

PRESS RELEASE

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ANSALDO NUCLEARE WINS THE CONTRACT FOR THE IMPLEMENTATION OF THE DIVERTOR TOKAMAK TEST FACILITY

The Italian challenge of nuclear fusion for sustainable and innovative energy is on

Ansaldo Nucleare has won a 21 million euros contract for the management of multidisciplinary technical-managerial support services aimed at implementing the Divertor Tokamak Test (DTT) Facility. Ansaldo Nucleare is part of Ansaldo Energia Group, 88% owned by Cassa Depositi e Prestiti.

The agreement provides for technical-managerial implementation support related to activities of Architectural Engineer, Specialized Engineering and Project Management, Supervision of Works and assistance in construction and commissioning. The contract has a duration of four years, extendable by other four. A great opportunity for Ansaldo Nucleare to develop further skills and experience in the design of fusion machines, opening new opportunities in the short and medium term at a European level. Nuclear fusion reproduces the sun's energy, clean, safe, and potentially inexhaustible.

The DTT is the Tokamak machine, with an estimated cost of around 600 million Euros, which ENEA and ENI will build in Frascati over the next seven years, with mainly national funding (10% provided by the EU). The project aims to create a divertor capable of expelling energy - mostly heat - and the products of nuclear fusion that are generated inside the tokamak. It is a very flexible machine in operational scenarios and represents an outstanding progress, in terms of performance, compared to current machines conceived over 40 years ago. The mission of the DTT is to qualify the divertor prototypes for DEMO (the nuclear fusion demonstration machine that will follow ITER), but its exercise will also allow new generations of scientists to grow, making them able to work on ITER and DEMO later.

"The signing of this contract fills us with pride because in the roadmap of nuclear fusion Ansaldo Nucleare further consolidates its position as leader in the Italian industrial chain, which has already started thanks to the years-long collaboration in the main fusion programs, ITER in particular" - says Luca Manuelli, Chief Executive Officer of Ansaldo Nucleare. "This project is an important step towards the new approach of sustainable nuclear power, the *new clear* one: in this perspective, nuclear becomes a pillar of the energy transition in its various technological and application forms, currently linked to decommissioning, fusion in the coming decades and, in a shorter time dimension, to mini reactors".

The Divertor Tokamak test structure will be 10 meters high with a radius of 5. Inside, 33 cubic meters of plasma will be confined at a temperature of 100 million degrees with a current intensity of 6 million amperes: and with a thermal load on materials of up to 20 million Watts per square meter (over twice the power of a rocket at take-off). The over 40 km of superconducting cables of niobium, tin, titanium - only a few tens of centimeters away - will be at 269 ° C below zero. The DTT facility is the first national fusion project in over 40 years.

The Ansaldo Energia Group, international leader in the field of power generation and key player of the energy transition, is a company 88% owned by CDP Equity, Cassa Depositi e Prestiti Group, a national promotion institution that has supported the Italian economy since 1850, and 12% by Shanghai Electric.