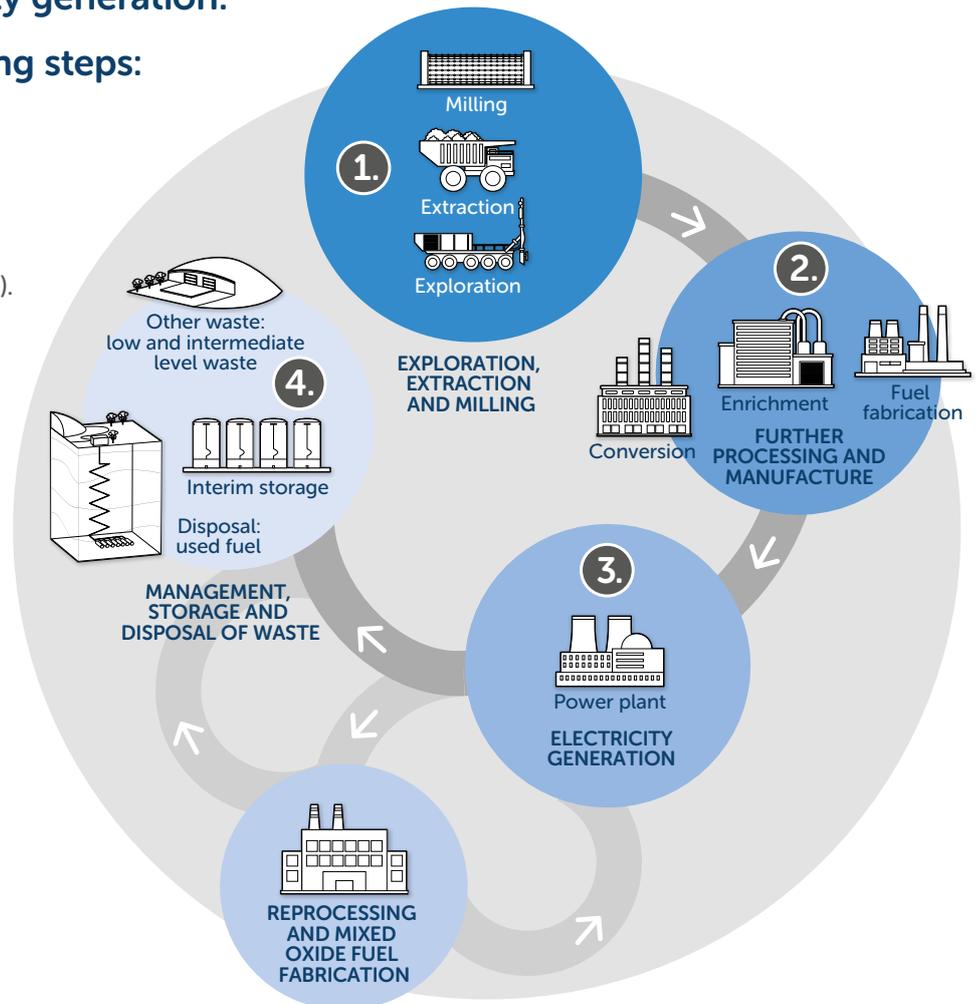


What is the Nuclear Fuel Cycle?

The nuclear fuel cycle, is the progression of activities to make and manage nuclear fuel for electricity generation.

It consists of the following steps:

1. Exploration, extraction and mining of uranium.
2. Further processing and manufacture (conversion, fuel fabrication and enrichment).
3. Electricity generation (power plant).
4. Management, storage and disposal of waste.



South Australia already participates in the nuclear fuel cycle through the exploration, extraction and milling of uranium.

South Australia hosts:



25% of the **world's uranium resources.**



80% of **Australia's uranium resources.**

OLYMPIC DAM is the **SINGLE LARGEST** uranium deposit in the **WORLD.**



Top three uranium producers:



Kazakhstan



Canada



Australia

= **64%** of world uranium production.

SA's history with uranium:

- 1906:** Uranium first discovered at Radium Hill.
- 1930s:** Uranium ores mined at Radium Hill and Mount Painter.
- 1954:** Radium Hill mine officially opened.
- 1958-62:** Processing plant operational at Pt Pirie.
- 1969:** Uranium discovered at Beverley.
- 1972:** Honeymoon uranium deposit discovered.
- 1975:** Olympic Dam uranium deposit discovered.
- 1988:** Uranium production began at Olympic Dam, first convoy of yellowcake from Olympic Dam.
- 2000:** Mining begins at Beverley.
- 2005:** Four Mile uranium deposit discovered.
- 2011:** Insitu recovery starts at Honeymoon uranium mine.
- 2015:** Four Mile uranium mine opened.

1930s
Uranium ores mined at Radium Hill and Mount Painter.



1988
Uranium production began at Olympic Dam, first convoy of yellowcake from Olympic Dam.



5 APPROVED URANIUM MINES IN SA.

Australia has seven approved uranium mines with five in South Australia.



Olympic Dam



Beverley



Beverley North



Four Mile



Honeymoon

Exploring the opportunities.

With South Australia's historical involvement in the nuclear fuel cycle and a strong background in manufacturing and associated industry, a Royal Commission was established to investigate the opportunities that the other stages of the nuclear fuel cycle might offer.

The Commission explored both the opportunities and risks of greater South Australian involvement in further processing to convert mined uranium into fuel for use in nuclear power plants, nuclear power generation, and the waste storage and disposal phases of the nuclear fuel cycle.

Every South Australian has an opportunity to learn more about the nuclear fuel cycle by discovering the facts, understanding the choices, and providing their views on the Royal Commission's Report. This is a discussion about the state's future that all South Australians can have, and will help guide the Government's decision making on the next steps.

Visit nuclear.sa.gov.au to find out more.



Government of South Australia