

## Background

- As shown in the assumption that the decommissioning of TRP will take about 70 years, the management of back-end issues needs a long period. TRP: Tokai Reprocessing Plant



## Back-end Roadmap

**Establish a long-term back-end prospect and policy (for about 70 years) for all existing facilities licensed by “Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors”**

### Main contents

- Decommissioning
  - RW processing & Disposal
  - Management of nuclear fuel material
  - Cost for Back-end Measures
  - Effort for streamlining and optimization
- The roadmap was published in December, 2018.
  - Based on progress of back-end measures, Back-end Roadmap will be reviewed as necessary.

## 【Facilities considered】

All existing facilities licensed by “Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors”.



**79 facilities**  
(as of Dec. 2018)

(Excluding 10 facilities handling radioisotope.)

## Promotion of Back-end Measures

(Policy for about 70 years)

- Decommissioning
- RW Processing & Disposal
- Management of nuclear fuel material



**Distribute to the 3 periods**  
**For each facility**

- **The 1<sup>st</sup> period ( - 2028, about 10 years)**
  - Period to implement back-end measures while giving priority to ensuring safety of facilities
- **The 2<sup>nd</sup> period (2029 – 2049, for about 20 years)**
  - Transitional period toward full-scale decommissioning through the implementation of the disposal of radioactive waste and the establishment of waste processing facilities
- **The 3<sup>rd</sup> period ( 2050 - , for about 40 years)**
  - Period to implement full-scale back-end measures toward completion

## Cost for Back-end Measures

- To estimate cost for decommissioning and RW processing & disposal.



**about 1.9 trillion yen**  
(for about 70 years)

## Effort for Streamlining and Optimization

- To discuss the policy on the development of technology and management system, etc.



# Back-end Roadmap 3

## JAEA Back-end Roadmap Target Facilities (79 Facilities)

(as of December 2018)

	Aomori	Ibaraki			Fukui	Okayama
	Aomori	NSRI (31 Facilities)	NCL (20 Facilities)	Oarai (18 Facilities)	Tsuruga	Ningyo
Reactor	Sekine Facilities (Mutsu)	JRR-2 JRR-3 JRR-4 NSRF FCA TCA STACY TRACY Radioactive waste treatment facilities		JOYO HTTR JMTR DCA	Fugen Monju	
Hot Laboratory	Research Building, Ominato Facility	RFEF BECKY WASTEF Hot-Lab Building Plutonium Research Building No.1 Radioactive waste treatment facilities  TANDEM Research Building No.4 Radioisotope Production Laboratory CLEAR Facility of Radiation Standards JRR-3 Experiment Building No.2 TPL Experimentation Building for Backend Technology Development FNS JRTE SGL Reactor Special Study Building Fuel Storage Uranium Enrichment Laboratory JRR-1	Pu-1 Pu-2 Pu-3 PWTF PWSF PWSF-2 Incineration Facility, UWSF, UWSF-2 CPF Building J Building M Building B Tokai Uranium Enrichment Facilities Safety Management Building Radiation Health Room Building of Calibration Facility for Radiation Monitoring Instruments Laundry EDF-1 Mock-up Room Building A	IRAF FMF MMF MMF-2 WDF AGF JMTR Hot Laboratory PFRF  Health Physics Laboratory Building Radiation Control Building Environmental Monitoring Building Sodium Analysis Building NUSF		Radioactive Waste Incineration Facility  Uranium Refinement and Conversion Facility  Enrichment Engineering Facility  Ore Testing Laboratory Dismantled Material Storage
Others			Tokai Reprocessing Plant	Waste management facilities		Uranium Enrichment Demonstration Plant

Facility name is displayed only for major nuclear facilities