Korea Research Institute of Decommissioning (KRID)
was established in **August, 2020.**

Establishment as Legal Entity

KRID **Korea Research Institute of Decommissioning**
(non-profit public-benefit research institute)

KRID was founded upon cooperation among the Korean government, 4 local governments (Busan, Ulsan, Gyeongsangbuk-do and Gyeongju), and 4 public corporations in Korea's energy sector (KHNP, KEPCO KPS, KEPCO NF and KEPCO E&C)

MOU Signing among 4 local governments (Apr. 2019)

The First Board Meeting (Sept. 2020)


Ground-breaking Ceremony for PHWR D&D Center (Pressurized Heavy Water Reactor Decontamination&Decommissioning Center) (Dec. 2023)

Milestones

- Apr. 2019 — Announcement of govt.'s strategies for fostering nuclear decommissioning industry
- Apr. 2019 — MOU signing among KHNP and local governments
- Dec. 2019 — MOU signing among public corporations
- Aug. 2020 — General meeting of founding members
- Oct. 2020 — Construction for KRID headquarters commenced(completion in 2026)
- Dec. 2023 — Construction for PHWR D&D Center commenced(completion in 2026)

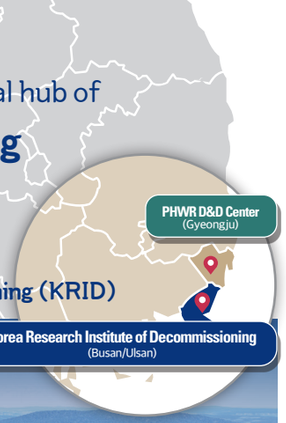
Mission Statement

Industry support platform for Korea's nuclear decommissioning industry and SME participation

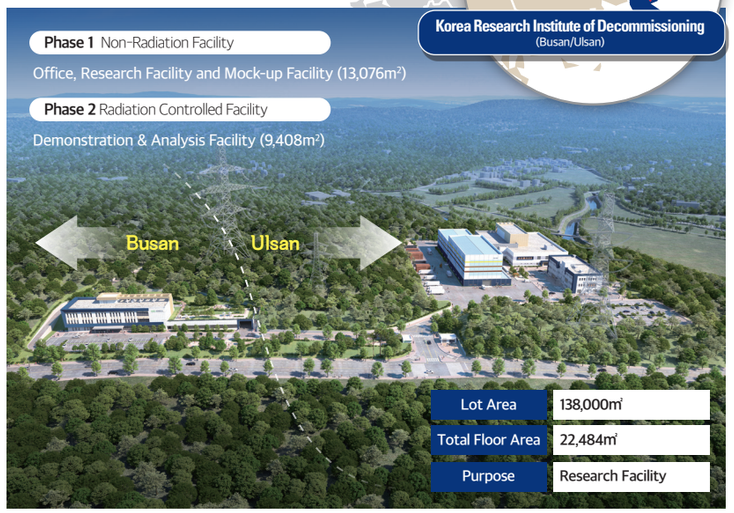
Vision	The world's top-tier research institute in nuclear decommissioning		
Mission	Advancing technologies for nuclear decommissioning, completing the whole cycle of clean nuclear energy		
Core Functions	Demonstration & Advancement of Decommissioning Technologies	Support for Nuclear Decommissioning Projects	Fostering Nuclear Decommissioning Industry
Implementation Strategies	**Building and sharing demonstration facilities** • Testing & demonstration of technologies and equipment • R&D for sophistication of technologies	**Analysis of D&D Radioactive Waste** • Radiochemical analysis services • Establishing and operating database	**Support for Commercialization** • Support for commercializing decommissioning technologies • Training facility for assessment of decommissioning processes

Guiding Korean Businesses into the Global Nuclear D&D Market

KRID envisions to rise as the global hub of
nuclear decommissioning technologies.



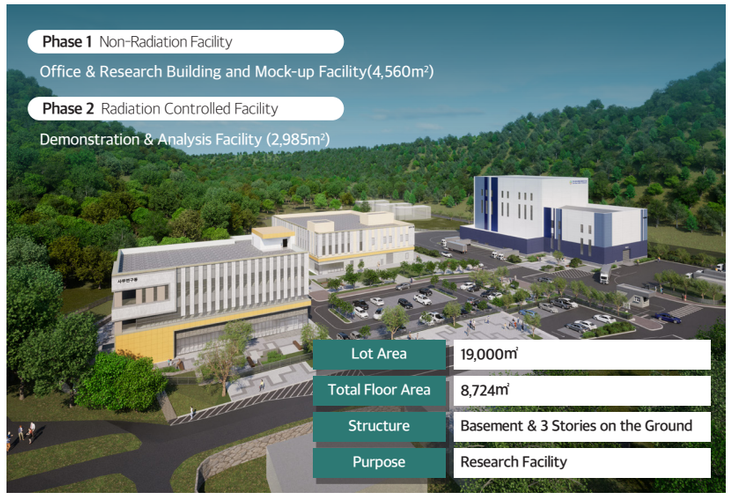
Korea Research Institute of Decommissioning (KRID)



Lot Area	44,500m²
Total Floor Area	4,878m²
Structure	Basement & 2 Stories on the Ground

Lot Area	93,500m²
Total Floor Area	4,154m² / 4,044m² / 9,408m²
Structure	Basement & 3//1/2 Stories on the Ground respectively

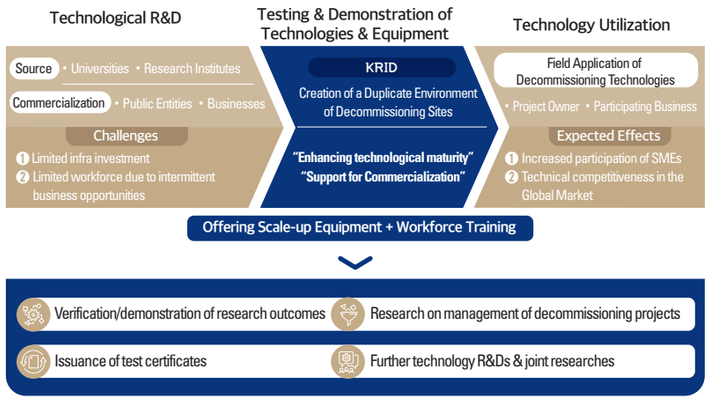
Pressurized Heavy Water Reactor Decontamination & Decommissioning Center



KRID will lead the pathway towards the
whole cycle of clean nuclear energy.

Demonstration and Advancement of Decommissioning Technologies

Creating a duplicate environment of decommissioning sites to ensure safe and cost-effective decommissioning



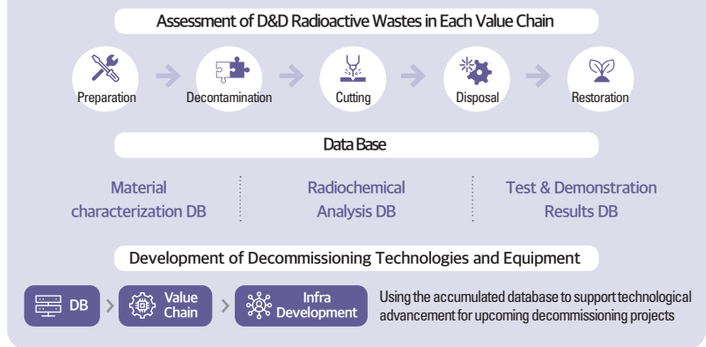
Support for Decommissioning Projects

1 Radiochemical analysis services
- Verification of R&D outputs
- R&D management in Radiochemistry
- Radiochemical analysis on LLW/ILW (Low level radioactive waste/ Intermediate level radioactive waste) decommissioning waste

+

2 Material characterization
- Construction of ILW(Intermediate level radioactive waste) handling hot cell and material characterization
- R&D support through establishment and operation of material characterization DB
- Analyzing primary system damages in operational NPPs, etc.

3 Building Database



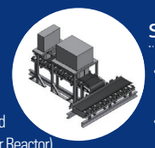
Fostering the Decommissioning Industry

KRID offers top notch technologies and equipment.

Testing & Demonstration Infra for Decommissioning

Decontamination

- Mock-up facility for primary system
- System decontamination process equipment (for PWR/PHWR - Pressurized Water Reactor/Pressurized Heavy Water Reactor)
- Concrete decontamination system
- Ultrasonic chemical decontamination system, etc.



Site Restoration

- Measuring and classification system for soil contamination level
- Contamination measuring system for large-components, etc.

Cutting

- Mock-up platform(PWR/PHWR) for activated structures
- Remote cutting and monitoring system
- High power laser cutting system, etc.

Waste Treatment

- Thermal trearment system for decommissioning composite hazadous wastes
- Vacuum induction and plasma torch melting systems for metal wastes
- Demonstration facility of volume reduction for radioactive concrete waste based on heating and grinding
- C-14/H-3 spent activated carbon thermochemical treatment system for PHWR

Characterisitic Evaluation of Decommissioning Waste

Hot Cell

- CNC lathe/mill
- High/low velocity precision cutter
- Dynamic/static UTM(Universal Testing Machine)
- EDM(Electrical Discahrge Machine)

Pre-treatment

- Automatic furnance system / electric furnace
- Automatic fusion machine
- Microwave digestion

Radiochemical Separation

- Automated sequential radionuclides separator
- Radiochemical treatment system, etc.

Radiochemical Analysis

- Alpha/Beta counting system
- HPGe(High Purity Germanium) Radiation Detector
- Alpha spectrometer
- Liquid scintillation counter, etc.

Training / Commercialization Support

Decommissioning Process Verification and Training

- Large-scale immersive visualization facility
- Virtual reality interface system
- Large-scale visual simulation and verification facility

KRID moves forward with the

local community.

Socio-economic Impact

KRID

Korea Research Institute of Decommissioning

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