EU-GCC WEBINAR

CLIMATE CHANGE AND CLEAN ENERGY IN LIGHT OF COVID-19 AND OIL PRICE DEVELOPMENTS
THURSDAY 14 MAY 2020, 12.00 - 13.00 CET

Webinar summary

This document is a summary of the EU-GCC webinar on "Climate change and clean energy in light of Covid-19 and oil price developments". The webinar was organised by the EU-GCC Clean Energy Technology Network (funded by the EU) and was the first in a series to explore current thinking amongst the EU and GCC regions on how covid-19 will affect action on climate change and clean energy. The summary reflects key issues that were discussed and should not be read as an exhaustive list of all technical issues. The situation is evolving very rapidly, so what is presented below is just a snapshot of views as of 14th May. The issues and relative priorities assigned therefore may change in the future.

Speakers:

- Tanzeed Alam, Climate Change Convener, EU-GCC Clean Energy Technology Network (**Moderator)**
- Dr Said Al Sarmi, Meteorologist, GCC Secretariat General
- Dr Mari Luomi, Independent Expert
- Dr Haris Doukas, NTUA

The webinar commenced with a presentation from Dr Said Al Sarmi about the observed climate change in the Arab region. The presentation (available here) highlighted that since 1998 there is a remarkable increase in air temperatures and a decrease in precipitation. In addition, there is a noticeable increase of sea surface temperature over the Arabian Gulf, Red Sea, and northern Arabian sea. The work of the RICCAR project (Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region) was also presented. RICCAR assessed some key vulnerabilities for the region, such as water. There were plenty of questions and interest from the audience on the information presented and how to take the work forward. The following areas were discussed.

Climate Change research gaps in the GCC

- Dr Said explained that some key research gaps include lack of publications and expertise on climate science in the GCC region. Therefore, it is important to focus on building capacity in the region to conduct vulnerability assessments.
- There are also limited scientific centres and universities studying climate change. The studies should focus not only on historical observations, but also seek to understand better the impacts and vulnerabilities experienced by key economic sectors. For example, trying to better understand how vulnerability changed in the region from the observed increased temperatures and decreased rainfall.
- Scientists will need to work on reducing uncertainty in combination with projections (eg. projected rainfall changes).

Making climate change research more relevant for Decision Makers in the GCC

The Network is funded by European Commission

- Research can be made more useful for decision makers in many ways. For example, explaining the benefits of meteorological data and short-term weather forecasting and how that is useful for planning purposes can help build trust.
- Decision makers also need to see shorter period projections, so the issues become more immediate for them and prioritised.
- Placing climate change information in the context of sectors that are affected will also make it more relevant for decision makers. This includes impacts on the economy, human health and key sectors such as energy, water and food (eg. impacts of climate change on food trade partners for the GCC)
- Also, it is important to ensure that proposed solutions don't create other problems (eg. tree planting to deal with heat could result in increased water use).
- Key health related impacts of climate change are:
    - heat stress and heat stroke, especially for labour/construction workers.
    - directly attributed to extreme events and increased heat stress.
    - Respiratory diseases from air quality problems and incidences of sand storms
- Climate change is an underestimated issue in the GCC region and there is significant scope to strengthen climate science and science-policy interface in the GCC. Scientists can assist by communicating data about climate change impacts to policy makers and policy makers should actively seek out scientific advice.
- The information presented outlines clearly the vulnerability of the GCC region and that we urgently need to address climate change.
- The pandemic shows that higher vulnerabilities and risks must be addressed in a timely fashion; the same principle applies to climate change.

Key discussion points from panel discussion

Following the presentation and Q&A with Dr Said al Sarmi, there was a panel discussion with Dr Mari Luomi and Dr Haris Doukas, details of which are below.

Climate Change and Covid 19

- 2020 is the year when the Paris Climate Agreement comes into force, and countries were supposed to be pledging how they would go beyond their current pledges. The 26th session of the Conference of Parties (COP 26)to the UN Framework Convention on Climate Change (UNFCCC) has been postponed due to Covid-19 so an important political moment might be lost. Pledges made so far would not deliver the temperatures goals to limit warming to below 2^{o}C but place us on a >3^{o}C trajectory.
- However, in 2020 due to the Covid-19 lockdown measures, emissions have been reducing at record rates. According to the IEA, CO_2 emissions are projected to fall by 8% this year, 6 times more than that seen after the 2008 financial crisis.
- To meet the 1.5^{o}C goal of the Paris Climate Agreement, a sustained 7.5% annual reduction is needed. For the 2^{o}C goal, a 2.7% annual decline is needed.
- During the lockdown and travel restrictions, the drop in oil demand from reduced transport has led to many of the emissions reductions that have been observed. Transport is still only a small percentage of the overall energy related emissions (20% on average globally), and these emissions will rise again once people start moving again. The key area to target is energy use for electricity, manufacturing and industry. While reductions are required across the board, the relatively small drop in emissions has demonstrated the limited impact of individual

consumer choices on emissions and the importance of tackling the energy system on the supply side.

- In EU electricity demand during March and April fell around 15% during the lockdown restrictions due to reduced demand and less coal and gas being used. CO_2 emissions were 40% lower during this period than the same period the previous year. Even though this occurred, renewables in the EU showed a 28% increase in solar compared to same period last year. These trends also show that renewable energy will continue to dominate. There were also negative prices on 5th April, outlining the need to increase fossil plants flexibility in the future.
- There are three interrelated crises – Covid-19, climate change and oil. The dialogue around going back to normality is problematic as this 'norm' has created these 3 crises.

Current context of low oil prices

- In EU, the decline in oil prices will have important implications for future contracts. There have also been negative electricity system prices for lignite and natural gas during the pandemic (and the corresponding decrease in demand) in some European countries. The 'panic' of fossil fuel markets shows they have lots of difficulties in dealing with uncertainties and the energy transition towards a low carbon economy. EU has ambitious plans for decarbonisation, based on the EU Green Deal, and fossil fuel markets need a new structure that will allow them to be part of mix while also ensuring the energy transition occurs quickly enough.
- Low oil prices would also result in there being limited incentives to curb domestic oil use and shift to electric vehicles.
- For the GCC the challenges are larger. Historically, both fiscal spending and reforms have been procyclical: when oil prices decline, spending declines and reforms slow down – and vice versa. Saudi Arabia recently increased VAT to 15%, which is feared by many to potentially stifle consumer demand even further, complicating recovery efforts. It remains to be seen if other GCC countries will follow suit. The UAE, for example, has indicated that it will not follow. The Covid-19 double shock to economies (shocks felt both on the supply and demand sides of economies) adds to the difficulty of Gulf governments to justify reforms that would broaden the tax base even though they might now be desperately needed.
- The average breakeven oil price required for GCC governments to balance their budgets is USD70, while in early May 2020 the global benchmark Brent was trading at USD30. IEA estimates a 32% decline in exploration and production companies' capital expenditure globally compared to 2019. In addition to implications for GCC governments, these trends also impact the region's national oil companies (NOC). NOCs normally have the funds to invest into clean energy technologies such as Carbon Capture and Storage and Hydrogen, as well as R&D, but in the current context this will be unlikely.

Stimulus packages for post covid-19 recovery

- Simultaneously addressing climate change and Covid-19 is important and being discussed in the European parliament. Some discussions focus on the inclusion of sustainability conditionalities for the recovery packages to assure more sustainable and climate friendly services. Connecting the EU Green Deal to the Covid-19 recovery package is the key issue investigated by the EC , with respective announcement to be follow within the next weeks.
- There is currently no publicly reported green recovery dialogue in the GCC. The GCC has faced a double economic shock with low oil prices and Covid-19. The International Monetary Fund predicts negative GDP growth across the GCC in 2020. The UAE has highlighted that its

priorities are health, education, economy, food security and society; it's non-oil economy highly has been exposed, especially aviation, hospitality, tourism and retail.

- The rising unemployment in the GCC region will likely be 'exported' as many foreign residents will likely head back to their home countries, as already evidenced with repatriation flights. The GCC populations will likely decline and thus result in a reduction in energy demand. However, energy consumption patterns may not change.
- The GCC governments may be less inclined to spend on green investments such as electric vehicles (due to low oil prices), green buildings (due to slow down of construction activities) and renewable energy (due to lower energy demand from population contraction).
- Note the situation is still rapidly evolving in the GCC and the above is no means set in stone – for example, there are some large plans for renewable energy projects which have so far proven to be economically competitive.

Opportunities for green and climate friendly recovery post covid-19

- Integrated solutions are needed that help address Covid-19, climate change and clean energy.
- While the lockdown has resulted in behaviour changes with people travelling less, only an 8% reduction has been achieved. However, there may be opportunities if people place increased value on quality of life from having a cleaner environment and less polluted air for example, and companies allow people to work more from home, reducing traffic related emissions.
- A collective and structural response is needed, starting with transforming how electricity is produced and used. A study conducted by the University of Oxford's Smith School of Economics ranked clean energy infrastructure has being the best policy for high job creation and economic growth.
- While people may travel less with increased digital connectivity enabling more homeworking, there will be important issues of equity to address and ensure everyone is 'connected'. The data centres and increased use of digital technologies also have a carbon footprint and ICT technologies need a roadmap and sustainable direction to ensure we don't substitute one problem with another.

- **Creating green stimulus packages**

    - Following the 2008 financial crisis, the green growth concept was defined and included recommendations for an ideal package of policies and green investments.
    - In the GCC it is important to work with governments, so they understand why green growth is important as they are facing more immediate challenges.
    - Other governments may go big on green recovery, which may accelerate their transition away from oil. This could be a big incentive for the GCC to take action. The EU is planning a border carbon tax adjustment, which would impact the cost for GCC exports to the EU. This could be an important motivator for the GCC to start exploring carbon pricing, generate cleaner energy or strive towards a lower carbon intensity in its economic output overall.
    - Bailouts are a big concern with Greenpeace maintaining a tracker for EU aviation.
    - The public may start to appreciate, and demand improved environmental health such as lower pollution and sustainable living options. Increased digital connectivity will also be of growing importance to the economy. Investing in these areas could be important for the GCC's ability to continue to attract foreign expertise. GCC could also position itself as a region that cares about quality of life and environmental health

- Ideally packages would include:
  - Public support for private investments - adding conditions to public support is important and these should include conditions that help green 'brown' sectors.
  - Implementing carbon pricing.
  - In Germany, the government, before the current crisis, imposed strict conditions on the iron and steel industry to more energy efficient and increase recycling. This industry is now considered one of the most competitive and innovative.
  - Spending in largescale clean infrastructure projects such as electric vehicle charging.
  - Focus on energy efficiency as first principle and then renewable energy.
  - designing building efficiency incentive schemes
  - Investment in research, development and deployment of clean technologies is greatly beneficial.
  - Green Hydrogen for transportation.
  - Battery storage for energy.
  - Rewarding Small and Medium Enterprises that are making a big difference.
- There are opportunities for EU & GCC regions to collaborate on these areas to share lessons learnt and define how a green recovery will look like for the GCC.

The Network is funded by European Commission