

Institute for Governance & Sustainable Development

China Announces Progress in Methane Monitoring and Evaluation In Preparation for the Release of Its National Action Plan on Methane

17 January 2023 — During its January 2023 <u>press conference</u>, China's Ministry of Ecology and Environment (MEE) highlighted progress on carbon dioxide and other greenhouse gas monitoring and evaluation pilot projects aimed at answering critical questions on "what to measure," "where to measure," and "how to measure." This includes pilot projects exploring preliminary technical methodologies for methane leakage detection. In particular, MEE noted that the oil and gas industry pilots have established a methane leakage detection mechanism by implementing an integrated "satellite + unmanned aerial vehicle + cruise" monitoring system for tracking methane leakage in production processes. For the coal mining industry pilots, MEE observed that a collaborative methane emissions monitoring technology has been developed using existing coal mine safety monitoring systems. Last but not least, MEE commented that it has established a preliminary understanding of the concentrations and the spatial and temporal distributions of global methane emissions through analysis of satellite remote sensing data.

Generally speaking, the methane-emissions monitoring pilots are contributing to the development of China's methane-emission monitoring methodologies for key industry sectors and improving access to up-to-date methane data. Such data and monitoring methodologies are essential for the Chinese government to establish and evaluate quantitative methane mitigation targets. They are also necessary to ensure the effective implementation of methane mitigation policies and actions, including those contemplated in the U.S.-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s (10 November 2022). These included China's intention "to develop a comprehensive and ambitious National Action Plan on methane, aiming to achieve a significant effect on methane emissions control and reductions in the 2020s." At the Global Methane Pledge Ministerial convened on 17 November 2022 at COP27 in Sharm El Sheikh, Egypt, Xie Zhenhua, China's Special Envoy on Climate Change, described key focus areas for China's methane mitigation and the fact that the National Action Plan on methane was undergoing approvals within the Chinese government.

As next steps, MEE will further evaluate the pilots and summarize the lessons learned, including analyzing the data collected through the pilot projects. Outcomes from the data analysis will also be applied to further improve the technical methodologies and relevant standards for methane mitigation.

Additional IGSD resources (selected examples):

- Tad Ferris, Gabrielle Dreyfus, and Durwood Zaelke (lead authors), with Valarie Fajardo, Caitlan Frederick, Erika Gerstenberger, Romina Picolotti, Connor Schiff, Xiaopu Sun, Trina Thorbjornsen, and Jon Turner, <u>A Primer on Cutting Methane: The Best Strategy for Slowing Warming in the Decade to 2030</u> (DRAFT 5 December 2022).
- Xiaopu Sun, Pu Wang, Tad Ferris, Hui Lin, Gabrielle Dreyfus, Baihe Gu, Durwood Zaelke, & Yi Wang, <u>Fast Action on Short-Lived Climate Pollutants and Nature-Based Solutions to Help Countries Meet Carbon Neutrality Goals</u> (Advances in Climate Change Research) (August 2022).
- IGSD, China Announces Actions to Promote the Development and Utilization of Coalbed Methane (5 August 2022).
- IGSD, China's New Urban and Rural Development Carbon-Peaking Plan Contributes to Energy-Efficiency Improvements and Measures to Curb Emissions of Non-CO₂ Greenhouse Gases (including methane) (30 June 2022).
- IGSD, China's Zero-Waste Cities Plan to Mitigate Methane and Other Waste-Sector Emissions During the 14th Five-Year Period (16 December 2021).
- IGSD, <u>China Announces Next Steps on Methane Emissions Control During the 14th Five-Year Period</u> (15 November 2021).



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