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

ENERGY TRANSITION DIALOGUES

INTELLIGENCE BRIEFING

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GI Consultancy Intelligence Publishing

SCROLL DOWN!

HYDROGEN AT $1.55/KG? | PUSH FOR CIRCULAR? | INDIA'S COAL QUANDARY?

STILL A 70% GAP IN CLIMATE TECH!

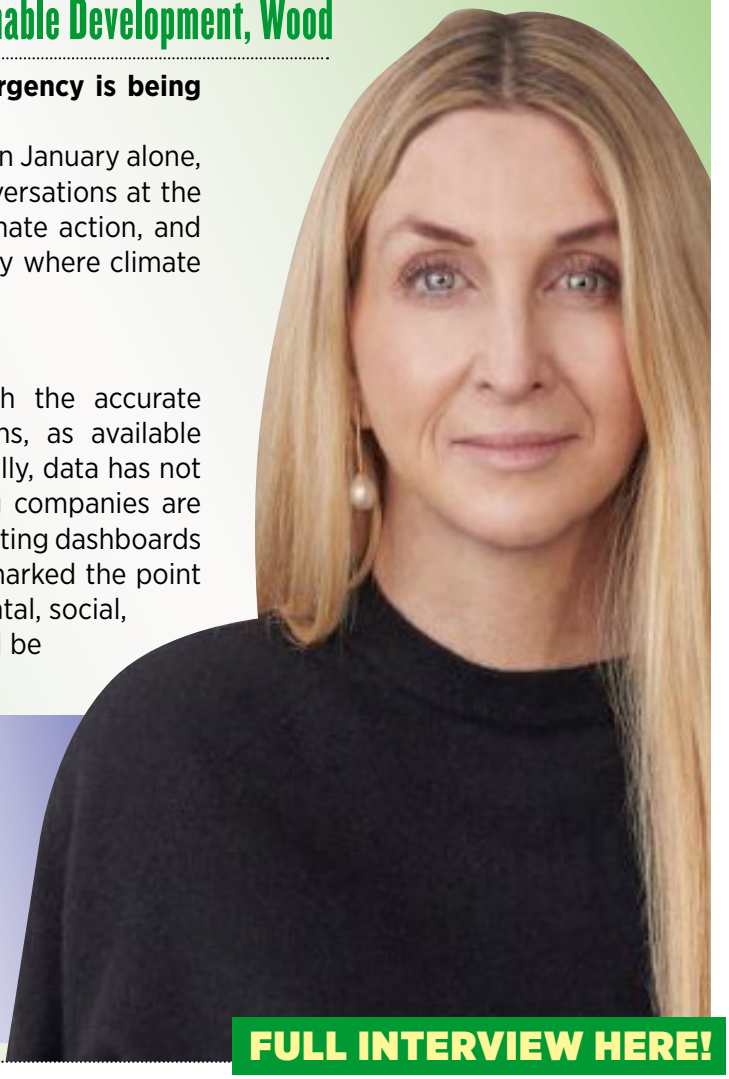
Ann Rosenberg, Senior Vice President for Sustainable Development, Wood

This is a historic turning point – climate-related urgency is being redefined.

The commitment to climate has never been stronger. In January alone, the US rejoined the Paris Agreement, 75% of all conversations at the World Economic Forum (WEF) revolved around climate action, and the UN Global Compact debuted an updated strategy where climate change was the key topic. That is just in one month.

Know your CO_2 stats

For several years, companies have struggled with the accurate measurement and reporting of their CO_2 emissions, as available technologies were not mature enough. Plus, historically, data has not been recorded. Today, more and more engineering companies are partnering with technology companies to create reporting dashboards that enable accurate CO_2 measurements. Last year marked the point that the world realized the importance of environmental, social, and corporate governance (ESG) issues. This year will be one of innovation and accurate CO_2 reporting!



$6.9TRN of investments per year over 15 years are required in clean energy infrastructure to keep the global temperature rise under 2°C. [1]

$54TRN is the projected climate cost to the global economy by 2100 – even if the Paris Agreement succeeds. [2]

1/ Organization for Economic Co-operation and Development (OECD)
2/ Ellen McArthur Foundation

FULL INTERVIEW HERE!

Hydrogen at $1.55/kg is Hugely Ambitious

HYDROGEN

Dr. Fiona Simon, CEO, Australian Hydrogen Council

There is enormous enthusiasm for hydrogen in Australia. In recent weeks alone, we have had AUD$100bn worth of investments for hydrogen announced.

We are seeing competition between our states and territories who are trying to emerge as the country's main export hub. There are at least 60 projects now, with most still in the early stages of demonstrations and pilots. But there is clear appetite for the industry. Previously, we had one hydrogen hub, which was contributed to by the Australian government. Now, we have five hubs – this is very promising. Having multiple hydrogen hubs will reduce negative competition amongst jurisdictions. It also allows for greater opportunity for collaborations and positions Australia as a serious player and exporter.

$1.54/KG

and less is the target to reduce the cost of hydrogen by 2030.[3]

The only way is up!

Hydrogen at $1.55/kg is hugely ambitious right now, but the right motions are in place. For one, we must reach economies of scale. Electrolyzer costs could be reduced significantly – and before 2030. There are other factors falling into play as well, like electricity prices being where they need to be and renewable developments having the right scale and cost associated with them. All in all, we certainly see hydrogen going in the right direction.

FULL INTERVIEW HERE!

1/ Australian Hydrogen Council
2/ COAG Energy Council, Australia's National Hydrogen Strategy
3/ H2 under 2" program

5 hydrogen hubs are in different jurisdictions across Australia.[1]

57 Joint Actions have been identified by Australia's National Hydrogen Strategy to ensure progress across the entire supply chain up to 2030.[2]

TOP 5 NEWS STORIES

- Australia Pledges $212.8mn for Clean Hydrogen Hubs
- India's $200mn to Promote Hydrogen Use
- UK's Major CCS, Hydrogen Project
- Sinopec, Longi Team Up for Hydrogen
- Shipping Majors Developing Guidance on Ammonia Fuel

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PODCAST

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THIS WEEK KICKSTARTING A CIRCULAR ECONOMY?

Michelle Meineke
Director, Energy Transition Dialogues

A circular economy: what needs to happen and when? This deeply complex question, which essentially rewrites economic and consumption norms if answered fully, is in sharp focus amid a plethora of net zero commitments rolling in. Pledges have been laid down by multiple nations – including from the world's biggest economies, the US and China, respectively – in recent months. A circular economy is far from a new idea; our ancestors were practicing scaled-down versions millennia ago. According to the Ellen McArthur Foundation, a huge 45% of the GHG reduction needed to hit net zero can be achieved via the pursuit of circularity. But that's the theory. How to make it a reality – and soon?

Katerina Serada
Founder, SDG Hub: Center for Sustainable Economies and Innovation

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Has enough been done? No!

We are at the very beginning of the journey towards a circular economy; we have a long road ahead of us. One of the big hurdles is the lack of the data throughout the supply chain, which consistently hinders investments. The EU has been working on creating the European data space for applications and activating security along the supply chains.

Energy players must rethink – and fast

The transition to a circular economy is an emerging business imperative. It will require oil and gas companies to rethink their market strategies, business models, and operations. Decreasing GHGs emissions requires a shift away from our globalized and linear material and resource flow, with a fundamental redesign of the way we create and maintain the value in our economic and environmental systems. This requires a different resource model, one which is focused on the resources already available in the economy and that requires sustainable and renewable inputs, including clean energy.

FULL PODCAST HERE!

Raj Jhajharia
Technical Manager, Acting Marketing and Communications Manager, Gulf Downstream Association

India recently pledged to spend $200mn in the next five to seven years to promote the hydrogen market. Plus, the country has asked its state-run oil and gas companies to set up seven hydrogen pilot plants by the end of this year. And in December last year, the world's biggest hybrid renewable energy park in the Indian state of Gujarat was unveiled. These examples are just the tip of the iceberg in India's push for green energy. The first-of-its-kind energy project is expected to play a major role in fulfilling the nation's vision of generating 450GW of renewable power by 2030. These are all steps in the right direction. India is showing how the world can align swift climate action with inclusive and resilient economic development.

GCC's early push?

The whole concept of a circular economy is fragmented – there are no consistent policy or global guidelines. In the Gulf Cooperation Countries (GCC), many industries are implementing a circular economy on an organizational level, rather than via a coordinated effort. Recently, we have witnessed initiatives like the UAE Circular Economy Council and other groups starting new efforts. But these are at a preliminary stage. We still have a long way to go.

45% of the GHGs that need to be reduced to hit net zero by 2050 can be achieved via the pursuit of circularity, said the Ellen McArthur Foundation.

PODCAST

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Koen Rademaekers
Managing Director, Trinomics

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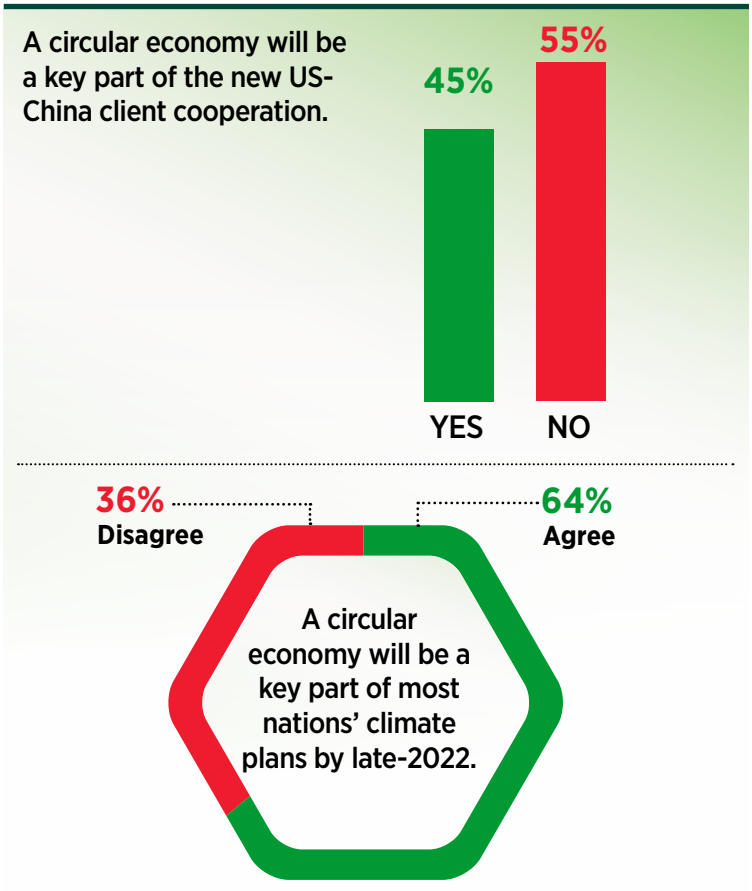
Incoherency. This is one of the main problems we see in policymaking when it comes to a circular economy.
The national energy climate plans that we have been evaluating over the last two years show there is still no linkage between a circular economy and the energy climate plan set up by European member states. Only recently have certain member states started crafting their roadmaps. Everyone must know that as long as we do not have a clear policy agreement about what roadmap needs to be developed and how to do it, the link will be lost. We have energy and climate departments focusing on reducing CO_2 emissions, but these efforts are still misaligned with the principles of a circular economy.

US-China's circular agenda?
The US is not as active in crafting a circular economy as it is in other domains. Other political issues tend to be higher on its agenda, including when it comes to the recently announced climate collaboration with China. From China's side, they do want to develop circular economy principles; it is very important to them to maximize their resources in the best possible way. But at the same time, a circular economy is also not high enough on its political agenda.

SURVEY ANALYSIS LET'S FINALLY JUMP START AN AGE-OLD IDEA!

Surprisingly bullish. That is how best to describe this week's survey results. But does that translate into naivety?
The jury's still out. There has undeniably been a big push towards a circular economy over the last year. On the positive side, the European Commission adopted the new circular economy action plan (CEAP) in March 2020, making it one of the main building blocks of the European Green Deal, while the UK has adopted its Circular Economy Package (CEP). There is also notable progress in the Middle East, the historical epicenter of fossil fuels and historically one of the highest waste producers per population worldwide. For one, Saudi Arabia, the world's biggest oil exporter, has crafted a circular carbon economy roadmap, gaining support from the G20, and fellow OPEC member, the UAE, approved its Circular Economy Policy 2021-2031 and established the UAE Circular Economy Council. And in China, the world's biggest energy consumer and home to the world's biggest population, the Circular Economy Promotion Law which came into force in 2009 continues to be part of a broader national momentum.[1] But there is a huge caveat – progress towards a circular economy is starting from a very, very low base. Plus, current efforts are a 'drop in the ocean' of global change required. So yes, be positive, but be wary. Successful carbon economies lie at the heart of successful decarbonization – a fact very rarely touched on. Making that understanding commonplace alone will mark a big step forward.

1/ https://bit.ly/2QTD4Xn



Survey source – ETD

INSIGHTS INTO INDIA

GI Consultancy Intelligence Publishing

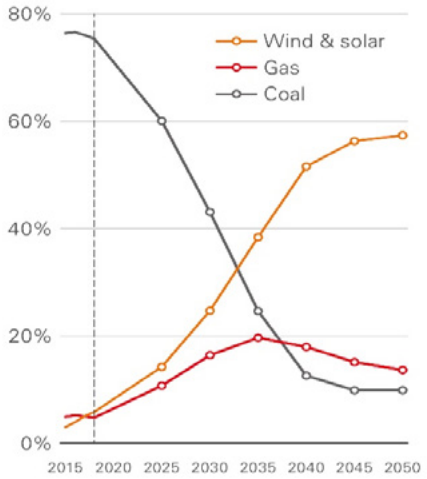
Coal Train WHY INDIA BELIEVES IT CAN'T DISEMBARK YET

From Newcastle to Appalachia and well beyond, coal has woven its way into societies the world over. India is no exception.

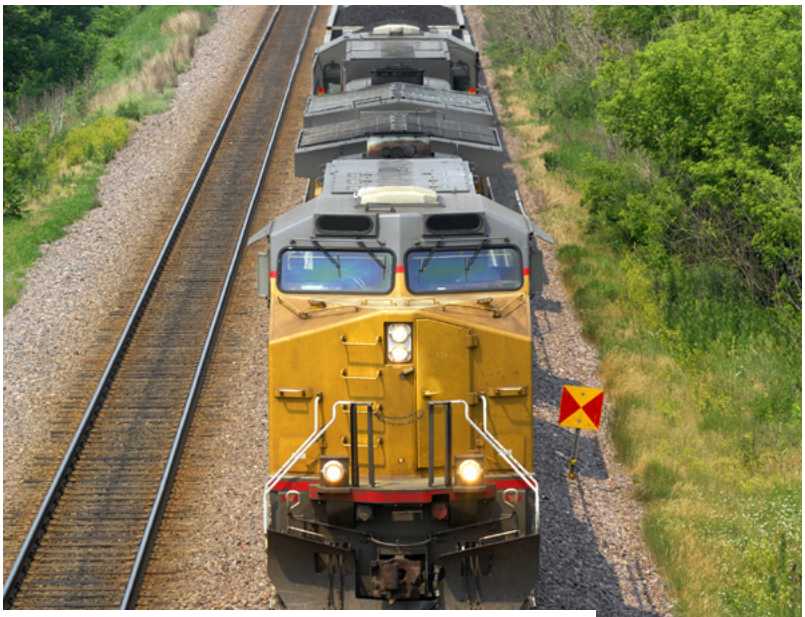
Bill Spindle
Council on Foreign Relations, International Affairs Fellow, India

These days Newcastle, among the world's first coal capitals, has moved on from mining. Appalachia, home to America's Piedmont coal belt, is deep in the throes of the industry's decline.

In India, coal still provides close to three-quarters of the electrical power. India consumes more coal than any country except China (which, it Is worth noting, consumes a whole lot more). Coal India Ltd., the country's primary producer, is the world's largest. And even then, it does not provide enough; India is also a huge coal importer and – like China, Indonesia, and Australia – sees a future for coal. Not a forever future, to be sure. But, as India sees it, an indispensable, unavoidable, ongoing role for coal in growing the economy and lifting hundreds of millions out of poverty, beginning with energy poverty. India's second-most-powerful politician made that clear recently. This does not mean India is down on renewable energy — exactly the opposite. Graphs showing the expected rise of renewables in India, particularly solar, are impressive. This one from BP's annual energy outlook last year illustrates a theoretical scenario in which India moves "rapidly" in decarbonizing its electrical power generation.



Source: BP Energy Outlook 2020



Looks great. But those aiming for the early, or even eventual, decline of coal in India will not find solace here. In this scenario coal generation increases by almost one-third over the next decade before declining to a globally very consequential 10% share of a much larger overall electricity system by 2050. India's most recent national electricity plan, released in 2018, lays out an even less dramatic change. Coal falls to only 48% of power generation by 2050. That would mean 60% more coal-powered generation three decades from now, since the plan pegs overall electricity demand growth at 4.5% annually.

What could kill coal off faster? Or, conversely, keep it going even longer? This is a conundrum I hope to get a much better feel for in the next few months. It is at the heart of India's energy transition challenge and matters immensely to a world needing to be done with coal as soon as conceivably possible. So, why can't India be done with coal faster?

FULL ARTICLE HERE!

HAPPY EARTH DAY

APRIL 22nd 2021

US PRESIDENT CONVENED A LEADERS' CLIMATE SUMMIT ON APRIL 22nd, WITH 40 WORLD LEADERS – A KEY MILESTONE BEFORE COP26 IN SCOTLAND

1 BILLION+ PEOPLE PARTICIPATE IN EARTH DAY – 13% OF THE GLOBAL POPULATION – ACROSS 190 COUNTRIES

ESTABLISHED IN 1970, GLOBAL MOMENTUM TO ADVANCE SUSTAINABILITY IS FINALLY CATCHING UP WITH THIS 51-YEAR-OLD EVENT

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