



## 2 Tecumseth Street

TAS

Toronto, 2023

Circular Architecture



TAS is a real estate developer who pursues projects that generate measurable social and environmental impact. TAS believes that it's critical for city builders to embrace a circular economy to address global challenges, climate change, resource scarcity and pollution while promoting innovation & economic growth - hence the development of material reuse at 2 Tecumseth site, using 62% of demolition waste.

The highlight of this effort is that we were able to divert nearly 93% of the demolition waste from landfill. That's over 32,000 tonnes. Additionally, much of this waste (62% of the total) stayed on site, so we also avoided hundreds of tonnes of GHG (greenhouse gas) emissions from the creation of new materials and unnecessary vehicle emissions from transporting the old material to waste processing plants or landfills.

## Lessons

- The current construction economic system leads to construction debris piling up in landfill (12% of national waste), and unnecessary greenhouse gas emissions are pumped into our atmosphere when replacement materials are created
- Every building material's production process involves GHG emissions. Every cubic meter of concrete began as predominantly limestone and clay mined from a quarry by machines that use energy, fired in a kiln, and transported by vehicle to a construction site. Every wood beam was a tree harvested by machines in a forest and transported (typically by truck) to a sawmill powered by some form of energy. Reuse practices avoid the consumption of energy required to make new things when we don't need to





