Coal Policy Committee – June 16, 2021

Outline

• Coal Policy Consultation
• Executive Summary
• Introduction to Cabin Ridge
• 1976 Coal Policy
  • Backdrop and coal mining in Alberta at the time
  • Key elements and land categories
• Coal mine reclamation since 1976
• Current regulatory and policy framework
• Need for steel-making coal and economic benefits
• Potential paths forward for a modern Coal Policy
• Closing thoughts
Alberta Coal Policy Consultation

Coal Policy Consultation

• Cabin Ridge appreciates this opportunity to express our views
• We support the Coal Policy consultation process and important work of the Committee
• We encourage all interested Albertans to let the Committee know their views
• We believe this process can lead to a modern coal policy that:
  • Balances multiple interests and values
  • Protects the environment
  • Strengthen communities and allow them to benefit in a sustainable way
Executive Summary

Cabin Ridge to Address and Highlight Several Areas of Interest for the Committee

• The 1976 Coal Policy responded to Alberta’s needs at the time but has been superseded by modern, evidence and science-based federal and provincial policy and regulation

• Cabin Ridge supports responsible modern metallurgical coal development that meets and exceeds today’s provincial and federal environmental standards

• A modern coal policy can provide opportunity for:
  • Increasing the amount of land protected on the Eastern Slopes
  • Ensuring the most sensitive biodiversity is protected
  • Ensuring water is clean and safe and there is enough for everyone
  • Advancing reconciliation with Indigenous Peoples
  • Alberta, local and regional communities and businesses to benefit economically
  • Articulating and confirming current federal and provincial regulatory mechanisms
  • Acknowledging Alberta and SW Alberta contain a world class steel making coal resource
About Cabin Ridge

The Project

- Privately-owned exploration and development company headquartered in Calgary
- Subsidiary of the Warburton Group, private investment group based in Perth, Australia
- Project Details:
  - On traditional territory of Treaty 7 First Nations
  - Approximately 50 km north of Coleman, Alberta
  - 4678 Ha site consisting of Freehold Mineral Title
  - In the exploration phase – drilled 16,000m in 2020
  - Results indicate high quality hard coking coal
  - Conducting Preliminary Economic Assessment (PEA) to determine size and nature of the resource
  - Geological results to date indicate a world-class resource with solid economic potential
Management Team

Experienced Canadian management team and Board

- Cabin Ridge has built a strong, experienced and locally based management team as well as having committed significant investment to exploring the development of its project interests, adopting industry best practices under the stewardship of its experienced board of directors

- Our Senior Management team:

  Bradley Johnston
  Chief Development Officer

  Linda Jefferson
  Director, Indigenous, Community and Government Relations

  Patrick Landry
  Director, Engineering

  Margwyn Zacaruk
  Manager, Environmental Affairs
Our Principles

A good neighbour committed to Alberta

We have developed principles that will guide all our activity in the following areas:

Environment
• Climate Change, Air Emissions, Water Stewardship, Waste, Biodiversity, Reclamation and Closure

Social
• Health and Safety, Diversity and Inclusion, Human Rights, Indigenous Peoples, Communities and Stakeholders

Governance
• Business Ethics, Code of Conduct, Compliance and Transparency, Business Resiliency
2021 Activity Update

Cabin Ridge to incorporate feedback into project design

- In April the Government of Alberta halted all coal exploration Category 2 lands until the coal consultation process is complete:
  - Cabin Ridge’s planned exploration program is halted, no drilling, construction or reclamation activities
  - Planned exploration spend was to be in the range of $12 million, supporting 60-90 full time jobs
- Continuing to engage with Indigenous groups, communities and stakeholders during the suspension
  - On-going direct engagement
  - Will be at the market and community events in Crowsnest Pass and region this spring and summer
- Continuing with limited environmental baseline work
  - Not related to exploration, non-invasive and no permanent footprint
  - Information would be used in designing a permitted potential future mine and any future environmental impact assessment
- Continuing with site safety and security responsibilities
Cabin Ridge Engagement

Our Neighbours

• Treaty 7 First Nations  
  • Piikani  
  • Kainai  
  • Siksika  
  • Tsuu’tina  
  • Stoney Nakoda  
• Métis Nation of Alberta Region 3  
• Grazers  
• Local and regional municipalities  
• Local and regional chambers of commerce  
• Crowsnest Pass residents and business owners
Consultation – What We’ve Heard

Cabin Ridge to incorporate feedback into project design

We’re committed to responsible exploration and development of steelmaking coal and are listening to our neighbours.

The things we’ve heard that are important:

- Water quality, and in particular selenium
- Water allocations from the Oldman River
- Protecting Indigenous rights and importance of reconciliation
- Biodiversity and protection of special species and areas
- Need for certainty in reclamation
- Need for communities and businesses to benefit
Coal Mining in Alberta in 1976

Backdrop to the 1976 Coal Policy

- Rapidly expanding surface coal mines (previously underground) and although fewer mines, increasingly larger
- Government shifting focus to development of oil and gas resources
- Concerns with natural resource development and reclamation in the province
- Reclamation in its infancy, before 1970 reclamation was unknown or of poor quality
  - Great concern and controversy regarding ability of operators to successfully reclaim land and protect wildlife
- Environmental policy and regulation was somewhat new and lacked comprehensive lifecycle management
- Legislation introduced starting in the early 1970s to further regulate coal mining
- Indigenous rights not constitutionally protected
1976 Coal Policy

“To bring and maintain the maximum benefits, now and in the future, to the people of Alberta who own this resource”

- Intended to ensure responsible development until regulation was defined
- Key Elements:
  - Exploration and development encouraged in a manner compatible with the environment
  - Development to proceed only if no irreparable harm and with satisfactory reclamation of disturbed lands
  - Exploration and development barred in certain areas, conducted very broadly and to limited extent in other areas
  - Reclamation of plant and animal life must occur
- Environmental Conservation Authority consulted and held hearings on the impact of surface mining in Alberta
  - Water pollution and land reclamation received considerable attention in the hearings
1976 Coal Policy

Guidance by Land Category

1976 Coal Policy and Land Category system would achieve the following:

• Coal mining prohibited in areas incompatible with development (Category 1)
• Coal mining facilitated in areas with existing operations (Category 4)
• Coal mining temporarily restricted or delayed in certain lands pending:
  • Confirmation of reclamation research and development
  • Further land use planning
  • Maturation of Alberta’s emerging environmental regulatory framework (would determine if coal mining could or couldn’t occur responsibly in those lands (Categories 2 and 3))
Coal Mine Reclamation Since 1976

Land and Wildlife

- Alberta has many examples of leading mine reclamation producing sustainable, productive landscapes
- Several surface mining operations have undergone successful reclamation:
  - Canmore region
  - Coal Valley Mine
  - Luscar (Cheviot) Mine
  - Gregg River Mine
- Reclamation landscapes have successfully attracted:
  - Grizzly bears
  - Bighorn sheep, elk, moose, deer
  - Smaller mammals and bird populations
Coal Mine Reclamation Since 1976

Aquatic Environment and Selenium

- Considerable research and development on water management to mitigate downstream impacts, in particular, selenium
- Selenium a focus since 1995:
  - Essential metalloid known to be toxic in high concentrations to egg-laying vertebrates (fish, birds). Present in bedrock, can oxidize and leach from mine rock piles
  - Mines use multi-pronged approach of avoidance, source control, water management, mitigation and treatment to manage selenium. Includes modifying mine design and operations, monitoring and formal adaptive management. New mines build selenium management into all aspects of the mining life cycle
- Sphinx Lake is an excellent example of post-closure selenium management and landform design

Current Regulatory and Policy Framework

Coal Mining is Highly Regulated

- Comprehensive and strong provincial and federal environmental legislation and regulatory requirements in place
- Water quality and selenium regulations are clear, defined and enforced
- Public environmental assessment processes
- Land use planning processes in place, including measures for substantial consultation
  - South Saskatchewan Regional Plan
  - Livingstone-Porcupine Hills Sub-regional Integrated Resource Plan
- Indigenous consultation processes in place
- Water allocations regulated (Oldman River Allocation Order, 2003)

Some Applicable Legislation

- Responsible Energy Development Act
- Coal Conservation Act
- Environmental Protection & Enhancement Act
- Public Lands Act
- Alberta Land Stewardship Act
- Water Act
- Fisheries Act
- Species at Risk Act
- Impact Assessment Act
- Canadian Environmental Protection Act
- Constitution Act
- Canadian Net Zero Emissions Accountability Act
Scarce Resource – Steelmaking Coal
Made in Alberta, but meeting global demand

Because of its high quality and unique properties, steel-making coal is a scarce resource in the world. With its high quality, Alberta coal has the potential to displace poorer quality and higher polluting steel making coals. It will be in high demand.
Economic Benefits and Need - Global

Global demand on the rise

- Global demand for steel, and the coal needed to make it, is growing to support strong and emerging economies. By 2050, global steel use is expected to increase by 20% to meet the needs of our growing population.

- Steel, iron ore and steelmaking coal are essential for a net zero emission economy. Steelmaking coal produced in Alberta will have an incremental benefit to global climate change objectives.

- Steel is strong, durable, and essential for buildings and infrastructure, vehicles, appliances, and metal products.

- Approximately 770 kilograms of steelmaking coal is required to produce one tonne of steel. That translates to:

  - PERSONAL RECREATION
    Approx. 1.1 kilograms of steelmaking coal is needed to build an average bicycle frame.

  - TRANSPORTATION
    On average, 700 kg of steel is used per vehicle.

  - ALTERNATIVE ENERGY
    107 tonnes of steel coal is required to make the average wind turbine.
Economic Benefits - Local

Producing steelmaking coal and opportunities

We are committed to ensuring employment and business opportunities for Indigenous groups and all Albertans. Should we move forward with a mine development, benefits to the region would be:

• Hundreds of direct and indirect employment opportunities
• Some of the highest industrial wages in Canada ($123K annual average)
• Contracts available for local and Indigenous Peoples, businesses and suppliers
• Local, regional and corporate taxes
• Substantial investment in community and environmental initiatives
• Skills and training advancement
• Regional investment in infrastructure
• Enabling legacy remediation to be addressed
Modern Coal Policy - Potential Paths Forward

Collaborate on environmental and economic goals

A modern coal policy can respect values, balance multiple interests, protect the environment and provide economic benefits to local communities and all Albertans

Increase protected lands

• Honour objectives of the 1976 Coal Policy and Albertans’ desire to protect the Eastern Slopes
• Achieve a net increase in protected areas
• Redefine the 1976 land categories by moving lands without possibility of steel-making coal development into protected areas

Ensure water is safe for people and animals

• Water quality management requirements thoroughly applied and monitored, proposed water quality management plans assessed and evaluated
• Ensure all water released to the environment meets quality standards
• Ensure transparency and collaboration
• Create multi-stakeholder water monitoring program that includes Indigenous Peoples, communities and grazers
Modern Coal Policy - Potential Paths Forward Continued

Collaborate on environmental and economic goals

Ensure enough water for all users
- Maintaining adequate water supply for all users is important
- Employ technologies and mining practices to reduce water consumption
- Support a collaborative, multi-stakeholder process to review current demands and water allocations and make recommendations to the Minister

Protect Biodiversity, special species and areas
- Ensure same or better biodiversity as 1976 Coal Policy
- Opportunities for investing/creating new protected areas through partnerships and offsets
- Mine planning and rigorous regulatory oversight to eliminate or reduce effects on wildlife and biodiversity
- Continued collaborative efforts for protection of species at risk and recovery plans
Modern Coal Policy - Potential Paths Forward Continued

Respect Indigenous rights and advance reconciliation
- Opportunity for Indigenous communities to be partners in mine development
- Meaningful consultation in project design, environmental management and monitoring
- Indigenous employment, business opportunities and commitments set out in agreements
- Support Crown-led accommodation discussions as required, including through an accommodation table

Define reclamation requirements and hold companies accountable
- Collaborative, multi-stakeholder approach to reclamation planning, land-form definition and long-term monitoring and regulatory oversight
- Provide further definition around reclamation obligations including bonding requirements and holding companies accountable until reclamation certificates issued
- Opportunity for contributions to remediating other existing areas

Collaborate on environmental and economic goals
Modern Coal Policy - Potential Paths Forward Continued

Collaborate on environmental and economic goals

Ensure Albertans, communities and businesses benefit
- Economic contribution that enable communities to be sustainable and diverse
- Ensure potential socio-economic effects and benefits are balanced and assessed
- Ensure community input into project design and mitigations
- Potential for regional investment programs
Further Protection of the Eastern Slopes

Embrace protection and development

- Coal categories encompass about 94,700 square kms of land
- Of this, about 45% of the land is already protected and won’t be developed (43,000 square kms), mostly Category 1 land
- Only 3% of the total area of coal category lands have potential for metallurgical coal development (3,065 square km out of 94,700 square km), most of this is on Category 2 land
- No metallurgical coal resource expected on Category 3 land. Category 3 is 32,500 square kms or ~33% of the total area of the category lands. Thermal coal resources may exist but are likely non-priority given transition away from coal-generated electricity
- Shift Category 3 and other lands which have no steel-making coal development potential into new areas protected from coal development
- Potential to increase protected/restricted area from 45% to 97% of existing coal categories – adding more than 49,000 square km’s to Alberta’s protected lands
Further Protection of the Eastern Slopes Continued

Embrace protection and development

- Map showing close up of southwest Alberta
Achieve a net increase in land excluded and restricted from coal development on Eastern Slopes

**Outcome - Current & Proposed Land Category System**

<table>
<thead>
<tr>
<th></th>
<th>Total - Protected</th>
<th>Total - Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current 1976 Coal Policy</strong></td>
<td>51,689</td>
<td>43,052</td>
</tr>
<tr>
<td><strong>Proposed 2022 Coal Policy</strong></td>
<td>91,676</td>
<td>3,065</td>
</tr>
</tbody>
</table>
## Outcome

- **Current & Proposed Land Category System Continued**

Achieve a net increase in land excluded and restricted from coal development on eastern slopes (*).

### CURRENT 1976 Coal Policy Land Category System

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Area Eastern Slopes (sq km)</td>
<td>41,555</td>
<td>14,584</td>
<td>33,270</td>
<td>5,332</td>
<td>94,741</td>
</tr>
<tr>
<td>Percent of Total (%)</td>
<td>44%</td>
<td>15%</td>
<td>35%</td>
<td>6%</td>
<td>100%</td>
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<tr>
<td>Area of Category Restricted (Parks, Water bodies) (sq km)</td>
<td>41,555</td>
<td>530</td>
<td>732</td>
<td>235</td>
<td>43,052</td>
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<tr>
<td>Percent of Category Restricted (%)</td>
<td>100%</td>
<td>4%</td>
<td>2%</td>
<td>4%</td>
<td>45%</td>
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<tr>
<td>Surface Area of Met Coal Bearing Groups (sq km)</td>
<td>2,234</td>
<td>1,248</td>
<td>0</td>
<td>684</td>
<td>4,166</td>
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<tr>
<td>Surface Area of Met Coal Bearing Groups Currently Protected (sq km)</td>
<td>2,234</td>
<td>108</td>
<td>0</td>
<td>72</td>
<td>2,414</td>
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<tr>
<td>Percent Coal Bearing Group Currently Protected (%)</td>
<td>100%</td>
<td>9%</td>
<td>0%</td>
<td>11%</td>
<td>58%</td>
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<tr>
<td>Established Resources Met Coal (Mt)</td>
<td>1,806</td>
<td>2,206</td>
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<td>3,152</td>
<td>7,164</td>
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<td>Established Exploration Targets Met Coal (Mt)</td>
<td>0</td>
<td>2,193</td>
<td>0</td>
<td>510</td>
<td>2,703</td>
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<tr>
<td>Surface Area Potential for Met Coal Mining (sq km)</td>
<td>0</td>
<td>1,140</td>
<td>0</td>
<td>612</td>
<td>1,752</td>
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<td>Surface Area Potential for Met Coal Mining (Disturbance) (sq km)</td>
<td>0</td>
<td>1,994</td>
<td>0</td>
<td>1,071</td>
<td>3,065</td>
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<tr>
<td>Percent Surface Area Potential for Met Coal Mining (%)</td>
<td>0%</td>
<td>14%</td>
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### PROPOSED 2022 Coal Policy Land Category System

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<td>6%</td>
<td>100%</td>
</tr>
<tr>
<td>Proposed Increased Total Area of Category Restricted &amp; Protected (sq km)</td>
<td>41,555</td>
<td>12,590</td>
<td>33,270</td>
<td>4,261</td>
<td>91,676</td>
</tr>
<tr>
<td>Proposed Percent of Category Restricted (%)</td>
<td>100%</td>
<td>86%</td>
<td>100%</td>
<td>80%</td>
<td>97%</td>
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<tr>
<td>Surface Area Open for Potential Development &amp; Assessment (sq km)</td>
<td>0</td>
<td>1,994</td>
<td>0</td>
<td>1,071</td>
<td>3,065</td>
</tr>
<tr>
<td>Percent of Category (%)</td>
<td>0%</td>
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<td>0%</td>
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Cabin Ridge Closing Thoughts

It is possible

- Globally, metallurgical coal is a scare resource that will be needed for the foreseeable future to support increasing demand for steel
- Steel is critical for everyday life and transitioning to a green economy
- Alberta has a world-class metallurgical coal resource that is in demand and should not be stranded
- A modern coal policy presents opportunity to:
  - Respect and balance different values and interests
  - Protect the environment, including water, biodiversity, special species and sensitive areas
  - Increase protected lands from coal development under the coal categories
  - Ensure reclamation certainty
  - Advance reconciliation with Indigenous Peoples
  - Collaborate
  - Invest in Alberta and contribute to economic prosperity in communities and the province
- Cabin Ridge supports this consultation process and thanks the Committee for the opportunity to express our views
Thank you