

## NUCLEAR TECHNOLOGY IN CANADA: THE BENEFITS

**Nuclear technology reaches directly into Canadian homes through health care, product advances, and knowledge-based careers.** Most of us know someone – often a family member – who has been diagnosed with cancer or a cardiac

condition, and most of these patients benefit from nuclear technology. Canada pioneered the use of radioisotopes to treat cancer, and remains a world leader in medical imaging, radiation diagnosis and therapy. Irradiation sterilizes our bandages and other medical supplies and reduces the likelihood of food poisoning. These medical and health advances are being shared worldwide every day.

### ***Did you know?***

Canada provides over half of the global supply of medical isotopes for nuclear medicine. They are used in over 50,000 procedures per day – 5,000 of those in Canada.

Canada has 22 CANDU power reactors generating electricity cleanly and safely. In Ontario, nuclear accounts for more than half of the province's electricity.

Saskatchewan has the world's largest known high-grade natural uranium deposits.

Neutron beam testing continually improves the materials and design of our manufactured products – benefitting us directly as consumers and indirectly by making our industrial and consumer goods more competitive. Through our exports of goods and services, these benefits reach people worldwide.

Nuclear research and development facilities, located in public and corporate facilities, at joint-venture laboratories and at universities, provide **learning environments for scientists and engineers** – not just those from the nuclear industries, but in many specialties from chemistry and physics to medicine and the environment. This means high-knowledge opportunities, not just for young Canadians, but for our partners around the world.



**Nuclear generates about 15% of Canada's electricity and over 50% of Ontario's power.** The economic benefits, just from refurbishing the existing reactors in Ontario, will support almost 25,000 jobs for a decade from 2014 to 2024.

**The Canadian Nuclear Association is 71,000 Canadians who work to share the benefits of nuclear technology with other Canadian families and across the globe.** We are a \$6.6 billion per year industry generating \$1.5 billion in federal and provincial revenues from taxes. We represent 150 firms and \$1.2 billion per year in exports.

