



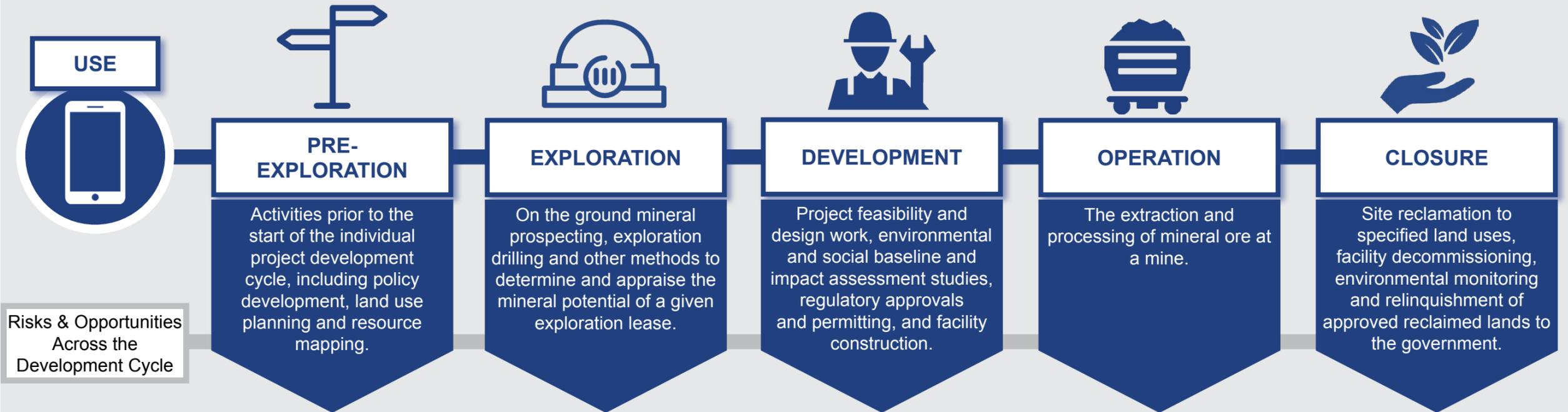
## ABOUT THE INFOGRAPHIC

This is an interactive infographic that highlights key findings regarding risks and opportunities for building public confidence through the mineral development cycle.

The first page of the infographic provides an overview of the entire mineral development cycle, and roles focused on four main groups. Each of the mineral development cycle stage boxes are clickable and will take you to the corresponding detail pages.

The subsequent pages provide details on the key risks and opportunities affecting public confidence that are cross cutting or occur at each stage in the cycle. These activities do not necessarily represent gaps in government action. They are currently being pursued to varying degrees and at various stages by federal, provincial and territorial jurisdictions.

# THE MINERAL DEVELOPMENT CYCLE



# ROLES



## AFFECTED PARTIES

Affected parties refers to people, groups or organizations that are directly impacted by one or multiple developments. Affected parties also include any group for whom there is a constitutional, statutory, contractual or common law obligation to consult by government or proponents. A non-exhaustive list of affected parties includes: local Indigenous Peoples and organizations, governments, communities, businesses, landowners, and citizens.



## THE PUBLIC & CIVIL SOCIETY

Public and Civil Society refers to the wider pool of Canadians who, while not directly affected by a specific development, may have varying levels of interest or opinions on the development of Canada's resources, both broadly and regarding specific projects. This includes civil society actors such as academic and other research institutions, the media and non-governmental organizations (NGOs).



## INDUSTRY

Industry refers to both specific companies as proponents who undertake development activities, as well as the wider industry in each sector, including the associations that represent them.



## GOVERNMENT

Governments refer to government ministries/ departments and regulatory agencies that have decision-making authority over resource projects, associated policies and plans, and general governance over energy and mineral resources within their jurisdictions. This group includes federal, Indigenous, provincial, and territorial governments and regulators.

### STRENGTHENING THE ROLE OF AFFECTED PARTIES IN POLICY AND REGULATORY DECISION MAKING AROUND PROJECTS CAN BE CONSIDERED AS FOLLOWS:

CONSULTATION

RESPONSE

ACCEPTANCE

WILLINGNESS

SHARED  
DECISION MAKING

# ACROSS THE DEVELOPMENT CYCLE



RISKS

OPPORTUNITIES

ACTIVITIES

## THE NATURE OF RELATIONSHIPS AND ENGAGEMENT

Industry practices and regulatory processes that involve insufficient engagement and that are not driven by what matters to communities undermine community confidence.

Effective engagement begins by working with communities to understand how they want to be engaged, identifying what matters to them and ensuring they have the capacity to participate.

- Community-shaped terms of engagement.
- Engagement guidelines incorporating community consultation protocols.
- Industry good practice engagement guidelines and protocols.
- Consistent local presence to build relationships.

## DEGREE OF COLLABORATION ACROSS INTERESTS

Insufficient collaboration among governments, industry, Indigenous Peoples, and civil society exacerbates polarized public debate on mining projects and undermines public confidence in mineral development.

Collective action and integrated resource management provide a path to developing shared objectives across government, industry, Indigenous groups and other affected parties to meet those objectives.

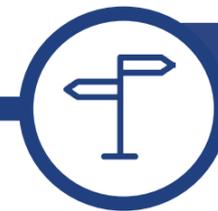
- Collective action on specific issues of concern to affected parties and the public.
- Dialogue to address tough issues at the local, regional or national levels, as appropriate.
- Principles and approaches for resource co-management or formalized integrated resource management.
- Outreach and engagement with Indigenous groups and communities on the entire energy project lifecycle.
- Enhanced capacity among local communities to be involved in resource development activities.

## STATUS OF LAND CLAIMS AND RESPECT FOR INDIGENOUS RIGHTS

Unsettled land claims; a limited understanding of how treaty, tribal and traditional rights are recognized; and challenges in articulating how rights are impacted affect the ability of Indigenous Peoples to effectively participate in decisions on and benefit from mining projects.

Increased certainty around the treatment of treaty, tribal and traditional rights can enable Indigenous Peoples to better participate in decisions on mineral resource development and benefit from major projects.

- Negotiation and settlement of land claims provide a basis for improved decision making by regulators and governments and for benefits to flow to Indigenous communities.
- Recognition of rights are explicitly built into decision making processes.



# PRE-EXPLORATION



## INTEGRATED AND ADAPTIVE APPROACHES TO RESOURCE POLICY AND REGIONAL PLANNING

RISKS

Jurisdictions that have not laid out objectives and plans for resource development that incorporate local values and interests fail to provide direction for development and project-level decision making.

OPPORTUNITIES

Jurisdictions that establish clear policies and regional plans for resource development are better placed to integrate the values and interests of local communities and affected parties into their priorities.

ACTIVITIES

- Integrated and adaptive land use plans and resource policies.
- Regional environmental cumulative effects thresholds.
- Regional strategic environmental assessments help to provide a useful basis for project-specific decision making.



## VISIONING, COMMUNITY READINESS AND RESILIENCY

Communities that do not set a vision for their future and that lack capacity are less able to participate in mineral development decision making and capture potential benefits.

Community visioning, readiness and resiliency processes can empower communities to make better decisions and optimize their participation in development.

- Holistic community visioning and planning.
- Community readiness and resiliency.
- Early investment in communities.



### AFFECTED PARTIES

- Provide input to government on policies and plans
- Learn about resource development
- Undertake community visioning, planning and objective setting



### THE PUBLIC & CIVIL SOCIETY

- Provide input to government on policies and plans
- Keep aware of resource development trends
- Thought leaders provide advice and options to governments and facilitate affected party involvement in policy and plan development
- Experts help shape public opinion



### INDUSTRY

- Provide input to government on policies and plans
- Develop internal policies, practices, technologies – individually and collectively



### GOVERNMENTS

- Establish policies and plans
- Develop legislative and regulatory regimes for development
- Gather geo-science data
- Gather social and environmental baseline data to meet legislative requirements and development planning and monitoring needs

ROLES

# EXPLORATION



## COMMUNITY UNDERSTANDING OF MINING DEVELOPMENT AND LIFECYCLES

Affected parties and the Canadian public need to be better informed in terms of their understanding of the mineral project development lifecycle and commodity markets.

A well informed population is better equipped to discuss and participate in resource development decisions and activities.

- A range of tools and methods, from social media to information sessions can better inform communities and the public on the basics of mineral development.



## LEGACY ISSUES

Legacy issues associated with orphaned and abandoned mines pose significant environmental and health and safety risks, leave communities facing serious impacts, and represent significant liability to the Crown.

Proactive and inclusive actions by governments to solve existing problems of abandoned mines and contaminated sites can begin to address the mistrust stemming from legacy issues.

- Affected communities are involved in remediation planning and the management of orphaned and abandoned mines.
- Robust policy and regulatory requirements – including financial provisions and securities for closure and remediation – are in place to prevent future occurrences.



## ENVIRONMENTAL AND SOCIAL PERFORMANCE

Instances of poor environmental and social performance during the exploration phase can foster negative perceptions towards potential mineral projects in communities and damage relationships prior to development.

Exploration activities that respect local cultures, values and traditional land use, and minimize environmental impacts, create the conditions for strong and long term relationships.

- Clear environmental criteria and regulation for exploration that reflect local values.

RISKS

OPPORTUNITIES

ACTIVITIES



## AFFECTED PARTIES

- Develop capacities to prepare input for project development processes and participation
- Identify concerns, expectations and needs to project proponents and government authorities



## THE PUBLIC & CIVIL SOCIETY

- Keep aware of resource development trends
- Thought leaders facilitate engagement of affected parties



## INDUSTRY

- Learn about and engage with potentially affected communities
- Build understanding of societal expectations for resource exploration and development
- Undertake exploration activities to assess resource potential



## GOVERNMENTS

- Monitor exploration activities
- Inform potentially affected communities of legislative and regulatory regimes
- Administer exploration permitting
- Enforcement and compliance monitoring

## ROLES



# DEVELOPMENT



## FAIR TREATMENT OF RISKS AND BENEFITS

RISKS

Communities are less willing to support and participate in mineral development if they believe potential risks will exceed possible benefits.

OPPORTUNITIES

The creation of local socio-economic benefits that outweigh risks taken on by communities from mining development can create the conditions for support.

ACTIVITIES

- Project decision making that integrates environmental and socio-economic considerations creates more balanced and supported development.



## THE NATURE AND RESPONSIVENESS TO AFFECTED PARTIES AND PUBLIC PARTICIPATION IN DECISION-MAKING

Affected parties that feel they have a limited ability to influence design and regulatory decisions for mining projects lose confidence in the regulatory process and resource development, more generally.

Affected parties that see their needs and concerns addressed and responded to in decisions made by governments and industry during project development have increased confidence in mining development.

- Each jurisdiction can determine at which level of participation it is willing to involve affected parties.
- Strong transparency and responsiveness of regulatory and policy decision makers to inputs provided by affected parties and the public.



## DUTY TO CONSULT AND ACCOMMODATE INDIGENOUS PEOPLES

Inadequate application and treatment of governments' duty to consult and accommodate in project review undermines Indigenous Peoples' confidence in regulatory and government decision making and has led to court challenges.

Federal, provincial and territorial jurisdictional consultation policies can create greater certainty and positive outcomes in application of duty to consult and accommodate.

- Preparation of communities prior to the start of project regulatory processes.
- Culturally appropriate consultation processes.
- Accommodation is explicitly incorporated into regulatory decision making processes, where appropriate.



## AFFECTED PARTIES

- Develop capacities for project participation
- Participate in regulatory processes
- Build relationships with project proponents



## THE PUBLIC & CIVIL SOCIETY

- Keep aware of issues and opportunities of major resource developments
- Thought leaders facilitate engagement of affected parties



## INDUSTRY

- Engage with and build relationships with potentially affected communities – prior to and during project approvals process
- Respond to public and community concerns and needs in project design
- Work with potentially affected parties to support development of capacities
- Undertake project review and approval process, including project design



## GOVERNMENTS

- Inform early affected communities and proponents of project of regulatory processes
- Administer regulatory processes, including identifying broad public and affected party concerns and providing social and environmental baseline and cumulative effects data
- Support building of community capacities
- Fulfill duty to consult and accommodate Indigenous Peoples

## ROLES



# OPERATION



RISKS

OPPORTUNITIES

ACTIVITIES



## REALIZATION OF COMMUNITY BENEFITS

Current practices that are not aligned with community expectations for lasting benefits from mining development affect community support for development.

Where tangible benefits outweigh risks, communities and other affected parties are more likely to accept and support mining development.

- Investment in social and physical infrastructure and services in affected communities.



## GOVERNMENT RESOURCE REVENUE SHARING

Expectations regarding resource revenue sharing with Indigenous Peoples could foster feelings of unfairness where resource development occurs on traditional lands.

Revenue sharing agreements or other economic arrangements could provide a stream of economic benefits to communities, and could enable greater participation in development.

- Potential adaptation and application of resource revenue sharing mechanisms or other economic arrangements to new agreements through negotiation with Indigenous Peoples.



## ENVIRONMENTAL IMPACTS ON WATER QUALITY, HABITAT AND WILDLIFE

Mining activities inherently have environmental effects which raise public concern with regard to impacts on water quality, wildlife and habitat.

Adoption of industry best practices focused on the greatest environmental risks that are of most concern to the public and communities, along with strong enforcement, can build public confidence in the mining sector.

- Meaningful monitoring and strong, effective enforcement along with more readily available compliance and environmental effects information.
- Involvement of Indigenous and other affected community members in the design, implementation and oversight of monitoring activities.
- Mechanisms for communities to express concerns and be responded to regarding operations or environmental changes.
- Traditional Knowledge used as a source of information and knowledge for monitoring activities.



## TAILINGS FAILURES AND EMERGENCY RESPONSE

High profile failures of tailings dams and associated impacts to waterways have reduced confidence in the environmental safety of mine operations.

Preventing tailings dam failures and ensuring strong emergency management measures designed with government, industry and communities will improve trust in industry performance and government oversight.

- Strong standards and enforcement are in place.
- The public is informed of potential risks.



## AFFECTED PARTIES

- Participate in project economic opportunities
- Inform and participate in monitoring of project environmental and social performance



## THE PUBLIC & CIVIL SOCIETY

- Keep aware of and comment on industry and government actions on environmental and social issues
- Thought leaders facilitate engagement of affected parties



## INDUSTRY

- Undertake project construction
- Extract and process minerals
- Fulfill regulatory requirements and community agreement commitments



## GOVERNMENTS

- Monitor/audit/enforce compliance to project permit conditions
- Gather and provide social and environmental cumulative effects information to industry, affected parties and the broader public
- Inform potentially affected communities of legislative and regulatory regimes
- Ensure companies make adequate financial provisions for closure liabilities

## ROLES



# CLOSURE



## SOCIO-ECONOMIC IMPACTS OF MINE CLOSURE

RISKS

Mining developments have limited life times and are subject to often unpredictable commodity price cycles. These realities may affect economic viability of projects and create the potential for social and economic dislocation in affected communities.

OPPORTUNITIES

Early planning with affected communities starting prior to operations and extending to closure is essential to mitigate the potential for negative effects and enhance community economic viability in the long term.

ACTIVITIES

- Policy and regulatory requirements are used to enable companies and communities to plan early for mine closure incorporating social, economic, land use, technical and environmental considerations.



## RECLAMATION

Land disturbance from mining which is not restored can leave localized sites damaged with a variety of environmental, health and social issues.

Reclamation to restore mined lands to natural or economically usable states can provide productive ecosystems and additional human use.

- Transparent policies requiring sufficient financial securities and ongoing updates of closure plans and level of securities to respond to changes to project context and activities.



### AFFECTED PARTIES

- Participate in and inform regulatory and company closure planning and decisions



### THE PUBLIC & CIVIL SOCIETY

- Thought leaders facilitate engagement of affected parties



### INDUSTRY

- Engage with affected parties on closure planning and design
- Undertake reclamation and closure activities to meet commitments to affected parties and regulatory conditions
- Monitor and report environmental and social conditions until relinquishment of land to government
- Ensure adequate financing of closure activities and monitoring until relinquishment



### GOVERNMENTS

- Ensure companies make adequate financial provisions for closure liabilities
- Monitor /audit closure activities for compliance to requirements
- Monitor environmental and social conditions and effects post relinquishment

## ROLES