

# Central Alberta Corridor Initiative Solutions

## Industrial Cluster Product & Capability Ecosystem Map

### Summary Solution Brief

#### The Challenge

The Central Alberta Corridor lacks a clear, shared, and decision grade understanding of its own industrial ecosystem. While the region hosts a dense concentration of industrial facilities, infrastructure, technical capabilities, research assets, and material flows, this information is fragmented across disconnected datasets, institutions, and informal networks. As a result, industry, researchers, governments, investors, and Indigenous partners struggle to see who is active, what capabilities exist, how materials and services flow through the system, and where gaps or complementarities lie.

This opacity reinforces siloed decision making and limits the Corridor's ability to deliberately shape integrated supply chains, align research and workforce development with industrial reality, and recruit the right participants at the right time. With multiple solution initiatives advancing in parallel, there is no common platform that allows them to reinforce one another, sequence activity, or collectively signal readiness and scale. Without shared ecosystem intelligence, opportunities for collaboration, project origination, circular value creation, and strategic investment remain hidden, under leveraged, or slow to materialize.

In a global environment where competitiveness is increasingly driven by ecosystem organization rather than isolated projects, this fragmentation constrains Alberta's ability to move from a firm by firm, commodity oriented mindset toward a more sophisticated cluster based strategy.

#### The Initiative

The Industrial Cluster Product and Capability Ecosystem Map is a shared, data enabled intelligence platform designed to provide a clear, integrated view of the Central Alberta Corridor's industrial ecosystem. Its purpose is to make the ecosystem legible to itself and to external

partners by clarifying who is active, what capabilities exist, how assets and actors connect across the value chain, and where coordination, investment, or intervention can unlock the greatest economic and strategic value.

The ecosystem map moves deliberately beyond static inventories, one time studies, or promotional “who’s who” exercises. It is conceived as a living decision support system that integrates industrial assets, research and innovation capacity, workforce and training programs, infrastructure, and material flows into a single, continuously evolving platform. Rather than describing organizations in isolation, the map is structured around capabilities, needs, and interactions, allowing users to understand how the system actually functions and where it can be deliberately shaped over time.

Built from existing ecosystem mapping work led by the Battery Metals Association of Canada, the platform aggregates priority public datasets and structured, actor-provided intelligence into a single, accessible interface. The emphasis is not on creating new data, but on integrating, organizing, and activating information that already exists but is currently fragmented.

Core elements of the ecosystem map include:

- Integrated data layers spanning industrial facilities and capabilities, research and innovation assets, workforce and training offerings, infrastructure and land availability, regulatory and approvals information, and material flows;
- Structured “needs and haves” inputs, allowing ecosystem participants to articulate material inputs and outputs, intermediate products, capability gaps, infrastructure constraints, partnership requirements, and workforce needs in a standardized, comparable format; and,
- Capability and readiness framing, enabling users to see not just what exists, but what is qualified, standardized, or positioned for pilot, demonstration, or commercial deployment.

AI enabled search, discovery, and interactive query tools allow users to explore the ecosystem by capability, material, process step, technology readiness level, infrastructure requirement, or workforce need. In practical terms, this allows industry to identify partners and suppliers, researchers to locate real world industrial problem sets and testbeds, investors to assess ecosystem depth and risk, and governments to ground policy and infrastructure decisions in real system conditions.

Importantly, the ecosystem map is designed to function as core enabling infrastructure rather than a standalone product. It underpins and strengthens multiple objectives simultaneously, including:

- Project origination and investment attraction;
- Research, development, and innovation alignment with industrial demand;

- Workforce and training planning grounded in real operating needs;
- Infrastructure and site prioritization at the cluster level;
- Policy development, regulatory dialogue, and standards discussions; and,
- Where appropriate, industrial by product utilization and circular opportunities.

The platform is deliberately outward facing. In addition to regional actors, it situates the Central Alberta Corridor within a broader national and international context, enabling benchmarking, partnership identification, and engagement with allied jurisdictions and global markets. In doing so, it helps translate the Corridor’s complexity into a coherent, credible narrative that external partners can understand and engage with.

Taken together, the ecosystem map provides the foundation for moving the Central Alberta Corridor from fragmented awareness toward **deliberate, ecosystem level action, allowing decisions to be made faster, coordination to improve, and opportunities to be identified and acted on** earlier in their lifecycle.

## Opening Moves

**Define the Data Focus and Architecture:** The first opening move is to deliberately scope what the ecosystem map needs to be, and what it does not. Rather than building a bespoke platform from scratch, this phase builds from existing mapping efforts and adapts them to the industrial cluster scale and decision contexts of the Corridor. Key actions include confirming priority data domains, defining platform architecture and governance, designing the structured “needs and haves” layer, clarifying user groups and decision outputs, and establishing an outreach and trust building approach. The outcome is a clearly scoped, user driven blueprint for a practical, action oriented ecosystem map.

**Activate the Ecosystem Map as a Cross Initiative Integration Platform:** The second opening move deploys the ecosystem map as a shared integration and activation platform for the Corridor’s other solution initiatives. Initiative specific lenses support transport and logistics planning, centralized processing recruitment, external and Indigenous partnership readiness, and visibility into research, development, and innovation assets. The map allows Alliance members to see themselves as part of a larger system, supports targeted recruitment and sequencing, and provides a credible interface for governments, investors, and international partners.

**Unlock Circular and By Product Opportunities Through Targeted Disclosure:** A third opening move focuses on making industrial by product and waste streams visible and investable. By advocating for targeted improvements to structured reporting within existing regulatory processes, and integrating this information into the ecosystem map with appropriate safeguards, the Corridor creates the conditions for new commercial

pathways, applied research, and collaboration to emerge where they make economic and technical sense.

## Role of the FMA

The Future Materials Alliance plays a catalytic and integrative role in advancing the ecosystem map. The Alliance helps articulate demand, convene participants, foster trust, and ensure the platform is grounded in real decision making needs. It supports alignment across regional, national, and international initiatives, helps identify credible development and stewardship partners, and ensures insights from the map actively inform broader Corridor strategy. The FMA does not own or operate the tool, but ensures it strengthens coherence and momentum across the ecosystem.

## What Success Looks Like

Success is achieved when the ecosystem map becomes a shared, actively used foundation for how the Central Alberta Corridor plans, collaborates, and executes. Actors across industry, research, government, Indigenous communities, and investment communities use the map as the first place to understand the region, identify partners, diagnose gaps, and position projects within a broader system.

Over time, the map evolves into trusted, living infrastructure. Solution initiatives reinforce one another rather than advancing in isolation. Recruitment becomes targeted and evidence based. Research, workforce, and infrastructure investments align more closely with industrial demand. External partners encounter a coherent, credible ecosystem rather than a collection of disconnected assets.

The ultimate signal of success is a shift from fragmented, reactive decision making toward deliberate, ecosystem level action, with the Central Alberta Corridor operating as a coherent industrial system capable of organizing capital, talent, infrastructure, and innovation with speed, clarity, and confidence.

## Detailed Solution Brief

### Barrier That Needs Addressing:

The Central Alberta Corridor lacks a clear, shared, and comprehensive understanding of its own industrial ecosystem and how existing strengths can be leveraged to opportunities of tomorrow. While the region hosts a dense concentration of industrial facilities, infrastructure, technical capabilities, and material flows, this information is highly fragmented, disaggregated, and difficult to access and draw insight from. Data exists across multiple public and private sources, but it is not centralized, standardized, or presented in a way that enables ecosystem-level insight.

As a result, ecosystem actors (including industry, investors, researchers, governments, and Indigenous partners) struggle to see who is operating in the region, what capabilities and assets are present, what materials and products are being produced or consumed, and where gaps or complementarities exist. This opacity reinforces siloed decision-making, limits collaboration, and constrains the region's ability to deliberately shape integrated supply chains. Without a shared, trusted picture of the ecosystem, opportunities for coordination, vertical integration, and strategic investment remain largely invisible.

Alberta has the opportunity to lead the development of a more circular industrial economy by leveraging the waste generated from its industrial ecosystem. However, there is no current business value or incentive for conservation and re-use of this waste. There is no available data on the types of waste being generated, their volumes, or their quality for their circular use. Company culture is also non-collaborative and disinclined to share this information voluntarily and it was determined that regulatory obligation was needed to unlock this potential.

With multiple solution initiatives potentially advancing in parallel, there is no common platform that allows them to visibly reinforce one another, sequence activity, or collectively signal readiness and scale. This fragmentation constrains the Corridor's ability to deliberately shape integrated supply chains, recruit the right participants at the right time, align research and workforce development with industrial reality, and present a coherent value proposition to external partners. Without a shared ecosystem map, opportunities for collaboration, project origination, and ecosystem level acceleration remain hidden, under leveraged, or slow to materialize.

### Why This Is Important:

Modern industrial competitiveness is increasingly driven by ecosystem intelligence rather than isolated projects. Regions that can clearly articulate their assets, capabilities, material flows, and interdependencies are better positioned to attract capital, originate projects,

align Research, Development, and Innovation with industrial needs, and engage effectively with governments and international partners.

For the Central Alberta Corridor, improved ecosystem visibility is essential to moving beyond a commodity-oriented, firm-by-firm mindset toward a more sophisticated cluster-based strategy. A shared understanding of “who is here” and “what exists” enables actors to identify collaboration opportunities, reduce duplication, accelerate learning, and de-risk investment decisions. It also supports more informed policy development, infrastructure planning, and standard-setting by grounding decisions in a clear picture of regional reality.

With a better understanding of the assets and actors available to deploy, what assets and actors are available to deploy, the FMA participants can leverage new collaborative connections and facilitate enhanced inter-ecosystem commerce and activity.

Importantly, ecosystem transparency is not an end in itself. It is enabling infrastructure that underpins multiple objectives: supply-chain integration, innovation commercialization, project origination, investment attraction, workforce alignment, and where appropriate, industrial by-product utilization and circularity.

### **The Initiative:**

The Industrial Cluster Product and Capability Ecosystem Map is a shared, data enabled intelligence platform designed to provide a clear, integrated view of the Central Alberta Corridor’s industrial ecosystem. Its purpose is to make the ecosystem legible to itself and to external partners by clarifying who is active, what capabilities exist, how assets and actors connect across the value chain, and where coordination, investment, or intervention can unlock the greatest economic and strategic value.

The ecosystem map moves deliberately beyond static inventories, one time studies, or promotional “who’s who” exercises. It is conceived as a living, decision support system that integrates industrial reality with research and innovation capacity, workforce and training assets, infrastructure, and material flows. Rather than describing organizations in isolation, the map is structured around capabilities, needs, and interactions, allowing users to understand how the system actually functions and where it can be deliberately shaped over time.

The ecosystem map is designed to function as enabling infrastructure rather than a standalone product. Key principles include:

- Action oriented by design: built to support real decisions related to investment, project development, research alignment, infrastructure planning, and policy;

- Continuously evolving: updated as projects advance, new actors emerge, partnerships form, and policies change;
- Capability focused: emphasizes what actors can do, what they need, and how they connect, rather than institutional labels alone; and
- Multi user and multi purpose: supports industry, project proponents, researchers, investors, governments, and Indigenous partners with a shared factual foundation.

Built from the existing Battery Metals Association of Canada Ecosystem Map, the platform aggregates and layers multiple data sources into a single, accessible interface. These include both public data and structured, actor provided intelligence, integrated in ways that support discovery, comparison, and pattern recognition.

Key data layers include:

- Public datasets, such as geoscience information, land and asset data, infrastructure, regulatory filings, water licences, and waste and disposal reporting;
- Industrial actors and capabilities, including facilities, products, technologies, services, certifications, and operational specializations within defined industrial clusters;
- Research, development, and innovation assets, including universities, polytechnics, applied research centres, pilot and demonstration infrastructure, training programs, funding mechanisms, and active projects; and,
- Needs and haves, capturing material inputs and outputs, intermediate products, precursors, capability gaps, partnership requirements, infrastructure constraints, and workforce needs.

AI enabled search and discovery tools allow users to query the ecosystem by capability, material, process step, technology readiness level, infrastructure requirement, or workforce need. Interactive, chat based interfaces enable natural language exploration of the system, lowering barriers to engagement and accelerating insight generation.

A defining feature of the ecosystem map is its focus on capabilities and constraints rather than institutional descriptions. Each participating organization or group is characterized by:

- Core technical and operational capabilities;
- Mandates and constraints, such as research focused, training focused, commercial, or regulatory roles;
- Current needs, including partners, funding, infrastructure, data, feedstocks, or talent; and,

- Stage of activity, from research to pilot, demonstration, and commercial deployment.

This structure allows the map to function as an active matchmaking and problem solving tool. Industry can identify relevant partners, suppliers, or testbeds. Researchers can locate real world industrial challenges and collaboration opportunities. Governments and funders can see where targeted support or infrastructure investment would unlock disproportionate impact.

Recognizing that some critical information will not emerge through voluntary disclosure alone, the initiative also contemplates targeted improvements to structured reporting within existing regulatory processes, particularly related to industrial outputs and by-products. When integrated into the ecosystem map with appropriate safeguards, this information strengthens ecosystem intelligence and enables new commercial, research, and coordination opportunities to emerge where they make economic and technical sense.

Importantly, this approach does not prescribe outcomes. Instead, it removes structural barriers to visibility and allows viable opportunities to be identified, tested, and pursued organically by ecosystem actors.

The ecosystem map is deliberately outward facing. In addition to regional actors, it situates the Central Alberta Corridor within a broader national and international context. Curated linkages can include:

- Relevant organizations and capabilities elsewhere in Canada;
- Allied international research hubs, companies, and funding bodies; and,
- Advanced industrial and research ecosystems in peer jurisdictions.

This orientation supports benchmarking, partnership identification, and strategic engagement with external partners, while making the Corridor's capabilities legible and credible to global audiences.

Rather than serving a single initiative or stakeholder group, the ecosystem map functions as core enabling infrastructure for the Central Alberta Corridor. It underpins:

- Project origination and investment attraction;
- Research and innovation alignment with industrial demand;
- Workforce and training planning;
- Infrastructure and site prioritization;
- Policy development and regulatory dialogue; and,

- Where appropriate, by product utilization and circular opportunities.

The Ecosystem Map directly supports a central objective of the CAC and the FMA: transforming a fragmented landscape of activity into a coherent, action-oriented critical materials ecosystem. It enables faster coordination, lowers transaction costs, shortens learning cycles, and supports a shift from siloed activity toward deliberate, ecosystem level action across all strategic priorities of the Corridor.

### **Success Looks Like:**

Success is achieved when the Central Alberta Corridor has a shared, actively used ecosystem intelligence platform that underpins coordination, decision making, and execution across all major initiatives.

In practice, the ecosystem map becomes the first place actors go to understand the region. Industry, researchers, governments, Indigenous partners, investors, and external collaborators can quickly see who is active, what capabilities exist, what materials and services are available, and where gaps or opportunities lie. Instead of relying on informal networks or fragmented information, users can clearly answer questions such as: Who can do this? Who needs this? Where does this fit in the system?

The map provides visibility into products, capabilities, and certifications, allowing actors to understand not just what exists, but what is qualified, standardized, or ready for deployment. This clarity reduces friction for project development, supports procurement and offtake discussions, and helps align R&D, pilot projects, and commercialization efforts with real industrial demand.

New entrants (whether local entrepreneurs, international investors, or allied-country partners) can rapidly identify local-scale partnership opportunities, see where gaps exist, and understand how their projects could integrate into the Corridor rather than operate in isolation. This shortens timelines for collaboration, lowers search and transaction costs, and improves the overall investment environment.

Critically, success also means the ecosystem map actively advances the Corridor's other priority initiatives. By incorporating actor "needs" and "haves," the platform strengthens:

- project origination and investment attraction efforts,
- R&D coordination and applied innovation initiatives,
- infrastructure and logistics planning,
- regulatory and standards development discussions, and

- efforts to improve material efficiency, by-product utilization, and circular opportunities where they make economic sense.

Over time, the map becomes living infrastructure, continuously updated, increasingly trusted, and embedded in how the Corridor plans, collaborates, and executes. The ultimate signal of success is a shift from fragmented, reactive decision-making toward deliberate, ecosystem-level action, where opportunities are visible early, partnerships form faster, and the Central Alberta Corridor operates as a coherent industrial system rather than a collection of disconnected assets.

### The Role of the FMA:

The Future Materials Alliance (FMA) plays a catalytic and connective role in advancing the Industrial Cluster Product & Capability Ecosystem Map, rather than acting as its owner, developer, or long-term operator.

First, the FMA helps articulate demand for the ecosystem map. Through its convening power across industry, Indigenous rights holders, governments, researchers, and investors, the Alliance is well positioned to surface and refine the practical needs the map must serve (i.e. what information actors require, how it should be structured, and what outputs would meaningfully support decision-making at the cluster level). By grounding the tool in real-world use cases, the FMA helps ensure the map adds tangible value rather than becoming a static or academic exercise.

Second, the FMA acts as a network access and engagement facilitator. Workshop participants emphasized that participation and data contribution will not happen organically. The Alliance can convene and mobilize ecosystem actors, foster trust, and create the conditions needed for data gathering (particularly around “needs” and “haves”) by framing participation as ecosystem-building rather than disclosure for its own sake. In this role, the FMA supports dialogue between data providers and tool designers to ensure outputs are useful, credible, and aligned with how industrial actors actually operate.

Third, the FMA ensures strategic alignment across scales. The ecosystem map is not an isolated regional tool; it must be informed by (and inform) international, national, and Western and Northern Canadian collaboration. Drawing on its broader convening activities and partnerships, the FMA can help align the map with allied-country priorities, federal and provincial initiatives, and parallel ecosystem efforts elsewhere in Canada. Conversely,

insights generated through the map can feed back into FMA-led discussions on project origination, investment attraction, policy alignment, and international engagement.

Finally, the FMA helps identify leadership and resources. While it will not develop or maintain the platform itself, the Alliance can play a critical role in identifying credible organizations or consortia to lead development and long-term stewardship, as well as in helping to secure funding from public, private, and philanthropic sources. By doing so, the FMA lowers coordination risk and accelerates momentum without centralizing control.

In sum, the FMA's role is to act as orchestrator and integrator, ensuring the ecosystem map is shaped by real needs, embedded within a broader ecosystem strategy, and actively supports the Corridor's multiple initiatives. Its value lies not in owning the tool, but in ensuring the tool strengthens the coherence, effectiveness, and impact of the overall FMA initiative.

### **Who Needs To Be Involved:**

Delivering a credible and useful Industrial Cluster Product & Capability Ecosystem Map requires participation from a broad cross-section of actors whose knowledge, data, and perspectives collectively define how the Central Alberta Corridor actually functions. The value of the map depends on engaging those who produce, regulate, invest in, and are impacted by industrial activity—both existing and emerging.

Industrial producers and operators are foundational. Existing firms bring firsthand knowledge of facilities, products, capabilities, inputs, outputs, and operational constraints. Their participation ensures the map reflects real industrial conditions rather than theoretical ones. At the same time, new entrants and project proponents (including startups, technology providers, and international firms exploring the Corridor) help articulate what information they need to evaluate opportunities, identify partners, and integrate locally.

Indigenous Nations and communities must be engaged as partners, not consultees. Their involvement is essential to ensure the map reflects Indigenous economic interests, land considerations, and development priorities, and that it supports pathways for Indigenous participation, ownership, procurement, and long-term benefit. Early and sustained engagement also strengthens trust, legitimacy, and alignment with rights and title.

Governments and public agencies play a critical role as data holders and policy shapers. Provincial and federal departments, regulators, and arms-length agencies (such as geoscience and land-data custodians, investment and trade agencies, and regulatory bodies) hold much of the foundational information that underpins the ecosystem. Their participation enables access to authoritative datasets (e.g., geoscience, land use, approvals, infrastructure) and ensures alignment with regulatory and policy frameworks.

Regulators are particularly important to ensure clarity on reporting requirements, data availability, and appropriate safeguards. Their engagement helps ensure the map complements existing approval and renewal processes rather than duplicating or conflicting with them.

Landowners and industrial park authorities contribute critical insight into land availability, zoning, servicing, and development readiness, information that is often decisive for project siting and expansion decisions.

Funders and capital providers, including public financiers, development finance institutions, strategic investors, and philanthropic funders, help shape the map's usefulness for investment decision-making. Their involvement ensures the platform supports due diligence, risk assessment, and capital deployment across multiple project types and scales.

Finally, trade and international engagement actors, such as trade commissioners and allied-country partners, help connect the ecosystem map to external demand, international standards, and partnership opportunities. Their participation ensures the Corridor's capabilities are legible not only locally, but to global markets and collaborators.

Together, these participants ensure the ecosystem map is not simply a data repository, but a shared, living representation of the Central Alberta Corridor, grounded in real assets, aligned with rights and responsibilities, and oriented toward action.

## **Opening Moves:**

### **1. Define the Data Focus and Architecture**

The first priority is to start with what already exists and deliberately define what an ecosystem map for the Central Alberta Corridor needs to be, and just as importantly, what it does not. Rather than building a bespoke platform from scratch, this opening move builds from existing ecosystem mapping work, including efforts

led by the Battery Metals Association of Canada, and adapts them to the industrial cluster scale, decision contexts, and use cases of the Corridor.

This phase is intentionally focused on confirmation, scoping, and design, not full deployment. The objective is to establish a clear, shared blueprint for a practical, action oriented ecosystem map that can support real decision making across the Corridor while remaining extensible as additional layers and use cases are added over time.

Key actions under this opening move include:

- Confirm priority data domains: Identify which data domains are most material to understanding and shaping the Corridor's industrial ecosystem, including public datasets such as geoscience information, land and asset data, infrastructure, regulatory filings and approvals, water licences, and waste and disposal reporting. The emphasis is on determining where integration across datasets creates new insight, rather than duplicating information that already exists in accessible form.
- Define the platform architecture: Establish how multiple, disjointed data sources are accessed through a single interface, how information is layered and linked, and how users navigate between assets, actors, products, capabilities, and material flows. This includes confirming principles for data governance, update cycles, and extensibility, ensuring the platform can evolve as projects advance and new information becomes available.
- Design the "needs and haves" layer: Develop a structured framework that allows industrial actors, research organizations, and other ecosystem participants to voluntarily contribute standardized information on inputs and outputs, intermediate products, precursors, capability gaps, infrastructure constraints, partnership needs, and workforce requirements. This layer is central to shifting the map from a descriptive tool to an active matchmaking and problem solving platform.
- Clarify user groups and decision outputs: Define primary user groups and the practical decisions the map must support, including industry operators, project proponents, investors, governments, Indigenous partners, and researchers. This step ensures the platform is designed around real use cases such as partner identification, investment screening, research alignment, infrastructure planning, and policy analysis at the cluster level.

- Confirm outreach, participation, and trust building approach: Identify which actors need to be engaged early, what incentives or safeguards are required to encourage participation, and how trust is established around data contribution and use. This includes clarifying how sensitive information is handled, how contributions are framed as ecosystem building rather than disclosure for its own sake, and how early participants see tangible value from engagement.

While this opening move is not designed to deliver all functionality at once, it must be informed by the full set of strategic objectives the Corridor is pursuing. The data focus and architecture should be sufficiently flexible to support future integration with other solution initiatives, without hard coding assumptions or prematurely constraining use cases.

The intended outcome of this opening move is a clearly scoped, user driven blueprint for an Industrial Cluster Product and Capability Ecosystem Map: one that aggregates priority public data, is augmented by structured, actor provided intelligence, and creates early visibility into gaps, overlaps, and collaboration opportunities across the Central Alberta Corridor.

## **2. Activate the Ecosystem Map as a Cross Solution Integration Platform**

With the data focus and architecture defined, the second opening move is to deliberately deploy the ecosystem map as a shared integration and activation platform for the Corridor's other solution initiatives. Rather than treating the map as a standalone analytical product, this move positions it as the connective tissue that allows multiple initiatives to reinforce one another, surface momentum, and reduce coordination friction across the ecosystem.

The objective is to ensure the ecosystem map does not merely describe the system, but actively helps organize it, allowing participants to see themselves as part of a larger, evolving whole and enabling faster alignment, recruitment, and execution across initiatives.

Key elements of this opening move include:

- Make the Alliance visible to itself and others: Use the ecosystem map to visually depict the breadth, depth, and diversity of Alliance participation across industry, research, Indigenous organizations, infrastructure, and

capital. By allowing members to see how they fit within the broader system, the map reinforces shared identity, strengthens legitimacy, and encourages deeper participation. This “system seeing itself” effect helps shift the Alliance from a convening body toward a recognizable, functioning ecosystem.

- Enable initiative specific views and filters: Configure the map to support tailored lenses aligned with priority solution initiatives. Rather than creating separate tools for each initiative, the same underlying platform enables different decision contexts by highlighting relevant actors, capabilities, and gaps. Examples include:
  - Transport and logistics: mapping project proponents, material flows, infrastructure constraints, and logistics providers using structured needs and haves to identify bottlenecks, aggregation opportunities, and sequencing challenges.
  - Centralized lithium refinery: identifying lithium brine and hard rock proponents, development timelines, feedstock characteristics, and potential anchor participants to support recruitment, coalition building, and early feasibility work
  - External partnerships: presenting a clear, organized view of Indigenous communities, organizations, capabilities, and interests, allowing the Corridor to “get its own house in order” and enabling external partners to understand where and how to engage constructively.
- Embed research, development, and innovation visibility: Integrate RDI specific layers that surface post secondary institutions, applied research centres, pilot and demonstration infrastructure, training programs, and active research projects. By structuring this information around capabilities, needs, and stages of activity, the map enables industry to find relevant research partners, researchers to identify real world industrial testbeds, and governments to see where applied research and workforce investment would have the greatest impact.
- Support recruitment, matchmaking, and sequencing: Use the ecosystem map as a practical tool to support targeted recruitment and engagement across initiatives. Rather than broad calls for participation, the map allows the Alliance to identify specific gaps, priority actors, and missing capabilities and to engage them deliberately. This supports more disciplined sequencing of initiatives, reduces duplication, and helps align effort around shared objectives.

- Create a credible external interface: While the map is first and foremost an internal coordination tool, this opening move also prepares it to function as a controlled external interface. Governments, investors, and allied international partners can be shown a coherent, evidence based picture of the ecosystem, including where capabilities are strong, where gaps remain, and where collaboration is actively being pursued. This improves credibility, shortens orientation time for external actors, and supports investment and partnership discussions grounded in reality.

This opening move does not attempt to solve every coordination challenge at once. Instead, it establishes the ecosystem map as a living platform that other solution initiatives can plug into and draw value from, while remaining flexible enough to evolve as those initiatives mature.

The intended outcome is a shift from parallel, loosely connected solution efforts toward a more integrated and mutually reinforcing system. The ecosystem map becomes the place where initiatives intersect, momentum becomes visible, and the Central Alberta Corridor begins to operate as a coherent industrial ecosystem rather than a collection of disconnected activities.

### **3. Unlock Circular and By-Product Opportunities Through Targeted Disclosure and Incentives**

While the ecosystem map serves multiple purposes, a second early priority is to unlock currently invisible industrial by-products and waste opportunities that cannot emerge without better data and regulatory clarity.

By making industrial by-product and waste streams visible and investable, the Corridor also creates a pipeline of applied entrepreneurial opportunities that can anchor new applied research, commercialization pathways, and market-relevant training within post-secondary institutions, strengthening a domestic talent and innovation base aligned with real industrial demand.

Workshop participants identified that voluntary disclosure alone is insufficient. This opening move therefore focuses on mobilizing ecosystem actors to advocate for targeted regulatory improvements that enable innovation without prescribing outcomes. Core actions include:

- Advocating for amendments to Alberta’s approval and renewal processes (e.g., EPEA/AER) that require the determination and disclosure of industrial waste and by-products as part of existing regulatory workflows.
- Ensuring disclosed data is accessible for RDI and commercial exploration, with appropriate safeguards, so entrepreneurs, researchers, and firms can quantify, test, and evaluate potential new uses.
- Piloting value metrics and incentives for waste generators (such as financial offsets, reputational benefits, ESG recognition, or access to innovation funding) to encourage collaboration rather than compliance-only reporting.
- Linking disclosed data directly into the ecosystem map, ensuring waste and by-product information becomes part of the broader cluster intelligence layer rather than a standalone reporting exercise.
- Supporting early demonstration and pilot projects that test reuse, substitution, or upgrading pathways for selected waste streams to build confidence and practical learnings.

The objective of this opening move is not to force circularity, but to remove structural barriers that prevent it from emerging where it makes economic and technical sense. By pairing improved disclosure with ecosystem visibility, the Corridor creates the conditions for new commercial pathways, applied research, and collaboration to develop organically.