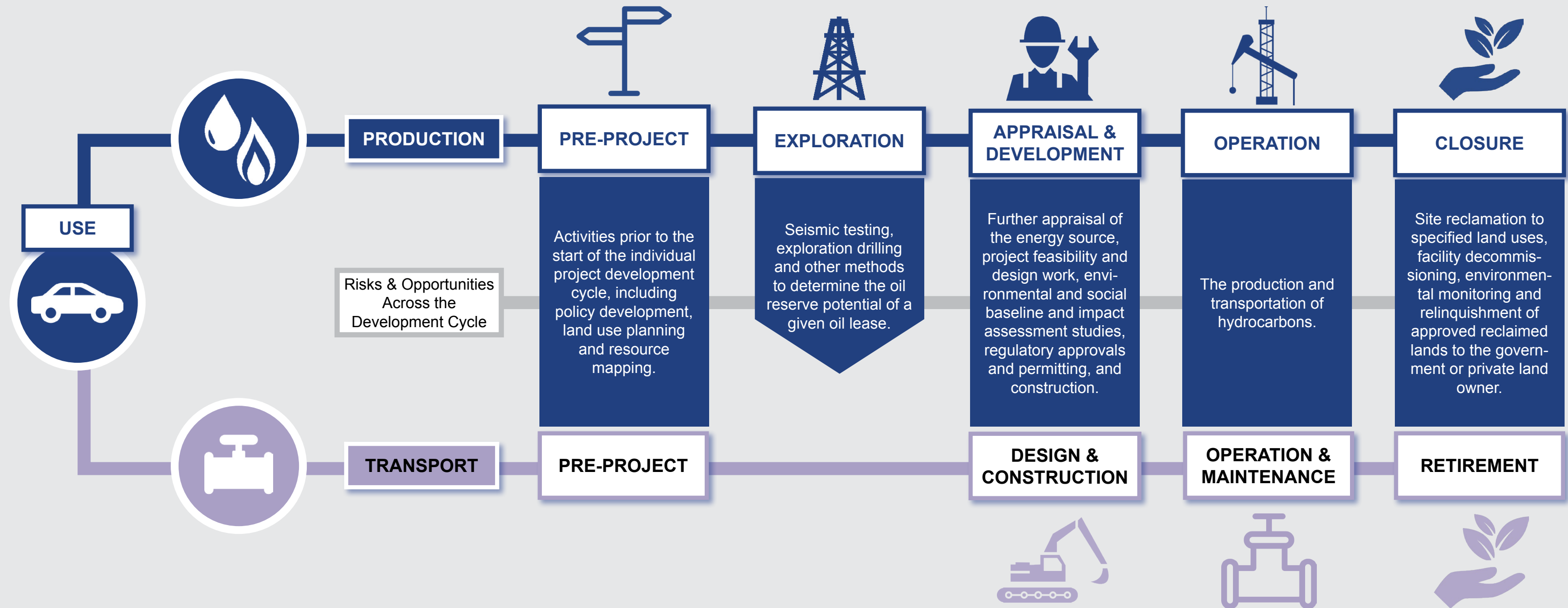


# THE ENERGY DEVELOPMENT CYCLE



## ABOUT THE INFOGRAPHIC

This is an interactive infographic that highlights key findings regarding risks and opportunities for building public confidence through the energy development cycle. The first page of the infographic provides an overview of the entire energy development cycle, and roles focused on four main groups. Each of the energy 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 phase in the energy development cycle. . These activities do not necessarily represent gaps in government action. They are currently being pursued to varying degrees across federal, provincial and territorial jurisdictions.

**While the energy example used here is for hydrocarbon (oil and gas) production and transportation, it is recognized that other types of energy projects – including electricity generation and transmission – face a number of similar risks and opportunities around public confidence.**

## 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 at the industry level.



### GOVERNMENTS

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 ALONG THE FOLLOWING SPECTRUM:

CONSULTATION

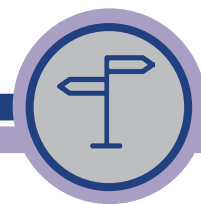
RESPONSE

ACCEPTANCE

WILLINGNESS

SHARED  
DECISION MAKING

# ACROSS THE DEVELOPMENT CYCLE



PRODUCTION

TRANSPORT



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 incorporate 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 energy projects and undermines public confidence in energy development.

Collective action and integrated resource management provides 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.

## DIFFERENT PERCEPTIONS OF RISK

There is a growing gap between the public and affected parties' perception of the risks of energy development, and regulator and industry risk assessments that inform design and decision making.

Engaging affected parties on environmental and social risks enables these risks to be considered from both a development and community point of view and promotes better alignment of risk tolerances.

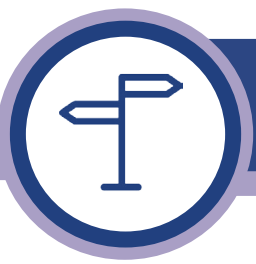
- Affected parties are involved in risks assessments.
- Co-design of environmental risk management measures.
- Transparent environmental and social risk communication with affected parties in understanding and assessing risks of development.

## 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 – energy 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-PROJECT



# PRODUCTION

# TRANSPORT



## 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 energy 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

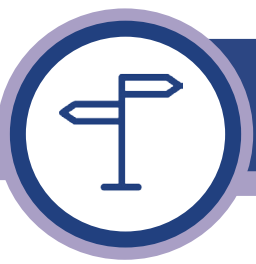
- Provide input to government on policy and plans
- Develop internal policies, practices, technologies – individually and collectively



### 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



# PRE-PROJECT



# PRODUCTION

# TRANSPORT



RISKS

OPPORTUNITIES

ACTIVITIES



## THE NATURE OF LAND ACCESS AND LAND OWNER PROPERTY RIGHTS

Under existing policies, many regulators have the authority to issue an order granting right of entry to construct or maintain energy infrastructure if proper notice has been served to the landowner. While land owners are compensated, this right of entry can create conflict with industry and lack of trust in regulators.

Policy regimes governing energy infrastructure rights-of-way that recognize the rights of land owners, foster benefits after construction and ensure safety, and that maintain the need for development of linear infrastructure can provide certainty and lay the foundation for shared outcomes/benefits.

- Transparency in decision making related to land access.
- Meaningful engagement between regulators and land owners.
- Negotiation of benefits that takes into account the risks borne by all parties, including land owners.



## CLIMATE CHANGE POLICY

Climate change concerns have led many Canadians to question growth in hydrocarbon development. Without clear action on climate policy, opposition to hydrocarbon development will remain.

Governments with clear policies and plans to address climate change in a substantive way will help decouple debates of Canada's approach to climate change from individual project approvals.

- Robust national approach and plan on climate change comprising provincial/territorial and federal elements, with targets that align with Canada's international commitments.



## REAL AND PERCEIVED WEAKENING OF LEGISLATION AND REGULATION

Elements of the Canadian public, including Indigenous communities and other affected parties, believe that some governments have weakened environmental protection and opportunities for participation in decision making on major energy projects through legislative change.

Robust legislation, regulation and effective implementation through the regulatory lifecycle can help to restore public confidence by strengthening engagement and consultation, inclusive decision making, transparency and environmental protection measures.

- Specific legislative and regulatory measures to strengthen public participation and environmental protection.
- Lifecycle regulatory stewardship across all phases of an energy project from planning to operations to abandonment.
- Collaborative dialogue with affected parties to discuss matters not addressed in regulatory processes.



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# ROLES



### COMMUNITY UNDERSTANDING OF ENERGY DEVELOPMENT AND LIFECYCLES

RISKS

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

OPPORTUNITIES

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

ACTIVITIES

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



### ENVIRONMENTAL AND SOCIAL PERFORMANCE

Instances of poor environmental and social performance during the exploration phase can foster negative perceptions towards potential energy 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.



### AFFECTED PARTIES



### THE PUBLIC & CIVIL SOCIETY



### INDUSTRY



### GOVERNMENTS

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

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

- 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

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

ROLES



# DEVELOPMENT AND CONSTRUCTION

PRODUCTION  
TRANSPORT

### FAIR TREATMENT OF RISKS AND BENEFITS

**RISKS**  
Communities are less willing to support energy development if they believe the potential risks will exceed possible benefits.

**OPPORTUNITIES**  
Tangible local socio-economic benefits and working to mitigate environmental risks taken on by communities due to development can create the conditions for increased support.

**ACTIVITIES**

- Negotiation with land owners and communities along the route and at the terminus.
- Traditional rights along the route and at the terminus are recognized.
- Project decision making that integrates environmental and socio-economic considerations creates more balanced and supported development.

### RECONCILING NATIONAL INTEREST AND LOCAL INTEREST ACROSS FEDERAL, INDIGENOUS, PROVINCIAL AND MUNICIPAL JURISDICTIONS

Proposed linear energy projects can be subject to multiple jurisdictional levels, with Indigenous governments, provinces, territories and municipalities seeking to protect their interests, resulting in projects approved by federal authorities to be delayed or blocked.

Multi-jurisdictional discussions to clarify respective decision making authorities that respect the interests of each jurisdictional level will enable better understanding and decision making in the public interest.

- Clear and respected roles for jurisdictions in decision making.
- Development and application of joint review processes.
- Aligned regulatory processes across involved jurisdictions that avoid duplication.

### THE NATURE OF AND RESPONSIVENESS TO AFFECTED PARTY AND PUBLIC PARTICIPATION IN DECISION MAKING

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

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

- Each jurisdiction can determine at which level of participation it is willing to involve affected parties.
- Strengthen 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 and provincial jurisdictional consultation policies developed through government-to-government dialogue with Indigenous Peoples 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

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

### 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 community concerns and needs and public issues 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



RISKS  
OPPORTUNITIES  
ACTIVITIES

### REALIZATION OF COMMUNITY BENEFITS

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

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

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

### GOVERNMENT RESOURCE REVENUE SHARING

Inadequate or non-existent sharing of resource revenues with Indigenous Peoples fosters feelings of unfairness where resource development occurs on traditional lands.

Federal, provincial and territorial revenue sharing agreements with Indigenous governments provide a stream of economic benefits helping to build economic self-sufficiency, and enable greater participation in development.

- Adaptation and application of resource revenue sharing mechanisms to new agreements through negotiation with Indigenous Peoples.

### ENVIRONMENTAL IMPACTS ON WATER, CLIMATE, AND LAND

Concerns over environmental impacts associated with energy production – including GHG emissions, land disturbance, and water use and quality – affect public support for the industry.

Strong, demonstrable performance improvements by industry along with reliable, participatory and transparent monitoring and regulatory enforcement on these key issues can help to build public confidence.

- Meaningful monitoring and strong, effective enforcement.
- 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.

### INCIDENTS AFFECTING SOURCE WATERS, LANDS AND MARINE ECOSYSTEMS

Urban and rural municipalities have concerns over the risk to drinking water sources and aquatic and marine ecosystems associated with energy development and transportation, including pipeline spills.

Legislation, regulatory processes, enforcement and compliance monitoring that involve affected communities in project planning; and better incorporation of community concerns around risks to land and water into design decisions increase community confidence.

- Significant water sources, marine habitat, and lands are defined with local governments and communities are engaged in project planning.

### 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 hydrocarbons
- Transport hydrocarbons to domestic and international markets
- Fulfil 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





PRODUCTION

TRANSPORT



CLOSURE & RETIREMENT



### ABANDONMENT

RISKS

Insufficient criteria and inadequate incentives for industry to decommission energy infrastructure reduce the support of landowners and other affected parties for energy development.

OPPORTUNITIES

Establishing clear regulatory requirements for energy infrastructure retirement and abandonment in consultation with landowners, industry and affected communities can help to build public confidence.

ACTIVITIES

- Legislation and regulations on energy infrastructure retirement and abandonment involving land-owners, industry and affected communities are re-assessed and revised.



### RECLAMATION

Land disturbance from energy development has led to concerns about the rate of reclamation and the ability of industry to restore wetlands, and other unique ecosystems to their former states.

Restoration of disturbed lands can provide an opportunity for partnerships between governments, affected communities, and industry to determine land restoration outcomes, and provide economic benefits to local communities.

- Transparent policies around financial securities for energy project remediation.
- Development of technologies and best practices around remediation science and engineering are supported and invested in.



### 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