



# Shaping the Future of a Nation Through Science, Technology, and Innovation

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According to the World Economic Forum, research and innovation is a major contributor to enhance economic development and improve societal well-being for the citizens of a nation. This presentation will consider national science, technology, and innovation (STI) agendas, the roles and responsibilities of the private sector including government support to this sector. Two strategies involving direct or indirect support are often implemented here.

Government has primary responsibility to support basic/fundamental and also applied research in academia, with potential contributions from industry, foundations, and philanthropists. Some governments provide funding to government research labs which, in addition to engaging in research and innovation, undertake work in support of the regulatory functions of governments.

From a policy perspective, governments also may establish programs, initiatives, priorities (e.g. climate change, environmental sustainability) and tools(instruments) to benefit research and development. This presentation will describe Canada's strategies towards positioning the country more advantageously in comparison with other nations. This includes recent bold initiatives such as the Next Frontier Research Fund (NFRF), Human Resources to provide high value scholarships to Canadians and foreigners, as well as a range of Research Chairs. And Canada has been a trailblazer in creating the Canada Foundation for Innovation years ago to provide infrastructure support for the research to be pursued.

Finally, despite a disproportionate number of top quality researchers, as well as benchmarking demonstrating the high significance, impact, and outcomes of the research contributions on a global basis, for many years Canada was a poor performer in competing for major benchmarked international awards and prizes. To address this deficiency the Global Excellence Initiative (GEI) was created in 2013, and Canada's success in the first decade has increased dramatically, The GEI has become a springboard for success on a global scale.