

**Written Submission for the Pre-Budget  
Consultation in Advance of the  
Upcoming Federal 2022 Budget**



By: Lunar Water Supply Company  
Aug 6th, 2021

## **Recommendations**

- **Recommendation 1:** That the Federal Government officially designate *one* of Natural Resources Canada or the Canadian Space Agency (Under Innovation, Science, and Economic Development) as the Federal Department leading Canadian space resource efforts.
- **Recommendation 2:** That the Federal Government develop or assist in the development of a standard for disclosure to space resource investors, similar to NI 43-101.
- **Recommendation 3:** That the Federal Government establish a grant or other funding source to directly support the development of the space resources industry in Canada.
- **Recommendation 4:** That the Federal Government pass legislation authorizing Canadian Companies to engage in the commercial recovery of space resources in a manner consistent with Canada's international obligations.

## **Body of Submission**

### **Introduction:**

As humanity begins its transition to becoming a space-faring civilization, it is inevitable that we will develop natural resources to support our growing space activities. As a signatory to the Artemis Accords, Canada is already engaged in the development of the sustainable exploration of the Moon. Canada has also shown leadership in the development of the Mine of the Future with the publication of the Canadian Minerals and Metals Plan. These actions have created a fantastic opportunity for Canada to create and grow a Canadian space resources industry.

With the Artemis missions planning for a permanent human presence in Lunar orbit, and China and Russia announcing their own plans to develop a permanent base on the Moon, a reliable supply of water on the Moon will be critical. Moreover, with applications in fuel and radiation shielding in addition to life support, Lunar water will have a strong and growing demand. Thus, the time to support the development of a Canadian space resource industry is now. Countries around the world - including the US, the EU, China and Russia - are already pushing their own space resource industries, and if Canada does not act quickly, it could fall behind.

The Lunar Water Supply Company is actively developing technology, training staff, and engaging with domestic and international stakeholders to position ourselves at the forefront of this emerging space resources industry. Our mission is bold, and it cannot be achieved without the support of the Canadian Government. This industry will take decades to mature, and if Canadian companies are going to be leading the industry in the future, we need to invest today to grow our capacity to take on the challenges of tomorrow.

Space resource development represents an opportunity for Canada to foster an industry that leverages Canada's existing position as a leader in both the space and mining industries. Canadian expertise in the minerals and metals sector covers the entire mining cycle, including geology, engineering, consulting and financial/legal services. In addition, mining activity occurs across Canada, in every provincial and territorial jurisdiction, making it a national industry in scope. Canada is a recognized leader in mining related financing with 52% of all global mining financings in the past 5 years happening on the TSX.

However, if the Government of Canada does not act soon, we will fall irreparably behind other space-faring nations: the United States, the European Union and Japan all stand notably ahead of Canada in growing a domestic space resource industry, and the UAE, China, Russia and Australia are actively working to develop their own domestic space resource industries.

By acting today, the Federal Government can make huge strides towards securing an innovative new industry with incredible long-term growth potential in Canada. In order to ensure the growth of a Canadian space resources industry, we propose the following recommendations:

**Recommendation 1: That the Federal Government officially designate one of Natural Resources Canada or the Canadian Space Agency (Under Innovation, Science, and Economic Development) as the Federal Department leading Canadian space resource efforts.**

Space mining and space resources fall directly at the intersection of the mandates of Natural Resources Canada (“**NRCan**”) and the Canadian Space Agency (the “**CSA**”). As such, there currently exists some confusion amongst private industry as to which Department Canadian space mining companies should be primarily interacting with. While both NRCan and the CSA’s participation in Canadian space resource efforts will be crucial, until one is designated as the leading Department for space resource efforts, there will be unnecessary confusion and wasted time going back and forth between NRCan and the CSA. This can easily be remedied with an official mandate being issued by the Federal Government to one of these Departments to pursue space resources and providing them an accompanying budget.

We need one point of contact in Government for space resources to keep up with competing jurisdictions.

**Recommendation 2: That the Federal Government develop or assist in the development of a standard for disclosure to Space Resource Investors, similar to NI 43-101.**

To ensure confidence in Canadian space resource operations, we need a common space resources disclosure standard for investors, partners, and all stakeholders to understand the risks associated with space resource activities. To that end, we propose that the Federal Government work with the Canadian Securities Administrators and the Provincial Securities Commissions to create a disclosure standard for all Canadian companies. We propose National Instrument 43-101 (“**NI 43-101**”) as an excellent example to follow:

(<https://www.albertasecurities.com/securities-law-and-policy/regulatory-instruments/43-101>)

NI 43-101 is used by the Mining Industry to ensure that misleading, erroneous or fraudulent information relating to mineral properties is not published and promoted to investors. By embracing similar standards, Canada can provide the nascent Canadian space resource industry with greater certainty for investors, thereby encouraging increased capital flows to space resource companies based in Canada.

**Recommendation 3: That the Federal Government establish a grant or other funding source to directly support the development of the Space Resources Industry in Canada.**

While there is massive long-term growth potential for this industry, government assistance at this very early stage will have an out-sized impact on the growth of a Canadian space resources industry. We are developing an entirely new industry, and a lot of work is needed to lay the foundations of a successful industry. Again, countries around the world are already providing space resource specific funding: NASA is awarding contracts for the collection of lunar regolith

and hosting a lunar water mining competition for American companies, and in Europe, a brand new European Space Resources Innovation Centre has been established, including a space resource incubator program.

Moreover, funding for the development of a space resources industry falls directly within the existing Federal mandate to fund innovative industries and thus should be easy to identify as a growth target. As an example, space resources could be specifically targeted by the Strategic Innovation Fund.

**Recommendation 4: That the Federal Government pass legislation authorizing Canadian Companies to engage in the commercial recovery of space resources in a manner consistent with Canada's international obligations.**

The legality of developing and selling space resources for use in space or on Earth is currently a legal gray area. While the 1967 Outer Space Treaty has been the law of the land for several decades, new legislation around the world is being adopted to clarify how private companies can develop space resources. We already lag behind other countries in establishing a law enabling domestic space resource activity and in clear guidance from the government encouraging said activity:

- The USA has passed the US Commercial Space Launch Competitiveness Act in 2015 (the “**US Space Act**”), and NASA has already awarded contracts for the collection of space resources.
- In 2017, Luxembourg passed the Law on the Exploration and Use of Space Resources. This law is the foundation for space resource activity across Europe. Moreover, the European Space Agency has published multiple positions on the commercialization of space resources, including a “Space Resources Strategy” in 2019.
- In 2019, the UAE passed the Federal Law on the Regulation of the Space Sector, which also contains provisions governing the commercial use of space resources, and the UAE's National Space Strategy 2030 also includes plans for space resources.
- This year (2021), Japan passed the Law Concerning the Promotion of Business Activities Related to the Exploration and Development of Space Resources, which explicitly permits private Japanese companies to develop and sell space resources.

Furthermore, as Canada has signed the Artemis Accords, it has already demonstrated its support internationally for the development of space resources. Thus, while we recognize that long term, the best way forward is for Canada to support the development of internationally accepted standards, Canada should first pass an initial domestic law, similar to the US Space Act, which authorizes Canadian companies to recover space resources so long as they comply with Canada's international obligations. Failure to pass such a law leaves Canadian companies at a serious competitive disadvantage to those based in countries that have legal clarity about space resources.

### **About the Lunar Water Supply Company**

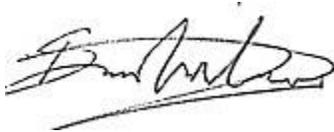
The Lunar Water Supply Company is a private Canadian corporation which is focused on the sustainable development of water resources on the Moon for use in off-Earth applications. We are based in Western Canada, with our founding team members split between Alberta and Saskatchewan. We are actively working on developing partnerships and integrating technology to achieve our mission of expanding human space exploration by providing water resources in space. We believe that Canada's leading position in terrestrial mining and natural resources makes Canada well-positioned to be a leader in the coming space resource industry. The Lunar Water Supply Company is working to ensure that it's Canadian companies and Canadian people who are at the forefront of developing space resources.

### **Conclusion:**

The Lunar Water Supply Company is committed to the cooperative development of a Canadian space resources industry, and we know that to achieve this lofty goal, we need the support of the Government of Canada. We look forward to working closely with the Federal Government as we continue on this exciting journey.

Sincerely,

**Lunar Water Supply Company**



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Sean Mitra  
Chief Legal Officer