

EXCLUSIVE INSIGHTS /// ACTIONABLE INTELLIGENCE /// EXCLUSIVE SURVEY ANALYSIS

ENERGY TRANSITION DIALOGUES

INTELLIGENCE BRIEFING

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SCROLL DOWN!

BOOMING BIOFUELS? NOCS' NET ZERO ROAD? NEXT WEEK'S EVENTS

HYDROGEN

FOCUS ON LOCALIZED HYDROGEN SUPPLY CHAINS

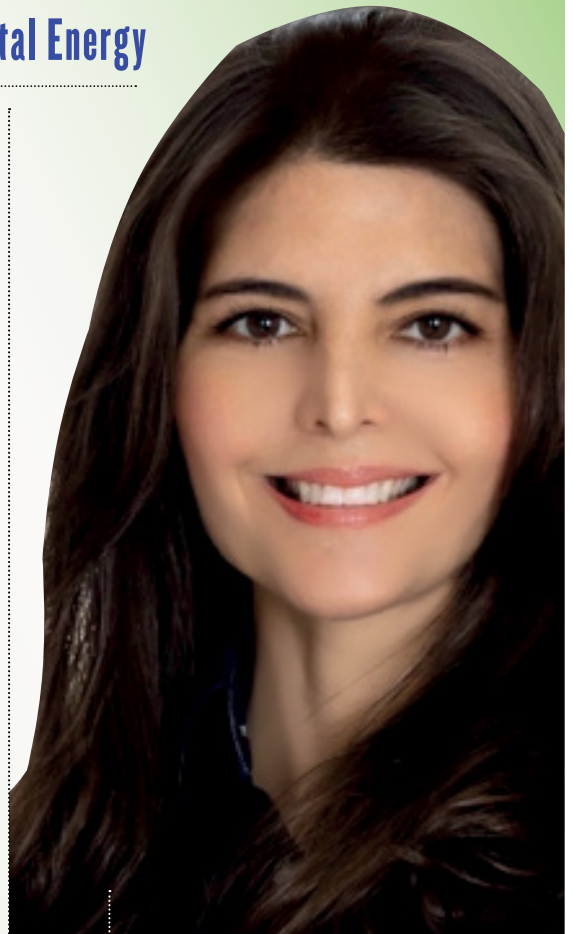
Alicia Eastman, Co-Founder & President, InterContinental Energy

We need to see entire supply chains for hydrogen localized. We have seen it with wind power generation companies; they localize production when they build facilities.

It is actually less expensive to do things right than it is to create problems now that then need solving later on. Planning correctly from the start makes sense. And importantly, it also creates a sustainable economy for the local population, versus popping up a project and leaving ten years later. For the last four decades or so, the focus has been on shareholders' wealth. But if you are only acting under that remit, you are not going to make the right decisions. Other types of shareholders must also be supported and incentivized, including local populations and the environment.

Walking the Walk

Our Western Green Energy Hub (WGEH) project in Australia will be built in phases to produce, among other outputs, up to 3.5mn tons of zero carbon green hydrogen or 20mn tons of green ammonia each year. The project sets a new global benchmark in its partnership with First Nations landowners. They have a seat at the board table; one they will hold forever. There are many jobs and education-related opportunities created as a result of the partnership. In turn, this has a big and positive impact on the local population's health and wealth. We aim for projects to have a positive role for generations to come.



FULL INTERVIEW HERE

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BIOFUELS' BOOM GAINS PACE

Karl Feilder, Chairman and CEO, Neutral Fuels

Companies are increasingly adopting biofuels as a low-carbon option – a drum we have been banging for years. More and more companies are saying: “We have done everything we can to reduce the carbon footprint of our buildings. Now, we need to look at our vehicles.” Momentum in the Middle East for biofuels is getting better, largely driven by multi-nationals’ rising demand. Governments are also placing bets where they can and they are also pushing some of the maritime and rail organizations to use biofuels. But there is still a lack of awareness that we can do something now about our carbon footprint rather than waiting till we have electric vehicles everywhere.

Q. The European Bank for Reconstruction and Development (EBRD) is looking to invest \$2.5bn in the MENA region this year, mostly in renewable energy and technology. Do you expect a chunk to be funneled into biofuels?

A. I doubt it. Government-led initiatives seem to take too long and have too much paperwork to really be able to fully respond to market dynamics. One reason we listed our bond was to get much better access to private capital markets. We are very well-funded and moving at lightning speed, so anyone who wants to catch us will have to run very fast. Since the 1990s, 71% of global CO₂ emissions have been created by just 100 companies. The climate problem was created by businesses and businesses are very good at making profitable and quick decisions to try and resolve it.

\$50MN

Series 2 certified Green Bond for Neutral Fuels will be used to build the next 16 biofuel factories, taking the company's global total to 20.

\$250MN

of the company's Bond 'program' will support its next series, which includes achieving a total of 50 sites globally.

25%

increase in global biofuel production is anticipated up to 2024, said the International Energy Agency (IEA).

20%

of the world's carbon footprint comes from transportation; 50% of which uses diesel fuels. Diesel engines could run on net zero fuel with no modifications while delivering slight improvements in fuel economy, Neutral Fuels said.

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PODCAST


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THIS WEEK NOCs' ROAD TO NET ZERO?

[FULL PODCAST HERE](#)


Faris Al Kharusi
Principal Business Transformation Lead, PDO

Several oil ministers in the Middle East are always speaking about how they are trying to hedge their bets by not rushing too aggressively into this energy transformation journey, while still feeling like they do not want to be the last group boarding the train.

50-year crystal balls

When I see organizations making 50-year plans with such definitive forecasting, I wonder how realistic they are being. The speed of change is so great that we do not know how our legacy infrastructure will be affected by new technologies and trends. It all comes down to how many of the existing and potential technologies diminish in pricing. For example, if you need to replace rigs or update data acquisition systems, how you do that will come down to what is available at that time. Plus, the rollout of many of these technologies, such as 5G, often comes down to basic considerations about politics and national security. Sometimes, this has nothing to do with what the environment needs; it is decoupled from the conversation.

"I wonder how realistic organizations' 50-year plans for a low carbon future are; the speed of change is so great."

Talent jigsaw

One cannot copy and paste what is happening in a typical Organization for Economic Co-operation and Development (OECD) country in Western Europe or North America to what is happening in the Middle East and North Africa (MENA). The regulatory and legal differences are too great. We must be honest: we have a large unskilled labor force in this region, mostly formed of expatriates from Asia and other parts of the world. And when we talk of upskilling and reskilling individuals [in a digital future], they are likely and unfortunately going to be the individuals who will bear the brunt of this change. It is unlikely to be the reservoir engineer or the geophysicist sitting in front of his computer in the office. So, the skills we need are going to really impact the most vulnerable among us. This is an issue that needs addressing.

[FULL PODCAST HERE](#)

Trung Ghi

Partner and Head of Energy & Utilities, Asia Pacific, Arthur D. Little (ADL)



NOCs and others – such as private oil firms and utilities – are only going to see more pressure from their customers and the public. Even now, we are much keener on sustainable living. Just look at how single use plastics are being banned everywhere and China is refusing to take other nations' rubbish.

How great the pressure will depend on different countries' policies and how much investment happens there. Of course, this really boils down to the government putting in the right policies, removing certain subsidies, introducing carbon credits or taxes, and incentivizing technology development. For one, hydrogen will never pick up in certain regions unless the associated technologies significantly improve.

"As a workforce, petroleum engineers are not seen in the same way they were a few years ago. We must think about different types of jobs to hit low carbon goals."

New breed of minds

We all need to rethink how we view talent, not just the NOCs. This will be one of the most interesting parts of the energy transformation up to 2030. We were already seeing big changes, but the energy transition [and the Covid-19 pandemic] have only accelerated this thinking. Now we are not looking at petroleum engineers as a workforce in the same way we were a few years ago. Instead, we need to think about many different types of people and hires. Otherwise, NOCs and the entire energy market will never achieve the low carbon goals.

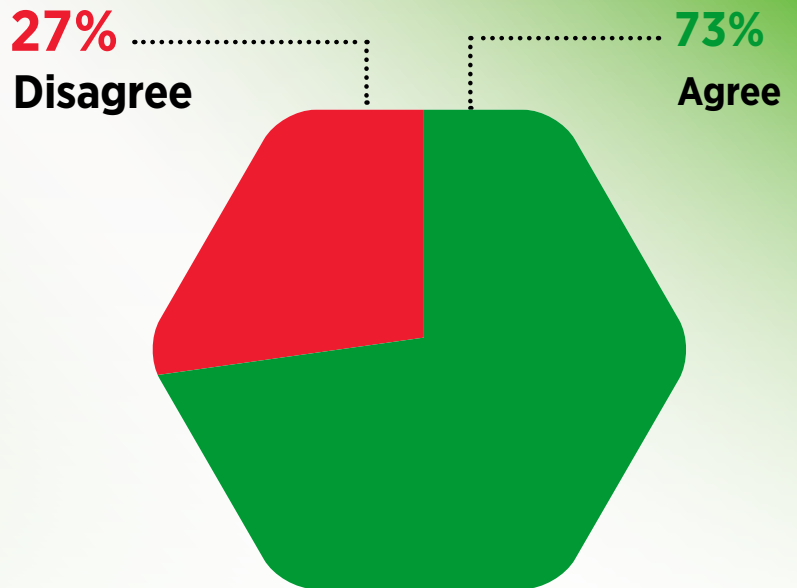
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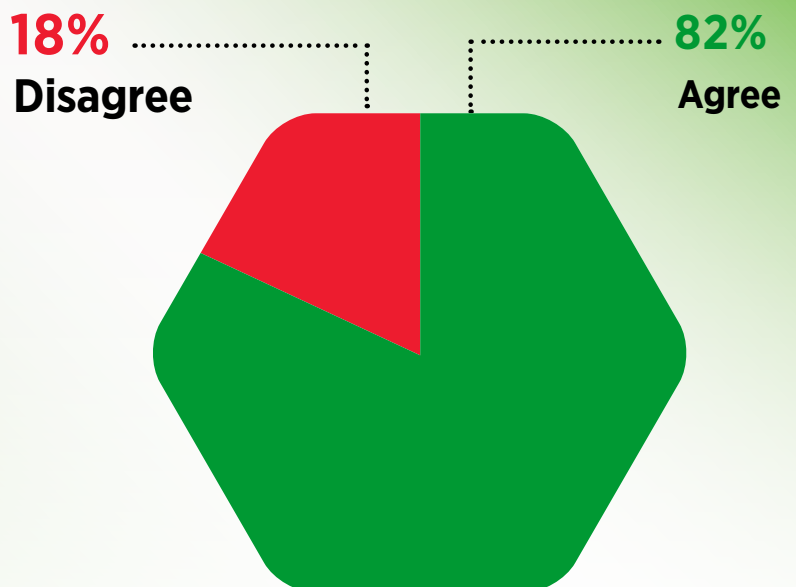
EXCLUSIVE SURVEYS

These survey results were harvested from our weekly Podcast Series, which we host with speakers from around the globe to try and answer two key questions: what is next and what *should* be next?

In 2022, NOCs without net zero pledges will start to fall behind energy players with net zero pledges.



NOCs are talking the talk when it comes to ramping up green hydrogen – but they have yet to fully walk the walk.



Survey source – ETD

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INSIGHTS INTO INDIA

The Leapfrog....

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Bill Spindle

Council on Foreign Relations, International Affairs Fellow, India

Developed and developing countries are on two different energy transition journeys, hopefully leading to the same place.

The global energy transition from fossil fuels to renewables is off and running, albeit with a long way still to go. Less appreciated are the starkly different routes this historic shift is taking in the developed versus developing worlds.

India is very different from the US or Europe. So is India's approach to energy transition. The many reasons for this boil down to one thing, growth. India's thirst for modern energy only been whetted; in the coming decades demand will perhaps triple. US and EU energy demand likely won't grow and might even decline.

This means the challenge for the US and Europe is replacing their existing fossil fuel-based energy system, pushing a unit of energy derived from coal, gas, or oil right out of the system with the insertion of energy from new green sources. For India and the developing world, the challenge is different: how to add green energy fast enough to get ahead of ballooning demand and avoid.

[FULL ARTICLE HERE](#)

“The US and Europeans are basically renovating a home after the kids have flown the nest. This is an expensive and sometimes difficult process of uprooting the old, throwing out many things you love (or are at least have grown used to), and deciding on what's best going forward. For the developing world, it's more like the thrill of building a new house – fun and in many ways easier than renovating until you realize selling, or even tearing down, the old house isn't immediately possible. No one wants to buy it. Even more important, turns out you also still need it to meet the needs of your family, what with young, growing kids needing all that additional food cooked, light to study after dark, a fan if not AC, and power for their computers, phones, and scooters. Oh, and you don't actually have the money banked to build that new home. You'll have to finance it.”

LATEST RESEARCH

KEY POINTS

- 88% of the growth in electricity demand to 2040 will likely come from emerging markets.
- Emerging market growth will be split roughly between giant China (39% of growth), other coal and gas importers like India and Vietnam (50% of the growth), coal and gas exporters like Russia, Saudi Arabia and Indonesia (10% of growth), and countries like Iraq and Nigeria that don't have the wherewithal to transition without external support (even if it benefits them to do so).
- In many of these emerging markets, fossil fuel demand has already peaked. Indeed, overall fossil fuel use for electrical power in developing countries other than China may have peaked way back in 2018.
- India has pulled off in two decades a feat unmatched in history: bringing first-time electricity to some 800mn people – more than double the population of the US – while building out renewable capacity equivalent to the needs of 30mn US homes.
In other words, India has vastly expanded its electricity system while slowing down its building of new coal-fired plants, indeed contemplating ceasing their construction altogether.

Source: Carbon Tracker and CEEW

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THIS WEEK'S EVENTS

ENERGY TRANSITION DIALOGUES Consultancy Intelligence Publishing

HYDROGEN FULL COURT PRESS

Kilian Crone

Team Leader International Markets, Hydrogen
German Energy Agency (Dena)

Wednesday /// Aug. 4th /// 11:00 (UAE)

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TWO MINUTE WARNING INTERVIEW SERIES

Tuesday /// Aug. 3rd /// 12:00 (UAE)

Dr. Sara Vakhshouri

Founder & President
SVB Energy International

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