

INDUSTRY AT A GLANCE CONSTRUCTION

Building a Sustainable Impact

THE INDUSTRY TODAY









Building industry professionals and trades account for approximately **7.6%** of the global workforce³

THE CONSTRUCTION SECTOR



Ninety-nine per cent of enterprises within the construction industry are **small or medium sized businesses (SMEs)**, accounting for 95.1% of employees within the construction sector in Canada.⁶

Overall, construction SMEs **contribute significantly to job creation**; supporting an environment of social stability that improves livelihood and alleviates poverty.⁷

"SMEs are experts in their fields and can provide insight into modern methods of construction (MMC), innovative technologies and ways to **minimise the GHG footprint of the proposed solutions across their whole lifecycle."** ⁸



The construction industry has faced severe challenges following the global pandemic. In the U.S., 402,000 jobs remained unfilled near the end of 2021[°], with wages increasing by 7.9%¹⁰ in only 12 months. These trends represent significant challenges for employers and the industry as a whole.

It is estimated that the building sector currently contributes to **almost half of total global greenhouse gas (GHG) emissions.** Building operations are responsible for 27% of annual emissions while building materials and construction account for 20%.¹¹ As such, the industry has significant potential for reducing GHG emissions as compared to other major emitting sectors.

Implementing global energy efficiency measures in the building sector could translate to **an estimated \$290 to \$430 billion in annual savings.**¹²

THE BUSINESS CASE

Sustainability as a route to success for small to medium-sized businesses



INCREASE THE VALUE OF YOUR PRODUCT AND GROW YOUR BUSINESS

Two thirds of the building structures currently in existence globally are projected to remain standing in 2040.¹³ These structures will require **eco-conscious upgrades to impact energy use, GHG emissions, equity,** and **resilience** and many will generate income and employment opportunities. In Canada, green buildings could provide 1.5 million jobs by 2030.¹⁴



IMPROVE YOUR BRAND AND INCREASE CUSTOMER LOYALTY

There is a growing demand by customers, including public sector organizations such as local governments, for **more sustainable and socially responsible** projects. Investors are also interested in **sustainable construction**. A \$24.7 trillion investment opportunity is predicted by 2030 in emerging markets.¹⁷



DELIVER EFFICIENCY SAVINGS

Integrated planning, energy-saving innovations, on-site renewable energy-producing technologies, and other types of equipment have resulted in **energy cost savings of 20-50%** in some cases.¹⁵ Although green buildings may require greater investment at the outset, their lower maintenance costs allow for exponential recovery and greater profits in the long term.¹⁶

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EMPLOYEE ENGAGEMENT

Green building provides a wide range of benefits: from **improved working conditions to enhanced job opportunities.** Research shows that in the postpandemic workplace, employees prioritize autonomy, flexibility, support, and upward mobility. ¹⁸

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Construction-sector participants should rethink their operating approaches to avoid being caught out in what could be the world's next great productivity story. ¹⁹

McKinsey & Company

Ninety-three per cent of CEOs say that sustainability issues are important for the future success of their business, and **54% expect sustainability to be embedded within the core business strategies of most companies in the next decade.**²⁰

THE IMPACT

Trends and Opportunities in the Sustainability Space



REDUCING EMISSIONS

As a resource-intensive and indispensable industry, the building sector is one of the most significant contributors to climate change. **Residential and commercial buildings** are responsible for 33% of GHG emissions yearly.²¹

With the cooling of the Global South and warming of the Global North, air cooling and heating is only increasing in demand while already accounting for 43% of all energy use in the United States. ²² By improving energy efficiency and increasing renewable energy use, we can reduce carbon emissions and the indoor air pollutants that have been found to have adverse health effects. ²³



PROTECTING ENVIRONMENT

Residential buildings account for almost 75% of energy use by facilities globally, yet only receive half of energy efficiency investment support. This creates an **opportunity for investment in building envelopes, appliances, water efficiency, and waste management.**²⁴

Infrastructure is continually subject to climate events, which are expected to increase in the future. Green buildings and renewable energy sources can minimize this impact on a large scale while reducing reconstruction costs.²⁵

"When electricity or water become scarce, building green can help meet construction demand without depleting resources." writes Hayley Samu in an article published on Edge buildings' website. ²⁶



ENERGY CONSERVATION

Shifting to renewable resources in green buildings can potentially reduce energy and water consumption by 20-40%. This could help the average homeowner cut their utility bills by 15 to 20%. ²⁹

The building sector is responsible for approximately 40% of global energy consumption. With as little as a 20% shift towards heating with clean energy, CO² emissions can be reduced by 9%. ³⁰



PRESERVING WATER

Water pollution caused by construction projects destroys the grass and topsoil that prevents chemical runoff from impacting local waterways. ³¹

This contaminated water poses immense threats to the health of both ecosystems and humans. It's imperative that officials and on-site workers manage pollutants and toxic chemicals generated at construction sites well before they impact water bodies. ³²

PRESERVING RESOURCES

Essential building materials, such as concrete and steel, present challenges to the environment, **as they alone are responsible for 14-16% of global-related CO2 emissions.**²⁷

Material and resource processing offers great opportunity for innovative development. De-carbonized steel, cement, and reduced embodied carbon are necessary to create new infrastructure to ensure a sustainable future.²⁸







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