

New report highlights importance of digital transformation and connectivity to meeting Canada's sustainability goals and fighting climate change

Report examines how the reinvention of Canadian industries through connectivity-powered digital transformation can lower greenhouse gas emissions, reduce waste and resource use, and increase cyber-security and workforce safety

OTTAWA, October 3, 2023 - Connectivity-powered digital transformation of Canadian businesses can play a key role in Canada's effort to achieve its climate change commitments, according to a new Accenture report commissioned by the Canadian Telecommunications Association.

The report, [*Canada's next sustainability frontier: Powering digital transformation with connectivity*](#), says that while Canada's current strategies for fighting climate change, which focus on renewables and clean tech solutions, are important, other approaches, such as the modernization of Canadian industrial operations using data and technology to become more efficient, are needed to achieve Canada's sustainability goals.

“Through digital transformation, business operations can become more productive, grow with less inputs or waste, and shrink energy and fuel consumption in the process,” said Jefferson Wang, global networks practice lead, Accenture. “Connectivity services, enabled by modern wireless and wireline networks, are an important foundation that make this transformation possible. Specifically, modern wireless and wireline networks provide the exponential growth in bandwidth and speed, simultaneous connections, and reliability needed to power IoT, data and AI, and cloud across industry sectors.”

In examining how digital transformation can drive both productivity and sustainability, Accenture focused on three of Canada's most important industries, the Oil & Gas, Mining, and Agriculture sectors. Using potential use cases in these industries, Accenture illustrates how connected devices and sensors, along with technologies such as digital twins, artificial intelligence, and cloud computing, can be used by businesses to operate more efficiently and safely, and in turn reduce energy and fuel consumption as well as produce less waste.

A few of the use cases highlighted in the report include:

- the use of sensors and drones in predictive maintenance of oil rig equipment can significantly limit unnecessary downtime and energy consumption, while digital twin technology can help optimize drilling parameters and reduce wasted fuel use by 20%;

- how connected technologies can help manage mining tailings ponds 25% more efficiently and with a 90% decrease in environmental compliance safety incidents; and
- how the agricultural sector can reduce its use of water and fertilizer by 20-40% using sensors and drones to monitor crops.

“This report illustrates the importance of telecommunications networks to Canada’s ability to achieve its sustainability goals and fight climate change,” said Robert Ghiz, President and CEO of the Canadian Telecommunications Association. “By continuing to invest in communication services, our industry is creating the foundation that enables businesses to use data and digital technologies to reduce waste, achieve greater energy efficiency, and improve productivity.”

The report concludes that achieving the productivity and sustainability benefits of digital transformation depends on four key enablers:

1. A regulatory approach that maintains incentives for Canada’s communications service providers to continue to invest in the expansion and enhancement of their wireline and wireless networks;
2. Solution provider ecosystem collaboration and innovation to ensure that industry verticals have the devices and software that meet their digital transformation and business requirements;
3. Embracing of digital transformation by industry verticals, including investing in the tools and processes needed to share data across their businesses, and developing and hiring workers with the necessary advanced skillsets; and
4. An expansion of government approach to addressing environmental challenges, including extending incentives beyond clean technology investments and renewables to include incentives for digital transformation. This approach should also employ a strong emissions measurement strategy so both government and industry can focus on the specific type of digital transformations that have the largest impact.

Canada’s next sustainability frontier: Powering digital transformation with connectivity can be found at <https://canadatelecoms.ca/wp-content/uploads/2023/10/Canadas-Next-Sustainability-Frontier-Powering-Digital-Transformation-with-Connectivity.pdf>

Accenture’s previous report, *Accelerating 5G in Canada: The Role of 5G in the Fight Against Climate Change* can be found at: https://canadatelecoms.ca/5G_Role_In_Fight_Against_Climate_Change

About Canadian Telecommunications Association

The Canadian Telecommunications Association is dedicated to building a better future for Canadians through connectivity. Our members include service providers, equipment manufacturers, and other organizations in the telecommunications ecosystem, that invest in, build, maintain and operate Canada's world-class telecommunications networks. Through our advocacy initiatives, research, and events, we work to promote the importance of telecommunications to Canada's economic growth and social development and advocate for policies that foster investment, innovation, and positive outcomes for consumers. We also facilitate industry initiatives, such as the [Mobile Giving Foundation Canada](#), [Canadian Common Short Codes](#), [STAC](#) and [wirelessaccessibility.ca](#)

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