ENERGY & MINES
DIGITAL TRUST

The EMDT pilot project was initiated in November 2020 by the British Columbia Ministry of Energy, Mines and Low Carbon Innovation to facilitate the transition to a resilient, clean economy. This pilot enables a collaborative digital ecosystem between the B.C. government, natural resource companies, and organizations around the world, making it simple and secure to share sustainability data.

EMDT is enabling and accelerating the B.C. government's entry into a digital trust ecosystem by creating a simple and secure way to share sustainability data, certifications, and credentials.

DIGITAL TRUST ECOSYSTEM

A digital trust ecosystem builds confidence between organizations, businesses, and individuals when interacting online.

Natural resource companies gain greater trust from the online community by clearly demonstrating their sustainability policies and practices.

DIGITAL CREDENTIALS

Digital credentials are the digital equivalent to a physical credential, like business registration or sustainability certifications. Digital credentials:

- can be shared quickly and are tamper-proof
- allow companies to control their data
- guarantee the integrity of the information
- build digital trust

SUSTAINABILITY REPORTING

Globally, an increasing emphasis on responsibly sourced natural resource products is pressuring organizations to prove they are globally competitive, environmentally-leading, and socially responsible. EMDT is coordinating a digital trust ecosystem that improves current processes.

Efficient Reporting

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

Improved Trust

Sustainability data received through digital credentials is secure and easily authenticated. Purchasers, suppliers, and investors can trust a company's data has not been tampered with.

Increased Accuracy

Digital credentials prevent data from being altered, so there is no risk of manipulation when it's shared. Information exchanged through digital credentials stays accurate.

Nancy Norris
Senior Director of ESG & Digital Trust
nancy.norris@gov.bc.ca

Kyle Robinson
Senior Strategic Advisor, EMDT
kyle.robinson@briartech.ca

Learn more
digital.gov.bc.ca/emdt

EMDT PILOT PROJECTS

EMDT is coordinating several pilots to demonstrate how sustainability reporting can be made more efficient and trustworthy. Two pilot projects explore greenhouse gas emissions reporting in the mining sector and the natural gas sector. These pilots allow participants to test sharing and receiving digital credentials that include verified GHG emissions data for a specific mine site or natural gas facility.

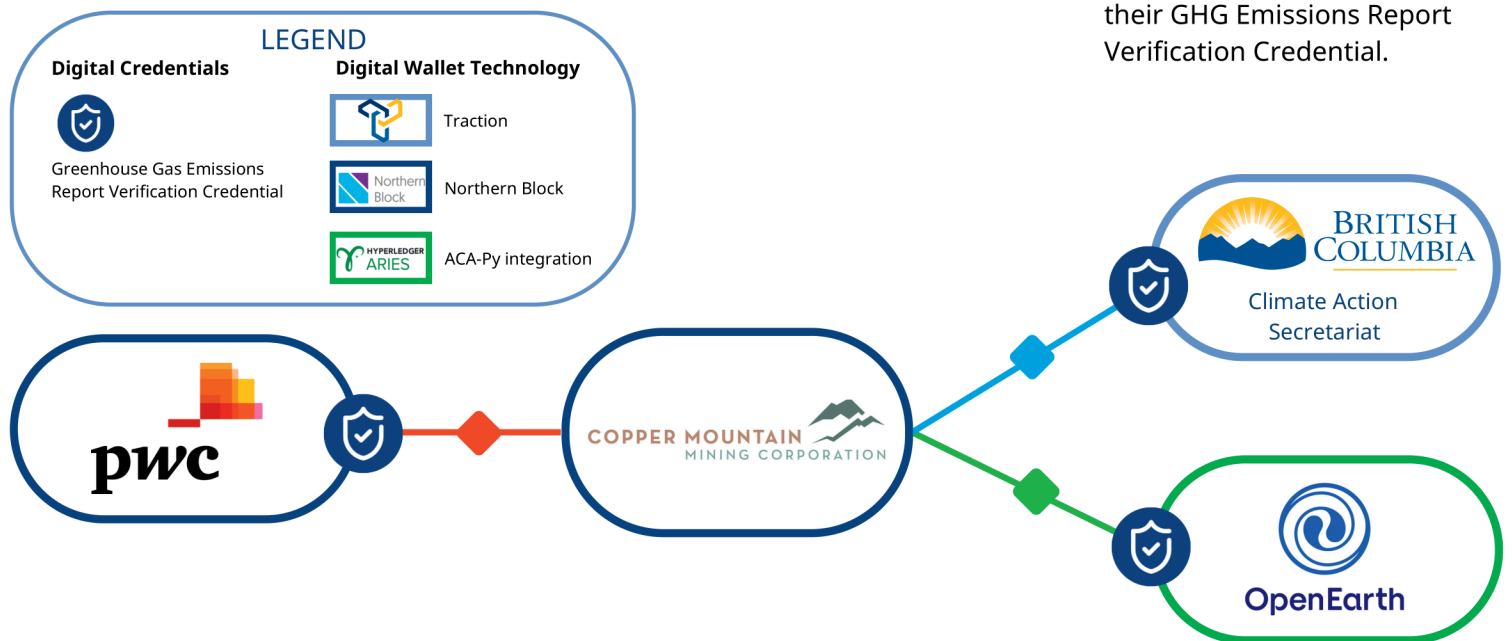## GREENHOUSE GAS MINING PILOT

3rd Party Validation

Having verified Copper Mountain's self-reported Greenhouse Gas Emissions (GHG) data, PricewaterhouseCoopers issues a digital credential containing GHG data.

Regulatory Reporting

Copper Mountain uses a verification statement as part of their GHG emissions report to the Climate Action Secretariat.

*Because this is a pilot, the process depicted in this diagram does not satisfy or replace existing regulatory reporting obligations.

Voluntary Reporting

Open Earth Foundation requests GHG emissions data from Copper Mountain for inclusion on the Open Climate portal, a global carbon accounting platform. Copper Mountain voluntarily supplies a subset of data using their GHG Emissions Report Verification Credential.

LEGEND

Digital Credentials

Greenhouse Gas Emissions Report Verification Credential

Digital Wallet Technology

Traction

Northern Block

ACA-Py integration

PwC → Copper Mountain Mining Corporation → British Columbia Climate Action Secretariat / OpenEarth

TRACTION

EMDT's technology, Traction, is open-source software built on Hyperledger Aries ACA-Py and Hyperledger Indy.

Broader Interoperability: Aries makes Traction highly interoperable with the technological solutions of companies and organizations around the world.

Multi-Tenant Capacity: ACA-Py is implemented on a cloud-based server, so multiple wallets can be managed with one Traction instance.

Collaborative Refinement: Traction is open-source technology, encouraging collaborative refinement, faster release, and higher scalability of the technology.

API-first Architecture: Traction is designed with an API-first architecture. This RESTful API allows for integration into existing line-of-business applications already being used by organizations. The Tenant user interface is built on this API to enable adoption prior to integration and for low-use functions.

Learn more about Traction:
github.com/bcgov/traction