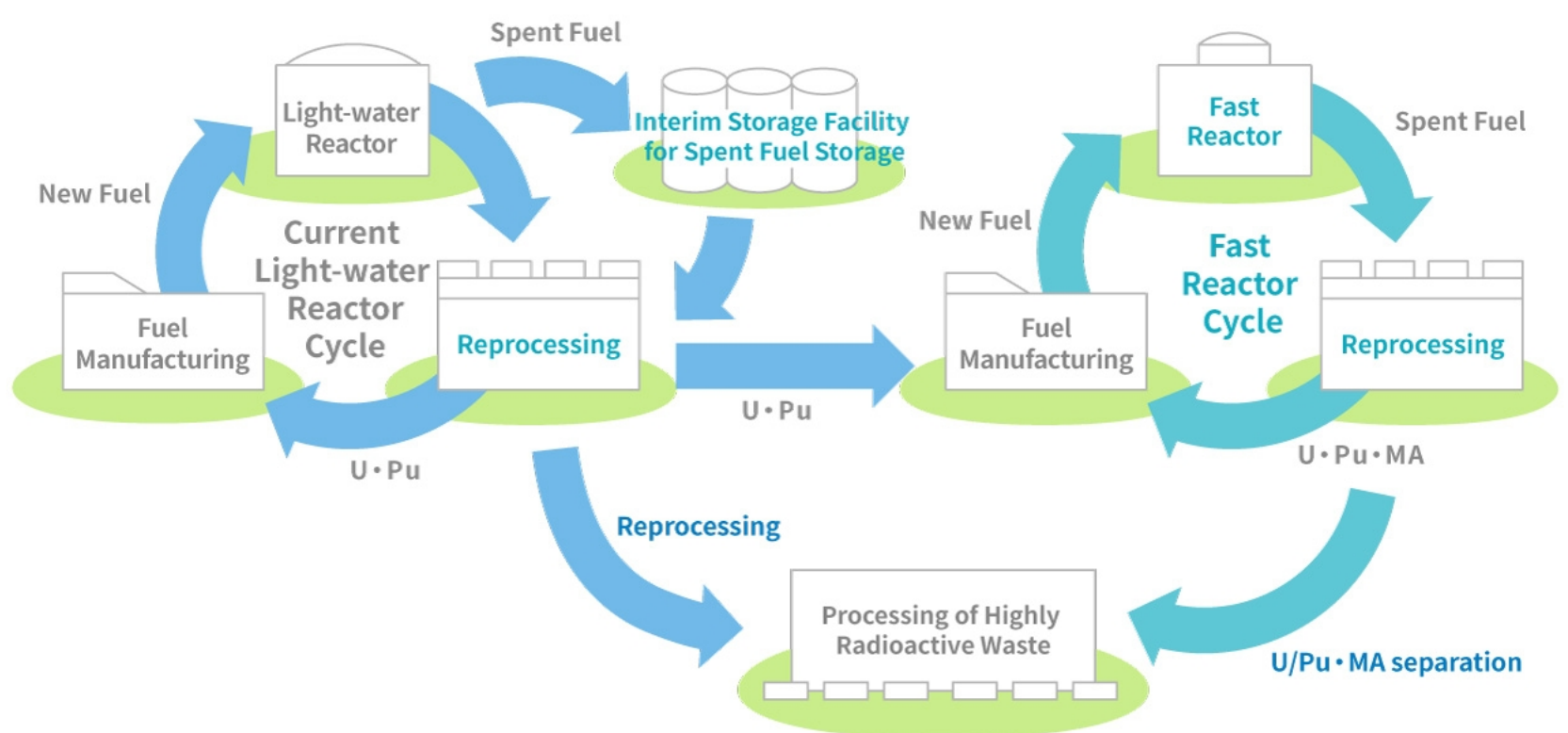


What is the nuclear fuel cycle?



The nuclear fuel cycle is the process for reusing fuel that has been used at nuclear power plants (spent nuclear fuel). Plutonium and uranium reprocessed from spent nuclear fuel are mixed and processed into mixed oxide (MOX) fuel, which is then reused for power generation in nuclear reactors.

Nuclear power generation produces high-level radioactive waste from the use of fuel. This radioactive waste can be disposed of as-is, but if reprocessed, it not only facilitates the effective use of resources, but also significantly reduce the volume of waste. In addition, high-level radioactive waste emits higher levels of radiation for long periods, but the nuclear fuel cycle has a number of potential benefits, such as reducing the impact of harmful components by separating them through reprocessing.

Nuclear fuel cycle facilities are currently being constructed in Rokkasho Village, Aomori Prefecture. The facilities include a uranium enrichment plant, reprocessing plant, low-level radioactive waste disposal center, and high-level radioactive waste storage management center.

Related Link

[Fuel Cycle](#) 