques_reductions_inegalites_sante.pdf

¹¹⁸ Ibid.

¹¹⁹ Assembly of First Nations (2017). *The First Nations Health Transformation Agenda*. Available at https://www.afn.ca/uploads/files/fnhta_final.pdf

¹²⁰ General Assembly of the United Nations (2020). *Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes on his Visit to Canada*. Available at <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G20/328/38/PDF/G2032838.pdf?OpenElement>

¹²¹ Government of Canada (2022). *Climate Change and Health Equity*. In P. Berry and R. Schnitter (ed.), *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*. Available at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>

¹²² Quebec Native Women Inc. (2019). *2019 Climate Change Report*. Available at https://www.faq-qnw.org/wp-content/uploads/2019/06/CC_report2019.pdf

health of individuals are intimately interdependent and interrelated. This is why Indigenous Peoples believe that maintaining good health goes hand in hand with the preservation of natural resources and social cohesion.¹²³

Furthermore, the impact of climate change on the health of Indigenous Peoples is not limited to physical impact but is also cultural in nature. For example, in Inuit Nunangat, the significant reduction in sea ice coverage jeopardizes Inuit safety and hunting practices, affecting their livelihood, food security and cultural identity. Inuit communities are also increasingly exposed to food- and water-related diseases and vector-borne and zoonotic diseases.¹²⁴

“Indigenous peoples have been affected by climate change in serious ways, including threats to food security, the sad disappearance of our relations including caribou and birds, our holistic well-being and access to traditional cultural practices”

Quebec Native Women, Climate Change Report 2019.

Similarly, conversations on climate often disregard the historical and present legacy of colonization. “Climate change is exacerbating many of the effects of colonization, including those related to mental health, well-being, poverty, poor housing conditions, food insecurity, unsafe drinking water and the loss of rights, culture and access to land. The situation experienced by Indigenous Peoples must be integrated into analyses of the distribution and scope of climate change impact. In this regard, the fight against climate change cannot be separated from the broader project of Indigenous self-determination and reconciliation.”¹²⁵

The Quebec government has everything to gain by developing environmental action by and with the communities most affected by environmental injustices, and by making progress on the nation-to-nation relationship with the 11 Indigenous nations whose traditional and unceded territories make up Quebec. In this sense, the Assembly of First Nations Quebec-Labrador published an Action Plan on Racism and Discrimination¹²⁶ in 2020 in order to allow all types of environments and people to engage with First Nations against racism and discrimination. The Government of Quebec should support the implementation of this plan. Indigenous Peoples are pushed into a state of extreme vulnerability because of climate change and ongoing colonialism, the consequences of which affect all spheres of their health. Their knowledge, their relationship to health and nature must guide us, just as we must let them show us the way and recognize their expertise and experience in ecological and environmental issues.

✓ TAKEAWAYS

The environmental injustices experienced by Indigenous Peoples are amplified by social processes associated with the colonialism they are subjected to, the denial of their right to self-determination on a historical basis, pre-existing health conditions and issues of access to health care. Their knowledge and their relationship to health and nature should serve as guidelines. We should recognize their expertise and experience in regard to ecological issues and the environment.

¹²³ INSPQ (2014). *Changements climatiques et santé en Eeyou Istchee dans le contexte des évaluations environnementales*. Available at https://www.inspq.qc.ca/sites/default/files/publications/1927_changements_climatiques_eeyou_istchee.pdf

¹²⁴ Inuit Tapiriit Kanatami (2019). *National Inuit Climate Change Strategy*. Available at https://www.itk.ca/wp-content/uploads/2019/07/ITK_Climate-Change-Strategy_English.pdf

¹²⁵ Assembly of First Nations (2020). *National Climate Gathering Report. Driving Change, Leading Solutions*. Available at https://www.afn.ca/wp-content/uploads/2021/04/Climate_Gathering_Report_ENG.pdf

¹²⁶ Assembly of First Nations Quebec-Labrador (2020). *AFNQL Action Plan on Racism and Discrimination*. Available at https://apnql.com/en/wp-content/uploads/2020/09/ACTION-PLAN-ON-RACISM-AND-DISCRIMINATION_ENG.pdf

Rethinking our Relationship to the Economy

The costs associated with protecting the environment and combating climate change are often used as an argument to justify the status quo.

First, it is important to put into perspective the costs of action and of inaction to prevent the health impacts of climate change issues. The assessment of climate change impact and their costs for Quebec and the Quebec State carried out by Ouranos in 2015 predicts exorbitant costs generated by the health impact of heat, zoonosis and ragweed pollen. For example, according to their analysis, the costs of heat over a period of 50 years (2015-2065) would amount to more than \$370 million for the government. The costs would amount to nearly \$33 billion for society, mainly due to premature death.¹²⁷ This report highlights the benefits of prevention for effectively reducing climate change costs and the already high costs without the impact of climate change, particularly from a healthcare perspective. In addition, Quebec's health and social services system is not prepared to manage and reduce the health impact of climate change,¹²⁸ and it faces many obstacles to adapting to this public health crisis, such as the absence of sustainable and sufficient funding for the hiring of a resource and the implementation of structuring adaptation measures in the health network in order to perpetuate the actions, resources and expertise developed in climate change.¹²⁹ It should also be noted that public health differs from biomedicine and other health care components. It is characterized by a focus **on populations and prevention**. The

government itself points out that the literature on the subject is unanimous: investing in prevention leads to savings. For every dollar invested in public health, \$14 is saved (median value).¹³⁰

Second, the costs of inaction will be increased for people in vulnerable situations, both because of climate change and because of SHI. Social inequalities as well as SHIs have a significant impact on **society as a whole**. Health vulnerabilities and inequalities have an economic impact and a significant cost to public finance and a hindrance to sound public health governance (e.g., low-income populations have experienced disproportionately high rates of Covid-19 infection, hospitalization and mortality). **Overall, unequal societies are less healthy.**¹³¹ It has been shown that wealth gaps are more deleterious to health than average wealth. And while Quebec is known to have public policies that better support vulnerable groups than other Canadian provinces and territories, Quebecers have not escaped the global trend of growing inequality among socio-economic groups, particularly between the most advantaged and disadvantaged groups.¹³² Working on the structural determinants of health and reducing social inequalities, which are exacerbated by the market economy and the orientation of public policies, is therefore essential to reduce environmental injustices and SHI.

¹²⁷ Larrivée, C., et al. (2015). *Évaluation des impacts des changements climatiques et de leurs coûts pour le Québec et l'État québécois. Rapport d'étude. Ouranos*. Available at <https://www.environnement.gouv.qc.ca/changementsclimatiques/evaluation-impacts-cc-couts-qc-etat.pdf>

¹²⁸ Clark, D. et al. (2021). *The Health Costs of Climate Change. How Canada Can Adapt, Prepare, and Save Lives*. Canadian Institute for Climate Choices. Available at https://climatechoices.ca/wp-content/uploads/2021/06/ClimateChoices_Health-report_Final_June2021.pdf

¹²⁹ INSPQ (2020). *L'adaptation aux changements climatiques dans le réseau de la santé : les progrès, les facteurs facilitants, les barrières et les besoins*. Available at <https://www.inspq.qc.ca/sites/default/files/publications/2719-adaptation-changements-climatiques-reseau-sante.pdf>

¹³⁰ Gouvernement du Québec (2022). *Un projet d'envergure pour améliorer la santé et la qualité de vie de la population. Plan d'action interministériel 2022-2025 de la Politique gouvernementale de prévention en santé*. Available at <https://publications.msss.gouv.qc.ca/msss/fichiers/2022/22-297-05W.pdf>

¹³¹ INSPQ (2021). *Réduire les vulnérabilités et les inégalités sociales : tous ensemble pour la santé et le bien-être*. Available at <https://www.inspq.qc.ca/sites/default/files/publications/2781-reduire-vulnerabilite-inegalites-sociales.pdf>

¹³² Ibid.

In January 2021, the Biden Administration created the **Justice40 initiative**, through Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*.¹³³ with the goal of advancing environmental justice by allocating at least 40 percent of the overall benefits of federal investments in areas such as climate, clean energy, public transit, affordable and sustainable housing to disadvantaged communities, which are historically overexposed to environmental problems and underserved by government.¹³⁴ Quebec could learn from this initiative to advance environmental justice in Quebec.

✓ TAKEAWAYS

The costs of inaction on climate change will lead to massive public health expenses. These costs will be even greater for vulnerable populations and for the health and social services system.

Environmental justice invites us to act to reduce the social health inequalities related to the environment which are being exacerbated by our current economic system.

Improving the Broad Determinants of Health

Environmental justice teaches us that we need to act on the processes and root causes of inequality - the underlying decision-making mechanisms and structural determinants that create SHIs. It is also important to act on the entire causal chain that shapes vulnerability (more exposure, more impacts due to more prevalent pre-existing health conditions, fewer resources to protect against the deleterious

effects of exposures). Thus, culturally safe care and services, health impact assessments, and PGPS are three elements that should be implemented or enhanced to reduce environment-related SHIs.

Culturally Secure Healthcare

Access to health and social services is an important component of community resilience and, more broadly, is a determinant of health that influences the overall health status of populations. It is essential that the government ensures this access to all populations. In Quebec, Joyce's Principle reinforces and reminds the urgency to act on this determinant of health among Indigenous communities. As previously discussed, Indigenous people face experiences of structural racism in health. This is why the Atikamekw Council of Manawan and the Atikamekw Nation Council have taken steps leading to the formulation of Joyce's Principle, which aims to ensure that all Indigenous people have equal and non-discriminatory access to all social and health services and the right to enjoy the highest attainable standard of physical, mental, emotional and spiritual health. Joyce's Principle requires mandatory recognition of and respect for Indigenous Peoples' traditional and contemporary knowledge regarding health.¹³⁵ This request for a formal commitment is addressed to the governments of Quebec and Canada.

Health Impact Assessments

Like the regional public health directorates, the INSPQ has expertise in health impact assessment¹³⁶ (HIA). This is an approach aimed at anticipating and documenting the potential impact of a policy or project under development on all the

¹³³ White House (2021). *Executive Order on Tackling the Climate Crisis at Home and Abroad*. Available at <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

¹³⁴ White House (2021). *The Path to Achieving Justice40*. Available at <https://www.whitehouse.gov/omb/briefing-room/2021/07/20/the-path-to-achieving-justice40/>

¹³⁵ Manawan Atikamekw Council and Atikamekw Nation Council (2020). *Joyce Principle*. Available at https://principedejoyce.com/sn_uploads/principe/Joyce_s_Principe_brief___Eng.pdf

¹³⁶ INSPQ (n.d.). *Offre de service en soutien à la réalisation d'évaluations d'impact sur la santé (EIS) en milieu municipal destinée au réseau de santé publique*. Available at <https://www.inspq.qc.ca/eis/soutien/offre-de-service>

determinants of health. In an HIA, the distribution of such effects among distinct population groups is assessed to avoid the emergence or increase of social inequalities in health. Such a prospective analysis is increasingly used at the municipal level, but it can also be used by all decision makers. **It is an avenue that could hold promise for better preventing environmental injustices, especially if conducted as part of an environmental impact assessment.** In Ontario, the Ministry of Health and Long-Term Care specifically created a health equity impact assessment to promote health equity and reduce avoidable disparities between population groups.¹³⁷ However, the need to narrow the gap between the health status of Indigenous Peoples and non-Indigenous peoples raises concerns about impact assessment (IA) systems for Indigenous contexts, as they do not systematically contain a HIA.

The legitimacy of an IA depends on meaningful participation in the process and the decisions that arise from it. However, Indigenous Peoples' worldviews are very different from the western approaches to assessment that underlie the practice of IA. The models for social determinants of health used in HIAs, although usually broad in scope, have been developed from a western worldview, from scientific knowledge derived from that vision, and from a Cartesian and rationalistic logic. There is therefore a discrepancy regarding the views on health, the knowledge systems, the information used to estimate the effects of a project on communities, and the imbalance of power at the time of decision-making. One example of this is the distinction between human health impact assessment and environmental impact assessment, which has no relevance in Indigenous contexts as they are both

part of the same whole.¹³⁸ To identify potential strategies meant to reduce this discrepancy, the National Collaborating Centre for Healthy Public Policy conducted an analysis¹³⁹ of articles on this issue. This led to the following suggestions for action to adjust HIA practice in Indigenous contexts:

- The use of culturally appropriate “health” models and determinants of health adapted to the cultural context and validated by local communities¹⁴⁰;
- The use of analytical tools adapted to Indigenous contexts and validated with local communities;
- Support to Indigenous communities in preparing for impact assessments for them to develop, for example, background information on their values, priorities, non-negotiable aspects of their way of life, state of health condition, etc.;
- Capacity building of Indigenous communities, for example through training opportunities related to impact assessments, in order to foster co-management of various processes and increase opportunities for Indigenous Peoples to collaborate with external experts.

Changes are therefore required in data collection to ensure that traditional knowledge and aspects that impact the health of Indigenous Peoples are considered in IAs. The right to self-determination and free, prior and informed consent must be an integral part of the process. Changes must also be made to the overall approach and working method; they must be made flexible enough to allow time and resources necessary to promote meaningful participation and even co-management.

¹³⁷ Ontario Ministry of Health and Long-Term Care (2021). *Health Equity Impact Assessment*. Available at <https://www.health.gov.on.ca/en/pro/programs/heaia/>

¹³⁸ St-Pierre, L. (2021). *Impact Assessments in Indigenous Contexts: Promising Avenues for Reflection and Improvement for Health Impact Assessments*. National Collaborating Centre for Healthy Public Policy. Available at <https://ccnpps-ncchpp.ca/docs/2021-HIA-Health-Impact-Assessments-in-Indigenous-Contexts.pdf>

¹³⁹ Ibid.

¹⁴⁰ It should be noted that it is possible to refer to the process underway for the First Nations of Quebec. Consult the model developed by the FNQLHSSC: <https://gouvernance.csssbnql.com/en/about/>

The Politique Gouvernementale de Prévention en Santé

Addressing the full range of determinants of health to reduce vulnerabilities and SHIs goes hand in hand with intersectoral collaboration. Indeed, all sectors of intervention, including health and social services, are responsible for reducing SHIs. In adopting the PGPS in 2016, Quebec wanted to act on a set of factors, taking into account cross-cutting issues, in order to improve the health status and quality of life of the population and reduce SHIs. This approach certainly represents a lever for supporting vulnerable groups and reducing SHIs. However, the Plan d'action interministériel 2022-2025 under the PGPS focuses primarily on promoting wellness and healthy living in communities. There is a critical need to enhance this cross-sectoral framework that has the potential to address environmental inequities by working more on the social and structural determinants of health than on individual determinants. Indeed, the vision for health prevention developed in the PGPS is built around four directions that can advance environmental justice:

- Developing people's capacities from an early age;
- Building healthy and safe communities and territories;
- Improving living conditions that promote health;
- Strengthening preventive actions in the health and social services system.

In short, Quebec has the tools at its disposal and several avenues to advance environmental justice. Its civil society and public health community is mobilized and ready to act. This is a unique opportunity to stand out on a Canadian and international scale. Quebec's resilience will depend on its ability to strengthen the political and economic power and voices of the most vulnerable communities.

✓ TAKEAWAYS

Many actions need to be taken to improve the overall determinants of health which will reduce vulnerabilities. **Guaranteeing everyone the right to equitable access to all health and social services without discrimination is one of them. In Quebec, Joyce's principle ensures this for Indigenous communities.** Systematizing health impact assessments when projects are carried out is an approach that could prevent environmental injustices. Finally, ensuring intersectoral collaboration is essential to act on all the determinants of health. Enhancing the framework developed in the PGPS is an approach that could reduce vulnerabilities to environmental risks.



Conclusion

Recommendations for Environmental Justice-Based Governance in Quebec

This report highlighted the presence of environmental and climate injustice in Quebec and the failure of our institutions to adequately identify and remedy them. Mitigating and adapting to climate change is not just the sum of GHG reduction measures and associated costs. It reflects the condition of human life and the health of an entire population. **There is an urgent need to place this issue on the political agenda.**

Provided below are a series of recommendations enabling Quebec to catch up and take on a role of leadership in environmental governance and in the fight against climate change, from a perspective of equity, public health and human rights. The implementation of such measures would be beneficial for Quebec society and not only for vulnerable communities. They would help to avoid creating ineffective public policies, save huge health costs, promote social cohesion and, ultimately, increase Quebec's resilience to the current and future changing climate.

1 Recommendation No. 1:

- **Adopt legislation to advance environmental justice** likely to:
 - Develop a strategy to overcome environmental injustice in Quebec. This strategy should be developed through the Strategic Environmental Assessment process,¹⁴¹ which would ensure a transparent process and public participation;
 - Enhance environmental injustice research and data collection, starting with the integration of ethnocultural data collection into the operation, accountability and decision-making of public sector organizations (Viens Commission's Call for Action No. 4);
 - Identify key documents that officials in every ministry must take into account to progress in terms of environmental justice and develop a procedure to consider environmental justice in the development of laws and regulations;
 - Analyze the Plan for a Green Economy with an environmental justice viewpoint to examine how its measures can impact vulnerable communities.

¹⁴¹ Environment Quality Act, CQLR c Q-2, art. 95.10

- **Establish an advisory committee on environmental justice** comprised of members with knowledge or experience in environmental justice, climate change, disaster preparedness, racism, Indigenous Peoples' rights, public health and other areas of expertise. This committee advises the Ministre de l'Environnement et de la Lutte contre les changements climatiques and the Ministre de la Santé et des Services Sociaux, in order to:
 - Ensure the implementation and monitoring of the law and the intersectoral action required for environmental justice-based governance;
 - Make publicly available recommendations on policies, legislations and regulation that could create or exacerbate environmental injustice within every concerned department.

2 Recommendation No. 2:

- **Expand the right to a healthy environment** by:
 - Amending the Charter of Human Rights and Freedoms to recognize the right to a healthy environment that respects biodiversity as a fundamental right;
 - Creating a mechanism for Quebecers to request BAPE investigation when a violation of their right to a healthy environment is suspected.

3 Recommendation No. 3:

- To be equipped to better **describe situations of environmental injustice** by:
 - Developing a socio-environmental vulnerability index, coupled with specific climate vulnerability issues;
 - Ensuring that environmental justice is considered in regional climate change vulnerability assessment processes and in the design of regional health adaptation plans;
 - Fully adopting an interministerial approach to "health in every policy" with a special focus on Indigenous Peoples' health impact, as requested by the Assembly of First Nations,¹⁴² by building on Section 54 of the *Public Health Act*,¹⁴³
 - Funding research to gain more knowledge on the differentiated impacts of climate change in Quebec, particularly from a socio-economic, gender and racial perspective, but also in terms of disability.

¹⁴² Assembly of First Nations (2017). *The First Nations Health Transformation Agenda*. Available at https://www.afn.ca/uploads/files/fnhta_final.pdf

¹⁴³ Article 54 stipulates that "The Minister is by virtue of his or her office the advisor of the Government on any public health issue. The Minister shall give the other ministers any advice he or she considers advisable for health promotion and the adoption of policies capable of fostering the enhancement of the health and welfare of the population. In the Minister's capacity as government advisor, the Minister shall be consulted in relation to the development of the measures provided for in an Act or regulation that could have significant impact on the health of the population."

4 Recommendation No. 4:

- **Improve public participation in environmental decision-making** by:
 - Providing funding for citizen participation during the public consultations conducted by the BAPE. Such funding could come from the Electrification and Climate Change Fund;¹⁴⁴
 - Enhancing the public consultations conducted by the BAPE, so that groups are consulted on an ongoing basis at each stage of the environmental impact assessment and assessment process. The mandate of the BAPE should continue following the tabling of its report, allowing the public to comment on the MELCC's final conclusions;
 - For the BAPE, approaching the concerned communities in a way that is culturally relevant.

5 Recommendation No. 5:

- For the Indigenous Peoples, climate action is a rights- and responsibilities-based process within a legislative, legal and policy context. It stems from their inherent jurisdiction over their lands and territories and their right to self-determination.¹⁴⁵ The Government of Quebec must therefore take steps to:
 - Pass legislation to **implement the United Nations Declaration on the Rights of Indigenous Peoples**, as initiated in Canada and British Columbia;
 - Take all necessary legislative measures to **implement Joyce's Principle**;
 - Support the implementation of the Assembly of First Nations Quebec-Labrador **Action Plan on Racism and Discrimination**, including the specific component on health.

6 Recommendation No. 6:

- Ensure equity in our environmental actions by:
 - Allocating at least 40% of our Electrification and Climate Change Fund dollars to projects for vulnerable populations to advance environmental justice;
 - Systematizing the use of Gender-based and Intersectional Analysis in the development and analysis of environmental measures.

¹⁴⁴ This fund was created under II.1 of the *Act respecting the Ministère du Développement durable, de l'Environnement et des Parcs*, CQLR, c. M-30.001.

¹⁴⁵ Assembly of First Nations (2020). *National Climate Gathering Report. Driving Change, Leading Solutions*. Available at https://www.afn.ca/wp-content/uploads/2021/04/Climate_Gathering_Report_ENG.pdf

7 Recommendation No. 7:

- Amend Section 31.3 of the *Environmental Quality Act* to:
 - **Formalize the consideration of health and climate change impact** of any project subjected to environmental impact study and assessment procedure, so that these become compulsory considerations in impact assessment and project assessment. When conducted on Indigenous lands, health impact assessment must take into account the holistic view of health to ensure the validity of the process. A participatory approach with communities is essential to the success of such consideration;
 - Formalize **respect for the principle of free, prior and informed consent** of Indigenous Peoples in any project subject to the environmental impact study and assessment procedure proposed on Indigenous territory.

8 Recommendation No. 8:

- Enhance the legal framework to **ensure that the cumulative impact of projects carried out in Quebec are taken into account**. Greater consideration of cumulative impact is essential, and more so for vulnerable populations that may be more exposed to this impact:
 - Establish a regional environmental assessment procedure. Such a procedure would help gain a better understanding of knowledge about the land and its sensitivities and to be better informed when authorizing projects. When planning the land, one must first know it before authorizing activities that can have an impact on it;
 - Adjust the supervision of projects under the *Environmental Quality Act* by creating a mechanism meant to set the level of risk associated with a project based on cumulative impact in the environment affected. Thus, a project that can be carried out through a statement of compliance should instead be granted ministerial approval if the **cumulative impact of different projects** in the given environment justify it.



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