



**JOINT REVIEW PANEL HEARING SUBMISSION
GRASSY MOUNTAIN COAL PROJECT
Impact Agency of Canada Reference No. 80101**

From

Crowsnest Conservation Society

Submitted To

**Joint Review Panel Secretariat
Grassy Mountain Coal Project
Impact Assessment Agency of Canada
By E-Mail
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1.0 Introduction

The Crowsnest Conservation Society (hereafter referred to as CCS) is offering the following submission to Joint Hearing Panel (hereafter referred to as the Panel) for their consideration in respect to the Grassy Mountain Coal Project proposed by Benga Mining Ltd/Riversdale Resources (hereafter referred to as the Proponent or Benga). This submission follows from previous CCS submissions in the form of Statements of Concern filed by CCS with the Alberta Energy Regulator (AER) in January 2016 and December 2017 respectively and our request for participant standing in the public hearing on this matter in July 2020 (CIAR #433) and Panel approval thereof (CIAR #468).

We are a volunteer-based organization with 130 individual, family and corporate members reflecting a broad cross section of the community. CCS is the principle active grass roots environmental and conservation ENGO in the Crowsnest Pass. For the last 20 years, CCS has been devoted to the promotion and enhancement of the natural environment in the area with an overall philosophy of mainstreaming environmental protection with the overall values of the broader community and the directions it takes. We seek to be an inclusive organization; as such, our membership spans the demographic and political spectrum represented in the Crowsnest Pass.

We believe that the natural environment provides our community with its primary quality of life asset and as such its principle attraction and a key factor in its present and hopefully its future economic wellbeing. Our various activities and initiatives cover such things as advancing wildlife connectivity, riparian area restoration and protection, invasive weed management, public education including in schools, advocacy of science-based understanding of local environmental and development issues, and promotion of low impact recreation opportunities in the natural environment.

Specific to the Grassy Mountain Coal Project, CCS has been actively involved in the project's development since its inception. Notwithstanding a range of individual views among our members regarding the merits of the project and coal mining generally, up to this point CCS has taken a deliberate approach of not taking a fixed position for or against to project. Instead, we have advocated for a comprehensive and fully transparent EIA and public review process that upon completion would allow the community to make an informed judgement on it. To this end we have been a facilitator of public information and orderly discussion on the project within the community. This has included direct engagement with the Proponent on public information and community initiatives, working with other interested groups, particularly recreation and business interests., sponsoring public events on the various coal mining initiatives and on specific issues associated with coal development. The CCS board and regular members have followed and reviewed submitted documents and the associated deficiency process as it has evolved with particular emphasis on the subjects of concern that are identified in Statements of Concern filed with the AER through the process to date.

In summary CCS believes it can offer some community perspective and voice advocating an appropriate balance between preservation of the natural environment and the community's sustainable economic development, in full recognition of the synergies and trade-offs that this may entail.

On that basis we are making this submission in the expectation that we can contribute to the Panel's understanding of community specific issues and concerns. Additionally, we hope that our insights t will facilitate the Panel's fair and balanced adjudication of the economic, scientific, technical, social, and environmental merits of the project. This submission includes specific and constructive

recommendations on permitting conditionality that could serve to address residual project uncertainties and associated concerns in the event of a positive decision results from this process. In that regard, we believe that the application of such conditionality to effectively protect the broad interests of the people of the Crowsnest Pass should be a paramount in this decision-making process.

CCS will participate in the hearing as the availability of the volunteer members permits given variability of hearing schedules at this time. To that end our intention is make a presentation at the hearing but ask that we be permitted to name witnesses when a schedule of appearances is established. We request an allocation of 30 minutes for a presentation excluding any additional time required for questions and our response.

2.0 Submission Approach

In developing this submission, CCS has approached preparation of this submission with a community perspective. Consequentially, CCS has aimed to address issues and concerns at a high level and to do so with the objective of being understood by ordinary people in the community. Additionally, we are suggesting options on how concerns might be addressed in a manner acceptable to people in the community. It is our view that the EIA process to date has been generally comprehensive in terms of technical information generated by the Proponent and its consultants. Likewise, it appears to have been subject to formal technical review by a wide range of relevant regulators and intervenors. This has generated a very large amount of technical and study information. We would anticipate to a significant degree detailed scrutiny and debate on issues of concern related to much of this detailed technical material will continue through the hearing process with the welcome addition of representation from resourced public interest groups. While we believe all of this has relevance, it is generally beyond the resources and capability of most people at a community level to absorb and objectively assess. As a consequence, we are taking an approach of focusing on relatively broad issues and concerns and hopefully propose options for addressing them that may have support within the community and have an impact on the decisions made by the Panel.

We wish to acknowledge that Benga and its predecessor have made significant efforts locally over the past five years to address and respond to community concerns relative to what Proponents typically undertake. However, we also recognize that any project Proponent understandably has a bias to promote their interests and, as projects, develop the linkage to the decision making corporately and the local level inevitably becomes more distant as the focus on the main approvals process and corporate business priorities moves elsewhere. We say this noting that several CCS board members involved in this submission have significant comparable project and executive management experience with large resource development projects while others have relevant public sector experience in their regulation. As such we bring some experience and understanding of the process from a Proponent's perspective.

3.0 CCS Members/Supporters Views and Identified Issues

In preparation for this submission, CCS initiated a simple survey of its members and supporters requesting their views and position on the proposed project. It asks three questions. The first asked respondents to select one of four opinions on the project, namely approve, oppose, approve on certain conditions or no opinion. The second question asked respondents to identify issues and

concerns. The third question asked if the prospect of one or more additional coal projects going ahead influenced their views on this project. In each case provision for elaboration on the answers was provided for. The covering letter explained the purpose of the survey request and provided a series of links including the project document registry, the project EIA information summary; the hearing participant list and draft procedures, and the proponent's hearing submission. Additionally, board members and volunteers are informally asking opinions of other community members. While CCS is not making any representation as to the scientific robustness of this informal poll of community views, we do believe that the opinions and associated messages conveyed are instructive in terms of getting some grass roots sense of community opinions and their concerns. To date we have collected approximately 40 responses (formal and informal).

The table below summarizes the issues and concerns that have been identified. The following points provides overview observations on the results to date, noting that we are continuing the process and will update it for the actual hearing.

3.1 Position on the project

The large majority of direct survey respondents were opposed to the project without qualification. No respondents to date expressed direct support. A small minority of respondents expressed qualified support if greater economic benefits could be demonstrated, environmental impacts were better mitigated, and measures to enhance compatibility with recreational lifestyle opportunities could be demonstrated. The informal feedback generally tracked this but with a greater number of people indicating they could potentially support the project under certain conditions. However, it was common for informal feedback to either express a neutral or an apathetic/resigned view often in the context that they believed that approval was going to happen anyway, the community would continue to decline regardless of any decision on the project, and that their opinion did not matter.

3.2 Issues and Concerns Conveyed by Members and Supporters

The table below summarizes the main issues raised in the course of this survey in four general areas. Based on our assessment the principle observations we make from this are as follows:

- In general, the issues and concerns track those identified and addressed in some form through the EIA process and are assumed to be further discussed in depth during the course of this hearing by participants. The exception to this is the effect and influence of additional coal mine development which seems to significantly reinforce people's negative views on this project.
- The principle environmental/technical design issue identified relates generally to aquatic impacts, specifically i) contamination of Blairmore Creek and Gold Creek related to selenium and nitrate contamination and the resulting specific impact on fisheries (specifically WSCT); ii) uncertainty about effectiveness of the proposed mine design related to water management and surface water containment; iii) effectiveness and feasibility of contingency water treatment facility additions in the event the existing design does not work as predicted; and iv) lack of detail on monitoring and mitigation implementation criteria.
- Another priority common concern expressed is site reclamation practices, typically with reference to historical experience and a lack of confidence that reclamation will actually proceed as proposed and doubts about the reliability of financial mechanisms to support post closure reclamation and restoration.

- Other commonly expressed environmental issues are air quality (off-site dust), noise, and wildlife impacts.
- In terms of socio-economic impacts and concerns, the dominant messages are that the economic benefits from the project to the community are seen as modest at best and would be obtained by essentially negatively impacting the current and future benefits from lifestyle in-migration and outdoor recreational tourism appeal.
- Issues are raised concerning the current economic viability of the project at current coal prices, long term market sustainability associated with emerging lower carbon footprint steel making technologies, consequences of project delay after permitting, provisions assuring financial resources for reclamation/restoration, and continuity of obligations to successor owners.
- Strong opposition exists for follow on coal development considering potential cumulative effects and the associated compounding of the impacts and issues above and translate into opposition to the current project proposal as effectively opening the area up to unrestricted coal development.

Summary Table of Issues and Concerns Expressed by CCS Members and Supporters

Environmental-Technical Concerns/Issues	Socio- Economic Concerns/Issues	Corporate and Project Sustainability	Additional Coal Mining Development
Water quality in directly affected water courses. Particularly selenium	Limited direct community benefits (short term)	Viability of project at current coal prices	Need to limit development only to this development
Water quantity (usage and flow)	Modest municipal taxes and inequity in property tax sharing with Ranchlands	Impact on coal markets due to changes in steel making technology	Compounding cumulative impacts of all types from following projects
Aquatic impacts, particularly WSCT and its status as protected in Gold Creek	Negligible provincial royalties	Risk company walks away from clean up liabilities/leaving large public liability.	Cause all lifestyle residents to leave
Air quality (particulate)	Degraded recreational land use opportunities	Impacts of project delay after permitting due to market uncertainty or financing	Give the community no post coal future.
Offsite noise	Reduction in community appeal as an outdoor recreation tourist destination, as well as existing and new residents.	Impact of project transfer to new owners after permitting	
Tailings pond stability	Reduction in outdoor lifestyle business opportunities (existing and future).		
Site reclamation	Higher municipal taxes to finance expanded municipal infrastructure and service requirements		
Monitoring and enforcement	Property value impacts due to proximity to mine structures and operations as well as any air quality and noise impact.		
Wildlife - Destruction of habitat and disruption of movement	Impact of the coal load out on the highway to community's appeal as a tourist destination		
	Project will cause lifestyle residents to leave and deter new ones from coming		

In the following sections, we offer some high-level discussion of the principle issues and concerns identified above with our recommendations on how these might be addressed in the Panel's decisions and in the regulatory oversight to be applied to the project should it be approved.

4.0 Environment Impact Issues

In the following sub-sections CCS has chosen to address the most common issues and concerns raised by members and supporters, noting that these are generally consistent with views held by the local community in our experience. This should not be taken to mean that concerns do not exist about other environmental and technical issues, particularly noting wildlife impacts. However, we note that the process to date has looked at these in depth and trust that the Panel and other participants will be addressing these in the hearing. In the following, the principal registry reference used for what is being proposed is the Proponent's hearing submission (CIAC #503).

4.1 Aquatic Impacts

As reflected both in the community concerns noted above and the emphasis to date on it by the Proponent and other parties, we have identified the principle environmental/technical design issue as being aquatic impacts. Specifically, these relate to selenium and nitrate contamination of ground water and Blairmore Creek due to surface contact water generated on-site during the mining operation. Similarly, there are concerns about the viability of Gold Creek related to flow impacts and sedimentation due to site stability. In both cases, the effect of these impacts mainly relates to sustainability of fish populations, particularly WSCT which at least in the case of Gold Creek are subject to specific protection as a species at risk. The Proponent has proposed a layered engineered design approach to its mining operation around water treatment/management and its overall civil design. The primary design proposal is claimed to be conservative and sufficient to address the issues. Additionally, added commitments are made for a series of additional conceptual on-site water treatment facilities as contingency measures should the initial primary design not perform acceptably once the mine is in operation. CCS will leave the detailed assessment of this approach to the technical expertise of the Proponent, regulatory authorities and other better resourced parties. However, we would make several basic points based on the Proponent's submission (CIAC # 503) that may guide how the Panel ultimately adjudicates this question. These are:

- Given the theoretical nature of this approach at this point, there is some technical uncertainty as to the actual performance of the design and its performance can only be established once in operation.
- It appears that there will be incremental contamination in at least Blairmore Creek and some flexibility in applying stream specific contamination standards for selenium will be required on a negotiated basis.
- The effectiveness, feasibility and affordability of contingency water treatment facility additions proposed in the event the existing design does not work as predicted are likewise not well defined at this point.
- The above points imply that a potentially time-consuming and effectively negotiated process will occur after the mine is in operation to determine what contamination load is tolerable and what action would be pursued to address the issue if contingency measures are to be applied and what in fact these might be.
- Therefore, one would anticipate some period where excessive contamination might be released before it is addressed.

- Additionally, it appears that this process would essentially be conducted without any commitment to public disclosure as to whether there is an issue and what standards and conditions trigger decision making on corrective measures.
- In the case of Gold Creek while undertakings respecting a conceptual Fisheries Offset Plan involving habitat enhancement and winter flows are made to maintain protected WSCT population, it is not clear what action would be taken to mitigate the ongoing impact of unstable slopes from the old mining operations which has been shown to present a major risk to fish population in another hearing submission by Jim Rennie (CIAC #527) . Likewise, it does not resolve the question of compliance with the species at risk legislation that might prohibit the development under Federal legislation.

In summary, CCS believes that at this point the project’s potential impact on two valued water courses and potentially the receiving Crowsnest River is sufficiently uncertain at this point to warrant the Panel taking a precautionary or “worst case” position as follows:

- **Assume damage to watercourses unless publicly demonstrated otherwise:** The two immediately impacted water courses should be assumed to be compromised as a result of the project and as such should be considered a direct cost that the environment generally and the community specifically must bear in hosting the project if it proceeds as proposed.
- **Definition of the process to prove acceptable levels of contaminant release:** Permit conditioning if issued would include requirements that the process of trying the proposed design, quantifying its performance in terms of contamination levels, establishing what is acceptable through independent monitoring, detailed water quality and flow monitoring plans, and implementing contingency measures be established in detail before final construction approval is permitted.
- **Transparent public disclosure of decision making and release performance:** The decision-making process to determine what is acceptable before and during operation must be subject to public and specifically community input with operational performance including regular public reporting of contaminant and flow monitoring referenced against agreed standards reported in a manner understandable to the community.

4.2 Noise and Air Quality

The issues of noise and air quality, specifically dust (particulate), are identified by the community as significant issues, typically on the basis of the community’s historical experience and/or perceptions thereof. The Proponent for its part has made the case that current best practice addresses this through integrating engineered mitigation and operational methods into its proposed project design such that performance in these areas essentially either eliminates or substantially mitigates these kinds of impacts.

CCS takes the view on these issues that there are inevitably some impacts which should be considered part of the community cost calculation of accepting an industrial project. The question from a community perspective is essentially whether the best practices proposed mitigate impacts to an acceptable tolerance level and that this can be readily demonstrated to show that historical perceptions of coal mining practice don’t apply as claimed by the Proponent. What is missing is a clear definition of how the effectiveness of this mitigation will be demonstrated to the community. A key mechanism to address this should be application of current monitoring technologies that offer the capability to remotely sample, analyze and report noise and particulate (both total and fine particulate) in real time. Associated with this is the need for a public complaint mechanism to respond to public concerns as they occur, something that is now imbedded as a requirement in environmentally and community sensitive

developments funded by international organizations in developing countries through well established Safeguard Policies.

On this basis, CCS recommends that approval and permitting conditionality should include the following:

- **Installation and reporting of real-time monitoring and reporting of particulate and noise at agreed community receptor points.**
- **Development and implementation of credible complaint and response mechanism.**

4.3 Land Reclamation

Grassy Mountain generally and the historical coal mining operations have left a major negative environmental legacy that the community has inherited and which has up until now had little prospect of being addressed. The return of mining with what is represented as current best practice on the site or parts of it presents an opportunity to do so for the long term. As addressed in a following section of this submission issues exist respecting the broader questions regarding how reclamation generally is assured financially. However, from a community perspective, the question also remains as to the extent to which this project will address the overall historical environmental legacy.

CCS recommends that the scope of the proponent's required reclamation extend to the whole area of historic mining disturbance in and adjacent to Grassy Mountain. In particular this should address slope stabilization on the whole foot print of the historic operations with particular emphasis on protection of the two directly impact water courses.

On that basis, CCS requests that permit conditionality require:

- **The scope of reclamation and restoration extend to the whole of the historically impacted footprint from mining at Grassy Mountain with critical areas on its boundary being addressed during and immediately and after construction.**

5.0 Socio-Economic Issues

In our view, the study work contained in the EIA¹ on socio-economic impacts represents a standard, general, "by the book", desk top analysis. It is typical of what development proponent's do to meet the standard requirement to undertake such work and primarily serves to promote benefits over negative impacts. It factually presents general statistical data on the population and community infrastructure, and services, and estimates of direct, indirect and induced employment benefits, the latter being factored from quantifiable direct employment and local expenditures. This is done for the Crowsnest Pass, Sparwood and the MD of Ranchlands. Sparwood is correctly recognized as being a significant positive beneficiary due to its established industrial service sector and labour pool. Likewise, it is well positioned to absorb increased population within existing capability and municipal infrastructure as well as capitalize on indirect economic development opportunities. All this is achievable without any incremental negative environmental impacts or social disruption. Ranchlands is largely unaffected positively or negatively by the development except as the primary beneficiary of increased industrial tax base associated with the mine. However, it is our view that the study does not

¹<https://www.ceaa-acee.gc.ca/050/documents/p80101/115631E.pdf>

adequately capture the unique and mixed nature of socio-economic impacts that will be felt by the Crowsnest Pass. This is clearly the community most directly impacted by the project and the one that is the least prepared to capitalize on potential benefits and which also is essentially making a potentially irreversible choice regarding its long-term future direction.

The reality is that the Crowsnest Pass has been a community in general decline economically for more than 40 years as a consequence of the loss of its historical coal mining based industrial base. It has been transitioning to a lifestyle-based economy through that period and most recently with some success. Its population has steadily decreased and aged over this period. Its infrastructure in terms of housing stock, serviced residential and industrial land, commercial sector expansion, and infrastructure has not developed at the same rate and quality as have other comparable communities in the rest of the province, region and relative to neighbouring communities. Over this period, economic expansion, in terms of commercial development, has largely occurred in Pincher Creek and Sparwood, rather than Crowsnest Pass. The main economic base in the Crowsnest Pass has essentially been sustained by being a bedroom community for labour in the mining industry in the Elk Valley and Northern Alberta. Most recently it has also seen new part and full-time residents coming for outdoor and non-urban lifestyle opportunities. In the absence of a return to industrial scale resource development, the most recent trend would be expected to continue both through people retiring here and increasingly through growth in virtual work place employment models bringing younger families drawn by outdoor amenities. While there has been a significant decline in traditional commercial retail and service activity, what development of this type that has occurred has tended to be focused on a lifestyle-oriented and tourism market.

The prospect of a major resource extraction development in the community has the effect of creating a crossroads determining the path the community takes in in the near and long term. This requires careful consideration of costs and benefits involved. The following highlights some specific socio-economic issues that we ask the panel to consideration of the project and recommendations it makes respecting approval.

5.1 Economic Benefits

The socio-economic study undertaken by the Proponent makes the case that the project will bring the traditional kind of economic stimulus to the community in the form of jobs and the resulting local demand for housing and commercial retail goods and services. As with any such project these will be largest during the relatively brief construction phase but also involve a significant increment in full time and sustained local employment that would obviously be welcomed in a community with a declining and aging population. However, it should be noted that on a sustaining basis the population increase effectively just brings the community back to where it was in 2010 and given the general decline in commercial activity during that period the stimulus created locally likewise would likely at best have an equivalent effect on traditional local business. However, due to decline in the scope and quality of the commercial sector in Crowsnest Pass, a portion of these benefit will go to better serviced neighboring communities. On the negative side, it is necessary to factor in the impact that the presence of a highly visible major resource development industry would have on the current development direction. The community's main economic growth driver over the last decade has been the community's attractiveness to outdoor lifestyle amenities through in-migration and tourism. A principle observation made by CCS in getting community feed back on the project was that most people who came here for this lifestyle choice say they would not have done so if they had known there was to be a coal mine and some would now consider moving elsewhere. This is an observation that extends across both younger and older residents. It would be logical to extend these views

to like minded people considering coming to the community for retirement or as virtual work location in the future. Likewise, it also seems likely that the inherent attractiveness of the community to tourism will be significantly degraded. Common feedback points to concerns that large scale industrial infrastructure along the through highway adjacent to the community's main business centre and to within the viewshed and auditory range of three of the community's main potential visitor recreational amenities (the golf course, mountain biking trails, and ski hill). This will act as a major negative influence on visitor experience and as a deterrent to tourist stopping in the community.

We note that the Proponent in their hearing submission provide some acknowledgement of this issue and undertake to address them at the hearing. In that regard we look forward to hearing what concrete proposals they have to enhance the compatibility of the development with sustaining and growing outdoor lifestyle based economic development and tourism.

CCS would make the following general recommendation with respect to the mitigation and enhancement of negative impacts on parallel sustained lifestyle and tourism based economic development in the Crowsnest Pass in approval conditions:

- **Require the proponent to provide a concrete proposal in advance of approval on how it will materially support and stimulate the attractiveness and continued development of the Crowsnest Pass in respect to lifestyle in migration, tourism, and related business development.**

5.2 Municipal Finance and Infrastructure

As indicated above, the Crowsnest Pass is not optimally positioned to capitalize on the economic benefits from the project. The community will share a significant part of the local direct and indirect benefits from increased business activity with neighboring communities. However, it is will be faced with increased costs associated with basic municipal infrastructure and the need to provide for shortfalls exist and will increase with a surge in population. Going into the project upfront investment in advance of actual mine operations will likely be required. The current municipal tax base is overwhelmingly dependant on the residential property tax base, which has progressively increased in proportion to commercial and industrial categories that have steadily declined. On that basis, there would seem to be a strong potential that residential taxes will have to increase and/or the Municipality will have to take on more debt to be able to meet demand for infrastructure and services.

Normally, the financial impacts on a municipality would be mitigated to a significant degree by the incremental municipal tax revenues from the expanded industrial tax base provided by the development. However, because of the distribution of fixed mine assets geographically between Ranchlands and Crowsnest Pass, the latter assumes the major portion of financial liabilities as well as environmental and social impacts but only gets approximately one third of the property taxes. To place this in perspective, the projected taxes going to the Crowsnest Pass increases municipal revenue by about 6% while in the case of Ranchlands it is 52% (based on 2019 tax revenues). It is also interesting to note that proportionally Ranchlands which is already in a strong financial position almost doubles its property tax base while in Crowsnest Pass is increased by only 5%.

This inequity is recognized factually by the Proponent in its Socio-Economic studies and hearing submission, and notes without further comment that Ranchlands has indicated some revenue

sharing may be negotiated but not until the mine is in operation. This leaves Crowsnest Pass and its citizens exposed to an upfront financial burden and risk, as well as being in a poor negotiating position when it comes to actually settling any revenue sharing arrangement.

On this basis, CCS believes that this inequity needs to be addressed in the Panel's decision at least in principle such that:

- **Support is provided to Crowsnest Pass in expediting the redistribution of property tax revenue and ideally increase certainty as to what tax revenue or other offsetting compensation will be available to cover the financial burdens and risk Crowsnest Pass would otherwise face.**

5.3 Impact of other Proposed Mining Developments

At this point in time there appears to be two other large-scale metallurgical coal development projects plus a smaller project reopening a nominally licenced mine on the BC/Alberta border active in or adjacent to the Crowsnest Pass. Additionally, the Benga/Riversdale operation has expansion potential south of Highway 3. The two largest developments are in the RM of Ranchlands north and west of the Grassy Mountain Project in areas of high recreational use by the community as are Benga's properties south of Highway 3. All appear to involve the development of new access routing infrastructure into the Highway 3 corridor through the Crowsnest Pass for purposes of export rail loading.

CCS recognizes that any consideration of the merits of these developments is beyond the scope of this proceeding but believes that this proceeding should acknowledge the reality of substantial cumulative impacts that will result if any of these proceed. We would anticipate a significant compounding effect of multiple coal mining developments on the socio-economic impacts discussed above. In particular, we believe that already threatened ability of Crowsnest Pass would be able to host intensive resource extraction and sustain a parallel economic and social development path based on lifestyle amenities and tourism would disappear. It would be important that this point be considered and acknowledged in the Panel's decision.

Our recommendation in this regard is that any positive decision include a recommendation that:

- **If this project proceeds ensure the actual socio-economic impacts are understood before follow on projects are considered and that a higher regulatory bar be recommended for them recognizing the cumulative impacts that they will obviously bring.**

6.0 Project Sustainability and Viability

In addressing concerns under this section of our submission, CCS fully recognizes that proceeding with this kind of a development is essentially a business decision by private sector investor and the kinds of business and market risks we are raising would be factored into these decisions by wise investors. As such these issues may not be considered relevant in what a private proponent may see is as separate aspect of the overall development process, namely getting the necessary regulatory environmental approvals which precedes the actual final business decisions to proceed.

As a consequence, the Proponent has offered a very general section in its hearing submission on the business case for the proposed development. This presumably is intended to provide comfort but

offers little substance on what the business risks and remaining barriers may be to actually proceeding with the project and the prospects of it being sustainable over a reasonable period.

CCS is concerned in principle that development of coal resources may simply not be a sustainable proposition in anything but the short term, based on a variety of global environmental and economic trends and realities. That concern is relevant in these proceedings and to our interests because of the trade off between costs and benefit that the community is being asked to make is impacted in major ways by the broader business case for the project determined elsewhere. Therefore, we submit that business sustainability and viability risks should be addressed and mitigated to the degree practical as part of this regulatory decision-making process because of their impact on community socio-economic development. These risks and our recommendations on how to mitigate them from the community's perspective are expanded on below with an expectation that they will be reflected in the decisions this Panel will make.

6.1 Current Business Plan Status

The Proponent's submission indicates confidence that there is a strong market for its product based on its quality and the general competitiveness of Canadian metallurgical coal. This is supported by a robust delivery system to Asian and other markets. In this regard the submission indicates export terminal commitments have been secured. However, it is silent on any actual contracts except to list potential countries with existing and prospective market opportunities. This begs the question as to what extent will having actual contract commitments in hand (and in what form) affects the project schedule and the absolute business commitment to proceed.

It is presumed that a key factor in the final business decision to proceed and when is significantly determined by the price of coal at the time and its prospects for the future. It is understood from past promotion and public consultation on the project by Benga and the previous owner that it had a US\$140/ton breakeven threshold. Metallurgical coal pricing is historically volatile, being driven by steel demand. Over the last decade, it has varied from a high of just over US\$200/ton (2011) down to a low of US\$68/ton (2016) and has a current price of around US\$115/ton². The highest quarterly price noted in the footnoted reference below in the period during which the Benga project has been active in the community (2015-2020) was US\$145/ton. This would suggest a quite marginal investment unless there are other factors in play, assuming Benga itself is in fact planning to pursue the development on the schedule proposed.

Another factor in considering the business decision making that warrants discussion is the potential that the current exercise may in effect be a step toward passing the existing assets and particularly the regulatory permits on to a new owner. In business terms, this "cash out" scenario might occur for any number of legitimate business reasons ranging from cutting losses if the investment is not immediately viable, though a change in focus of the existing owner's core business, to the need to attract new capital financing as examples. However, this raises the question of how time consuming that process might be and the mechanisms by which a new owner and/or its management structure assumes both the substance and spirit of obligations that we would assume are being made by Benga in good faith. Once in operation the same concern continues over the life of the operation and beyond.

² <https://www.steelonthenet.com/files/metallurgical-coal.html>

From the community's perspective, the above suggests that there needs to be some well supported demonstration of how and when actual final commitment to the project will be made. This should be integrated back through the business activities on a realistic timeline or timelines assuming the inevitability of uncertainty in that process. As such it would define the linkages between contracting thresholds, securing major capital financing, any corporate or ownership restructuring that potentially could occur, and actually committing to major on-site construction work. The principle of transparency in the risks involved at each stage of the process should be reflected in this in the form of a mechanism to inform the community throughout in sufficient detail so that its risks can be assessed. The justification for this is that the timelines and risks that impact the project's post regulatory approval will have significant impacts on the community in terms of expectations generally and particularly on decisions that various part of the community make. These local decisions include: i) preparatory investment in infrastructure and services by the municipality; ii) business planning and financial commitments by the local businesses and potentially external investors; and iii) lifestyle and employment decisions by individuals including whether to stay, come, or leave, and where to live within the community or area. Once in operation, the same questions apply in the context of the enterprise's sustainability.

A primary concern that CCS wishes to express and request specific consideration by the Panel is how overall business uncertainties, risks and decision making can mitigate the consequential risk and damage assumed by or put on the community in terms of its future direction and economic sustainability. In this regard, CCS is recommending that the Panel include specific conditionality on the following:

- **Require the participant to have a transparent effective mechanism such as outlined above be in place so the community who at that point effectively shares the business risks is well be kept informed in the uncertain period between regulatory approval and actual substantive commitment to construction and operation.**
- **Require continuation of a like mechanism through-out its operating life.**
- **Recommend that all main permitting and approvals have a fixed term of no more than 5 years and require renewal by a public review process such as this if substantive construction with a date certain for completion not in place.**

6.2 Closure Reclamation Liabilities

A reoccurring community concern relates to the process of site reclamation and restoration. Clarity in defining need to exist up front on what assurances will apply to see that this will in fact happen regardless of how the world unfolds for the project's business. The engineering aspects of physically how this done is left to the expertise of the proponent, regulators, and resourced interested parties to this hearing. Our representation on this issue, apart from the issue of how the historical condition of Grassy Mountain is corrected upfront to protect Gold Creek, is confined to how the assurances of sufficient financial resources are available and accessible to responsible and creditable public authorities to accomplish this under whatever eventualities that the actual business may see.

In our understanding the Proponent essentially proposes to pursue reclamation on a progressive basis as the coal mine develops over time and that it will complete reclamation and site restoration to a suitable natural or equivalent state satisfactory to the Alberta Government when the mine is closed. Financial assurance covering closure are to be provided

in accordance with the Financial Security Program provided in the provincial Coal Conservation Act.

CCS finds this approach essentially equivalent to saying trust us, the government has this looked after. As some of our members with some professional knowledge of post-industrial environmental legacy can attest this is not particularly comforting if you are impacted by them either physically due to proximity or financially as a tax payer. Alberta is perhaps not a good case study for this kind arrangement, given the history of things like orphan oil and gas well legacies.

On this basis, CCS is requesting that the Panel ensure strict conditionality respecting the financial security be applied from the outset that addresses the following key points:

- **Demonstrated in fully transparent documentation from the outset and periodically verified/updated that the amount of any financial arrangement is sufficiently funded:** It is assumed that this would be funded directly by the proponent through cash contribution to a securely held fund and/or a surety instrument to reasonably and conservatively cover the actual cost of reclamation and restoration during operation and upon site closure.
- **Financial resources established above are held outside of the control of the permit holder and solely assessable by a creditable regulatory authority or trust fund holder.**
- **Ensure that all financial obligations and liabilities are transferred to successor owners as a condition of being able to assume ownership and operating rights under all applicable permit with provision that the successor owner demonstrates financial capacity to meet these obligations.**
- **Ensure a mechanism exists that provides for priority access to the proceeds of disposition of assets in the event of the owner closing down operations indefinitely and/or declaring bankruptcy.**

6.3 Climate Change/Steel Making Technology Development

A final aspect under this heading that CCS wishes to raise a concern that the current and projected global environmental conditions as well as the likely path to mitigating these will have a significant impact on the viability and future of mining metallurgical coal. CCS believes that climate change represents the most significant global environmental challenge that we collectively face. While there remains debate about how fast it is happening, what effect it will have in the near and long term, and what can be done about it, there is now a global scientific consensus that this is a direct result of emissions of green house gas (GHG) from human activity particularly from fossil fuels with combustion of coal being the most significant contributor among fossil fuels. It is also recognized that major reductions in GHG emissions, and specifically those from fossil fuels is urgently needed globally. This is evidenced by rapidly rising atmospheric GHG levels and consensus that the planet appears to be approaching a tipping point at which planetary warming can not be stopped.

Among industrial sectors, the steel industry and particularly blast furnace-based steel making utilizing metallurgical coal is a priority industrial area for GHG reduction. Steel making is reported to account 7-9% of global GHG emissions, second only to the cement industry among global industrial contributors. This priority is driving global efforts to reduce and potentially ultimately eliminate coal from the steel making process as well as stimulate development and use alternative lower carbon footprint materials. Technologies to eliminate coal in steelmaking now exist and are beginning to be commercialized, particularly in Europe based on hydrogen

technology. A partnership of Scandinavia's leading steel maker (SSAB), a major iron ore producer, and a leading EU electricity company have partnered in the Hybrit initiative. This initiative has a pilot plant in operation and plans to place the its first fossil free steel on the market in 2026³. This reference also notes that Thyssenkrupp⁴, Germany's largest steel maker has successfully piloted hydrogen in blast furnaces and plans to convert three such units by 2026 and to achieve corporate carbon neutrality by 2050. Another interesting option being promoted in Australia is a process that utilizes brown thermal coal in a process that is claimed to be cheaper and have a significantly lower carbon footprint⁵. In the near term, there is increased emphasis on scrap based electric arc furnace (EAF) technology that in 2018 accounted for 29% of global steel production and has a lower carbon footprint⁶ plus more flexible scaling characteristics making it an attractive option for both in developed and developing countries.

The qualification on the non-metallurgical coal technologies above (EAF technology does require some pig iron produced with coal) is the cost which in the case of the European initiatives is estimated to be 30 to 90% higher in terms of steel price/ton. Likewise, the timelines for widespread commercialization for large scale replacement of conventional blast furnace technology are relatively long. However, the driver for reduction of coal consumption is implementation of increasingly aggressive public policies and associated financial instruments that internalize in one way or another the price of GHG emissions and setting carbon neutrality goals approaching or meeting carbon neutrality. This is most advanced in the EU but will inevitably have to be adopted globally if climate change is to be stabilized or reversed. Not doing so makes any discussion of future economic viability anywhere academic. In this case, internalizing carbon emissions will create large and progressively increasing economic advantage to technologies reducing carbon intensity and that means ultimately there will be a steady and irreversible decline in the demand for metallurgical coal.

Returning the discussion to the question at hand, we would submit that all of this is a major potential barrier to the viability and sustainability of a project such as Grassy Mountain. It may be everything that the Proponent claims and fits into a market niche in time that is sufficient to sustain it. However, that time period is uncertain and it is fair to assume that it is essentially a one-off development as the industry declines and ultimately disappears. This is important to the decision making a local community such as the Crowsnest Pass makes in balancing the costs and benefits, particularly looking beyond a 20-year time frame which is likely what this potentially sunset project for this industry could expect in a best case.

7.0 Concluding Summary

³ <https://reneweconomy.com.au/nordic-steel-giant-to-use-renewable-hydrogen-to-produce-fossil-free-steel-by-2026-2026/>

⁴ <https://reneweconomy.com.au/another-nail-in-coals-coffin-german-steel-furnace-runs-on-renewable-hydrogen-in-world-first-55906/>

⁵ <http://ectltd.com.au/can-we-make-steel-without-metallurgical-coal/>

⁶ <https://www.worldsteel.org/en/dam/jcr:96d7a585-e6b2-4d63-b943-4cd9ab621a91/World%2520Steel%2520in%2520Figures%25202019.pdf>

The Crowsnest Conservation Society is taking a position in opposition to the proposed Grassy Mountain Coal project in the absence of strong conditionality in its approval by the Joint Hearing Panel in any decision made to allow it to proceed.

This position is taken based on our conclusion that significant and potentially irreversible environmental, social and economic impacts on the Crowsnest Pass as a community will unless strong mitigating conditionality and their enforcement are not applied throughout its construction, operation and beyond.

The Crowsnest Pass is at a cross roads in its development, The community is faced with a choice between a future committed to near term industrial development of a kind that entails significant costs, impacts, uncertainties and risks, or one that continues the current path that relies on maintaining its natural environment to provide a sought after quality of life and economic development based on outdoor recreation, tourism and a non-urban lifestyle. A principle question that this process should seek to answer is whether both options are possible or is this the black and white many in the community believe.

CCS submits that a key step in addressing this is how this Panel evaluates and adjudicates the costs and benefits of the development that is before it. In particular it will be dependant on the conditions that the panel applies to any positive decision it may render. In this submission, CCS has proposed conditions that would serve to protect the community and may have some ability to preserve a sustainable future for the community and its residents present and future. These are listed in under each impact and risk category in the sections above.

In this concluding summary we would highlight the following points related to the required conditionality which we consider paramount to our being able to offer in any support in the event of a favourable opinion by the Panel on the project.

- Rigorous conditionality applied to demonstrating the effectiveness the Proponent's technical design in terms of environmental performance by ensuring that it is well documented and fully transparent as to i) the process by which these demonstration steps will be done; ii) justification of performance standards applied; iii) ensuring robust and frequent performance monitoring; iii) evaluation and approval of timely mitigation and corrective action where performance not compliant with acceptance standards; iv) public disclosure of performance through out the project life; and v) implementation of a creditable public complaint mechanism.
- Require the proponent to provide material support to address the negative effect of the development on the continued development of the Crowsnest Pass in respect to lifestyle in-migration and population retention, tourism, and related business development.
- Facilitate through its decision addressing the inequity in the redistribution of property tax revenue and the need to address it at this stage rather than after operations start.
- Ensure that the actual socio-economic impacts of this project are understood if it is approved, before additional major coal mining projects are considered for approval and that a higher regulatory bar be recommended for them recognizing the cumulative impacts that they will inevitably obviously bring.

- Ensure the recommended conditionality covering closure reclamation and restoration liabilities as listed in Section 6.2 are in place and activated.
- Recommend that all main permitting and approvals have a fixed term of no more than 5 years and require renewal by a public review process such as this if substantive construction with a date certain for completion has not been fully committed.

These recommended conditions are considered critical to protecting the Crowsnest Pass as the Grassy Mountain Coal Project's host community. Perhaps the most important one is the last one above recognizing the substantial business uncertainties associated with this project and metallurgical coal generally in the near and medium term. The worst possible outcome of this regulatory process for the community is to have a positive approval decision rendered and then have its actual implementation delayed indefinitely due to any number of business and corporate decisions and circumstances beyond its control. Many of the costs associated with hosting the development will be incurred, not the least of which would be the suspension if not elimination of growth opportunities from being a tourist and lifestyle residential destination, while seeing none of the benefits from an operating mine.