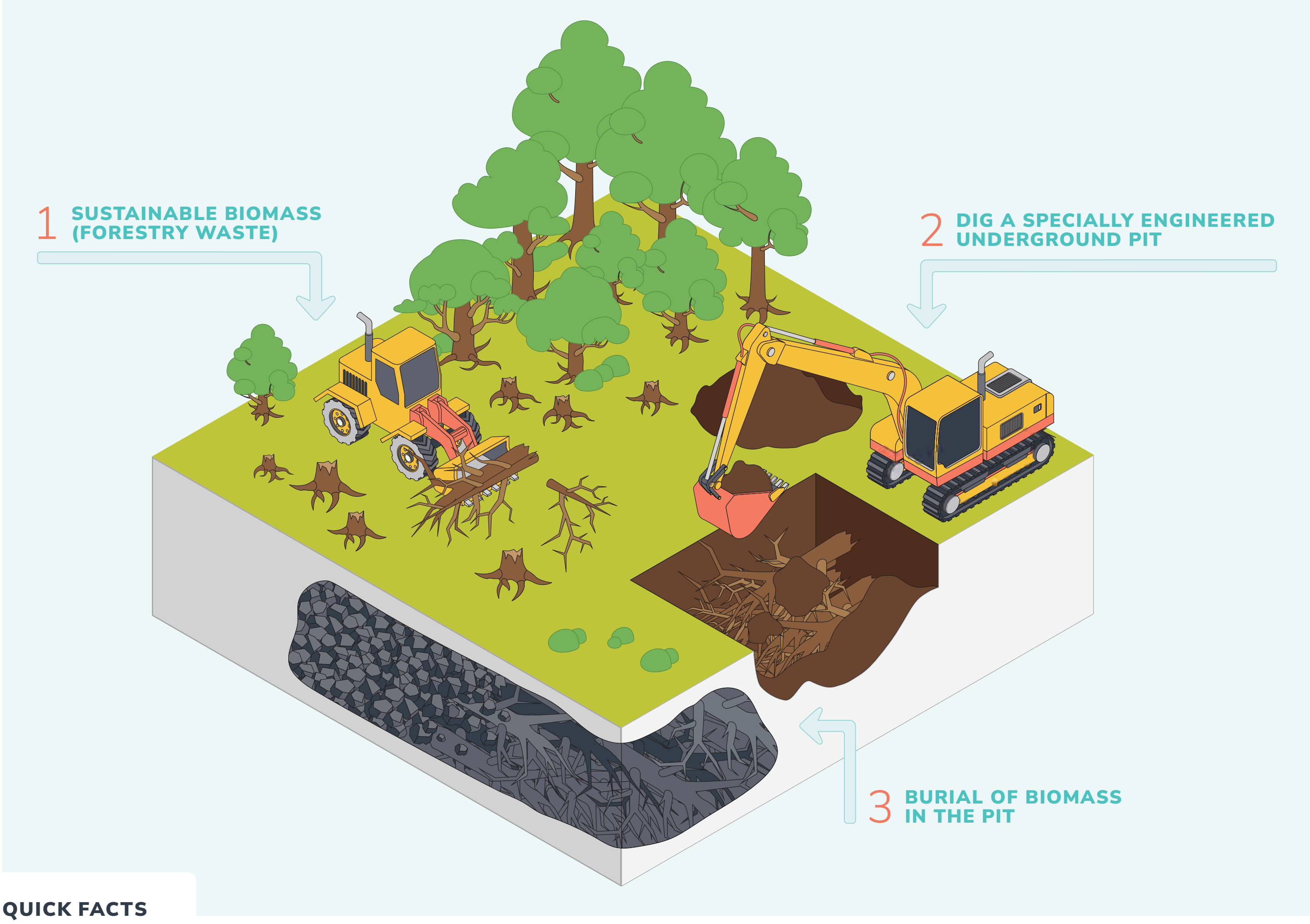
Carbon removal is Biomass Burial

carbon removal canada

Growing solutions by burying emissions



QUICK FACTS

- Future Estimated Cost: \$40 - \$140 per tonne of CO_2
- Current Canadian Capacity: Each year, Canada produces over 34M tonnes of biomass waste

What is carbon removal?

Carbon removal is the process of cleaning up carbon dioxide (CO_2) *already in the atmosphere* and storing it away for centuries or longer. Even if we cut emissions significantly, Canada cannot reach net-zero without also scaling carbon removal solutions to counterbalance any residual emissions. Beyond net-zero, carbon removal can help tackle historical emissions and turn back the clock on the worst impacts of climate change.

Carbon removal's potential in Canada

Carbon removal isn't just climate action, it's also an economic opportunity. Our research shows it will create jobs, position Canadian industries to compete globally, and make net-zero dramatically more affordable.

\$80B economic boost to Canadian GDP

\$13B in annual investment catalyzed across Canadian industries

40% - 70% cost savings on Canada's path to net-zero

How does Biomass Burial work?

Think of: Putting your leftovers into the freezer to make it last longer.

Trees, plants, and crops naturally remove CO_2 from the atmosphere as they grow. However, normally, when they decompose, all that stored carbon is released back into the atmosphere. Biomass burial technologies can interrupt that cycle and lock the carbon away in specially designed underground storage sites.

By controlling the environment where the biomass is stored, using low-oxygen conditions created by layering clay and other material, we can keep the carbon locked away for extended periods. The sites are engineered to prevent decomposition, with monitoring systems to ensure the carbon remains sequestered for hundreds to thousands of years. This effectively removes CO_2 from the atmosphere permanently.

This technology transforms Canada's abundant forestry and agricultural waste into a profitable carbon removal industry. It creates new revenue streams for farmers and forest companies while reducing wildfire risks by providing an economic alternative to leaving biomass as dangerous fuel in forests and fields.

Why Canada?

1 **ABUNDANT AGRICULTURAL AND FORESTRY WASTE**
Canada's $92B agricultural and $24B forestry sectors generate substantial biomass.

2 **GEOLOGY AND TEMPERATURE**
Canada's stable geology, low-permeability soils, and cool climate create ideal conditions for permanent biomass burial.

Co-benefits from Biomass Burial

WILDFIRE RISK REDUCTION
Biomass burial removes forest waste that would otherwise fuel wildfires, reducing fire risk and protecting communities.

PREVENTS METHANE RELEASE
Biomass burial prevents the creation of methane—a greenhouse gas 28 times more potent than CO_2—that would otherwise be released when organic materials decompose or are sent to landfills.

RURAL COMMUNITY JOB CREATION
Biomass burial's flexibility in site location makes it ideal for rural economic development, creating jobs in communities across Canada.

INDUSTRIES SUPPORTED
Agriculture   Forestry

Project snapshot

More than 4500 tonnes of trees killed by wildfire being sequestered in a 22 foot pit.

FIRST 30X30 & TIMBERTURN
British Columbia. *Planned.*

Canada's carbon removal capacity across technologies

106K	12.4M
Current	Planned

12M TONNES OF CARBON REMOVAL CAPACITY IS EQUIVALENT TO:

- Taking 3.6M cars off the road
- Completely decarbonizing all domestic air travel

Canada is ready for removal
Visit the Carbon Console to explore more projects, technologies, and companies