



SUSTAINABLE GAS INSTITUTE

Imperial College
London

SUSTAINABLE
GAS INSTITUTE

SGI

Partners Programme

About us

The Sustainable Gas Institute at Imperial College London provides thought leadership and authoritative interdisciplinary evidence and analysis on the role of gas in future low carbon energy systems. We manage, lead and deliver world-class research with our global partners across the spectrum of science, engineering, economics and business to support policymakers and industry in their decision-making.

Aims

- Examine the environmental, economic and technological role of natural gas in the global energy landscape;
- Define the technologies and develop energy systems models that could explore the role of gas and other energy sources;
- Address the global challenge of how to mitigate climate change.

Scope

The Institute focuses on natural gas, hydrogen and biogas/biomethane energy vectors, covering research in production processes, transport and related infrastructure, and a complete range of end-use technologies. This technical knowledge underpins further analysis of enabling factors such as economics, policy, regulatory and market mechanisms in low carbon futures.

Working together to solve our global energy challenges

"Partnerships are key to solving and addressing our global energy challenges. Our new partners programme at the Sustainable Gas Institute will provide an opportunity for organisations in the energy sector to work alongside our world-class research team at Imperial College. We are excited to be engaging the full gas value chain in our partnership model, opening opportunities to answer the questions that really matter to stakeholders."

Dr. Adam Hawkes, Director, Sustainable Gas Institute



Why organisations work with us

- Full access to world-class leading research on key energy topics.
- Opportunity to keep up to date simply and effectively with leading-edge technology.
- Find out what others (including peers, other industries and academics) are thinking and doing.
- Commission sector evidence-based reviews and white papers to aid senior stakeholders in investments, decision-making and energy and climate change policy.

SGL recently worked in partnership with Enagás to improve our understanding of methane emissions:

“Enagás is strongly committed to climate change and reducing methane emissions from the value chain. Partnership with the Sustainable Gas Institute has helped us quantify how natural gas can contribute to a low carbon economy.

The researchers provided a framework for realistic and up-to-date methane impact which examined the different existing climate metrics as well as the uncertainty of both metrics and estimated emissions.

We now have a better understanding of the methane fugitive emissions reduction existing potential from our natural gas infrastructures which will help LNG to find its place in the maritime sector in the near future.”

Claudio Rodriguez,
Infrastructures General Manager at Enagás, Spain

Our Research Themes

The core activities of the SGI where partners can work with us:



Evidence-based Reviews

Deliver evidence based white papers that inform the debate around the role of natural gas.



Gas Technology Briefings

Focus on the translation of our research into industry and policy impact in high-profile peer-reviewed journals.



Modelling Gas Futures

Develop a unique energy systems simulation modelling tool (MUSE) to analyse the energy system, and the role of technologies within it.



Methane Research

Understand methane emissions and their mitigation in energy supply chains. Data, analysis, technology, techniques, policy and regulation.



Hydrogen Research

Explore possible future roles of hydrogen in heating, transport, power generation and industry.



Member-tailored Research

The institute works with a range of industry and government partners to deliver tailored insights on future energy systems.



Our areas of expertise

7 topics

Applications for gas in low and net zero carbon energy systems

Natural gas supply chain technology from production to end-use

Biogas/biomethane supply chain technology from production to end-use

Hydrogen supply chain technology from production to end-use

Methane emissions in oil and gas supply chains

Carbon capture, utilisation and storage

Policy, regulation and markets

7 competencies

Engineering-led interdisciplinary technology assessment

Energy systems modelling and integrated assessment modelling

Methane emissions data repository, detection/quantification approaches, mitigation strategies

Life cycle assessment

Process simulation

Systematic review and evidence synthesis

Policy knowledge and research for policy impact

Gas could play a crucial role in the future energy mix. What does that mean for industry, governments and other stakeholders?

The Sustainable Gas Institute partnership programme aims to engage a diverse partnership from leading companies and institutions across the gas value chain, including oil and gas extraction, distribution and end-use, energy companies, consultancies, and government bodies to address the tremendous opportunities and challenges associated with increased use of natural gas, hydrogen and bio-derived gases.

The goals of the programme are to:

- Examine the role of natural gas, hydrogen and other low carbon gases in the global energy landscape;
- Apply state of the art techniques to explore the environmental performance of gas production, transmission and distribution and end-use systems;
- Define the technologies that underpin the role of gas in future, including technical challenges, their solutions, and the supporting economic case.
- Determine the role of gas in mitigating climate change, through supporting renewable electricity systems, providing low carbon heat and transport, and in green industrial production.

We bring together a wide range of world-leading Imperial College researchers with expertise in natural gas futures, carbon capture and storage, modelling energy futures, life cycle assessment, hydrogen, energy efficiency, carbon and methane emissions mitigation and low-carbon transport.

Our partners are given a clear insight into the forefront of gas and energy research and development to gain an early competitive advantage.

Partnership opens the opportunity to form long-term partnerships, to share ideas and network with other global organisations working in the energy sector.



What are the benefits of joining?

The Sustainable Gas Institute provides numerous benefits to its partners including direct assistance and solutions to organisations' specific goals and challenges.

Benefits vary depending on the partnership level, but include:

- Privileged access to a **director** as the main point-of-contact.
- Dedicated access to an experienced **project lead** or research team (PhD students and post-doctoral researchers).
- Serving on the **governance board** with an opportunity to drive research priorities for the Institute.
- Active participation in the **White Paper Expert Advisory Group**.
- Opportunity to develop research through a **tailored academic research project** (aligned with the level of fee contribution).
- Regular input into **research project meetings**.
- Partners and members will receive **priority early-stage access to findings**.
- Invitation to a **roundtable discussion/members dinner** with our annual lecture speaker
- Optional sponsorship of a **Gas Technology Briefing paper**.
- Participation in an annual **"Sustainable Gas Day" workshop** industry/academic showcase.
- Guaranteed and privileged access to our **Annual Lecture** series.
- Special access to expertise on **collaborative MSc research project proposals**.
- Regular institute updates: **newsletter, and annual report**.

We offer three levels of partnership: Standard, Plus, and Foundation.

The following benefits are available, depending on the level of partnership.

Partnership level	Standard	Plus	Foundation
Director contact point			Yes
Researcher contact point		Yes	Yes
Governance Board		1 position	2 positions
White Paper expert advisory group		Yes	Yes
Tailored research project*		Yes	Yes
Research project meetings		Yes	Yes
Priority early-access to findings		Yes	Yes
Gas Technology Briefing acknowledged sponsor	Yes		
Annual "Sustainable Gas Day" workshop	Yes	Yes	Yes
Annual members dinner		1 place	2 places
Annual lecture VIP seats	1 place	2 places	5 places
Collaborative MSc research projects	Yes	Yes	Yes
Centre updates: newsletter, annual report	Yes	Yes	Yes

*Tailored academic project resources aligned with level of fee contribution

For more information, please contact Dr Marina Lomborg (Operations Manager), at m.lomborg10@imperial.ac.uk

