# ENERGY TRANSITION DIALOGUES INTELLIGENCE BRIEFING

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SCROLL DOWN!

**UAE'S CLIMATE ACTION H2 BUNKERING? GREENTECH UPTAKE? COP26 & THE TRIPLE TRANSITION** 

# **UAE Fast Gains Climate Action**

Elias Kassis

President Total E&P UAE and TotalEnergies Country Chair in UAE

e have a clear strategy to tackle climate change. We see gas as a vector for the energy transition and we will continue to invest heavily in renewables. We are committed to supporting the energy transformation in the Middle East and across our global geographical footprint.

#### **Slashing methane emissions**

TotalEnergies has been proactive in managing methane emissions for some time – we are actually ahead of the curve. It forms part of our net zero by 2050 roadmap. We achieved lower methane emissions intensity of our operated gas facilities to below 0.1% in 2020. The company has now set a target of a further 20% reduction in absolute methane emissions from its operated oil and gas assets by 2025, compared to 2020. Looking ahead, we are cognizant of the new elements and implications that arose during COP26 and how we will need to embed that into our agenda.

## **TOP 5 NEWS STORIES**

OPEC Chief: COP26 Is a 'Wake-Up Call'
UAE, Russia Sign MoU on H2
Adnoc, Taqa to Form Global RE and H2 Venture
LNG Industry Launches 'Carbon Neutral' Framework
KSA, China to Cooperate on H2











# HYDROGEN

AMMONIA BUNKERING TO PICK UP IN THE NEXT 5 YEARS

Michael Schah, CEO and Co-founder, Calypso Trading

ooking at the shipping market dynamics, shipowners would typically sign a long-term contract for ammonia supply with a hydrogen producer, but they are not the typical off-takers. To scale up, we need an established ammonia market that they can tap into.

There are some challenges when scaling up and decarbonizing ammonia production. For one, investment cycles to ensure we have the right engines and vessels will take time. For other applications where (gray) ammonia is already being used, the switch to green can be easier. This is the dilemma that shipowners are facing.

#### LNG vs ammonia?

Going into 2020, we expected a lot of new final investment decisions (FID) on vessels with LNG bunkering. While some have happened, the switch to LNG bunkering has not been as significant as expected. Looking at the order book of new vessels, the question is: does it make sense to have LNG as the greenest have fossil fuel, or whether to transition directly to green ammonia? As long as we have regulatory uncertainty, particularly in relation to LNG bunkering, these investment decisions will keep being postponed.



## **SURVEY RESULTS**

18%

Oil

Will a successful
Hydrogen consortium of
partners in the Gulf need
to resemble more of the
JV model we have seen in
the regional oil industry or
in the LNG industry?

82%

LNG

Source: GI Gulf Hydrogen Workshop 2021









## PODCAST THIS WEEK



## **COP26: TURBO-CHARGING THE UPTAKE OF GREEN TECH?**



Jesus Gutierrez Head of Energy Efficiency, ENGIE Solutions **FULL PODCAST HERE** 

That world leaders accounting for more than 70% of the world's energy consumption have made a clear statement to support clean technologies is a deal to be proud of.

They also recognize that for green technology to succeed, there is still much work to do – a lot of work actually. For examples, the costs of green hydrogen and carbon capture and storage (CCS) need to be reduced [to support net zero goals]. Such technologies are still far from being financially

viable in many cases. Now we must look at ways to stimulate the application of these technologies worldwide in a more affordable manner. We are already seeing a lot of interaction between academia and industry to spur green innovation and stimulate the uptake of green technologies, while governments are encouraging the deployment of seed capital and providing more regulations. Governments are also driving demand towards green technologies to encourage the private sector to invest.

#### **FULL PODCAST HERE**

#### Dr. Satyam Priyadarshy Technology Fellow & Chief Data Scientist, Halliburton



When it comes to the energy industry's uptake of green technologies, the most optimal approach is balanced connectivity.

For one, the oil and gas sector can leverage its experiences and data – especially when it comes to exploration – to support carbon initiatives. The last decade of discussions about green

technologies has significantly accelerated in the last two years, with far more action on the ground. There are a lot of efforts to improve the energy consumption of renewable energy sources in individual households, for example. While a smaller investment compared to grid-scale projects, it is still significant. Entrepreneurs' desire to be involved, plus the support of the local authorities, is astonishing.

#### COP26 KEEPS 1.5°C ALIVE AND FINALISES PARIS AGREEMENT

- COP26 ends with global agreement to accelerate action on climate this decade
- Two weeks of intense negotiations finally complete the Paris Rulebook
- For the first time COP agrees position on phasing down unabated coal power
- The Glasgow Climate Pact caps two years of diplomacy and ambition raising

COP26 has concluded in Glasgow with nearly 200 countries agreeing the Glasgow Climate Pact to keep 1.5°C alive and finalise the outstanding elements of the Paris Agreement. The Glasgow Climate Pact, combined with increased ambition and action from countries, means that 1.5C remains in sight, but it will only be delivered with concerted and immediate global efforts.

The Glasgow Climate Pact will speed up the pace of climate action. All countries agreed to revisit and strengthen their current emissions targets to 2030, known as Nationally Determined Contributions (NDCs), in 2022. This will be combined with a yearly political roundtable to consider a global progress report and a Leaders summit in 2023.

The Paris Rulebook, the guidelines for how the Paris Agreement is delivered, was also completed today after six years of discussions. This will allow for the full delivery of the landmark accord, after agreement on a transparency process which will hold

countries to account as they deliver on their targets. This includes Article 6, which establishes a robust framework for countries to exchange carbon credits through the UNFCCC.

And for the first time, heeding calls from civil society and countries most vulnerable to climate impacts, the COP agreed action on phasing down fossil fuels.

COP decisions went further than ever before in recognising and addressing loss and damage from the existing impacts of climate change. There were also commitments to significantly increase financial support through the Adaptation Fund as developed countries were urged to double their support to developing countries by 2025. The final COP26 text follows two years of intense diplomacy and campaigning undertaken by the UK Presidency to raise ambition and secure action from almost 200 countries.

READ FULL ARTICLE HERE









# **INSIGHTS**



## **Glasgow and the Triple Transition**

### The move to decarbonized energy is a reimagination of who we are



Bill Spindle Council on Foreign Relations, International Affairs Fellow, India

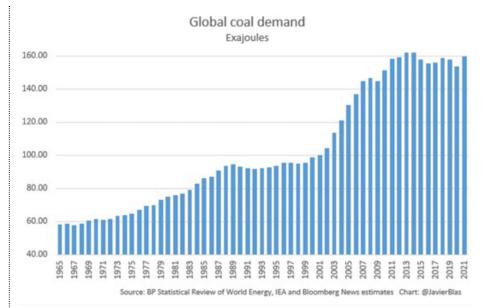
o the last-chance climate summit to save the world from global warming has concluded in Glasgow. Where did it leave us?

Before my two-cents on that question, I wanted to step back with a wider lens on the massive energy transition we're now plunging ahead with, whether too late or not. It will be a long and complex journey, and also one that needs to be dramatically accelerated right now if we are to zero out carbon emissions by midcentury and head off the worst impacts of climate change.

I think about the energy transition as really three different transitions — overlapping, interrelated, occurring at once but at different speeds. The challenge at this point isn't making these transitions happen. They are now as inexorable as the march of fossil fuels that replaced wood and dung as energy sources during the industrial revolution. Rather, the challenge is speeding them along. The first of these three transitions is going amazingly well. The second remains predictably problematic. The third, and in some ways most important, we've barely just begun.

- The first transition is technological. We're making real progress here, surprising even ourselves, repeatedly, with stunning advances in renewable technology and deployment that have relentlessly driven costs down over the past decade. Almost no one imagined that harvesting energy from the sun and wind would become cheaper than any other energy source so quickly in so many places. Yes, challenges remain to turn wind and solar into reliable, around-theclock resources available throughout the year. But similarly spectacular progress with batteries. along with the traction electric vehicles are finally gaining from this, is set to turn the power and transportation sectors upside down. Even more impressive technologies are in the pipeline, from revolutionary materials for solar to newfangled nuclear power generation that is safer and more manageable.

This gets us to the second transition: the economic and political adjustments to bring these new technologies on line. And here is where we currently find ourselves most stuck. Evidence of this log jam — a pile up on the shoals of financing and managing both pains and gains from the technological transition — were everywhere in Glasgow. This is understandable, because energy lies at the heart of nearly all human activity. And human activity, for better and worse, is both a



competitive and cooperative undertaking. The goal is to improve both our lot overall and our position as opposed to each other. These two aims are in tension, at least in the short and medium terms. The history of energy is, more than anything else, a chronicle of humans leveraging ever better resources and ways of using them to enrich everyone and exercise power over others. What vexes our ability to speed up this part of the transition is the recognition that winners and losers will be created among us even as we move toward solutions we all collectively need.

The tension was most palpable as the conference hashed out a final agreement on the dirtiest of fossil fuels, coal. India's economy and domestic politics today are as reliant on coal as those in the U.S. and Europe once were (and to a surprising extent still are, judging from the outsized influence of coal-country Senator Joe Manchin in the U.S.). For India, soon to be the world's most populous nation, likely to require more energy growth than any other country in the coming decades, phasing out a source that currently provides three-quarters of its electricity is an overwhelming domestic adjustment. It is even more challenging for India than for China, which is currently the world's most populous country and by far the largest global user of coal. At the same time, eliminating coal is also an international challenge for India. In the short run, the only way to realistically slow coal consumption would be to constrain economic growth. That's a non-starter for any nation, much less a poor one striving to be a first-rank global power.

Now, there is one way India says it could move faster - if the developed world pays for it. This would only be fair and just, it notes. Not only do developed countries have far more money, they're responsible for most of the greenhouse gases accumulated in the atmosphere. Unfortunately, it's also unrealistic on the scale and time-frame needed. Developed countries haven't even made good on their initial small-time promises to provide \$100 billion in funding annually, even as they've spent many thousands of times that keeping their economies afloat through the covid crisis. Their own domestic political struggles (see: Joe Manchin, et. al) have so far prevented delivering more faster. At Glasgow they promised this will change in a big way. We'll see. For now, the world will have to live with Glasgow's less-than-screamingly-urgent plea for a "phase down" of coal instead of what's obviously needed: the full-throated "phase out" that India, backed by China, threatened to spike a deal over.

**FULL ARTICLE HERE** 









## **UPCOMING EVENTS**





