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# Concrete's ability to advance global sustainability efforts might surprise you.

There's a lot of misperceptions about the sustainability of concrete. But concrete has been – and continues to be – one of the world's strongest, most innovative and resilient building materials available. From how it's made to how it's used, concrete is meeting the needs of growing urban populations, infrastructure, energy, education and health care. All while protecting the environment.

#### **EXTRACTING**

Comprehensive studies conducted by Forintek Canada Corp., show that the impact of concrete and cement materials extraction is less than that of other construction materials. In fact, it's 2.25 – 3.25 times lower than steel and wood.

#### **TRANSPORTING**

Raw concrete materials are not only abundant but always manufactured locally. Being close to each construction project minimizes environmental impacts due to transportation energy consumption and emissions.

#### **MANUFACTURING**

Because concrete includes cement, there is an initial environmental impact as concrete is being made – unlike other industries, we're not only upfront about it, but we're always looking for new and better ways to make a difference. But over time, concrete can actually absorb CO2, saving 3-5% in greenhouse gas emissions over the building's lifecycle.

#### BUILDING

Concrete building materials for walls, floors, columns, etc., provide structural performance, but also adds value to its surroundings and the occupants, which include:

### **INNOVATING**

Concrete can be created in so many different variations that some enhancements actually scrub pollutants from the surface of concrete and from the surrounding atmosphere. From self-cleaning to bendable, high-performance, graphene and carbon capture concrete, there's endless opportunities to lower its environmental footprint.

## **SUSTAINING**

Buildings made with concrete improve indoor air quality, save up to 50% annually on energy costs, and reduces environmental impact due to less maintenance and repair. Pervious concrete also improves water quality by allowing rainwater to be filtered naturally and recharge ground water.

WITH STRENGTH A COALITION OF THE NATIONAL READY MIXED CONCRETE ASSOCIATION

Additional resources for all reporting about the environmental impact of concrete can be found at **www.buildwithstrength.com** or by emailing Kevin Lawlor at **klawlor@buildwithstrength.com**