

Whether we're talking about flying in the sky, or circling the planet in orbit, Canada has an impressive story to tell about our aerospace and space sectors. As a research-intensive industry, it is not an easy sector to excel in, yet Canada has a track record to brag about. It is not by accident, and it should not come as a surprise. We rank in the top three globally for civil simulators, turboprop and helicopter engines, business jets and regional aircraft. We are the only nation ranked in the top five of all key sector categories.

Aerospace contributes more than to \$25 billion to our GDP and 213,000 jobs to our economy. It is the number one R&D investor across manufacturing industries, and over five times as research-intensive as the manufacturing average. What is more, the sectors are at the leading edge of advanced technologies, and hire a tremendous number of skilled workers, including workers with STEM skills. These are the kinds of well-paying, long-lasting, middle-class jobs of tomorrow our economy needs.

Canada's aerospace and space sectors are also truly national industries. Large multinationals right down to small firms work together to feed a supply chain that often spans the globe. Companies export over 70% of their products to over 190 countries across 6 continents.

While we know that there is more work to be done, the industry is on better footing today than it was when we were elected. Since October 2015, our government has invested more than \$750 million in aerospace as part of our Innovation and Skills Plan. This relatively modest investment has helped to leverage nearly \$10 billion in private sector investments.

And we made it simpler to work with government, through the creation of the Strategic Innovation Fund. It is more flexible, it is more focused on business scale-up and it is designed to attract global investment—a key to keeping Canadian businesses competitive internationally. From BC's Coulson Airplane, to Quebec's Bell Helicopter Textron Canada, to Nova Scotia's Bluedrop Performance Learning, SIF is helping our companies develop innovative new technologies throughout the aerospace supply chain.

Furthermore, the government is investing just under \$50 million to bring together regional R&D activities, leverage private sector investment, and establish a national aerospace innovation ecosystem. A stronger ecosystem will help companies work together better to commercialize new and improved products, processes, and services.

Our government is looking beyond just planet Earth, too. Earlier this year, we launched *Exploration, Imagination, Innovation: A New Space Strategy for Canada*. This strategy is our recognition of the long and proud history of Canada's work in space – it is one of our strategic national assets. And, as the first international partner to commit to the NASA-led Lunar Gateway, and the proud builder of the CanadArm3 for the mission, our strategy will ensure that Canada remains a leading space-faring nation for many years to come.

When it comes to applying space technology here on *terra firma*, we are also investing in next generation low Earth orbit satellite communications technologies, which will help expand Internet coverage not only to the remotest places in Canada, but around the globe

Also in Paris, the AIAC launched its *Vision 2025* report, which presents its five-year forecast for the industry. The Vision looks to a global market that is increasingly competitive and envisions a Canadian industry ready to compete – and win.

But the industry will not be able to win alone. The report estimates the industry will need about 50,000 skilled workers in the next few years. To continue to lead the world, we will have to work together – business, researchers and government – to provide the right skills and development, and the necessary investments.

- 1) **Skills** *Vision 2025* calls for a national system to coordinate work integrated learning opportunities and to seek ways to incorporate older workers and women into the workforce.
 - **Work-integrated learning:** Budget 2019 targets 84,000 student work placements across Canada by 2023-24. This will deepen collaboration between industry and education institutions, and help Canadian employers and workers adapt to the economy of the future.
 - **Canada Training Benefit:** Budget 2019 proposed to invest more than \$1.7B over five years to deliver the program. It targets workers throughout their careers, from age 24-65. Can be applied against training fees at colleges, universities, and eligible occupational skills programs starting in 2020.
 - **Global Talent Stream:** supporting 24,000 successful visa applications already, and at least 10 spin off jobs for every person brought in through the program.
 - **CanCode:** we have offered almost 2 million training opportunities to Canadian kids and teachers digital skills, and are on our way to 2 million more.

- 2) **SME Growth and scale up** – *Vision 2025* suggests that the Government of Canada introduce programs to support scale up, digital transformation, and procurement to support “domestic champions”.
 - **Industrial and Technological Benefits: Small and Medium Enterprises**
 - As of January 2019, 161 contracts valued at nearly 47 billion dollars had been signed with small and medium enterprises. Application of the value proposition seeks greater opportunities to advance innovation, skills development and training and support capabilities that meet the current and future needs of the Canadian Armed Forces.
 - supports the long-term sustainability and growth of Canada’s **defence industry**;
 - supports the growth of bidders’ Canadian operations as well as their **suppliers in Canada**, including SMBs in all regions of the country;
 - enhances innovation through **research and development (R&D) in Canada**;
 - increases the **export** potential of Canadian-based firms; and
 - promotes **skills development and training** to advance employment opportunities for Canadians.
 - The value proposition also considers a commitment to small and medium business involvement.
 - **Scale-ups programs:** We are supporting businesses all along the innovation continuum, and have made significant steps to support scale-ups through

- **Access to capital:** In 2018 Canada's venture capital market broke records (raising between \$4.3-\$4.6B), marking a two-decade high in dollar flows, with a bigger proportion of late state financing, signaling an upward trend in scale-up activity.
- **Export markets:** We have negotiated significant trade advantages for Canada in the global market, with preferential access to nearly two third of countries in the world.
- **IP:** We invested \$85 million, and launched Canada's first ever national IP Strategy. The Strategy is supporting education around IP, developing strategic IP tools, and IP legislation.
- **Innovative Solutions Canada:** We are leveraging the government's purchasing power, using the government as first customer to support innovative SMEs. We have issued more than 40 challenges, through 14 different federal departments; receiving more than 500 applications.
- **ITB policy:** In the past five years, more than 700 companies across the country received investment through the ITB policy, **almost two-third of those companies are SMEs.**
- **Digital transformation:** SIF is more flexible than the previous funding pockets, supporting a wide variety of investments.

3) Innovation: *Vision 2025* identifies 4 key areas opportunities where Canadians can win by innovating: carbon neutral flights; unmanned vehicles; Growth of MRO services; Defence procurement.

- Canadian Aerospace is #1 in manufacturing R&D – \$1.4 billion dollars last year.
- Leveraged nearly \$10 billion dollars in private sector investments, since we took office in 2015.
- Last year alone, we invested nearly \$253 million in support of our aerospace industries through the Strategic Innovation Fund.
- CAE, a prime example of innovation in the industry with a \$150 million investment through SIF. With this investment, CAE will harness the power of artificial intelligence, cloud computing, big data, and augmented and virtual reality to develop the next generation of simulation and training products. Supporting Canada as a leader in simulator training.

4) Space: *Vision 2025* welcomes the investment of the GOC in to LEO satellites.

- **Lunar Gateway:** Our commitment in *Exploration, Imagination, Innovation: A New Space Strategy for Canada* is \$2.05 billion over 24 years to participate in the NASA-led Lunar Gateway.
 - **Lunar Exploration Accelerator Program:** The investment includes \$150 million over five years in support for a new Lunar Exploration Accelerator Program. This program will help SMEs develop new technologies to be used and tested in lunar orbit and on the Moon's surface in fields that include artificial intelligence, robotics, and health.

LEOs: We announced a significant investment in Telesat to develop LEO technology - \$85m through the Strategic Innovation Fund for a \$215 million R&D project to develop the technology. We've also announced an MOU where we will provide up to \$600 million in services from the network.

- **Radarsat:** Canada's world-leading RADARSAT satellites have been providing scientists, government and industry with crucial and continuous data for a wide variety of uses.
 - Over 125 Canadian suppliers in 7 provinces helped build the RCM. The three spacecraft were assembled in the Montreal area by the prime contractor MDA, a Maxar company.

5) Investing/Procurement/Partnerships:

- Previous programming did not support the changing needs of the industry. When we introduced the Strategic Innovation Fund, **AIAC said “the program offers significant opportunities to Canadian aerospace firms of all sizes.”**
- To date, the **SIF** has contributed approx. \$2 billion to 64 projects, leveraging an investment of \$43 billion and helping Canadian innovators create and maintain nearly 67,000 jobs.
- This includes almost \$50 million to the AIAC to help build the aerospace ecosystem.
- Since October 2015, \$750 million in funding to support the aerospace and space sectors through the department’s innovation programs, leveraging approximately \$10.5 billion in total project costs.
- **Trade and export markets:** Our support includes negotiating access to markets, particularly for export-oriented industries like aerospace – 75% of products are exported, and Canadian companies have exported to over 190 countries on six continents. We are the only G7 nation that has free-trade agreements with all other G7 countries, and preferential access to almost two-thirds of the global economy through CETA, the CPTPP, and the new NAFTA.
- **SIF Stream 5:** This is the fifth stream and is focused on supporting national ecosystems. It will support large-scale initiatives that create high-impact collaborations to support innovation.
 - We are investing in national innovation ecosystems that are bringing together Canada’s best companies, researchers and incubators. Together, we will build on our many strengths to accelerate commercialization, develop new technologies, scale up businesses.
 - Funding under this stream will be awarded to not-for-profit organizations or for-profit corporations that lead collaborations with SMEs, large corporations, academia, not-for-profit organizations, and accelerators/incubators.
 - It is expected that successful projects will result in the commercialization of new and improved products, processes or services; more research and development; and more highly skilled jobs for Canadians.
 - Our support has been further affirmed by Exploration, Imagination, Innovation: A New Space Strategy for Canada. Canada’s commitment of \$2.05 billion over the next 24 years to participate in the NASA-led Lunar Gateway forms the cornerstone of Canada’s future in space.