



CAPGEMINI ENGINEERING IN NUCLEAR

Accelerate Nuclear Excellence
Deliver an Intelligent Industry Future
Drive Netzero Ambitions



NUCLEAR INDUSTRY CHALLENGES

On-time and at Costs Delivery Globally

With 57 reactors under construction and 160 planned, on-time delivery of nuclear projects is a major challenge in this complex environment. Almost 65% of the plants under construction are currently behind schedule

Plant Life Extension

The cost of extending the operating life of nuclear plants in France is estimated at €48 billion by 2025

Decommissioning and Waste Management

The decommissioning cost estimated by European operators ranges between €900 million and €1.3 billion per reactor

Nuclear Safety

Improving nuclear safety across the entire life cycle is essential. According to IRSN, a representative serious accident would incur an average overall cost of €120 billion

International Reach

Nuclear players need to meet tomorrow's engineering challenges to create an ecosystem enabling local and global delivery

Digitalization

€1.1 trillion of value is expected to be captured from the digital transformation in the global electricity sector by 2025, but ensuring cybersecurity is a critical requirement

CAPGEMINI ENGINEERING IN NUCLEAR

Capgemini Engineering, Global Leader in ER&D Services

Capgemini Engineering combines, under one brand, the world leading engineering and R&D services of Altran, acquired by Capgemini in 2020, and Capgemini's digital manufacturing expertise, including Euriware, acquired in 2014, while leveraging the entire group capabilities to build unique solutions for our clients at scale.

Pioneering Intelligent Industry

We foster synergies between the digital and engineering worlds combined with deep domain knowledge to help the nuclear sector build intelligent assets, products, operations, and services at scale with digital inside and digital continuity throughout the lifecycle and digital convergence with its ecosystem, allowing the rise of a sustainable, intelligent industry era. We leverage a solid ecosystem of partnerships, from hyperscalers and world-class editors to specific niche accelerators.

2,000 Nuclear Specialists Throughout the Entire Value Chain

With a network of 2,000 dedicated nuclear specialists globally, we combine deep domain knowledge of the nuclear sector with strong expertise in nuclear engineering and digitalization to deliver added-value, sustainable and safe solutions across the nuclear value chain from new build through operations to dismantling.

Scaling and Industrializing the Delivery of Engineering Services

We support our clients shifting their operating model through sizeable, scalable, and customizable delivery models. We enable unmatched cost advantage with proven quality benefits at scale, leveraging our local, nearshore, and offshore engineering centers.

Turnkey Solution Integrator

Thanks to our multidisciplinary engineering expertise (electrical engineering, mechanical engineering, general installation, fluidic system engineering, supervision, MES/MOM, etc.), and the mastery of safety requirements and experience in managing large-scale projects, we offer end-to-end integrator services to major clients in the energy sector, from design and build to the commissioning and running of complex systems on the client's site, leveraging partnerships for the manufacturing and construction phases.



OUR FOOTPRINT

Global engineering and digitalization partner fostering your operational transformation through the delivery of added-value, sustainable, and safe solutions across the nuclear value chain

Capex Excellence

We support the design and delivery of new nuclear installation projects with services ranging from feasibility studies to commissioning as well as existing fleet revamping and decommissioning. We cover all key capabilities of the owner's engineering, physical engineering and Instrumentation & Control. We help our clients build & scale capabilities, shift to new engineering and project management models, and deliver at an international scale.

Operations Performance

We design, integrate, deploy and run tailored end-to-end solutions to shift operations and maintenance performance in a safer, more sustainable environment. We combine a unique blend of domain, technology, and digital expertise to aggregate the best OT/IT solutions and guarantee viability and scalability.

Digital Engineering

As digital continuity and digital convergence are becoming the foundation for performance, we leverage our group capabilities on application development as well as our network of partners to scale new digital engineering applications (PLM, system engineering, digital twin, O&M hypervision, etc.) within a connected and secured client environment.

Research & Innovation

As the undisputed leading ER&D services provider, Caggemini Engineering provides specific services around product and process innovation. Our experts are proud to enable the future production and usage of decarbonized energy.

**2,000+ Nuclear Specialists
Distributed for Optimized Delivery Models**



DID YOU KNOW?



Capex Excellence

To match the unprecedented needs for talents in the nuclear sector, Caggemini Engineering has created specific upskilling trainings, opened new offices close to its clients in France, UK and India and organized more than 50 partnerships, resulting in + 300% growth of its teams.

We are a major partner of the ITER program, from design and flow simulation to providing support to the owner for the construction of the buildings leveraging digital transformation. We are helping our clients unlock the unlimited energy of the sun on Earth.



Operations Performance

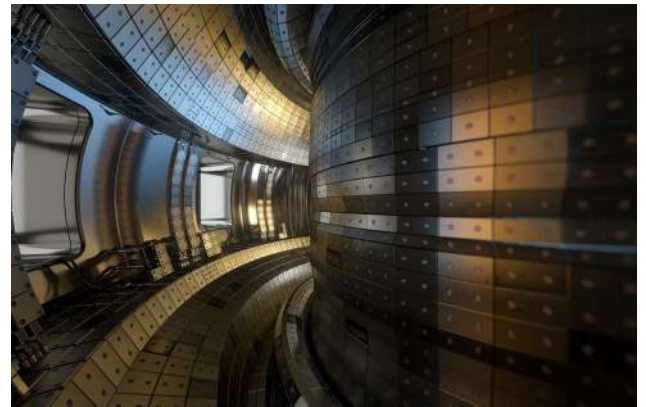
Caggemini Engineering has built and deployed a solution in 18 French nuclear power plants, enabling real time supervision of on site workers to increase their safety and improve operational efficiencies.

We have designed, integrated and deployed real-size control room simulators for all nuclear training facilities of a major electricity company.



Digital Engineering

We have partnered with EDF to carry out a vast digital transformation of its nuclear business to boost competitiveness and maintain its spot among the world's top names in the energy industry. Launched in partnership with Caggemini in autumn 2017, the SWITCH program was designed to standardize, harmonize, and modernize processes and engineering methods.



Research & Innovation

Caggemini Engineering is leading twenty-two in-house R&I programs around the "Future of Energy," including dedicated projects for decommissioning optimization, Small Modular Reactor modeling, and advanced analytics for lifetime prediction.



About Capgemini Engineering

Capgemini Engineering combines, under one brand, a unique set of strengths from across the Capgemini Group: the world leading engineering and R&D services of Altran – acquired by Capgemini in 2020 - and Capgemini's digital manufacturing expertise. With broad industry knowledge and cutting-edge technologies in digital and software, Capgemini Engineering supports the convergence of the physical and digital worlds. We help clients unleash the potential of R&D, a key component of accelerating their journey towards Intelligent Industry. Capgemini Engineering has more than 52,000 engineer and scientist team members in over 30 countries across sectors including aeronautics, space and defense, automotive, railway, communications, energy, life sciences, semiconductors, software, and internet and consumer products.

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