

# **Nuclear Materials and Fuel Cycle Services Sources, Inventories and Stockpiles Volume II**

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**NUCLEAR MATERIALS AND FUEL CYCLE SERVICES  
SOURCES, INVENTORIES AND STOCKPILES**

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In the 1950s, the use of radioactive elements in generating electricity grew in many of the developed countries as well as some developing countries. Installed nuclear capacity rose from 1 gigawatt in 1960 to 100 gigawatts by the end of the 1970s. Since nuclear power plants also generated key ingredients for producing nuclear weapons, many countries kept their nuclear research under strict government control.

This report explores different reactor systems and their material requirements. It then goes on to give a description of the technical aspects of the nuclear fuel cycles of the aforementioned systems.

"The CANDU Fuel Cycle is considerably different from the LWR fuel cycle and the Magnox fuel cycle as shown in Figure V-4. Mining and Milling is still required to produce U308, but fluorination and enrichment are not." (p V-3)

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