

**Speech at the Conference “The Economics of CCUS Applications” by IESE– Athens,
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Ladies and Gentlemen,

It is a great honor and pleasure to be with you today at this meeting on an issue of exceptional importance for the future of our industry, our economy, our climate, and indeed our entire natural environment: the economic dimensions of CCUS applications – Carbon Capture, Utilization and Storage. I would like to congratulate the Institute for Energy in South-East Europe and the Technical Chamber of Greece for organizing this event.

Today, as the climate crisis stands as one of the most pressing challenges, CCUS emerges as one of the most innovative and significant technologies for addressing excessive carbon dioxide emissions and the escalating climate crisis. This has been my view for the past 20 years, and unlike other some environmentalists, I believe that CCUS technologies – including Direct Air Capture (DAC) technologies, sequestration and the conversion of CO₂ emissions into other materials, namely its reuse within a **circular carbon economy** – are an essential part of the solution to the climate crisis.

Of course, these initiatives must be developed in parallel with other solutions, such as reducing carbon dioxide emissions, restoring our ecosystems which serve as natural sinks for CO₂ emissions, promoting environmental innovation, and more. However, these CCUS **technologies must be part of the solution**, as they constitute one of the most direct ways to tackle the greenhouse effect.

The ability to capture, utilize, and store CO₂ is not only an environmental necessity, but also an opportunity for the economic restructuring of our industry, creating new markets and jobs. From an economic perspective, CCUS applications bring with them a series of challenges and opportunities. First, I would like to mention the indicative costs of investment and technological development (R&D). The installation and operation of CCUS technologies require significant initial investment, both in infrastructure and in research and development. However, technological progress and continuous innovation lead to a gradual cost reduction, making these solutions increasingly competitive in the global economic environment, as is the case with most new technologies.

Secondly, it is essential to provide financial incentives and policy support for the development of these technologies, which are currently lacking. For the widespread adoption of CCUS, a favorable regulatory framework is necessary. Government policies that promote financial incentives – such as tax exemptions, subsidies, and public investments – can facilitate the implementation of these technologies, encouraging both the private and public sectors. Our country has already incorporated the development of these technologies into the provisions of the first National Climate Law (Law 3946/2022) and we still need to elaborate further on this sector.

Furthermore, it is necessary to develop new markets and pursue new business opportunities. CCUS is not only about reducing emissions but also opens new prospects for using CO₂ as a raw material in various industrial applications. From the creation of synthetic fuels to the production of chemical products, the possibilities are many that can lead to new economic activities and markets. From an environmental standpoint, it is preferable that your research efforts focus on the development of alternative fuels, because the need for fuels is what drives us to extract and use hydrocarbons that create the subsequent CO₂ emissions.

If we want to significantly reduce emissions, we must reduce the extraction of new hydrocarbons and the release of their emissions into the atmosphere. This goal could be better achieved using CCUS techniques. We already have as much carbon in the atmosphere as we need to ensure fuel sufficiency, provided we develop the necessary know-how for the conversion of the emissions into alternative fuels and make full use of these CO₂ atmospheric reserves.

Along with the economic prospects, environmental and social challenges must also be taken into account. Ensuring safety in CO₂ storage processes, avoiding potential leaks, and managing local impacts are critical factors that require coordinated actions between the private sector, the academic community, and governmental authorities.

In this context, it is worth highlighting the pioneering role of the Parliamentary Environment Committee, which has already organized sessions on CCUS and has emerged as one of the most progressive public bodies in promoting these technologies in Greece. Its actions and vision can be a decisive factor in the adoption and integration of CCUS solutions into the national and European legislative and technological landscape.

At the same time, I must emphasize the significant role of the Institute for Energy in South-East Europe (IENE), whose contribution to research, development, and the promotion of innovative energy technologies for CCUS is extremely important. Through its continuous support and initiatives, IENE has managed to bring innovation closer to practice, demonstrating that collaboration between research institutions, industry, and the public sector can lead to sustainable solutions for our future.

On an international level, several countries have already invested significantly in the development and implementation of CCUS technologies. These initiatives not only improve environmental performance but also create a new model of entrepreneurship that combines innovation with economic viability. The exchange of best practices and collaboration between countries, especially within the European Union, serves as an example for Greece, where the Technical Chamber plays a crucial role in shaping the business environment.

In Greece, the potential for CCUS is vast, especially given the technological development and business activity that characterize the Greek industrial landscape. The transition to a low-carbon environment and a zero emissions economy is not only an internationally agreed environmental obligation by 2050, but also an opportunity to renew our industrial base and enhance our competitiveness in the global market. The dialogue between government agencies, industry, and research institutions is now more important than ever for the successful implementation of our plans.

The Technical Chamber of Greece has always played a leading role in shaping the technological and business policies of the country. With its support and expertise, we can develop comprehensive strategies for implementing CCUS that combine technological innovation, economic efficiency, and environmental protection. The collaboration between the Chamber and industrial bodies can accelerate the transition to a green economy while offering opportunities for employment and the development of new markets.

Ladies and gentlemen, our future demands a combination of innovation, strategic thinking, and mutual support. CCUS applications are a critical component in addressing climate change, simultaneously providing a platform for new business opportunities and economic development. We are at a turning point where the decisions we make today will determine our future, not only environmentally but also as a society and an economy.

Therefore, I call on you, as representatives of Greek industry and technology, to adopt a long-term vision by investing in research, development, and innovation that will lead to the widespread implementation of CCUS. Together, with the contributions of both the Parliamentary Environment Committee and pioneering entities like IENE, we can shape a

sustainable future where economic growth and environmental protection are not contradictory, but complementary values.

Thank you very much for your attention, and I wish you all a constructive and inspiring session.