Building on 60+ years of nuclear experience, Tractebel leads innovation in Small Modular Reactors (SMRs)

Tractebel has been the architect engineer and responsible designer for the Belgian nuclear fleet since 1960's. Our highly skilled and experienced experts can adapt the current engineering practices to the new paradigm imposed by SMRs.

SMRs are simple, small and standardized solutions. They can renew investors' appetite for nuclear projects, improve certainty of delivery on time and budget, and facilitate the introduction of advanced technologies.

SMRs enable and extend the uses of nuclear technologies to innovative industrial applications such as energy storage capabilities, Combined Heat and Power for the heavy industry and hydrogen & eFuels production.

Our development programme

- Advance R&D and demonstrate **Passive Safety** performances
- Recommend and defend adaptations to the Licensing approach backed by inherent safety features
- Drive localization strategy for the supply chain rooted in mastery of American and European **Codes & Standards**
- Address and unlock untapped opportunities in **Industrial Applications** leveraging our 360° understanding of tomorrow's energy landscape

Our added value

- An **international footprint** to allow a continuity of experts, processes and tools from one project to the others
- A **team** of meticulous pioneers eager to tailor solutions to **First-of-a-Kind** projects
- A **network** of world-class experts to de-risk the most ambitious and complex projects

Clients benefits

A **partner** that anticipates needs and addresses issues upfront in particular for **unexperienced** market actors

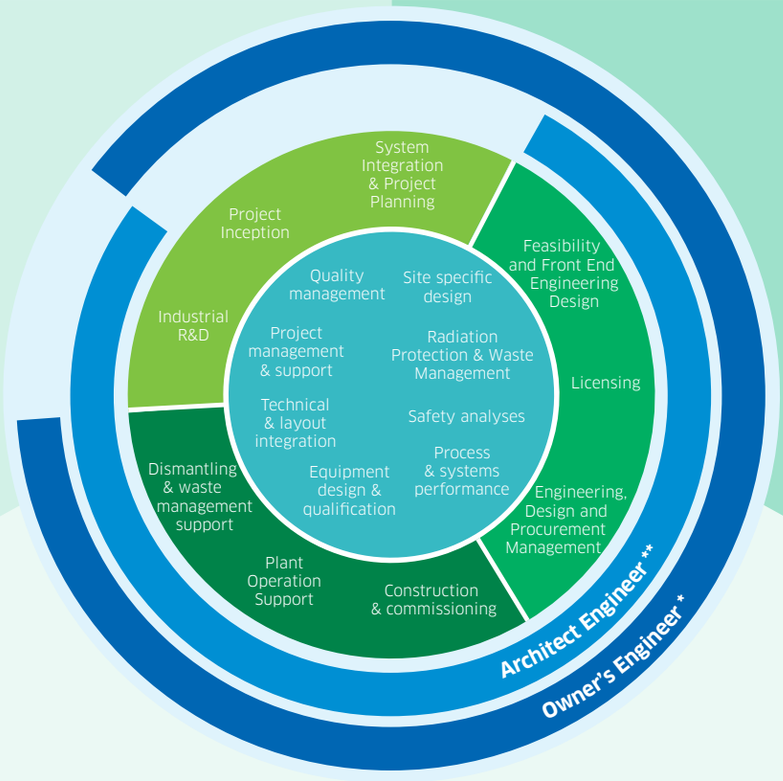
Tailoring our role to your needs and project maturity

Discover our SMR White Paper

WHO CAN BENEFIT FROM OUR EXPERTISE?

SMR developer looking for cutting edge expertise and a trustworthy partner for larger market deployment

Industrial R&D
End-to-end design & Constructability
Project planning & structuring
Operating Procedures



Utilities & industrial off-takers looking for options to decarbonise their assets

Master Planning
Technology assessments
Pre-Feasibility & Feasibility Studies
Technical & Regulatory Consultancy
Organizational development

Established nuclear operators looking for a competent partner to deliver projects on high-quality, time and budget

Due Diligence
Site selection & characterization
Environmental Impact Assessment & Licensing
Operational readiness
EPC Management

***Owner's Engineer**: when the client is the future owner and/or end-user of the asset

****Architect Engineering:** when the client is the provider of the technology to be built

SOME REFERENCES SMALL MODULAR REACTOR

Coal plant retrofit
Mission in Poland

Objective
Assess the relevance of retrofitting two coal fired combined power and heat plants (CHPs) with SMRs.

Solutions
Multi-expertise evaluation of brownfield opportunities and retrofit strategies to ensure service continuity.

Results
Sites and assets characterization regarding suitability to host SMRs and comparative assessment of deployment scenarii accounting for technology options.

CHP Chemical
Mission in US & EU

Objective
Optioneering study to decarbonize the production of chemicals at two large chemical plants in US and Europe given brownfield constraints.

Solutions
Use of SMR to provide combined heat and power (CHPs) services to existing asset with technology options matching assets operational evolution and surrounding infrastructures.

Results
System integration of a reduced list of SMR options meeting operating constraints and siting requirements while accounting for business imperatives from local geopolitics, regulation and supply chain.

Utility program
Mission in Estonia

Objective
Suitability evaluation of SMR as a decarbonised power source beyond 2030 accounting for country' status as embarking in nuclear energy.

Solutions
Technico-economic assessment of best suited SMR technologies considering technical merit, industrial deliverability and market appetite as well as survey of potential sites.

Results
Reduced list of technologies and sites suitable for Estonia's SMR ambition used as a basis for the next project development phases.

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