

EXCLUSIVE INSIGHTS // ACTIONABLE INTELLIGENCE // EXCLUSIVE SURVEY ANALYSIS

ENERGY TRANSITION DIALOGUES INTELLIGENCE BRIEFING

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SCROLL DOWN!

PEAK OIL BY 2025?

GREEN H2 AUCTIONS

GREEN TECH

THIS WEEK'S EVENTS

OIL COULD PEAK AS EARLY AS 2025

Tim Gould, Chief Energy Economist, International Energy Agency (IEA)

All eyes are on government leaders as they meet in Glasgow. There have been many climate pledges and commitments made in the run-up to COP26, stating how governments intend to tackle climate change and reach net zero by 2030 or 2050.

In the latest edition of the International Energy Agency's (IEA) Outlook Report, we aimed to take all those pledges at face value and see where they would get the energy system. If you look at the report through a climate lens, if all those pledges are implemented, you get to a global average temperature rising to 2.1 °C over pre-industrial times. That is still a long way away from where we would need to be compatible with the Paris Agreement. Although an unsatisfactory outcome, it has quite tangible and interesting implications for energy markets. Global climate pledges are consistent with a 40% decline in emissions by 2050. If all countries' climate pledges are implemented, in line with announced budgets, by 2025, you will see a peak in oil demand and a flattening in natural gas demand. All of this is accompanied by a continued sharp rise in the deployment of renewable energy sources. This is indeed significant and quite different from the trends that we have seen in the recent past.



FULL INTERVIEW HERE

TOP TAKEAWAYS

Even if all countries' climate pledges are implemented, we will still be short of reaching the goals in the Paris Agreement.

Global climate pledges are consistent with a 40% decline in emissions by 2050 - a big departure from what we've seen so far.

Carbon pricing is not a golden answer, but a climate mitigation tool. It's not proven to be useful in stimulating innovation.

12Gt

of CO₂ emissions need to be abated in 2030 to get the world on track for the Net Zero emissions.

90Mt

reduction in methane emissions from fossil fuel operations (equivalent to 2.7 Gt of CO₂ emissions) is needed to get the world on track for Net Zero emissions.

45%

of the current oil and gas methane emissions could be avoided at no net cost (based on average natural gas prices from 2017-21) given that the cost of deploying the abatement measures is less than the value of the gas that would be captured.

Sources: IEA

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HYDROGEN

GREEN HYDROGEN AUCTIONS: PROJECT READINESS VITAL BY 2024

Timo Bollerhey, Managing Director, H2Global Advisory GmbH

The Middle East will become an important region in the future commodity market of green hydrogen products.

Furthermore, when it comes to the green hydrogen auctions led by the German government, Middle East projects will be key. However, we need to remember that these auctions are open, hence competition and compliance with ESG criteria plays an important role. The funds are being made available as soon as 2024 and project readiness is a very important aspect. While there are challenges, we believe there are several projects on the global scale that can potentially meet those targets. The second aspect is the definition of green and the ESG criteria to avoid greenwashing.

The challenge?

The aim of H2 Global is to cover the chicken and egg situation that we have in the hydrogen market. We want to make the case for green hydrogen, but on a competitive and market-based approach. To achieve the Paris Agreement goals, we need to start ramping up hydrogen production at an industrial scale now, not in five or ten years' time. On the other hand, we have a situation where green hydrogen is still drastically more expensive on the production side, making the business case less viable. The price gap and the uncertainty in the market needs to be addressed. Equally, we need the business model on the supply side to have investment certainty.



FULL INTERVIEW HERE

50%

of natural gas consumed is used to produce low-carbon hydrogen by 2050.

Source: IEA

TOP 5 HYDROGEN NEWS STORIES

Oman's Plan to Become Global H2 Player

Earthshot Prize Tech: Compact Electolyzer that Produces H2

Work on NEOM's Green H2 Plant to Start in 2022

Expo 2020: Slovakia's H2 Concept Car Unveiled

INEOS to Invest \$2.3bn in Green H2

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PODCAST

THIS WEEK GREEN TECH: MOVING THE NEEDLE?



**Nathan Wrench, Head of Sustainability Innovation
Cambridge Consultants**



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Increasingly, firms are grasping the fact that climate risk is investment risk and that you are not investable if you are not managing the energy transition. Realistically, I am not sure that we are working fast enough.

It will be fascinating to see the outcomes of COP26, with hopes that it will include a commitment to carbon pricing on an international scale. If it does not, it would be too optimistic to think we can rely on individual governments to introduce policies, that could effectively tackle climate change in time. When it comes to the oil and gas majors, most of them have at least signed up to net zero targets. However, we must remember that what matters is not when they will achieve net zero, it is the path they follow to achieve the target.

The problem with methane emissions

Methane emissions are a major problem. It is correct that agriculture and land-use changes dominate this area. But there is also the very real problem of fugitive emissions from the natural gas industry – the fracking and the inadequate processes for flaring off in oil and gas production. Even the hydrogen industry is problematic because much of the production is grey hydrogen – produced from fossil fuels – with emissions left uncaptured. We do not particularly have good recovery in all parts of the world, however, there are some standout performers. For example, Uniper has got good processes for minimizing fugitive emissions but there are plenty of second-rate providers in the industry.

[FULL PODCAST HERE](#)

**Riad Bestani, Founder & GM
ECO2(square)**



Positive developments are happening in the oil and gas sector, in the Middle East, and beyond. Just look at the recent announcement of big players like Total or Qatar Petroleum that have changed their names to TotalEnergies and QatarEnergy.

It is not just about changing names, but also changing roadmaps. Oil and gas companies are increasingly getting into developing technologies, which will help them transition. It is going to be a massive step change for oil majors to rebrand and divest their remaining fossil fuel assets. It will be interesting to see how things move in the coming decade, which will be critical. The next ten years are going to be showing the trend for the next 30 years for these companies.

Technologies to look out for?

Look out for technologies that tackle the massive issue of waste in the Middle East. About ten years ago, we were talking about harvesting crops to produce biofuel, which was not the best solution. In the Middle East, there is a lot of waste that is available because we consume a lot, we withdraw a lot, and we do not recycle to the degree that is required. This is one of the areas that needs attention and innovation. We have a lot of organic material that can be turned into bio-char, which is bio-coal. Some companies are already developing projects in the region but more needs to be done.

SURVEY

With potency 80 times greater than CO₂ emissions, a global roadmap to start mitigating methane emissions from the energy sector must be decided at COP26.

71%
Agree



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THIS WEEK'S EVENTS

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TWO MINUTE WARNING INTERVIEW SERIES

Tuesday /// Oct. 26th /// 12:00 (UAE)

Peter Godfrey
Managing Director- APAC
Energy Institute



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H₂ HYDROGEN FULL COURT PRESS

Wednesday /// Oct. 27th /// 11:00 (UAE)



Robin Mills
CEO
Qamar Energy

Dr. Julio Friedmann
Senior Research Scholar
The Center on Global Energy Policy
at Columbia University SIPA

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