

Media Release

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Golden age of gas dependent on changing DNA of industry, new El survey reveals

- 90% of oil and gas professionals surveyed see role for industry in developing and implementing carbon capture and storage (CCS)
-but two-thirds express surprise at the scope for reducing potent fugitive methane emissions in their own operations.
- El challenges industry at IP Week to do more to embed climate change in operating cultures, on a par with health and safety.

A new report published by the Energy Institute (EI) at International Petroleum (IP) Week today sheds light on the attitudes of global oil and gas professionals towards reducing the climate change impacts of natural gas.

As the energy sector's independent professional body and host of IP Week, the EI is working to address the realities of the energy system as it shifts to low carbon.

While much of the debate about cleaning up gas has focused on the technologies required, the EI report finds lack of awareness could also be holding back progress.

Speaking at IP Week, El President Malcolm Brinded CBE FREng FEI said:

"There's an elephant in the room of the global energy system and it's called natural gas. It looks like a golden age for gas, with unconventional production soaring and global LNG trade forecast to more than double by 2040. But at the same time the world has committed to keeping temperature increases within 2°C, requiring net zero emissions in the second half of this century.

"Even natural gas's cleaner-than-coal and friend-to-renewables advantages will not be enough to square this circle. For it to fulfil its potential long-term role in the low carbon world, more must be done to clean up how it is produced and how it is burned.

"The EI report's findings are a call for action across the industry. Just as health and safety are embedded in operating cultures, tackling climate change in all ways needs to become equally – and profoundly – part of business-as-usual. It must enter all our DNA."

Key findings of the report:

 Most respondents to the survey are confident about the role of natural gas through to 2050. They also take a largely positive view of the potential to tackle carbon emissions from combustion, believing CCS offers the greatest potential of any technology to reduce emissions in the natural gas lifecycle. Nine out of ten believe industry has a role to play in developing and implementing CCS.

 But on methane leakage during production, too many professionals underestimate the significance of fugitive emissions, and the possibilities for reducing them cost effectively.
Two thirds expressed surprise at the extent of the problem and these possibilities within their own operations.

Natural gas is an abundant and flexible fuel. It contributes to reducing climate change impacts when it displaces coal in power generation and heating, with some 40% less CO2 emitted. Gas also significantly reduces local air pollution from small particulates and from sulphur dioxide, relative to coal burning and also relative to diesel fuels in transport.

Nevertheless methane is emitted during the production of gas. Methane as a greenhouse gas is 28–36 times more potent than CO2 over 100 years. The International Energy Agenda (IEA), in its World Energy Outlook 2017, has assessed that much more could technically be done during production and distribution of natural gas to reduce leakage of methane. It found that it is possible to avoid 75% of current methane emissions in the natural gas supply chain, and that 40–50% of these emissions could be avoided at no net cost.

Commentary from leading figures contained in today's report addresses its findings:

Christophe McGlade, Oil and Gas Analyst, IEA:

"There are multiple technologies and measures available today that can be used to reduce methane emissions from oil and gas operations. Implementing just those measures that pay for themselves, by monetising the captured methane, would have the same long-term impact on mitigating climate change as immediately shutting all existing coal-fired power plants in China."

Maarten Wetselaar, Integrated Gas a New Technologies Director, Royal Dutch Shell:

"To realise greater greenhouse gas emissions benefits, the gas industry must increase its focus on reducing emissions of methane across the value chain... Every company in the industry must take control of this issue. Measure emissions accurately. Report them in a transparent way. And continually reduce emissions to maximise the full greenhouse gas advantages of natural gas."

Dominic Emery, Vice President, Group Strategic Planning, BP:

"Gas has many advantages as a source of energy — ... it is abundant, resilient and flexible — but much of this is conditional on 'getting gas right'. As the report shows, this means detecting and reducing methane emissions and acting on the need for abated gas in all demand sectors... Our industry holds the keys to driving this forward and making gas a destination fuel for the energy transition."

Gérard Moutet, Executive Committee Chairman, Oil and Gas Climate Initiative:

"It's hard to imagine a pathway to a lower emissions future that does not include natural gas... Gas has a significant role to play in fulfilling the energy needed to ensure

development for all countries, complementing renewables, and delivering a clear climate and clean air benefit, especially when compared to coal... The more cleanly gas is produced, processed and transported, the bigger the benefit in tackling climate change."

Philip Swanson, CCAC Oil and Gas Methane Partnership:

"As the survey shows, addressing methane emissions is unfortunately still new territory for many in the sector, despite the fact that it is 'low hanging fruit' and other stakeholders are increasingly aware of the issue."

Notes for editors

- 1. The Future of Gas report can be found at: https://knowledge.energyinst.org/collections/future-of-gas
- 2. For any media enquiries please contact Nick Turton, External Affairs Director, on 020 7467 7103, 07776 135296 or nturton@energyinst.org
- 3. International Petroleum (IP) Week, hosted by the Energy Institute (EI), is taking place from 20-22 February at the InterContinental London Park Lane. It is a renowned and highly respected event where leaders from the global oil and gas industry share their wealth of knowledge and experience with fellow experts over three days of conferences, seminars, roundtables and social events.
 - Over the years, IP Week has established itself as one of the most important events in the global oil and gas calendar, attracting over 1,500 senior executives from all around the world every year.
 - IP Week reviews the state of affairs both globally and locally and provides you with a robust platform where decision makers gather to debate, learn, discuss, share knowledge on current issues and helps to shape the future direction of the industry.
- 4. The Energy Institute (EI) is the chartered professional membership body bringing global energy expertise together.
 - We're a unique network with insight spanning the world of energy, from conventional oil and gas to the most innovative renewable and energy efficient technologies.
 - The global energy industry, the people working in it and wider society all benefit from the FI's work

We gather and share essential knowledge about energy, provide the skills that are helping us all use it more wisely, and develop the good practice needed to keep it safe and secure.

We articulate the voice of energy experts, taking the know-how of around 20,000 members and 250 companies from 120 countries to the heart of the public debate. And we're an independent, not-for-profit, safe space for evidence-based collaboration, an honest broker between industry, academia and policy makers.

The EI is here for anyone who wants to better understand or contribute to the extraordinary energy system on which we all depend.