

Spatial redevelopment trajectories of nuclear sites. The cases of Brunsbüttel and Fessenheim

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Outline

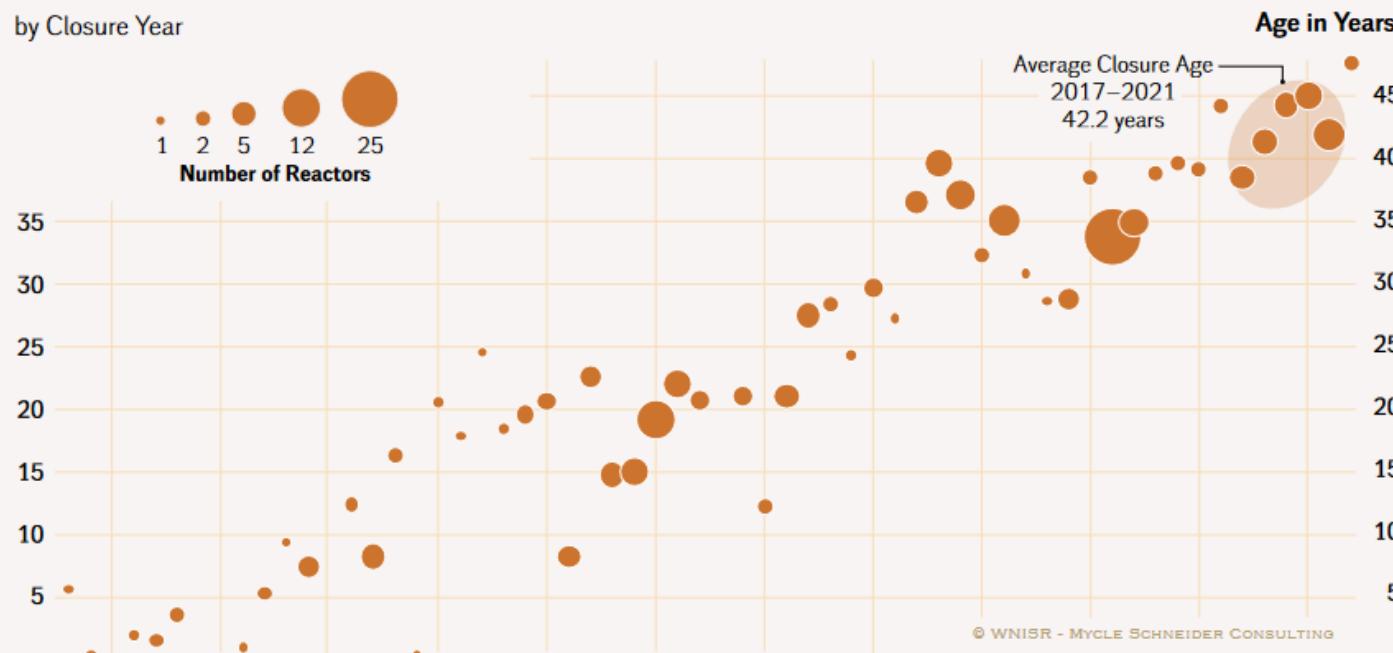
1. Context
2. Methods
3. Results
4. Conclusion



Research context

Evolution of Nuclear Reactors' Average Closure Age 1963 – 1 July 2022

by Closure Year



Sources: WNISR, with IAEA-PRIS, 2022

31 years

average age of operating reactors

30 to 40 years

lifetime of most nuclear reactors

182

number of shutdown nuclear reactors in 2022
(Nuclearplanet)

Methodology



Press analysis

Grey literature analysis

Semi-structured interviews

Brunsbüttel

- Use of factiva (press review : 2007 to now)
- Semi-structured interview (autumn 2024)

Fessenheim

- Use of nexus (press review : 2012 to now)
- Online archives of local newspaper (07.2022 to now)
- 8 Semi-structured interview (2021/2022)

Study areas

B r u n s b ü t t e l



- Schleswig-Holstein, Germany
- 1 reactor (BWR)
- Temporarily shut down in 2007
- Decommissioned in 2011

F e s s e n h e i m



- Alsace, France
- 2 reactors (PWR)
- Election promise
- Shut down in 2020

Key elements



	Sociopolitical claims	Nuclear heritage	Waste management
Brunsbüttel	None (0 project)	Invisibility	High
Fessenheim	High (competition between projects)	2 competing visions: invisibility and status quo	Average (technocentre)

No sociopolitical claims in Brunsbüttel

□ Why ?

- Lack of economic and socio-demographic benefits
- The plant has been inactive since 2007
- Poor reputation «most error-prone nuclear power plant in Germany»



An energetic and territorial transition in Brunsbüttel

“The dismantling of the power station also symbolically accompanies the site: as a visible sign of the rethink and as an inspiration to take new paths. Today and in the future” (perspektive-brunsbuette.de, n.d.)



- Immediate dismantling
- Denial of the nuclear heritage
- Transition to green energy

Waste management in Brunsbüttel

- 3 NPP being dismantled
- Niemark landfill site in Lübeck
- 3 issues :
 - Reliability of radiation threshold levels
 - Exportation vs. on-site storage
 - Citizen participation and consultation



yellow : Brunsbüttel, Brokdorf and Krümmel
red: Niemark landfill in Lübeck

Spatial shifting of the problem and the scale of regulation



Fessenheim



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Regional project « Our common ambition for the future of the Fessenheim area »



Stakeholders involved

Communauté de communes Pays Rhin-Brisach	SMO Port de Colmar/Neuf Brisach	Région Grand Est	Commune de Fessenheim
Départements Bas et Haut Rhin	Mulhouse Alsace Agglo (m2A)	EDF	CCI Alsace Eurométropole
Banque des territoires	Allemagne	Collectivité européenne d'Alsace (CeA)	SNCF
CNRS	UHA et Unistra	Eucor	ADEME
BPI France	Associations environnementales	Création de la SEM NovaRhena	Etc.

Monitoring group

« EcoRhena » project	Semi-public company	Prospecting
Mobility	Energy transition	Innovation and research
Cross-border cooperation	Business needs	Communication
Transversal group		

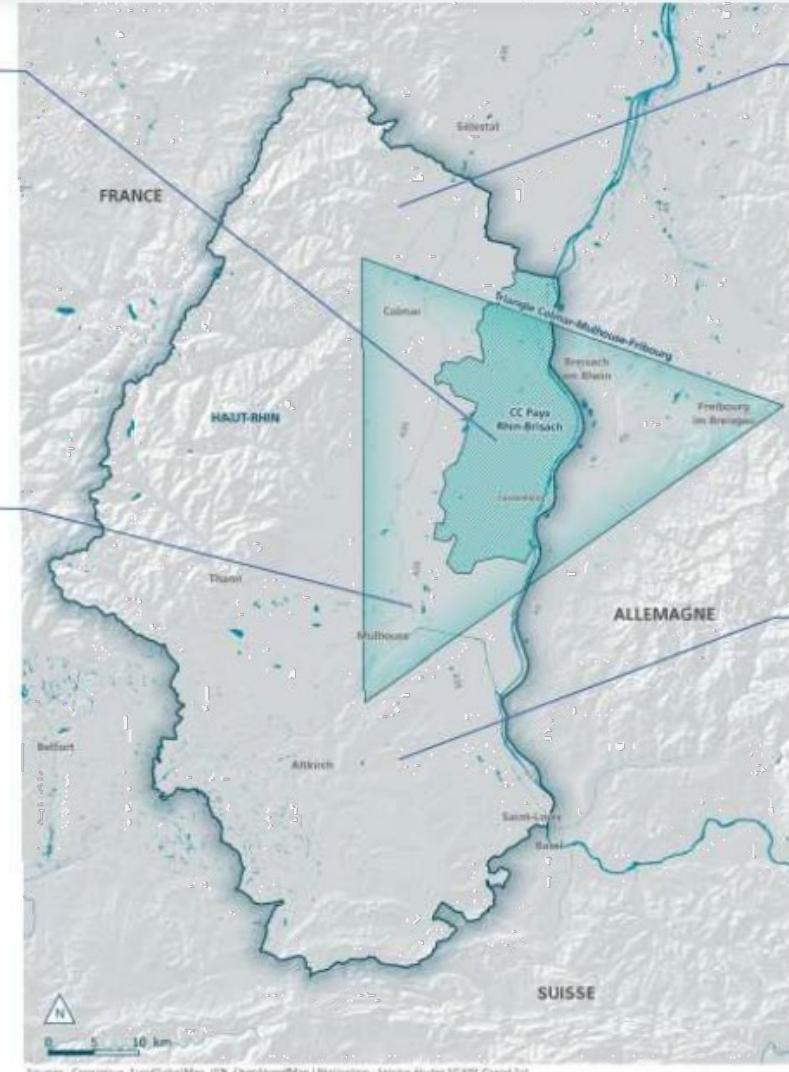
Regional project « Our common ambition for the future of the Fessenheim area»

Priority 1: Create jobs and added value as part of the economic redevelopment of the region

Priority 2: Improve access to the region and mobility

Priority 3: Make the region a model for the transition to a new energy era

Priority 4: Make the region a model of innovation for the industry and energies of the future



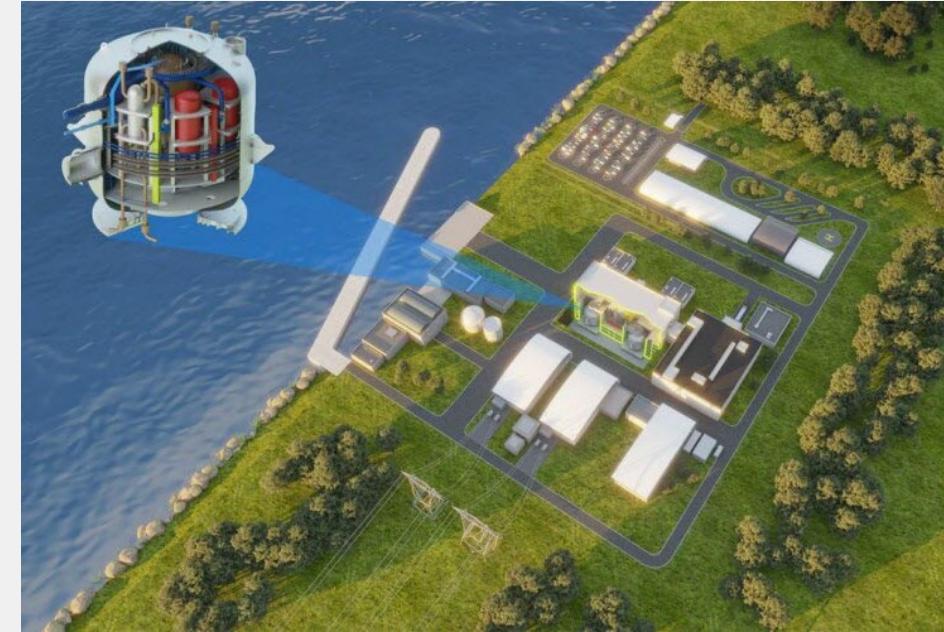
Nuclear heritage: Forget or go back to nuclear?

Technocentre projet



<https://www.lalsace.fr/economie/2023/06/21/le-projet-de-technocentre-est-sur-les-rails>

Small modular reactor (SMR)



<https://www.lalsace.fr/culture-loisirs/2023/04/09/fessenheim-s'accroche-a-l-atome>

Waste management



Conclusion



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Redevelopment projects are linked to a lack of discussion on the concrete arrangements for dismantling and restoring the sites (and the areas concerned)
-> Factors to be identified

Thank you for listening

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