



PRESS RELEASE

Paris, 10 February 2021

New European H2020 EURATOM research project:

INNOvative tools **FOR** dismantling of **GRAPH**ite moderated nuclear reactors

INNO4GRAPH

What are the most optimal ways to dismantle graphite reactors? What remote tools can help operators to safely remove radioactive graphite? What solutions will be the most cost-efficient for dismantling operations in reactors of such complexity and dimension? These are questions that the recently launched Inno4Graph project is trying to answer through the development of physical and digital tools and methods to support the decommissioning of European graphite reactors.

The three-year EU-funded project INNO4GRAPH, which started on 1st September 2020, is addressing this need in two different phases:

- Tools and methods will be used during tests and studies upstream of the dismantling operations to:
 - Get an excellent knowledge of both the graphite properties thanks to in-situ measurement of cracks and corrosion and the dismantling tools to be used;
 - Evaluate the efficiency of the use of innovative tools in order to define the most adapted scenario for each reactor regarding the local context (technical constraints, regulations, ...) in terms of safety and cost-efficiency thanks to scenario grid analysis, mock-ups for physical tests and digital 3D models.
- Innovative cutting and handling tools will then be made available during the dismantling operations.

The launch by EDF, the Coordinator of the Project, of a full-scale graphite reactor dismantling demonstrator in Chinon, France, in 2022 will facilitate the uptake and further development of the tools developed during the project.

To respond as efficiently as possible to these major challenges, leading nuclear industries and research partners have joined their expertise and efforts in the following pan-European INNO4GRAPH consortium:

- Electricité de France, EDF, France
- Empresa Nacional De Residuos Radioactivos S.A, ENRESA, Spain
- Graphitech, France,
- Cyclife Digital Solutions, France

- Commissariat à l'Energie Atomique et aux Energies Alternatives, CEA, France
- Societa Gestione Impianti Nucleari, SOGIN, Italy
- Lithuanian Energy Institute, LEI, Lithuania
- Consorzio Interuniversitario Nazionale per la Ricerca Tecnologica Nucleare, CIRTEN-POLIMI, Italy
- The University of Manchester, United Kingdom
- Westinghouse Electric, Spain
- Ansaldo Nucleare, Italy
- TECNATOM, Spain
- ARTTIC, France

The INNO4GRAPH project is labelled by both the French competitiveness cluster “Nuclear Valley” and the SNETP Association, the Sustainable Nuclear Energy Technology Platform. The consortium is also supported by an end user advisory group including, in addition to the operators of the consortium, the Lithuanian graphite nuclear power plant operator of Ignalina (IAE) and the Japan Atomic Power Company (JAPC).

The advisory groups will interact on the project results based on the current dismantling situation of the graphite reactors and help disseminating the project work progress to international bodies or events.

This project has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 945273 for an EU contribution of three million euros.

More information on the project can be found at:

- [Cordis.europa.eu/project/id/945273](https://cordis.europa.eu/project/id/945273)
- twitter.com/inno4graph
- www.linkedin.com/company/inno4graph-project/
- www.Inno4Graph.eu/ (to come soon)

Project Contact:

INNO4GRAPH-Coordination@eurtd.com