

Office of the Director-General

Pietro Barabaschi, Director-General ITER Organization

An electro-mechanical engineer by training, Pietro Barabaschi was born in Milan, Italy, in 1965. He has dedicated his career to fusion research and began his tenure as Director-General of the ITER Organization in October 2022.

In the late 1980s, shortly after graduating from the University of Genoa, Barabaschi joined the Joint European Torus (JET)—a European project based in Culham, UK—to work on what was then the largest fusion machine ever designed. Through his work across multiple aspects of JET, he gained comprehensive experience in the complexities of building a large tokamak.

At the same time, an even more ambitious project was taking shape within the international fusion community. Launched in the mid-1980s by the United States and the Soviet Union, and soon joined by Europe and Japan, the International Thermonuclear Experimental Reactor (ITER) aimed to construct a tokamak whose scale and technical specifications would demonstrate the industrial feasibility of fusion energy. Barabaschi joined the ITER team in 1993, during the early Engineering Design Activities, which were carried out across three Joint Work Sites in Munich-Garching (Germany), San Diego (United States), and Naka (Japan). Based in San Diego and Naka, he was appointed Deputy to the ITER Project Leader and Head of the Engineering and Design Integration Unit in 2000.



china

eu

india

japan

korea

russia

usa

In 2006, he moved to Fusion for Energy (F4E)—the European Joint Undertaking responsible for delivering Europe’s contributions to ITER and to the “Broader Approach,” a collaboration on advanced fusion research between Europe and Japan. As Head of the Fusion Development Department, Barabaschi led Europe’s contributions to the JT-60SA project, a major upgrade of the JT-60U tokamak, from 2007 to 2021. He also served as Acting Executive Director of F4E in 2014–2015 and again in 2022, shortly before returning to ITER as Director-General.

When Barabaschi became Director-General of ITER in 2022, the project had matured from a design-phase initiative into a highly complex construction and integration enterprise, operating within a demanding technical, organizational, and regulatory environment. Early in his tenure, Barabaschi initiated a structured effort focused on strengthening technical delivery, reinforcing alignment with regulations, enhancing collaboration with Domestic Agencies, and simplifying internal processes to improve efficiency and accountability. In parallel, the combined effects of the COVID-19 pandemic and technical adjustments required a reassessment of the project’s delivery framework.

A revised plan—Baseline 2024—was developed in close collaboration with international partners. It incorporated design adjustments, additional testing, and an updated research strategy to reduce risk. Endorsed by the ITER Council in November 2024, the new baseline has since been supported by strong year-on-year project performance, with progress tracking slightly ahead of schedule and well within cost forecasts.

Across his career, Barabaschi has developed deep expertise in the scientific, technological, industrial, human, and financial dimensions of large-scale international collaboration.