

# Energy & Mines Digital Trust

Development & Digital  
Services Section Meeting

March 16, 2023



Ministry of  
Energy, Mines and  
Low Carbon Innovation

**Brings additional functionality to  
B.C. Government's pioneering  
contributions to open-source digital  
trust technology**

**Enables B.C. energy & mining  
companies to prove where their  
products come from and how they  
are produced**



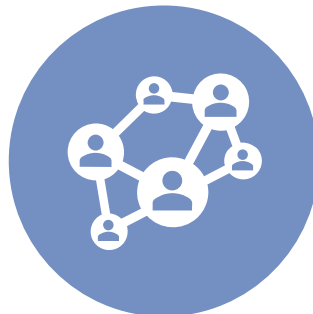
# Key Terms & Concepts

**Digital Credentials**



**Traction**

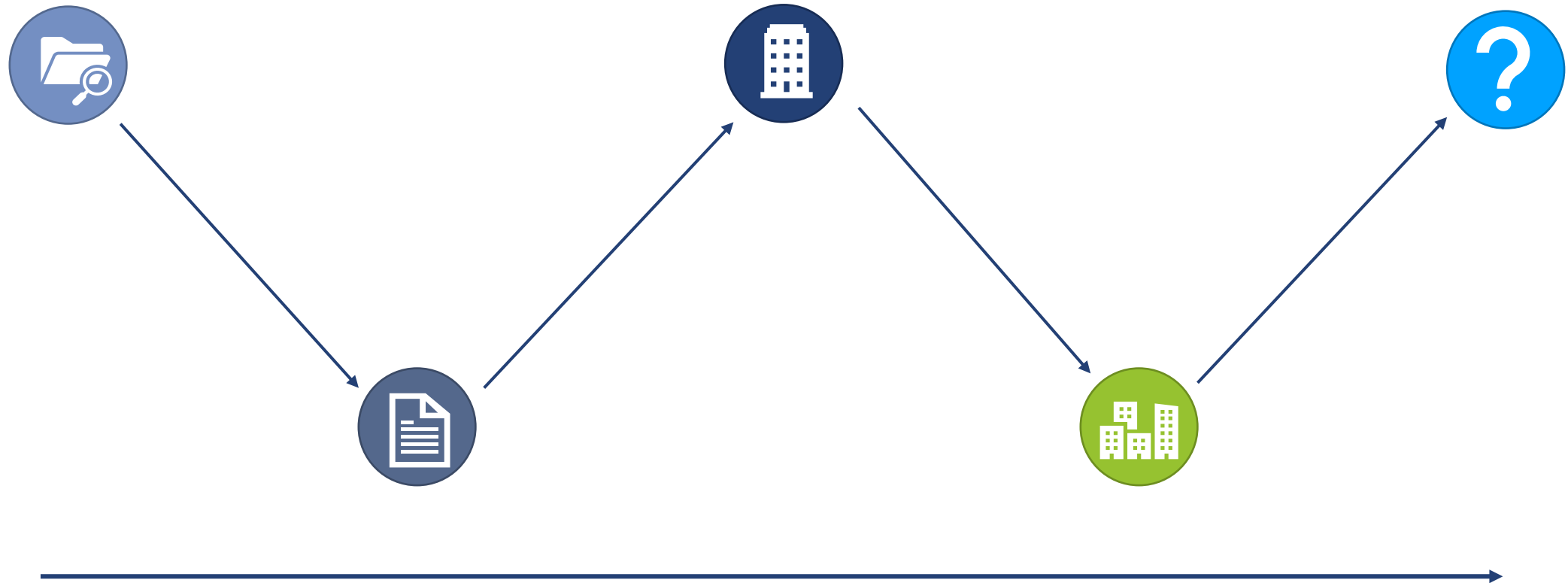
**Digital Trust  
Ecosystem**



**Governance  
Framework**



# Current Challenge

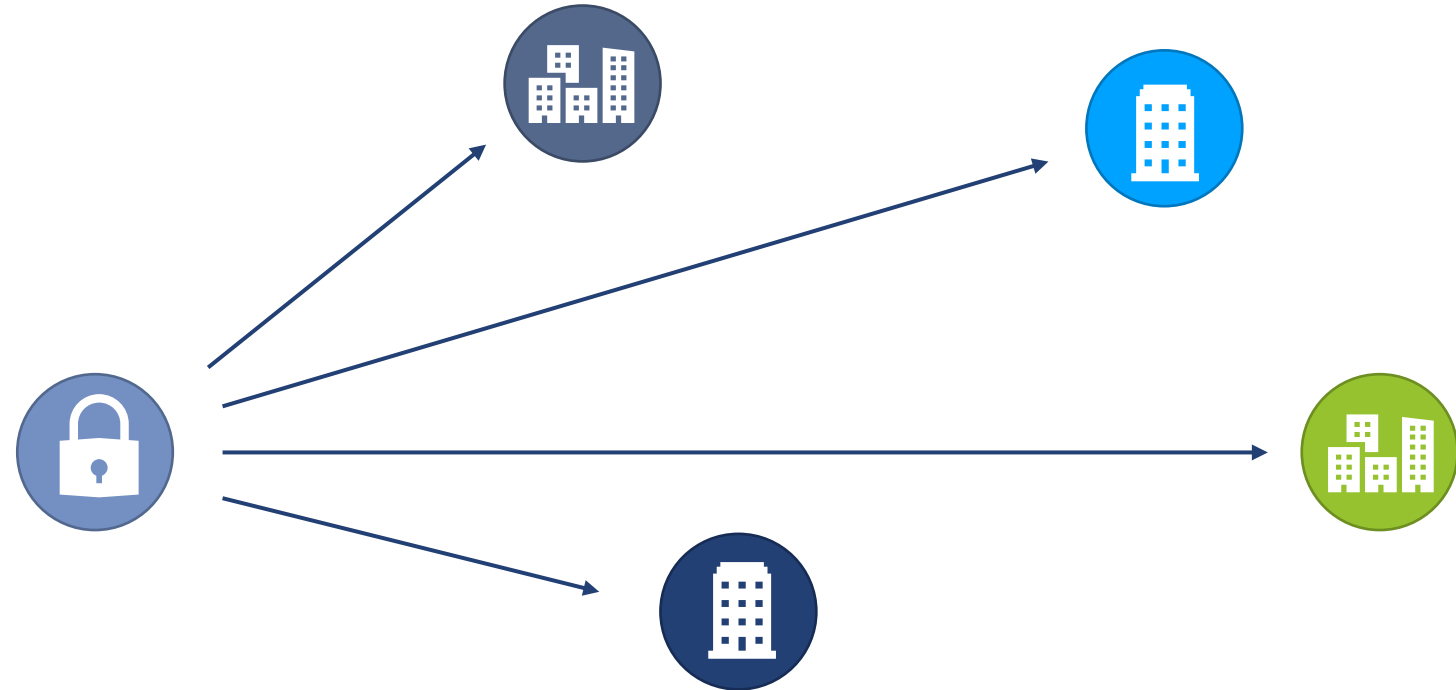


**Over time, risk increases and trust is lost.**



# Digital Trust Solution

With digital credentials, information can be trusted, regardless of where, or to whom, it is shared.







# Digital Credentials



## EFFICIENT REPORTING

A digital trust ecosystem makes it quick and easy to share data that proves natural resource products were responsibly sourced.



## INCREASED ACCURACY

Digital credentials are checked in real-time and there is no risk of data manipulation when shared.



## IMPROVED TRUST

Digital credentials are tamper-proof so data cannot be manipulated during transmission. Information can be trusted.



## PRIVACY PRESERVING

Organizations share only the information they choose. Digital credentials make it easy to customize specific data requests.



## MAXIMIZED MARKETS

Natural resource companies that verify responsibly-sourced products can compete in a global market that values sustainability.



## INNOVATIVE TECHNOLOGY

This cutting edge technology positions B.C. as a global leader and enables a digital trust framework with many business applications.



# EMDT Timeline

## 2021

- Developed Proof of Concept
- Convened Advisory Committee
- Technology testing pilot with Climate Action Secretariat

## 2022

- Developed Traction
- Designed five digital credentials in the mining and natural gas sectors
- Expanded ecosystem to 17 participants

## 2023

- Combined development teams with CITZ OCIO
- Completed two natural gas and two mining pilots
- Potential to launch a critical minerals pilot as part of UN/CEFACT project.

Deliverables

Funding

Events

Initial Funding  
Approved Jul 2021

Additional Funding  
Approved Mar 2022

Supplemental Funding  
Approved Mar 2023

Presented  
remotely at  
UNFCCC  
COP26

Presented at  
Hyperledger  
Forum in  
Ireland

Presented at  
UNFCCC COP27  
in Egypt

Premier's  
Award  
nomination

Foresight  
Canada Award  
nomination

Invited to speak at  
UN/CEFACT Forum  
in Switzerland



# Digital Trust Ecosystem

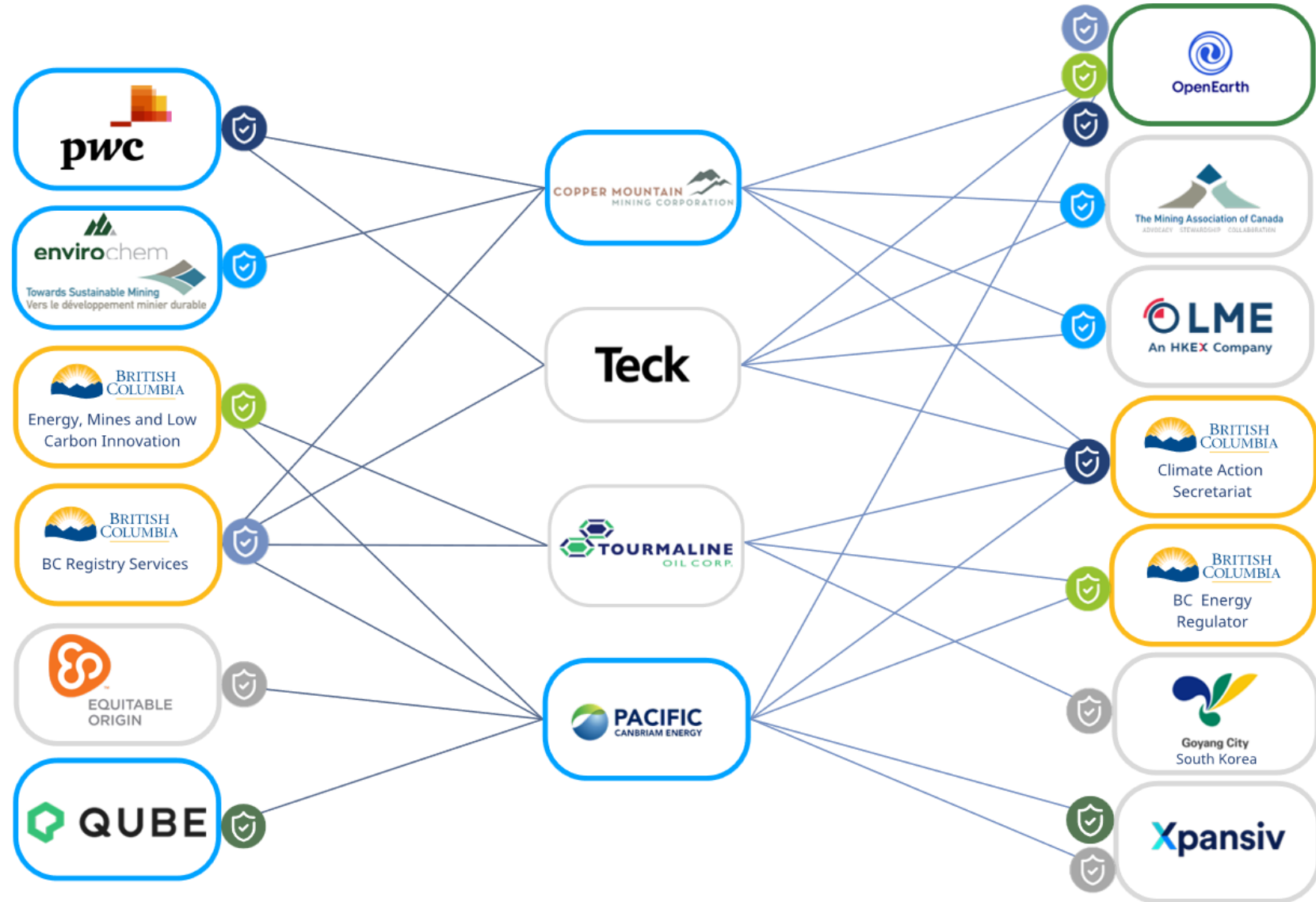
**LEGEND**

**Digital Credentials**

- Greenhouse Gas Emissions Report Verification
- Natural Gas Tenure
- Towards Sustainable Mining
- Business Registration
- EO100
- Monthly Qube Report

**Digital Wallet Technology**

- Traction
- Northern Block
- ACA-Py Integration
- Spherity
- To Be Determined

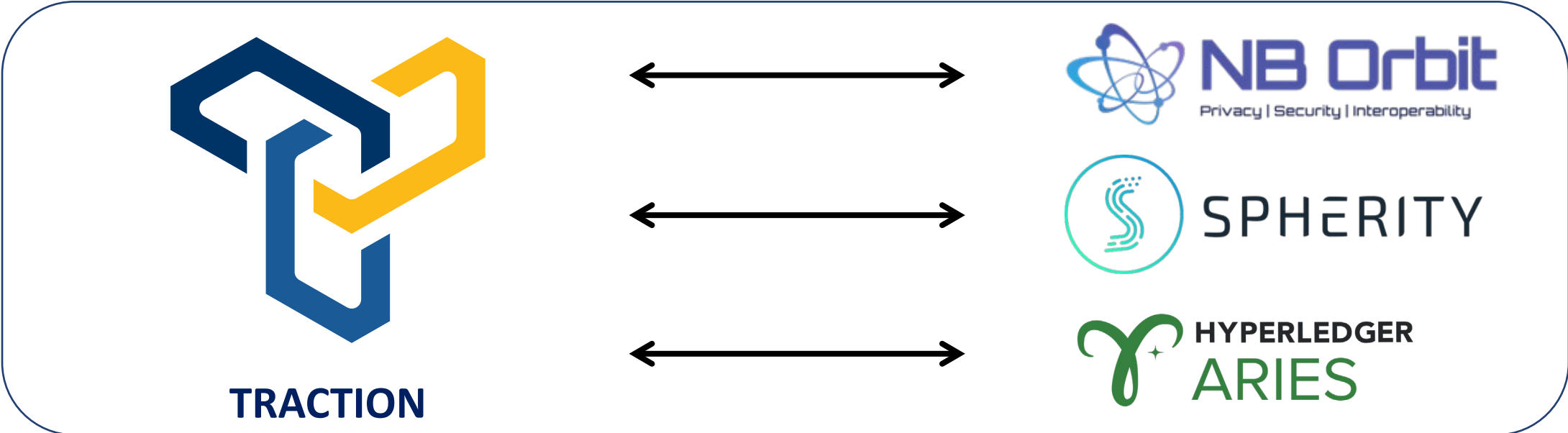






# Interoperable Technology

Anyone using interoperable technology can send and receive digital credentials.





# Opportunities



Cross-border trade



Supply chain traceability



Net zero and ESG reporting



Image: Copper Mountain Mining Corporation



# Strategic Alignment: Critical Minerals

## Global



- UN Center for Trade Facilitation and Electronic Business

## Pan-Canadian

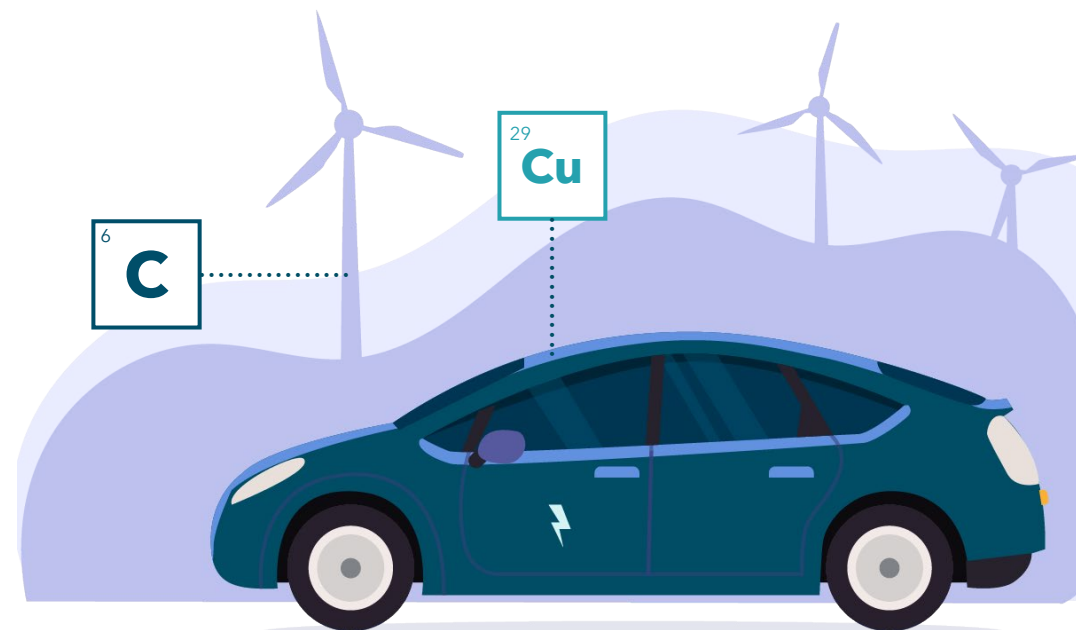


- Federal & Provincial Critical Minerals Strategies
- Pan-Canadian Workplan

## British Columbia



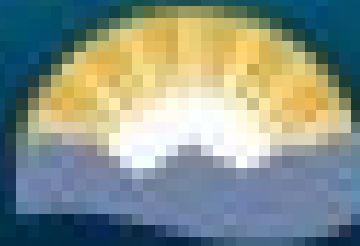
- British Columbia Critical Minerals Strategy
- ESG Center of Excellence





# Demonstration Video





BRITISH  
COLUMBIA



ENERGY & MINES  
DIGITAL TRUST



Attribution-NonCommercial-ShareAlike



Open Earth



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Explore the  
EMDT Case Study

