



cleanBC

CLIMATE
LEADERSHIP
SYMPOSIUM

Public Sector and Local
Government Action

Pathways to Net Zero Embodied Carbon in Buildings

Megan Badri, Research Manager, UBC Sustainability Hub



THE UNIVERSITY OF BRITISH COLUMBIA

Sustainability Hub

This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

UBC Institutional Energy and Carbon Targets

Climate Action and Awareness Fund (CAAF)

To support the mandate of Canada's Net-Zero Advisory body related to research, this project was undertaken with the financial support of the Government of Canada through the federal government Department of Environment and Climate Change.



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

The Net-Zero Advisory Body was established pursuant to the Canadian *Net-Zero Emissions Accountability Act* and is mandated to provide independent advice on the most likely pathways for Canada to achieve net-zero emissions by 2050.



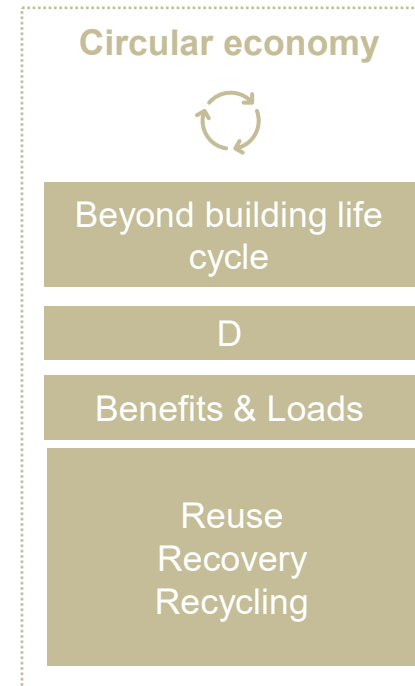
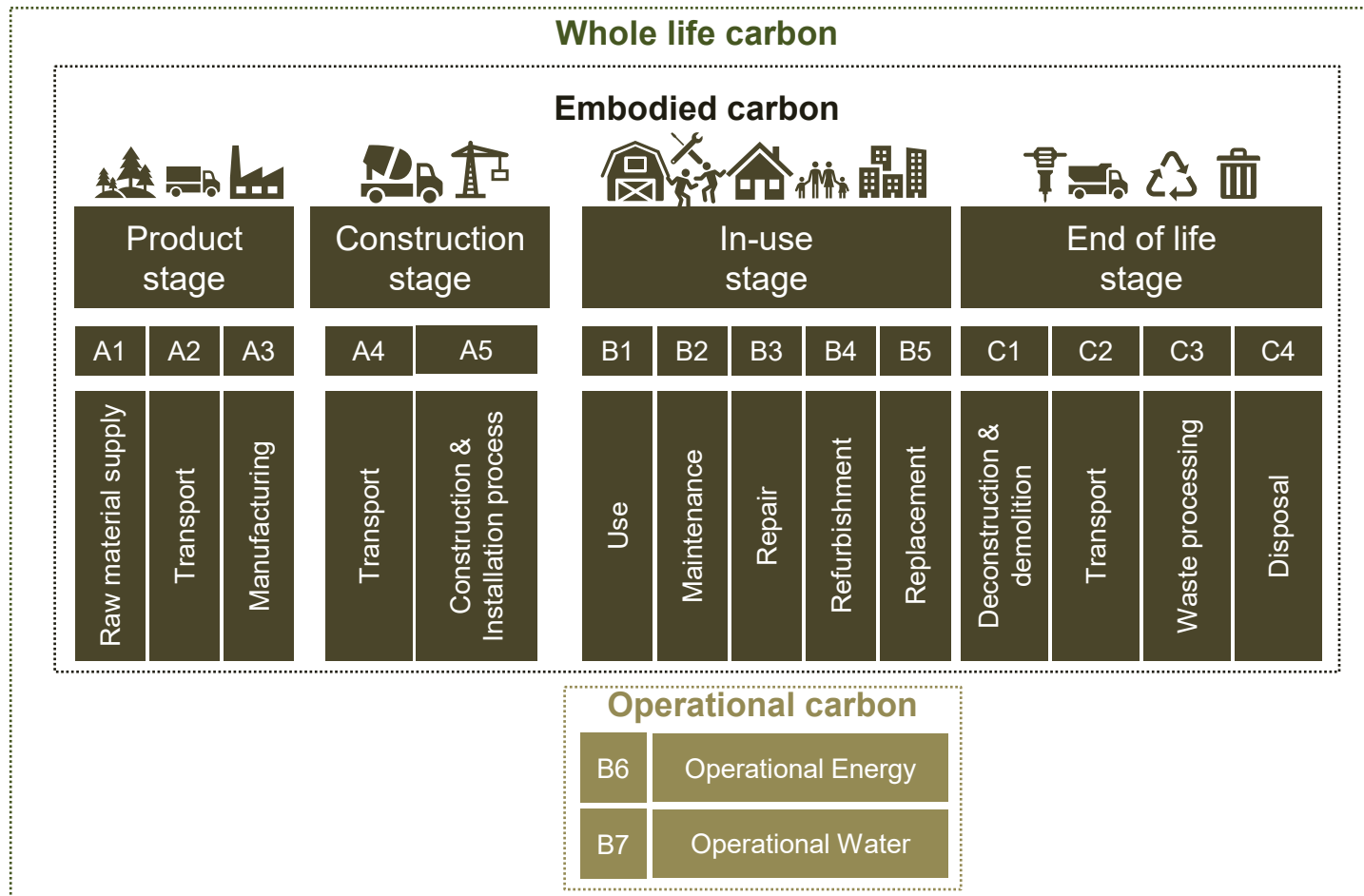
Fund Objective: The Climate Action and Awareness Fund is designed to support projects that can create middle class jobs for Canadians who work in science and technology, academia, and at the grassroots community level. These projects are critical to continue to build a sustainable net-zero emissions economy by 2050.





What is embodied carbon?

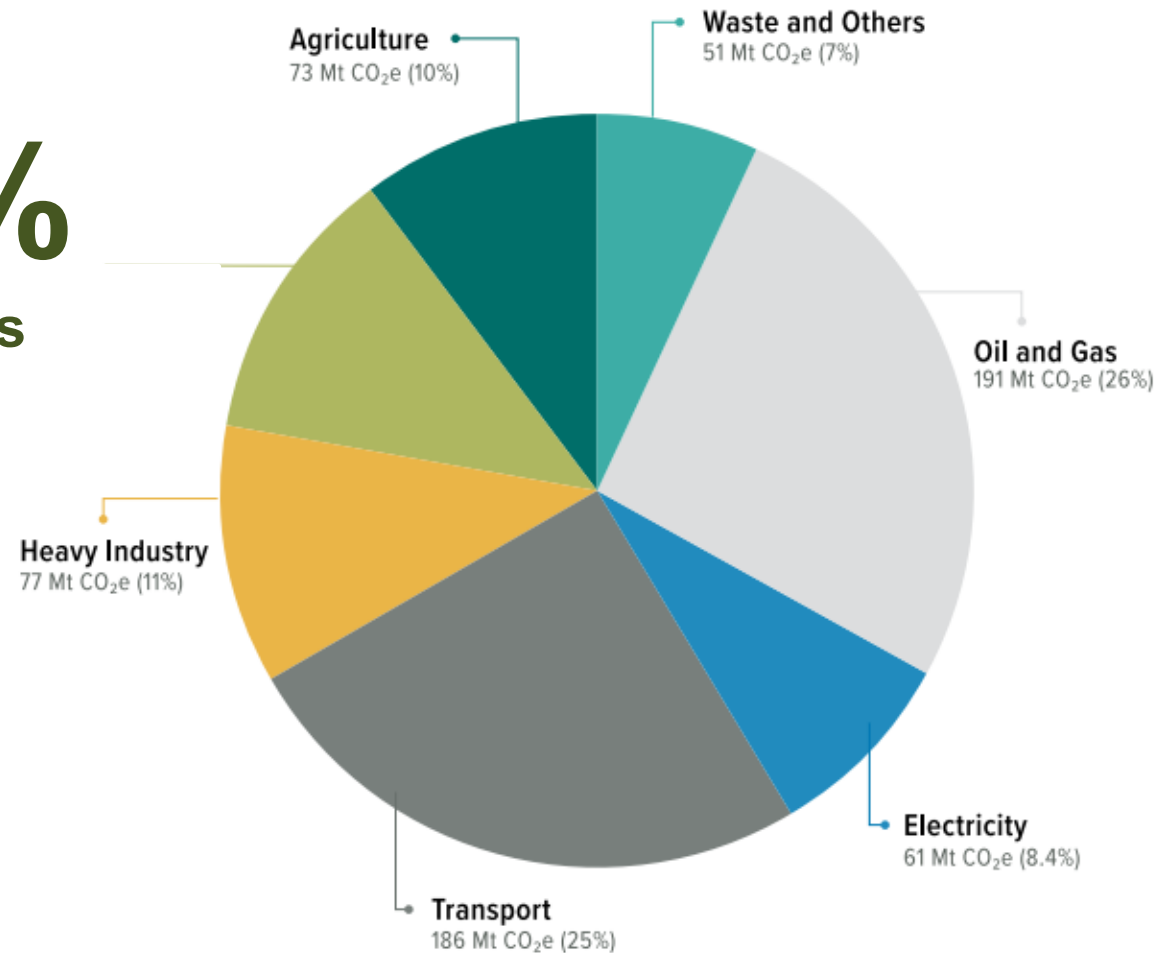
Greenhouse Gas emissions (GHG) attributed to **material products** throughout their lifecycle.



Canada's Greenhouse Gas Emissions by Sector (2019)

18%
If embodied
carbon emissions
were included

12%
Buildings
91 Mt CO₂e



Pathways to Net-Zero Embodied Carbon in Buildings

Barriers and solutions to effective policies and actions



- Build local and regional collaborations and partnerships



- identify immediate barriers and challenges



- implementing policies and actions to reduced embodied carbon emissions in buildings



- Develop opportunities to pilot solutions



- Knowledge exchange and mobilization



Project Timeline



Barriers and Challenges

- Low-carbon product availability and supply chains
- Local availability of data, assessment tools and workflow
- Combination of skills and knowledge required for decision making
- Diversity and complexity of buildings industry
- Policies and regulations at different levels of government



Thank You!

Any comments and questions?

