

**Paris Energy Club
Autumn Meeting**

Wednesday 8 November 2023

Venue : Maison des Polytechniciens, Hôtel De Poulpry, 12 rue de Poitiers, 75007 Paris

9:30–10:00 Registration and Welcome Coffee

10:00–10:15 Welcome Remarks and Introduction
Pierre-Franck Chevet, President, Paris Energy Club
Said Nachet, Director, Paris Energy Club

10:15–11:45 COP28 ahead: where do we stand and what are the expectations?

At COP28, the UN will conclude its first-ever “Global Stocktake,” assessing the world’s collective progress toward addressing the climate crisis. The Global Stocktake synthesis report released in September 2023 already reveals that the world is far off track from its goal of holding global temperature rise to 1.5 degrees C (2.7 degrees F) to avoid some of the most disastrous impacts of climate change. The world is watching how leaders from countries, companies, cities and financial institutions respond to the Global Stocktake.

Major consuming countries exhibit different approaches and pathways towards carbon neutrality (when they have one). Some of the energy sources that could contribute to the decarbonization process, of hard to abate sectors in particular, are still lacking proper regulatory framework and/or sufficient financial support from governments.

Since COP27, producing countries and some oil companies and fossil fuels producers have advocated against a too rapid phase out of fossil fuels putting forward energy security issues and the need to provide energy access to the segment of the world population presently deprived from such access. Still, many headwinds make new investments in oil and gas projects difficult: civil society opposition, financial sector growing reluctance, etc. Such uncertainties, in addition to others, fuel oil price volatility and discourage investors.

Questions to be addressed include:

- *What has been achieved since the 2015 Paris Agreement? What are the obstacles hindering the implementation of INDCs?*
- *How leaders from countries, companies, cities and financial institutions may respond to the Global Stocktake?*
- *How will COP28 accommodate the stronger call from oil and other fossil fuels producing countries not to phase out too rapidly such energy sources?*
- *Will the world be able to accommodate the financial burden of the energy transition? How will such burden be split among stakeholders?*

11:45–12:45 Hydrocarbons producing countries and the energy transition

Noé van Hulst is the author of an insightful book launched this year and titled “From Dutch Disease to Energy Transition”. The book intends to provide his personal assessment of the economics and politics of resource-rich countries, based on a review of the vast academic literature, as well as on personal memories and reflections gathered in roughly 35 years of working for the Dutch government (Ministry of Economic Affairs & Climate Policy and Ministry of Foreign Affairs) and international organisations (IEA, IEF, IPHE).

Although he originally focused on the possible adverse economic impact of exploiting natural

resources like oil and gas, he gradually discovered it is impossible to ignore the wider political ramifications of what is often called the Resource Curse. In this book, it is highlighted how closely these two concepts are intertwined. In the final part of the book, he discusses to which extent the global energy transition towards a net-zero emission world will impact the economics and politics of producer economies.

The session will provide an opportunity to discuss the energy transition in producing countries as world leaders prepare to meet at the COP28 climate summit in Dubai end of this year.

Questions to be addressed include:

- *What are the main differences among oil producing countries when considering the resources curse?*
- *What lessons can be drawn from successful experiences in fighting the so-called Dutch disease?*
- *How could policymakers in resource rich economies drive successfully the development of new domestic energy economy?*

12:45–14:00 Lunch

14:00–15:30 Redefining energy investment drivers to better serve decarbonization policies

Investment in clean energy technologies is significantly outpacing spending on fossil fuels. According to IEA's latest World Energy Investment report, about USD 2.8 trillion is set to be invested globally in energy in 2023, of which more than USD 1.7 trillion is expected to go to clean technologies – including renewables, electric vehicles, nuclear power, grids, storage, low-emissions fuels, efficiency improvements and heat pumps.

However, the last few years have been a period of extreme disruption for the energy sector. While huge uncertainties remain, some important features of the new investment landscape are already visible, including the policies now in place that reinforce incentives for clean energy spending, the energy security lens through which many investments are now viewed, widespread cost and inflationary pressures, the major boost in revenues that high fuel prices are bringing to traditional suppliers, and burgeoning expectations in many countries that investments will be aligned with solutions to the climate crisis.

Capital flows are currently strongly favoring renewable power generating assets, namely wind and solar, with less focus on, for example, transmission and storage. This dislocation between policy intent and current investment is likely to result in integration bottlenecks and dysfunctioning energy markets unless market design evolves quickly.

Questions to be addressed include:

- *How is the recent interest rate hike impacting energy projects?*
- *How could/ should financial markets be redesigned to channel capital towards energy transmission and storage?*
- *How to mobilize finance in support to clean energy transitions in the emerging and developing world?*
- *What are the strategies of the players in the renewable energy sector? And to what extent will they bring changes to existing business models?*

15:30–16:00 Coffee Break

16:00–17:30 Water and energy nexus: addressing challenges and sizing opportunities

Producing energy resources often requires significant quantities of freshwater as water is required for nearly all production and conversion processes in the energy sector, including fuel extraction and processing (fossil and nuclear fuels as well as biofuels) and electricity generation (thermoelectric, hydropower, and renewable technologies). The global energy system used around 370 billion cubic meters of freshwater in 2021, or roughly 10% of total global freshwater withdrawals. Water is essential for almost every aspect of energy supply, from electricity generation to fossil fuel production to biofuels cultivation.

Some low-carbon technologies, such as wind and solar PV require very little water, others, such as biofuels, concentrating solar power (CSP), carbon capture, utilization and storage or nuclear power are relatively water-intensive. Climate change, aquifer depletion, and population growth are increasing water scarcity worldwide. Therefore, fuels or technologies used to achieve the clean energy transition could, if not properly managed, increase water stress or be limited by it.

As an energy sector changes or expands, the mix of technologies deployed to produce fuels and electricity determines the associated burden on regional water resources.

Questions to be addressed include:

- *How can smart technology contribute to better management and supply and use of water in the energy sector?*
- *How can circular economy approach help energy industry to achieve more efficient use of water in energy processes?*
- *What kind of collaboration could be implemented with local stakeholders to share water resource and use it wisely?*
- *Are there basic guidelines to follow to ensure long-term conservation, against the backdrop of global warming?*

17:30–17:45 Concluding Remarks