

Deep Geological Disposal and Stakeholders' involvement

French example

Open session-Japan

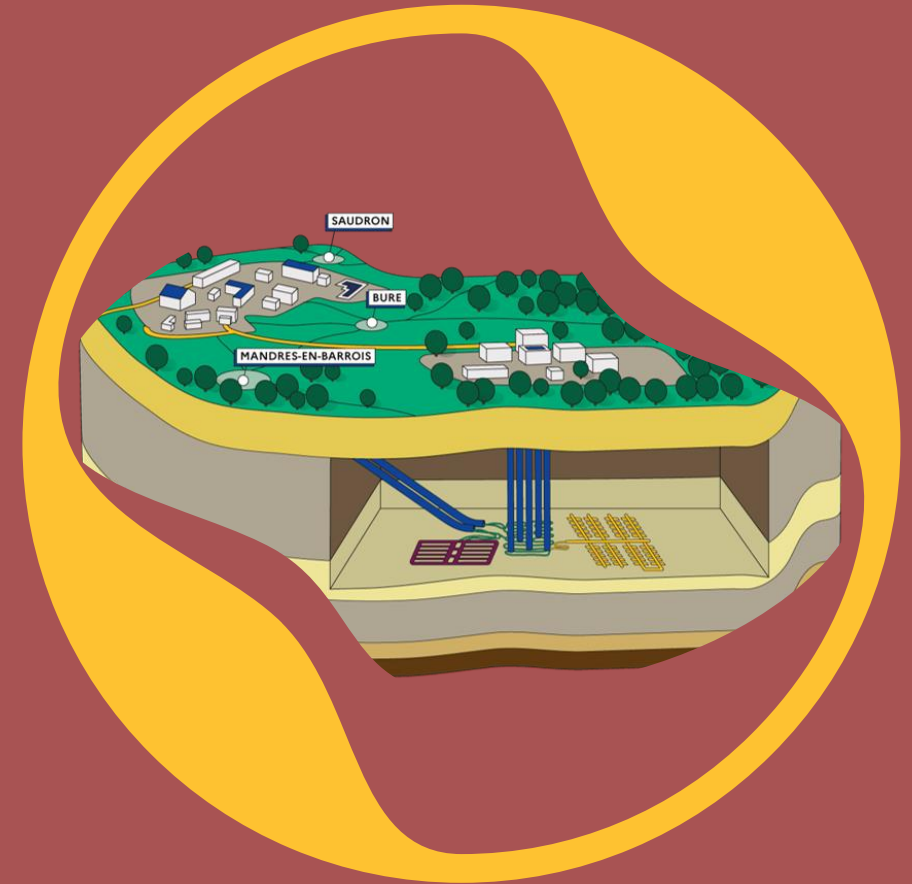
21st November 2025

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1.

The Deep Geological Disposal “Cigéo”



French National Radioactive Waste Management Agency (Andra) to ensure a safe long-term radioactive waste management

1 Public agency

3 Disposal facilities

750 Employees



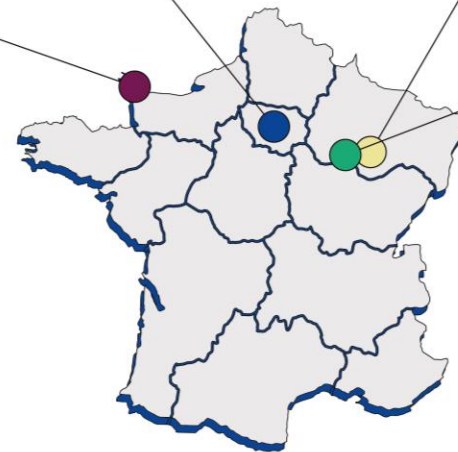
Andra's headquarters
in Châtenay-Malabry



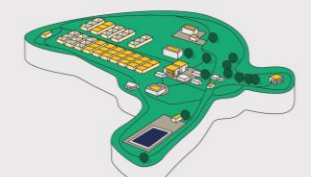
Andra's Meuse/Haute-Marne
facility (CMHM)



Manche Disposal
Facility (CSM)



Andra's industrial
facilities in Aube



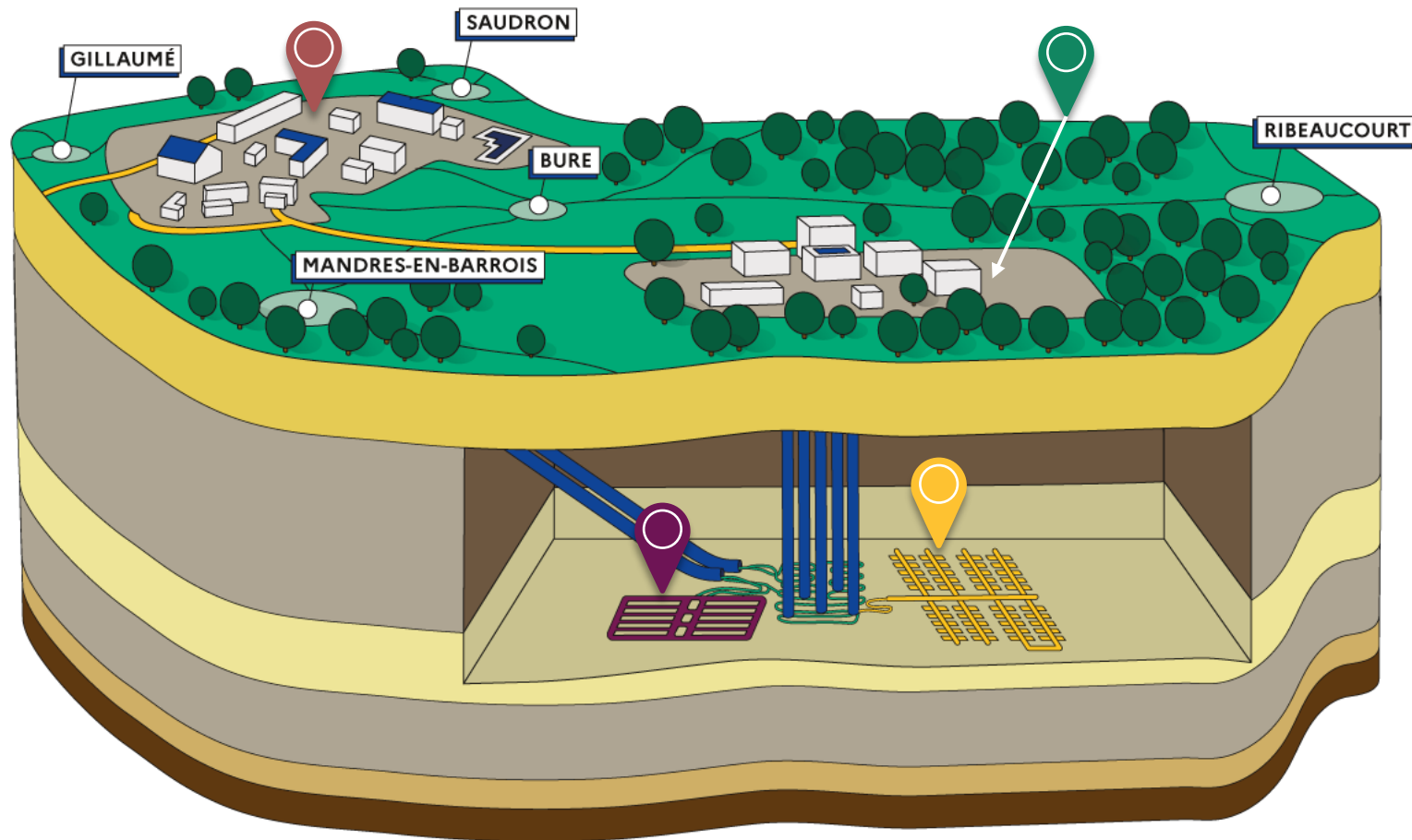
Aube Disposal
Facility (CSA)



Industrial Facility for
Nuclear Waste Grouping,
Storage and Disposal (Cires)

Cigéo disposal facility project

Surface facilities connected to an underground repository



-  **Ramp zone**
Waste package reception, inspection, and preparation
-  **Shaft zone**
Construction support
-  **ILW-LL disposal section**
-  **HLW disposal section**

A long journey with successive milestones with the authorities and public over 30 years

Regulatory Framework in 1991 (French Act, guidance) R&D programme including URL to support feasibility studies

Approval for URL in clay formation

1998

2005 : « Dossier 2005 » on feasibility of DGR
2006 : ASN' opinion
French Act 28th June 2006

2005
2006

Public Inquiry

National Public debate

2009 : Intermediate safety case "Dossier 2009"
2010 : ASN' opinion on Area for in depth investigation

2009
2010

Intermediate files and reviews on dedicated topics (e.g, operational risks..) and reviews to prepare safety options

2016 : Safety Options « DOS »
2016 : French Act on reversibility
2018 : ASN 'opinion

2016
2018

2020 : submission of files for public utility safety case "Dossier 2009"
2022 : Decree of public utility

2020
2022

Environmental Agency Opinion and Public Inquiry

Nuclear Safety Authority opinion on Safety Options gave Andra a roadmap and topics for further development before submission of the license application for construction

«DAC 2023»
Submission of license application for construction

2023
...

National review including public inquiry

3.

Various stakeholders involved in the decision- making process

A need for information and involvement



Stakeholders involved in the decision-making process



Parliament

- Legislative framework of the project
- 3 laws passed on Cigéo
- Another one to come for long-term disposal operations

Andra

Research and implementation of long-term radioactive waste solutions

- Implement structuring decisions
- Implement a programme of dialogue with stakeholders

Government

- Project that involves scientific and technical, but also ethical, societal and political considerations
- Need to integrate the long-term

Project host territory

- National recognition to be formalised
- Economic support included in 1991 law
- Local organisation for dialogue

Civil society (citizens, local residents)

- Dialogue as a part of a voluntary and regulatory framework at a national and local level
- Consultations supervised by the CNDP since 2017

Review bodies and evaluation

(Safety authority ASNR, National assessment board CNE)

- Scientific and technical support for decisions
- Safety reviews

A need to explain where do we stand

- **What is the global “work” plan for the development of the DGR ?**
- **What is the safety strategy?**
- **What do we know? On which basis ?**
- **What are the challenges issues ? For when (Siting, licensing...?)**

- The main objectives to reach : “the next step will not be the only one”
- Overall strategy
 - Fundamental objective to protect human and environment on long term
- Understanding of the host-rock and behaviour of the disposal
 - Detailed characterization
 - Work with academia
 - Underground Laboratory and technical experiments
- Safety assessment
 - Post-closure and operational safety
 - Lessons learnt from international practices
- R&D plan

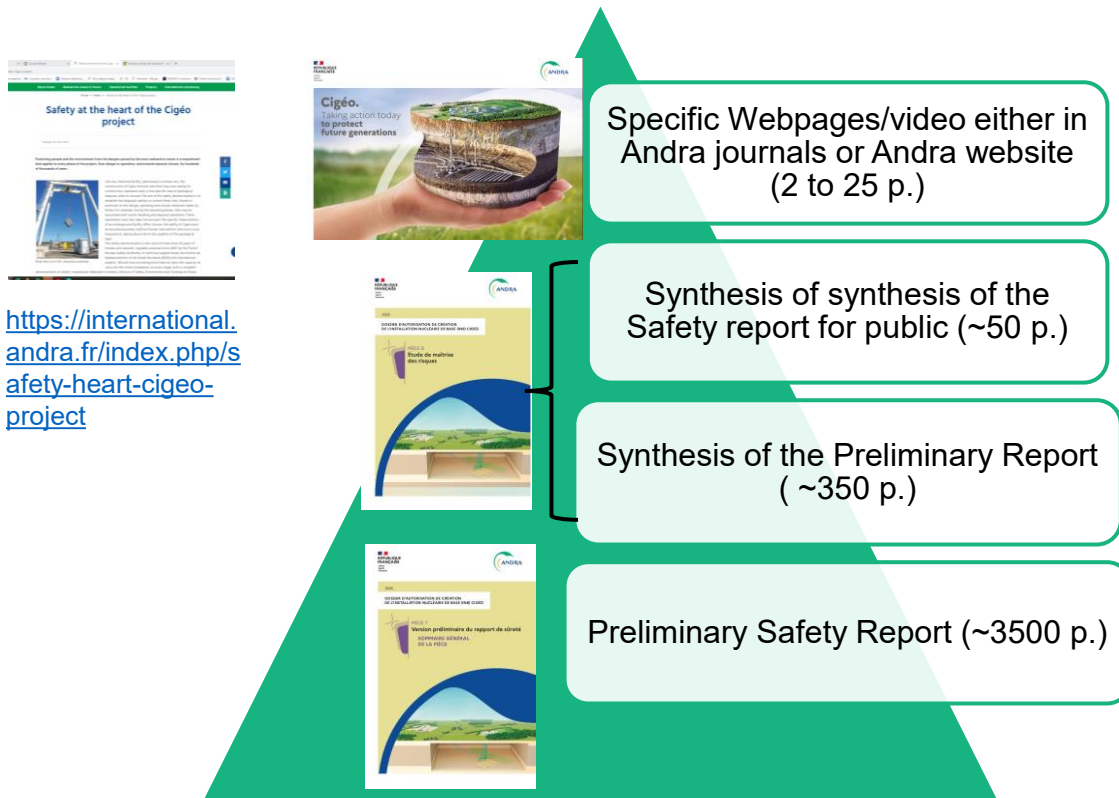
- Brochures, periodicals, videos, websites, etc. (A local newspaper (24p) – nearly 190 000 ex – for Meuse and Haute-Marne)
- Andra communication on various “detailed and thick ” technical documents (made available on Andra site and in local sites).
- Regulatory body also communication on opinions after national reviews of these documents (e.g. on the NSA website).

- Visitors' centre.
- Temporary exhibitions.
- Door to Door campaigns in the nearby municipalities, carried out by employee ambassadors.
- Use of social media as a tool of dialogue.
- Continuous innovation: street-art , novels & fictions, etc.

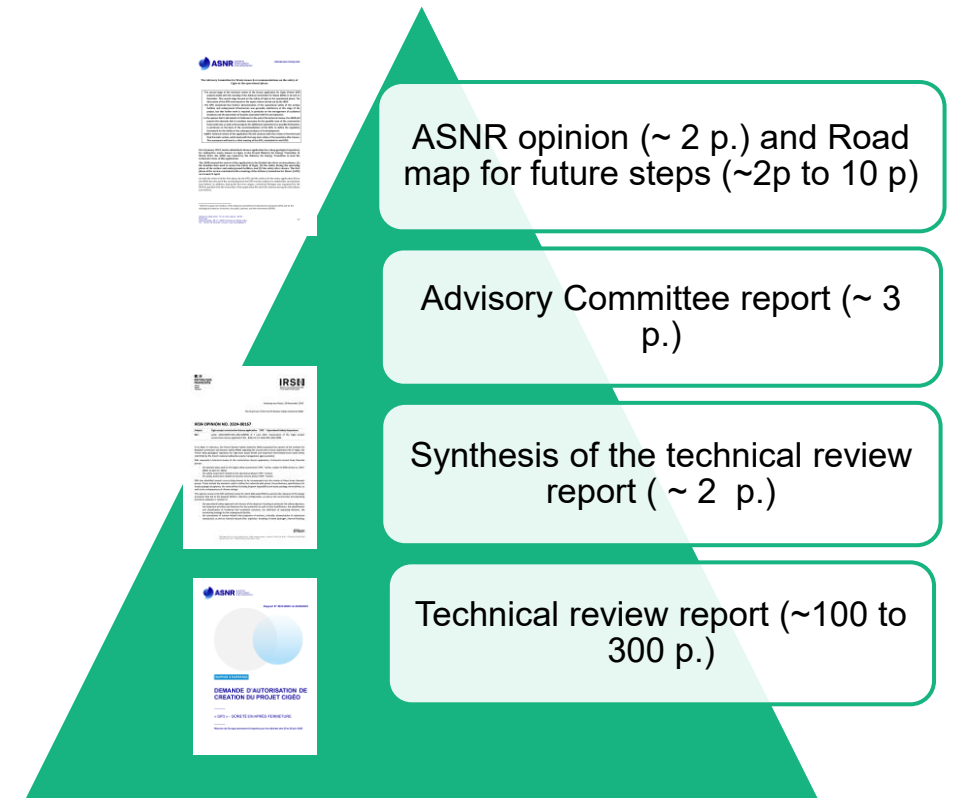


Example on where to find information about Deep Geological Disposal

Various levels of details for digital safety documentation available on Websites



All Andra reports are available for public on <https://www.andra.fr/cigeo/les-documents-de-reference>



All ASNR instruction available for public on <https://reglementation-controle.asnr.fr/espace-professionnels/installations-nucleaires/projet-de-centre-de-stockage-en-couche-geologique-profonde-cigeo#aujourd-hui-instruction-de-la-dac>

Engaging the Public through Andra's Facilities

The URL and Technological Exhibition Centre in Meuse/Haute-Marne



10,000 visitors
annually

200 000th
visitor in 2024

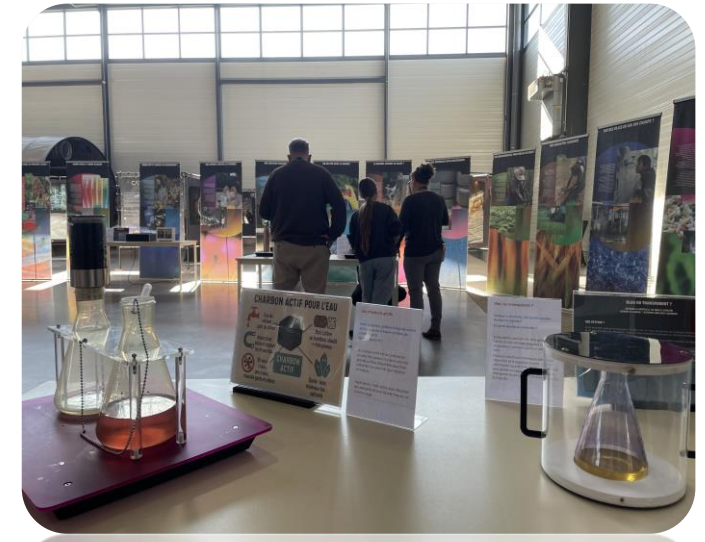
Visit of the URL



Permanent exhibition



Temporary exhibitions



The evolution of stakeholder engagement approaches

2008–2013: Public outreach following the 2006 law on sustainable radioactive waste management

→ To inform widely, capture attention and arouse curiosity



Our waste doesn't disappear by magic !



On average, one French person produces 2 kg of radioactive waste per year. What do we do with it?



2013-2016: National public debate on the Cigéo project and explanation of the industrial project

Demand for an industrial pilot phase



Since 2018: Driving innovation in communication and dialogue

→ In order to create a specific debate on radioactive waste



Future challenges



The public inquiry on the Cigéo licensing application, scheduled for 2026



- **Maintain dialogue with the local public during the initial construction works**
- **Continue exchanges with stakeholders at the national level**

A long way with ups and downs, but with limited step backwards

- **Resilience** : Radioactive waste management raises societal and political challenges that may create tensions, it is essential to acknowledge and accept these difficulties.
- **Responsibility**: The implementer operates within a broader governance ecosystem with shared competencies.
- **Information**: Some technical aspects of the project require making information accessible and adapting communication to different audiences and project stages.
- **Humility**: Accepting criticism and listening carefully to public concerns.

An iterative process of learning and testing

”Trust is long to gain, but quick to lose”



***“To you who isn’t
yet born, Andra is
already working for
you”***

Dès aujourd’hui, nous sommes plusieurs centaines de femmes et d’hommes engagés dans la mise en œuvre de solutions sûres et responsables pour gérer les déchets radioactifs.

GARANTIR LA SÉCURITÉ

DES GÉNÉRATIONS PRÉSENTES ET FUTURES

*Thank You
For Your Attention*

