# Concrete building for life



Who are we?

We are 8 associations representing the cement, concrete and aggregates industry collaborating with government with one voice, collectively building a healthy, safe, resilient, and prosperous Alberta.













asga

associations



### We are a vital participant in Alberta's economy

- 36,500 direct and indirect jobs across Alberta
- Generate over **\$17 billion** in direct, indirect and induced economic activity while supporting small and medium size businesses throughout the supply chain
- Across Alberta there are **131** cement and concrete producing companies and over **2,622** private land aggregate pits



### Concrete ~ An indispensable building material and backbone to our modern world

Proven through time, as nations evolve through developing to developed and beyond, concrete is the **ultimate building material** that supports innovation and provides the foundation to advancement and prosperity. Concrete is the material that forms the **backbone of our modern world** and has dramatically improved the quality of our lives. This material is integrated with how we work, live, laugh, and play every day. As we increasingly experience climate-related unknowns, concrete is the one building material proven to withstand extreme weather, keeping Albertan's safer with its strength, durability, and resilience.





#### For every woman, man and child, three tonnes of concrete

are produced each year. On a per capita basis, three tonnes of concrete are produced each year. On a per kg basis, concrete has the lowest carbon footprint of comparable building materials.



## Concrete ~ Essential to a Healthy, Safe and Prosperous Alberta

Concrete is ubiquitous, from our homes, schools and hospitals to our dams, wastewater treatment facilities, highways, bridges, and transit ways, concrete is an essential part of our daily lives.

# 🧳 👫 🕺 Energy:

Whether it is fuels, wind, solar, biomass or others, concrete is essential to keep Alberta communities powered. In fact, concrete is a primary material used in assets for generation, transmission, and distribution of electric power.

# Wastewater Treatment:

Concrete is the right choice for wastewater transportation and treatment facilities. It resists corrosion caused by contaminants in the wastewater stream and the chemicals added to treat these waste products. Its inherent durability and corrosion-resistance protects our environment from wastewater leaks.

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#### Healthcare & Education:

Concrete builds schools and hospitals, offering the ultimate protection to our most precious and most vulnerable. Concrete doesn't burn, rust, or rot. It is resistant to fire, wind, water, vibrations, and earthquakes, keeping people safer and reducing costs. In the aftermath of extreme weather events, concrete structures have proven to be the most resilient.

# Transportation:

Studies show over a 50-year period, the embodied primary energy required to construct, maintain, and rehabilitate concrete pavement is one third of that required for asphalt pavement. The rigid surface of concrete pavements helps reduce fuel consumption and related energy emissions by heavy trucks and other vehicles by up to 7%. And their light colour helps reduce the heat-island effect — which lowers cooling requirements — while also reducing exterior lighting requirements at night by up to 24%. Permeable interlocking concrete pavement (PICP) has a proven ability to clean, detain and reduce stormwater and recent research also notes that PICP can use less de-icers than asphalt pavements yet maintain slip resistance at the same level or better.

#### Housing:

Concrete's ability to store energy helps moderate interior temperature conditions. It reduces a building's heating and cooling demands over its service life by up to 8%. Used in combination with technologies such as radiant floors and geothermal or hydronic heating and cooling systems, concrete enables energy efficiency improvements of 70% over the Model National Energy Code for Buildings.

## Our Commitment to Decarbonize

Canada's cement and concrete industry has consistently supported strong action on climate change. Our industry has wholeheartedly and unreservedly supported the Government's increased reduction targets of 40-45% CO<sub>2</sub> emissions by 2030. We proactively champion innovation in the manufacturing of cement and concrete, and collaboration – at



home and abroad – to advance the policy and market solutions needed to reach net-zero concrete by 2050 with reduction targets for both 2025 and 2030.













50% reduction of CO<sub>2</sub> emissions