SUMMARY OF COMMENTS

REVIEW OF QUÉBEC'S ROLE IN THE DEVELOPMENT OF CRITICAL AND STRATEGIC MINERALS

Votre gouvernement

Québec

1. Review of the Development of Critical and Strategic Minerals - Procedure

The review of Québec's role in the development of critical and strategic minerals was announced by the Minister of Energy and Natural Resources on November 19, 2019, at the Québec Mines + Énergie Congress, and ended on February 7, 2020. Its purpose was to obtain different opinions, among other things on the development of CSM value chains, from exploration through mining and processing to recycling, and on the development of CSM operational expertise.

Six regional meetings were held between December 2019 and January 2020 in Val-d'Or, Roberval, Montreal, Sept-Îles, Chibougamau and Québec City. They were attended by approximately 140 participants from stakeholder bodies and organizations, including regional elected officers and representatives from the industry, regional and economic development organizations, environmental groups, universities, research centres and Aboriginal communities and organizations. Numerous government actors from different departments and agencies concerned by CSMs also attended as observers. A press release sent out on January 31, 2020, presented the highlights from the regional meetings.

All the Aboriginal communities and some Aboriginal organizations were invited to take part in the review process, and their representatives were able to attend special regional presentations. Some communities and organizations submitted comments in writing, in accordance with the consultation procedure. However, this report does not cover comments, questions and suggestions submitted by Aboriginal communities and organizations because they were consulted separately and, under the current rules, comments made by Aboriginal communities and organizations during a consultation process led by the Government cannot be made public.

The general public was also invited to take part in the review process by submitting comments or completing an online questionnaire via a website page dedicated to the public consultation, [1]hosted on the website of the Ministère de l'Énergie et des Ressources naturelles (MERN). The MERN also published a discussion paper – *Overview of critical and strategic minerals*

1 https://mern.gouv.qc.ca/mines/strategies/mineraux-critiques-strategiques/

worldwide and the potential for mining them in Québec – on the same web page, along with a map of CSMs in Québec and a copy of the presentation made at the regional meetings.

In all, 35 online questionnaires were submitted and 29 briefs were filed.

This document presents a summary of the opinions expressed at the regional meetings and in the questionnaires, comments and briefs received. To make the report easier to read, opinions have been divided into four separate categories by subject matter: Knowledge, Economy, Environment and Society.

2. Summary of comments

KNOWLEDGE

The question of knowledge was one of the main concerns raised during the consultations and in the briefs. More specifically, participants mentioned the need for knowledge acquisition, research, development and innovation. All these subjects were regarded as vital prerequisites to CSM development.

Participants also identified a need for two separate types of knowledge: geological knowledge and market knowledge.

With regard to geology, several participants mentioned the importance of improving knowledge of CSM potential in Québec through increased government investment in geoscientific knowledge acquisition and regional professional support, and by investing in research, innovation and new technology. More geoscientific surveys specifically targeting CSMs were also suggested, as was the possibility of targeting lesser known deposits in Québec, including brine and non-traditional copper deposits, in addition to regions in respect of which there is insufficient geoscientific knowledge to proceed with mineral potential development, such as Côte-Nord. Knowledge of groundwater upstream of mining projects was also mentioned as a priority by certain groups.

The need for market knowledge and information on value chains was raised. Participants suggested that existing and future demand should be assessed more accurately, and that markets with the most promise should be targeted to maximize the economic impacts for Québec.

Several participants also noted that research and development plays a major role in CSM development, and should therefore be supported in different ways, including direct support for funding and coordination of research, amalgamation of research efforts through sharing of knowledge between academics and the industry, and optimization of existing resources. Research into processing methods was also felt to be essential, and several participants noted that an additional effort will be needed in this respect.

The possibility of creating a Québec research network for CSMs was also mentioned, to ensure that the partners work together and avoid duplication.

The development of CSM expertise in Québec, especially in the fields of geology and mineral/metal processing, was identified by several participants as one of the positive consequences of supporting research and innovation. They noted that this form of expertise should be developed not only in universities, but within the Québec Government and in the regions too.

ECONOMY

As was the case for regional consultation participants, most of the people who submitted briefs welcomed the economic opportunities that would arise from the development of CSMs, provided that development takes place from a transitional standpoint, is structured by a strategy to decarbonize Québec's economy, and meets stringent environmental and social criteria. These participants also identified social dialogue, employment equity, safe and respectful working conditions and, where possible, priority to local labour and economic spinoffs, as the cornerstones of sustainable economic development.

Funding for mining projects is a major concern for CSM project promoters, especially since these projects are often carried by junior firms with limited financial means, working in little-known economic sectors. Not only is there a risk involved in searching for minable deposits, but the development of ore processing and conversion procedures can be costly. Several participants raised the question of funding and suggested measures that the Government could introduce to assist mining companies with the search for funding at different stages of a project, in collaboration with the federal government. Measures such as these could help support high-potential exploration and development projects, as well as the development of new technologies and the construction of new, greener pilot plants generating fewer greenhouse gas emissions. However, some organizations observed that support such as this should be used as top-up funding, not as basic funding. Participants also requested more involvement by State-owned bodies and corporations, among other things through direct investments, incentive green taxation and measures to address the challenges involved in supporting promoters and attracting local labour.

Greater synergy between companies working on CSMs was also proposed, to make them more competitive. Examples mentioned by participants included the development of multi-purpose ore processing and conversion factories and the creation of an industrial cluster and innovation zones.

Numerous participants said they thought Hydro-Québec should play a greater role, first by making clean energy available at competitive prices in remote regions, and second by working on the development of new technology and energy storage mechanisms.

Several stakeholders mentioned infrastructure development, which they felt was essential for resource access, economic development and territorial occupation, especially in isolated areas of Northern Québec. Some asked for more consideration to be given to the importance of infrastructure development, since it would benefit not only the communities and citizens living in the areas concerned, but also Québec as a whole.

In addition, to encourage foreign investment, some participants mentioned the importance of coordinating the international effort through a promotional strategy that would position

Québec as a good place to invest and that would include a development plan for CSM and processed product markets abroad. In both cases the strategy would use the network of Québec Government representatives abroad. Participants suggested capitalizing on existing trade agreements, researching new markets in general and new North American and European markets in particular, and setting up strategic international partnerships to facilitate sector development.

Some of the comments suggested that the Government should promote the benefits of Mining 4.0[2] and electrified facilities, and that it should provide support for firms engaging in these developments and transformations.

Some of the briefs said the measures to be implemented should be part of a general government vision for greenhouse gas management. Connections would have to be made with other government policies and plans for the energy transition, including the 2020-2030 Energy Policy and Action Plan, the 2018-2023 Energy Transition, Innovation and Efficiency Master Plan proposed by *Transition énergétique Québec*, the Sustainable Mobility Policy, the Transportation Electrification Plan and the Plan for a Green Economy.

Generally speaking, the brief signatories and meeting participants all said that ore should be processed in Québec as a priority, instead of exporting concentrate. Local development of mining and processing procedures would enhance Québec's expertise and would be beneficial in the long term. In addition, it was noted that, with this approach, local expertise would remain even after the resource was exhausted. Similarly, signatories and participants suggested that efforts should be made to attract investments, provided they would play a role in developing Québec's expertise. For example, investors who commit to processing ore in Québec could be given priority, and promoters could be encouraged to use local expertise. Some groups suggested that social and environmental responsibility criteria should be included as conditions for public funding of natural resource development projects.

ENVIRONMENT

Several groups, at the consultation meetings and in briefs and comments, thought a circular economic and recycling strategy should be a core element of CSM development in Québec, to optimize the life-cycle of these non-renewable resources. Some suggested potential government actions such as the creation of committees, recycling and recovery standards or goals, consideration of greenhouse gas emissions in the mining industry, mapping of urban deposits and an analysis of CSM flows and life cycles.

Also addressed was the topic of financial support for companies working on the recovery, repair or recycling of products containing CSMs and the reintroduction of recycled materials into industrial processes. The need to innovate in order to recycle and process materials

2 The term Mining 4.0 refers to the concept of operational agility in mining through greater innovational interconnectivity. The digital transformation provides access to additional data and analysis methods for real-time decision making. Source: Institut national des mines.

Object and data connectivity is the key factor of Industry 4.0. Software, hardware and data connectivity, mass data processing and cybersecurity are essential in creating intelligence within a manufacturing system that is more adaptable in production, and is able to allocate resources more efficiently. Source: https://www.economie.gouv.qc.ca/bibliotheques/outils/gestion-dune-entreprise/industrie-40/feuille-de-route-industrie-40/1-industrie-40-origine-et-definition/

effectively was mentioned, as was the possibility of setting up multidisciplinary research centres on CSMs and the circular economy.

Consultation participants also suggested that, because CSMs are non-renewable resources, Québec should aim to cut back on mining through source reductions combined with re-use and recycling.

A number of organizations suggested intensifying the use of CSMs that are already in circulation, and of using eco-design, in which repair, recycling, responsible consumption, transportation logistics, land use planning and waste management are taken into account in the product design process. Some suggested exploiting CSM recovery potential at tailings sites to develop and give new life to "mine tailings".

Some briefs and comments suggested that the relevance of creating a traceability system for Québec's metals, with their enviable ecological and social characteristics, should be considered. Among other things, this would provide value on export product markets. A similar idea also emerged at the consultation meetings.

Some stakeholders asked for the State to adopt a legal and regulatory framework in which the well-being of the Québec population is a priority, and which would also provide adequate protection for the environment. They suggested that all new mines should be subject to an environmental impact assessment and consultations by the Bureau d'audiences publiques sur l'environnement (BAPE), and that protected area goals should continue to be pursued throughout Québec. Others objected to this suggestion because of the delays caused by the current environmental hearings process, and the significant costs it generates for mining projects. Most of the stakeholders were not against the hearings as such, but noted that the process is both cumbersome and long.

Some also said the process of designating protected areas should include geoscientific knowledge acquisition surveys so that high-potential areas can be identified before protected areas are formulated and designated.

With respect to active mines, some stakeholders suggested that the "polluter pays" principle should continue to apply, with financial guarantees for contaminated site cleanup at the companies' expense, stronger ministerial powers and criminal penalties for environmental offences.

Lastly, some environmental stakeholders suggested that strategic environmental assessments should be carried out for certain sectors, including rare earth elements.

SOCIETY

Some of the 29 groups that filed briefs said the Government's role should be to structure mining activity, not invest in its development. In their view, the Government, by performing both these roles, has created a conflict of interest. In their briefs, they also noted that, although CSMs are essential for the energy transition, this is not sufficient to justify preferential extraction conditions.

Although several respondents raised the question of simplifying the regulatory and administrative framework to speed up the development of high-potential areas, they felt it was even more important to make the necessary investments in infrastructures, and to

maximize and share new or existing multi-purpose infrastructures (roads, railways, airports, telecommunications, etc.), to ensure that projects are able to go ahead.

Several participants mentioned land protection and use reconciliation as part of an environmentally friendly approach that is respectful of local and Aboriginal communities. Some groups also addressed the notion of flexibility with respect to land protection, to allow for changes of use where necessary. Other groups were against the idea of setting aside part of the territory for CSM extraction.

Some regional stakeholders also noted the importance of ensuring sustainable spinoffs for communities located in the vicinity of mining projects, among other things by reducing their dependency on primary resource extraction and including them to a greater extent in the CSM value chain. Some suggested that the Government should work with regional authorities to draw up an integrated vision of mining development.

Public awareness and information, offering neutral facts on CSMs and related issues, were mentioned as key factors in helping to educate the general public about the mining industry, its impacts, its spinoffs and its opportunities, with a view to fostering social acceptability. Several respondents suggested that this type of information should be circulated by Government agencies and educational institutions, so that it would be more credible in the eyes of the general public. In addition, numerous participants raised the question of stakeholder involvement throughout mining project development process. They also underscored the importance of explaining the authorization process and clearly communicating the role played by mining in Québec's economy.

Some groups felt the municipalities should have an expanded role, and that industry actions should be better regulated. They also felt it was important to avoid inhabited areas and vacation areas, especially for industrial projects aimed at the export market. To do this, they suggested reviewing the current legislation and frameworks in order to give more power to municipalities, RCMs and Aboriginal communities so that they are able to protect their regions' sensitive areas.

Participants also commented on the potential issues arising from the health risks to which populations living near mining sites are exposed, especially when radioactive substances are involved.

Social acceptability was regarded as being extremely important to the CSM sector. Although not always mentioned explicitly, the concept was implicit in numerous comments, including those concerning the consideration of intra- and inter-generational issues, community involvement in project development, more information for communities on projects under development, inclusion of BAPE recommendations when permits are issued, consideration by public authorities of the mining methods used by mining companies, greater consideration of Aboriginal issues in the legal framework, with the possibility for Aboriginal and non-Aboriginal communities to exempt certain areas from mining activities, and harmonization of the provincial and federal legal frameworks.

Several groups suggested that the MERN should continue the participatory aspect of the review process by providing public feedback on the CSM consultations.

3. Conclusion

The purpose of the review of critical and strategic minerals was to survey stakeholders and citizens with an interest in the mining sector, in order to obtain their opinions regarding the Québec Government's orientations for CSM development. Most of the organizations and individuals involved the process were in favour of developing CSMs, provided it could be done with due respect for the communities and the environment, and provided it would generate sustainable spinoffs for the regions and for Québec as a whole.

Some of the central themes to emerge from the review process were the importance of improving knowledge of CSMs and promoting responsible economic development in line with environmental values such as recycling and the circular economy, for the benefit of the Québec population as a whole, and the contribution of regional actors and partners to the development process.

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