



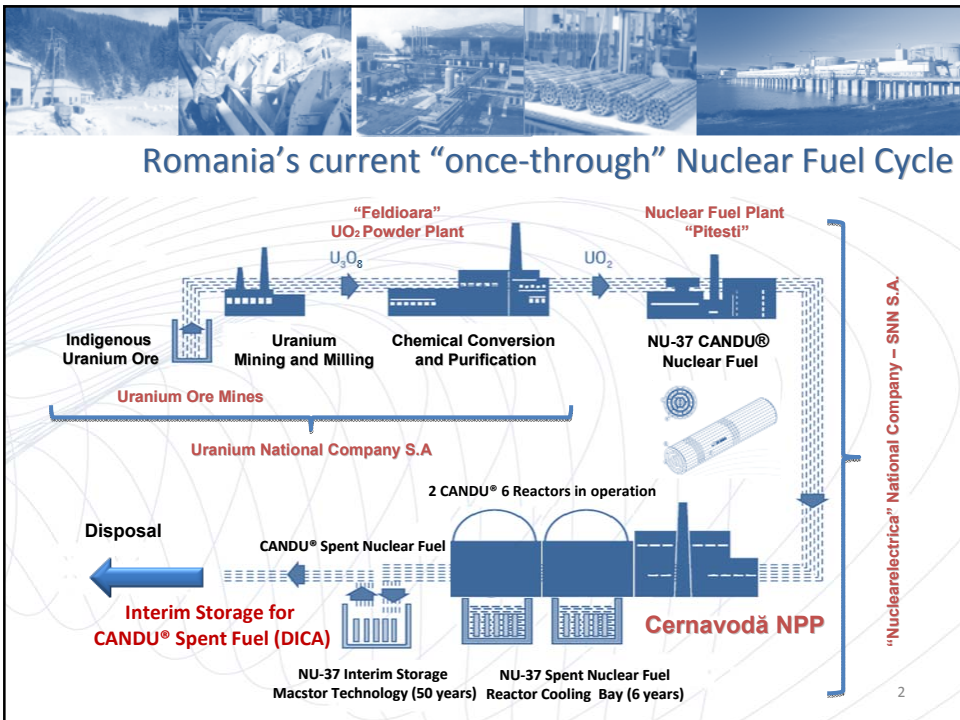
Ministry of Economy, Commerce and Business Environment
Nuclear Agency & Radioactive Waste (AN&DR)

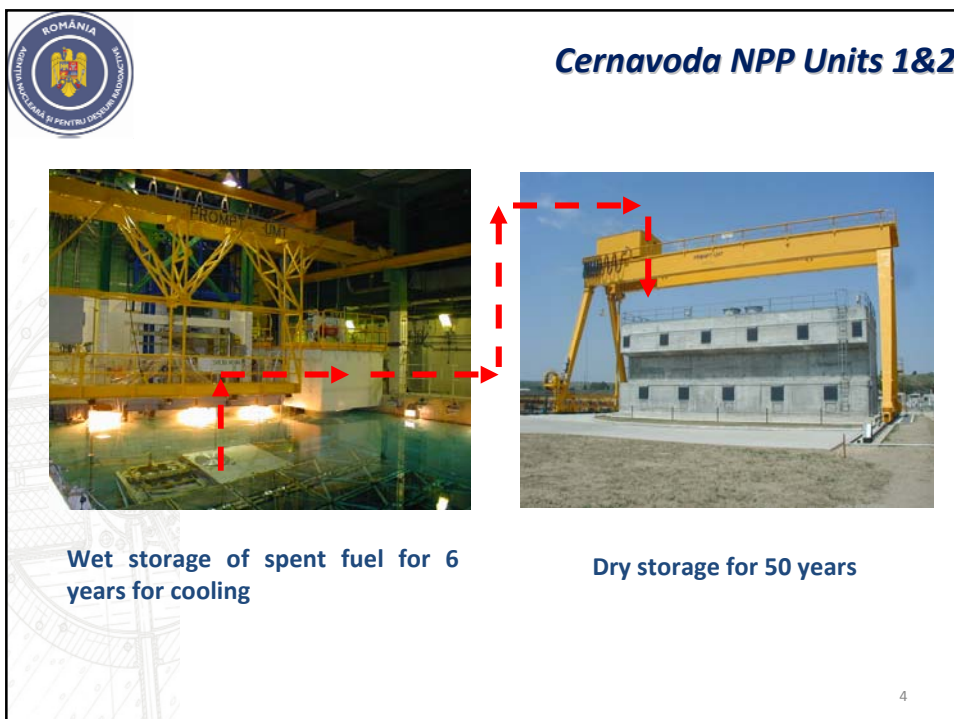
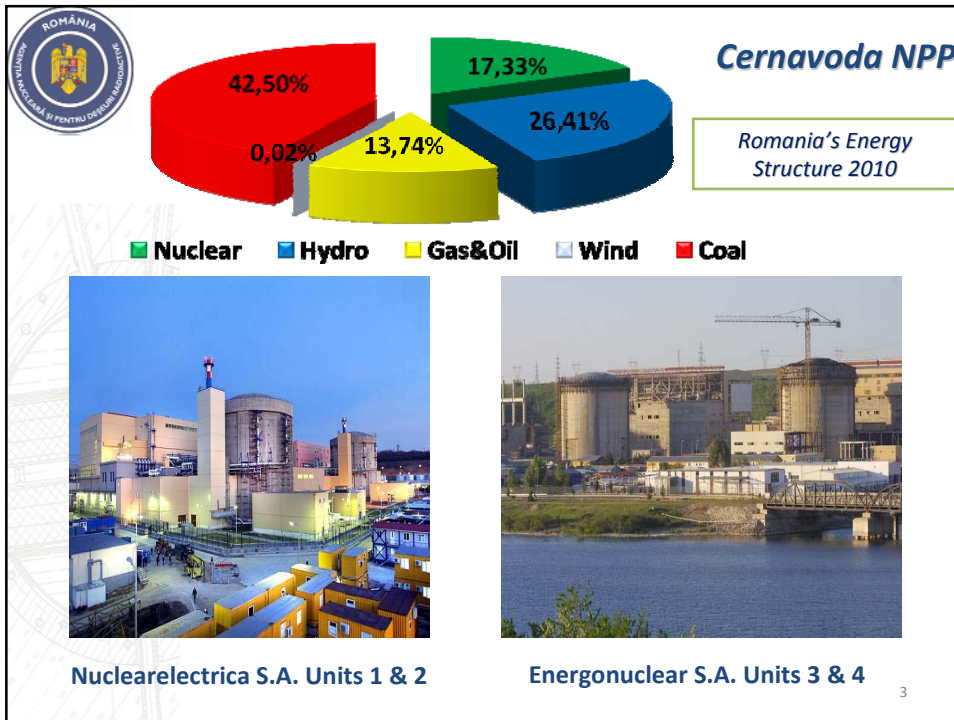


Romania's Radioactive Waste Management Overview

Antonius Gheorghe-Sorescu

*Technical meeting on the establishment of a radioactive waste management organization,
7 – 9 June 2010, Paris, France*





Cernavoda NPP Units 1&2

The Solid Radioactive Waste System



An interim storage facility:
- Total storage capacity: 1400m³;
- 220L stainless steel;



2 concrete structures :

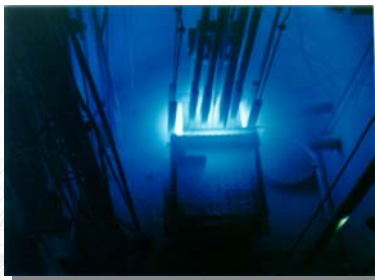
-A concrete structure equipped with cylindrical steel cells dimensioned to accommodate spent filter cartridges. Designed storage capacity is of 57.77 m³;
-A second concrete structure for large and highly contaminated pieces has a total storage capacity of 41 m³.



5



Institute for Nuclear Research - Pitesti

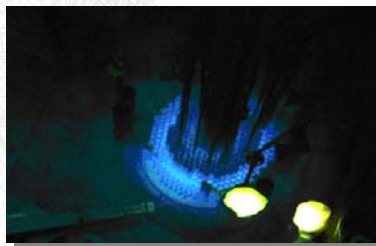


TRIGA 14 MW Steady State Core

Post Irradiation Examination Laboratory



The Dry Storage Pits



Annulus Core Pulse Reactor (ACPR)



6



"Horia Hulubei" National Institute of R&D for Physics and Nuclear Engineering

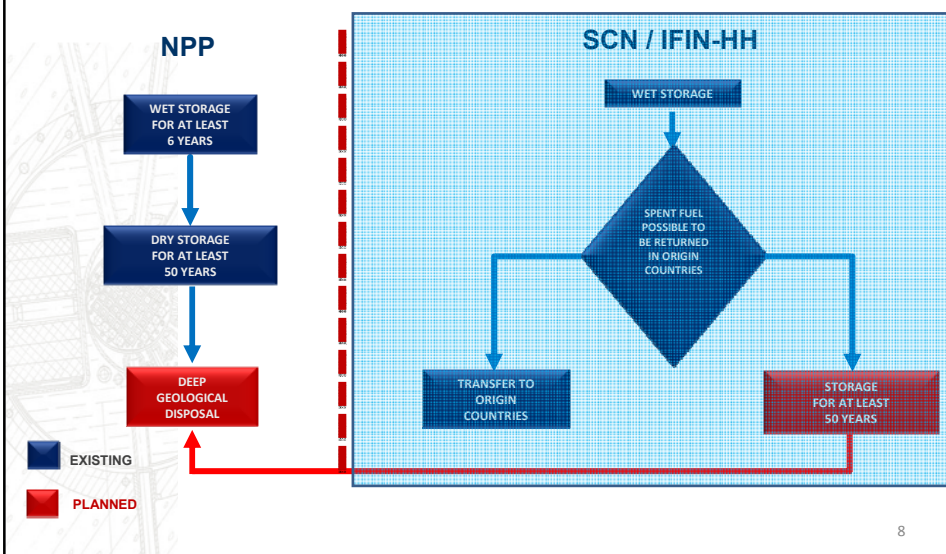
VVR-S reactor



- The Spent Fuel Cooling Pool;
- The Spent Fuel Storage Pools.

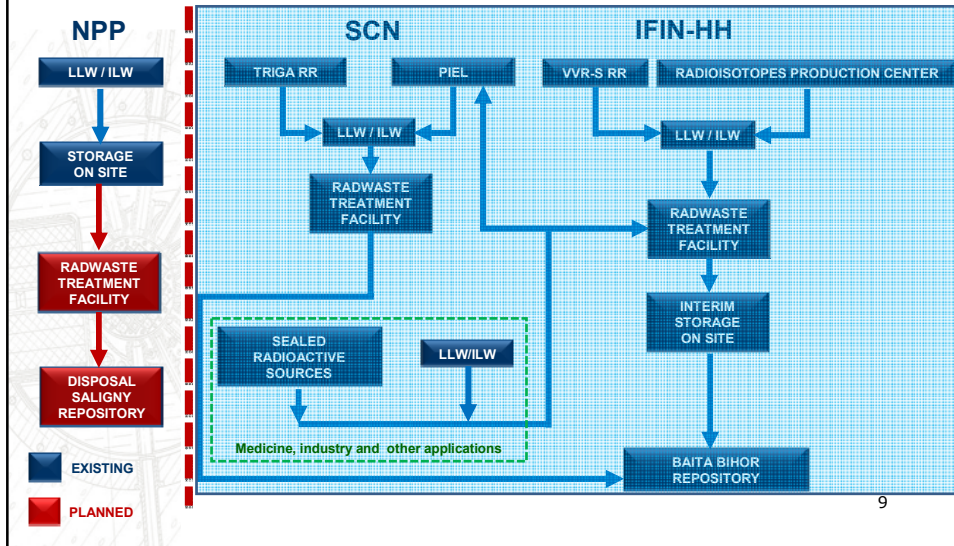


The National Mid- and Long Term Strategy for Safe Management of Spent Fuel and Radioactive Waste, and for Nuclear Installations Decommissioning (1)





The National Mid- and Long Term Strategy for Safe Management of Spent Fuel and Radioactive Waste, and for Nuclear Installations Decommissioning (2)



9



Nuclear authorities: Before December 2009

Three authorities:

- **NUCLEAR AGENCY (AN)**
 - in charge of promoting peaceful uses of nuclear energy
- **NATIONAL COMMISSION FOR NUCLEAR ACTIVITIES CONTROL (CNCAN)**
 - regulatory body
- **NATIONAL AGENCY FOR RADIOACTIVE WASTE (ANDRAD)**
 - Disposal

10



ANDRAD - Short History

- 2003: GO No. 11/2003 approved;
- 2004: National strategy for management of SNF and RW approved;
- 2004: ANDRAD established;
 - *Subordinated to the Ministry of Economy;*
 - *coordination;*
 - *Financed by waste producer (0.12 Euro / MWh);*
- 2006: GO No. 11/2003 modified;
 - *Responsible for disposal;*
- 2007: financing mechanism improved (fee 2 Euro / MWh);

11



Nuclear authorities: After December 2009

Two authorities:

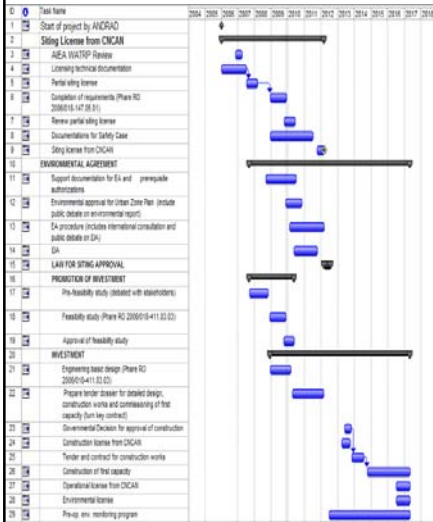
- **NUCLEAR AGENCY & RADIOACTIVE WASTE (AN&DR)**
 - *Promoter of the nuclear energy development in Romania (power and non – power applications), exclusively for peaceful purposes;*
 - *Responsible for disposal of radioactive waste and spent nuclear fuel, and ensure at national level the coordination of the nuclear installations decommissioning processes;*
- **NATIONAL COMMISSION FOR NUCLEAR ACTIVITIES CONTROL**
 - *regulatory body*

Reason: Reduce expenses

12



New Repository - Current Status (1)



Extension of the Partial Siting License in February 2010 which allows:

- To continue Saligny site characterization completion
- To start the process to obtain Environmental agreement
- To finalize the documentation for the urban planning zone, process started in 2009, having the approval of the Saligny Local Council



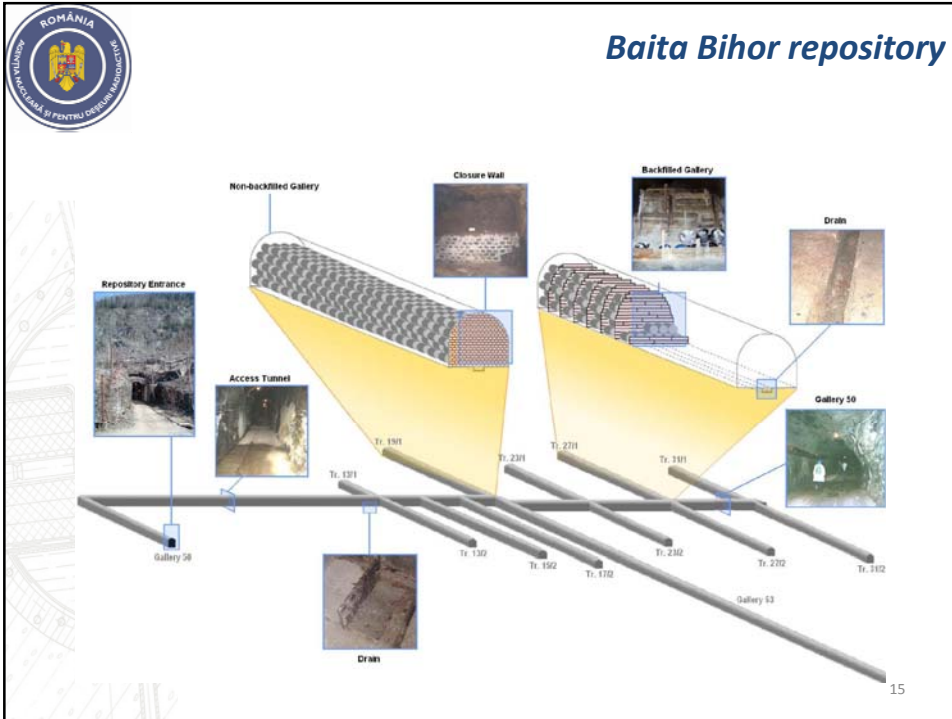
New Repository - Current Status (2)

A new Urban Certificate for the new surface indicated by the Feasibility Study

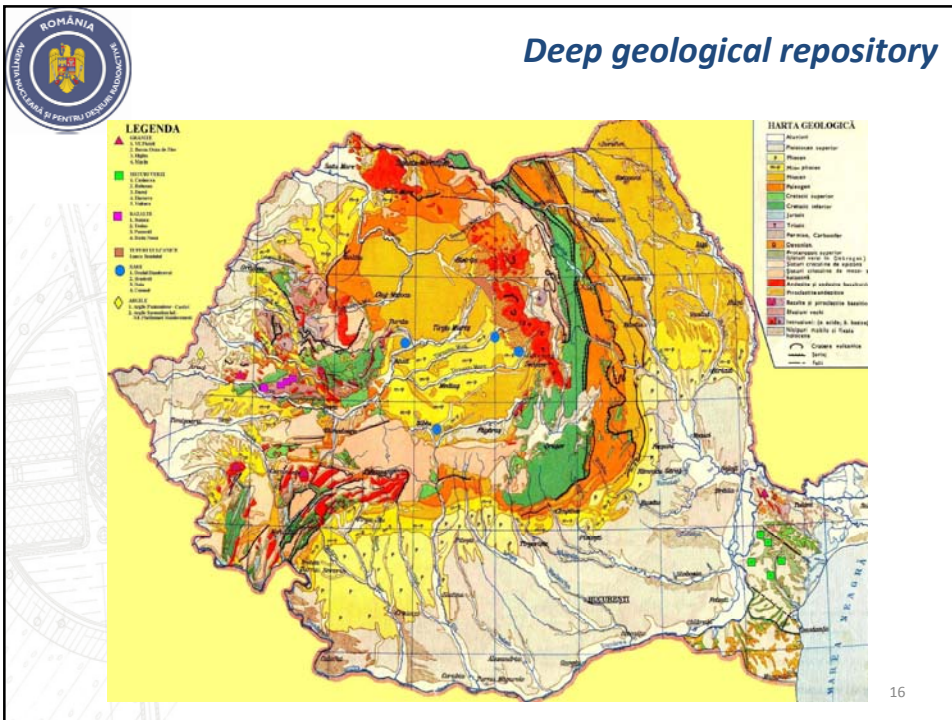
- Finalize the documentation on:
- Site characterization
 - Feasibility study
 - Safety and
 - Construction license



Baita Bihor repository



Deep geological repository





AN&DR (Short Term Plans) (1)

- Improvement of the Legal Framework in order to clarify specific issues regarding the Radioactive Waste Management
- Up-dating the Medium and Long Term National Strategy for Safe Management of Radioactive Waste
- Elaboration of the Institutional Development Strategy in order to enhance the capacity to achieve its mission

17



AN&DR (Short Term Plans) (2)

- Licensing the Saligny Repository Site
- Approval of the Road Map for Geological Repository Development
- Strengthening the efforts to increase the Public Acceptance for Radioactive Waste Repositories

18



Lessons learned

- Establish the level of knowledge and expertise at the outset;
- Identification of training needs;
- International cooperation – key element;
- Discussion with the regulator should not be overlooked;
- Close cooperation with waste producers – highly recommended;
- The provision of adequate funding is a problem.

19



Contact AN&DR

- ☐ **București**
 - **Str. I.D. Mendeleev, nr. 21 – 25, sector 1**
 - **Tel.: 021 316 80 01, 021 316 80 02**
 - **Fax: 021 312 14 10**
- ☐ **Mioveni**
 - **Str. Câmpului, nr. 1, CP 115400, jud. Argeș**
 - **Tel.: 0248 291 275**
 - **Fax: 0248 291 400**

contact@nuclearagency.ro

www.andrad.ro

20