Uranium fuels the world's nuclear power plants.

20% of the world’s production of uranium is mined and milled in northern Saskatchewan.

2nd largest uranium producer in the world

$1.9 B in 2015

87% exported for use in foreign nuclear power reactors

13% used for fuel Canadian nuclear power reactors

Yellowcake is refined at Blind River, Ontario, to produce uranium trioxide.

The uranium mining industry is the largest private employer of Indigenous people in Saskatchewan.

At uranium mills, ore is processed into concentrate, "Yellowcake".

Uranium is used to fuel CANDU nuclear reactors. UF₆, is exported for enrichment and use in foreign light water reactors.

At plants in southern Ontario, fuel pellets are loaded into tubes and ascended into fuel bundles for CANDU reactors.

400 kg of CO₂, 2.6 barrels of OIL, 350 m³ of GAS

At Port Hope, Ontario, uranium ore is converted to uranium trioxide.

Uranium mining is the largest producer in the world for production of uranium.

Yellowcake is re-refined at Blind River, Ontario, and used to fuel CANDU nuclear reactors.

The nuclear industry in Canada contributes $6 B annually.

60,000 jobs

$6 Billion

The nuclear industry in Canada contributes $6 B to the Canadian economy and provides 60,000 jobs.

6,000 direct jobs

6,000 indirect jobs

At plants in southern Ontario, fuel pellets are loaded into tubes and ascended into fuel bundles for CANDU reactors.

At Port Hope, Ontario, uranium ore is converted to UF₆.

UO₂ is used to fuel CANDU nuclear reactors. UF₆, is exported for enrichment and use in foreign light water reactors.

18 CANDU reactors at 4 nuclear power generating stations.

$25 B planned investment over 15 years to extend the life of 10 reactors in Ontario.

Leader in nuclear research and technology, exporting Canadian-developed CANDU reactor technology.

Nuclear science has broad applications: materials testing, pharmacology, nuclear medicine, food and agriculture, wastewater treatment, and environment protection.

Strong nuclear science and technology presence across Canada: 6 research reactors and a tokamak support R&D, and produce isotopes for medical and industrial applications.

Radioactive waste is produced throughout the nuclear fuel cycle and safely managed in licensed storage facilities:

- High-level waste - Nuclear fuel waste
- Low and Intermediate-level waste - Uranium mine and mill tailings waste

Initiatives underway for long-term management of radioactive waste include:

- Deep geologic repositories - suitable for all waste categories;
- Near-surface mounds - suitable for LILW and some ILW, and;
- Tailings management facilities - specially designed for tailings.

All in keeping with internationally accepted approaches and best practices.

$1.9 B in 2015

87% exported for use in foreign nuclear power reactors

13% used for fuel Canadian nuclear power reactors

© Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources, 2017
Governance Framework

**FEDERAL**

Nuclear energy is under federal jurisdiction.

**Key Federal Legislation**

- Nuclear Safety and Control Act
- Nuclear Fuel Waste Act
- Nuclear Liability and Compensation Act
- Nuclear Energy Act
- Export and Import Permits Act

**Canadian Nuclear Safety Commission (CNSC)** regulates the use of nuclear energy and materials to protect health, safety, security and the environment; to implement Canada’s international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical and regulatory information to the public.

The CNSC is an independent administrative tribunal set up at arm’s length from government.

**Provincial & Territorial**

Provinces and territories have ownership over the natural resources and provincial grids that lie within their boundaries.

**Province’s Role**

- Provinces choose approaches and technologies for electricity generation based on their natural endowments and regional requirements.

**Policy Makers**

- Natural Resources Canada is the lead department on behalf of the Minister of Natural Resources.
- Other federal departments also contribute to policy development.

**Key Federal Legislation**

- Uranium
- Nuclear Energy
- Nuclear Research and Development and Science and Technology
- Civil Nuclear Liability
- Radioactive Waste Management

- Canada’s 1996 Policy Framework on Radioactive Waste
- Nuclear Non-Proliferation Policy
- Non-Resident Ownership Policy in the uranium mining sector

- Uranium mining, milling and processing industry
- Hydro-Québec
- Atomic Energy of Canada Limited
- Major Radioactive Waste Owners

- Responsible for financing and management of facilities required for the waste

**Nuclear Sector**

- A number of companies stretching along the Quebec City-Windsor Corridor and in others locations across Canada

**National Regulator**

Canadian Nuclear Safety Commission

Regulates Nuclear Energy

**Provincial & Territorial**

Exploration

Management of Natural Resources

Production*

**Electricity Supply**

Provinces have ownership over the natural resources and provincial grids that lie within their boundaries.

**Key Policies**

- Uranium
- Nuclear Energy
- Nuclear Research and Development and Science and Technology
- Civil Nuclear Liability
- Radioactive Waste Management

- Canada’s 1996 Policy Framework on Radioactive Waste
- Nuclear Non-Proliferation Policy
- Non-Resident Ownership Policy in the uranium mining sector

- Uranium mining, milling and processing industry
- Hydro-Québec
- Atomic Energy of Canada Limited
- Major Radioactive Waste Owners

- Responsible for financing and management of facilities required for the waste