



IDEATHON CHALLENGE

"Design a solution, system, or approach that helps individuals, communities, or companies offset or reduce their carbon footprint in a meaningful way."

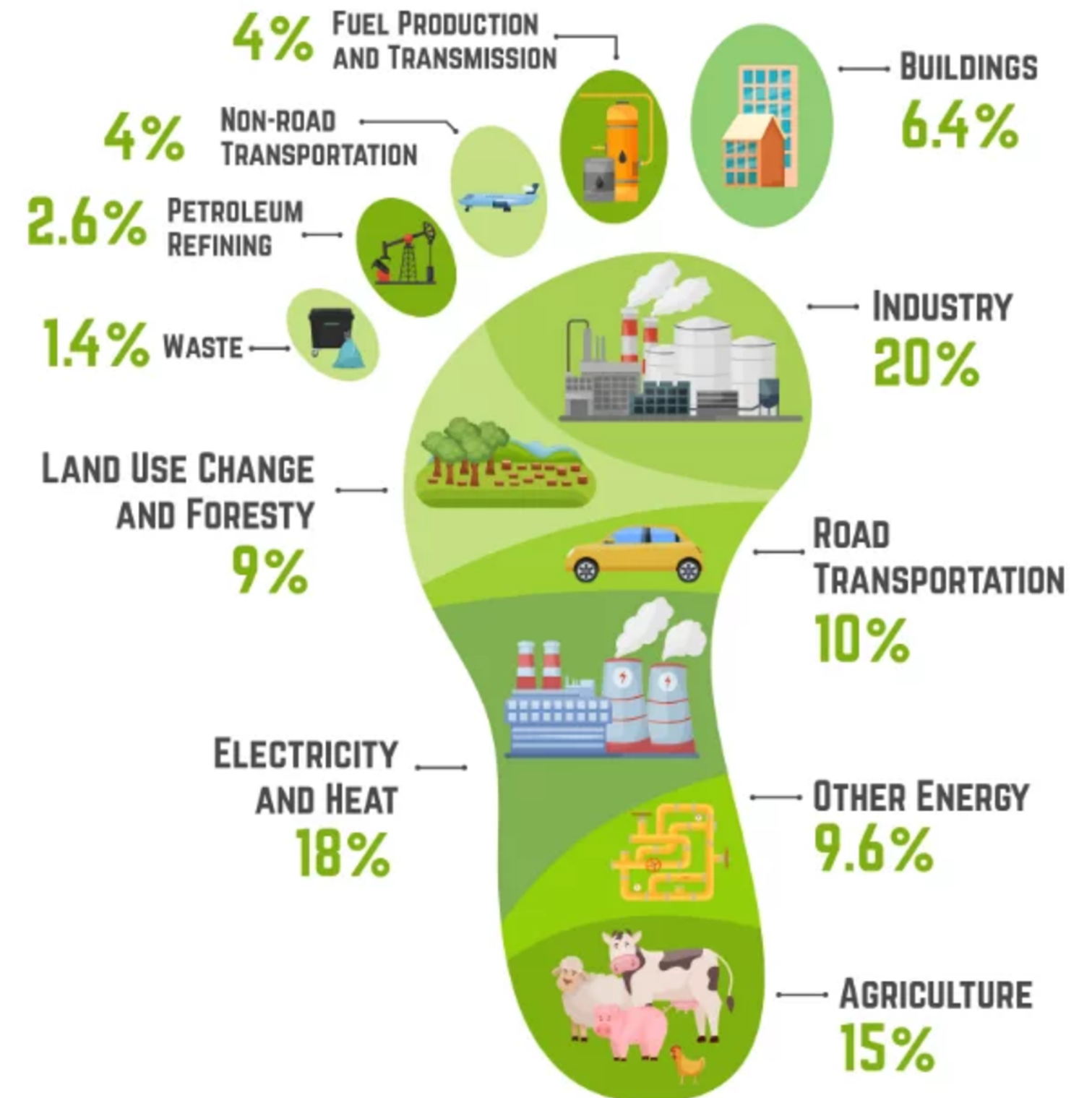
TERMINOLOGY

CARBON FOOTPRINT

Total amount of Green House Gases (GHGs) released into the atmosphere by a person, product, or activity. Emissions from Direct and Indirect sources and can be assessed over the entire life cycle of a product of service - from extracting the raw materials through production to disposal.

<https://www.nature.org/en-us/get-involved/how-to-help/carbon-footprint-calculator/>

CARBON FOOTPRINT



TERMINOLOGY



Direct Emissions

Sources you own and control!

Emissions associated with your own activities:

Fuel consumption in a personal vehicle

Heating oil used in the winter

Scope 1



Indirect Emissions

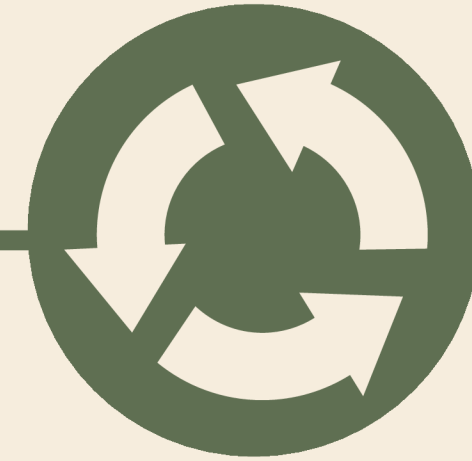
Emissions from purchased electricity/heat/cooling

Emissions that are not owned or controlled by reporter, but related to activities.

In the supply chain

transportation, employee commute

Scope 2 and 3



Life Cycle

Comprehensive cradle to grave look at the total GHG emissions associated with a

product/service or process throughout its entire existence:

- Raw material extraction and processing
- Manufacturing
- Transportation/distribution
- Use and operations
- End of life management

TERMINOLOGY

CARBON OFFSET

Tradable certificate that represent reduction of carbon dioxide from the atmosphere

Verified by thrid parties

- Projects that sequester CO₂
- Reforestation and wetlands
- Renewable energy
- Methane Capture
- Carbon Capture and Storage
- Biochar
- Development of Carbon Sinks

CARBON REDUCTION

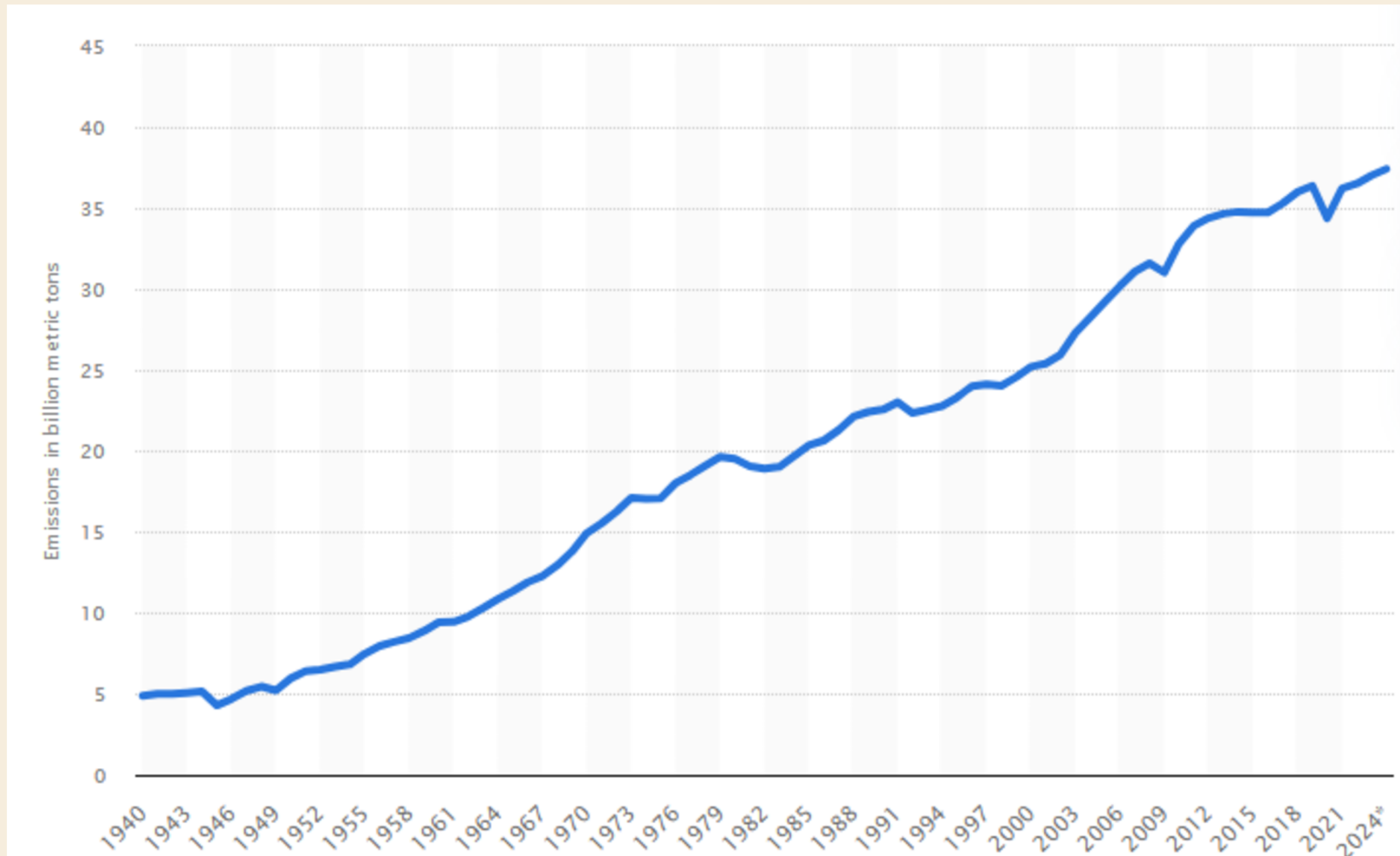
Decreasing the amount of GHG emissions created

Canada Net Zero by 2050

- Renewable Energy
- Improved energy efficiency
- Sustainable Transportation
- Circular Economy
- Reduce footprint of food/goods

THE ISSUE

Global Emissions continue to rise
- farther away from Net Zero



1

GHGs trap heat in the atmosphere contributing to increased temperatures driving Climate Change

2

Climate Change is adversely affecting life in NL - Less Winter Ice in Labrador, Forest Fires in the Summer

3

While there is a provincial strategy for Net Zero much is still reliant upon individuals, businesses, and communities

4

Solutions can generate the next generation of economic development in the province

THE OPPORTUNITY

Carbon Offset and Sequestration creation as well as GHG Emission Reduction is a way to generate revenue as well as

- Save money
- Produce fewer emissions
- Local supply chain and economic development



TYPES OF SOLUTIONS



Technical

Create or adapt a new product or technology; processes



Business

Create a new business to implement existing products or technologies; logistics



Policy

Create a new policy/implementation plan
Municipal strategy or action plan

SOME CONSIDERATIONS



SOME EXAMPLES

Sharp Management

Developed NL's First Certified Carbon Offsets at the Appleton-Glenwood and Stephenville Wastewater Treatment Facilities. Split revenue between the company and the Municipalities.

Maple Leaf Foods

First Major Carbon Neutral Food Company in 2019. Analyzed their 35 facilities to find energy and water conservation, saved \$350,000 per facility. Purchased carbon offsets for their remaining GHG emissions.

Terrebone Municipality

Created a regulation in 2023 to restrict single use plastic. Worked with businesses to help support their transition to reusable products



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