

Global Renewable and Low-Carbon Gas Report

2021 edition

About IGU

The International Gas Union is the global voice of the gas industry. With more than 160 members in over 80 countries, covering 95% of the global gas market: from exploration and production of natural gas, low and zero carbon gas and technologies, to transit, pipelines, and LNG, and through distribution and use of gas, the IGU is the only international association covering the entire supply chain across all continents.

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Message from the President

Welcome to the inaugural edition of the International Gas Union's *World Renewable and Low-Carbon Gas Report*.

This is the first report in what is to become a new series. We made the choice to launch this report to demonstrate our support and appetite for the accelerated growth of the global renewable and low-carbon gas sector. Developing effective growth strategies, requires an understanding of the baseline, and that is what we aim to establish with this series. It will track the industry's progress, as it grows and develops over time.

Renewable gas and low-carbon hydrogen are two vital elements in an achievable energy transition. They will be critical for the global energy system to achieve the required levels of decarbonisation, fast enough to avoid irreversible climate change.

The clear message is that scale of projected supply is going to be more and more challenging to attain, without a rapid and significant increase in production. The current level of planned and installed production capacity for renewable and low-carbon gases appears negligible compared to the stated plans, and that must be changed.

As such, this report is a call to action on all fronts – policy, industry, and the financial community. We all need to play our part if there really will be a practicable gaseous energy revolution.

The IGU aspires for this report to develop into authoritative source of information on global renewable and low-carbon hydrogen gas, as our other flagship reports are on natural gas. We will tap into the IGU's wide-reaching global network and one of the most extensive gas industry knowledge bases in the world to make that possible. Over a thousand professionals participate in IGU's Committees and Task Forces. They produce insightful reports and design the Technical Program of one of the biggest global energy events, the World Gas Conference with the next edition in Daegu, Korea, in May of 2022.

I also take the opportunity to call on all IGU members and partners with renewable gas and low-carbon hydrogen projects to participate in the next year's edition of this survey. For more information, you can reach out to the IGU report study group leader or IGU Public Affairs.

I hope this report will be informative and inspire action in the global energy community to accelerate the production scale-up of the key renewable and low-carbon gas technologies.

Joe. M. Kang
President, IGU

Message from the Oxford Institute for Energy Studies

The Oxford Institute for Energy Studies (OIES), together with its partners in this project from the Sustainable Gas Institute, Imperial College, London and the Bureau of Economic Geology, University of Texas, Austin, has been delighted to work with the International Gas Union on the production of this renewable gas database report. While we recognise that this first edition has only be based on limited data, it has already produced some valuable insights, and we expect this to grow further as the data coverage increases in future editions.

We felt it particularly valuable to look at both biomethane and hydrogen in one report, as we see them playing complementary roles in decarbonisation of the global energy system and both are very relevant to the natural gas industry.

We look forward to continuing the co-operation with the International Gas Union over the coming years.

Martin Lambert

Senior Research Fellow, Oxford Institute for Energy Studies

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"Texas is an energy state — does that include Hydrogen? "