



# National Presentation Republic of Croatia

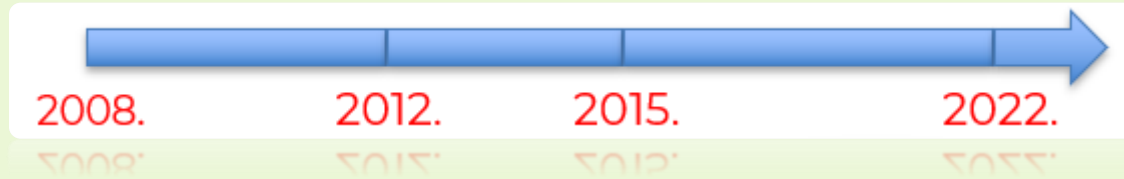
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Fund for Financing the Decommissioning of the Krško NPP

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# Fund for financing the decommissioning of Krško NPP

Evolution from a financial institution to the waste management organization



## Main responsibilities:

- Collection, preserving and increasing the value of assets for financing the preparation, review and implementation of the Krško NPP Decommissioning and RW and SNF Disposal Programme – **since 2008**
- Preparation, drafting and implementation of the Krško NPP Decommissioning and RW and SNF Disposal Programme – **since 2012**
- Establishment of the Radioactive Waste Management (RWM) Centre in Croatia – **since 2015**
- Implementation of RW management in Croatia – **since 2015, formalized in 2022**



# Croatia RW and SNF inventory

## Waste originating from Krško NPP

Type of RW (Croatia half)	Volume (m <sup>3</sup> )	Mass (t)	Activity (TBq)
Operational LILW (1983 –2023)	1,266	2,494	17
Operational LILW (2024 – 2043)	255	427	14
Decommissioning LILW (2044 - 2058)	736	1,341	2,4
SNF dry storage decommissioning LILW (2103 - 2107)	35	275	0,5
<b>Total LILW (total)</b>	<b>2,282</b>	<b>4,536</b>	<b>34</b>
Decommissioning HLW (2044-2053)	18	140	24,600
Spent Nuclear Fuel	234,4	926,5	-

## Waste originating from Republic of Croatia

- 11 m<sup>3</sup> of IRW; up to 100 m<sup>3</sup> after decommissioning of existing storage facilities
- Category 3 – 5 DSRS
- Return to supplier, reuse/recycle, Ra-226 initiative



# Croatia RWM concept

## Radioactive Waste Management Centre

- Long-term storage for Krško NPP LILW (1983. - 2023.)
- Centralized storage for Croatia IRW
- Near-surface disposal facility (LILW)
- Borehole-type disposal for long-lived IRW

} operational by 2028  
} operational by 2050

## High-level Radioactive Waste and Spent Nuclear Fuel

- SNF currently stored at NPP site – pool and dry storage
- DGR disposal operational by 2092.
- R&D for DGR started in 2024.



# RWM Centre – design documentation



# Croatia participation in EURAD and EC initiatives

## **EURAD – participation so far**

- Identification of WAC used in EU Member-States for different disposal alternatives in order to inform development of WAC in countries without WAC/facilities.
- Training Course on application of requirements management systems.



# Identifying the needs of the Republic of Croatia from the ongoing EC projects

## 1. **DG ENER 2024 project „Consultation on a joint European approach towards radioactive waste management”**

- List of available options for joint activities on the processing and storage and disposal of radioactive waste within the member states of the European Union
- Proposal of changes of legislative approaches for the joint approach

## 2. **EURAD-2** - EC support in:

- Development of disposal facilities (DGR, LILW, IRW/DSRS) and supporting activities (safety case, QMS, monitoring)
- Characterization, treatment and conditioning of challenging waste streams (ion resins, dried sludges, evaporated concentrates...) – determination of potential partnerships with some MS on the same stage of development
- Stakeholder engagement
- Radiation Protection, Dosimetry...



Thank you for your attention!

