



Canada Growth Fund

Technical Briefing

2023.12.20

Accelerating Canada's net-zero journey

CGF MANDATE

Reduce emissions

**Accelerate
the deployment
of key
technologies**

**Scale up
companies**

**Capitalize on
Canada's natural
resources**

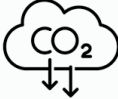

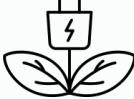



CGF is a C\$15 B investment fund

Independent and arm's length from the government

Targeting preservation of capital on a portfolio-basis over the long term

Focus Areas

Focus Sectors

 Carbon Capture	 Hydrogen	 Clean Tech
 Biofuels	 Critical Minerals	 Smart Electrons

Investment Verticals and Instruments

Projects	Clean Technology	Low-Carbon Supply Chains
Equity	Debt	Contracts

Progress to Date



CGF's First CCS Investment

Why we invested

Canadian clean
technology
champion

Scalable
technology

Need to de-risk
policy

Credible
partners

Crowding in
capital

Strategic Priorities for CCS

1 Minimize Technical Risks

- Low capture risk
- Low sequestration risk
- Good operating partner

2 Anchor the Carbon Market

- Competitive prices encourage competitive providers
- Contract structured focused on optimizing the capital structure to reduce costs
- Maximize impact per \$ of CGF balance sheet
- Allow CGF to market and offset exposure, multiplying its impact

3 Unlock a Scalable Approach

- Framework approach to scale deployments
- Support Canadian CCS champions to create value for Canadians
- Make CCS available for emitter who aren't CCS experts

Strategic Priorities for First CCS Deal

1

Minimize Technical Risks

- Strong operating partner with leading technical capabilities
- Appropriate site to deploy the technology at scale

2

Anchor the Carbon Market

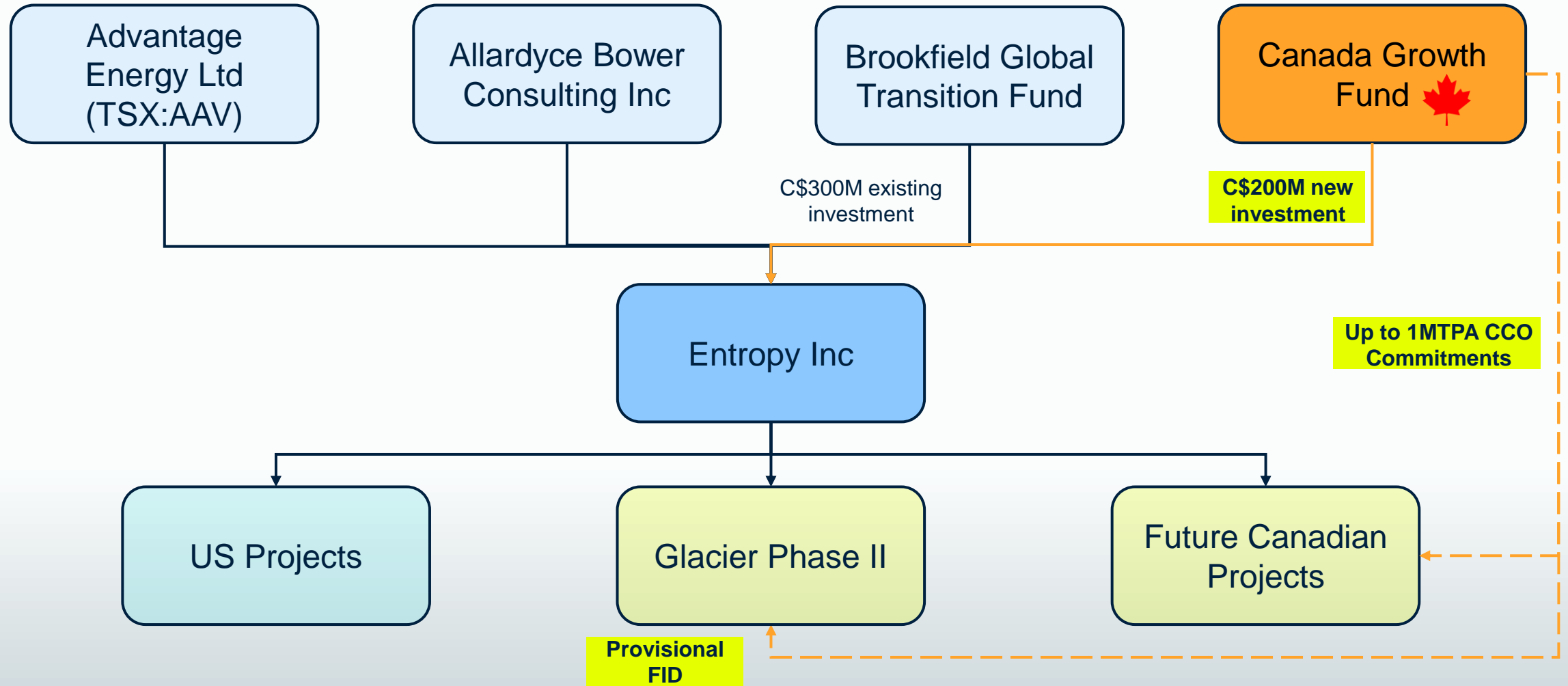
- Global first large-scale, long-term, fixed-price Carbon Credit Offtake (CCO) in a compliance market
- \$86.50/t initial price on a 15yr contract

3

Unlock a Scalable Approach

- Deal structure that supports Entropy's growth
- Clear path to accelerating growth and reducing emissions up to 1MMTPA

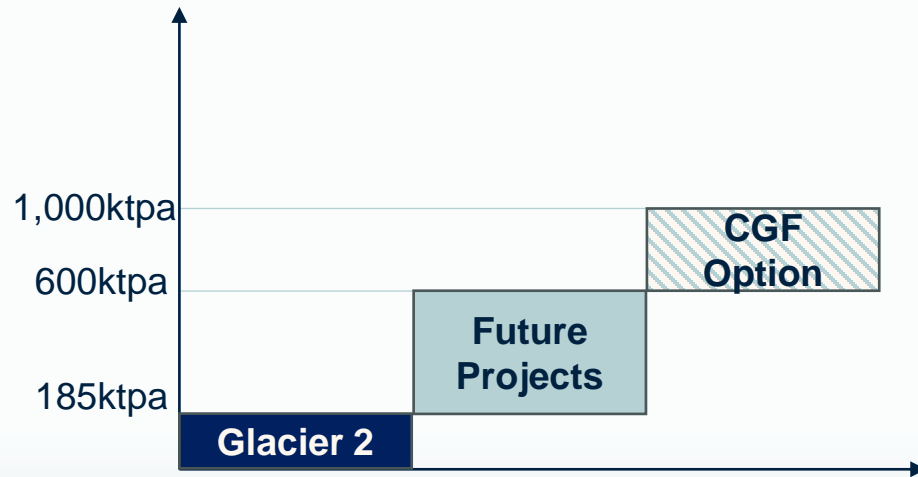
Transaction Structure



Transaction Overview

1 CCO Framework

- Framework agreement providing ability for CGF to purchase up to 1mtpa of TIER carbon credits



Initial allocation of CCO targets the sale of up to 185,000 tpa of Alberta TIER carbon credits

Result in provisional FID on Glacier Phase II

Balance of the CCO will be available to underwrite additional projects in Canada, on similar terms

2 CGF Investment

- C\$200m delayed draw convertible debenture facility
- Once fully drawn, could result in CGF owning up to 20% of Entropy
- **Governance**
 - CGF to receive one board seat
 - Customary information rights
 - Market leading ESG data reporting

Building a competitive CCS industry

US Inflation Reduction Act

12 years of tax credits @ US\$85/t

Entropy/CGF Transaction

ITC + ACCIP + 15-year CCO @ C\$86.50/t

**Incentive
Tenor**

12-year tenor

15-year tenor

**Post-Incentive
Monetization**

No clear path for monetization post-45Q

Clear path to monetize carbon post-CCO

**Revenue
Certainty**

Includes revenue certainty

Includes revenue certainty

**Upfront Capital
Reduction**

No reduction of upfront capital

Up to 57% reduction in upfront capital when combining provincial and federal incentives²

**Effective Price
of Carbon**

~C\$115/t¹ + escalation on a gross basis

C\$86.50/t + escalation on a net basis

CGF can work with emitters to structure efficient transactions

Delivering on CGF's Mandate

Materially Reduces Canada's Emissions

- Approximately **8.6 million tonnes of CO₂ over 15-years**

Unlocks Additional Capital

- Unlocking BGTF's existing facility and third-party debt capital

Kick Starts the Alberta Carbon Market

- **First-of-a-kind** large-scale, long-term, fixed-price Carbon Credit Offtake
- Establishes a **strong precedent**

Creates & Supports Canadian Jobs

- Creates **~60 direct permanent jobs** and **>1,000 temporary jobs**
- Sustains **~180 existing jobs**

Scales a Canadian Champion

- Provides ability for Entropy to build more projects in Canada
- Protects key CCS solvent / design patents

Aligns with the Mandate's Financial Objectives

- **Expectation to return capital** while **minimizing concessionality**

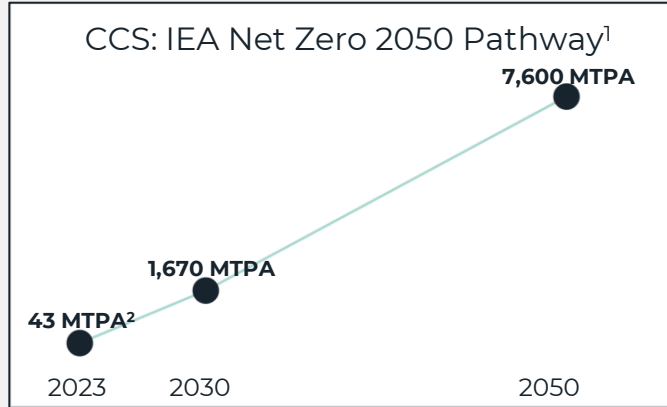
MADE-IN-CANADA SOLUTION:

Leading the way globally on post-combustion carbon capture



Massive Market Need

CCS to play an essential role in global decarbonization

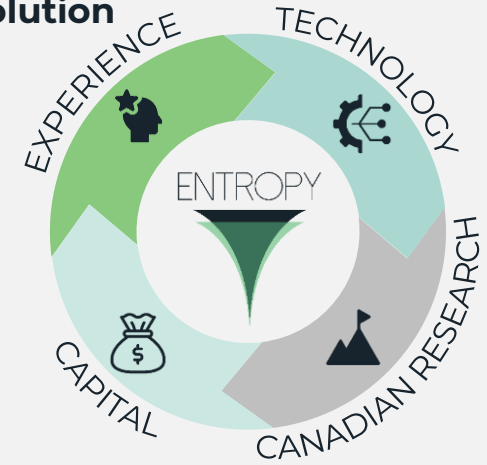


Full-service CCS Solution

World-leading research and implementation of the first commercial post-combustion capture facility



University of Regina's Clean Energy Technology Research Institute



Requirements for CCS Deployment

Long-term Investment

Emissions Reduction



Long-term Certainty

Attracted Capital

Carbon Credit Offtake³: Guaranteed 600k TPA CO₂

First-of-kind facility: GLACIER CCS



Glacier CCS Operating Runtime⁽²⁾

97%



Solvent Performance

2.4 GJ/Tonne



FID to Commission

16 Months



Capture Rate

90-98%

(1) Net Zero by 2050: A Roadmap for the Global Energy Sector (IEA, 2021)

(2) March to May 2023

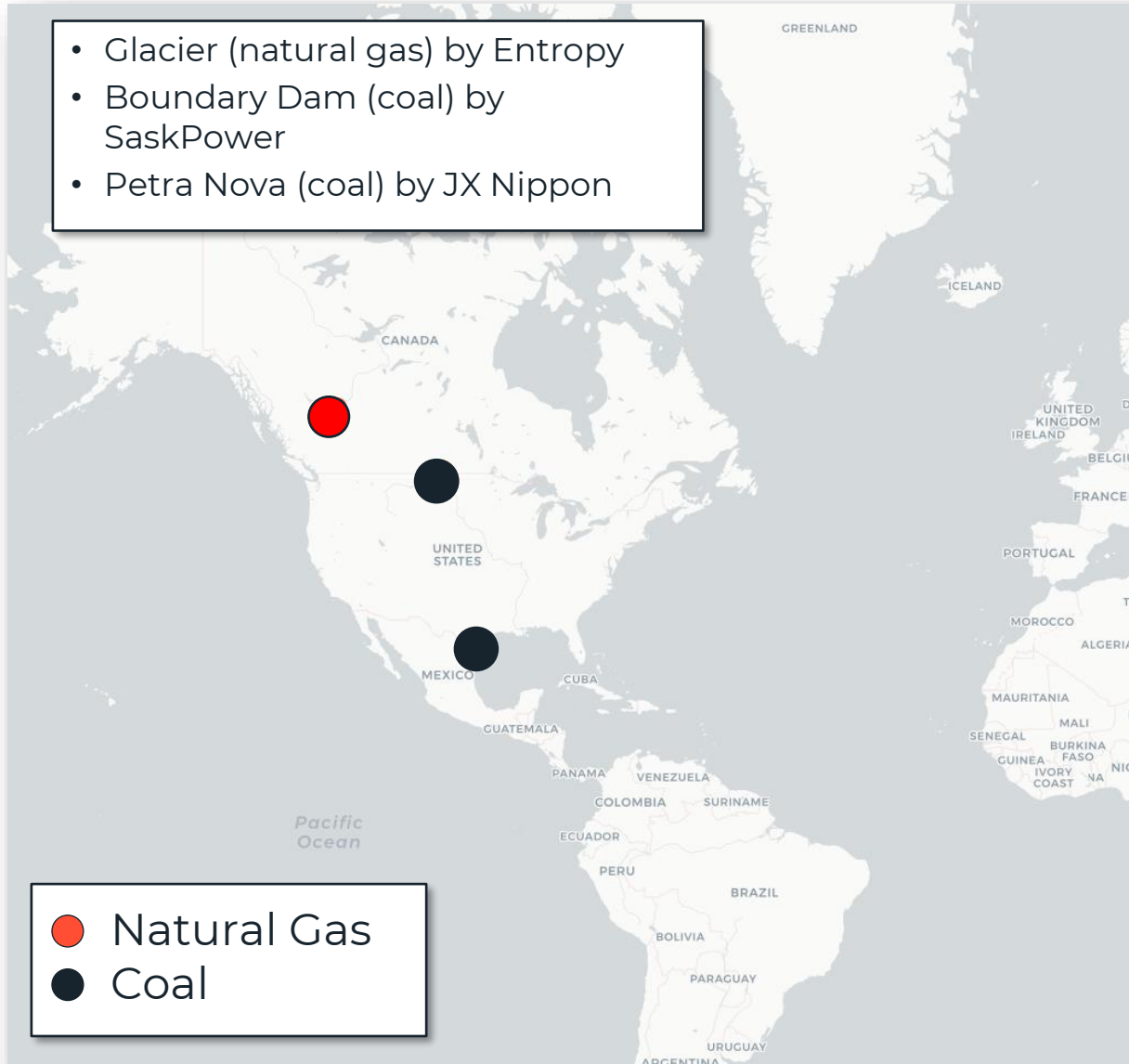
(3) See Press Release December 20, 2023

WORLD MAP OF ACTIVE COMMERCIAL CCS PROJECTS

...only three known operating commercial CCS projects on post-combustion emissions

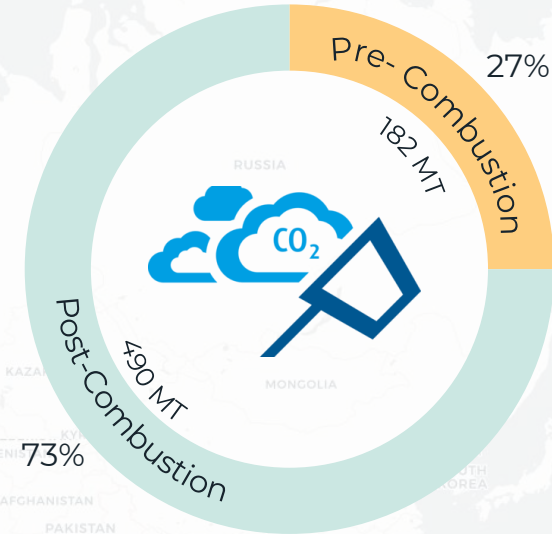


- Glacier (natural gas) by Entropy
- Boundary Dam (coal) by SaskPower
- Petra Nova (coal) by JX Nippon



- Natural Gas
- Coal

Canada's Emissions – Breakdown (670 MT CO₂ in 2021)



Suitable industrial point-source emitters include:

- Ethanol
- Steel
- Boilers
- Electricity Generation
- Methanol
- Natural Gas Processing
- Thermal Oil
- Turbines



Emitter

- Industrial Point Source
- Clean-burning
- Steady State
- Jurisdiction



Reciprocating Engines

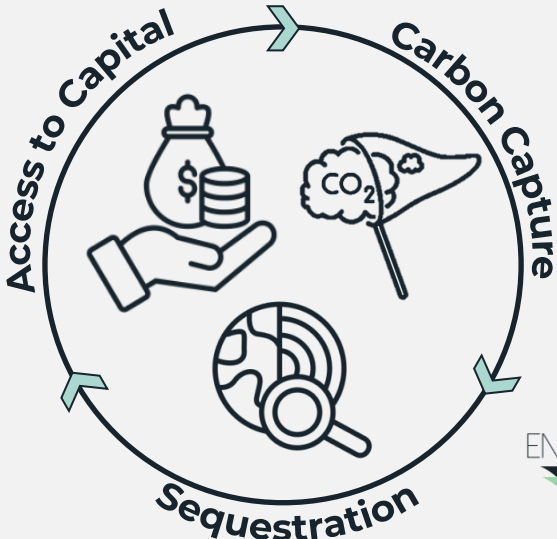


Boilers



Turbines

Full-service CCS Offering to Emitters



Return on Investment

- Environmental Attributes
- Clean Fuel Regulation Credits
- Carbon Credits
- CCS Refundable Incentive Credits



Carbon Credits



Carbon Credit Offtake (CCO)



Tax Credits

Capital



Technology

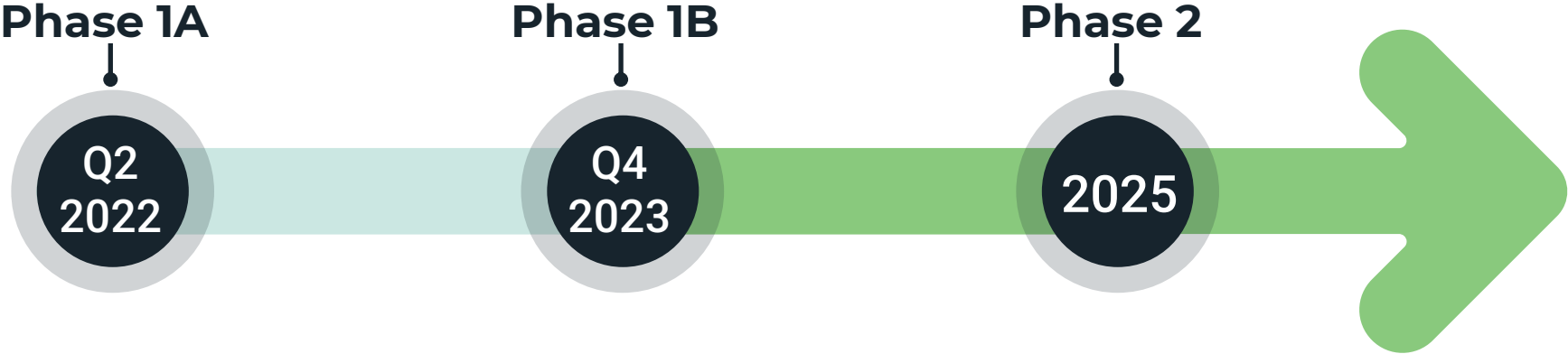
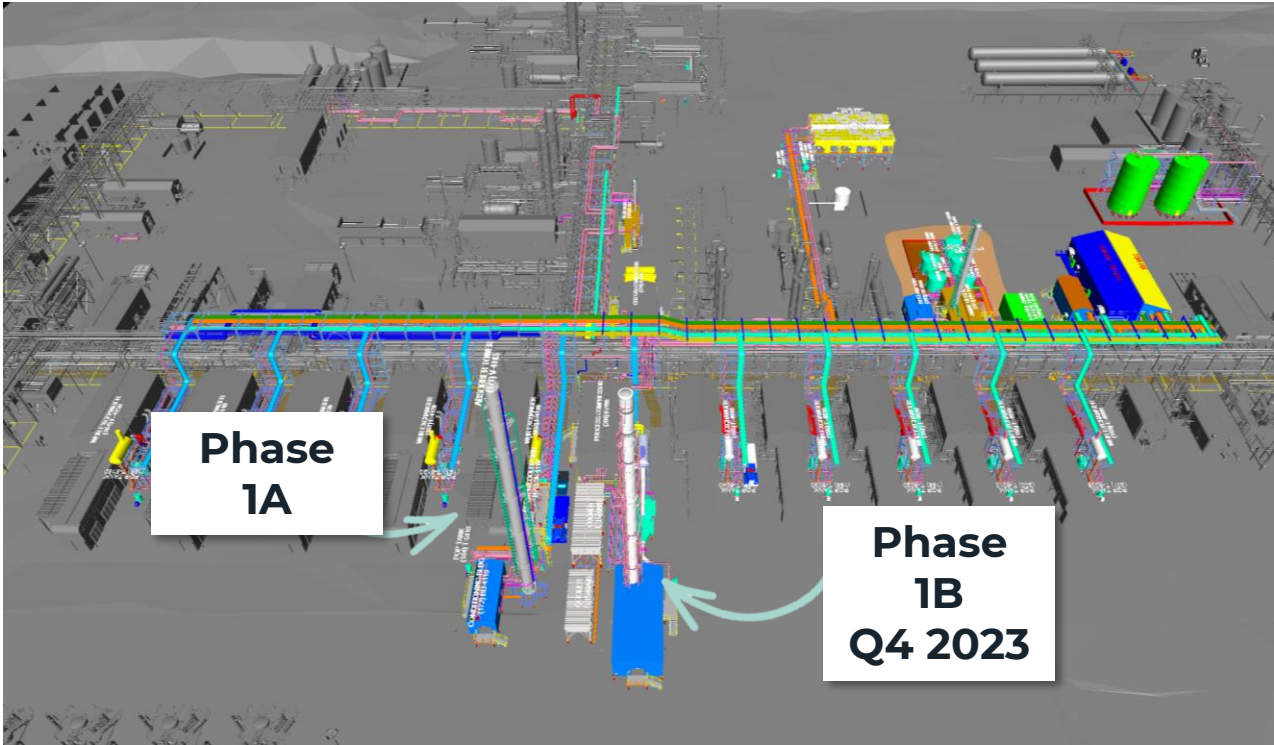


Expertise



Reduced Emissions

GLACIER PHASE 1 – FROM CONCEPT TO REALITY



- **Glacier CCS Phase 2 development**
- **Acceleration of Canadian 3rd party projects**
- **Application of Canadian technology to various sectors around the world**



Q&A