<u>Title:</u> The synergy of Innovative technologies and Carbon Market developments in achieving Net Zero carbon in the GCC region

Date & time: January 19th, 2021, 3.00 pm - 4.30 pm

## **Executive Summary**

On January 19, The Carbon Market Leadership Coalition (CPLC), in partnership with Dubai Carbon Center of Excellence (DCCE), Clean Energy Business Council (CEBC), EU-GCC Clean Energy Technology Network (EU-GCC CETN), and ENGIE, conducted a virtual event 'The Synergy of Innovative Technologies and Carbon Market Developments in Achieving Net Zero Carbon in the GCC Region' in the framework of the annual Abu Dhabi Sustainability Week. The event, with an impeccable line-up of panelists, presenters, and subject experts, was a success and brought together 270 attendees.

The session was opened by Martine Mamlouk, High Level Advisor – Prospective and Stakeholders' Management at ENGIE Middle East, South & Central Asia and Turkey, who welcomed the speakers and attendees to the third major event in a series of gatherings organised by the group of above-mentioned stakeholders in the region, to foster dialogue on carbon reduction, carbon pricing, and carbon markets.

In her introductory remarks, Angela Naneu Churie Kallhauge, Head of CPLC Secretariat at World Bank, pointed out that carbon markets had potential to generate significant investments towards low carbon options, and international carbon markets could reduce costs of Nationally Determined Contributions (NDCs) more significantly, compared to a scenario when all countries would try to do it individually. She concluded that more effort was needed to create institutional capacities, and foster partnerships and scalable pilot solutions to build strong foundation for sound climate action.

Drawing parallels of the current post-COVID-19 situation with the global financial downturn in 2008, Ivano Iannelli, CEO of Dubai Carbon, pointed out that challenges pushed innovation and brought about solutions, and added that carbon pricing would help foster environmental efficiency.

Tanzeed Alam, Climate change Convener at EU-GCC CETN, delivered an insightful presentation on the status and policies towards net zero across the GCC countries, as well as the EU Green Deal, and opportunities in GCC with regards to catalysing action on climate change through a carbon price. Looking at the growth potential of carbon markets in the Middle East and GCC, he said: "There is a multibillion-dollar untapped market opportunity for GCC to really benefit from price on carbon", which can be partially delivered by carbon capture storage and utilisation, renewable energy, and green hydrogen mega projects deployed in the region. He concluded that the global momentum post COVID-19 presented an opportunity for countries in the GCC region to realign their green growth and climate change policies, set more ambitious emission reduction targets, and cooperate with other countries and regions under Article 6 of the Paris Agreement.

The panel, moderated by Frank Wouters, Director of EU-GCC CETN, discussed the aspects of policies, technology, and market stimulation in GCC, as well as potential collaboration with the EU to advance the net zero agenda across the region.

When asked about the potential carbon border tax adjustment, Princess Noura bint Turki Al-Saud, Cofounder Aeon Collective, saw it as an opportunity rather than a threat, adding that it would "unlock the necessary enablers to promote and deploy CCE-related technologies".

The UAE recently updated the NDC, including a concrete target of 23.5% emission reduction by 2030. Speculating whether other GCC countries would follow suit, Ivano Iannelli was positive that there would be a lot more ambitious targets from the GCC countries in the coming months, and emphasised that the NDCs were the simplest tools to lead in the right direction.

On the issue of the market demand, Stephanie La Hoz Theuer, Senior Project Manager, ICAP cautioned against relying on voluntary demand to drive the high carbon prices required for a low carbon transformation in the region, as the voluntary market remained oversupplied and prices remained low. She noted the importance of understanding (a) the broad policy goals of different countries, (b) the basket of policy instruments that could be employed to achieve those goals, and (c) the role of carbon pricing, taking into account the prices required and where the price signal would come from. It was also crucial for countries to understand which mitigation options they wished to retain for domestic NDC achievement, and which could be transferred internationally. She also noted that several carbon pricing instruments could be considered for the region – an emission trading scheme (ETS), carbon tax, and/or international transfers through Article 6. According to her, instruments generating domestic compliance demand (e.g. an ETS or carbon tax) could be the best approach in establishing the incentives that would be required for a low-carbon transformation in the region.

Adding to the discussion, Kishor Rajhansa, Director-Carbon and Climate Action at Global Carbon Council, was positive that the GCC countries could come together under cooperative approaches. For him Article 6.2 was a better alternative than considering carbon tax or ETS, especially for the region that had largely remained underrepresented in carbon markets. As he explained, this was because ETS and taxation were sovereign issues and it would require years before first such model could surface. Voluntary markets, on other hand, were quick to support non-state actors through voluntary offsetting, and governments – through certification of Internationally Transferred Mitigation Outcomes (ITMOs). According to him, the introduction of corresponding adjustment was already a great solution that determined integrity of offsets from the context of overall mitigation globally.

Bringing in the Saudi mega project NEOM in the picture, Thomas Bosse, Energy Certificates Manager at NEOM, pointed out the importance of having an operational Carbon Management Framework in place as a key enabler for NEOM's circular carbon economy to ultimately achieve a carbon neutral position. He explained that while NEOM would be a net generator of offsets in the long run and a test bed for carbon reduction and removal technologies, an offset portfolio strategy was essential in navigating through the development and construction period in order to maintain carbon neutrality.

On green hydrogen as a future energy vector in the GCC and beyond, Dr Gisèle Abi Chahla, Hydrogen and Carbon Expert at Masdar, specified that solar and wind would not cover the decarbonisation needs of the society, and this is where green hydrogen would play an important role. She continued that the UAE had great potential to become a key player in the global hydrogen economy due to the low cost of the renewable energy resource, the available space to roll out production, the expertise of the oil and gas industry, and lastly, the available infrastructure. Reflecting on what circular carbon economy industries could be built in the GCC, Amer Arafat, Technical Manager at Dubai Carbon, referred to the 4 Rs: (Reduce, Reuse, Recycle, and Remove). One way to reuse carbon emissions was by injecting them into the ground for sequestration and use them again to extract oil. As to recycling carbon, he mentioned forestation on a mass scale, and removing carbon emissions by coming up with new technologies that allowed for the carbon storage.

The session also saw the participation of Kjetil Wilhelmsen, New Business Development Director at Northern Lights CCS, who gave a short overview of this unique project which involved preparing infrastructure to take the delivery of and store liquified CO<sub>2</sub>. As the EU Commission and the Nation States were starting to implement policies to address CO<sub>2</sub> footprint, he mentioned that the project, aiming to start the delivery in 2024, had an overwhelming interest from potential customers in Europe.

In his closing remarks of what turned out to be an overwhelmingly rich and multifaceted discussion, Dr Nasser Saidi, Chairman of CEBC, pointed out that COVID-19 was a wake-up call to realise that there were existential risks, and climate risks wer part of them. As to the carbon markets, a clarity on goals, objectives and targets was needed, as well ensuring that the instruments available were suitable for these targets. The issue lied in the ability to manage externalities, such as climate risks, and in internalising the cost of these externalities. He concluded that the financial sector had a critical role to play in putting a price on carbon, and that by integrating climate risks into the pricing of all financial products and services would make businesses wake up.

The full recording of the event is available on CPLC website:

https://www.carbonpricingleadership.org/calendar/2021/1/19/the-synergy-of-innovative-technologiesand-carbon-market-developments-in-achieving-net-zero-carbon-in-the-gcc-region