

## Science and Technology in Korea

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### 1. Korea: S&T Opportunities for Canada

Based on Korea's strategic plans the following core technologies have been identified as being essential for facilitating the country's continued economic growth, realizing the goal of becoming a world leader in S&T, and helping to cope with social change.

- Information technology in order to establish the basis of a knowledge based economy.
- Life sciences and medical technology to improve quality of life
- Environmental technology to respond to pollution concerns (air, water, waste management)
- Materials/megatronics as a basis for scientific developments in other fields (nanotechnology, MEMS, robotics)
- Aerospace (space science/aviation).
- Energy technology (fuel-cells, nuclear, etc.)

As Korea decides to become a player on the world stage and part of an international S&T network, the nation's laws, policies and institutions require reforms and thus would benefit from exposure to Canadian personalities, facilities and their experiences. For example, as the National Innovation System is put in place to efficiently facilitate new strategic R&D, Korea must grapple with how to clarify, streamline and simplify its diverse tax and financial system to encourage R&D expenditures.

The Korean education system has also come under fire in 2001/2 and also needs to learn from other nations how best to proceed if it is to be the foundation for future generations of Korean scientists and engineers.

There is a strong push for Korea to globalize. Canada is not doing enough to make itself visible as a likely international partner. Several countries were mentioned in Korea's long-term development plan called, Vision 2025 (see section 4). There are countries with whom Korea has close relations, Canada was no mentioned among them.

With respect to bilateral S&T relationships, the Korean government favours countries, that it has agreements with, leaving many institutes in a position where they must choose partners from a select pool of countries in order to secure central funding from Ministry of Science and Technology (MOST) and its affiliated agencies. Currently Canada and Korea are weighing options for an appropriate mechanism that would encourage more collaborative R&D between the two countries.