

Canadian strategic venture capital for dual-use technology

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Introduction and background

With global free trade under pressure and geopolitical tensions on the rise, Canada is facing a once-in-a-generation crisis. The Prime Minister clearly stated in his mandate letter that “we must redefine Canada’s international, commercial, and security relationships” and that “we need to develop a defence industrial policy that secures Canada, fulfills our responsibilities to our allies, and helps build our economy” (Government of Canada, May 21, 2025).

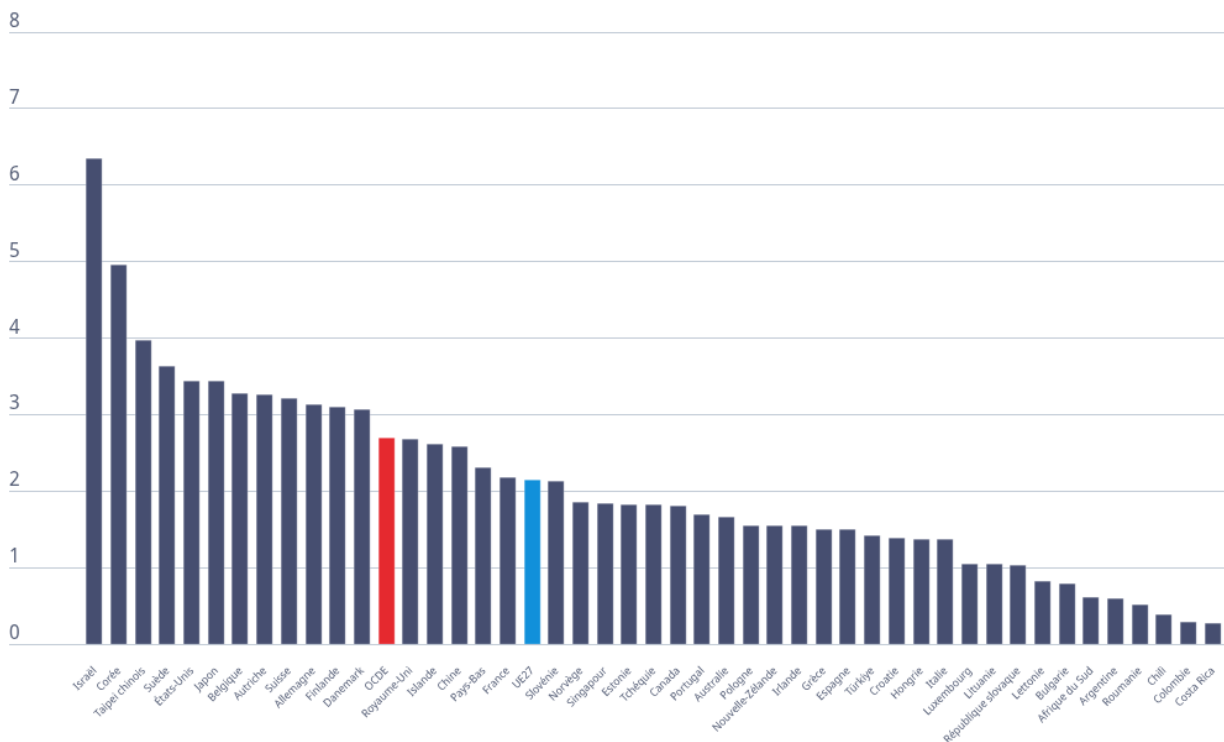
As part of this approach, Canada must stimulate local innovation in critical sectors to reach its defence targets and support jobs and the economy in the long term. This essay posits that dual-use technology has a major role to play: the commercialization of these strategic projects through Canadian funding will galvanize the research and development (R&D) sector for both civilian and military innovations, thus reducing Canada’s economic and security dependence, specifically on the United States.

As a result, Canada should increase its defence spending and strengthen the competitiveness of its economy by developing its own high-value-added technologies. While Canada has abundant natural resources and is renowned for its technological expertise, several pain points prevent it from reaching this goal.

First, Canada has the second-lowest R&D investments of all the G7 countries. Resources invested in R&D dropped from 1.9% of its GDP in 2000 to 1.8% in 2023, while this figure increased in all other G7 countries (Council of Canadian Academies, 2025). This level of investment is substantially less than the OECD average of 2.7% (OECD, 2025).

Dépenses intérieures brutes de R-D en pourcentage du PIB

%, 2023 ou dernière année disponible



Source: OCDE, Principaux indicateurs de la science et de la technologie, septembre 2025, <https://oe.cd/msti>

Source: OECD, 2025

Innovation development is also slowed down by the lack of Canadian venture capital. This “powerful innovation engine for economic growth, playing a critical role in job creation, productivity gains and competitiveness” (Business Development Bank of Canada, 2025) is even more vulnerable as a large portion comes from foreign investors. In 2024, only 22% of all VC dollars invested involved solely Canadian investors, while 40% involved American investors (Business Development Bank of Canada, 2025). As tensions grow with the United States, this reliance on American investments puts Canadian innovation in jeopardy.

Another challenge arises from the commercialization of new Canadian technologies. Greater public-private collaboration is required to support local innovation and encourage larger-scale adoption (Council of Canadian Academies, 2025).

In addition to these issues, there’s also the matter of fulfilling our NATO commitments, namely to increase our military budget to 2% of the GDP by 2030, then 5% by 2035 (NATO, 2025). The Department of National Defence (DND) has not, however, been able to spend its entire budget in recent years. As noted by the Office of the Parliamentary

Budget Officer, “there was a cumulative shortfall of \$18.5 billion between planned and actual capital spending over 2017-18 to 2023-24” (Fecteau, 2025, p. 7).

Canada must correct these deficiencies to ensure its prosperity and security. There are already some initiatives in place, like the IDEaS program and the BOREALIS agency, but they face structural challenges. The government calls the federal ecosystem “complex to navigate” for innovators (Department of National Defence, 2026), with more than 130 innovation programs, and the recent evaluation from IDEaS pointed to a lack of strategic direction and connections between partners (Department of National Defence, 2023). This lack of coordination hinders an effective and adequate response.

Policy options and recommendations

In light of these observations, this essay puts forward that priority should be given to dual-use innovations and increased Canadian VC via a strategic fund and targeted tax incentives for VC investors. Dual-use technology opens the door to leveraging research and manufacturing beyond initial military and civilian goals (Martins & Ahmad, 2020), making this type of technology of key interest to Canadian industry in today’s world.

This paper also proposes that DND and Natural Resources Canada (NRCan) partner with businesses on dual-use technology projects, facilitating relationships and communications between the different links in the value chain so as to fast-track processes and better align projects with national strategic directions.

This public policy could be implemented by the new Defence Investment Agency (DIA).

Recommendation 1: Targeted tax incentives for dual-use VC

Canadian investors should make greater commitments to strategic local innovations, particularly to new dual-use technologies (artificial intelligence, quantum computing, cyber security, aerospace, etc.) Incentives would help to develop critical technology and decrease dependence on foreign capital in critical sectors of our economy.

The following measures should be implemented to fast-track Canadian VC in dual-use innovation:

- A 30%¹ refundable tax credit for any VC funds that dedicate more than 50% of their portfolio to “certified strategic” technologies (see Recommendation 2)
- Complete exemption for capital gains from successful resales of strategic investments

Expected impact: Dual-use VC becomes more lucrative than classic VC, attracting more Canadian investors.

Recommendation 2: Federal funds for public-private partnerships

Developing dual-use innovations requires the active involvement of the private sector, an indispensable condition for meeting Canada’s strategic objectives for defence. We must leverage public-private partnerships if we want to transform our industry and economy.

Aligning investments with national defence and security priorities requires rigorous oversight of local innovations. Federal funds for public-private partnerships guarantee that every dollar invested targets federal objectives and NATO commitments, while optimizing how we use the natural, industry and human resources available.

To this end, the following measures should be established:

- A Canadian strategic venture capital fund that specializes in dual-use technologies
- A 1:2 matching mechanism, where the federal government invests one dollar for every two private dollars²
- Mandatory joint investment, in which NRCan and/or the DND must invest at least 20% in any dual-use technology project for access to the Canadian strategic venture capital fund³
- A “strategic” certification for projects deemed critical, which gives priority access to the Canadian strategic venture capital fund

Expected impact: The matching fund will attract more private investment, driving the development of dual-use technologies. By partnering with NRCan and DND, private investors will have guaranteed clients (reducing VC risk). A certification system will ensure that projects of national strategic value can get priority access to benefits.

¹ The 30% rate aligns with the CRIC tax credit recently adopted in Quebec (Ministère des Finances du Québec, 2025) and the federal SR&ED tax credit (15% or 35% based on criteria). (Canada Revenue Agency, 2023)

² Managed by the BDC in collaboration with the Defence Investment Agency

³ Via the IDEaS program, providing a clearer strategic target

Recommendation 3: National platform for strategic synergy

To leverage the full potential of dual-use technologies, researchers, industry, investors and the government need a better, more robust way to communicate.

To this end, the following measures should be established:

- A digital platform for Canada's strategic synergy: a space where priority calls for tenders and DIA operational needs can be published in real time, projects can be submitted online, stakeholders can be automatically connected via AI and partners can hold virtual meetings
- Two annual conferences in two major Canadian cities (to define federal strategic directions and offer in-person networking opportunities for stakeholders)

Expected impact: Faster funding of strategic projects and optimal stakeholder coordination, in alignment with national priorities

Analysis and conclusion

In a rapidly shifting global order, economic and geopolitical instability means Canada must make some major changes, and fast. The only way to get all the actors and sectors involved in achieving these national objectives on the same page is through a cohesive strategy. The public policies proposed are built on greater Canadian VC in dual-use technologies, a key sector for strategic autonomy. The three recommendations work in synergy, creating a virtuous cycle: tax incentives fast-track private investment, partnerships lock in projects and the platform connects stakeholders for seamless execution.

There are many critical technologies with dual-use potential, such as AI, aerospace, telecommunications, biotechnology and quantum computing. For the Chinese government, the integration of dual-use technologies is a way to speed up military modernization efforts and cut costs and reduce risks related to developing and producing military technology and equipment (Blitzinger, 2021, p. 11). The European Union also recently made dual-use technology development a strategic priority (European Commission, 2025).

Dual-use technology is a major strategic opportunity for Canada, which already boasts multiple centres of excellence in technology and abundant critical natural resources (Government of Canada, 2025). By coordinating how its strengths are leveraged, Canada can not only boost its economic independence, but also stake out its spot as a global leader in critical technologies, while honouring its commitments to its allies.

Canada has a unique opportunity here: by implementing an ambitious, capacity-building national policy, it can transform its current assets into a long-lasting competitive advantage.

Mediagraphy

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