GLOBAL CCS

WHAT THE EXPERTS SAY ABOUT CCS



"CCUS is a necessary bridge between the reality of today's energy system and the increasingly urgent need to reduce emissions. Not only can it avoid locking in emissions from existing power and industrial facilities, it also provides a critical foundation for carbon removal or negative emissions."

DR. FATIH BIROL Executive Director, The International Energy Agency

"If we want to limit warming to 1.5° C, we need to halve global CO₂ emissions in the next ten years... Every tonne and every year counts... CCS has a role there if it enables an industrial system transition and takes us out of the current carbon lock-in."

PROF. HELEEN DE CONINCK

Associate Professor, Department of Environmental Science, Radboud University, Coordinating Lead Author of Chapter 4 of the IPCC Special Report on Global Warming of 1.5°C





"We have little time left to avoid some of the worst impacts of climate change.. We can tackle this challenge by avoiding carbon emissions through point source carbon capture coupled to reliable storage (CCS), and by removing carbon dioxide from the accumulated pool in the atmosphere (CDR)... If done strategically and collaboratively, deploying these approaches will not only help us address the climate crisis, but will also spur the creation of high-quality clean economy jobs – helping those populations and communities that have been disproportionately affected by climate change."

DR. JENNIFER WILCOX

Principal Deputy Assistant Secretary, Office of Fossil Energy and Carbon Management, United States Department of Energy, formerly Presidential Distinguished Professor of Chemical Engineering and Energy Policy at the University of Pennsylvania

"CCUS is proven to deliver massive emission reductions. It provides a pathway for the low-carbon utilisation of fossil fuels and to achieve negative emissions, and will also make a significant contribution to clean energy production, such as hydrogen... CCUS is not only essential for CO₂ emissions reduction, but is an indispensable technology to build a resilient, versatile, and complementary future energy mix."

PROF. JIN HONGGUANG

Member of China Academy of Sciences, Chair Commissioner, CCUS Professional Committee, Chinese Society of Environmental Sciences



UNDERSTANDING CARBON CAPTURE AND STORAGE WHAT THE EXPERTS SAY ABOUT CCS



"The stars have begun to align for carbon management, including CCS, carbon-tovalue (CO₂ recycling) and carbon removal. [Due to] the uncomfortable recognition that most major economies won't achieve their climate targets for Paris [and] the unsettling facts in the IPCC's recent 1.5°C report. Thankfully, dramatic progress in technology, policy, investment, and business around carbon management balances the scales and drives current interest and progress on many fronts."

DR. JULIO FRIEDMANN

Chief Scientist at Carbon Direct, and non-resident fellow at the Center on Global Energy Policy at Columbia University

"Carbon sequestration is one essential component of addressing the climate crisis. While the ideal method is to reduce emissions, and everything possible must be done to achieve that, this still will not be enough...Industries, such as cement and steel production, emit carbon dioxide in massive amounts; [and] until technological alternatives are developed and widely applied, it will be necessary to capture and then utilize or store the emissions from these industries as well."

PROF. MICHAEL GERRARD

Andrew Sabin Professor of Professional Practice, Columbia Law School





"We must recognise that there is no such thing as a "one size fits all" [green] transition. Different countries and regions have their own strengths... It is in this context that CCS has a uniquely important role to play in decarbonising the provision of heat, power, mobility, and industrial services, whilst creating and preserving jobs at all levels of the economy."

PROF. NIALL MAC DOWELL Professor in Energy Systems Engineering, Imperial College London

"We have long known that CCUS will be an essential technology for emissions reduction; its deployment across a wide range of sectors of the economy must now be accelerated. Low-carbon technologies, including renewables and CCUS, point toward a viable pathway for achieving net-zero GHG emissions by 2050, even in sectors that were considered "too difficult" to decarbonise just a few years ago, such as steel, cement, aviation, and long-distance transportation."

LORD NICHOLAS STERN

IG Patel Professor of Economics and Government, and Chairman of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics





"Over the last 20 years, the role of carbon capture and storage [as a climate solution] has evolved from 'nice to have' to 'necessary."

DR. SALLY BENSON

Deputy Director for Energy and Chief Strategist for the Energy Transition at the White House Office of Science and Technology Policy (OSTP)