

Prioritizing Canada's Space Sector



CANADA'S
SPACE
INNOVATORS

**Written Submission for the
House of Commons Standing Committee on Finance
Pre-Budget 2023 Consultations
October 2022**

Recommendations

1- Space Canada recommends that the Government of Canada **prioritize the space sector** through policy development, investment, and the advancement of space related policies.

2- Space Canada strongly recommends that the Government of Canada **create a National Space Council of Canada** chaired by the Prime Minister to enhance space policies, investments, and initiatives, and to facilitate the level of collaboration required for Canada to be a global leader in space.



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INNOVATEURS
DE L'ESPACE
DU CANADA

Message from the CEO

By leveraging space innovation, Canada can more effectively tackle global challenges from climate change to inequalities – all while creating the jobs of the future right here in Canada.

The new space economy is an emerging sector poised to create enormous economic opportunity. In fact, the global space sector is expected to grow to a multi-trillion-dollar-a-year industry over the next two decades. Plus, advancements in space play an important role in combatting climate change and mitigating its effects, safeguarding Canada's security and sovereignty, and addressing the digital divide.

Investments in space drive new innovations with tangible benefits to our everyday lives – like robotic surgery and other medical advancements and at the same time, help us overcome the challenge of space traffic – which recently rounded out the World Economic Forum's list of top 5 Global Risks.

Maybe the most important benefit - space exploration can inspire the next generation of Canadians to reach for the stars.

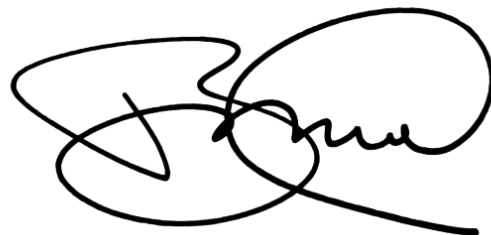
Numerous countries recognize these tangible benefits stemming from the prioritization of space. That is why Canada is in a new global space race.

For all these reasons, the time for Canada to prioritize space is now.

There is a need for the highest levels of government and sector leaders to collaborate and prioritize space like never before, as other countries around the world are doing. The creation of a National Space Council of Canada will help Government of Canada establish national space policies, drive strategic investment in the Canadian space ecosystem, and synchronize space activities across the government.

Canada is well positioned to harness the power of space for the betterment of our country, society and the planet. Canada's space innovators are already leading the way.

We can do this. Canada can do this. We must do this because space needs more Canada.

A handwritten signature in black ink, appearing to read 'Brian Gallant', with a large, stylized flourish at the end.

Brian Gallant
CEO, Space Canada

Who is Space Canada

Space Canada represents Canada's space innovators, allied industries, and ecosystem to convey the value of space technology, research, and investment to domestic and international audiences.

From vibrant start-ups to large global companies, Space Canada's over 40 members are designing, building, and implementing innovative new solutions on and around our planet. Space Canada's members launch space vehicles, deliver and operate space-based telecommunications systems, lead space exploration, perform environmental monitoring and Earth observation, and many other applications.

There are nine highly innovative and world-leading founding members of Space Canada: Calian, GHGSat, Magellan Aerospace, Maritime Launch Services, MDA, Mission Control Space Services, NorthStar Earth & Space, SpaceBridge and Telesat.

Space Canada members are investing billions of dollars here in Canada and have facilities across the country employing thousands of people in Canada and around the world with a strong emphasis on STEM and innovation. The work Canadian space innovators do in orbit and on the ground puts people to work and consistently pushes and expands the envelope of Canada's potential.

Why Prioritize Space?

Canadian space innovators are able to assist the Government of Canada with its goals of creating new jobs while building a more innovative, more competitive, a greener, more inclusive, and more resilient Canada.

Create New Jobs

The space sector supports over 20,000 jobs and contributes \$2.5 billion yearly in GDP to Canada's economy – and it's poised to grow.

Investments in space will propel Canada to seize job opportunities stemming from the new space economy - a rapidly expanding global sector that some forecast to reach USD \$2 trillion by 2040.¹



¹ [Morgan Stanley](#), [US Chamber of Commerce](#), [Bank of America](#)

**INVESTING
IN THE
NEW SPACE
ECONOMY**

From R&D to advanced solutions, investment by Canadian space companies are delivering big economic benefits to Canada and innovations to the world.

The time is now to invest in space, Canada.

LEARN MORE AT: SPACE-CANADA.CA

**SPACE-ESPACE
CANADA**

Build a More Innovative Canada

Space inspires innovation.

The space sector is an innovative industrial sector that creates the jobs of the future and includes some of our most innovative businesses, researchers, and minds. Efforts to harness the power of space inspires young Canadians to pursue STEM studies and careers.

**SPACE
INNOVATIONS
BECOME
EVERYDAY
SOLUTIONS**

With generational leaps in computing, robotic surgery and other medical advancements, Canada's space innovators are creating solutions that extend far beyond the reaches of space.

The time is now to invest in space, Canada.

LEARN MORE AT: SPACE-CANADA.CA

**SPACE-ESPACE
CANADA**

Build a More Competitive Canada

The future is at Canada's doorstep.

The space sector contributes immensely to Canada's competitiveness. Advancements in space technology and science will fuel the next generation of innovation and help Canada enhance its competitiveness - from smart cities to autonomous cars to robotic manufacturing to AI to the metaverse. The competitiveness of many emerging and traditional industries will depend on space innovation.



**MORE
GROWTH
IN SPACE
INNOVATION
FOR BETTER
GROWTH HERE
ON EARTH**

Canadian-built satellites, ground-based facilities and technologies provide key data that help farmers monitor their crops, enabling sustainable land usage.

The time is now to invest in space, Canada.

LEARN MORE AT: [SPACE-CANADA.CA](https://space-canada.ca)

**SPACE • ESPACE
CANADA**



WE ARE TRACKING EMISSIONS TO HELP REDUCE THEM

Climate change is one of the biggest challenges of our generation. Canadian space technology is being used to measure our changing planet.

The time is now to invest in space, Canada.

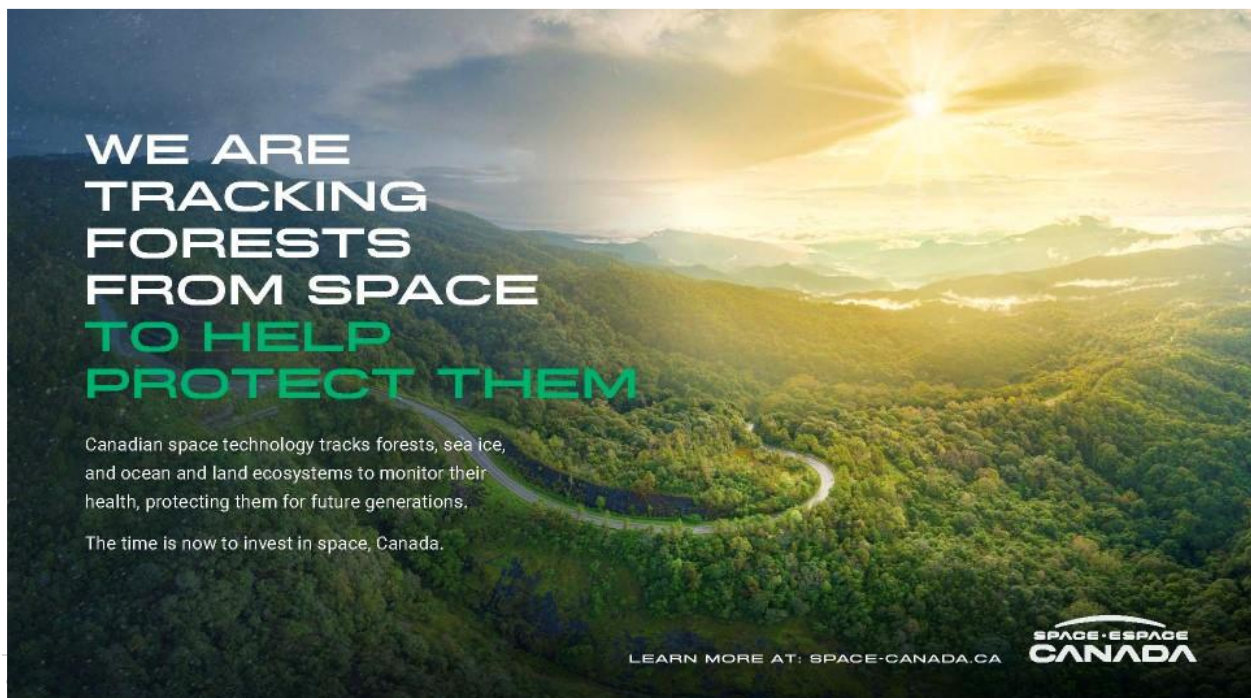
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Build a Greener Canada

Space is delivering the data needed to protect our environment and tackle climate change.

It is only through space that half of the essential climate variables identified by the World Meteorological Organization can be observed and monitored. Space technology also monitors our land ecosystems and coastlines and protects our oceans and forests.



WE ARE TRACKING FORESTS FROM SPACE TO HELP PROTECT THEM

Canadian space technology tracks forests, sea ice, and ocean and land ecosystems to monitor their health, protecting them for future generations.

The time is now to invest in space, Canada.

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Build a More Inclusive Canada

Through space, Canada can help address economic, environmental, and social inequalities.

Canada's space innovators can close the digital divide – which was put on display during the COVID-19 pandemic - by providing high-speed connectivity in remote, rural, and Indigenous communities.



**WHEN CANADA
IS IN ORBIT
MORE OF THE
WORLD GOES
DIGITAL**

Providing fibre-like high-speed Internet and 5G solutions to northern, rural and Indigenous communities is a big challenge. Canada's space innovators are creating global solutions.

The time is now to invest in space, Canada.

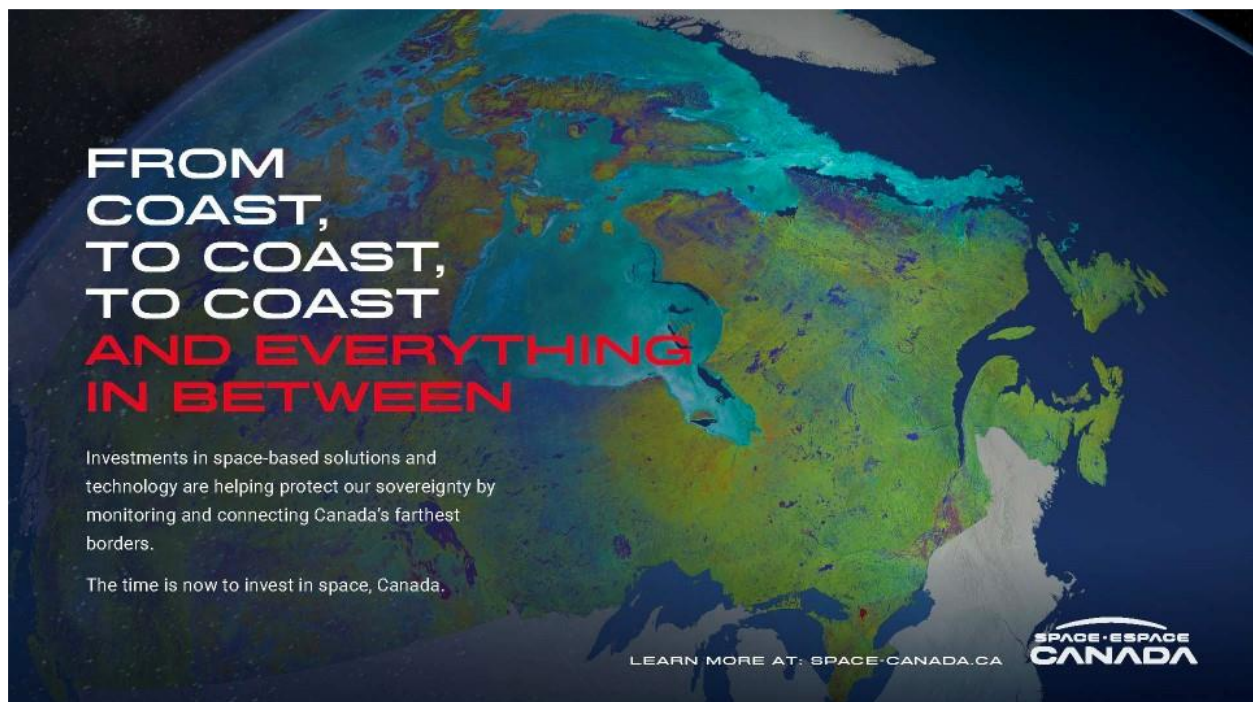
LEARN MORE AT: [SPACE-CANADA.CA](https://space-canada.ca)

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Build a More Resilient Canada

Through space, Canada can enhance its national security and better protect its sovereignty.

Canada can more effectively monitor the North and its borders as well as strengthen its disaster relief efforts through space-based technologies, communications, and innovations.



Why Create a Space Council?

As launching into space becomes more accessible, there is a global race to lead the new space economy and to harness space to overcome the most pressing societal and planetary challenges.

The Race for the New Space Economy

The increasing recognition of the power of space is one of the reasons why the new space economy is growing so rapidly. Now more than ever, governments are prioritizing and utilizing the space domain for their sovereign, strategic needs in national security, economic development, and land and marine environmental stewardship.

Through investing heavily in their domestic space industries and space programs, and by adopting space related policies, numerous governments are working to harness the massive potential of space in a variety of functions, i.e. commercialization, research and innovation, telecommunications, Earth observation, environmental protection, national security, militarization, and more.



Moreover, as a force multiplier to government investments and to further capture this global opportunity, governments are increasingly creating national executive forums and whole-of-government political task forces to ensure that space is being prioritized at the highest levels of government in a strategic, results-oriented way.

The United States has long utilized a National Space Council within the Executive Office of the President, chaired by Vice President Kamala Harris. The European Union and other leading space countries like

France, China, Russia, and India are also focused on space at the executive level, prioritizing the sector and investing billions of dollars every year in their domestic space capabilities

Emerging spacefaring nations like Australia and New Zealand – Canada’s Five Eyes partners – are increasing investment in their space capabilities and are on track to surpass Canada’s investments.

For a nation to compete in the race for the new space economy, government commitment towards space is necessary as governments play a pivotal role in fostering the space sectors as regulators, as capital providers (as an investor, funder, anchor-customer, or owner), or as operational partners.

A Strong History in Space

Fortunately, Canada has a strong foundation in space to build on.

Due to the vision, foresight, and investments of past governments, Canada has built an impressive and proud history in space, from space-based communications to environmental monitoring to space exploration. An often-overlooked fact: Canada was the third country in space – after the Soviet Union and the United States - and a pioneer in satellite telecommunications, Earth observation, and space robotics.



The National Space Council of Canada

To enable the level of collaboration required to secure Canada's future as a leader in the global space sector, Space Canada recommends the creation of a National Space Council (NSCC) similar to the United States. This would be an internal structure of the Government of Canada.

The NSCC should be chaired by the Prime Minister and be formed with relevant cabinet ministers.

The creation of the NSCC will signal to international partners and competitors alike that Canada plans on maintaining its leadership role in space.

The NSCC will also improve coordination of federal policies, investments, and initiatives related to space as it will bolster cross-departmental collaboration. This level of coordination is crucial as a whole-of-government approach is required given there are numerous federal departments that will influence Canada's level of success in the space sector and as many federal departments will benefit from the contributions space can make to advancing their respective mandates.

Although the council would be comprised of internal stakeholders in various federal departments, it would help coordinate and facilitate collaboration efforts with industry and other key external stakeholders in Canada's space ecosystem by providing a central point of contact. To this point, the council should be supported by a space sector advisory group.

Conclusion

Canada's strong legacy in space positions it to be a global leader of the new space economy. It is now time to take the next step and create a National Space Council of Canada (NSCC), chaired by the Prime Minister, to ensure Canada's investments and policies capture the importance and true breadth of the space sector's benefits for solving our biggest challenges.

Seizing this opportunity will help create the jobs of the future and enable other important emerging sectors in Canada – such as clean tech, biotech, ag tech, and fin tech - to grow.

Further, prioritizing space will help build a more inclusive, greener, and more resilient Canada.

In essence, to accomplish the Government of Canada's important goals as it seeks to rebuild from the COVID-19 pandemic, *Canada needs more space.*

Nevertheless, Canada is not the only country that sees the massive opportunities of space. There is a new space race. Thus, ***the time is now to invest in space, Canada.***

If the Government of Canada prioritizes space and creates the NSCC, it will be taking a giant leap in building a better Canada, and world.

Space Canada would be pleased to elaborate more on this submission.

Contact us for more information:

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