

GLOBAL MARKETS FORUM

Join the conversation exclusively on
Refinitiv Messenger

@ReutersGMF #RefinitivMessenger



Q&A-Next phase for EU, Britain in transitioning to clean energy, renewables will be tough; Solar to lead for next 20-30 years: Simon Flowers, Wood Mackenzie



The next phase of the transition to clean energy and renewables for the European Union and Britain will be tougher, as they have to meet targets similar to what they previously achieved in half the time and in tougher sectors, **Simon Flowers, chief analyst and chairman at energy consultancy Wood Mackenzie**, told the Reuters Global Markets Forum on Thursday, May 6.

"The way forward is pretty clear," Flowers said, adding that the renewables element should be "straightforward."

Low and zero-carbon sources of power, including renewables, hydropower, nuclear and geothermal, are set to provide 63% of world energy demand by 2050, if the Paris Agreement's most ambitious goal of limiting the rise in average global temperatures to

1.5 degrees Celsius above preindustrial times are met, Flowers said.

"Nuclear has to be part of the solution... it's super-dependable and (has) zero emissions," he said, predicting a 10% for its share within the renewables pie despite the social and political opposition to it.

Following are edited excerpts from the conversation:

Q: How do you see the progress of global energy and renewables transition versus commitments made by countries?

A: Well the rhetoric is very encouraging of course, more and more countries have committed to net zero targets, the USA expected to set its target this year before COP 26. We've also seen the UK and EU accelerate near term targets for 2030 to ambitious levels. Actual progress is quite encouraging but mostly in the power sector. Renewables have become relatively inexpensive and we are going to see more progress there.

Q: Is 2030 going to be the next big milestone, and what progress do you expect by then?

A: So far, EU and UK have achieved half their targets in 20 years; getting to 68% or 55% means achieving the same again in half the time and in tougher sectors. It's going to be very tough, no mistake.

Q: Do you see a path for that happening, and these countries reaching those targets in time?

A: The way forward is pretty clear; the renewables element should be straightforward. The hardest part will be transportation and ensuring EV (electric vehicles) sales pick up rapidly by 2023-2024. At the moment the economics don't work without subsidy. Renewables and transport sectors together could achieve much of the 2030 target; beyond that we'll need new technologies.

Q: Of the multiple renewables available, which do you think will eventually become the dominant ones? Could nuclear energy become more of a focus, or is its public perception too much to overcome at this point?

A: Nuclear has to be part of the solution. It carries problems, and there's social/political opposition, but it's super-dependable and zero emissions. So, I think it will play a part. But the other big challenge is flexible generation. We will need gas with CCS (carbon capture storage) but also have to develop the long-duration batteries and of course hydrogen - these are the solutions for 2030 and beyond.

Q: In percentage terms, how do you see the shares of hydro, solar, wind and nuclear increasing by 2030?

A: Renewables will dominate and solar exceeding wind because it's lower cost; but of course, it does vary. We'd expect renewables approaching 60%, nuclear 10%, hydro less than 10% because of environmental difficulties. The rest a mix with fossil fuels, mainly gas, supported by CCS (carbon capture and storage).

Q: In renewables, can you think of a specific trend that the market is getting wrong, or one that isn't being talked about yet?

A: I can't think of one related to renewables; For the next 20-30 years it looks like a slam dunk with solar leading on costs, onshore wind growing and offshore wind nascent and with costs set to fall. The tricky bit with renewables is avoiding the impact too high a percentage has on the market - intermittency is a problem and excess solar and wind drive the power price down.

A solution will be to develop hydrogen at scale with uses, the cheap excess power and hydrogen becomes the storage. I'm sure hydrogen has a huge future as energy storage, because it will be transportable, so it could, in theory, be produced anywhere and sold into needy markets, a bit like oil is today.

Q: Do you see a dichotomy in countries exporting fossil fuels, earning revenue, and yet committing to sustainability goals?

A: Yes, it is a dichotomy. Oil and gas producers' first challenge is to decarbonise their O&G industry, much as we're seeing Big Oil start to do. The challenge though is how can they move their economy from dependency on oil and gas revenue to zero-carbon. It's not a route many will be prepared to embrace, but we are starting to see encouraging signs. Saudi Arabia is a good example - super-dependent on oil revenue but starting to diversify into low carbon technologies. One other issue - it's easier perhaps for richer resource-owning countries to start to diversify than poorer ones.

Q: Do you see any ramifications for companies, especially energy majors, if they don't stay on track to meet the ambitious environmental goals? Company disclosures on their renewables/transition seem quite patchy -- how can that be overcome?

A: On majors and others, patchy yes, inconsistent yes too. We need to move to a position where everyone is on the same page and I think we'll get there may be around COP 26. I expect the IOC (International oil companies) majors to come towards similar targets so they can more easily be benchmarked, and that will be helpful for all stakeholders. We need all companies IOCs and NOCs (national oil companies) to buy into a 'charter'.

Q: Can you share some instances of R&D progress in renewables?

A: A lot of the heavy industry needs a breakthrough in commercial technology to decarbonise. Green steel, I believe, is really awaiting green hydrogen (H2), but that is probably a decade, perhaps more, away. Similarly, high carbon-intensity industries like fertiliser, or cement. These will decarbonise in the 'second wave' when CCS around H2 scale up and commercialise. Heating is another interesting one - the technology is there but how do you repurpose old residential buildings for heat pumps? It will be expensive and take time, but the tech is 'oven ready'!

Q: How can developed economies aid -- both financially and by sops -- emerging ones to make the transition faster, alongside themselves? And should the obligation of financial aid fall on the developed countries?

A: That is doubly difficult given; a) the immediate need for developed countries to rebuild their economies post-COVID-19, and b) funding their own green journey. Direct transfer of capital may prove difficult. I think the World Bank and IMF (International Monetary Fund) have a big role to play.

Q: Any parting thoughts for us?

A: This year is building towards what we hope is a constructive COP 26; I also think there's a great chance we'll enter 2022 with a better sense of practical steps to progress to build on the lofty ambition. We need that.

About the Global Markets Forum

Moderated by experienced Reuters journalists, the Global Markets Forum (GMF) is an exclusive editorial community for financial market professionals [available for free on Refinitiv Messenger](#). The world's first macro, cross-asset class, cross-regional community, the forum surfaces the most critical market topics, the widest range of views, and hosts the most influential guest voices, in real-time. Hear peer opinion, take market temperature, and discover new connections: The GMF offers content, conversation, and networking all in one place.

Check out the up to date topics, events & LiveChat with our weekly featured guests: [GMF Week Ahead](#)

 [@ReutersGMF](#) Follow us on Twitter

Don't have access? Visit refinitiv.com/gmf

