COAL POLICY COMMITTEE

DECEMBER 2021

FINAL REPORT:

RECOMMENDATIONS FOR THE MANAGEMENT OF COAL RESOURCES IN ALBERTA

MESSAGE TO THE MINISTER

Honourable Sonya Savage
Minister of Energy and Deputy House Leader
324 Legislature Building
10800 – 97 Avenue
Edmonton, Alberta T5K 2B6

Dear Minister:

Re: Letter of Transmittal –
Final Report:
Recommendations for the Management of Coal Resources in Alberta

We are pleased to present our final report and recommendations.

Forty-five years ago, the Government of Alberta issued "*A Coal Development Policy for Alberta*." The creation of that policy involved considerable public engagement and debate over some very salient questions. Did Albertans wish to develop their coal resources and, if so, to what end? How could we best protect the special ecological values of the Eastern Slopes? What would the implications of coal development be for the water supplies crucially needed for agriculture, municipal drinking water and life in general? Was it even possible to reconcile coal development with environmental protection?

Almost half a century later, all those questions came to the fore again as the committee explored the topic of coal with Albertans. So, what has changed?

Since 1976, Alberta's population has more than doubled, and its economy has expanded in even greater proportion. Consequently, the activities on our province's landscapes are far more numerous and diverse, leading to more potential for, and instances of, land-use conflicts. Global trends and policy considerations have also shifted significantly. After more than a century of coal mining in Alberta, our engagement disclosed support within communities associated with existing or potential coal developments; however, many Albertans now legitimately question whether coal should have a place in the future economic development of our province.

Public policies to deal with existing and potential future impacts of coal development will require careful forethought to meet the changing expectations of Albertans.

We submit that our report offers innovative recommendations needed to complete a responsible, modernized policy for Alberta coal.

The Alberta Coal Policy Committee

(L-R: Fred Bradley, Ron Wallace, Natalie Charlton, Eric North Peigan, Bill Trafford)

Yours truly,

Fred Bradley

Bill Trafford

Natalie Charlton

Ron Wallace, Ph.D., Chairman

Eric North Peigan

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EXECUTIVE SUMMARY

The committee was established "to conduct engagement as necessary to prepare a report to the Minister on the advice and perspectives of Albertans about the management of coal resources in connection with matters under the Minister's administration."

Alberta has a long history of coal mining, one that began in 1874 with the opening of Alberta's first commercial coal mine on the Oldman River near present-day Lethbridge.

However, by 1973, Alberta recognized a need to refine how coal development was controlled and regulated. The Environment Conservation Authority held extensive public hearings and based on their recommendations the 1976 Coal Policy was published. That policy established an integrated resource management regime for the Eastern Slopes.

In the 45 years since, significant land use planning has occurred throughout the Eastern Slopes. Many conditions have also changed. In 1976 Alberta was at a different stage of evolution. The government of the day wished to manage and encourage the development of Alberta's coal resources for energy security, job growth and wealth creation while it supported intra-provincial electricity generation. Since 1976, the population of Alberta has grown significantly and with the changing demographic and economic landscape have come changes in public expectations for conservation and development. There have also been considerable shifts in terms of trade and economic development. Many aspects of the 1976 Coal Policy that could be described as protectionist in nature have become antiquated or been unenforceable for some time. For example, the implementation of free trade agreements has constrained the government's ability to prefer local companies or to require the sourcing of local labour and materials.

Today, arguably the only aspects of the 1976 Coal Policy that have not been integrated into provincial legislation are the coal categories. Although it was contemplated that legally enshrined regional plans under the *Alberta Land Stewardship Act* would eventually incorporate and supersede the coal categories, this has not yet occurred.

The committee engaged openly and transparently with Albertans including municipalities, unions, Indigenous leaders, environmental groups, ranchers, landowners and industry representatives. While rigorously following the rules of procedural fairness throughout the engagement, the committee's mandate precluded advice or decisions on specific project applications or operating mines. It was the committee's task to formulate recommendations to the Minister of Energy about potential resource policies for coal – a role that is entirely distinct from that of a regulator.

Early in its work the committee recommended that the Minister of Energy suspend coal exploration and development activities on Category 2 lands, until such time as the committee's recommendations were complete. This suspension was announced on April 23, 2021, and significantly, on November 10, 2021, the Minister chose to extend the pause until further notice.

Through its engagement process, the committee received 176 detailed written submissions and completed, virtually or in person, 67 engagement sessions from across the province. This extensive public engagement was clearly embraced by the concerned public. Their extraordinary efforts, done at considerable expense, provided the committee with submissions of excellent quality, many of which were published and disseminated on the committee's website. Indeed, some consider that the research contained in the submissions will constitute an invaluable, ongoing knowledge base to many, including the Government of Alberta as it defines future policies.

The engagement process found that Albertans considered the environmental impacts of potential coal mines to be a "top of mind issue", along with concerns about water and concerns about the coal categories in the 1976 Coal Policy, which many thought should clearly specify if and where mining could occur. Indeed, a majority (85 per cent) of Albertans indicated they were not at all confident that coal exploration and development are properly regulated.

Certain communities, including Indigenous communities that would potentially experience economic benefits from new coal mines understandably expressed support for new potential development projects. However, many Albertans were deeply concerned about or opposed to such proposed projects, particularly in the southwest region of the Eastern Slopes. There were fewer public concerns expressed about certain existing mines with the underlying sentiment expressed that those operating mines should be allowed to continue operations to sustain local economic development. Allowing these mines to continue would allow ongoing continuous reclamation as Alberta transitions to alternative energy systems.

There exist opportunities here. Alberta first legislated the requirement to reclaim land disturbed by industrial activities in 1963 with the enactment of the *Surface Reclamation Act* and subsequently enacted the *Land Surface Conservation and Reclamation Act* in 1973. Since that legislation was enacted, Alberta Environment and Parks (AEP) and certain companies have achieved remarkable outcomes with increasingly sophisticated practices in mine site reclamation. These proven efforts, recognized internationally by professionals, have resulted in final landscapes that are topographically complex and biologically diverse. These pioneering reclamation techniques could also be employed to provide economic incentives at other historic and legacy sites in disadvantaged regions of the province.

In that regard, the committee recognizes that certain water basins affected by prior coal mines are experiencing significant downstream contamination. Monitoring is not mitigation, but it is a first step to assessing problems and to devise reclamation strategies to counter, or at least mitigate, negative environmental effects.

There are other factors that affect the Alberta coal mining sector. These include the emergence of heightened regulatory attentions from the federal government and recent court decisions concerning Indigenous rights. In fairness, it is perhaps understandable that the 1976 Coal Policy paid scant attention to Indigenous peoples and their rights because it was drafted prior to formulation of Section 35 of the 1982 *Constitution Act* and before the 2007 *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP). More recently, in 2016, the Government of Canada endorsed that Declaration and proclaimed legislation on June 21, 2021, to implement it. The committee recognized these historical omissions and, as an early step on the path toward reconciliation, undertook six engagements with First Nations, associations and Métis, followed by three roundtable sessions with northern, central and southern First Nations.

Broadly, Albertans consider that coal exploration and development should only be allowed on lands that conform to regional or subregional plans completed under the *Alberta Land Stewardship Act*. Such land use certainty should replace the existing coal categories for the purposes of land use decisions about where coal exploration and surface or underground development can and cannot occur. Regional plans and subregional plans, and associated implementation strategies should supersede the coal categories and be legally binding. In sum, a new coal policy for Alberta needs to include modernized land use guidance that is aligned with comprehensive, enforceable land use planning for the entire Eastern Slopes.

In the course of the committee's engagement process, many themes of importance to Albertans emerged. Here they are listed as a commentary to the wide range of interests and opinions about modernized coal policy and legislation for managing coal resources in Alberta:

- Albertans care about the effects of possible coal development.
- Albertans expect to be meaningfully engaged on matters around resource development, particularly in relation to proposals for open-pit coal mining in the Eastern Slopes region.
- Albertans are very concerned about their waters and place a high value on the Eastern Slopes region.
- Regional differences need to be recognized in terms of future development.
- There is a need for modernized land use guidance that is aligned with comprehensive land use planning for the entire Eastern Slopes.
- Certain Alberta mine operators have achieved exemplary outcomes in reclamation.
- Coal developments provide highly localized fiscal and employment benefits for nearby communities.
- The economics of metallurgical coal carry challenges and uncertainties.
- Indigenous communities need to be involved in modernizing coal policies.
- Federal intervention and provincial policies may have taken most thermal coal resources off the table.
- Reclaiming past coal activities is a concern among many Albertans.
- Linear disturbances in the Eastern Slopes are an issue for Albertans.
- Albertans have concerns about the regulatory process for coal activities.
- Albertans are concerned that coal policies can be easily overridden when many thought that these policies were legally binding.

The committee came to understand during its engagement process that a primary goal of any modernized coal policy should be to enhance public trust in the management of Alberta's renewable and non-renewable resources, particularly the coal sector. Accordingly, the committee developed several principal recommendations, along with other associated observations, to address changes required to achieve a modernized Coal Policy for Alberta:

Principal Recommendations

1. **Modernize Alberta's coal policy.**

   A strategic goal of modernized coal policy should be for decisions about potential coal developments to be guided by regional and subregional plans under the *Alberta Land Stewardship Act*. Land use for the development of coal resources should be determined by regional and subregional plans.

   Consequently, regional and subregional plans for the Eastern Slopes must first be completed before any major coal project approvals are considered. These plans should contain land use guidance that supersedes the coal categories.

   The halt on coal activity and exploration on Category 2 lands, which was announced by the Minister of Energy on November 10, 2021, should continue until specific regional and subregional plans are completed. All authorizations and dispositions for coal activities on Category 3 and Category 4 lands which were issued after May 1, 2020, and do not pertain to an already active coal mine or advanced coal project, should be paused until specific regional and subregional plans are completed. Advanced coal projects are considered to be those that have formally applied for authorization to mine. Projects in exploration stages are not considered to be advanced coal projects.

   The committee heard that Alberta could supply coal to meet current global demands from operating or advanced coal projects on Category 4 lands. Certain mining proposals for existing mines and advanced coal projects in process prior to the rescission of the 1976 Coal Policy should be allowed to proceed through regulatory processes. Regional or subregional plans should be completed before any new requests for authorizations are considered.

2. **Meaningfully involve Alberta's Indigenous communities in the land use planning process.**

   A major deficiency of the 1976 Coal Policy was that it was developed without the involvement of Indigenous peoples. Expectations have evolved since 1976. Policies designed to address the extraction of a non-renewable resource such as coal from land areas of traditional significance for Indigenous peoples must, in the age of reconciliation in Canada, involve Indigenous communities.

   For modernized land use planning, Alberta's existing tools may be used to accommodate Indigenous expectations into binding and enforceable actions for land use.

3. **Articulate land use guidance for coal exploration and development through planning under the *Alberta Land Stewardship Act* to provide certainty and bind the Crown.**

   Legal certainty demands adherence, while demonstrating public responsibility and legislative oversight. This could be accomplished by the incorporation of approved land use plans created under the *Alberta Land Stewardship Act*. As is made clear in section 15 of the *Alberta Land Stewardship Act*, regional and subregional plans that are incorporated as regulations under the *Alberta Land Stewardship Act*, are binding on the Crown.

   This approach will provide investment certainty, and clarify responsibilities and liabilities for future potential compensation claims. Importantly, regional and subregional planning must include measures for historical and closed mines to address and limit ongoing ecological impacts at those sites.

4. **Undertake a review of Alberta's coal tenure and royalty regimes.**

   The committee heard that Alberta should reconsider the royalty rates on coal to ensure that Albertans capture fair values from coal developments. An independent review should be undertaken to recommend coal royalty structures that carefully consider the value of coal development. Consideration should also be given to implementing a freehold mineral tax for coal, similar in nature to that which is currently assessed for oil and natural gas.

5. **Address the issue of freehold coal mineral rights.**

   Although coal leasing, exploration and development are prohibited on Category 1 public lands, these restrictions may not apply to private lands or freehold mineral rights. The committee heard arguments that holders of freehold mineral rights should not be exempted from the land category restrictions as, regardless of mineral ownership, environmental issues remain the same. Modernized coal policy should clarify whether and how policy applies to freehold mineral rights owners.

6. **Assess proposed new coal projects with rigorous net benefit tests that include extensive public consultation.**

   The committee heard from several public entities that net benefit tests for major projects should be undertaken to better evaluate the public interest.

   Requirements for socio-economic benefits analyses and public interest tests need to be met for all coal project evaluations. The accuracy of costing and

project assumptions that are made by coal project proponents should also be validated in ways similar to those prescribed under the previous Directive 061.

7. **Resolve uncertainties regarding responsibility for reclamation liabilities relating to coal exploration and development activities.**
   The Auditor General of Alberta has discussed uncertainties as to the responsibility for reclamation liabilities associated with coal mining projects. These uncertainties need to be resolved.
   Under the Government of Alberta's Mine Financial Security Program (MFSP), financial security deposits are collected from mining companies to fund the future reclamation obligations associated with their development activities. However, the MFSP was not designed specifically for coal mining projects.
   The committee heard that remediation and reclamation liabilities for some coal mining projects have been independently assessed as exceeding current financial security. Also, the Auditor General of Alberta has indicated (in 2019) that there is a significant risk that asset values are overstated within the MFSP. The committee understands that, of nineteen Alberta coals mines required to provide financial security in 2015, only two have been subjected to detailed audits by provincial officials.
   These factors contribute to concerns that the MFSP is insufficient. As part of a review of the MFSP, the Government of Alberta should consider tailoring a mine funding system specifically for coal mines.

8. **Address reclamation liabilities for legacy coal mines.**
   There are many legacy coal mining sites in Alberta; these are historic mines and mines which pre-date modern reclamation legislation. Lack of funding to address environmental and reclamation liabilities from legacy coal mines is an ongoing issue. The Alberta Energy Regulator (AER) has not received material funding for legacy coal reclamation projects. Alberta should consider re-establishing funding for land reclamation to offset liabilities from legacy coal mines.

Associated Observations

Associated with the principal recommendations, the committee makes numerous observations about coal that should be considered of significance to policy makers:

1. **Cumulative effects analyses should be undertaken before a new coal mine, exploration permit or other industrial activity is authorized.**
   Coal exploration and development have significant impacts on the landscape. A key concern is the ability of landscapes in the Eastern Slopes to continue providing water required for ecosystems and downstream users. The regulation of coal activities thus requires a full understanding of ecological limits, determined by careful cumulative effects analyses.

2. **Modernized coal policy for Alberta must recognize many Alberta communities depend upon the coal industry and will need support to ensure their sustainability through a time of transitions.**
   Although coal mining represents less than one percent of the province's GDP, it represents substantial economic activity at the local level – in local wages, local property taxes and support for local communities from social responsibility efforts by coal producers. Aside from Employment Insurance for impacted workers, however, there are few programs to compensate Alberta communities affected by mine closures or the termination of coal exploration programs. There are no programs that compensate communities for loss of future economic opportunities due to project denials or the halting of proposed projects due to changes in policy or regulations.

   In fairness, any federal or provincial policies deliberately aimed at closing active coal mines, or transitioning communities away from exiting mining projects, must be accompanied by programs to assist and compensate workers. The federal government's Just Transition program should assist local communities impacted by federal regulatory initiatives. Alberta should also consider joint programs and strategies to assist communities in the Eastern Slopes affected by curtailment of coal activities.

3. **Place priority on restoring trust throughout Alberta's regulatory system for coal, including material new efforts to convince Albertans that the public interest is respected.**
   A general decline in public trust in regulatory authorities may reflect broader concerns about complex policy issues and shifting public attitudes toward acceptance of risks. The committee heard Albertans have concerns about the AER's perceived lack of transparency and accessibility. Trust in regulatory authorities is essential. The Government of Alberta should work to enhance public trust in the regulatory process for coal exploration and development.

4. **Enhance environmental monitoring, inspection, and enforcement at existing and abandoned mines to address water contamination, specifically selenium contamination within watersheds.**
   Importantly, the AER should be instructed to consider activities impacting species under the *Species at Risk Act* and, equally as important, critical habitats. Cumulative impacts of approvals must be assessed by the AER in conjunction with current and future land uses, including linear footprints resulting from resource development.

Selenium is a key concern. Any assessments of proposed coal mines should consider the selenium standards soon to be established in proposed federal Coal Mining Effluent Regulations. A joint Alberta-industry inventory of contaminated waters at coal sites should also be commissioned.

5. **Alberta should continue to work with Canada and other provinces to develop consistent regulations for coal mine effluents.**

   Several policy pronouncements by the Canadian federal government in 2021 have indicated a reluctance to approve new thermal bituminous coal developments, or the expansions of existing thermal coal mines. There is a need for a seamless, integrated federal, provincial and municipal regulatory regime for coal. A first step would be the enactment of consistent effluent regulations.

ACKNOWLEDGEMENTS

The Coal Policy Committee extends its sincere thanks to the individuals, organizations, Indigenous communities, corporations and municipalities who generously participated in our engagement process. The trust shown by the public in the committee produced an outpouring of interest from across the province. These attentions were as informative as humbling. The many, highly crafted written submissions received by the committee now form a substantial record – not only of our proceedings, but also as an invaluable data base for future policy deliberations and public information.

The committee thanks the members of the public who chose to engage with the committee and are grateful for the generous contributions received from Indigenous communities, associations and related organizations, coal industry proponents and the Coal Association of Canada, unions, municipalities, elected councils, environmental organizations and public interest groups. Due to the generous time extended from certain coal enterprises across Alberta, the committee was able to view proposed, operational, completed and reclaimed sites first-hand.

The committee is also grateful to the Secretariat staff, who supported the efforts of the committee, as well as associated special advice received from Mr. David Luff. Their vital and accommodative work, including the significant logistical planning and execution for required trips and community visits, is sincerely acknowledged by the committee.

INTRODUCTION

About the Committee

On June 1, 2020, the Government of Alberta took the step of rescinding *A Coal Development Policy for Alberta*, commonly referred to as the "1976 Coal Policy". In the months that followed, a groundswell of voices across Alberta steadily grew, all reacting strongly to the decision.

After hearing these concerns, the Government of Alberta reinstated the 1976 Coal Policy as of February 8, 2021. The government also provided specific direction to the Alberta Energy Regulator (AER) about coal development. This included instructions to consider the coal categories in the 1976 Coal Policy in the course of decision-making about coal projects and to cease issuing any new coal exploration approvals on Category 2 lands, pending engagement on a new coal policy for Alberta.

On March 29, 2021, the Minister of Energy appointed the Coal Policy Committee (the "committee") to make recommendations to the Government of Alberta about what it should consider in developing a new coal policy. As part of this work, the committee was expected to undertake engagement with Albertans on key matters such as:

- Albertans' understanding and views on existing policies regarding coal development;
- Whether Albertans wish to have the province supply coal to meet global demand;
- The conditions under which Albertans would support coal development; and
- The enhancements, requirements and restrictions that should form part of an updated coal policy for the province.

Membership of the Coal Policy Committee

- Fred Bradley
- Natalie Charlton
- Eric North Peigan
- Bill Trafford
- Ron Wallace (Chair)

As stated in the committee's Terms of Reference (see Appendix A):

"The purpose of the committee is to conduct engagement as necessary to prepare a report to the Minister on the advice and perspectives of Albertans about the management of coal resources **in connection with matters under the Minister's administration**, including:

- *Mines and Minerals Act*, relating to coal tenure and royalty;
- *Coal Conservation Act*, relating to resource management and conservation; and
- *Responsible Energy Development Act*, relating to regulatory oversight of responsible coal development.

The committee will prepare a report to the Minister that describes Albertans' understanding of coal development as it pertains to the Coal Policy and other areas under the Minister of Energy's purview. Additionally, the committee will provide recommendations to the Minister about how to clarify the nature, scope and intent of the restrictions under the current Coal Policy."

[Emphasis added.]

The committee chose to consider this mandate as including matters related to the AER.

The Committee's Process

After the Minister's announcement of March, 29, 2021, the committee took note of public concerns about coal exploration activities that had already been authorized on lands designated by the 1976 Coal Policy as Category 2 lands. Accordingly, there was a recommendation made to the Minister that coal exploration in Category 2 lands be suspended.

In response, on April 23, 2021, the Minister of Energy announced that the Government of Alberta was suspending coal exploration activities on Category 2 lands. This included a halt to exploration activities that the government had already approved. The affected companies indicated they would cooperate with the pause on activity.

In the months that followed, the committee undertook considerable work to engage Albertans about coal and the development of Alberta's coal resources. The committee gathered a range of input from Indigenous communities,

stakeholders and Albertans-at-large by way of virtual and in-person meetings, written submissions and in-person tours of regions with coal developments. Details about the engagement process, and the major themes and concepts that emerged from the input, are outlined in the committee's Engagement Report.

Input gathered through the engagement process served as a vital data base in the committee's deliberations. To supplement this, the committee undertook its own research on issues around Alberta's coal resources and coal developments. From this, the committee distilled advice for the Minister of Energy, along with the rest of the Government of Alberta, which offers a principled path forward for the modernization of coal policy for Alberta.

This document constitutes the committee's final report. The reader is encouraged to examine this report in tandem with the Engagement Report, with the understanding that not everything covered in the Engagement Report is discussed here. The two reports reflect opinions heard from a cross-section of engaged Albertans which formed the basis upon which the committee derived its recommendations. It was the committee's task to engage with the Alberta public and to reflect upon the information so presented. Based on that engagement, the report forms recommendations to the Minister.

A HISTORY OF COAL POLICY

Overview

The history of coal policy is one of continued adaptation to the needs of Albertans. It has been 45 years since the 1976 Coal Policy came into effect. During that time, significant land use planning has occurred throughout the Eastern Slopes region.

Coal and the Eastern Slopes (1976)

The 1976 Coal Policy was developed during a time in Alberta's evolution when many circumstances were different. Although the province's ambitions were large, its population and economy were much smaller than today. So too was the level of activity on the landscape, with less complexity and fewer incidents of land use conflicts. There was a desire for growth and development. Domestic energy security was also a prominent policy concern, with the 1970s energy crises in the forefront of people's minds.

Along with these considerations, there was a recognition that the Eastern Slopes were home to many unique and ecologically important landscapes. The 1976 Coal Policy sought to reconcile the desire to protect the Eastern Slopes with the desire to enable opportunities in resource development.

Much spadework went into the creation of the 1976 Coal Policy. In 1973, the Environment Conservation Authority held extensive public hearings, which led to 232 recommendations being tabled to Government in 1974. On July 18, 1975 (one year prior to the publication of the 1976 Coal Policy), Alberta announced that the management of resources in the Eastern Slopes would be conducted in an integrated manner.

Indeed, the 1976 Coal Policy ultimately stipulated that:

"…. no coal exploration or development will be permitted unless the Government is satisfied that it may proceed without irreparable harm to the environment and with satisfactory reclamation of any disturbed land…"

and further that:

"…detailed exploration and development operations will not be permitted in areas where the environment and plant and animal life cannot be properly protected and where reclamation of any disturbed land is not possible."

Significantly, the 1976 Coal Policy classified provincial lands into four categories to manage coal leasing, exploration and development activities. The classification of lands into these "coal categories" considered then-contemporary issues of environmental sensitivity, alternate land uses, potential coal resources and supporting infrastructure.

Under the 1976 Coal Policy, holders of existing Crown coal rights in Category 1, Category 2 and Category 3 lands were invited to sell their rights back to the Crown. It was further indicated that the purchase of freehold coal title in Categories 1, 2, and 3 could occur at fair value "determined by agreement or arbitration, and to acquire any lessee rights on the same basis as for lessees of Crown rights." Notably, except for Category 1 lands, the 1976 Coal Policy did not prohibit leasing rights.

Broader Planning for the Eastern Slopes (1977-1984)

Coal exploration and development were not the only types of activities being contemplated or undertaken on the Eastern Slopes. Recognizing this, the Government of Alberta articulated policy regarding the management of public lands and resources across the region generally. This was accomplished in 1977 through the publication of *A Policy for Resource Management of the Eastern Slopes,* which was subsequently revised in 1984[1] (the "Eastern Slopes Policy").

The Eastern Slopes Policy imposed an eight-zone land management classification system to guide activities, with zones corresponding to three management outcomes:

1. Protection (Zones 1 and 2) to provide the highest level of protection for those areas which are known to form the unique character of the Eastern Slopes.

2. Resource Management (Zones 3 to 6) to foster wise mixed use of the natural resources to achieve specific goals and objectives.

3. Development (Zones 7 and 8) to recognize existing and provide for future site-specific development.

The Eastern Slopes Policy noted that while "watershed management was established as the…highest priority", recreation and tourism were also recognized as extremely important. Nonetheless, the Eastern Slopes Policy also contained an overall policy goal for coal to "increase income and job benefits, meet Alberta energy needs and supply exports".

The Eastern Slopes Policy only prohibited coal exploration and development in what was identified as the "Prime Protection and Facility Zones" with the Department of

1. Alberta Public Lands & Wildlife. (1984). *A Policy for Resource Management of the Eastern Slopes, Revised 1984.* Government of Alberta.

Energy responsible for designation of the undisposed Crown coal rights in Prime Protection and certain Facility Zones. As economic opportunities were not all known in advance, the policy allowed site-specific developments to be considered in any zone.

The Eastern Slopes Policy stipulated that other Government of Alberta policy statements, including the 1976 Coal Policy, had to conform with the intent of the Eastern Slopes Policy. However, like the 1976 Coal Policy, the Eastern Slopes Policy was not a piece of legislation. Indeed, it stated that it was "to be a guide to resource managers, industry and public users having interests in the area, rather than a regulatory mechanism." Effectively, this meant that all proposals for land use and development, whether consistent with the policy or not, were to be considered while existing land use commitments were to be honoured.

Integrated Planning Continues (1985-1992)

The period of 1985-1992 saw the introduction of Integrated Resource Plans (IRPs). The purpose of an IRP was to provide more detail under the broad management directions articulated in the Eastern Slopes Policy, and to refine zoning.

Each IRP established goals and management guidelines for natural resource protection, use and development, including those for coal. These goals and guidelines were linked by geography to the landscape under the eight-zone system established by the Eastern Slopes Policy. Further direction was provided at the Resource Management Area level (a geographical sub-unit of the IRP).

Coal resource potential, management goals and development guidelines were generally provided for each Resource Management Area in an IRP. In some cases, the IRPs identified specific local restrictions on development activities. (For example, to preserve certain environmental or recreational features.)

The IRPs also created some wrinkles.

When some of the IRPs were being developed (typically those drafted in 1985-86), it was anticipated that the coal categories in the 1976 Coal Policy would be revised to incorporate the new directions and zoning provided in the IRPs. As a result, coal management direction was written independently from that provided by the 1976 Coal Policy. In some cases, this led to misalignments in policy direction concerning coal.

For example, the Nordegg – Red Deer River Sub-Regional IRP explicitly contemplates that the 1976 Coal Policy is likely to be overtaken by the integrated resource planning system.[2] It goes on to state that it "thus contains objectives and guidelines for coal activities generally without relying upon the categorization in the present policy".

Another example of this misalignment occurs later in the same document, where objectives and guidelines are established for the Ram-Clearwater Resource Management Area. These include a stated objective to "provide opportunities for industry to assess and develop the Seven Mile Creek and Ram River coal fields and to explore for other coal deposits." This objective was established despite the Category 2 classification for this area under the 1976 Coal Policy.

Later plans (generally from 1987 forward) used the coal categories in 1976 Coal Policy to establish baseline conditions with the intention of "eliminating the potential for policy misalignment." Alberta established a management guideline with the understanding that proposals for coal exploration and development must be processed in accordance with the 1976 Coal Policy.

Today, IRPs can be found listed on the Government of Alberta website.[3] However, the website provides express caveats about IRPs, indicating that "some plans reflect management intent that no longer applies" and "some plan provisions do not align with and/or have been replaced by present Government of Alberta policy and legislation".

The Whaleback Decision (1994)

In 1994 the Energy Resources Conservation Board (ERCB) held public hearings on an application by Amoco to drill an exploratory well in the Whaleback area of the Eastern Slopes, which ultimately led to a decision to reject the application. That decision raised important questions about Alberta's evolving approach to development applications, particularly in the Eastern Slopes, and about the use of public interest tests for natural resource management in Alberta. At the time, the Whaleback was said to be the largest remaining undisturbed montane ecosystem in the province.

In December 1993, the ERCB issued IL 93-9 that set out supplementary application requirements for the southern Eastern Slopes. It acknowledged "a shift in public values which has resulted in a greater emphasis by the public on the protection of wildlands and of ecological integrity" for the region. Significantly, IL 93-9 also demonstrated the ERCB's expectations for information on overall development plans, staged environmental assessments and the need for operators to consolidate their operations.

The Whaleback decision represented a unique initiative by the ERCB to address complex issues within its project review mandate in the sensitive Eastern Slopes region. Alberta's land use policies were viewed as being central to the ERCB's determination of public interest for the Whaleback for developments that "can be carried out in a manner which does not reduce the existing land-use values so significantly that the overall public interest is compromised." In doing so, the ERCB referred to the Integrated Resource Plan for the Whaleback and also,

2. Alberta Forestry. (1986). *Nordegg-Red Deer River Sub-Regional Integrated Resource Plan.* Government of Alberta. Retrieved at https://open.alberta.ca/dataset/84512bd5-d38c-4b3d-839c-fcb71ed22135/resource/b259726b-3c4a-4e76-81a2-12450c9f8cd0/download/1986-nordeggreddeerriversubregionalplan-1986.pdf
3. https://www.alberta.ca/integrated-resource-plans.aspx#jumplinks-2

to Special Places 2000, Alberta's proposed protected areas strategy. The approach raised important questions for the ERCB, and the Eastern Slopes, as it addressed how specific determinations of the public interest were to be made. The experience demonstrated that IRPs may have a major influence on the regulatory decision-making, although the ERCB chose not to allow such considerations to fetter its decision-making by treating them as binding. In considering the IRP the ERCB struck a balance between giving weight to Alberta's land use planning policies and the maintenance of its statutory mandate for determinations of the public interest.

The Whaleback decision demonstrated that individual project applications may raise important questions related to regional and provincial land-use issues and showed that fundamental questions for resource management in Alberta could be addressed thorough project-specific reviews or within the broader field of land-use planning and zoning.

Another lesson was that processes to establish greater certainty for land-use priorities are vital for determinations of the public interest and also for investor certainty. It also demonstrated that at that time land-use issues for resource management of the Eastern Slopes had not yet been addressed.

The *Alberta Land Use Stewardship Act* (2009)

Subsequently, Alberta experienced considerable population and economic growth, including a substantial 'boom' period associated with high oil and natural gas prices. With a rise in activity levels, land use conflicts on the landscape became more frequent and more complex. Recognizing this, the Government of Alberta developed the Land Use Framework in 2008, which set out an innovative approach to managing the province's land and natural resources.

Aimed at reconciling and achieving Alberta's social, economic and environmental goals, the Land Use Framework called for several initiatives. Most notably, it divided the province into seven new land-use regions and called for the development of a regional plan for each region.

To implement this and other aspects of the Land Use Framework, the Government of Alberta enacted the *Alberta Land Stewardship Act*.[4] The Act clarifies the regional planning process, the required contents of regional plans, and provides for regional plans to have legal force and effect as regulations under the Act.

The boundaries of the new land use regions align with major watersheds in the province. Consequently, the Eastern Slopes are represented in four land use regions: the Upper Peace Region, the Upper Athabasca Region, the North Saskatchewan Region and the South Saskatchewan Region. As of the date of writing, only the latter of these four has a regional plan enacted under the *Alberta Land Stewardship Act*.

South Saskatchewan Regional Plan (2014)

The Government of Alberta intended the South Saskatchewan Regional Plan to be the basis for "robust growth, vibrant communities and a healthy environment within the region over a 50-year period". Accordingly, the plan established land use objectives and strategies and articulated policy to manage the regional cumulative effects of human development on the environment. The plan thus speaks to many considerations, including industrial activities.

Interestingly, the South Saskatchewan Regional Plan contemplated future development of coal resources and made explicit mention of portions of the Eastern Slopes:

"The Government of Alberta is continuing to explore development opportunities for our abundant coal deposits. Given the current and anticipated future global demand for coal, particularly from Asian markets, maintaining opportunities for responsible development of coal resources is important to the region and the province. The mountains and foothills in the western part of the region, as well as the plains in the east, have significant coal fields with good potential for development.

The metallurgical coal potential in the region is of significance in that the coal can be used in the steel-making process. For many developing or expanding countries, steel will be an essential component for infrastructure and Alberta's metallurgical coal could help meet those demands. Exploration and investment for coal near the Municipality of the Crowsnest Pass in the eastern portion of the region has increased over the past five years and demonstrates the future potential for coal development in the region. **Ensuring opportunities for coal exploration and development in the region will create economic diversification opportunities and export markets for Alberta coal and mineral resources and will result in increased employment in the region.**"

[Emphasis added.]

In terms of providing land use guidance around coal, however, the South Saskatchewan Regional Plan committed to future work, stating that:

"The Integrated Resource Plans will remain in effect until they have been reviewed for their relevance and incorporated as appropriate under the implementation strategies of this regional plan or future subregional or issue-specific plans within the region. This will include direction for key industrial sectors such as coal, oil and gas, industrial minerals and aggregates."

4. *Alberta Land Stewardship Act*, S.A. 2009, c. A-26.8.

"As part of reviewing and incorporating the Integrated Resource Plans, the government will integrate a review of the coal categories, established by the 1976 A Coal Development Policy for Alberta **to confirm whether these land classifications specific to coal exploration and development should remain in place or be adjusted.** The review of the coal categories will only be for the South Saskatchewan planning region. **The intent is for the SSRP and implementation strategies of the regional plan or future associated subregional or issue-specific plans within the region to supersede the coal categories for the purposes of land use decisions about where coal exploration and development can and cannot occur in the planning region."**

[Emphasis added.]

As of the date of writing, this work has yet to be completed.

It is important to note that, while IRPs and Regional Integrated Decisions are not legally enshrined, when a regional plan is complete parts of it are formally incorporated as a regulation under the *Alberta Land Stewardship Act*, giving those parts legal force and effect. A consequence of this is requiring provincial and local decision-makers, including the AER, to comply with the legally enshrined parts of the regional plan. Also of interest is that all of the coal policy statements featured in the South Saskatchewan Regional Plan are found in parts of the plan that are not legislatively binding.

The South Saskatchewan Regional Plan called for the development of "footprint management plans" that would aim to "minimize the extent, duration and rate of linear footprint development to meet the objectives established in this regional plan and the biodiversity management framework."

The South Saskatchewan Regional Plan also created eight new or expanded conservation areas, one of which included the 1998 designation of a portion of the Castle Special Management Area. Crown coal leasing, exploration and development were considered not to be compatible with the new parks. As a result of this policy direction, the creation of two conservation areas (the Bow Valley Wildland Provincial Park and High Rock Wildland Provincial Park) resulted in the cancellation of portions of six coal leases.

Castle Parks (2017)

In 2017, both the Castle Provincial Park and the Castle Wildland Provincial Park were established.

The conservation objectives of the South Saskatchewan Regional Plan were paramount. This had consequences for the management of coal. Crown coal leasing, exploration and development were not considered compatible activities within either the Castle Provincial Park or the expanded Castle Wildland Provincial Park. This resulted in the cancellation of the full extent or portions of 19 Crown coal leases south of the Crowsnest Pass.

These restrictions on coal activities in the Castle were not applied to freehold coal title.

Livingstone-Porcupine Hills Land Footprint Management Plan (2018)

The Livingstone-Porcupine Hills Land Footprint Management Plan[5] was the first in Alberta designed specifically to manage the effects of cumulative human effects ("footprints") on the landscape. To accomplish this, tools such as regulatory limits on road density and a measure called the "Spatial Human Footprint" were specified, the latter of which is still under development. The Management Plan also specified:

"As part of reviewing and incorporating the Integrated Resource Plans, the Government of Alberta will integrate a review of the coal categories for the South Saskatchewan Region (SSRP p. 61). New direction, consistent with the footprint planning outcomes, will supersede the coal categories and may extend to all large-scale industrial surface disturbances, including coal. This new direction should be consistent with an integrated approach. It will specify where surface exploration and development can and cannot occur based on the best and most recent biodiversity sensitivity data."

A commitment was also made to complete this work within three years.

Motorized access density limits were imposed for the planning area and were considered binding regulatory details under the South Saskatchewan Regional Plan. Alberta Environment and Parks (AEP) subsequently developed a model and online submission tool to assist proponents in understanding how their proposed projects could impact road density levels in the sub-region using different limits in designated Priority Management Zones. As noted, the concept of the Spatial Human Footprint is still under development, considered to be a complex measure of the degree to which landscapes would be impacted by anthropogenic disturbance.

There are material implications for the 1976 Coal Policy and the Eastern Slopes Policy in the Livingstone area. The area contains significant coal resources that include all or large portions of six coal fields. These resources are predominantly found in lands that were classified as either Category 2 or Category 4 lands under the 1976 Coal Policy. The lands also include multiple uses designated as critical wildlife zones under the Livingstone-Porcupine Hills Sub-Regional IRP.

5. Alberta Environment and Parks. (2018.) *Livingstone-Porcupine Hills Land Footprint Management Plan* Government of Alberta.

Summary

Although considerable work has been undertaken over the past 50 years, the ultimate result to date is a complex web of policies and plans. Determining whether and how certain coal activities are compatible uses on landscapes in the Eastern Slopes is no easy task. In addition to the 1976 Coal Policy and the Eastern Slopes Policy, there are various land use guidance documents (e.g., IRPs, the South Saskatchewan Regional Plan, and the Porcupine Hills-Livingstone Land Footprint Management Plan) that purport to provide direction.

In announcing its 2008 Land Use Framework, Alberta explicitly recognized that "what worked before will not work for the future." The growing demand and expansion of multiple natural resource uses, and subsequent impacts on the landscape, called for a more integrated management approach.

The most recent policy documents have articulated a common expectation that regional plans (and associated plans) created under the *Alberta Land Stewardship Act* will reconcile this dispersed guidance in a unified way. Yet in 2021, only one of the four land use regions covering the Eastern Slopes has a regional plan; and even in that case, considerable work remains outstanding.

ANALYSIS OF THE 1976 COAL POLICY

Given that the committee's mandate is concerned with the 1976 Coal Policy, it is logical to examine and discuss that policy.

During the committee's engagement process, it became clear that there are many differing views among Albertans about the 1976 Coal Policy, what it covers, what it is intended to achieve, and what it does.

In order to provide a shared understanding and set context for its advice, the committee offers the following analysis of the 1976 Coal Policy and the complex evolution in law that has occurred between 1976 and today.

Overview

When the 1976 Coal Policy was created 45 years ago, the province was at a different stage in its history. The government of the day wished to encourage the development of Alberta's coal resources for energy security, and including job and wealth creation, and to support intra-provincial electricity generation.

Since 1976, provincial law has evolved in response to Alberta's growing population and economy, which have brought with them a busier landscape. Consequently, most issues addressed by the 1976 Coal Policy have been enshrined in law over time.

Sections 3 and 4 of the 1976 Coal Policy contain most of its substance. Section 3 articulates the "Elements of the Policy" in detail, comprised of:

- Protection of the Environment
- Compatibility with other Land Uses
- Rights of Owners of Surface Land
- Land Surface Reclamation
- Use of Alberta Manpower, Services, Materials and Equipment
- Townsites and Infrastructure
- Transportation
- Royalty on Crown Coal – Taxes on Freehold Coal
- Opportunity for Equity Participation by Albertans
- Timing of Developments
- Overall Benefit to Alberta
- Granting of Rights to Explore for Coal
- Classification of Lands for Coal Exploration and Development
- Submission of Results of Exploration
- Restrictions on Existing Leases; Lease Purchase by the Government
- Granting of Leases for Development
- Regulation to Ensure Safe and Efficient Development Without Waste
- Efficient Use of Coal in Alberta – Maximum Upgrading
- Appraisal and Protection of Alberta's Requirements
- Supply for Canadian Markets Beyond Alberta
- Supply to Foreign Markets
- Pricing and Marketing
- Manpower Training
- Research and Development

Section 4 outlines "Administrative Procedures" that identify how developers are to acquire coal rights and apply for coal projects, consistent with elements in section 3.

For the sake of this analysis, the elements of the 1976 Coal Policy can be grouped into six subject areas:

- Environmental Protection
- Socioeconomics and Trade
- Surface Rights
- Coal Mineral Tenure and Royalties
- Authorization of Coal Exploration and Development Activities
- Land Use and the Coal Categories

Environmental Protection

Applicable elements from the 1976 Coal Policy:

- Section 3.1, Protection of the Environment
- Section 3.4, Land Surface Reclamation

Since 1976, environmental laws have advanced. Today, the *Environmental Protection and Enhancement Act*,[6] *Public Lands Act*,[7] *Water Act*,[8] and associated regulations have enshrined Alberta's approach to balancing ecological protection with industrial development. This legislative framework guides the processes and requirements for considering, approving (or rejecting), operating and reclaiming industrial activities – including coal exploration and coal development activities.

There are many regulations and Codes of Practice that have been enacted under the *Environmental Protection and Enhancement Act* which prescribe environmental protection requirements in greater detail, such as the Conservation and Reclamation Regulation.

These enactments have codified sections 3.1 and 3.4 of the 1976 Coal Policy, which speak to "Protection of the Environment" and "Land Surface Reclamation".

For instance, section 3.1 of the 1976 Coal Policy states:

"Approvals under environmental legislation will be granted only under conditions where all appropriate measures are taken for the protection of the environment and where environmental standards and criteria are not exceeded."

Similarly, section 3.4 of the 1976 Coal Policy states:

"Land reclamation will include the contouring of the mined or disturbed lands, the replacement of the topsoil, revegetation for soil stabilization, biological productivity and appearance, and suitable maintenance of the vegetation or, where appropriate, the conversion of the land to agricultural or other desirable use. Where applicable it will also include the replacement and rehabilitation of those facilities or features which were disrupted during the mining process and which are required to return the land to its former use."

This is what the provisions of today's *Environmental Protection and Enhancement Act* are designed to achieve. Additionally, there are many guidelines for conservation, reclamation and remediation published by AEP, which operators must follow.

Meanwhile, the *Water Act* has established a framework for the management and protection of water supplies in the province, including water use by industrial activities.

Interestingly, section 3.1 of the 1976 Coal Policy mentions that, "All operations will be subject to the environmental standards and conditions of the… Clean Water Act…and the Water Resources Act." Yet beyond this, the 1976 Coal Policy offers scant other guidance pertaining to water. Alberta's legal framework for water management today is arguably stronger than what existed in 1976.

Socioeconomics and Trade

Applicable elements from the 1976 Coal Policy:

- Section 3.5, Use of Alberta Manpower, Services, Materials and Equipment
- Section 3.9, Opportunity for Equity Participation by Albertans
- Section 3.18, Efficient Use of Coal in Alberta – Maximum Upgrading
- Section 3.19, Appraisal and Protection of Alberta's Requirements
- Section 3.20, Supply for Canadian Markets Beyond Alberta
- Section 3.21, Supply to Foreign Markets
- Section 3.22, Pricing and Marketing
- Section 3.23, Manpower Training
- Section 3.24, Research and Development

Considerable shifts in policy have occurred since 1976 when it comes to trade and economic development. The overall evolution has been one towards open investment, free trade and allowing the marketplace to determine commodity prices and producer-customer relationships.

Many aspects of the 1976 Coal Policy that could be described as protectionist in nature have become antiquated or unenforceable. For example, the implementation of free trade agreements has constrained the government's ability to prefer local companies or to require the sourcing of local labour and materials.

Aspects of the 1976 Coal Policy that specify the desired end users of Alberta's coal resources also appear antiquated. For example, sections 3.19, 3.20 and 3.21 of the 1976 Coal Policy articulated a position that coal developments would be expected to serve Alberta's energy needs first; and under the right circumstances, the government would consider developments aimed at serving the needs of other parts of Canada or foreign markets. Section 3.18 of the 1976 Coal Policy specified that coal be upgraded within the province to the

6. *Environmental Protection and Enhancement Act*, RSA 2000, c. E-12.
7. *Public Lands Act*, RSA 2000, c. P-40.
8. *Water Act*, RSA 2000, c. W-3.

extent practical. Since then, systems around the world have changed such that global markets drive private agreements between producers and consumers of resources such as coal.

Similarly, the Government of Alberta has tended away from direct involvement in the economy, rendering other aspects of the 1976 Coal Policy antiquated. For example, section 3.9 of the 1976 Coal Policy discusses equity participation by Albertans through the Alberta Energy Company, which no longer exists in such a form. In the decades since, participation in equity markets has been democratized considerably. Today, if Albertans wish to invest in coal developments, they can do so through the purchase of equities in publicly traded coal companies, or through the purchase of private investment products that invest in coal producers. Many mechanisms exist today for doing so, including a plethora of online banking and online trading platforms.

The 1976 Coal Policy also speaks to labour market development, to ensure Albertans can partake in employment opportunities in coal; and to the government's commitment to support research around coal resources and development. In 2021, the Government of Alberta maintains support for skills training (e.g., through investment in post-secondary institutions and through training support programs) and support for research (e.g., through investments in research activities at various institutions and through vehicles such as Alberta Innovates). Labour market and research needs have changed since 1976 and so coal does not figure as prominently, but the substantive sentiments of sections 3.23 and 3.24 of the 1976 Coal Policy are reflected today in legislation, government programs and government investments.

Surface Rights

Applicable elements from the 1976 Coal Policy:

- Section 3.3, Rights of Owners of Surface Land

Alberta's *Surface Rights Act*[9] legally enshrines concepts in the 1976 Coal Policy related to consent from, and compensation to, private landowners for surface access. This legislation has been used for a long time in respect of energy development. The principles and processes in the legislation are consistent with those articulated in section 3.3 of the 1976 Coal Policy.

Coal Mineral Tenure and Royalties

Applicable elements from the 1976 Coal Policy:

- Section 3.8, Royalty on Crown Coal – Taxes on Freehold Coal
- Section 3.16, Granting of Leases for Development

Importantly, provisions in the 1976 Coal Policy relating to the granting of coal mineral rights, and the raising of revenues from coal production, are now codified in legislation.

Today, the *Mines and Minerals Act*[10] establishes the framework for granting coal rights and the collection of coal royalties. The term of a coal lease is 15 years and is renewable under certain conditions. One of the regulations under the Act, the Coal Royalty Regulation,[11] provides greater detail about these issues. The Coal Royalty Regulation explicitly addresses bituminous coal and subbituminous coal. It should be noted, however, that the *Freehold Mineral Rights Tax Act*[12] does not apply to coal.

The 1976 Coal Policy draws a direct line of sight between the coal categories and the Government of Alberta's granting of coal leases. Essentially, it says the government will not grant mineral rights in areas where development is not expected to occur.

Notably, though, the 1976 Coal Policy contemplated granting coal leases in Category 2 or Category 3 lands under certain conditions. Table 1 in the 1976 Coal Policy notes that applications for coal leases would be accepted in these lands where exploration was approved; and those leases would be issued where development was approved. This is consistent with the 1976 Coal Policy's overall orientation that Category 2 and Category 3 lands were not completely off limits to exploration and development but would face greater scrutiny as compared to activities on Category 4 lands.

Presently, an operator does not need to secure a coal mineral lease in order to undertake coal exploration activities. This is not because of what is stated in the 1976 Coal Policy, but rather because legislation does not impose a requirement on an operator to do so.

9. *Surface Rights Act*, RSA 2000, c. S-24.
10. *Mines and Minerals Act*, RSA 2000, c. M-17.
11. Coal Royalty Regulation, AR 295/1992.
12. *Freehold Mineral Rights Tax Act*, RSA 2000, c. F-26.

Authorization of Coal Exploration and Development

Applicable elements of the 1976 Coal Policy:

- Section 3.6, Townsites and Infrastructure
- Section 3.7, Transportation
- Section 3.10, Timing of Developments
- Section 3.11, Overall Benefit to Alberta
- Section 3.12, Granting of Rights to Explore for Coal
- Section 3.14, Submission of Results of Exploration
- Section 3.17, Regulation to Ensure Safe and Efficient Development Without Waste

Several elements in the 1976 Coal Policy address regulatory processes around the management of coal resources and the approval of coal exploration and development activities. All of these elements are addressed today in Alberta's legislative framework.

The goal of "ensuring orderly, efficient and economic development of Alberta's coal resources in the public interest" is embedded in the *Coal Conservation Act*.[13] That Act also sets out a variety of permitting and licensing requirements around the development, operation and abandonment of coal projects. These requirements complement and supplement environmental protection requirements and safety requirements in other pieces of legislation (such as the *Environmental Protection and Enhancement Act*).

Since 2013, responsibilities around the regulation of coal activities have become more delineated between the Government of Alberta and the AER (which is a successor to the ERCB). In this dynamic, the government maintains responsibility for establishing desired outcomes and expectations around coal exploration and development. The role of the AER is to follow those outcomes and expectations when considering, approving and regulating individual coal activities.

The AER is designed as a single, integrated regulator for energy resources, including coal. In practice, this means the AER is responsible for issuing authorizations under and enforcing various pieces of legislation, including environmental legislation. The AER serves as the regulatory body for the full lifecycle of a coal project – from application, through operation, to closure and reclamation. Before the AER's creation, these regulatory functions were distributed across multiple entities, including AEP and the former ERCB.

The *Responsible Energy Development Act*[14] establishes the AER and addresses details about the regulatory process – including issues such as application requirements, public notifications and engagement. Section 2 of that Act specifies the mandate of the AER, including "to provide for the efficient, safe, orderly and environmentally responsible development of energy resources in Alberta through the Regulator's regulatory activities."

Under the *Responsible Energy Development Act*, the AER is empowered to make orders and directions under the legislation it enforces, and to issue rules and directives on more detailed matters. It can attach terms and conditions to project approvals that it issues. Today, however, these would not typically include requirements that operators financially contribute to townsites or public transportation infrastructure, as was contemplated by sections 3.6 and 3.7 of the 1976 Coal Policy.

When it comes to coal exploration activities (i.e., seeking authorization to explore for coal resources, versus seeking authorization to build a mine), the AER grants authorizations according to the current legislative framework. The main pieces of legislation that guide this are the *Environmental Protection and Enhancement Act* and the *Public Lands Act*.[15]

The *Public Lands Act* sets out requirements for obtaining permission to undertake exploration on Crown land (i.e., how an operator acquires a disposition to be on Crown land and to undertake activity). The *Environmental Protection and Enhancement Act*, meanwhile, sets out environmental expectations around the proposed activity and what kind of authorization is needed for the activity (such as an approval or registration).

The AER also rescinded Directive 061. This directive dated back to 1978 and contained extensive and detailed information requirements for applications to develop coal mines as well as guidance for coal exploration. The directive was replaced by *Manual 020 Coal Development*,[16] which contains minimal information requirements and provides scant guidance on coal exploration programs. During its engagement process, the committee heard that the rescission of Directive 061 was part of a red tape reduction process. This action removed a long-standing public interest test that was of prime interest to many Albertans.

13. *Coal Conservation Act,* RSA 2000, c. C-17.
14. *Responsible Energy Development Act,* S.A. 2012, c. R-17.3.
15. *Public Lands Act,* RSA 2000, c. P-40.
16. Alberta Energy Regulator. (2020). *Manual 020 Coal Development.* Retrieved at https://static.aer.ca/prd/documents/manuals/Manual020.pdf

Land Use and the Coal Categories

Applicable Coal Policy elements:

- Section 3.2, Compatibility with other Land Uses
- Section 3.13, Classification of Lands for Coal Exploration and Development
- Section 3.15, Restrictions on Existing Leases; Lease Purchase by the Government

Certain elements of the 1976 Coal Policy address how the Government of Alberta will reconcile coal activities with other activities on the landscape (such as agricultural or recreational uses). The most significant elements here are the coal categories, which designate and classify landscapes in the Eastern Slopes into differing levels of development restriction.

Altogether, these elements amount to a nascent form of land-use planning back in 1976. In the 45 years since, there has been considerable evolution in how the Government of Alberta undertakes land use planning. (See discussion in the previous chapter.)

As noted earlier, the most recent step in the evolution of provincial land use planning has been the establishment of the *Alberta Land Stewardship Act,* which enabled the creation of a regional plan for each of seven integrated planning regions (i.e., the land use regions). Only two of seven regional plans have been completed thus far: the Lower Athabasca Region Plan and the South Saskatchewan Regional Plan.

Significantly, the coal categories of the 1976 Coal Policy have not been reviewed and incorporated into the South Saskatchewan Regional Plan. The South Saskatchewan Regional Plan has had ancillary impact on the management of coal resources because of certain land use decisions it contains. Most notable is the creation of new or expanded conservation and/or recreation areas, including the Castle parks, which collectively resulted in the cancellation of several coal leases. This serves as an example of how regional plans under the *Alberta Land Stewardship Act* can have the effect of overtaking the coal categories in the 1976 Coal Policy.

In addition to the South Saskatchewan, the geographic areas covered by the coal categories in the 1976 Coal Policy straddle three other land use planning regions: the North Saskatchewan, the Upper Athabasca and the Upper Peace. As of the time of writing, regional plans have not been completed for these latter three regions.

Discussion

For the most part, the concepts and expectations set out in the 1976 Coal Policy have been integrated into provincial legislation. The major exception is the coal categories. Though it is contemplated that regional plans will eventually incorporate and/or supersede the coal categories, this has not yet happened.

This leaves the coal categories in a space where they continue to be considered by planners and decision-makers, but potentially in competition with other policy guidance. As noted, there are IRPs and Regional Integrated Decisions that do not reference the coal categories but instead provide other guidance which may be inconsistent.

Furthermore, there does not appear to be any statutory requirement for planners and decision-makers to follow the 1976 Coal Policy, IRPs or Regional Integrated Decisions. They are being followed as a matter of course, but with the understanding they are policy documents and not legal instruments.

THE EVOLVING LANDSCAPE OF COAL

Among the questions the committee was asked to consider is whether Albertans wish to see the province supply coal to meet global demand. The premise here is that Alberta can seize new international market opportunities by developing its coal resources and generate jobs and other benefits in the process.

Like any other industrial land use, coal development involves trade-offs – economic, environmental, and societal. Consequently, decisions about Alberta's approach to coal should be informed by assessments of the benefits and opportunities of coal development activities relative to their drawbacks and risks.

To carefully consider the trade-offs involved in decisions about coal development, it makes sense to look at the overall landscape in which coal exists. As noted earlier, many conditions have changed since 1976. This includes the role of coal resources and their importance in the energy mix.

The History of Coal in Alberta

Though it has been used as far back as 1000 B.C., the explosion of coal as a fuel happened in tandem with the Industrial Revolution. In Britain, for instance, coal production increased tenfold between the mid-1700s and the mid-1800s.

Alberta's history of coal mining began in 1874 with the opening of the first commercial coal mine on the Oldman River near present-day Lethbridge. Alberta's first anthracite coal development was in the Bow Valley in 1883, followed by developments (including several underground mines) in the Crowsnest Pass in the 1900s, Nordegg in 1914, and Alberta's Coal Branch where production peaked in 1929. Coal was used primarily by the railways for use in steam engines, and for home consumption, and thermal power plants in Saskatchewan.

The arrival of the Canadian Pacific Railway sparked coal development throughout southern Alberta, with coal production helping supply the railway's needs in which coal was used primarily by the railways for use in steam engines. The path of the railway influenced the settlement of Alberta, and in some ways the location of Alberta's coal resources influenced the railway's path. Built in the late 1890s, the Crow's Nest Line of the Canadian Pacific Railway had the effect of stimulating coal development in the Crowsnest Pass and southeast British Columbia.

Coal in the Crowsnest Pass area also attracted attention from other users. This included the International Coal and Coke Company, which required a source of coal for its copper-smelting operations in British Columbia. The corporation's investment in coal mining led to the establishment of the community of Coleman in 1903, which essentially served as a "company town", where the corporation not only employed town residents, but also built and ran the town.

Further north, meanwhile, the first coal mine in Edmonton started operations in 1883. The thick, exposed coal seams in the valley of the North Saskatchewan River lent themselves to development. By the end of the 1800s there were several mines in operation. Around this same time, the Edmonton Electric Lighting and Power Company was authorized to develop the first power plant in Edmonton, with coal produced from the North Saskatchewan River valley serving as the feedstock. This later became Edmonton's Rossdale power plant, which produced electricity for the city until 1989 (though it converted to natural gas in 1955.)

The paths of northern rail lines – the Grand Trunk and Canadian National Railways – also led to coal development in central Alberta. Several mines were established south of Hinton, along what is known as the Coal Branch. Coal mining in the west-central parts of Alberta gave rise to the communities of Nordegg and Grande Cache. Notably, Grande Cache was built under the New Towns Act legislated to support regional developments. Along with investments by the Government of Alberta in the Alberta Resources Railway, these initiatives served as a major catalyst for resource development, particularly for coal.

Around the time of the First World War, both industrial needs and the development of more rail lines helped propel the expansion of coal. In 1918, annual coal production in Alberta was approximately 5.4 million tonnes. This grew over time, with coal serving as the province's dominant energy source. In fact, coal was so important to the economy that during the Second World War, the federal government took steps to stimulate coal production and ensure the industry was sustainable. Federal policies around military recruitment were even adjusted to prevent experienced coal miners from leaving their jobs and entering the armed forces.

The dominance of coal faded with the discovery of oil and natural gas in Alberta. Markets changed in response to the advantages offered by oil and gas, such that previous users of coal switched away from the resource. This included the railways, which had been huge customers of coal until they converted their coal-powered engines to diesel electric. In 1946, annual coal production in Alberta was 8.9 million tonnes; by 1961, it had fallen to 2 million tonnes.

These conditions forced the industry to make changes. Surface mining in the Plains areas of the province became more prominent, with coal producers supplying electrical generation facilities. This led to coal production ramping up again. By the early 1970s, power generation within Alberta became the biggest use for coal. Exports also began of smaller amounts of coal produced from Canmore and the Crowsnest Pass. In the 1960s, Coleman Collieries pioneered and opened international export markets for Alberta coal by negotiating long-term contracts to export metallurgical coal to Japan and using unit trains to transport the coal to west coast port facilities.

It is estimated that over 1800 coal mines have operated in Alberta since the 1800s. Though eclipsed by oil and gas, the truth is that coal played an instrumental role in the economic development of the province. During the past two centuries, coal mines have provided jobs and opportunities for generations of Albertans. They have also directly contributed for the overall development of Alberta and the establishment and expansion of entire communities.

As discussed below, the role of coal in Alberta is poised for evolution once again. Global and national trends are influencing the opportunities and challenges around coal. These need to be considered when deciding whether Alberta can or should supply coal to meet global demand.

Are There Opportunities to Meet Global Demand?

A key question is whether there are any opportunities for Alberta to meet global demand.

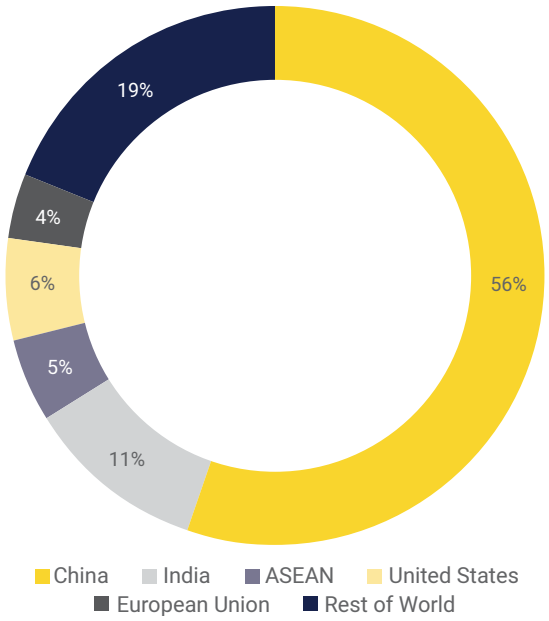
Calls for action on climate change have led to rhetoric that suggests the world is moving "off coal." This would seem to suggest that global demand for coal is on a downward spiral. But this view is too simplistic and fails to recognize that the world consists of more than North America and Europe.

In reality, coal is a story of two worlds.

One world (essentially, the developed world) is indeed attempting to wean itself off various forms of coal. Twenty years ago, the United States and Europe represented more than one third of global coal consumption; today they represent only ten percent.[17]

The other world (essentially, China and India) has not taken the same track. In fact, both countries, which are the most coal-reliant in the world, are taking steps to secure adequate supplies of coal to fuel their economic expansions. In 2020, for instance, a new Coal Trading Centre opened in China, and significant investments were made by that country to produce more than 1 billion tonnes of coal annually. India, meanwhile, is introducing commercial mining amid existing domestic production of 800 million tonnes per year.[18]

Share of coal consumption of different countries and regions, 2020

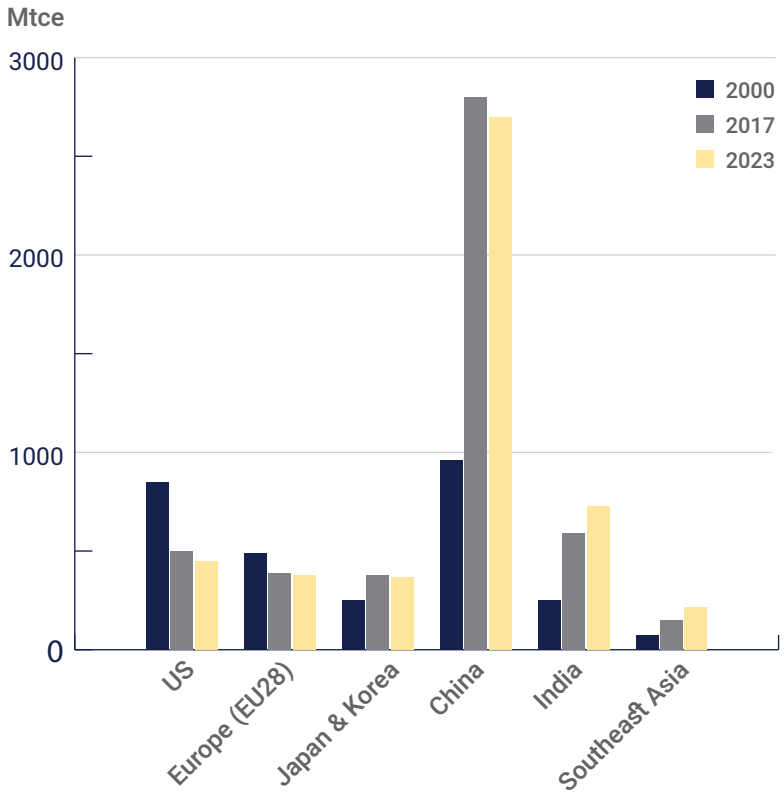


Source: IEA, 2021

All of this is to support voracious appetites for electricity and industrial needs in those countries. Coal still accounts for over one-third of global electricity generation (38.5 per cent of the global power mix in 2018).[19] While the worldwide economic contraction brought on by COVID-19 caused a notable drop in coal consumption in 2020, this was temporary. By the end of 2020, demand for coal was back above pre-COVID levels, propelled by Asia.

17. Alvarez, C. (2021). *Global coal development surpassed pre-COVID levels in late 2020, underlining the world's emissions challenge.* International Energy Agency. 2021. Retrieved at https://www.iea.org/commentaries/global-coal-demand-surpassed-pre-covid-levels-in-late-2020-underlining-the-world-s-emissions-challenge
18. International Energy Agency (IEA). (2020). *Coal 2020: Analysis and forecast to 2025.* Retrieved at https://iea.blob.core.windows.net/assets/00abf3d2-4599-4353-977c-8f80e9085420/Coal_2020.pdf
19. International Energy Agency. Retrieved at https://www.iea.org/fuels-and-technologies/coal

Coal demand in selected countries/regions in 2000, 2017, and 2023



Source: IEA, 2019

According to the International Energy Agency, global coal demand is expected to plateau by 2025, not because of the entire world moving off coal, but due to asymmetric patterns in global consumption. Moreover, there are fluctuations in opportunity based on the different types of coal that are produced in Alberta.

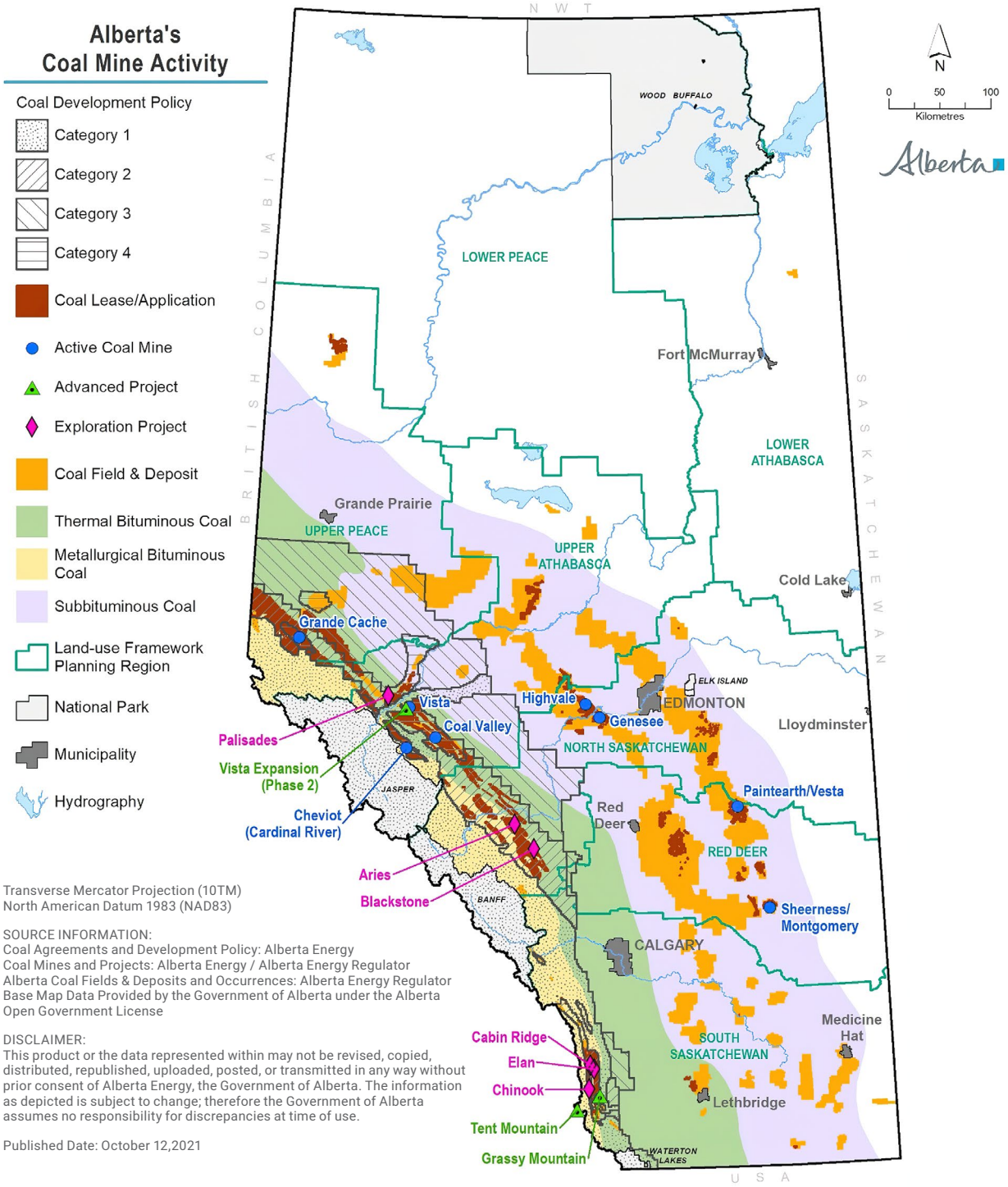
The COP 26 conference (2021) in Glasgow, Scotland demonstrated the complexities of any international attempts to regulate global fossil fuel use. Almost two hundred countries adopted the "Glasgow Climate Pact" after nearly two weeks of negotiations to limit global warming, fossil fuel use and compensation for third world countries affected by the climate crisis.

The Climate Pact made unprecedented mention of the role of fossil fuels, a result that the earlier Paris Agreement did not include. The Climate Pact also called for the "phasing down" of unabated coal and the use of fossil fuel subsidies. This was widely interpreted as a clause to allow for the continued use of coal in China, India and other countries of Southeast Asia.

THE CURRENT LANDSCAPE OF COAL IN ALBERTA

Alberta has a rich history associated with coal mining. Although proposed new metallurgical coal mines have generated controversy, particularly in the southernmost regions of the Eastern Slopes, several companies are currently operating actively in other locations.

In addition, there are approximately ten mining sites that are maintaining or entering exploration and development. The Grassy Mountain project was recently subject to a regulatory decision.



Transverse Mercator Projection (10TM)
North American Datum 1983 (NAD83)

SOURCE INFORMATION:
Coal Agreements and Development Policy: Alberta Energy
Coal Mines and Projects: Alberta Energy / Alberta Energy Regulator
Alberta Coal Fields & Deposits and Occurrences: Alberta Energy Regulator
Base Map Data Provided by the Government of Alberta under the Alberta Open Government License

Published Date: October 12,2021

Active coal mines in Alberta

MINE	OWNER/OPERATOR	LOCATION
Cheviot (Cardinal River)	Teck Coal Ltd.	Hinton
Coal Valley	Westmoreland Coal Co.	Hinton
Grande Cache	CST Canada Coal Ltd.	Grande Cache
Vista	Bighorn Mining Ltd. Coalspur (Operations) Ltd.	Hinton
Genesee	Capital Power LP Westmoreland Coal Co.	Warburg
Highvale	Transalta Corp SunHills Mining LP	Wabamun
Paintearth/Vesta	Westmoreland Coal Co. Alberta Power (2000) Ltd.	Forestburg
Sheerness/ Montgomery	Westmoreland Coal Co. Alberta Power (2000) Ltd.	Hanna

Source: Alberta Energy, 2021

Advanced coal projects in Alberta

PROJECT	PROPONENT	LOCATION	CATEGORY
Grassy Mountain	Benga Mining (Riversdale Resources)	Blairmore	Category 4
Tent Mountain	Montem Resources	South Crowsnest Pass	Category 4
Vista (Phase 2) Expansion	Bighorn Mining Ltd. Coalspur (Operations) Ltd.	Hinton	Category 4

Source: Alberta Energy, 2021

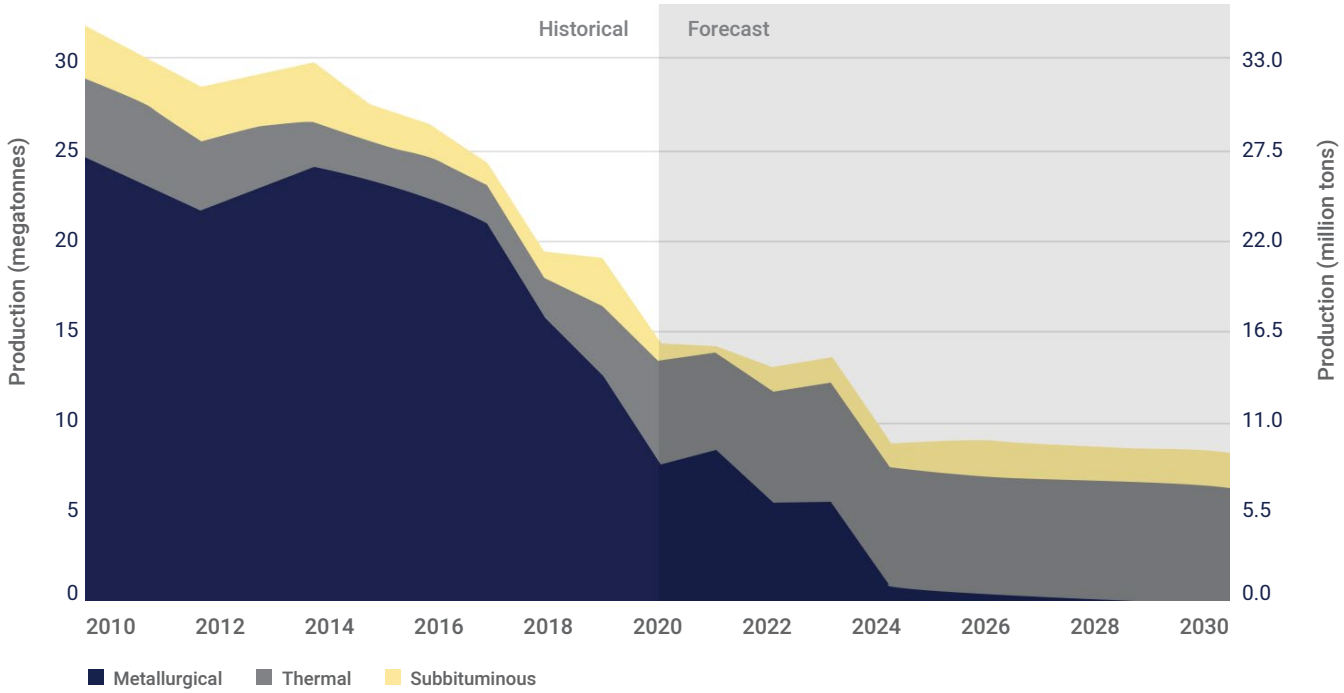
Coal exploration projects in Alberta

PROJECT	PROPONENT	LOCATION	CATEGORY
Aries	Ram Coal	Nordegg	Category 2
Cabin Ridge	Cabin Ridge Project Ltd.	North of Coleman	Category 2
Chinook	Montem Resources	South of Coleman	Category 4
Elan	Atrum Coal	North of Blairmore	Category 2
Blackstone	Valory Resources Black Eagle Mining	Nordegg	Category 2
Palisades	Horn Ridge Resources	Hinton	Category 4
Targa	Horn Ridge Resources	Grande Cache	Category 4

Source: Alberta Energy, 2021

Below are the historical and forecast volumes for coal production in Alberta.

Figure S7.1 Alberta marketable coal production



Source: Alberta Energy Regulator[20]

THE OUTLOOK FOR SUBBITUMINOUS COAL

Found across the Plains region of the province, subbituminous coal has by far represented the heart of Alberta's history with coal development. As a coal with lower energy content, subbituminous coal has been a product only for domestic consumption. Although it lacks sufficient value to make it an exportable commodity, Alberta has put it to use for easy, reliable, and cost-effective generation of electricity and heating.

In recent history, however, action on climate change has permanently disrupted this dynamic. Regulatory changes by the Government of Canada, first introduced in 2012, called for coal-fired electricity generation facilities to meet certain performance standards when they reach 50 years of operation or the year 2029 (whichever is earlier). These regulations were complimented by policy changes enacted by the Government of Alberta in 2015 (e.g., the Climate Leadership Plan). Federal regulations were further updated in December 2018 in the Regulations Amending the Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations. Collectively, these changes put coal-fired power generation on a track to be obsolete in Alberta.

Consequently, the use of subbituminous coal has sharply declined because of the retirement and conversions of coal-fired power plants within the province. Indeed, our province expects to be fully transitioned away from coal-fired electricity generation by 2023 – seven years ahead of the federal deadline.

The complete retirement of coal-fired electricity generation will effectively eliminate the only remaining customers for subbituminous coal mines.

20. Alberta Energy Regulator, *supra* note 19.

The committee observed that Alberta's undeveloped coal resources may provide future opportunities for coal gasification in the emerging hydrogen economy. There are positive environmental issues associated with this technology over other combustion and hydrogen-generation technologies. Notably, the technology may eliminate mining, coal transport, post-mining reclamation, and management of combustion residues with minimum start-up capital requirements, operating costs and construction time. While these processes are known to be subject to certain technical problems, underground coal gasification (UCG) by which coal is converted to useful gases in situ without the need for mining, to produce UCG (CO, CO2, N2, and H2) could represent a possible subject area for consideration as Alberta considers development of hydrogen strategies for the domestic and international marketplace.

The Implications for Alberta:

- Alberta's subbituminous coal has only been used within the province for low-cost power generation.
- Domestic demand for subbituminous coal is declining, due to the retirement of coal-fired electricity generation.
- Coal gasification from undeveloped coal resources could represent a possible subject area for consideration as Alberta considers development of hydrogen strategies for the domestic and international marketplace.

The Outlook for Thermal Bituminous Coal

Found in the Foothills region of the province, thermal bituminous coal has a higher energy content than subbituminous coal. The higher energy content and corresponding monetary value of Alberta's thermal bituminous coal has made it possible to economically transport the coal over long distances to serve electricity generators in distant markets. This makes it an exportable commodity – and indeed, most thermal bituminous coal produced in Alberta is sent to other markets. The biggest markets in 2020 were Chile, Japan and Korea.

Because it is primarily used for power generation, the demand for thermal bituminous coal is significantly influenced by electricity markets. As economies reopen in the wake of COVID-19 and economic growth returns, electricity demands are expected to increase. While Europe and the United States will generate this electricity through a wider mix of non-coal fuel sources, coal will remain a "cornerstone of electricity supply in India, China and some Southeast Asian countries".[21] The International Energy Agency estimates, for instance, that power-related demands for coal in 2021 alone will increase 3.1 per cent in China and 7 per cent in Southeast Asia.[22]

While this could theoretically present additional export opportunities for Alberta's thermal bituminous coal, our province's distance from markets may make this difficult. According to the AER, "Most of the Asian demand for thermal bituminous coal is expected to be met by other international suppliers, which will limit Alberta's potential for growth in these markets." [23]

On June 11, 2021, the Canadian federal government issued a policy statement regarding the future of thermal coal mining. Citing Canada's commitment to the Paris Agreement, the statement indicated that "the Government of Canada considers that any new thermal coal mining projects, or expansions of existing thermal coal mines in Canada, are likely to cause unacceptable environmental effects."[24] Essentially, the policy statement telegraphs that neither new thermal coal developments, nor expansions of existing thermal coal developments, will be able to obtain federal regulatory approval in Canada.

This takes the Canadian government's activism on coal to the next level. Through its regulatory changes (discussed earlier), the federal government had already acted to end coal-fired power generation in Canada – thereby helping to reduce the amount of carbon emissions produced by our country. The June 11, 2021, policy statement goes further, effectively declaring that Canada does not wish to enable any other country to use coal for power generation. It serves as a federal declaration to leave thermal bituminous coal resources in the ground, outside any that are already slated for extraction. This may raise the question of compensation or training for workers in a "transitioning economy" led by federal policy edicts.

The Implications for Alberta:

- There may be global demand for thermal bituminous coal, mainly from Asian markets.
- The federal government has signaled that it will not approve any additional thermal bituminous coal production.

21. IEA, *supra* note 14.
22. IEA, *supra* note 14.
23. Alberta Energy Regulator. (2021). Alberta *Energy Outlook*. Government of Alberta. Retrieved at https://www.aer.ca/providing-information/data-and-reports/statistical-reports/st98/coal/demand
24. Government of Canada. (2021). *Statement by the Government of Canada on thermal coal mining.* Retrieved at https://www.canada.ca/en/environment-climate-change/services/managing-pollution/energy-production/electricity-generation/statement-government-canada-thermal-coal-mining.html

THE OUTLOOK FOR METALLURGICAL BITUMINOUS COAL

Also referred to as coking coal, metallurgical coal largely originates from mountainous regions in Alberta and current production is directed to export markets. Metallurgical coal has a higher energy content compared to other types of coal and is used for higher-value industrial production. One of its most notable uses is in the production of steel. Consequently, the economics of the steel industry strongly influence the demand for metallurgical coal.

According to the International Energy Agency, China was by far the largest consumer of metallurgical coal in 2019, representing 64 per cent of global demand. The impacts of COVID dampened steel production in 2020, putting a small dent in metallurgical coal demand worldwide, yet in China demand for metallurgical coal continued to increase in 2020 by 2.4 per cent. China's steel industry has remained strong because of government stimulus measures.[25]

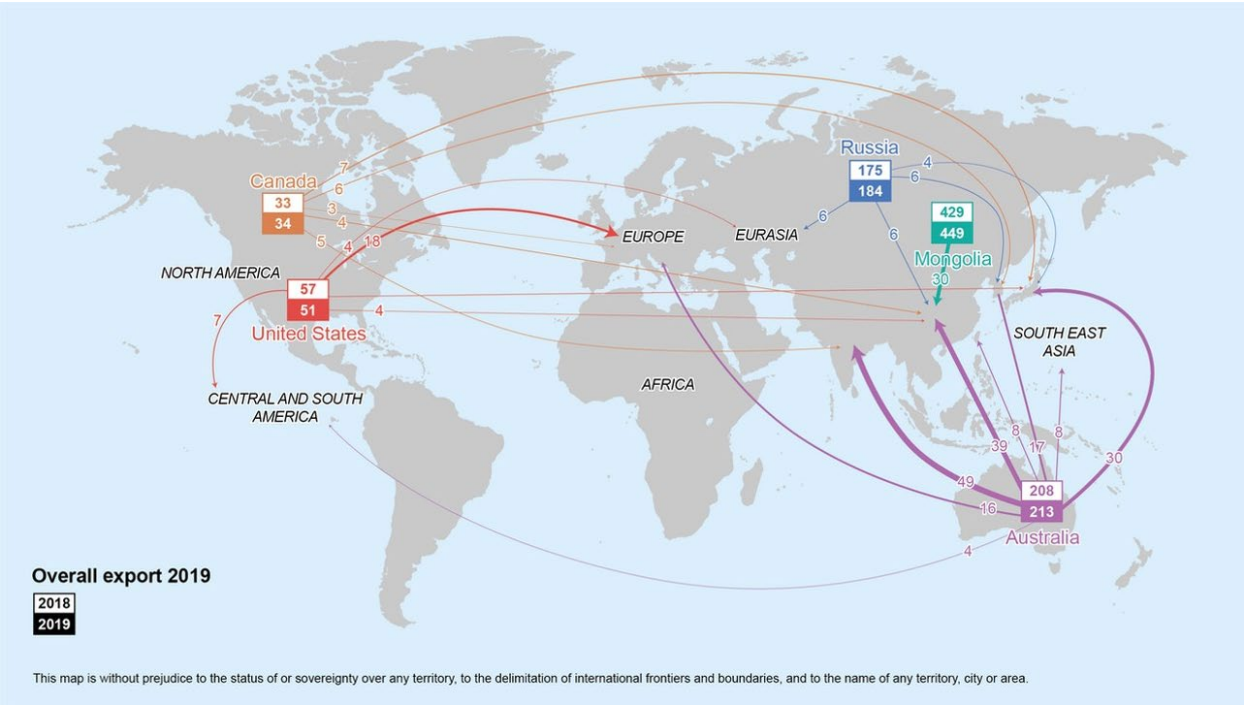
Worldwide demand for metallurgical coal may be boosted or extended over several years, as major nations undertake massive infrastructure-based stimulus programs to kick-start their economies. For example, the U.S. infrastructure package, which was passed on November 5, 2021, will see hundreds of billions of dollars invested in roads, bridges and other core projects. That will likely translate into considerable demand for steel and, in turn, metallurgical coal.

Australia, Russia and Mongolia are the largest exporters of metallurgical coal on the planet. They command most of global market share, which is not surprising given their proximity to the major sources of demand (China, India, and other Southeast Asian countries).

Recently, this longstanding dynamic has been disrupted due to a diplomatic conflict between Australia and China. As part of the conflict, China unofficially banned imports of Australian coal in October 2020. This has created supply-side challenges for China in respect of metallurgical coal, particularly since it has experienced interruptions in metallurgical coal imports from Mongolia. One consequence has been an increase in the price of metallurgical coal. Another is that China has sought to diversify its sources of metallurgical coal supplies. This is creating opportunities for other producing countries. For instance, during summer 2021, it was reported that a U.S. producer shipped a 136,400-ton load of metallurgical coal bound for steel making factories in China. It was the largest shipment of its kind ever sent from a U.S. east coast port.[26]

It is certain that China, as the dominant market force, will continue to seek markets with competitively priced coal.

Main trade flows in the metallurgical coal market, 2019 (Mt)



Source: IEA, 2020

25. IEA, *supra* note 14.
26. Bloomberg News. (2021). "Record US coal shipment to China highlights Australia's pain. Mining.com. Retrieved at https://www.mining.com/web/record-us-coal-shipment-to-china-highlights-australias-pain/

It is conceivable that Alberta could seek market share in meeting global incremental demands for metallurgical coal. However, the federal policy landscape may prove increasingly challenging, especially in light of recent announcements by Canada and certain agreements reached at the COP 26 Glasgow conference held in November 2021.

In a letter on June 16, 2021, the Honourable Jonathan Wilkinson, Canada's Minister of Environment and Climate Change, announced changes to how the government will treat coal mines, including metallurgical coal mines.

Under the federal *Impact Assessment Act*[27] and associated regulations, coal mines of certain size are automatically required to undergo the federal environmental impact review process. In his letter, Minister Wilkinson indicated he will use his discretion under the *Impact Assessment Act* to designate "any new proposed metallurgical coal mine or the expansion of an existing coal mine…that has the potential to release selenium into water bodies" as a project that must undergo the *Impact Assessment Act* process. The Minister cited the potential impacts of selenium on fish, which fall under federal jurisdiction, as part of his justification for exercising his discretion under the *Impact Assessment Act.*

The consequence of Minister Wilkinson's letter is that any new metallurgical coal mine, or any expansion of an existing mine, will be assessed by the federal environmental impact review process regardless of its size. This new approach is expected to work in tandem with new Coal Mine Effluent Regulations that the federal government is proposing to enact under the *Canada Fisheries Act.* Those new regulations would establish effluent quality standards for substances including selenium, nitrate, and suspended solids.

While being seen by some commentators as establishing a higher bar, the Coal Association of Canada issued a release saying it "welcome[s] comprehensive regulation and oversight." The Association acknowledged concerns about selenium and said that the industry "has, and will continue to adopt, a 'multiple line of defense' approach that is part of the mine design process." The Association signaled optimism saying, "We are confident these approaches will satisfy both provincial and federal requirements."

Yet another evolution in the federal policy landscape concerns climate change. On June 29, 2021, Royal Assent was given to the *Canadian Net-Zero Emissions Accountability Act.*[28] The new law requires the federal government to set national targets for the reduction of greenhouse gas emissions and sets an objective of achieving "net-zero" emissions by 2050. It also requires the federal government to account for its progress through plans and reporting.

The accountability dimension is expected to bring additional pressure on the federal government to strive towards emissions reductions. While the Act does not provide for legal consequences if the federal government fails to live up to its climate promises, it arguably serves to exert political influence on resource development. Given that the new law forces the federal government to establish plans for greenhouse gas reductions, it is reasonable to expect those plans may lead to creation of new policies and procedures. The federal government has signaled greater scrutiny when it comes to resource projects such as metallurgical coal developments.

The Implications for Alberta:

- Alberta may face growing competitiveness in a global marketplace for coal. If there will be any global demand for Alberta to meet, it will come from distant Asian markets – not North America and not Europe. Market demand levels will vary, depending upon export markets and the type of coal.
- Alberta and federal regulatory scrutiny and decisions will increasingly shape the nature and extent to which coal mining projects continue, or proceed, in Alberta. Federal policies will make it increasingly difficult for new metallurgical coal mines (or expansions of existing mines) to be approved.
- Companies may experience growing difficulties to secure investment capital for coal mines.
- There may be global demand for metallurgical coal, but market pricing and changes in technology make the long-term outlook uncertain.

27. *An Act respecting a federal process for impact assessments and the prevention of significant adverse environmental effects,* S.C. 2019, c. 28, s. 1.
28. *An Act respecting transparency and accountability in Canada's efforts to achieve net-zero greenhouse gas emissions by the year* 2050, S.C. 2021, c. 22.

INDIGENOUS RIGHTS AND COAL

The future trajectory of coal also stands to be influenced by Indigenous rights and interests. Several events in 2021 have brought more prominence to these rights and interests and have evolved the scope of considerations that governments and project proponents must have when considering coal developments.

Adoption of UNDRIP

Adopted by most United Nations members in 2007, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) was officially endorsed by Canada in 2016. A key step in implementing UNDRIP came in June 2021, when the Canadian federal government enacted the *United Nations Declaration on the Rights of Indigenous Peoples Act*.[29]

The Act contains many provisions to bring UNDRIP more formally into Canadian law. Among these is a requirement that federal laws be made consistent with UNDRIP. The federal minister responsible is also required under the Act to develop an action plan for achieving the objectives of UNDRIP. Importantly, the Act requires that both prongs of work must be done in consultation and cooperation with Indigenous peoples.

UNDRIP and the new Act stand to influence the construction and interpretation of statutes and regulations, including those concerning energy and environmental issues. This could result in greater rigour in federal processes around the approval of major resource projects. It will also likely result in changes to how governments and companies consult with Indigenous peoples.

Residential Schools and Reconciliation

The past year has also been notable for the discoveries of remains at or near known locations of residential schools. These discoveries have since spurred investigations across the country into additional sites. It brought attention to Canada's history concerning the residential school system and the treatment of Indigenous peoples in Canada.

It has also brought greater attention to the need for meaningful progress on the Calls to Action made by the Truth and Reconciliation Commission of Canada. Consequently, the importance of reconciliation has taken on greater and much-needed prominence in public policy discussions and decisions. For instance, the Canadian federal government has already published a set of Principles Respecting the Government of Canada's Relationship with Indigenous peoples.[30] The government notes that:

> "These Principles are a starting point to support efforts to end the denial of Indigenous rights that led to disempowerment and assimilationist policies and practices. They seek to turn the page in an often-troubled relationship by advancing fundamental change whereby Indigenous peoples increasingly live in strong and healthy communities with thriving cultures."

The renewed attention on reconciliation is likely to have implications for the viability of coal development in the Eastern Slopes. The Eastern Slopes have served as a sacred and traditional place of gathering, ceremony and harvesting for Indigenous peoples. As the federal government continues to grapple with its past concerning Indigenous peoples, and as considerations about reconciliation enter mainstream consciousness, it will be challenging to 'square the circle' with new coal activities that do not include the active participation or tacit approval of Indigenous peoples.

Treaty and Aboriginal Rights

As a general comment, the committee notes that in entering into a treaty process many Indigenous peoples viewed the Treaties as a means to establish a reciprocal relationship that would be lasting. In that regard, recent court decisions concerning Indigenous rights may impact the outlook for coal developments in Alberta because the decisions influence the interpretation of Aboriginal and Treaty rights, which are recognized and affirmed by section 35 of the *Constitution Act*, 1982.

One of these is the *Yahey* decision[31] from British Columbia, which concerns the interpretation of Treaty 8 and therefore has application across northern Alberta. The court found that the Government of British Columbia breached its obligations under Treaty 8 when it failed to consider the cumulative effects of various activities it had authorized on Treaty 8 lands.

Among other issues, Treaty 8 speaks to allowing Indigenous communities to continue their "way of life". While this is commonly understood to include activities such as hunting, trapping, and fishing the court noted that "way of life" goes beyond economic sustenance and includes considerations of culture and identity. Importantly, the court observed that the ability of Indigenous peoples to continue their "way of life" is connected to the health of the environment. This health was harmed by the cumulative effects of the multiple activities that the BC government had authorized and, hence, the BC government infringed Treaty rights.

29. *An Act respecting the United Nations Declaration on the Rights of Indigenous Peoples*, S.C. 2021, c. 14.
30. Department of Justice Canada. (2018.) *Principles Respecting the Government of Canada's Relationship with Indigenous Peoples*. Government of Canada.
31. *Yahey v. British Columbia*, 2021 BCSC 1287.

All of this is to say that cumulative effects management is likely to take on greater importance. Governments will be challenged to ensure that the cumulative effects of activities do not reach a point where they are infringing on the ability of Indigenous peoples to continue their way of life. Proposed coal projects are likely to be assessed by regulatory bodies not only based on their impacts, but also in relation to other known impacts on the landscape. This higher bar may make it more difficult for coal developments to secure approval.

At the same time, the *Ermineskin* case[32] has put governments on notice that they cannot simply sideline or ignore Indigenous communities that wish to benefit from coal developments. Handed down in July 2021 by the Federal Court, this case looked at the rights of the Ermineskin First Nation, which had entered into an Impact Benefits Agreement with Coalspur Mines in relation to its Vista Mine Phase 2 expansion.

In December 2019, the federal Minister of the Environment and Climate Change decided that the Vista Mine Phase 2 expansion did not need to be reviewed under the *Impact Assessment Act*. At some point later, however, the Minister reversed his decision and issued an order that the Vista Mine Phase 2 would need to be reviewed. Critically, the Minister did this without first consulting with the Ermineskin First Nation, even though the Minister knew the Ermineskin First Nation had entered into an Impact Benefit Agreement about the project.

In doing so, the Minister was found to have breached the Crown's duty to consult. Significantly, the court noted that economic and community benefits in the Impact Benefit Agreement were in compensation of Aboriginal and Treaty rights. As a result of breaching the duty to consult, the Minister's order was quashed by the court and the Minister was told to reconsider the decision.

On September 29, 2021, the Minister reinstated his decision to have the Vista Mine Phase 2 expansion reviewed under the *Impact Assessment Act,* saying that the Ermineskin First Nation had withdrawn their objection. The Ermineskin First Nation, however, explicitly stated that it still believes a review under the federal *Impact Assessment Act* is not necessary and that a review by the AER would be sufficient.[33]

Regardless of how the Vista Mine Phase 2 expansion plays out, the Ermineskin case has broadened the Crown's duty to consult with Indigenous peoples. This stands to further complicate the regulatory process for the review and approval of coal projects, potentially placing new obligations on governments and project proponents alike.

The Implications for Alberta:

- Enhanced engagement and Consultation with Indigenous peoples to respect traditional lands and Treaty rights will be necessary to achieve reconciliation before any future coal mines are approved.

Summary

Much has been said about the approaching end of coal for energy generation, but data suggests that both thermal bituminous and metallurgical coal will continue to be used, and perhaps will be in higher demand, by China, India and countries in Southeast Asia. Climate Pact negotiations at COP 26 appeared to confirm this position, when India refusal to accept language that called for coal to be phased "out" leading to last minute changes that required coal to be phased "down".

The COP 26 conference (2021) in Glasgow, Scotland demonstrated the complexities of any international attempts to regulate global fossil fuel use. Almost two hundred countries adopted the "Glasgow Climate Pact" after nearly two weeks of negotiations to limit global warming, fossil fuel use and compensation for third world countries affected by the climate crisis.

In addition to statements made by Canada's Prime Minister and the Minister for Environment and Climate Change at COP 26, the Canadian federal government has consistently telegraphed that it does not want to develop or market thermal coal. Federal regulations also appear to be on a trajectory to be tightened when it comes to metallurgical coal mines. Meanwhile, developments around Indigenous and Treaty rights, and greater attention to reconciliation with Indigenous peoples, will add further complexity to the regulatory picture.

Compounding all of this is another reality: coal mines require significant amounts of capital to build and, as such, require investors. Institutional investors, however, and the corporate world generally, are under increasing pressure to bring a more critical lens to investments. A key trend is the rise of environmental, social and governance (ESG) criteria in assessing potential projects for investment. While still evolving, the ESG movement is attaching to ever-greater amounts of capital. ESG assets under management are forecast to reach $53 trillion by the end of 2021.[34]

32. *Ermineskin Cree Nation v. Canada (Environment and Climate Change),* 2021 FC 758.
33. Weber, B. (2021). "No need for federal involvement in Alberta coal mine review, First Nations say." *CBC News.* October 4, 2021. Retrieved at https://www.cbc.ca/news/canada/edmonton/no-need-for-federal-involvement-in-alberta-coal-mine-review-first-nations-say-1.6199627
34. Diab, A. and Adams, G. (2021). *ESG assets may hit $53 trillion by 2025, a third of global AUM.* Bloomberg Intelligence. Retrieved at https://www.bloomberg.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/ 32. Ermineskin Cree Nation v. Canada (Environment and Climate Change), 2021 FC 758.

The nature of ESG criteria may make it very difficult for investors to pursue large investments in coal developments, especially with rising levels of shareholder activism. Recently, for example, a small activist hedge fund was able to bring new members onto the board of Exxon, despite the hedge fund owning only 0.02 per cent Exxon's shares.[35] Historically, Alberta and Canada have depended on high levels of foreign investment to develop their energy resources, including coal.

Overall, the investment and regulatory landscapes for coal is one fraught with considerable uncertainty – for both its proponents who wish to pursue developments in North America or Western Europe, and its detractors who must wrestle with the major challenge of Asia as they continue to seek coal's retirement in the context of containing global carbon emissions. Companies will make their own decisions about whether a potential development is economically viable. Government's role is to provide regulatory certainty and clear rules to enable companies to move forward with these decisions.

35. Hiller, J. and Herbst-bayliss, S. (2021). *Exxon loses board seats to activist hedge fund in landmark climate vote.* Reuters. Retrieved at https://www.reuters.com/business/sustainable-business/shareholder-activism-reaches-milestone-exxon-board-vote-nears-end-2021-05-26/

ADVICE AND RECOMMENDATIONS

Overview

> "The reality is that fresh water is more valuable than crude oil"
>
> *-Peter Lougheed, 2005*

Many Albertans believe it is a duty of policymakers to consider the public voice. For those who participated in it, the committee's engagement process became a welcome avenue for policy discussions. Their submissions, which included many recommendations, reflected views from Albertans who believe that Alberta is at a crossroads. Their passion and care reflect an exceptional depth of feeling for, and understanding of, these policy issues.

The emergence of proposed mining developments in the Eastern Slopes has caused a divergence among various public, economic and environmental interests. Some consider that major coal developments have the potential to advance certain economic interests while others consider that such projects would permanently diminish unique landscapes and ecosystems at a time when these lands are increasingly threatened by multiple consumptive demands. Indeed, it appears that many Albertans feel that current policy and regulatory systems magnify, through siloed departmental mandates, the difficulties in managing this sensitive and valuable region.

There are also growing pressures on a limited water supply. An example noted by the committee is the South Saskatchewan Regional Plan, which considers the basin waters to be over allocated, with 75 per cent already directed to agriculture. Water quality and quantity has become a significant issue in Alberta, one that is perhaps the most significant issue of our time.

Certainty in regulatory policies is essential for decision-making with local citizens, businesses and the global investment community. Policies that reflect regulatory certainty and procedural fairness provide the citizenry with a sense of purpose. By contrast, jurisdictions with conflicting or changeable policies are rarely associated with sustained investment. Unsurprisingly, many Albertans have expressed a diminished confidence in policies that result in uncertain regulation. A prominent example concerns the unanticipated reclamation liabilities from certain industrial operations that many Albertans previously had assumed to have been secured.

The committee has carefully considered and assessed the many recommendations made by those who participated in the committee's engagement process. Many individuals and organizations exerted extraordinary efforts, at considerable expense, to provide the committee with written submissions of excellent quality. Indeed, some considered that such basic research should have been completed by government agencies before certain policy changes were enacted. The committee used key elements gleaned from 176 formal submissions as a constructive first step in developing recommendations to modernize coal policies for Alberta.

Fundamental Principles

The committee began its deliberations by considering the key principles and elements in the original 1976 Coal Policy. The committee believes that many, if not most, of these principles remain as germane today as when first enunciated. In particular:

- "The Government's overall policy for the development of Alberta's coal resources is designed to bring and maintain the maximum benefits, now and in the future, to the people of Alberta who own this resource. Exploration and development will be encouraged in a manner that is compatible with the environment and at times which will best suit Alberta's economy and labour force."
- "No development will be permitted unless the Government is satisfied that it may proceed without irreparable harm to the environment and with satisfactory reclamation of restored land."
- "The Government recognizes the importance of Alberta's land resources for agriculture, recreation, forest products and wildlife, and is determined that proper attention be given to these alternative uses in the consideration of coal development projects."
- "Neither exploration nor development will be permitted in certain designated areas. Limited exploration and development will be permitted in other area while some areas will broadly open for both exploration and development under controlled conditions."
- "A fundamental feature of the Government's policy is that no coal development will be permitted to proceed unless in its overall economic and social impact it is clearly beneficial to Alberta."
- "All operations will be under strict inspection and regulation to ensure full compliance with standards and requirements relating to safety and industrial health, environmental protection, and resource conservation."
- "The Government is committed to maintaining a balance between resource development and environmental protection in order to maintain a desirable quality of life for future Albertans."

The committee believes that the foregoing principles should form the fundamental basis of modernized coal policy in Alberta.

Why Modernize the 1976 Coal Policy?

Much has changed since the 1976 Coal Policy was developed, including the following:

- Environmental legislation and public expectations for land use have changed significantly in Alberta since 1976. Additionally, earlier policies only indicated that development on Category 2 lands "will normally not be considered at the present time". This has left open determinations of where and how certain developments would be approved.
- Issues of water quality and quantity are now matters of heightened concern, particularly where major population centers and agricultural industries are being impacted by increasing industrial demand and climate change.
- The population of Alberta grew from 1.8 million in 1976 to 4.4 million by 2021. This population growth has increased resource pressures.
- The Government of Alberta has increasingly recognized the importance of Alberta's land resources for agriculture, recreation, forest products and wildlife. These uses may conflict directly with major land disturbances associated with open-pit coal mining.
- The issue of climate change has become a major focus for national and international legislators. Earlier, thermal coal was the prevalent form of domestic power production in Alberta, but this has changed. Additionally, there is an accelerating national and international trend to transition away from the use of thermal coal.
- The issue of Indigenous reconciliation has become a priority of governments in Canada. The *1982 Constitution Act* and the *United Nations Declaration on the Rights of Indigenous Peoples* adopted in 2007 have changed concepts for resource development in Canada.
- In 2009 the *Alberta Land Stewardship Act* was proclaimed, requiring the development of regional plans, and subregional plans if required, to balance economic, environmental and social objectives that take cumulative effects into account.

Given these material changes and developments, the committee concludes that modernizing coal policy in Alberta is not only desirable, but probably overdue.

Themes from the Engagement Process

In the course of the committee's engagement process, many themes emerged of importance to Albertans.

These themes constitute a commentary on the wide range of interests and opinions about modernized coal policy and legislation for managing coal resources in Alberta.

- *Albertans care about the effects of possible coal development.* Almost 25,000 responses were received from a departmental survey (see Engagement Report) which indicated that Albertans care about coal development in Alberta, an opinion that is particularly true in southern Alberta. Many respondents indicated that the management of Alberta's coal resources affected them.
- *Albertans expect to be meaningfully engaged on matters concerned with resource development.* This is particularly for any open pit coal mining proposals throughout the Eastern Slopes region.
- *Albertans are very concerned about their waters and place high value on the Eastern Slopes region.* Modernized coal policy for Alberta must recognize the critical importance to Alberta and neighboring provinces of managing our water supply. It must fit within Alberta's well-established system for water supply management and contain strict standards to protect, monitor and maintain water quantity and quality, particularly the potential effects from selenium and other contaminants.
- *Regional differences need to be recognized in terms of future development.* Modernized coal policy for Alberta should account for differences in regional realties and recognize that the entire province is not the same.
- *There is a need for modernized land use guidance that is aligned with comprehensive land use planning for the entire Eastern Slopes.* Modernized coal policy for Alberta should recognize that the coal categories should be replaced by regional or subregional plans as envisioned through processes defined by ALSA.
- *Certain Alberta mine operators have achieved exemplary levels of reclamation.* Alberta first legislated the requirement to reclaim land disturbed by industrial activities in 1963 with the enactment of the *Surface Reclamation Act* and subsequently enacted the *Land Surface Conservation and Reclamation Act* in 1973. Alberta's enhanced reclamation regulations have produced exemplary outcomes with increasingly sophisticated practices in mine site reclamation. These efforts, recognized internationally, have resulted in final landscapes that are topographically complex and biologically diverse.
- *Coal developments provide highly localized fiscal and employment benefits for nearby communities.* Modernized coal policy for Alberta needs to recognize many small Alberta communities depend upon the coal industry and will need support to ensure their future sustainability.

- *The economics of metallurgical coal carry challenges and uncertainties.* Modernized coal policy for Alberta needs to consider that global markets will determine the long-term economics of metallurgical coal projects. The committee heard that the overall benefit to Alberta's economy is not projected to be significant. Investors will assess the economic viability of specific opportunities.
- *Indigenous communities need to be involved in modernizing coal policies*. Modernized coal policy for Alberta needs to be developed and implemented with the involvement of Indigenous communities.
- *Federal intervention and provincial policies may have taken most thermal coal resources off the table.* Modernized coal policy for Alberta needs to consider the effect of current and proposed federal legislation.
- *Reclaiming past coal activities are a concern among many Albertans.* Modernized coal policy for Alberta should not only establish strict expectations for timely and quality reclamation, but also address the need for timely reclamation of legacy sites.
- *Linear disturbances in the Eastern Slopes are an issue for Albertans.* Modernized coal policy should accommodate existing legislation and policies to limit land disturbance associated with coal projects and incorporate strict standards for the protection and maintenance of water quality and biodiversity.
- *Albertans have concerns about the regulatory process for coal activities.* Modernized coal policy for Alberta should address the need for robust transparency and public participation in the regulatory process that is in keeping with the scale, nature and potential impact of coal activities in the Eastern Slopes.
- *Albertans are concerned that coal policies can be easily overridden, when many thought that these policies were legally binding.* Changes to coal policies should be made using instruments that are legally binding between the parties-at-interest.

THE COMMITTEE'S RECOMMENDATIONS

Background

In June 1976, Premier Peter Lougheed's government published the 1976 Coal Policy. At the time, the government recognized that Alberta's coal resources were a valuable potential energy source which, if exploited properly, could result in material economic, social and even environmental advancement. During its engagement process, the committee came to understand that a primary goal of any modernized coal policy should be to enhance public trust in the management of Alberta's renewable and non-renewable resources, and in particular, the coal sector.

The 2020 rescission of the 1976 Coal Policy alarmed many Albertans. For example, Information Letter 2020-23 declared that "all restrictions on issuing coal leases within the former coal categories 2 and 3 have been removed." Based on this, many Albertans may have thought incorrectly that all restrictions on coal developments had been removed.

Coal lease sales in Category 2 were suspended on January 20, 2021 and exploration approvals halted on February 8, 2021, when the 1976 Coal Policy was reinstated. Subsequently, on April 23, 2021, acting upon a recommendation of the committee, the Minister of Energy directed the AER to suspend or pause all activities (as defined by the *Responsible Energy Development Act*) for coal exploration on Category 2 lands until December 31, 2021 to enable an "open and honest conversation about the long-term approach to coal development in our province." On November 10, 2021, the Minister announced that the halt on all coal activity and exploration in Category 2 lands was extended until further notice.

Chronology of Events Related to Coal Policy

DATE	REFERENCE	DIRECTION
May 15, 2020	IL 2020-23	Rescission of the 1976 Coal Policy, selected passage ■ "…Those interested in acquiring Crown coal leases and pursuing exploration and development opportunities will now face the same restrictions as other industrial users." ■ "…all restrictions on issuing coal leases within the former coal categories 2 and 3 have been removed." ■ "… offering the right of first refusal to the holders of active coal lease applications… no new coal lease applications will be accepted for a 120-day period…"
January 20, 2021	Il 2021-03	Suspension of coal public offerings ■ "… temporarily suspended all coal public offerings in areas that were formerly classified as Coal Category 2…"
February 8, 2021	IL 2021-07	Reinstatement of the 1976 Coal Policy: ■ "…cease issuance of any new coal exploration approvals on Category 2 lands pending widespread consultations on a new coal policy."
April 23, 2021	MO 093/2021 Appendix	Coal Exploration Direction to the AER ■ AER Directed to "…take steps to suspend or pause all approvals (as defined by REDA) for coal exploration, on Category 2 lands, until December 31, 2021, or such other date as the Minster of Energy may specify in writing to the AER."
May 11, 2021	AER Bulletin 2021-19	Coal Activity on Category 2 Land Suspended ■ "The Government of Alberta … has directed the [AER] … to suspend all approvals for coal exploration activities on Category 2 land until December 31, 2021, or other date specified by the energy minister in writing. ■ During this period, we will not issue any new or amended approvals and will pause our review of existing applications for any type of coal activity on Category 2 land."
November 10, 2021	Press release	Coal policy report deadline extended ■ In addition, the halt on all coal activity and exploration in Category 2 lands – which was set to expire at the end of this year – will be extended until further notice.

Given this recent history, the committee believes there is a constructive opportunity for the Government of Alberta to fully reconsider and modernize coal policy. The committee's recommendations are designed to address challenges and to help advance aspirations shared by Albertans.

As to the question of whether or not Albertans wish to supply Alberta coal to meet global demands, the committee heard the answer is a "qualified yes".

There is considerable controversy and debate as to whether or not Alberta should supply coal to meet current global demands from operating coal mines or advanced coal projects. (Advanced coal projects are considered to be those that have formally applied for authorization to mine. Projects in exploration stages are not considered to be advanced coal projects.)

The committee heard arguments that existing coal mines could be completed while being progressively, and aggressively, reclaimed. However, a strong majority of opinion among Albertans, parallel with current federal policy directions against thermal coal production in Canada, called for no new coal mines, especially in the southern Eastern Slopes region. Nonetheless, many accepted that currently operating mines worked until completion offer local economic benefits with attendant prospects for continuous reclamation.

If Alberta chooses to continue to supply coal to international markets from existing or future approved mines, there is a need to review and update legislation associated with coal management. The committee considers that any such review should include:

- Royalty and tenure authorities (e.g., *Mines and Minerals Act* and associated regulations)
- Process law (e.g., *Coal Conservation Act* and associated regulations)
- Water protection and management (e.g. *Water Act* and associated regulations)
- Environmental protection (e.g., *Environmental Protection and Enhancement Act* and associated regulations)
- Land management (e.g., *Alberta Land Stewardship Act, Public Lands Act*, and associated regulations).

The committee received numerous recommendations from participants who made submissions through the engagement process. Based on those submissions, it was recognized that modernized coal policy must be designed to set both the direction and vision for coal developments, if any, in Alberta. This observation is based on a recognition that a large segment of Albertans appears to be steadfastly opposed to open pit mining, particularly in the southern Eastern Slopes region. Indeed, based on the public response made to the committee during the engagement process, one could reasonably conclude that, outside of specific communities, most Albertans consider coal not to be a priority for resource development.

The committee took note of certain areas of interest in its Terms of Reference:

- What should be the nature, scope, and extent of the restrictions in the Coal Policy?
- Should surface mining ever be considered in Category 2 lands?
- If so, what should be the nature, scope and extent of the "not normally be considered" restriction set out in the Coal Policy?
- If not, what are the next steps government should take?
- What, if any, parts of the Coal Policy should be changed or removed and why?
- What parts of the Coal Policy should be clarified? How and when should the enhancements and clarifications be made?

The committee developed several principal recommendations and associated observations to address changes required to achieve modernized coal policy for Alberta.

Principal Recommendations

Principal Recommendation #1: Modernize Alberta's coal policy.

Considerations of these areas lead the committee to conclude that a strategic goal of modernized coal policy should be to have decisions related to potential coal developments guided by regional and subregional plans under the *Alberta Land Stewardship Act* (ALSA). The committee notes that ALSA employs certain principles related to cumulative effects as a basis for the development of regional or subregional plans that may supersede the coal categories.

Accordingly, the committee believes that regional or subregional land use plans must first be completed before any major coal project approvals are considered. Moreover, land use for the development of coal resources should be determined by those regional and subregional plans.

The committee understands that Alberta has legislated a more effective and efficient land management system through the *Alberta Land Stewardship Act* that considers the cumulative effects of all activities and improves integration across economic, environmental

and social pillars. This direction is a foundation of the Land-use Framework, where the Government of Alberta has committed to manage the cumulative effects of development on air, water, land and biodiversity while ensuring their values and benefits are sustained.

Consistent with this established management system in Alberta, the committee heard from Albertans that some areas of the province are inappropriate for coal exploration and development. Therefore, a priority should be to recognize the enhanced protection of sensitive areas – especially within the southern Eastern Slopes region.

Recommended Actions

1.1 Coal exploration and development activities should only be allowed on lands that conform to regional or subregional plans completed under the *Alberta Land Stewardship Act*. Such land use certainty should replace the existing coal categories for the purposes of land use decisions about where coal exploration and surface or underground development can and cannot occur in the planning regions. Regional plans or subregional plans, and associated implementation strategies, should supersede the coal categories and be made legally binding.

1.2 Modernized coal policy must consider cumulative effects in consideration of future development. Regional and subregional plans must entail a cumulative effects assessment and require formal public and Indigenous consultations.

1.3 Certain mining proposals for existing mines and advanced coal projects in process prior to the rescission of the 1976 Coal Policy should be allowed to proceed through regulatory processes. Advanced coal projects are considered to be those that have formally applied for authorization to mine. Projects in exploration stages are not considered to be advanced coal projects. Regional or subregional plans should be completed before any new requests for authorizations are considered.

1.4 On November 10, 2021, the Minister announced that the halt on all coal activity and exploration in Category 2 lands, including activity related to freehold mineral rights, was extended until further notice. This halt should continue until specific regional or subregional plans have been completed.

1.5 For Category 3 and 4 lands of the Eastern Slopes, all authorizations and dispositions for coal exploration and development issued after May 1, 2020, which do not pertain to an already active coal mine or advanced coal project should be paused until specific regional or subregional plans have been completed.

1.6 Consideration should be given to revoking coal leases in the Eastern Slopes that were issued after the 1976 Coal Policy was rescinded.

Principal Recommendation #2: Meaningfully involve Alberta's Indigenous communities in the land use planning process.

The committee learned that the Eastern Slopes served as place of gathering, harvesting and ceremony for Indigenous peoples long before Europeans arrived in Alberta. The footprints created by coal exploration and development activities raise concerns about the abilities of Indigenous peoples to pursue traditional uses of key landscapes and how Indigenous communities stand to benefit. It was noted that coal projects could constitute major economic development and training opportunities for Indigenous communities.

A major deficiency of the 1976 Coal Policy is that it was developed without the involvement of Indigenous peoples. Expectations have evolved since 1976. Policies designed to address the extraction of a non-renewable resource such as coal from land areas of traditional significance for Indigenous peoples must, in the age of reconciliation in Canada, involve Indigenous communities.

Part of the reason the 1976 Coal Policy did not consider Indigenous peoples and their rights is that it was enacted prior to certain recognitions of Indigenous rights, the most important of which is Section 35 of the *1982 Constitution Act*. In 2007, the *United Nations Declaration on the Rights of Indigenous Peoples* enshrined rights that constitute the "minimum standards for the survival, dignity and well-being of the Indigenous peoples of the world." In 2016, the Government of Canada endorsed the Declaration and legislation to implement the Declaration was proclaimed on June 21, 2021.

The committee also notes that the Alberta Land Use Framework contains several strategies and guiding principles for Indigenous peoples that are of relevance today:

"C. Guiding principles
...
Respectful of the constitutionally protected rights of aboriginal communities

The Government of Alberta will continue to work with aboriginal communities' governments, while respecting the special role and relationship of the federal government regarding the Aboriginal peoples. The Government of Alberta recognizes that consultation should take place on matters that impact treaty or constitutionally protected rights of First Nations and Métis peoples.

...
Strategy 7

Inclusion of aboriginal peoples in land-use planning.

The provincial government will strive for a meaningful balance that respects the constitutionally protected rights of aboriginal communities and the interests of

all Albertans... Aboriginal peoples will be encouraged to participate in the development of land-use plans.
...
Aboriginal peoples
...
To support meaningful consultation in the province, Cabinet approved *The Government of Alberta's First Nations Consultation Policy on Land Management and Resource Development* in 2005. This policy is a key step towards engaging First Nations in land management decision-making. Ongoing review and monitoring of the policy with the intent of changing and improving it will ensure that it meets the needs of Albertans, First Nations and industry."

Within the context of modernized land use planning, that increasingly emphasizes meaningful participation of Indigenous communities, Alberta's existing tools may be used to accommodate Indigenous laws and expectations into binding and enforceable actions for land use. Land use plans set the stage for legally binding objectives. In order to exert practical effects, a land use plan must be translated into binding and enforceable legal requirements to support decision-making.

Recommended Actions

2.1 For modernized land use planning, Alberta's existing tools may be used to accommodate Indigenous expectations into binding and enforceable actions for land use.

Principal Recommendation #3: Articulate land use guidance for coal exploration and development through planning under the *Alberta Land Stewardship Act,* to provide certainty and bind the Crown.

Legal certainty demands adherence, while demonstrating public responsibility and legislative oversight. This could be accomplished by the incorporation of approved land use plans created under the *Alberta Land Stewardship Act.* The committee notes that regional and subregional plans are incorporated as regulations under the *Alberta Land Stewardship Act*, which bind the Crown. Therefore, through this approach, provisions within regional and subregional plans pertaining to coal would be binding. This is made clear through section 15 of the *Alberta Land Stewardship Act*:[36]

"Binding nature of regional plans
15(1) Except to the extent that a regional plan provides otherwise, a regional plan binds

(a) the Crown,

(b) local government bodies,

(c) decision-makers, and

(d) subject to section 15.1, all other persons."

The committee recognized that regional and subregional planning must include measures for historical and closed mines to address and limit ongoing ecological impacts at those sites. In sum, modernized coal policy must adhere to the regional and subregional plans developed under the *Alberta Land Stewardship Act.* This would provide investment certainty, clarify responsibilities and liabilities for future potential, compensation claims in ways that acknowledge the international "energy transition" underway. The current Mineral Rights Compensation Regulation is designed to provide 'public interest' determinations and associated compensation to the holders of Crown agreements where those agreements are cancelled such that "... any or any further exploration for or development of the mineral to which the agreement relates within that location or part of it is not in the public interest."

Recommended Actions

3.1 Requirements for coal development need to be incorporated within land use planning provisions of ALSA that bind the Crown.

3.2 Development of future policies for coal requires significant consultation with Albertans.

3.3 Land use planning should include measures to consider post-coal mine closures to limit ongoing ecological impacts.

Principal Recommendation #4: Undertake a review of Alberta's coal tenure and royalty regimes.

The committee heard that Alberta should reconsider the royalty rate on bituminous coal to ensure that Albertans capture fair value from the development of coal resources. A review should therefore be undertaken to ensure coal royalty structures consider the value of coal development. Oil and gas has a freehold mineral tax. Consideration should be given to implementing the same for coal.

Recommended Actions

4.1 Review and update the different royalty structures for coal in Alberta.

4.2 Provide clarity on the coal tenure regime.

4.3 Consider implementing a freehold mineral tax on coal.

Principal Recommendation #5: Address the issue of freehold coal mineral rights.

Although coal leasing, exploration and development are prohibited on Category 1 public lands, these restrictions may not apply to private lands or freehold mineral rights. The committee was informed that there are an estimated 191,000 hectares of freehold mineral rights within the Eastern Slopes including 83,760 hectares of freehold rights in Category 1 land.

36. *Alberta Land Stewardship Act,* S.A. 2009, c. A-26.8.

The committee notes that the 1976 Coal Policy provides for the imposition of additional restrictions on freehold rights:

"Where freehold rights to coal and leases of such rights are affected by the restrictions on exploration and development imposed by Categories 1, 2 and 3, the Government is prepared to purchase the lessor rights at fair value determined by agreement or arbitration, and to acquire any lessee rights on the same basis as for lessees of Crown rights."

The committee heard arguments that holders of freehold mineral rights should not be exempted from the land category restrictions as, regardless of ownership, environmental issues remain the same. Accordingly, modernized coal policy should have the capacity to continue compensation mechanisms for holders of freehold mineral rights. This established approach should be adopted or changed as the land category classifications or restrictions are expanded.

Recommended Actions

5.1 Modernized coal policy should clarify whether and how policy applies to holders of freehold mineral rights. Modernized coal policy should consider these freehold mineral rights recognizing current legislated compensation mechanisms.

Principal Recommendation #6: Assess proposed new coal projects with rigorous net benefit tests that include extensive public consultation.

The committee heard from several public entities that net benefit tests for major projects should be undertaken to better evaluate the public interest.

Recommended Actions

6.1 Requirements for socio-economic benefits analyses and public interest tests need to be met for all coal project evaluations.

6.2 Validate the accuracy of costing and project assumptions as to the quality and quantity of developing coal resources at project sites as previously described under Directive 061, to verify the economic benefit to Albertans.

Principal Recommendation #7: Resolve uncertainties regarding responsibility for reclamation liabilities relating to coal exploration and development activities.

The Auditor General of Alberta has discussed uncertainties as to the responsibility for reclamation liabilities associated with coal mining projects. These uncertainties need to be resolved.

One part of Alberta's reclamation liability regime is the Mine Financial Security Program (MFSP). Under the MFSP, financial security deposits are collected from mining companies to fund the future reclamation obligations associated with their development activities. Although the MFSP applies to new coal development activities, the committee heard the MFSP was not designed specifically for coal mining projects. This has contributed to concerns that the MFSP is insufficient.

For instance, the committee heard that remediation and reclamation responsibilities for some coal mining projects, such as Smoky River Coal, have been assessed independently as exceeding current financial security.

In 2019, the Auditor General of Alberta indicated there was a significant risk that asset values are overstated within the MFSP. It was also noted that AEP had not implemented recommendations made in 2015 to improve the overall design of the MFSP. The MFSP uses the asset-to-liability approach to determine the size of deposits a mining company must make, but this fails completely when the price of the resource drops suddenly.

Although some current coal mine reclamation liabilities have been paid in advance, if a mine becomes unprofitable or the reclamation costs exceed the value of the financial security the company could declare bankruptcy and forfeit the deposit as the best means to limit their liability and clean-up and reclamation costs would accrue to the Crown.

The committee was told that of nineteen Alberta coal mines required to provide financial security in 2015, only two have been subject to detailed audits by provincial officials. The Alberta Auditor General has concluded:

"There is a high degree of financial risk associated with coal mine operations due to the decline in coal prices. As a result, the entire coal sector elected to provide financial security for the reclamation of their mines. However, very little audit activity has been undertaken in the coal sector to ensure that the amount of financial security provided by the operators is adequate."

The committee believes that the Government of Alberta, as part of a review of the MFSP system, should consider tailoring a mine funding system specifically for coal mines.

Recommended Actions

7.1 Review the MFSP system as it pertains to development.

Principal Recommendation #8: Address reclamation liabilities for legacy coal mines.

There are many, legacy coal mining sites in Alberta; these are historic mines and mines which pre-date modern reclamation legislation. Lack of funding to address ongoing environmental and reclamation liabilities in legacy coal mines is an issue. The AER has not received material funding for legacy coal reclamation projects. An expanded, targeted program could provide many opportunities for local employment programs associated with the reclamation of legacy sites.

Alberta should consider re-establishing funding for land reclamation to offset liabilities from legacy coal mines. An annual allocation should be considered to fund reclamation projects.

Recommended Actions

8.1 Reclamation liabilities for legacy coal mines need to be assessed and innovative programs (and/or plans) be developed, funded, and implemented to reclaim these sites.

8.2 Review the adequacy of regulation and enforcement of reclamation requirements for exploration activities and consider the use of reclamation bonding for exploration activities.

8.3 Review the adequacy of securities against liabilities to fund ongoing monitoring and remediation following mine closures.

Associated Observations

These associated observations will require careful coordination within and between Alberta government departments in order to successfully implement an integrated, modernized coal policy. To ensure meaningful modernized coal policy, new initiatives and regulatory changes will be required. These considerations are essential to achieving modernized coal policy. In recognition of that fact, the committee has chosen to better define these issues by formulating associated observations.

Associated Observation #1: Cumulative effects analyses should be undertaken before a new coal mine, exploration permit or other industrial activity is authorized.

The committee recognizes Albertans' concerns that coal exploration and development have significant impacts on the landscape. Clearly, Albertans are concerned with the ability of Eastern Slopes landscapes to continue to provide the water necessary to support the ecosystems and downstream activities far into the future. The regulation of coal mining projects requires a full understanding of ecological limits, determined by careful cumulative effects analyses.

The committee observes that:

- A cumulative effects study that takes into account all potential activities on the Eastern Slopes needs to be undertaken.

Associated Observation #2: Modernized coal policy for Alberta must recognize several Alberta communities depend upon the coal industry and will need support to ensure their sustainability through a time of transition.

Some Alberta communities affected by mine closures or the termination of exploration programs find there are few programs to compensate for loss of economic activity other than Employment Insurance benefits for workers. Furthermore, there are no programs that compensate for the loss of forecast future economic activity and opportunity from denied projects or from new proposed projects that may be halted by policy or regulatory decisions or changes. In fairness, any federal or provincial policies deliberately aimed at closing active coal mines, or transitioning communities away from exiting mining projects, must be accompanied by programs to assist and compensate workers.

Governments will need to design alternative fiscal and employment benefits to compensate nearby communities and workers against the effects of mine closures that result from such targeted policy or regulatory initiatives. Coal mining today represents a small fraction of Alberta's economy. In 2020, Alberta's GDP was $307.1 billion; in that same year coal mining contributed $215 million to the GDP. Hence, as a proportion of the total provincial economy, the committee understands that coal mining represented less than one-tenth of one per cent of GDP (0.07 per cent).

Economic statistics that appear minuscule at the provincial level may nonetheless translate into substantial economic activity at the local level – especially in smaller communities and municipalities. Mining jobs translate into wages spent in local businesses and local property taxes. Communities also benefit from social responsibility efforts made by coal producers, such as local sponsorships and charitable contributions. At the local level, economic activities from coal mining may be crucial to the nearby communities that support and service those mines.

The committee notes that the federal government has developed a Just Transition program in accordance with the Paris Agreement on climate change, which called on signatories to take into account "the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities." An impetus of Just Transition is to help ensure Canada's transformation to a low-carbon future protects and improves the lives of workers and communities across the country.

The committee observes that:

- The federal government's Just Transition program should assume responsibility to assist local communities with funding programs to offset regulated closures which may result from regulatory initiatives by the federal government.
- Alberta should consider joint programs and strategies to assist communities in the Eastern Slopes affected by curtailment of coal exploration and development activities to develop sustainable economic development opportunities

There are precedents in which the federal government has supported programs from coal-generated power in Alberta through funding initiatives such as the 2020 Canada Coal Transition Initiative (CCTI) in the Cactus Corridor region to "Strengthen communities affected by coal transition." The Battle River Region (BREOC) transition initiative represents yet another example.

Associated Observation #3: Place priority on restoring trust throughout Alberta's regulatory system for coal, including material new efforts to convince Albertans that the public interest is respected.

The Departmental survey conducted in early 2021 indicated that more than 85 per cent of Albertans had little confidence in the regulation of coal projects or that the industry is regulated to ensure safe, efficient, orderly, and responsible operations. A general decline in public trust in regulatory authorities may reflect broader concerns about complex policy issues and shifting public attitudes toward acceptance of risks. These factors may be further compounded by perceptions of inaccessibility of information needed to promote public trust in decision-making.

In that regard, the committee heard that the role of the AER in public communications needs to be clarified. This includes concerns about a lack of routine notifications about proposed activities in certain watersheds and other difficulties encountered in accessing project and applicant information on the AER's website.

Other specific recommendations from stakeholders were associated with the perceived roles of AEP and the AER. Many were concerned about the lack of transparency and accessibility of the AER in considering and reaching determinations for applications which should take into account restrictions in *Species at Risk Act* and, equally as important, critical habitats. Cumulative impacts of approvals must be assessed by the AER in conjunction with current and future land uses, including linear footprints resulting from resource development.

The committee observes that:

- Alberta should work to enhance public trust in the regulatory process for coal exploration and development.
- The AER and AEP should be directed to consider the loss of recreation and tourism opportunities that would result from coal development, and to address recreation and tourism management under the Land Use Framework and the *Alberta Land Stewardship Act.*

Associated Observation #4: Enhance environmental monitoring, inspection and enforcement at existing and abandoned mines to address water contamination, specifically selenium contamination within watersheds.

There are other specific recommendations associated with the role of AEP and the AER. Importantly, the AER should be instructed to consider activities impacting species under the *Species at Risk Act* and, equally as important, critical habitats. Cumulative impacts of approvals must be assessed by the AER in conjunction with current and future land uses, including linear footprints resulting from resource development. Under the AER, cumulative effects and other regional, landscape-level impacts from coal development are restricted to assessments of individual projects.

The issue of water quality, particularly concerns voiced about potential and existing selenium contamination from coal mining operations, was raised as one of the most significant concerns among Albertans.

The committee observes that:

- Any assessments of proposed coal mines should consider the selenium standards soon to be established in the proposed federal Coal Mining Effluent Regulations.
- Alberta should commission a joint Alberta-industry inventory of contaminated waters at all coal development sites in the province.

Associated Observation #5: Alberta should continue to work with Canada and other provinces to develop consistent regulations for coal mine effluents.

The retirement of coal-fired electricity generation in Alberta, scheduled to occur by 2030, is serving to retire subbituminous coal mining in the province. This was the case well before the 1976 Coal Policy was rescinded.

Several policy pronouncements by the Canadian federal government in 2021 have indicated a reluctance to approve new thermal bituminous coal developments, or the expansions of existing thermal coal mines. There have been announcements that new and expanded thermal coal mines are unlikely to be approved due to unacceptable environmental risks.

Currently, coal projects over 5,000 tonnes per day automatically trigger a federal impact assessment. The former federal Minister of Environment and Climate Change, the Honourable Jonathan Wilkinson, has recently announced that smaller mines that have the potential to release selenium into waterways will also be subject to review. Announcements, including regulatory attentions to assess selenium impacts, are indications of the federal government's aggressive policy shift towards regulation of coal mining projects. The committee recognizes that there is a need for a seamless, integrated federal, provincial and municipal regulatory regime for coal. A first step would be the enactment of consistent effluent regulations.

The committee observes that:

- Alberta should continue to work with Canada and other provinces to develop new, consistent rules governing coal mine effluent regulations and to establish new effluent water quality standards for industry.