

Stefano Stendardo has a degree in Mechanical Engineering with Energy specialisation and a Ph.D. in Engineering and Mathematical Physical Modelling in the field of Fluid dynamics and Chemical Reactors.

The main research interest of Mr Stendardo is the experimental and theoretical investigation of sustainable and circular technologies for the separation of CO₂ and carbon valorisation in energy intensive industries.

He started his experience in the carbon capture, use and storage (CCUS) technologies at the ENEA in 2004 where he was involved in the study of advanced thermodynamic cycles with zero carbon emissions and very high efficiency. He has worked also at the Joint Research Centre (JRC) of the European Commission where he was involved in task force for providing technical support to the European Commission's policy makers in the field of carbon capture technologies.

From 2014 to 2018, he was the main coordinator of the ASCENT project funded by the EC for producing H₂ by reforming CH₄ via efficient and novel technologies based on advanced cycles of CO₂ sorbents.

In 2017, he has been appointed as the reference person in ENEA for the activities on the CCUS processes. He is the Italian representative in the executive committee of the research (RFCS) which supports research projects in clean coal and steel sectors. He represents ENEA in the Joint Programme on CCUS in the European Energy Research Alliance (EERA).

In 2019, the Ministry of Economic Development approves the appointment of Mr Stendardo as delegate to represent Italy in the collaborative technological programme of the international energy agency (IEA) on the Industrial and Energy-related Technologies and Systems.

Currently, he is the scientific coordinator of a 0.5MWth ECCSEL-ERIC research infrastructure (ZECOMIX) installed in the Casaccia Research Centre for producing hydrogen from carbonaceous fuel gases and using industrial waste for the final storage of capture CO₂ and produce materials for the building products market.