ansaldo nucleare



Ansaldo Nucleare SpA and its subsidiary Ansaldo Nuclear Ltd (UK) operate together as a "one-stop shop" specialized in nuclear power. Ansaldo Nucleare covers all nuclear activities. From the production of critical high-tech components to the design and construction of new builds, from decommissioning and waste management to advanced research on Fusion, Generation IV plants and Small

Ansaldo Nucleare has consolidated its role as EPC contractor managing the integrated design, the supply of nuclear components and their installation in several recent projects in the domestic markets (Italy, UK) and abroad (France, Romania, Slovenia, Argentina, ...).

Modular Reactors, we can do it all.

Nuclear energy is an essential component of the low-carbon economy. A large proportion of the CO2-free electricity generated in the EU comes from its 100+ nuclear reactors.

The contribution these plants make to the abatement of overall carbon emissions is crucial for the future of the planet.

Ansaldo Nucleare is **devoted to the advance- ment of nuclear technology, enhancing safety and guaranteeing public transparen- cy.** Safety, quality, performance and sustainability guide our vision. We believe in a brighter nuclear future, providing carbon-free energy through advanced and modular technologies for dependable and competitive fission and fusion reactors.

We believe in a nuclear industry of the future and for the future.











NEW BUILDS AND SERVICES



Ansaldo Nucleare has over sixty years of experience working on a variety of reactor types.

Our impressive track record includes significant experience within Generation II to III+ present reactors.

Ansaldo Nucleare provides systems, components and services for the NSSS (Nuclear Steam Supply System) and BOP (Balance of Plant).

Implementing solutions for safety systems and components for new and operational nuclear power plants is vital to **supporting the demands** for a safe and secure energy supply.

Ansaldo Nucleare has provided a range of services in support to operations of nuclear power plants across the globe by delivering cutting-edge engineering services and solutions, optimising their systems, enhancing their performance and making them safer

Working on a variety of different plant designs has provided us with **unrivalled insight when it comes to optimising and enhancing** the performance of a power plant.

Ansaldo Nucleare is **capable of plant upgrades** according to the most stringent safety requirements and **can manage the entire improvement program**, from the design and development of viable solutions to the procurement of equipment and components, construction and installation, all the way to commissioning.



NEXT GENERATION

From pioneering the introduction of passive systems and components in evolutionary designs to revolutionary concepts, Ansaldo Nucleare is heavily investing in the future of nuclear energy.

We have always been proud to contribute to the design of new enabling technologies, the product development and the cultivation of talent that could promote innovative approaches for sustainable growth.

Ansaldo Nucleare is investing in the development of Generation IV lead-cooled fast neutron reactor technology, to make strides towards implementing the EU's Strategic Energy Technology Plan, and we have been consistently contributing to the development of several small modular reactor concepts (SMRs)











Ansaldo Nucleare has been working in the field of fusion for over 30 years, contributing to the development of a fusion-dedicated industrial chain from the very beginning.

Promising to bring the power of the sun to Earth, fusion is one of the nuclear industry's most important areas of innovation. Europe is playing a key role in ensuring the success of fusion projects like the ITER program and the future DEMO fusion power plant, and Ansaldo Nucleare has been heavily involved since the first steps.

Ansaldo Nucleare operates in close **collaboration** with key partners and suppliers, including 40 Italy-based companies, making up one of the most expansive nuclear fusion value chains in Europe.

Ansaldo Nucleare took part in the development of ITER, the largest research project on nuclear fusion technology in the world. Now, Ansaldo Nucleare is leading a consortium tasked with supplying five out of nine sectors of the ITER Vacuum Vessel - an important technology-edge component of an extremely challenging size.

As leader of the DYNAMIC joint venture, Ansaldo Nucleare is also in charge to deliver ITER tokamak assembly, with unprecedented heavy lifting, precision measuring and welding/NDT technologies specifically developed for stainless steel state-of-the-art applications.

DECOMMISSIONING AND WASTE MANAGEMENT

Waste generated during nuclear facilities operations and their decommissioning must be responsibly managed in due time.

Ansaldo Nucleare has provided products and services for decommissioning programmes, in strict collaboration with nuclear facilities operators, combining remote management and waste treatment technologies with our expertise and approach for a safe nuclear business.

Ansaldo Nucleare has delivered decommissioning and waste management solutions worldwide, across a wide range of nuclear plants and research sites, and is **collaborating in many Italian and international programmes** focused on new products and technologies.



