

NATURAL RESOURCES SECTORS & SUB-SECTORS 2023-2024

ENERGY SECTOR

- **CLEAN ENERGY TECHNOLOGIES** : *solar, wind, hydro/wave/tidal, geothermal, biofuels/biomass, nuclear/uranium, carbon capture & storage*
- **TRANSMISSION, SMART GRID & ENERGY STORAGE** : *technology enabling systems to adapt to renewable energy or further enhance the efficiency and operations of the grid, including power grid, utility services, battery storage, and hydrogen fuel-cell systems*
- **ENERGY EFFICIENCY, FUEL SWITCHING** : *green building design & construction; electrification, cogeneration & systemic energy management; hydrogen, bioenergy, landfill-gas-to-energy, waste-to-energy*
- **SUSTAINABLE DEVELOPMENT OF NON-RENEWABLE RESOURCES** : *enhanced oil recovery, GHG reduction, downhole technology, disaster prevention and clean-up, site closure and remediation*

FOREST SECTOR

- **FORESTRY & SUPPORT ACTIVITIES** : *Silviculture, reforestation, land-use planning*
- **ECOLOGY MANAGEMENT** : *forest ecosystem management, including insects, invasive species, wildlife in relation to forest ecosystems*
- **NON-TRADITIONAL FOREST-BASED BIOECONOMY PRODUCTS MANUFACTURING** : *bioeconomy manufacturing, trade, and value-chain products, including biofuels and biochemicals used in pharmaceuticals and biodegradable plastics*
- **SOLID WOOD PRODUCT MANUFACTURING** : *primary and secondary manufacturing of hardwood and softwood, including engineered wood products*
- **PULP & PAPER PRODUCT MANUFACTURING** : *manufacturing of products using wood fibres and pulp to create paper and other cellulose-based products*

MINING, MINERALS & METALS SECTOR

- **PROSPECTING & EXPLORATION** : *remote sensing, aerial photography, geophysical and ground surveys, sampling*
- **CONSTRUCTION & DEVELOPMENT** : *preparation of mine sites & construction of mining facilities, project design and engineering*
- **EXTRACTION & MILLING** : *mining operation, mining value from waste*
- **PROCESSING & MANUFACTURING** : *metals smelting and refining, mineral processing, advanced materials & manufacturing*
- **RECLAMATION, CLOSURE, CARE & MAINTENANCE** : *remediation*
- **MINING SUPPLY & SERVICES** : *providing goods and services predominantly to the mining industry*
- **CRITICAL MINERALS**: *lithium, graphite, nickel, cobalt, copper, rare earth elements, and others*

EARTH SCIENCES & SUPPORT SECTOR

- ENVIRONMENTAL ASSESSMENT : *geology, hydrogeology, aquatic and land ecology, and/or regulatory support (Species at Risk Act, Fisheries Act, etc.)*
- ENVIRONMENTAL PROTECTION : *natural resource protection and management, cumulative effects, conservation and restoration*
- GEOMATICS & EARTH OBSERVATION : *surveying, mapping, remote sensing and geographic information systems, land-use changes, habitat modelling*
- NATURAL HAZARD RISK ANALYSIS AND PREVENTION : *seismic, terrain, and marine geohazards, including earthquakes, landslides, subaqueous slope failure, as well as climate change and extreme weather hazards, including flooding, sinkholes, wildfires, drought*
- SUSTAINABLE DEVELOPMENT : *development, design, and maintenance of sustainable community projects, including parks, gardens and agriculture, or support for industrial processing, including air, water and waste management*
- CLIMATE CHANGE ADAPTATION (CCA) placements refer to activities that address observed or projected changes in climate, with the goal of reducing the negative impacts of climate change and taking advantage of new opportunities.
 - This is not to be confused with climate change mitigation activities, which focus on efforts to reduce greenhouse gas emissions.
 - Examples of CCA activities may include:
 - Assessing climate change risks and vulnerabilities of a region, community or organization to support adaptation planning and action;
 - Using nature-based solutions to reduce flood risk due to sea level rise and coastal erosion;
 - Designing infrastructure that can withstand more extreme weather;
 - Redesigning cities to make them more comfortable and safe during heat waves.