

The French nuclear fuel cycle's policy is based on two main principles

French Code of the Environment : reuse or recycling of waste must be a priority.

- Spare natural resources
- Limitate the impact on the environment of waste disposal

Principle of non-proliferation : keep the stock of plutonium steady by recycling it.

The French Nuclear fleet

Current French fleet of NPP

58 operating PWR :

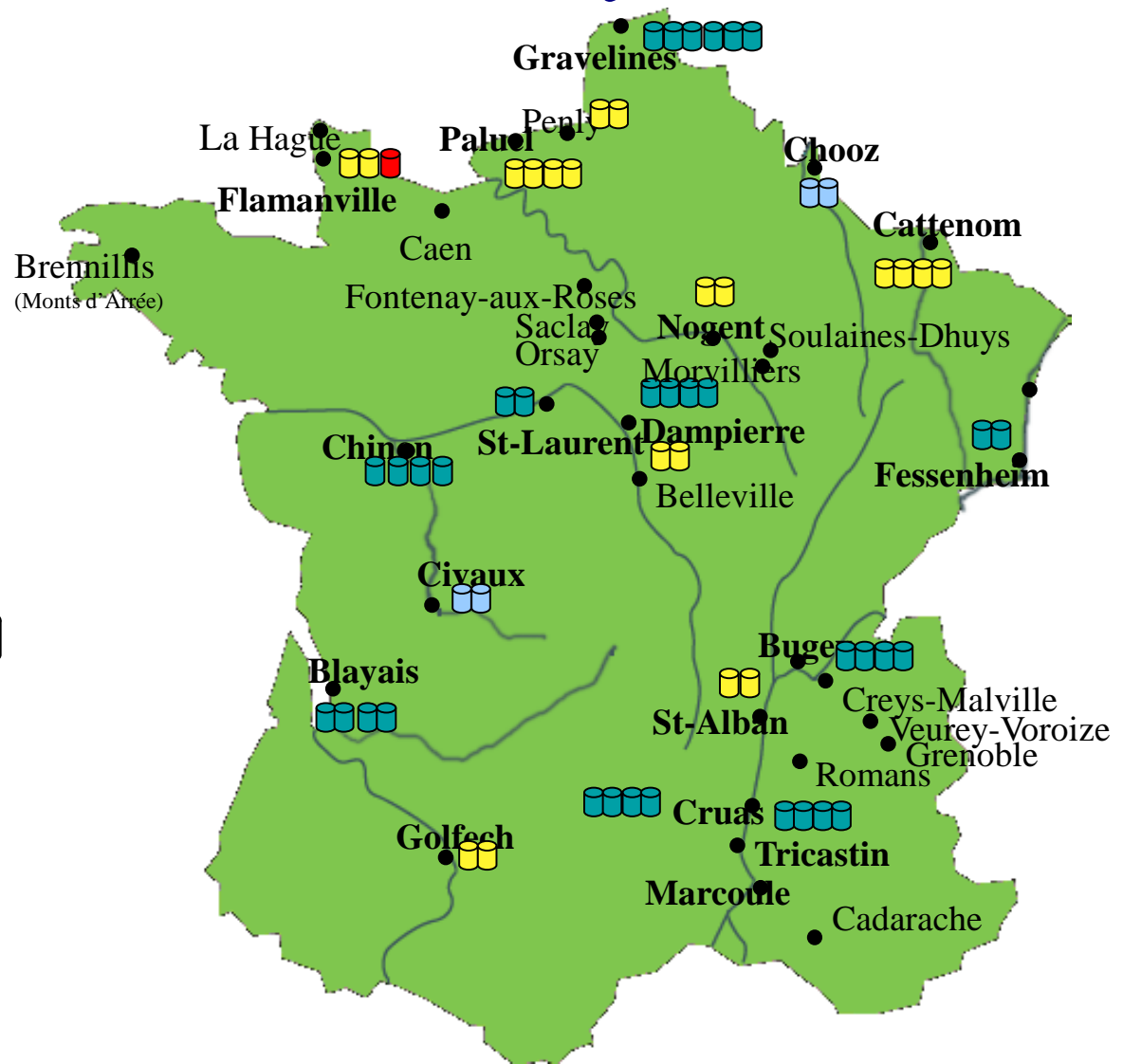
34 / 900 MWe 

20 / 1300 MWe 

4 / 1450 MWe 

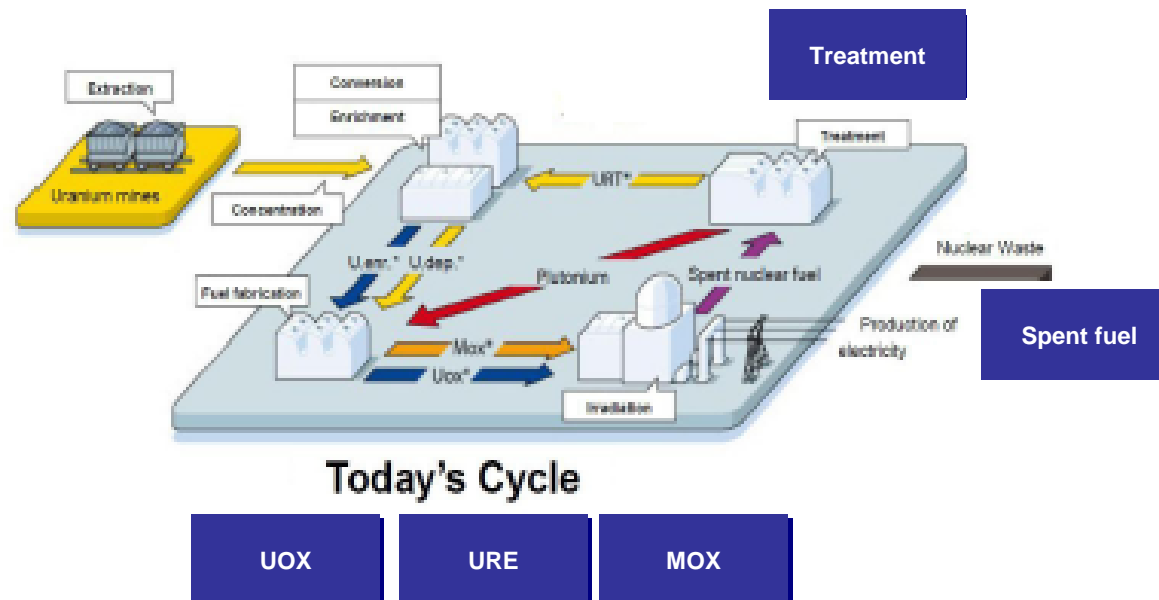
Projects :

1 EPR in construction 



The French nuclear fuel cycle

Recycling to spare natural resources



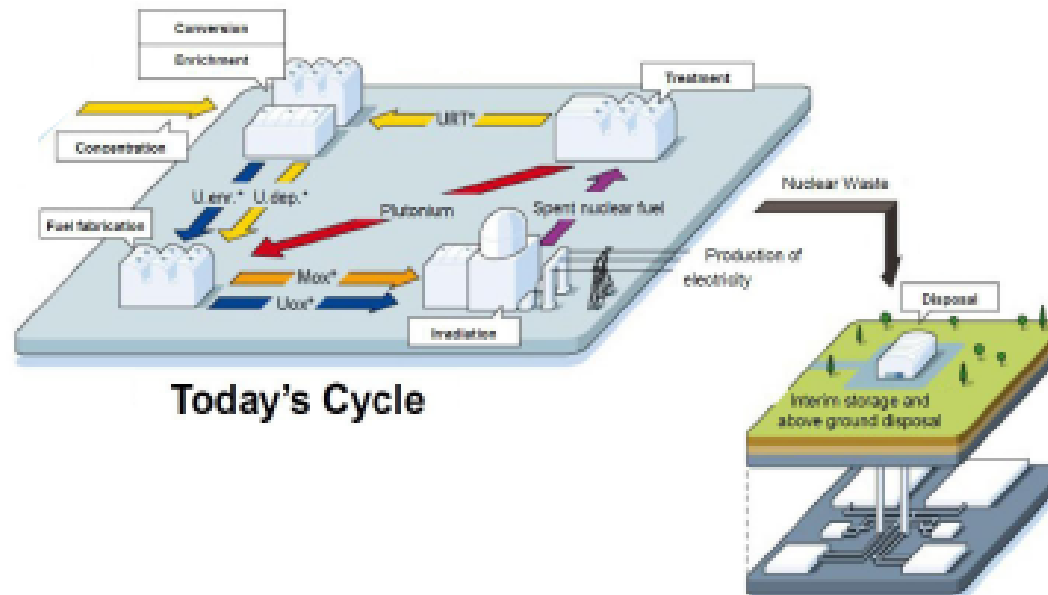
**Full recycling enables to save up to 25% of natural uranium consumption.
In France, this provides now an economy of 17%.**



**Equivalent of 11 reactors among 58 fully independent from natural uranium
22 can use MOX fuel (up to 1/3 of the assemblies)
4 can use re-enriched reprocessed uranium (all assemblies)**

The French nuclear fuel cycle

Recycling to facilitate nuclear waste disposal

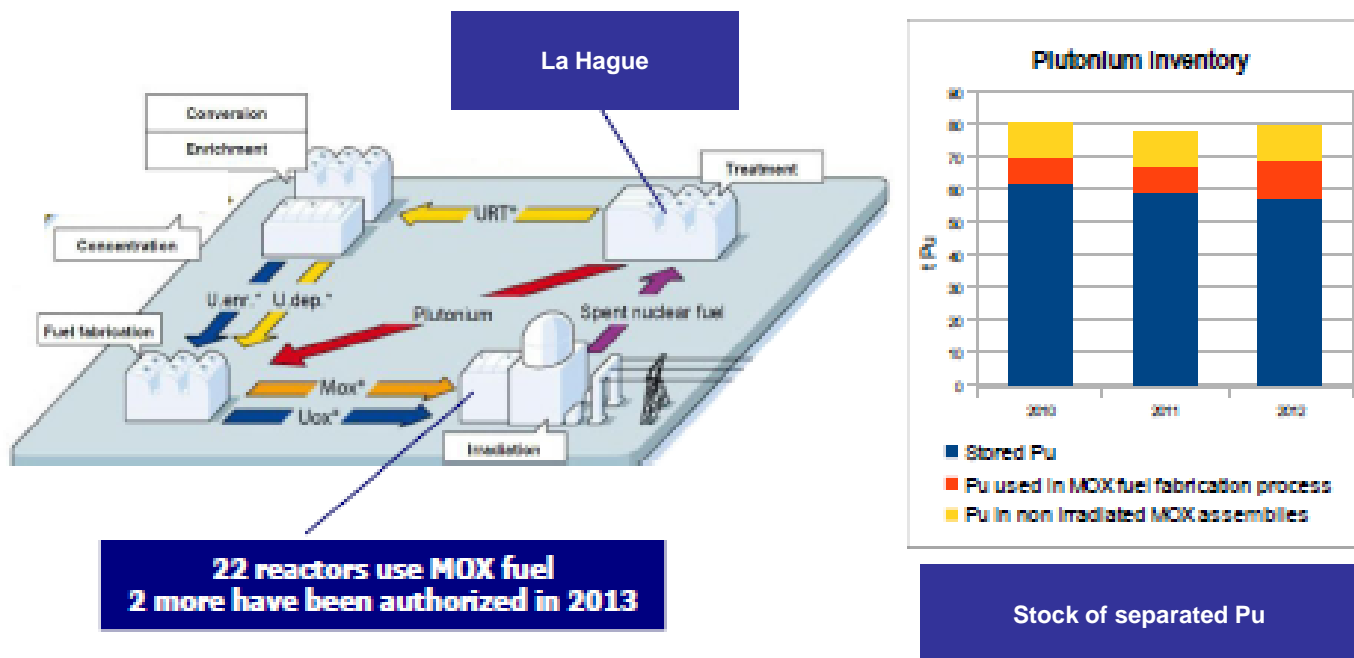


Technical advantages of recycling :

- Adequate conditioning for storage and disposal**
- Reduced volume (division by 5) and heat loading**
- Long-term radiotoxicity (division by 10) drastically decreased**

The French nuclear fuel cycle

A policy in coherence with the non-proliferation principle



MOX needs are determined to minimize the stock of separated plutonium

MOX irradiation significantly degrades the isotopic composition of the remaining plutonium and thus the potential attractiveness for non-peaceful usage

French Nuclear Panorama



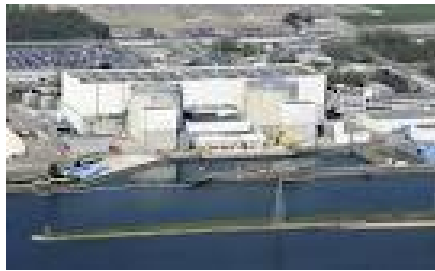
**La Hague
Reprocessing plant**



**MELOX - MOX fuel
fabrication plant**



MARCOULE – CEA – R/D lab



Fessenheim NPP



Paluel NPP



EPR Flamanville NPP



ANDRA Geological disposal lab



**Open door – Public Consultation
by law and by choice**