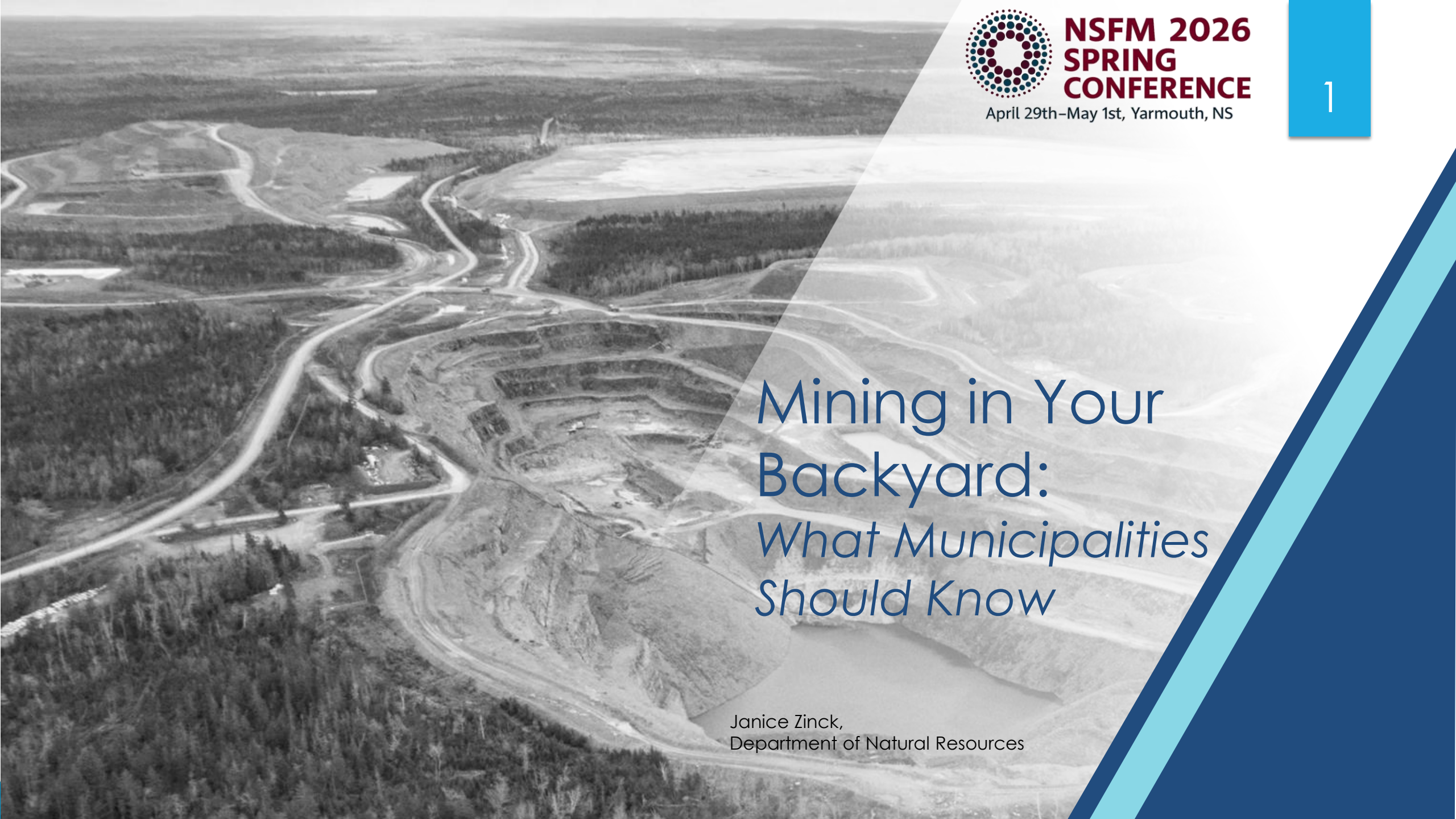


NSFM 2026 SPRING CONFERENCE
April 29th–May 1st, Yarmouth, NS

Mining in Your Backyard:
What Municipalities Should Know

Janice Zinck,
Department of Natural Resources

MINING IN NOVA SCOTIA

Building a Sustainable Future & Economic Opportunities

MUNICIPAL & PROVINCIAL COLLABORATION

- Policy Alignment
- Funding & Investment
- Infrastructure Planning

LOCAL IMPACTS & SUSTAINABLE DEVELOPMENT

- Community Engagement
- Environmental Protection
- Land Use Planning
- Local Benefits

KEY MINERALS & PROJECTS

- Lithium
- Cobalt
- Rare Earth Elements
- Graphite
- Gold

ECONOMIC GROWTH & INNOVATION

- Job Creation
- Industry Growth
- Value Chain Development
- Attracting Investment
- R&D initiatives
- Clean Energy
- Driving Clean Energy Transition
- High-Tech Manufacturing

Mining in Nova Scotia Today

- Mining in Nova Scotia occupies a very small area, approximately 0.02% of the Nova Scotia landmass
- Accounts for 0.73% of GDP while employing 0.5% of the workforce
- Approximately 2,500 people are employed by the mining sector, average salary $102k
- $30–50 million typical annual exploration spending in Nova Scotia
- Currently. main commodities – gypsum, salt, limestone, aggregate, past producer of many critical minerals
- Goldboro open-pit mine expected to create over 700 jobs and $2B in economic impact
- 15 Mile Processing Hub will have a $5B GDP impact

Mining Life Cycle

- Claim Staking
- Prospecting
- Geological Mapping
- Aerial Surveys
- Data Research
- Historical Core Review
- Drilling (RC or Core)

- Advanced Drilling
- Ore Body Definition
- NI 43-101 Stage
- Pre-Feasibility Study
- Feasibility Study
- Environmental Studies
- CLC Community Liaison Committees

- Mine infrastructure
- Roads
- Processing Facilities
- Power Grid installation
- Environmental Studies

- Open-Pit Mining
- Underground Mining
- Crushing/Grinding Facilities
- Flotation/ Separation
- Milling, smelting, refining
- Environmental Compliance Monitoring

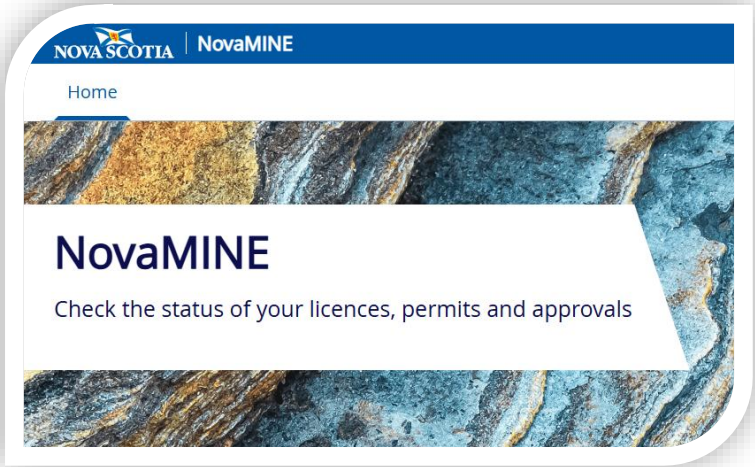
- Return to natural state
- Buildings removed
- Mine Hazards made safe
- Vegetation growth
- Crown Lands returned

NOVA SCOTIA

Public Geoscience

- While the surface of the Earth is well mapped, much of what lies underground and how it affects our lives remains less understood.
- The role of the Nova Scotia Geological Survey is to collect and share geoscience information (e.g., geology, mineral resources, geohazards) for the public good
- Supports informed decision-making, public safety, environmental stewardship, and responsible economic development

Publicly available tool

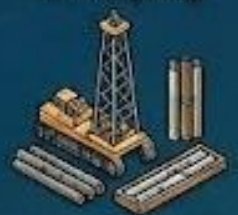


EXPLORATION & MINING ACTIVITIES: A LINEAR PROCESS FLOW

GEOLOGICAL EXPLORATION

Geological Mapping & Sampling

Geological Sampling



Exploration Dril Rig

Remote Sensing & GIS

Deep Core Drilling

PROJECT FEASIBILITY & DEVELOPMENT

Resource Assessment

Stakeholder & Land Use Planning

EXCAVATION & EXTRACTION

Large-Scale Excavation

Blasting Operations

PRIMARY PROCESSING

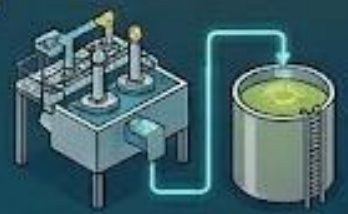
Crushing & Grinding

Screening & Classification

MINERAL EXTRACTION & CONCENTRATION

Lithium Cobalt Copper

Rare Earth Elements Gold



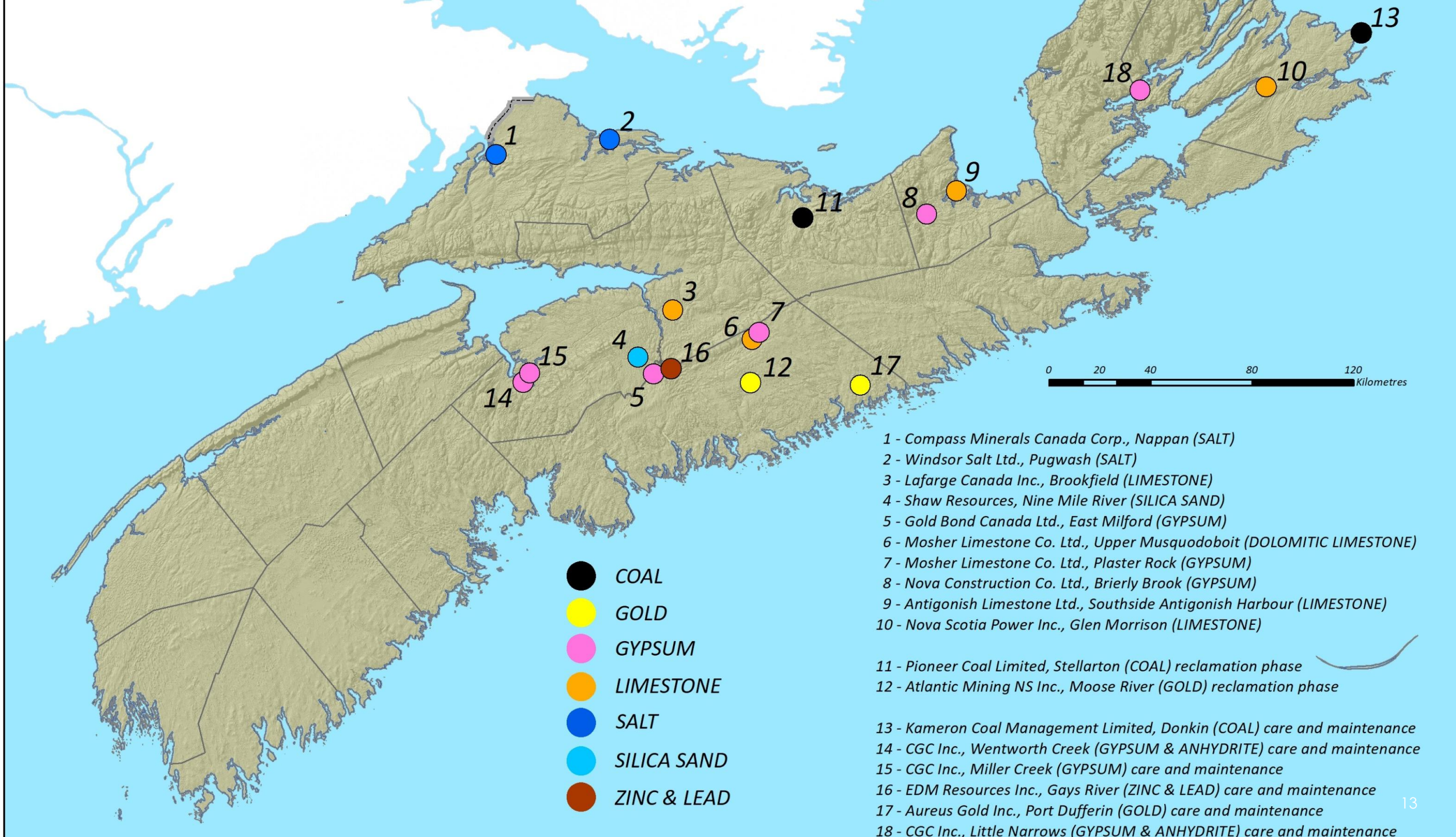
Flotation & Leaching

Product Processing

Non-Disturbance Exploration

Exploration

Operations

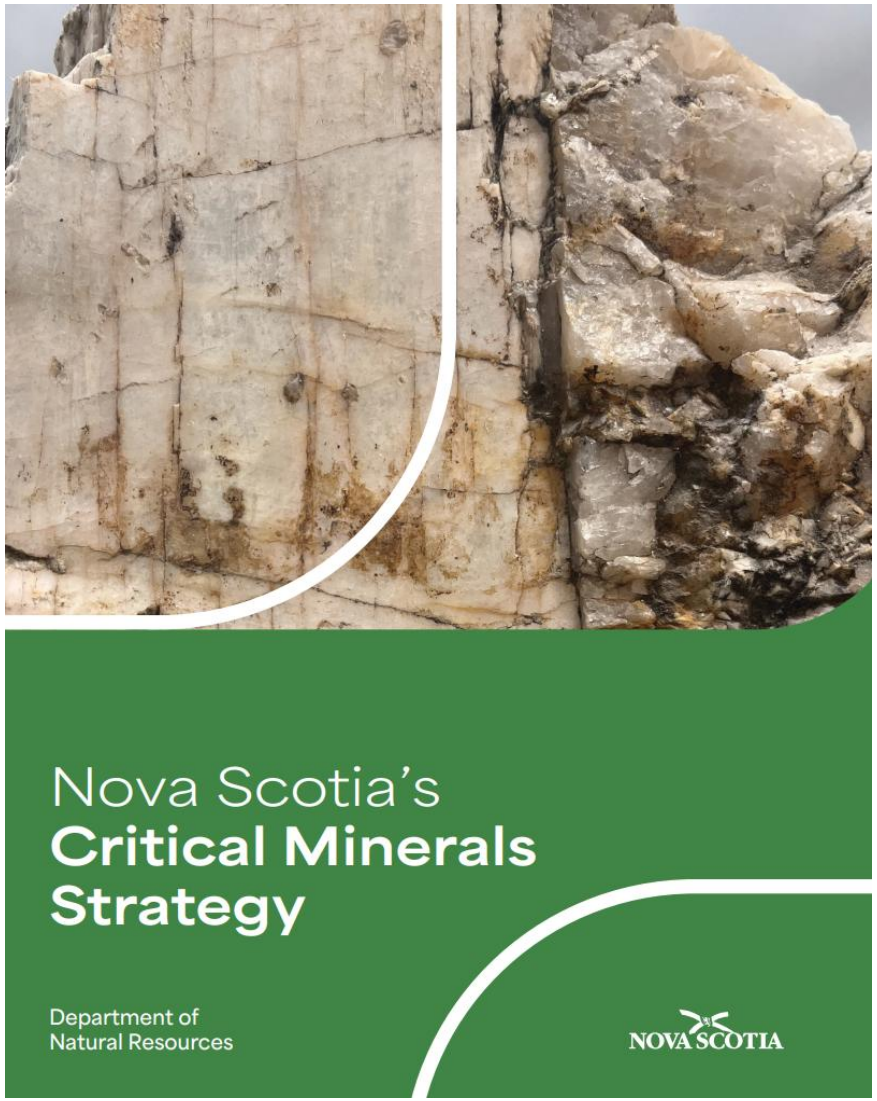


1 - Compass Minerals Canada Corp., Nappan (SALT)
2 - Windsor Salt Ltd., Pugwash (SALT)
3 - Lafarge Canada Inc., Brookfield (LIMESTONE)
4 - Shaw Resources, Nine Mile River (SILICA SAND)
5 - Gold Bond Canada Ltd., East Milford (GYPSUM)
6 - Mosher Limestone Co. Ltd., Upper Musquodoboit (DOLOMITIC LIMESTONE)
7 - Mosher Limestone Co. Ltd., Plaster Rock (GYPSUM)
8 - Nova Construction Co. Ltd., Brierly Brook (GYPSUM)
9 - Antigonish Limestone Ltd., Southside Antigonish Harbour (LIMESTONE)
10 - Nova Scotia Power Inc., Glen Morrison (LIMESTONE)

11 - Pioneer Coal Limited, Stellarton (COAL) reclamation phase
12 - Atlantic Mining NS Inc., Moose River (GOLD) reclamation phase

13 - Kameron Coal Management Limited, Donkin (COAL) care and maintenance
14 - CGC Inc., Wentworth Creek (GYPSUM & ANHYDRITE) care and maintenance
15 - CGC Inc., Miller Creek (GYPSUM) care and maintenance
16 - EDM Resources Inc., Gays River (ZINC & LEAD) care and maintenance
17 - Aureus Gold Inc., Port Dufferin (GOLD) care and maintenance
18 - CGC Inc., Little Narrows (GYPSUM & ANHYDRITE) care and maintenance

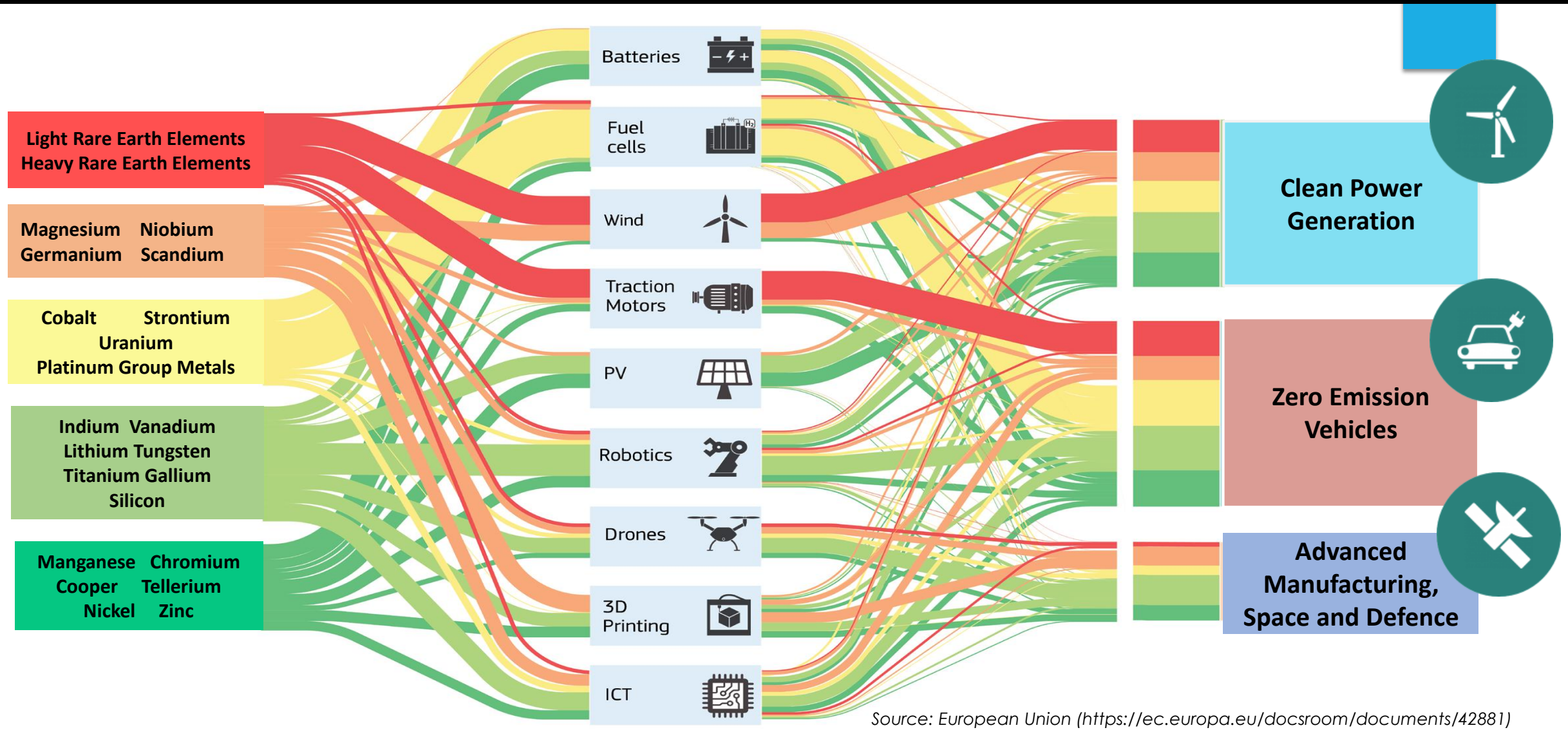
Reclamation - Melford Gypsum Mine



Nova Scotia's Critical Minerals Strategy Pillars

- Critical minerals geoscience
- Review regulatory framework
- Opportunities for partnerships with the Mi'kmaq
- Opportunities for Nova Scotians
- Research, development and innovation
- Enhance public awareness

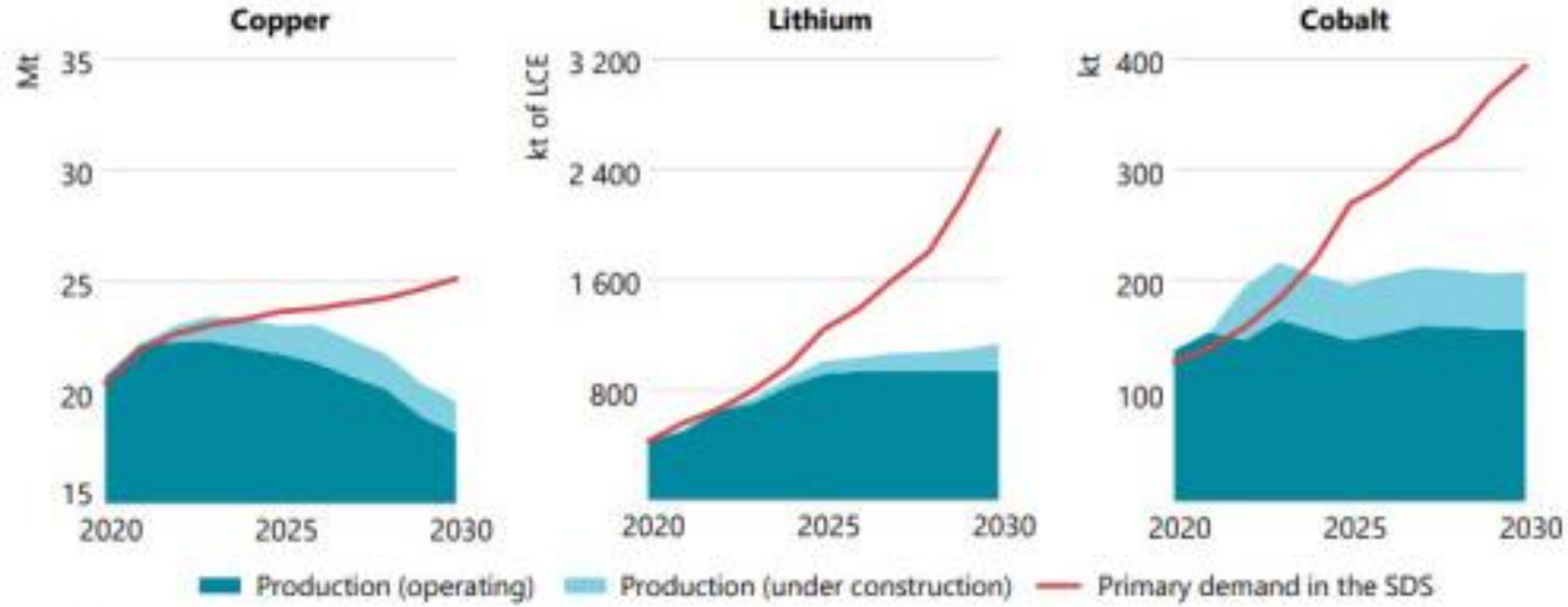
BUILDING BLOCKS FOR THE GREEN AND DIGITAL ECONOMY



Source: European Union (https://ec.europa.eu/docsroom/documents/42881)

NOVA SCOTIA

A looming mismatch between mineral supply and climate ambition



Today's investment plans are geared to a world of gradual change; given long leads times for new projects, an accelerated energy transition could quickly see demand running ahead of supply

SDS - Sustainable Development Scenario

Critical Minerals List Update

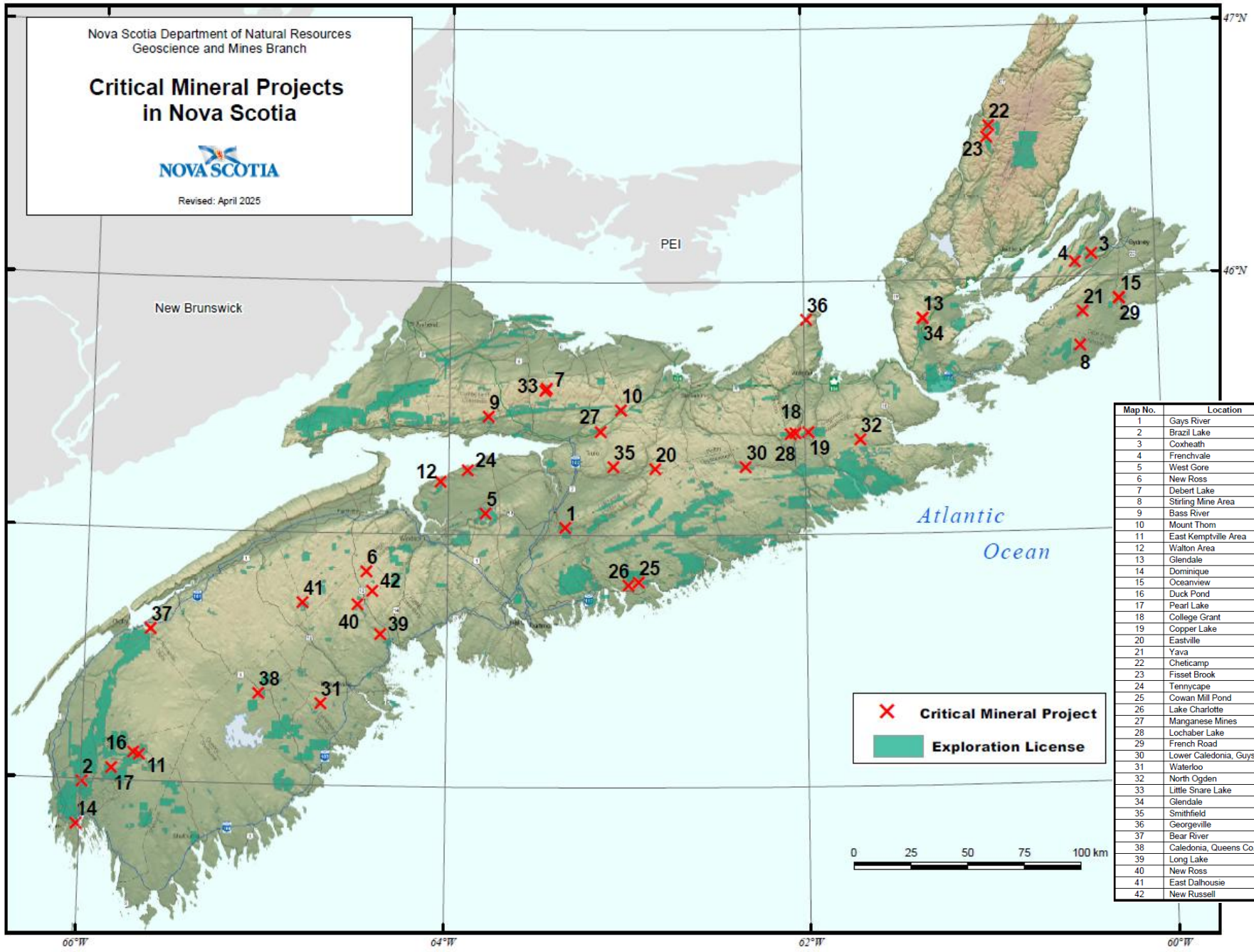
- Antimony
- Cobalt
- Copper
- Graphite
- Germanium
- Gallium
- Indium
- Lithium
- Manganese
- Molybdenum
- Niobium
- Rare Earth Elements
- Tantalum
- Tin
- Tungsten
- Zinc

ADDITIONAL MINERALS

STRATEGIC MINERALS

Magnet Components | Advanced Technologies | Electrical Transmission | Fiberoptics
Battery Components | EV Specific Components | Alloy Metals | Solar Components

NOVA SCOTIA



Map No.	Location	Project	Company	Mineral
1	Gays River	Gays River	Scotia Mine Ltd.	Lead, Zinc
2	Brazil Lake	Brazil Lake	Lithium Springs Exploration Inc.	Lithium
3	Coxheath	Sydney Copper Project	Cabrita Investments Inc.	Copper, Molybdenum, Cobalt
4	Frenchvale	Frenchvale Property	Mt. Cameron Minerals Inc.	Graphite
5	West Gore	West Gore Mine	Military Metals Corp.	Antimony
6	New Ross	New Ross	21Alpha Resources Inc.	Manganese, Molybdenum
7	Debert Lake	Debert Lake Property	Magnum Resources Inc.	Rare earth elements
8	Stirling Mine Area	Stirling Mine Area	Perry MacKinnon	Zinc, Copper, Lead
9	Bass River	Bass River Property	Spark Minerals Inc.	Manganese, Copper, Cobalt
10	Mount Thom	Mount Thom Property	Spark Minerals Inc.	Copper, Cobalt
11	East Kemptville Area	Ikes Ridge Prospect	Everest Metals Inc.	Copper, Tin, Zinc, Indium, Tungsten
12	Walton Area	Walton Pb, Zn, Ag, Ba Deposit	Basin Metals Ltd.	Lead, Zinc, Barite, Silver
13	Glendale	MacCollis Brook Graphite Occurrence	Kenneth Mallett	Graphite, Copper
14	Dominique	Dominique Sn, Zn, Cu, In Prospect	The Goldfields Group	Copper, Indium, Tin, Zinc, Molybdenum
15	Oceanview	French Rd Fe, Cu, Pb, Zn Prospect	ExplORE Resources Ltd.	Copper, Lead, Zinc, Molybdenum
16	Duck Pond	Duck Pond North Sn Occurrence	Avalon Advanced Minerals Inc.	Tin
17	Pearl Lake	Pearl Lake North	Everest Metals Inc.	Tin, Copper
18	College Grant	College Grant Cu, Fe Mine	Jimmy Gravel	Copper, Lead, Zinc, Fluorite
19	Copper Lake	Copper Lake Cu, Fe, Au Mine (Poisons Lake)	Minotaur Atlantic Exploration Ltd.	Copper
20	Eastville	Eastville Zn Prospect	Scotia Mine Ltd.	Zinc, Lead
21	Yava	Yava Pb Deposit (Silver Mine Pb Deposit)	Perry MacKinnon	Lead, Zinc, Copper
22	Cheticamp	Cheticamp Mountain Top Prospect	21Alpha Resources Inc.	Lead, Zinc, Copper
23	Fisset Brook	Fisset Brook Pb, Zn, Cu Prospect	21Alpha Resources Inc.	Lead, Zinc, Copper
24	Tennycape	Tennycape Manganese Mine	Basin Metals Ltd.	Manganese, Zinc
25	Cowan Mill Pond	Cowan Mill Pond W Occurrence	Andrew Hamilton	Tungsten, Copper, Molybdenum, Tin, Zinc
26	Lake Charlotte	Lake Charlotte W Occurrence	RareX Minerals Inc.	Tungsten
27	Manganese Mines	Manganese Mines	Cabrita Investments Inc.	Manganese
28	Lochaber Lake	Lochaber Lake (Felmate Pit)	Jimmy Gravel	Copper, Lead, Zinc
29	French Road	French Road Fe, Cu, Pb, Zn Prospect	ExplORE Resources Ltd.	Copper, Cobalt, Zinc, Tin
30	Lower Caledonia, Guys Co.	Lower Caledonia Be, Ta, Li in LCT pegmatite	Tower Resources, Ken Mallet	Tantalum, Lithium
31	Waterloo	Waterloo Mn Prospect	Kenneth Mallett	Manganese
32	North Ogden	North Ogden Graphite-Au Prospect	Kenneth Mallett	Graphite
33	Little Snare Lake	Little Snare Lake	Daniel Allen	REEs
34	Glendale	McColls Brook	Perry MacKinnon	Graphite
35	Smithfield	Smithfield	Perry MacKinnon	Zinc, Indium, Gallium, Germanium
36	Georgeville	Georgeville Zn	Duncan MacInnis	Zinc, Indium, Gallium, Germanium
37	Bear River	Waldeck Sb Target	Roger Fitzgerald	Antimony
38	Caledonia, Queens Co.	Caledonia Sn-W Prospect	Everest Metals Inc.	Tin, Indium, Tungsten, Copper, Zinc
39	Long Lake	Long Lake Mo, W, Cu Prospect	21Alpha Resources Inc.	Molybdenum, Copper, Tungsten
40	New Ross	Keddy Mo, Nb, Ta Pegmatite	Brunswick Exploration Inc.	Molybdenum, Tungsten, Tantalum, Niobium
41	East Dalhousie	East Dalhousie Cu, Sn Prospect	Kenneth Mallett	Tin, Copper
42	New Russell	Walker Moly Prospect	Tandem Exploration Inc.	Molybdenum, Copper, Tungsten, Tin

NOVA SCOTIA

FAQs

Landowner Rights

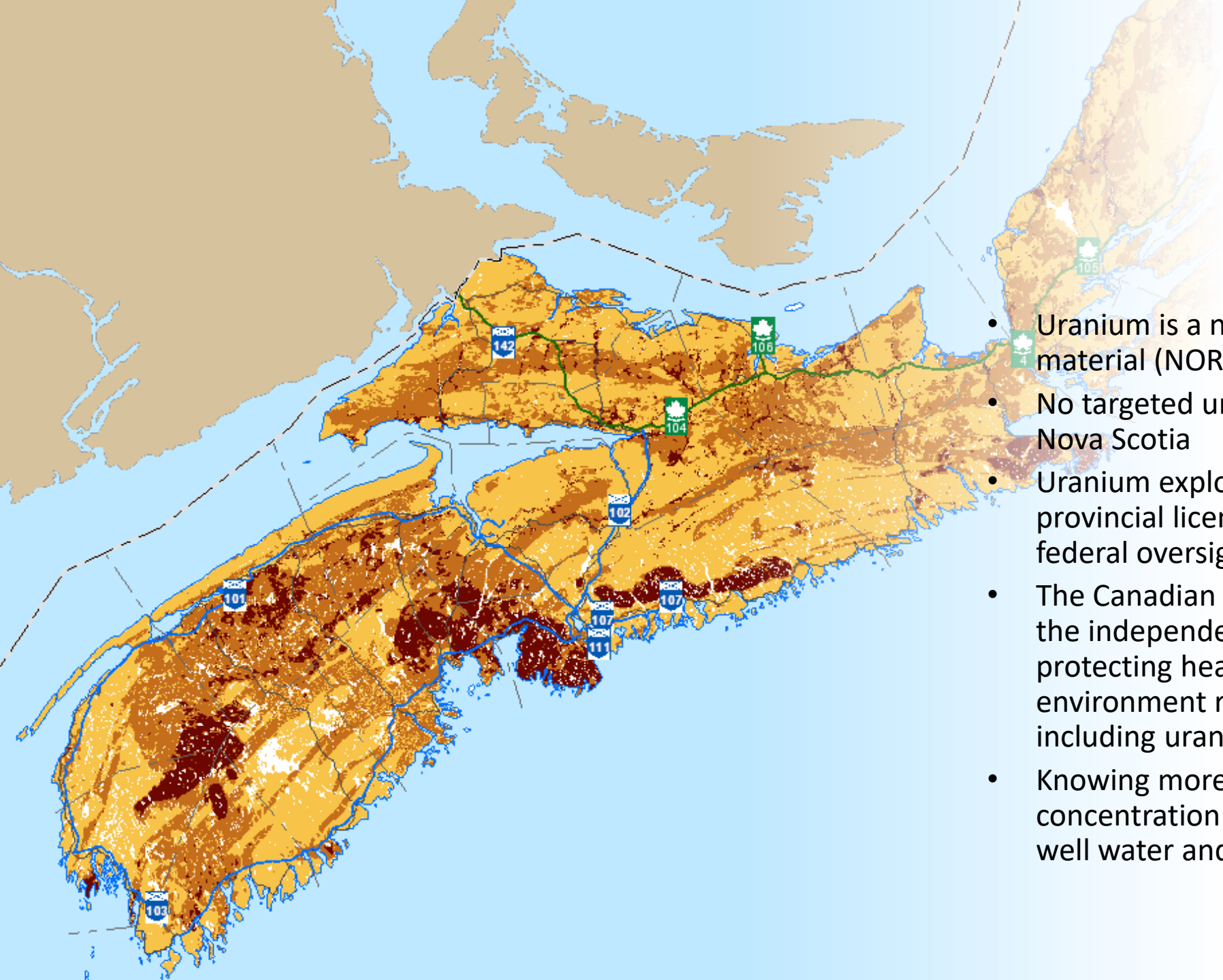
Permission is required before entry: An exploration licence holder must obtain the permission of the landowner before entering private land, and may only work within the licensed area

Landowners control surface access: Landowners own surface rights and can set conditions (such as timeframes or types of work) for exploration activities on their property

Minerals are owned by the Crown: While landowners own the surface, all mineral rights beneath the land are reserved to the Province of Nova Scotia

Disputes follow a formal process for exceptional cases. Mineral Resources Act (s.26)

Bill 198 – Gypsum on Crown land is owned by the Crown. Does not affect private land.



Uranium

- Uranium is a naturally occurring radioactive material (NORM) found in rocks and soils.
- No targeted uranium exploration or mining in Nova Scotia
- Uranium exploration is regulated through provincial licensing and permitting, with additional federal oversight where applicable.
- The Canadian Nuclear Safety Commission (CNSC) is the independent federal regulator responsible for protecting health, safety, security, and the environment related to nuclear substances, including uranium.
- Knowing more about its presence and concentration can help people manage uranium in well water and radon gas in buildings.

Contaminated Mines

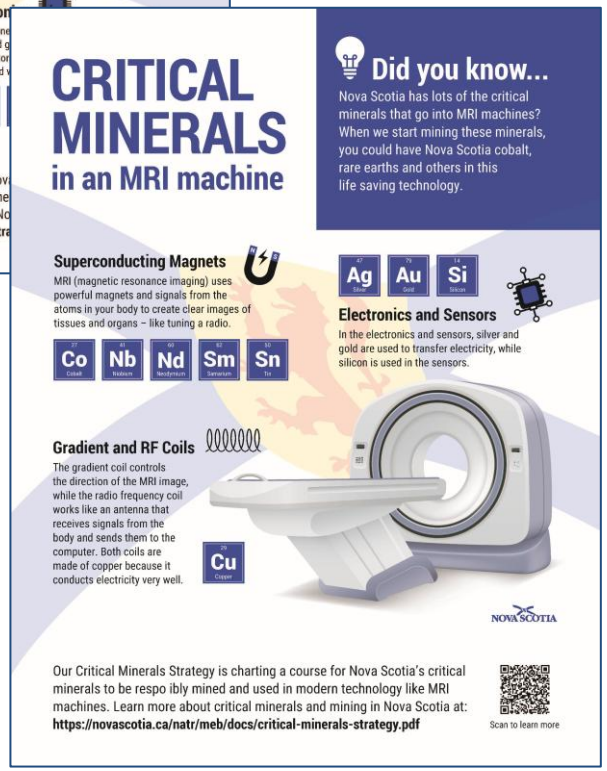
- Historic mining practices left sites contaminated.
- Provincial responsibility to remediate Crown sites, work is on going and funding is secured.
- Since 1990s, mining companies were required to prepare reclamation plans and post the financial security required, prior to starting.
- Reclamation security bonds are held and updated every 3 years for active and past-producing mines.

Community Benefit Agreements

- CBAs are legally binding and project-specific
- Benefits reflect the unique impacts and priorities of each community
- Communities should define themselves
- Effective CBAs rely on inclusive, consensus-based community coalitions
- Municipal or public oversight strengthens monitoring, inclusion, and enforcement.
- CBAs work best when tied to existing policy goals e.g. housing, economic, land-use, and reconciliation strategies.

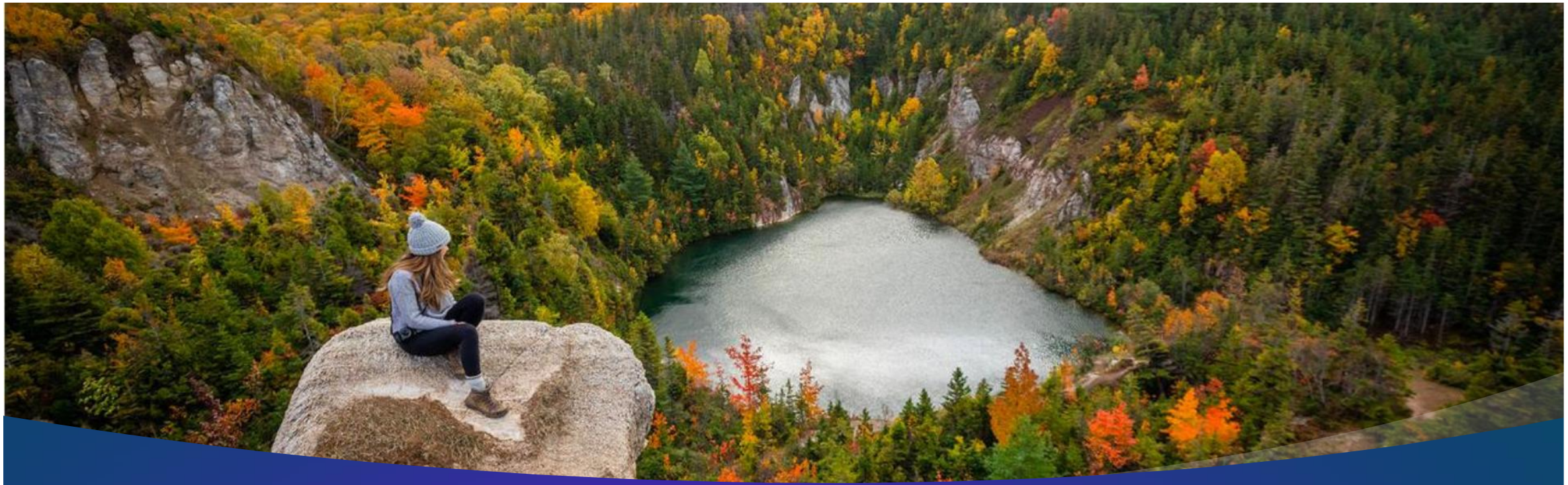
Engagement

- Session on tools available to municipalities such as the Geoscience Altas, Critical Minerals Atlas, Risk Maps
- Present a Mining 101 presentation to those interested
- Share fact sheets on topics of interest
- Mineral Resources Development Fund: Communities Stream



The Year Ahead

- *Making Business Easier Act*
- NovaGEOSCIENCE and NovaMINE
- Aerial geophysical surveys
- Critical minerals – studies to support supply change opportunities
- Ongoing:
  - Remediation of contaminated mine sites and abandoned mine openings
  - Field research
  - Exploration and mine site inspections



Thank You!

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  Department of Natural Resources
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