

## MARC-ANTOINE EYL-MAZZEGA

Directeur du Centre Énergie et Climat de l'Ifri

Thank you very much, good morning everyone. We had some very lively discussions in the energy, climate technology and environmental workshop. The scene was set by a framing question, which was basically how to develop trajectories, policies, and investment strategies that help to bridge and to meet the different objectives at the same time. Those objectives are energy security, sustainability, competitiveness, acceptability and of course, last but not least, affordability.

We started by taking stock of the position of the global energy situation as we spoke and as we meet today. We came out of one of the worst energy poly-crises, which has left the Europeans as probably the largest global losers. However, we should not forget that a number of emerging economies were deeply affected by the rise in energy prices, the shortage of LNG and regrettably had the need to reduce supplies to end-consumers and as a result, often energy access for the population. There was also a need to switch to more carbon-intensive fuels such as [inaudible] fuel oil or coal in energy systems.

Talking about Europe, clearly it was the most affected with the brutal decoupling from Russian energy supplies, which led to soaring energy costs. The Europeans were able to rebalance towards the LNG markets thanks in a way, to siphoning off available spot LNG. A lot of LNG from the US that was typically geared to the Atlantic base in Latin America or Asia, was redirected to Europe. On the other hand, there was also a drop in demand in Europe, which also helped to get through these difficult moments, as well as interventions by governments at very heavy costs to alleviate the burden of rising energy prices on their populations. That being said, I think it is also important to note that this will have structural consequences because huge debts were created which have to be reimbursed at a time of increasing or high interest rates. There is also the issue of the acceptability to European populations of an accelerated energy transition and their ability to sustain higher costs and lower purchasing power, which is now in question.

We also touched on the fact that we now have huge price differences between Europe and its other OECD competitors. If we have energy prices that are three or four times higher than we see in the US, for example, this will pose structural and systemic competitiveness issues moving forward.

We also moved on to discuss the global energy picture, especially a few weeks before COP. What is striking there and you are all familiar with that, is that global energy demand is rising sharply and that is not only related to the growth in renewables or electricity, it still also relies on fossil fuels. We now have a global oil demand that has topped 100 million barrels per day

and by year-end, that will mean an increase of 2 million barrels per day compared to last year. This is a sharp increase and if you consider that there is a 4% natural depletion rate for the world's oil fields, it means that you have to add 6 million barrels per day of new production. That is in a world where, if we listen to the science, in principle we need to phase out fossil fuels and of course, reduce demand accordingly and go down to 1.5 degrees. That being said, there is an interesting development which is that TotalEnergies outlooks share the approach and view of the IEA and both see oil demand expecting to peak around 2030 and then progressively decrease. If we are in the 1.5-degree scenario there will still be oil, but we are unlikely to hit that target so in the middle of the century we would still have between 40 and 60 million barrels per day of oil demand, which will require sustained investment.

Then we discussed coal, which has been clearly on the rise over the past two years because of the energy shocks, but there is still fundamentally good news, which is that we saw an influx of natural gas in a number of emerging economies but also in OECD countries. That natural gas has helped to reduce the share of coal power generation and hence reduce the increase in greenhouse gas emissions from the energy sector. There were clear figures on that and probably when gas prices decelerate in the coming years there will be a positive trend in this direction again. Another interesting fact you should also note is that the energy shocks have accelerated the globalization of natural gas markets. We now have a growing share of LNG rather than pipeline trade and of course, that is related to large reduction in Russia's pipeline exports to Europe.

It is also interesting to remark that we are now witnessing the rise of renewables and the IEA has brought out some remarkable numbers on how much solar PVs are actually aligned with 1.5-degrees and there is an incredible boom that is expected to continue. Nevertheless, the share of renewables in total primary energy supply remains insufficient if we are to be on track for 1.5 degrees and the global energy system is still dominated by fossil fuels.

We also discussed what this means for a global energy major like TotalEnergies and we heard that one-third of their capex is already devoted not to fossil fuels but to what they call integrated power and all the low-carbon molecules and electrons. Two-thirds is still dedicated to hydrocarbons but there is a clear focus on natural gas. What is remarkable is that there are obviously very strong efforts being made by that company to reduce fugitive methane emissions, stop flaring and basically to improve the carbon footprint of oil and gas production, notably through electrification of processes and improving all this. Of course, what will matter at COP in particular, is that it is not just one, two or three companies that are investing in the class and this aspect, but that this spreads across the whole industry, notably in national oil companies and oil producing countries in the OPEC region.

Of course, we also discussed the role of electricity, which is one of the largest sources of increase in total primary energy supply. If we look at electricity, , renewables are the front runners but the key issue now is to provide flexibility and develop tools for electricity systems, as well as investing in the grids. That comes at a cost and there are no magic solutions for that but it will play an increasing role as we move forward.

We moved on to discuss some specific regions including Russia and the former Soviet Union countries of Central Asia. Obviously, we heard that they are also interested in becoming more sustainable and putting regulations and policies in place to take them in that direction. I think it

was very encouraging that even in Russia you still have companies and stakeholders with support to push for decarbonization and improve companies' records on this front. Overall, that will probably be one of the aspects post-war where relations could somehow be reinstated.

Finally, I would like to mention one major issue in the discussion related to global energy governance. There needs to be a recognition that the climate and energy transition discussion is centered too much on the Northern Hemisphere and has too great a European footprint, that actually leaves large emerging economies, like India for example, without a seat at the table and with completely different interests. That is not to say that India is not concerned about climate change, etc., but there is a view in some emerging economies that the Europeans have a kind of climate extremist approach to these issues. These countries feel that Europe does not recognize the challenges they are facing, notably energy access, the need to respond to soaring energy demand and the fact that there are often no immediately available alternatives to fossil fuels to develop energy systems. Of course, there are also concerns about energy security, which are overwhelming in many countries, in particular in South-East Asia but also in Sub-Saharan Africa. Unfortunately we did not really have time to go into how to bridge these tensions but nonetheless, I think there was a strong emphasis on that. Overall there are clear signs that the Europeans, India, and Sub-Saharan African countries need to talk and engage more on these issues and address the fundamental aspects of a just energy transition or transitions, because there are multiple pathways or models not just one and especially not one designed by the Europeans.

Last but not least and related to that, the other issue that was touched on by the previous panel of how to provide liquidity and financial resources to many of the emerging economies that are deprived of access to capital markets and cannot roll-out low-carbon technologies because the borrowing costs are simply too high.

I think we had a good conversation around these aspects and there are definitely a lot of things to develop and discuss further next year when we reconvene. Thank you for your attention.