

## AFRY in Nuclear

### **PIONEERS IN THE NUCLEAR INDUSTRY SINCE THE 1950s**

AFRY has been working with the nuclear industry for more than 60 years, successfully carrying out projects dealing with everything from full-service undertakings to highly specialised details. Our focus has always been on improving safety, increasing utilisation rates and enhancing the availability of the facilities.

### **EXPERTISE COVERING THE ENTIRE LIFE CYCLE OF NUCLEAR POWER**

Our services cover the entire life cycle of a nuclear project, starting from strategic advice and feasibility studies, through project planning, licensing, engineering and design, operation and maintenance support, all the way to services for decommissioning and waste management. We also offer training in various topics related to nuclear energy and beyond.

We support new-build projects as well as upgrades and long-term operation of existing facilities, covering both traditional large nuclear power plants as well as SMRs and new technologies. Our clients include investors, plant vendors, owners as well as regulators.

### **SUPPORTING ALL ASPECTS OF A NUCLEAR PROJECT AS WELL AS SECTOR INTEGRATION**

Combining our nuclear expertise with extensive knowledge in energy, industry and infrastructure, we offer our clients a comprehensive and unique range of services. We cover e.g. energy markets, environmental aspects, transmission and distribution, land use planning and more. We also have expertise in new technologies, such as hydrogen and e-fuels production, carbon capture and storage and many other areas, which may become topical in a nuclear project, too.

AFRY provides engineering, design, digital and advisory services to accelerate the transition towards a sustainable society.

We are 19,000 devoted experts in industry, energy and infrastructure sectors, creating impact for generations to come. AFRY has Nordic roots with a global reach, net sales of 27 BSEK and is listed on Nasdaq Stockholm.

Making Future

### **PROJECT AND QUALITY MANAGEMENT**

Building on our global experience from large-scale energy and industry projects, as well as experience in nuclear and other type of projects, we provide expert support in project and quality management. We support our clients in project development and preparations, as well as project management during implementation.

### **MAINLY OPERATING IN EUROPE, BUT DRIVING GLOBAL DEVELOPMENT AS WELL**

Our nuclear business is established in six European countries, where we locally serve our clients with projects and assignments for new-build projects as well as continuously support the operating nuclear facilities in O&M issues as well as plant upgrades and long-term operation. Combining our expertise in these countries, we can establish a team to best support the needs of our clients.

We also operate globally, supporting nuclear projects on several continents.



Scan for more information:



## SUPPORTING OUR CLIENTS THROUGHOUT THE LIFE CYCLE OF A NUCLEAR FACILITY:

Consulting in strategy, business and organisational development, site screening and characterisation, licensing, concept development and environmental impact assessments.

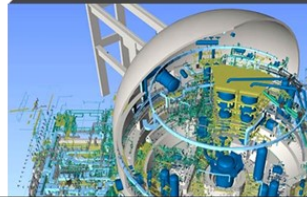
Studies and improvement of existing nuclear energy assets, in e.g. safety, reliability, availability and maintenance, as well upgrades and lifetime extension.



Development & pre-construction



Operation and Maintenance



Project implementation



Decommissioning and Waste Management

Consulting and engineering from comprehensive Owner's Engineering solutions to specific services in engineering and design review, project management, all the way to EPCM consulting.

Expert services in nuclear waste management, interim storages as well as final disposal of spent nuclear fuel, based on pioneering project experience.

### SOME OF OUR SELECTED REFERENCES:

- **Feasibility studies, Finland and Sweden, 2023-ongoing** (confidential). Feasibility studies for new-build SMRs for electricity production. Technology evaluation, site studies, licensing support.
- **Hinkley point C NPP, UK, 2009-ongoing**. Supporting a new-build project with safety case activities including organisation, site license and radiology. Review and acceptance of engineering, safety as well as construction and design management documentation. Engineering support regarding lifting and fuel handling.
- **Olkiluoto 3 NPP, Finland, 2004-ongoing**. Supporting a new-build project with services like EIA, design reviews, support in different technical disciplines (civil, electrical, I&C, mechanical, etc.), site seismic hazard studies, construction supervision, claim management, support in owners scope area and expert support in specific areas. Structural analysis and dimensioning for reactor island buildings. Services continue with O&M support.
- **SMR siting study, Finland, 2022** (confidential). A general study of the possibilities of locating SMR plants, taking into account combined production, technical characteristics, cooling, environment and land use planning, including a high-level review of the opportunities and challenges of decentralised plant siting.
- **Siting of a district heat SMR, Kuopion Energia, Finland, 2022**. Identification and evaluation of possible sites for a district heat SMR.
- **SMR District Heating Study, Finland, 2022** (confidential). Study of district heating with HOB and CHP SMRs including following areas: technologies, heat storages, CHP heat extraction, plant location, competing heat production options and economical profitability.
- **Long Term Operation support, Uniper and Vattenfall, Sweden, 2014-ongoing**. Analyses, calculations and review in various engineering disciplines, etc.
- **Decommissioning, Uniper, Vattenfall, Svafo, NND, Sweden/Norway, 2014-ongoing**  
Project Management, Dismantling coordination, Planning and strategy, HSE, Logistics, Environmental permits, Safety and Licensing Support, SAR, Tools and calculations, Documentation.
- **Waste management, Uniper, Vattenfall and Svafo, Sweden, 2014-ongoing**.  
Intermediate and final repositories, Radiological impact assessment, Safety and risk assessment – simulation modelling, Waste treatment and packing studies. Radioactive Waste Clearance (IAEA model).

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