



Canada 2030: Scan of Emerging Issues

Sustainability

Over centuries humans have attempted to manipulate their environment to meet their own needs without consideration of potential environmental costs. This was particularly true during the industrial era and has resulted in unsustainable forms of production, consumption, business practice, waste disposal and a host of other economic, social and governance practices. These practices have resulted in a range of issues (including climate change, pollution, environmental degradation and food insecurity, among others) that exceed the carrying capacity of the planet and are threatening the survival of humanity.

Significant efforts have been underway over the past three decades that aim to address some of these issues through “sustainable development”, defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. The discipline opposes traditional paradigms such as “economic growth at all costs” and seeks to strike a reasonable balance between economic, environmental and social dimensions.

What is changing?

Sustainability is increasingly on the radar for new and influential actors. Sustainability has historically been limited to international debates, but is now gaining the attention of new actors taking action against an unsustainable path to development. Important financial actors, including banks, insurance companies and fund managers (pension, wealth funds), are increasingly requesting more transparency and disclosure from businesses and standards to help them evaluate the risks associated with sustainability issues. A transition towards mandatory disclosure and reporting may force private businesses to align with the best sustainability practices to remain attractive for investors. Cities facing the consequences of unsustainable development practices over the last few decades are multiplying their actions to help improve and protect the wellbeing of their citizens by adopting greenhouse gas (GHG) emissions reduction targets, investing in public mass transit and reviewing land management strategies.

Advancement of science and technology is enabling the “smart” implementation of sustainability. Lack of data is no longer an excuse for ignoring the impacts of socio-economic development strategies on the carrying capacity of the planet. Emerging technologies like the Internet of Things, sensors and satellite imaging contribute to big data analysis, making real-time monitoring of different environmental issues possible (deforestation, melting ice, pollution levels in urban areas, etc.). The integration of these technologies in buildings, vehicles, oceans, soils and space may improve the responsiveness, as well as the reaction time of governments with regards to unsustainable actions. It may also contribute to the development of new metrics and instruments that assess the footprint of products/services, and that monitor the health of natural ecosystems.



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The development of social and environmental tools and metrics are contributing to a re-definition of prosperity.

[Social life-cycle assessment tools](#) can currently be used to measure and evaluate the social impact of goods, services and policies on different stakeholders, including employees, local communities, society, consumers and all the actors across the [value chain](#). At the same time, a “sharing economy” is emerging that may transform our consumption-oriented society. For decades, GDP has been the measure of wellbeing, but emerging metrics such as the [Gross Ecosystem Product](#) and [Genuine Progress Indicators](#) are being developed that may ensure a more equitable balance between the three dimensions of sustainability: economy, society and environment. Anemic economic growth could also put pressure on governments to adopt new metrics that better reflect progress and prosperity compared to GDP alone.

Environmental crises will have system-level impacts resulting in both challenges and opportunities. Extreme drought, rising food insecurity, and water scarcity in some regions of the world may have important impacts over the next 10 to 15 years, including regional conflicts, spread of disease and viruses, and rising commodity prices. Even companies are evaluating their exposure to the rise in extreme weather events and are searching for “climate-proof” regions for their production facilities. Canada has the opportunity to become a preferred destination for climate refugees as well as companies trying to reduce their supply chain exposure to the risks of climate change. Canada may also have an opportunity to become an important producer of water intensive goods in the future.

How Horizons is Contributing to the Conversation

A foresight study led by Policy Horizons Canada is exploring plausible futures for Canada over the next 10-15 years in the area of sustainability.

The exercise is exploring questions such as:

- What disruptions are likely to impact achieving/making progress toward sustainability?
- What challenges and opportunities could these disruptions create for Canada?
- What could a “sustainable society” look like in Canada in 2030?

With the active participation of experts from governmental and other organizations, the exercise is identifying the key factors driving disruptive change, exploring plausible futures in the form of scenarios, and identifying key emerging policy challenges and opportunities.

Policy Horizons Canada (Horizons) is a strategic foresight organization within the Public Service of Canada with a mandate to help anticipate emerging policy challenges and opportunities and to experiment with methods and technologies to support resilient policy development. This document is a scan of some emerging issues with potential implications for public policy over the next 10 to 15 years. It does not attempt to predict the future. The purpose is to stimulate reflection and dialogue and support the development of public policy that is more robust and resilient across a range of plausible futures. The views contained in this document do not necessarily represent the views of Horizons, the Government of Canada or participating departments and agencies.