

## Energy Futures: The Middle East and Regional Energy Transitions

Summary of the Annual Event of the Spanish Committee of the World Energy Council | 25 September 2018

On September 25<sup>th</sup> 2018, the Spanish Committee of the World Energy Council and the Spanish Energy Club, in collaboration with the Elcano Royal Institute, organised an event entitled “**The Middle East and Regional Energy Transitions**”. The event was sponsored by CEPSA.

Opening statements were made by Pedro Miró, Vice-Chairman and CEO of CEPSA; Emilio Lamo de Espinosa, Chairman of the Elcano Royal Institute, and Miguel Antoñanzas, President of the Spanish Energy Club (Enerclub). All three speakers expressed their gratitude to HE Mohammad Sanusi Barkindo, Secretary General of the Organization of the Petroleum Exporting Countries (OPEC), for his presence at the event.

Pedro Miró underlined the fact that the topic of energy transitions is one that affects everyone and highlighted the Spanish energy sector’s commitment to environmental and socioeconomic sustainability. Emilio Lamo de Espinosa outlined the large geopolitical shifts that have taken place in the last year, namely OPEC’s joint action with Russia to manage oil prices, the “geopolitical acceleration” witnessed by the Middle East and North Africa, and the continuing challenge of the energy transition to deal with climate change. He stressed that more work needs to be done to develop low-carbon economic models after the Paris Agreement, and highlighted the role of the Royal Elcano Institute’s Energy and Climate Programme in providing analyses to support this. Miguel Antoñanzas highlighted that society is experimenting a historic moment due to the “three D’s” of decarbonisation, decentralization and digitalisation. He stated that the key challenge will be to meet the UN Sustainable Development Goal of universal access to energy while simultaneously reducing the carbon footprint. The EU was mentioned as an example of how growth is compatible with the reduction of carbon emissions.

These opening statements were followed by a Plenary Session with Secretary Barkindo and Iñigo Díaz de Espada, Chair of the Spanish Committee of the World Energy Council.

Secretary Barkindo expressed OPEC’s commitment to multilateral cooperation as the most effective way to tackle climate change. The 2016 Joint Declaration of Cooperation signed by the organisation and non-OPEC oil-producing countries to bring market stability was highlighted as an example of effective dialogue. Secretary Barkindo then outlined the findings of OPEC’s World Oil Outlook, which forecasts energy trends up to 2040. As the population will increase by 1.6 billion people by 2040 and GDP will be 200% what it is today, energy needs are expected to increase by about 33%. It is also important to make energy available to those who still lack access to it so as to meet UN goals. 3

billion people lack access to clean cooking fuels, while 1 billion people lack access to electricity. This demand cannot be met through the use of renewables alone, so fossil fuels will probably still account for at least 75% of global demand by 2040. This will mean a rise in demand for oil, driven mainly by an increase in the conventional transportation system and the petrochemicals industry. HE Mohammad Sanusi Barkindo stated that OPEC is fully committed to the Paris Agreement, which all member countries have signed on to, it fully recognizes the need to reduce emissions. It is confident this can be done through technological innovation and multilateral collaboration.

The first round table, entitled “**Middle East and North Africa Geopolitics**”, was moderated by Cristina Manzano, Director of ESGLOBAL, with contributions from Gonzalo Escribano, Senior Analyst and Director of the Energy and Climate Change Programme; David Ramin Jalilvand, Independent Consultant and Research Associate with The Oxford Institute for Energy Studies; and Emre Iseri, Chair of the Department of International Relations at Yasar University.

The panel focused on three key countries: Turkey, Iran and Algeria. These countries were chosen because they are experiencing significant geopolitical developments while playing a key role in the world's energy supplies. Turkey is a key transit country that, while being crucial to Europe, competes with Cyprus for gas and is a major gas partner of Russia; Iran is a major oil exporter now suffering the effect of sanctions that could significantly affect global oil supplies; while Algeria is the main gas producer in the Mediterranean region and a strategic supplier to the south of Europe. The latter will also be holding presidential elections in 2019.

The panel highlighted how geopolitics and energy are so intertwined that they cannot be separated. Turkey is a net energy importer experiencing significant inflation. In light of President Erdogan's recent election, we can expect that these issues will be dealt with through state-led capitalism. In Iran, the first round of sanctions has already had a significant effect on oil exports and increased inflation. This has put Hassan Rohani's government, which was elected on the promise of integrating Iran into the global economy, under great pressure. An ongoing positive relationship with the EU will therefore be critical to its stability. Finally, Algeria has managed to avoid internal turmoil despite the recent fall in gas prices, but it has still not engaged in long overdue reforms to its energy sector. A hydrocarbon law is expected at the end of this year, but it is unlikely that any critical reforms will take place before elections take place in April 2019. The EU should provide incentives for Algeria to undertake these reforms so as to maintain geopolitical stability in its neighbouring region.

The wider geopolitical effects of these developments were also discussed. Turkey's situation after the *coup d'état* brought it closer to Qatar and Russia, on which it depends for 55% of its energy. This has implications for Turkey's ability to take independent decisions. In Iran, sanctions have had a significant effect on the local population, which was benefitting from a growth in GDP and a fall in inflation after the signing of the Nuclear Deal. However, it is not expected that sanctions will affect Iran's geopolitical engagements. Indeed, these might increase amidst growing fears of Saudi Arabian, Israeli and US involvement in the region. Its relationship with Turkey was highlighted as being especially interesting: though both countries are on opposing ends of the Syrian conflict, they maintain a cordial trade relationship. Finally, Algeria's newfound stability has enabled it to effectively contain the conflict on its Libyan border, its Tunisian border

and the Western Sahara. Despite potential human rights shortcomings in Algeria's containment operations, the EU needs to adopt a conciliatory approach and make use of the energy opportunities it provides.

The panel offered some predictions on the effects that geopolitical developments might have on energy. The suggestion that Iran might move closer to China, as Russia did after its sanctions, was discounted. Chinese companies were already brought in to fill the vacuum left by European companies after the EU's 2010 sanctions, and their aggressively commercial behaviour alienated Iranian officials. Instead, it will probably move closer to the EU. Turkey is hoping to reduce its energy dependency on Russia by developing its local resources and coal reserves.

Finally, panellists discussed investment in renewables in these three key countries. Turkey currently meets 50% of its energy needs through gas and 20% of its energy needs through hydropower, which accounts for it being presented as a "success story". However, its imports of coal contradict its commitments to the Paris agreement. It is also not focusing sufficiently on developing its solar and wind capacities. Iran has a huge potential to develop solar and wind power, which the government wants to foment. However, these new sources of energy will have to compete with heavily subsidised fossil fuels in the domestic market. Iran is also increasing its gas production for domestic consumption. Finally, it is unlikely that Algeria will focus on developing shale or renewable energies when it has not yet effectively developed its production of conventional energy sources. This would however make sense in the long term, as it would leave the state with more surplus gas to export.

The second round table, entitled "**Regional Energy Transitions**", was moderated by Maria Mendiluce, Managing Director of the World Business Council for Sustainable Development, with contributions from David Nelson, Executive Director of Energy Finance at Climate Policy Initiative (CPI); Ferrán Tarradellas, Head of the European Commission representation in Barcelona; and César Emiliano Hernández, Head of Planning at the Institutional Relations and International Affairs Unit of the Federal Economic Competition Commission (COFECE).

The panel introduced the idea that energy transitions take a very different shape in different regions, despite sharing a common background of increasingly cheaper renewables, digitalisation and the development of new energy models. From the perspective of the Climate Policy Initiative, however, regions that want to reduce their carbon emissions can do so by following five common steps: improving energy productivity to meet GDP objectives; decarbonising the electricity system; electrifying as many sectors as possible; developing methods to electrify more difficult sectors such as cement, steel and chemicals; and optimising the remaining fossil fuel budget.

The particularities of the local energy transitions were discussed. The EU wants to reduce its carbon emissions by 80-95% by 2050 with respect to what they were in 1990. It hopes to achieve this by transitioning to an economic model that is based on renewables and where consumption and generation happen at a local level and are digital-based. Mexico provides an excellent model for reducing emissions. It engaged in a long process to decarbonise its electricity production against the interests of its industrial sector, which feared a loss in competitiveness. Mexican clean energy now reaches some of the lowest prices in the market due to its well-managed energy auctions system. Despite the Trump's administration antipathy to climate initiatives, the US is also

predicted to significantly reduce its carbon emissions in the next ten years. Local leadership of states such as California, as well as cities, companies and other local actors, keep the energy transition alive. The greatest obstacle is the fact that energy policy is the competency of states, meaning that adequate legislation will have to be passed in all of them.

The panel then moved on to the topic of transportation, which accounts for 20% of all emissions. Mexico has engaged in impressive public transport works, but there are still many opportunities to exploit. All large metropolitan areas have substantial amounts of traffic, and the middle class has a strong culture of car ownership. Further reforms to Mexico's rigid and expensive public transport system will be required to make it an attractive alternative. The EU wants to rethink the concept of transport to encourage more energy-efficient methods of transporting people and products. It hopes to electrify transportation and transition to gas in sectors where electrification is not an option (such as maritime transport). These efforts will be combined with the creation of energy-neutral infrastructure to develop cleaner cities. The European Commission also wants to focus on reducing demand and thus improving energy efficiency by 32.5% by 2030. Finally, thermonuclear energy is being investigated as a potential source of safe, clean energy to meet the growing demands of the future.

The panel ended by proposing solutions to some of the current obstacles that prevent an effective transition. The first is the electrification of heavy industry. Hydrogen was mentioned as potentially providing a solution to electrifying the production of steel. However, most hydrogen is currently produced with fossil fuels. This can partly be managed through carbon capture storage, but new solutions, such as recycling steel, should be explored as alternatives. The second is the concentration of risk in companies and countries that want to invest in the energy transition. This risk could be offset by insurance. However, insurance companies are currently more reluctant to insure companies against climate risk. This is due to how embedded climate risk and risk relating to the energy transition are across all of their potential customers. The development of financial instruments such as climate derivatives, which insurance companies can buy to offset this risk, will therefore be crucial to accelerating the energy transition.

During the closing ceremony, Rafael Estrella, Deputy Chairman of the Elcano Royal Institute, and Iñigo Diaz de Espada, Chair of the Spanish Committee of the World Energy Council, summarised the key ideas discussed during the event. Secretary Barkindo's confidence that demand for oil will continue to grow was highlighted as surprising. It was deemed to underestimate factors such as the "geopolitical acceleration", the fall in the price of renewable energies, and the global engagement that exists in the fight against climate change. Rafael Estrella also highlighted how geopolitical realities go hand in hand with the energy transition, pointing to Algeria as one of many examples. He reminded the audience that markets are still designed around fossil fuels and that companies should embrace the business opportunities provided by decarbonisation. Finally, he encouraged Spain (which might finally have its own Climate Change and Energy Transition Law under the new government) to use climate policy as a diplomatic tool of soft power.

The session ended with key members of the Spanish Committee of the World Energy Council presenting their outlook on the future of energy. Paloma Sevilla, Managing

Director at AELEC, highlighted the key role that clean electricity will play in the EU's decarbonisation initiatives. Luis Travesedo, Vice President E&P of CEPSA, outlined the company's trajectory in Argelia, which now accounts for 50% of their energy supply. He stressed that hydrocarbons will still be important to the future energy mix of states but that it is nevertheless important for companies to invest in the energy transition.

Francisco Pablo de la Flor, Director of International Organisations at ENAGÁS, commented on what cooperation initiatives currently exist to manage gas in the Euro-Mediterranean area. He focused on the Euro-Mediterranean Gas Platform, an EU initiative started in 2014 to guarantee a stable gas supply and study improvements in infrastructure. He underlined the key advantages that this initiative provides to member states, such as the elaboration of technical documents that can inform their political decisions.

Juan Jose Alba, Director of Regulation at ENDESA, commented on the resources that will need to be mobilised to enable an efficient energy transition. Given that huge investments will have to be made in a climate of uncertainty, he stressed the importance of integrating effective correction mechanisms into new projects.

Francisco Laverón, Head of Energy Prospective at IBERDROLA, commented on the different energy transitions taking place in the regions where his company operates. He highlighted that the best way forward across regions is electrification using clean energy, and reminded the audience of the importance of protecting the vulnerable sectors that will be most affected by the transition, calling for a just transition. He applauded how energy companies have internalised the need to invest in renewables and stated that the political climate across regions is overall favourable to tackling climate issues.

David Gallardo, Director of Development of Gas Supply at Naturgy, assured that gas connections between North Africa and Europe are sufficient to meet current energy demands.

Pedro Antonio Merino, Chief Economist at REPSOL, made predictions on how oil prices will develop and the factors that will affect them. The Iran sanctions and the chaotic political situation in Venezuela mean that prices will probably continue to increase. The increase in production of shale oil will be offset by insufficient infrastructure to export it efficiently. In the medium to long term, the energy transition might accelerate due to these rising oil prices – a key incentive that is often overlooked by energy analysts. A final factor predicting high oil prices is the large deficits of OPEC countries, who will need high prices to maintain socioeconomic stability.

Marta Margarit, Secretary General at SEDIGAS, commented on the ongoing role that gas will play in a clean electricity based EU economy. Gas will still be required in sectors where electrification is impossible, while gas pipelines will remain critical to storing energy. Javier de la Fuente, Senior Sales Manager of the Power and Gas Division at SIEMENS, commented on the technology that is already enabling the energy transition as well as on the technological developments we can expect in the future. Finally, Francisco Rodriguez, General Director of Regulatory and Institutional Affairs at VIESGO, outlined the role of energy distribution systems, where innovation will play a key role in enabling future energy transitions.