

CATALYST

FUTURE OF CANADA CENTRE

Global disruption in 4D: Exploring intersecting forces impacting Canada's future



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COMPLEX ISSUES NEED SOPHISTICATED RESPONSES

→ *Uncertainty about the future of the world has deepened in recent years.*

Numerous events with global ramifications—from pandemics and destructive weather events to lengthy, violent conflicts and technological revolutions—have left leaders with more questions than answers. While Canada possesses enduring advantages, it will have to confront and adapt to this environment of volatility to ensure a secure and prosperous future for all of us who call it home.

We see four, interconnected disruptions at the global level that are having a significant impact on life in Canada: the **talent transformation**, the **artificial intelligence (AI) revolution**, the **race to net-zero**, and **geopolitical uncertainty**. These forces are deeply intertwined, with each influencing the others. For instance, capitalizing on the immense opportunity of AI requires first equipping workers with the skills to use it effectively. Similarly, making progress on net-zero emissions goals means also being aware of the potential for geopolitical conflict to rupture the supply chains that bring in the goods critical to the energy transition.

To build a better future, Canada must address these disruptions not only individually but also by recognizing the trade-offs and interdependencies between them. This calls for systems-level thinking, greater collaboration, and a willingness to think innovatively. At Deloitte, we believe we have both **a calling and a duty** to drive positive change for Canada. While this report is not a prediction nor a deep dive, we do aspire for it to shift the perspectives of our country's leaders, prompting them to examine these disruptions separately and in relation to each other as they **map out a thriving future together**.

THE FOUR DISRUPTIONS

TALENT TRANSFORMATION

Since 2020, the **world of work** has changed dramatically. Employers are now confronted with growing **shortages of both workers and skills**, caused by an aging population, rapidly changing skills needs, and evolving worker preferences.

AI REVOLUTION

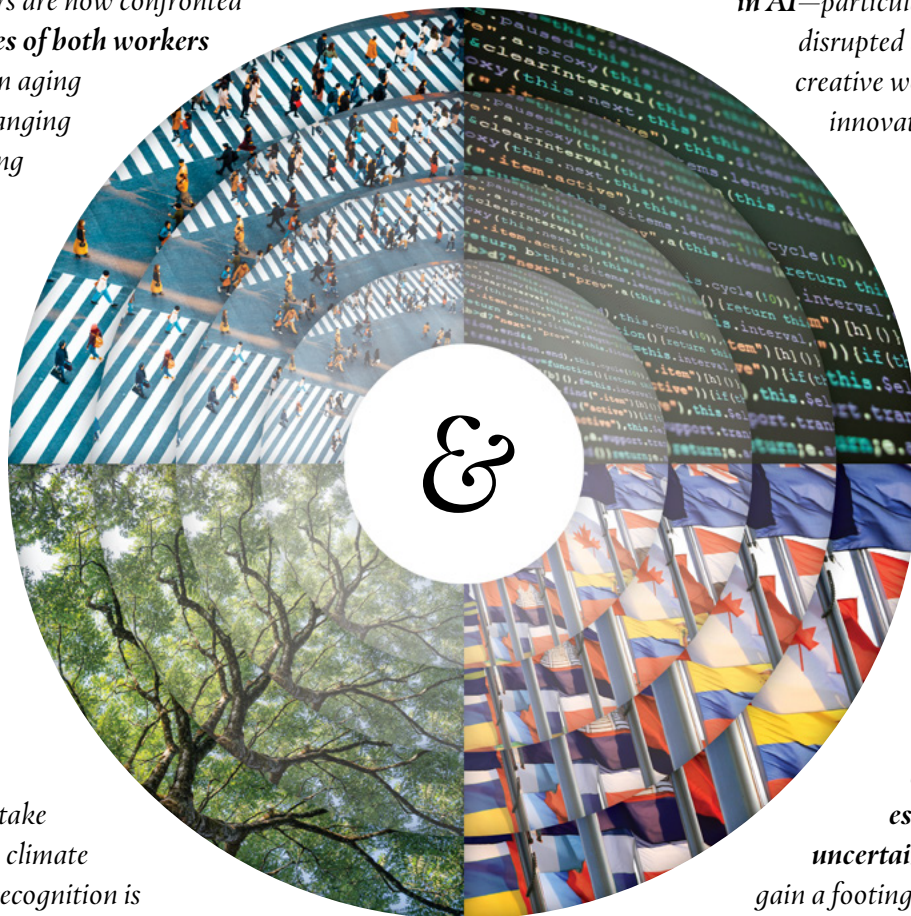
In recent years, the **explosion of advancements in AI**—particularly Generative AI—has disrupted activities from coding to creative work to health care. These innovations are revolutionizing how **humans interact with technology**.

THE RACE TO NET-ZERO

We have reached an **inflection point**: we're running out of time to take tangible action to slow climate change. This growing recognition is prompting accelerated efforts worldwide to **achieve a net-zero future**.

GEOPOLITICAL UNCERTAINTY

Global power dynamics are in flux, leading to an **escalation in geopolitical uncertainty**. As countries seek to gain a footing or secure advantages in this environment, we're seeing far-reaching repercussions on **supply chains, trade, and security**.



TALENT TRANSFORMATION



→ **Phenomenon** — Since 2020, the world of work has transformed dramatically. Employers today are confronted with growing shortages of both workers and skills, caused by an aging population, rapidly changing needs in skills, and evolving worker preferences.

→ **Drivers** — Canada's labour force growth rate has been trending downward since 2000, but the decline has gathered speed in recent years as baby boomers—those born between 1945 and 1964, members of one of Canada's largest generations—began to retire. At the same time, as technology advances and industries evolve, employers' needs are shifting: the demand for technical skills is growing, digital literacy is becoming a prerequisite for most jobs, and human skills such as communication, collaboration, creativity, and problem-solving are more important than ever. Furthermore, since the pandemic, workers have become more interested in flexibility and purposeful work.¹

→ **Impact** — If this disruption in the workforce isn't addressed soon, widespread and prolonged job vacancies and skills shortages will continue to negatively impact business innovation, growth, and

productivity.² This is hurting Canada's overall competitiveness and growth potential. But if we invest in reskilling the workforce, we can bridge skills gaps and enhance one of our country's signature competitive advantages: a world-class, highly educated labour force, one that consistently places Canada at the **top of G7 countries** for share of working-age people with a college or university credential (57.5%).³

At the international level, reskilled workforces could contribute up to **US\$6.5 trillion to the global GDP** and create an estimated 5.3 million new jobs by 2030.⁴ For Canada, navigating the evolving workforce is an opportunity to address its persistently lagging labour productivity, which stood at just 18th among Organisation for Economic Co-operation and Development (OECD) countries in 2023.⁵

AI REVOLUTION



→ **Phenomenon** — In recent years, the explosion of advancements in AI—particularly Generative AI (GenAI)—has disrupted activities from coding to creative work to health care. These innovations are revolutionizing how humans interact with technology.

→ **Drivers** — The modern concept of AI has been around for several decades, but recent breakthroughs—including the exponential growth in computing power, the proliferation of data, and advancements in machine learning techniques—have made AI technologies more accurate, reliable, and capable of handling complex tasks. A crucial factor in the acceleration of AI-driven disruption is the democratization of the technologies. The development of user-friendly tools, frameworks, and platforms has made AI more accessible to individuals, startups, and small businesses, empowering a wider range of users to capitalize on its capabilities.

→ **Impact** — Our research suggests that Canadian organizations are lagging in AI adoption due in large part to the difficulties they face in hiring the talent they need to deploy and leverage AI. They

also struggle to commercialize AI, which poses particular challenges for startups and scale-ups, many of which find it difficult to grow and remain in Canada. Failing to address these challenges could result in missed opportunities for AI-enabled economic growth and productivity gains. And these opportunities are significant: by one estimate, harnessing GenAI alone could result in a remarkable **7% increase in global GDP**—that’s nearly US\$7 trillion—as well as a **1.5-percentage-point increase in productivity growth** over a 10-year period.⁶

THE RACE TO NET-ZERO



→ **Phenomenon** — We have reached an inflection point: we're running out of time to take tangible action to slow climate change. This growing recognition is prompting accelerated efforts worldwide to achieve a net-zero future.

→ **Drivers** — The impacts of climate change—extreme weather events, rising sea levels, and biodiversity loss chief among them—have become more apparent and alarming in recent years, leading to a greater sense of urgency among governments, businesses, and the public to reduce greenhouse gas (GHG) emissions. A clearer understanding of the economic and social benefits of transitioning to a low-carbon economy is also spurring interest in action. For example, in a context where fossil fuels continue to play a significant role in the global energy mix, decarbonization is becoming integral. Meanwhile, renewable energy technologies have become more affordable and efficient, making them increasingly viable as an energy source. This, coupled with the recognition that investments in clean energy can stimulate economic growth, create jobs, and enhance energy security, has motivated governments and businesses to act.

→ **Impact** — The consequences of global inaction could be severe. Failing to take coordinated international climate action will almost certainly exacerbate the challenges—including energy insecurity

and supply chain disruptions—and could lead to greater damage from natural disasters, scarcer resources, and social unrest. By one estimate, **Canada's GDP will be \$35 billion lower** because of climate change than it otherwise would have been.⁷ By the end of the century, climate change could cost our country upward of \$5.5 trillion due to biodiversity loss, higher sea levels, and damages from wildfires and floods.⁸

Conversely, taking decisive and coordinated climate action holds the potential for significant benefits for people everywhere, to not only achieve net-zero goals—thereby helping ensure the planet's health—but also to **boost the global economy by US\$43 trillion by 2070.**⁹

GEOPOLITICAL UNCERTAINTY



→ **Phenomenon** — Global power dynamics are in flux, leading to an escalation in geopolitical uncertainty. As countries seek to gain a footing or secure advantages in this environment, we're seeing far-reaching repercussions on supply chains, trade, and security.

→ **Drivers** — For decades, the world order was shaped by globalization and the rule of law. In recent years, however, a series of conflicts, coupled with ongoing trade tensions, has ushered in a new era of geopolitical risk and uncertainty. Since Russia's invasion of Ukraine, NATO-Russia relations have deteriorated; they're the most unstable they've been since the Cold War. Increasingly complex US-China relations are significantly impacting global trade. And the growth of nationalism, protectionism, and populist movements, particularly since the pandemic, has cast a veil of ambiguity over the future of international cooperation and the flow of global trade.

→ **Impact** — According to the February 2024 Fortune/Deloitte CEO Survey, the majority of chief executives (65%) have identified geopolitical instability as the **top most influential external issue** expected

to disrupt business strategies within the next year.¹⁰ Canada, a trading nation committed to multilateralism, faces both risks and opportunities in this context. Our heavy reliance on trade means strains on and interruptions to global supply chains are keenly felt, especially by distributors, manufacturers, and construction companies. It makes us vulnerable to the growing shift toward protectionism, such as certain measures taken by the United States in recent years, and increasing tensions and trade restrictions with countries like China and India, which could be detrimental to Canadian exports and trade relationships.

However, if we can carefully navigate this uncertainty, there are also options. Identifying strategic parts of changing global supply chains where Canada could increase exports, for example, would help our allies diversify and build resilience while bolstering our own economic competitiveness.

Our analysis is structured around the four intersections that generated the most fruitful discussions during the specialist workshops, regional roundtables, and symposium (see [Our research approach](#)). To reduce the complexity and ensure clarity in our calls to action, we've focused on the intersection of two disruptions at a time.

AI REVOLUTION & TALENT TRANSFORMATION

Canada's ability to capitalize on the opportunities of AI is impacted by the difficulty businesses have competing for, hiring, and training the talent needed to adopt AI.

GEOPOLITICAL UNCERTAINTY & AI REVOLUTION

In an environment of geopolitical uncertainty, the race for AI sovereignty and leadership is heating up. Canada is vying to lead globally in AI, govern to mitigate its risks, and protect against AI-enabled threats to democracy.



TALENT TRANSFORMATION & THE RACE TO NET-ZERO

Canada's ability to meet its global climate commitments will depend on building a workforce for the net-zero economy. Done well, its leaders can create great jobs, drive economic growth, and position the country as a net-zero leader.

THE RACE TO NET-ZERO & GEOPOLITICAL UNCERTAINTY

Geopolitical uncertainty is creating ambiguity for the energy sector, while presenting a potential area of competitive advantage for Canada: to supply the critical minerals necessary for net-zero solutions.

Summary of the impacts of these intersections and our calls to action

INTERSECTION	IMPACT ON CANADA	RECOMMENDATIONS
AI REVOLUTION  TALENT TRANSFORMATION	<i>A battle to hire Canada's world-class AI talent</i>	<ul style="list-style-type: none"> ♦ Rethink strategies for attracting AI talent ♦ Work with universities to both access and develop AI talent ♦ Stem localized brain drain
	<i>A struggle to prepare workforces for AI-driven change</i>	<ul style="list-style-type: none"> ♦ Create an action plan to build workers' skills in AI ♦ Incentivize business investment in AI training for employees
GEOPOLITICAL UNCERTAINTY  AI REVOLUTION	<i>Harm from the global pursuit of AI sovereignty</i>	<ul style="list-style-type: none"> ♦ Position Canada as a leader in the global semiconductor industry ♦ Protect AI research from espionage
	<i>A need to catch up on AI governance</i>	<ul style="list-style-type: none"> ♦ Introduce AI governance and enhance agility
	<i>AI-enabled misinformation is undermining trust and democracy</i>	<ul style="list-style-type: none"> ♦ Fight the impact of misinformation on elections

INTERSECTION	IMPACT ON CANADA	RECOMMENDATIONS
TALENT TRANSFORMATION  THE RACE TO NET-ZERO	<i>Workers are unequipped to work in the net-zero economy</i>	<ul style="list-style-type: none"> ♦ Develop and implement a comprehensive net-zero skills strategy ♦ Attract talent to skilled trades careers
	<i>The benefits of net-zero opportunities are not evenly distributed</i>	<ul style="list-style-type: none"> ♦ Create opportunities for equal access to high-quality clean energy jobs
THE RACE TO NET-ZERO  GEOPOLITICAL UNCERTAINTY	<i>Uncertainty about Canada's future energy mix is complicating efforts</i>	<ul style="list-style-type: none"> ♦ Support investments in clean technology and decarbonization ♦ Enhance competitiveness through border carbon adjustments
	<i>An opportunity to supply critical minerals</i>	<ul style="list-style-type: none"> ♦ Move faster and more responsibly ♦ Compete throughout the value chain ♦ Position Canada as a global leader in critical minerals

**Read the full report
to learn more**



Global disruption in 4D:
*Exploring intersecting forces
impacting Canada's future*

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