Protecting the Earth from global warming

Nuclear fuel cycle

TEPCO **approaches**

Terminology

Reprocessing plant
A facility for reprocessing spent fuel to recover uranium and plutonium from it. Japan Nuclear Fuel Limited (JNFL) is presently conducting a test run of Japan's first commercial reprocessing plant in the city of Rokkasho-mura in Aomori Prefecture.

MOX fuel fabrication plant
Recovered uranium and plutonium are made into MOX (mixed-oxide) fuel. At present, JNFL is in the process of making the necessary preparations for the construction of Japan's first commercial MOX fuel fabrication plant.

Interim storage facility
Some of the spent fuel is stored at interim storage facility. At present, Recyclable-Fuel Storage Company, which was established jointly by TEPCO and Japan Atomic Power Company, is making preparations for constructing a recycled fuel storage center for safe storage of spent fuel.

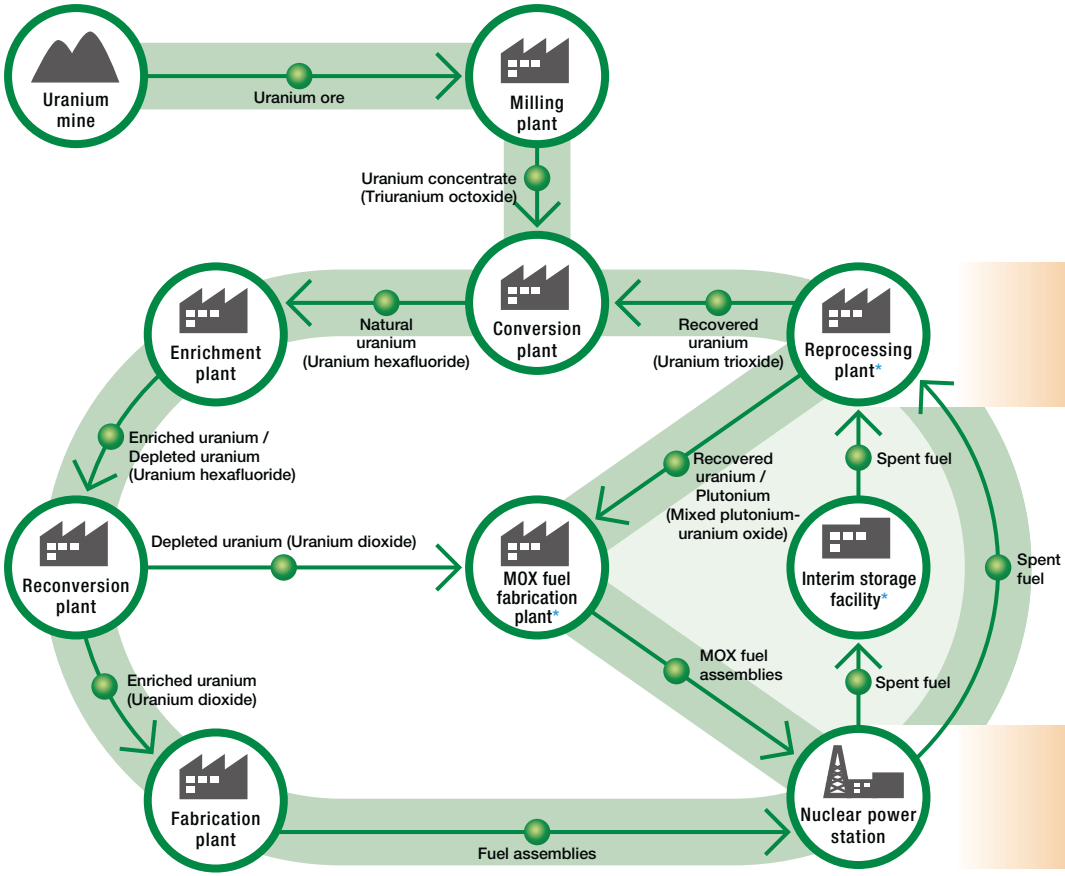
With the understanding of every person, we are promoting nuclear power generation

Nuclear power generation, which does not emit CO_2 in the power generation process, is an essential measure in addressing global warming issues. It also plays an important role in the aspect of assuring the energy security and stabilizing costs. We believe it is necessary to promote it with top priority on safety and the understanding of every person while rigorously managing radiation, radioactive waste, and other items.

The nuclear fuel cycle makes reuse of energy resources possible

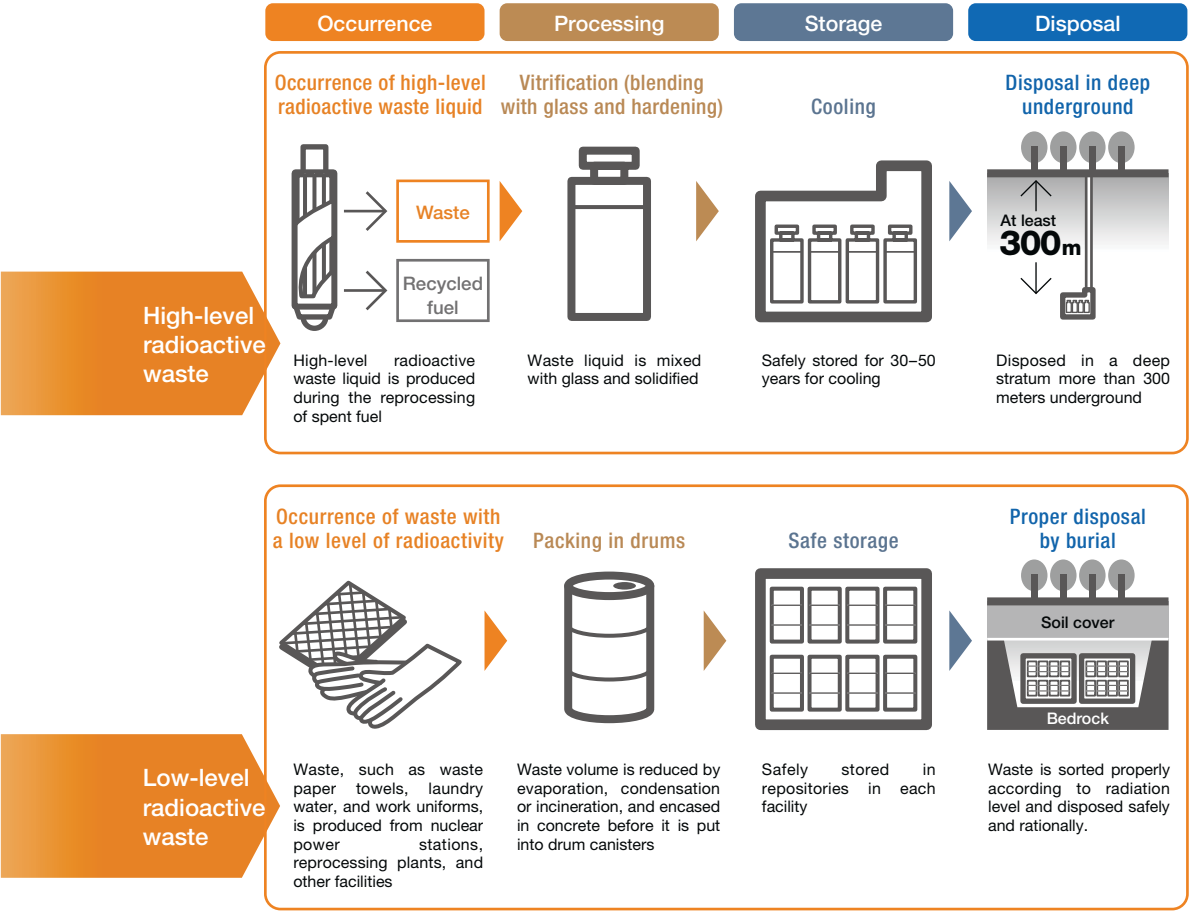
After the fuel is used at nuclear power stations, it still contains some uranium that did not undergo fission and some newly created plutonium. Reprocessed and recovered, this material can be used as fuel. The chain of operations enabling effective use of uranium resources is known as the “nuclear fuel cycle.” In resource-poor Japan, we aim to establish this nuclear fuel cycle in order to assure itself of a stable energy supply for the long term and properly process and dispose of radioactive waste.

Nuclear fuel cycle



To help prevent global warming, TEPCO is promoting nuclear power development with top priority on safety.

Management of radioactive waste



Proper management in correspondence with the level of radioactivity

Radioactive waste is divided into two basic categories: low-level and high-level. Each type is properly managed so that they will not harm people's life in the surrounding area.

Related information

Disposal of high-level radioactive waste

This task is assigned to the Nuclear Waste Management Organization of Japan (NUMO), which is pursuing work for selection of disposal sites with a view to commencing final disposal in the late 2030s.

Disposal of low-level radioactive waste

Low-level radioactive waste is further divided according to radioactivity level and buried in the manner stipulated for each category of low-level radioactive waste.

Some categories of waste are buried in a pit created on the ground or 50 m below the ground at the deepest. This method is already being implemented at the low-level radioactive waste disposal center operated by Japan Nuclear Fuel Limited (JNFL) in Rokkashomura, Aomori Prefecture.