

Carbon Capture and Storage – A Decarbonisation Strategy for Sustainable Development

Access to new resource related to solving global problems added to PMWL



Resource provided by [Ishitha Doniparthi](#)

3 March 2026 – Mumbai, India – Access to a new resource has been added to the PM World Library (PMWL) related to climate change mitigation and sustainable development. The new resource is titled “**Carbon Capture and Storage as a Decarbonisation Strategy: Empirical Evidence and Policy Implications for Sustainable Development**”, an open-access article by Maxwell Kongkuah, Noha Alessa, and Ilham Haouas, published in the journal *Sustainability* in 2025.

The article examines the role of carbon capture and storage (CCS) as a strategic tool for reducing national carbon intensity across 43 countries between 2010 and 2020. Using a Dynamic Common Correlated Effects (DCCE) econometric model, the study evaluates sector-specific impacts of CCS deployment in direct air capture, cement production, iron and steel, power and heat, and natural gas processing. The findings show that CCS installations in high-income countries are associated with measurable declines in carbon intensity, particularly in cement and power sectors, while lower-income economies show mixed results due to infrastructure and financing constraints.

The study also highlights the importance of policy design tailored to income levels, emphasizing tax incentives and public-private partnerships in advanced economies, blended finance in upper-middle-income countries, and pilot CCS hubs supported by international cooperation in developing regions. By linking technological deployment with sustainable development objectives, the article reinforces CCS as a potential pathway toward achieving Sustainable Development Goal 13 (Climate Action) and advancing global decarbonisation efforts.

To access this new resource, go to the Solving Global Problems section of the library at <https://pmworldlibrary.net/solving-global-problems/>, scroll down to Solving Global Environmental Problems, click on “Carbon Reduction – Carbon Capture”, scroll down to resource. Must be a registered member and logged in to access. If not currently registered, please consider the FREE 30-Day Trial at <https://pmworldlibrary.net/trial-membership>.

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For PMWL Post

Kongkuah, M., Alessa, N. And Haouas, I. (2025). **Carbon Capture and Storage as a Decarbonisation Strategy: Empirical Evidence and Policy Implications for Sustainable Development**, *Sustainability*, 17(13), 6222; <https://doi.org/10.3390/su17136222>. This paper examines the impact of carbon capture and storage (CCS) deployment on national carbon intensity across 43 countries between 2010 and 2020. Using a Dynamic Common Correlated Effects (DCCE) model, the study provides sector-specific evidence showing that CCS expansion particularly in cement, power and heat, iron and steel, and direct air capture can significantly reduce carbon intensity in high-income economies, while highlighting infrastructure and financing challenges in lower-income countries. The paper also outlines tailored policy pathways aligned with Sustainable Development Goal 13 (Climate Action). Available online at <https://www.mdpi.com/2071-1050/17/13/6222> (Ishitha Doniparthi)

Where to post in the library: <https://pmworldlibrary.net/carbon-reduction-carbon-capture/>