"A COVID-19-induced macroeconomic overview of the GCC", Keynote presentation at Bonds, Loans & Sukuk Middle East, 8 Dec 2020

Dr. Nasser Saidi, a keynote speaker at the latest Bonds, Loans and Sukuk Middle East event, held virtually on 8-9 Dec 2020, presented a 30-min talk titled "A COVID-19-induced macroeconomic overview of the GCC".
The presentation covered the macroeconomic impact of Covid19 pandemic on the global economy and the Middle East/ GCC region (economic growth, capital flows, trade, investment, labour movements, job losses). Also covered were the policy responses (monetary, fiscal, social and health policies) in addition to thoughts on the Biden Presidency and its regional consequences. The concluding remarks focused on GCC's way forward post Covid19, looking at three pillars: geopolitics, the economy and new sectors of focus.
Download the presentation here.

"The case for new green deals in the Gulf", article in Aspenia Issue No.89-90, Oct

2020

Dr. Nasser Saidi's article titled "The case for new green deals in the Gulf" appeared in Aspenia Issue No 89-90, issued in Oct 2020, and is posted below. A PDF file of the article can be downloaded here.

The case for new green deals in the Gulf

The world is in a "new oil normal", with permanently lower prices. The oil rich countries of the Gulf need to diversify and focus on clean energy alternatives. Europe has a significant role to play here, too, as the EU and the GCC should develop a strategic techno-energy partnership.

The Gulf Cooperation Council (GCC) is weaving its way through two major shocks. Covid-19 and the Great Lockdown resulted in a collapse of oil prices, against a background of climate change and global energy transition. The imf projects an estimated 4.9% decline in global growth this year, with cumulative output losses to the tune of over 12 trillion dollars for the 2020-21 period. Within the GCC, growth is forecast to shrink by 7.1% in 2020, before, optimistically, rebounding by 2.1% next year.

One unintended consequence of the current health crisis has been a record decline in global oil demand, along with emissions reduction and cleaner air as lockdowns were imposed across the globe. I would venture that we are currently in a "new oil normal", with permanently lower oil prices. It is imperative, therefore, that the GCC's recovery model include a strong clean energy policy component and structural reforms, alongside a recasting of its economic diversification model and social contracts. The current GCC economic model – over-dependence on fossil fuels, pro-cyclical fiscal policies and generous government subsidies – are unsustainable in the medium to long term.

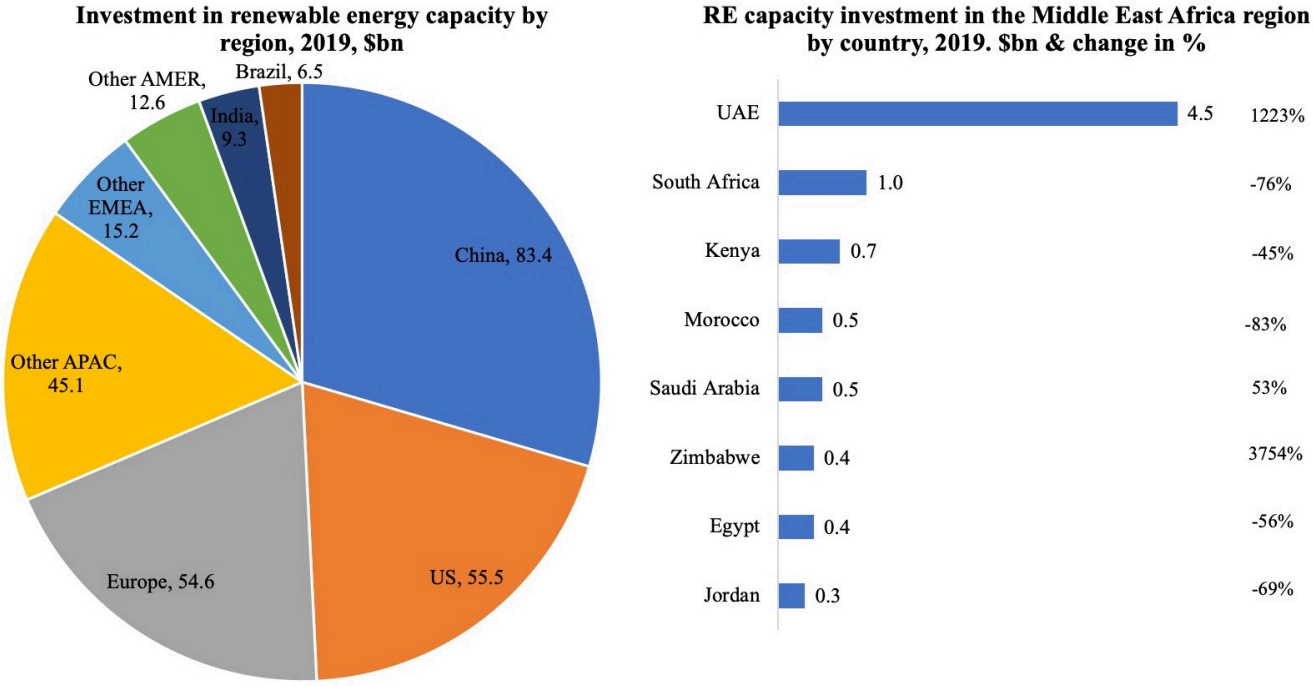
THE PATH LESS TRAVELLED. As countries enter the second phase of the Covid pandemic of easing restrictions along with social distancing norms, there are two divergent paths for economic activity. One track is that government stimuli, together with lower fossil fuel prices, result in diminished incentives to invest in clean energy and clean tech. This will lead to a business-as-usual mode, to a pre-Covid-19 path. Crises and disasters (sars, 9/11, the 2008 Great Financial Crisis) have been associated with temporary dips in carbon emissions, with a 1.5% decline in output associated with a 1.2% drop in co_2. Emissions pick up again, typically with a vengeance, once activity recovers. Recent history provides evidence: it is estimated that following the global financial crisis in 2008-09, carbon emissions increased by 5.9% as a result of policy stimuli.

The second path is a green one wherein countries implement cop21 commitments and energy transition policies, moving to "Green Deals". This could take multiple forms: we could accelerate the decarbonization of power and road transport, place greater emphasis on energy efficiency investments, phase out subsidies, launch policy incentives to reduce carbon emissions and make a concerted effort to provide no bailouts for industries or business models that are not viable in a low-carbon world. Proactive fiscal policies can help nations become more climate-resilient through investment in climate resilient infrastructure and cities, along with instruments to transfer climate risks to markets (carbon taxes and carbon trading).

According to IRENA's 2020 "Global Renewables Outlook: Energy Transformation 2050", decarbonization of the global energy system – away from fossil fuels to renewables – could generate 98 trillion dollars in cumulative growth, adding an extra 2.4% to global gross domestic product. This is a conservative estimate that does not even take into account the negative growth effects of climate change and rising temperatures.[1]

CLEAN ENERGY AND CLEAN TECH INVESTMENTS. Governments in the GCC have been vocal supporters of renewable energy projects despite their vast fossil fuel reserves. The Covid-19 crisis has temporarily slowed deal-making in renewable energies in recent months, and this will likely affect investment levels in 2020. In comparison, renewable energy investments in the wider Middle East and Africa slipped 8% to $15.2 billion in 2019, from a record total of 16.5 billion in 2018.[2] The uae was the biggest investor in renewables in the region last year, with the massive 4.3bn Al Maktoum iv solar project, while Saudi Arabia is accelerating investments, with a total 502 million dollars invested (including a windfarm project). Record-breaking bids in renewable energy auctions in Saudi Arabia and the uae have made solar power cost-competitive with conventional energy technologies. The United Arab Emirates is already ahead of the curve in terms of deployed energy storage to support its grid during high demand hours with two NaS battery storage projects in Abu Dhabi and Dubai.

Figure 1 . Investment: Global vs. Middle East



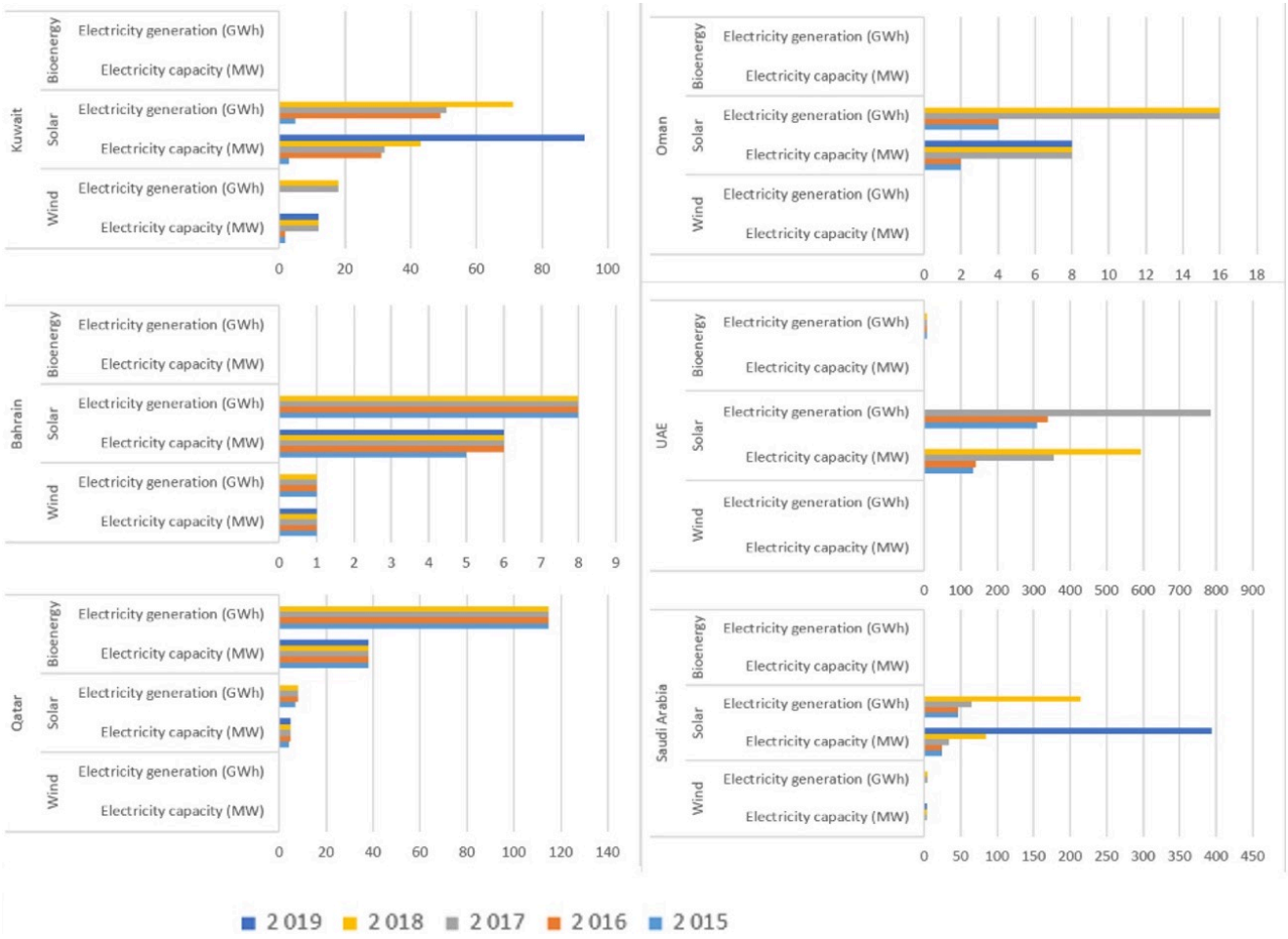
Source: Global Trends in Renewable Investment 2020

During the pandemic, governments have reiterated their commitment to support renewable energy policies. Recent announcements – Oman's financial closure of its Ibri ii plant, uae's upcoming plans to develop the world's largest solar

power plant (2 gigawatt) in Abu Dhabi's Al Dhafra region (at a historically low price of 1.35 us cents per kWh), came just hours after Dubai awarded a contract for a project (part of a solar park designed to produce 5 gigawatts by 2030) to generate power at a tariff of 1.7 us cents per kWh, confirm the region's commitment to the sector.

New renewable energy projects in the region are becoming increasingly reliant on private funding (versus government support previously). Private power developers, who can borrow internationally at historically low interest rates, are helping to lower financing costs thereby leading to even cheaper power. The bottom line is that growing private sector participation in energy projects along with technological innovation that is rapidly lowering the cost of renewable energy production and storage, will accelerate the energy transition in the Arabian Peninsula.

Figure 2 . Electricity generation and capacity in the GCC



Source: IRENA Statistics.

NEW GROWTH MODELS. The new oil normal presages permanently

lower real oil prices and the prospect that plentiful fossil fuel (including shale), with increasingly ubiquitous, cheap renewable energy, along with energy transition policy and regulatory measures, will lead to an increasing proportion of fossil fuel reserves becoming stranded assets. This poses an existential threat to the GCC countries, though they are among the world's low-cost producers. The imf estimates that the GCC's net financial wealth (estimated at 2 trillion dollars at present) could be depleted by 2034, with non-oil wealth depleting within another decade.[3] The policy imperative for the GCC goes beyond recasting economic diversification strategies that are vulnerable to pandemics, to new development and growth models, with a focus on developing "green deals" as well as "blue deals" (given the vulnerability of GCC coastal areas to climate change). All this, while supporting increased economic digitization too. The current combined crises are a wake-up call for GCC governments to design economic recovery programs to accelerate decarbonization and encourage investment in cost-competitive sustainable technologies. Pre-Covid, there were an estimated 6,722 active infrastructure projects with a combined value of more than 3.1 trillion dollars planned or under way in the GCC. These plans should be radically revised to invest in climate resilient infrastructure covering energy, water, transport and cities. Such a well-planned recovery would cut pollution, reduce the outsized carbon footprint of the GCC and also lead to job creation: each million dollars invested in renewables or energy flexibility is estimated to create at least 25 jobs, while each million invested in efficiency creates about 10 jobs.[4] The added macroeconomic benefit is that the GCC would release oil supply for export rather than subsidize wasteful domestic energy-intensive consumption and production activities.

Figure 3 . Energy transition in the Middle East OPEC nations, 2050

	Thousand jobs	Increment from current plans
Renewables	**816**	**169%**
Solar	365	223%
Bioenergy	139	156%
Wind	236	259%
Energy sector	**3317**	**12%**
Renewables	816	169%
Energy efficiency	1059	11%
Energy flexibility & grid	433	17%
Fossil fuels	975	-24%
Nuclear	35	-35%

Source: IRENA, "Measuring the socioeconomics of transition: focus on jobs", February 2020.

BUILDING BLOCKS OF A RECOVERY PROGRAM. I see four major steps to be taken in order to launch a successful recovery in the Middle East.

1. Structural reforms. The lowest hanging fruit is the phased elimination of fuel and utilities subsidies that are a drain on government finances. Removing subsidies frees up fiscal resources to provide financial incentives for the ubiquitous use of clean energy and clean technology within the broader framework of a "zero net emissions policy". Regional cooperation is required to support renewable energy growth across the region through a GCC integrated grid, unification of environmental standards along with a removal of barriers to trade and investment, to benefit from large economies of scale and avoid costly and wasteful duplication. A

regional GCC grid could change global power infrastructure by creating an energy corridor to East Africa, to Europe through Egypt and to India and Pakistan through a sea cable. Power exports would compensate the GCC for the gradual secular decline of fossil fuel exports through the export of higher value-added solar power.

2. De-risk fossil fuel assets. Across the GCC, state-owned enterprises (soes) and government-related enterprises (gres) are majority owners and operators of upstream and downstream oil & gas (the power sector), while also investing heavily in renewables (even increasing their market share of new capacity relative to private firms in recent years). Given the growing risk of oil & gas reserves becoming stranded assets, the GCC states need to repurpose their soes and gres to support and survive a low-carbon energy transition plan. Saudi Arabia has recently shown the way through the partial privatization of Aramco. The privatization of oil & gas assets should be part of an overall strategy of sharing the risk of potentially stranded assets with investors. Proceeds of the privatization of fossil fuel assets need to be invested in a transformation of the economies of the GCC, sustainable diversification based on partnership with the private sector, with a strategy focused on investing in human capital and sectors capable of competing in increasingly digitized economies.
3. Green financing is integral to fuel climate change policies, for a low-carbon transition. Introducing carbon taxes should be the main plank: such taxes would not only raise revenue and increase energy efficiency, they would provide part of the funding for decarbonization strategies. The imf finds that large emitting countries need to introduce a carbon tax that rises quickly to 75 dollars per ton by 2030, consistent with limiting global warming to 2°C or below. For a country like Saudi Arabia, revenues from a carbon tax

(35 to 70 dollars per ton of emissions) could raise some 1.9% to 2.7% of gdp in revenue[5] in addition to reducing pollution, and being the most effective tool for meeting domestic emissions mitigation commitments. **The other plank for the capital rich GCC is "green finance".** The financial centers of the region could become regional and global centers for new energy financing, for the issuance of "green bonds" and Sukuk, as well as for facilitating the listing of Clean Energy and Clean Tech companies and funds. Ideally, this should be complemented with the creation of Green Banks to finance the private sector. Such institutions would support energy efficiency policies, retrofit where necessary, make climate risk mitigation investments and so on. The imf has estimated an annual financing gap of 2.5 trillion dollars through 2030 to attain the global targets set through the Paris Agreement and the broader un sdgs. Climate finance reached record levels of $360bn in 2019 – but this remains a tiny fraction of the required amount.

4. The Covid pandemic has accelerated the digitization process as people, governments and businesses have shifted online. The digitization of the energy sector is next through investments in smart grids, smart city technologies and the deployment of new digital technologies, low-cost cloud computing, the IoT, big data analytics, artificial intelligence and blockchain. This is an unprecedented strategic opportunity for the GCC countries to participate in the Fourth Industrial Revolution through the digitization of their dominant energy sectors, with massive "soft" (including training and building digital human capital) and "hard" investments by industry, prosumers, and governments to increase transform their economies and increase overall productivity growth.

GEOECONOMIC CONSEQUENCES. The year 2020 will likely witness the largest decline in energy investment on record, mostly due to Covid. A reduction of one-fifth – or almost $400 billion – is expected in capital spending compared with 2019.[6] Fossil fuel supply investments (e.g. exploration) have been the hardest hit while utility-scale renewable power has been more resilient, but this crisis has touched every part of the energy sector. As the energy transition progresses in the European Union and the United States becomes a net energy exporter, it implies less energy dependence on GCC. This lessens the region's geopolitical and geoeconomic importance. How should the GCC react? First of all, greater regional economic integration is required, with a focus on infrastructure and logistics: energy, water, transportation, digital highways. As noted above, a new energy infrastructure would enable the GCC to shift to selling renewable-energy-based electricity to Europe (via an interconnected power grid), to East Africa, but also to Pakistan, India and East Asia. Secondly, the GCC needs to formalize their shifting trade and investment patterns towards Asia and China through new trade and investment agreements with China, Japan, Korea, and the Asean countries. Thirdly, a new extended Gulf security arrangement needs to be negotiated to reduce arms expenditure and focus on economic development. Finally, the EU and the GCC should develop a strategic techno-energy partnership: the Gulf countries could supply solar-generated electricity, while Europe contributes as a renewable energy and climate change technology partner.

Figure 4 . China-GCC trade and investment

Source: IMF DoTS, Refinitiv Datastream, AEI's China Global Investment Tracker.

[1] Matthew Kahn et al, in their 2019 paper "Long-term macroeconomic effects of climate change: a cross-country analysis", found that a persistent increase in average global temperature by 0.04 degrees Celsius per year, in the absence of mitigation policies, reduces world real gdp per capita by more than 7% by 2100; abiding by the Paris Agreement limits the temperature increase to 0.01°C per annum, which reduces the loss substantially to about 1%. According to a nasa study, 2010-2019 was the hottest decade ever recorded. A goal of the Paris climate accord was that global temperatures need to be kept from rising more than 1.5°C, but a United Nations report in Nov 2019 found that the world's emissions would need to shrink by 7.6% each year to meet the most ambitious aims of the Paris climate agreement.

[2] See "Global trends in renewable energy investment 2020", Frankfurt School-unep Centre, BNEF report, June 2020.

[3] "The future of oil & fiscal sustainability in the GCC region, imf Working Paper, January 2020.

[4] IRENA, "Global renewables outlook: energy transformation 2050, April 2020.

[5] IMF, "Putting a price on pollution", December 2019.

[6] IEA, "World energy investment 2020".

Podcast on what Biden's win means for the Middle East with The National, 12 Nov 2020

Beyond the Headlines: How will Joe Biden change US policy in the Middle East?

For nearly four years, US President Donald Trump has torn up America's foreign policy handbook – for better and for worse. The implications, both at home and abroad, have been staggering. Most recently, the Trump administration was lauded for facilitating the Abraham Accords, the normalisation of relations with Israel by the UAE and Bahrain. In exchange, Israel's government agreed to halt its plan to annexe Palestinian territories. But Mr Trump's days in the White House are now numbered. By the end of January 2021, a new administration will take the reins of American foreign policy.
This week on Beyond the Headlines, we hear from Sanam Vakil, deputy director of Chatham House's Middle East and North Africa Programme, and Nasser Saidi, Lebanon's former minister of economy and former vice governor of the Lebanese central bank, about what will change for the Middle East and what will remain the same when Joe Biden takes his seat in the Oval Office.
Listen to the podcast on: https://audioboom.com/posts/7728822-the-changes-in-the-middle-east-after-joe-biden-takes-office
OR on The National's page: https://www.thenationalnews.com/podcasts/beyond-the-headlines/beyond-the-headlines-how-will-joe-biden-change-us-policy-in-the-middle-east-1.1110861

https://audioboom.com/posts/7486040-tear-gas-fireworks-and-politics-in-lebanon-s-revolution

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"How the US elections matter for the Middle East", Op-ed in The National, 2 Nov 2020

The op-ed by Dr. Nasser Saidi, titled "How the US elections matter for the Middle East", appeared in The National on 2nd Nov 2020 and is reposted below.

How the US elections matter for the Middle East

The bottom line is that the outcome of the US elections will directly impact a host of global issues

The opinion polls largely predict a win for Joe Biden on Tuesday.
FiveThirtyEight, a political analysis website, in its extensive analysis and simulations too favours Mr Biden, barring a major polling error. But a contested election is probably on the cards, given the likelihood that more than 90 million postal ballots – mostly Democrats – are likely to be systematically challenged by Republicans.
With a day left for the US Presidential elections, what would

a potential change of guard at the White House mean for the Middle East? What is at stake?

First, a potential return to multilateralism and international co-operation from the current unilateral policies of withdrawal from the Paris climate accord, the Trans-Pacific Partnership or the World Health Organisation or the Iran nuclear deal.

International co-operation – such as the Global Access Facility – will be critical when the vaccine for Covid-19 is ready and needs to be distributed globally.

A widespread availability of vaccines is a global public good. A discriminatory or preferential national treatment would be detrimental to the global economy and hamper recovery from the pandemic.

More broadly, a US reversion to multilateralism would be welcomed internationally. This would mean less confrontation on trade, tariffs and investment policies with China, the EU, Canada-Mexico and others. This would lead to a win globally and – by encouraging non-US trade and investment – result in a cheaper dollar.

Significantly, under a Biden administration, global policy uncertainty, which has been peaking, would diminish. This would, in turn, encourage trade, investment flow and global economic recovery.

Lower, volatile oil prices and a strong dollar along with US tariffs on aluminium and steel, have cost a number of Arab countries over the past four years.

Currently, GCC members are pegged to the dollar. Oil is priced in dollars, trade is dollar denominated – a strong dollar penalises sectors like trade, tourism, transport and logistics that these countries have relied on for economic diversification.

Given the Covid-19 lockdown and the global energy transition away from fossil fuels, it is unlikely – given weaker demand – that oil prices will revert to levels seen a few years ago: the IMF's latest World Economic Outlook puts oil prices, based on futures markets at $41.69 in 2020 and $46.70 in 2021 versus

an average price of $61.39 last year.
But a likely cheaper dollar under Mr Biden would support an economic recovery in the region, driven by the non-oil sector, tourism and services exports – and as countries reopen in phases – also in foreign investment in real estate.
The impact on the oil market will be more important.

A re-elected Trump administration would continue its policies: supporting US shale oil, encouraging drilling, rolling back climate-related regulations, supporting US oil and gas exports, thereby weakening oil prices.
By contrast, a Biden administration would be climate and environment policy friendly, would revert to the Paris Agreement and support renewable energy.
In a scenario where fossil fuel demand is already weak, an additional push towards renewables would reduce US supply but also demand.
The affect on oil prices would depend on the balance between demand and supply effects, and not necessarily downwards. Oil exporters in the region are still highly dependent on oil. Lower oil revenue implies limited fiscal room and higher fiscal deficits.
As real oil prices trend downward, fiscal sustainability becomes increasingly vulnerable. The risk of being left with stranded assets then becomes the elephant in the room.
According to the International Energy Agency, stranded assets refer to “those investments which have already been made but which, at some time prior to the end of their economic life, are no longer able to earn an economic return”.
The strategy imperative is the need to re-emphasise diversification policies, along with a policy to de-risk fuel assets.
National oil companies and state-owned enterprises, that are majority owners or operators of oil and gas assets, would need to pursue a plan of low-carbon energy transition – in addition to the unlocking of greater immediate value from fossil fuel assets.
Examples are the Aramco IPO and Adnoc’s pipeline network deals. This could be complemented by a major drive to accelerate investment in and an adoption of green energy policies, by both government entities and the private sector.

The bottom line is that the outcome of the US elections will directly impact a host of global issues – from dealing with Covid-19 and climate change, de-escalating confrontation and preventing a cold war with China, restoring confidence in multilateral agreements and institutions like the WHO, the WTO, the UN and geopolitics, along with repercussions on regional power struggles involving Israel, Iran, Turkey and a number of Arab states.

Important as these issues are, the other bottom line is the need for a renewed focus of the regions' oil producers, on economic diversification strategies and de-risking fossil fuel assets within a well-designed, time-consistent energy transition strategy.

Dr Nasser H Saidi is a former Lebanese economy minister and founder of the economic advisory and business consultancy Nasser Saidi & Associates

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Panel discussion "Managing energy transition in the Middle East" at World Energy Week Live, 7 Oct 2020

The collapse in oil demand and prices due to Covid-19 has had a devastating impact on the resource-dominant countries of the Middle East. Will this delay economic reforms and a transition to lower carbon economies, or can this pose an opportunity for the region to accelerate energy transition and economic diversification?

This panel session, broadcast on 7th Oct 2020, was part of the Middle East and Gulf States session at World Energy Week LIVE on the theme "Managing Energy Transition in the Middle East"

Dr. Nasser Saidi joined an esteemed panel comprising of Adam Sieminski, President, KAPSARC, Adnan Shihab-Eldin, Director General, Kuwait Foundation for the Advancement of Sciences and Robin Mills, CEO, Qamar Energy in a session moderated by Eithne Treanor, Executive Chair, WE Talks, World Energy Council.
The session can be accessed below:

Weekly Insights 28 Oct 2020: US Presidential elections & impact on the Middle East/ GCC

Download a PDF copy of this week's insight piece here.
FiveThirtyEight, in its extensive analysis and simulations, favours Biden to win the election, barring a major polling error. A contested election is probably on the cards. But, with less than a week left for the US Presidential elections, what would a potential change of guard at the White House mean for the Middle East? Interestingly, a recent YouGov-Arab News survey shows that respondents have little confidence in either candidate: only 12% preferred Trump versus 40% for Biden.
First and foremost is a potential return to multilateralism and international cooperation from the current (unilateralism) policies of withdrawal from the Paris climate accord, the Trans-Pacific Partnership or the World Health Organization or the Iran nuclear deal. International, multilateral cooperation – such as the Global Access (COVAX) Facility – will be critical when effective Covid19 vaccines are available to be rolled out and need to be distributed globally. A discriminatory or preferential national treatment would be

detrimental to the global economy and recovery. More broadly, a US reversion to multilateralism would be welcomed internationally: less confrontation on trade/ tariffs and investment policies with China, the EU, Canada-Mexico and others would lead to a win-win globally and would lead to a cheaper dollar by encouraging non-US trade and investment.

Lower oil prices and a strong dollar along with US tariffs on aluminium and steel, have been strong headwinds and costly for the GCC. Currently, GCC members are pegged to the dollar (Kuwait pegs a basket dominated by US$), oil is priced in dollars, financial assets are largely dollar denominated, trade is dollar denominated and dollar financing is popular, while bond issuances have been on the surge (taking advantage of globally low borrowing costs) as nations adjust to rising fiscal deficits. Given the Covid Great Lockdown, the energy transition away from fossil fuels, it is unlikely that oil prices will revert to prices seen a few years ago given weaker demand – the IMF's latest World Economic Outlook puts oil price, based on futures markets at USD 41.69 in 2020 and USD 46.70 in 2021 (versus an average price of USD 61.39 last year). But a cheaper dollar would support an economic recovery in the region driven by tourism and services exports, as countries reopen in phases.

More important, will be the impact on the oil market. A re-elected Trump administration would continue its policies supporting US shale oil, encourage drilling and roll back of climate-related regulations and support US oil & gas exports, weakening OPEC+ and oil prices. By contrast, a Biden Administration would be climate and environment policy friendly, revert back to the Paris Agreement, support renewable energy, including through "Green" and "Blue" New Deals. In a scenario where fossil fuel demand is already weak, an additional push towards renewables would tend to reduce US supply but also reduce demand, the oil price impact would depend on the balance between demand and supply effects.

Oil exporters in the region are still highly dependent on oil, with lower oil revenues implying limited fiscal room and

higher fiscal deficits which are averaging 10% in 2020 for the GCC countries. As real oil prices trend downward, fiscal sustainability becomes increasingly vulnerable. The elephant in the room remains the risk of being left with stranded assets. According to the IEA, stranded assets refer to "those investments which have already been made but which, at some time prior to the end of their economic life, are no longer able to earn an economic return". The strategy imperative is the need to emphasise diversification policies, along with a policy to de-risk fuel assets. National oil companies and related state-owned enterprises, that are majority owners/ operators of oil and gas assets, would need to pursue a low-carbon energy transition plan in addition to the privatisation of fossil fuel assets. Examples are the Aramco part-privatisation, and ADNOC's part-pipeline privatisation. This should be complemented by a major drive to accelerate investment in and adoption of green/ clean energy policies by both government entities and the private sector.

The bottom line is that the outcome of the US elections will directly impact a host of global issues from dealing with Covid and climate change, de-escalating confrontation and preventing a Cold War with China, restoring confidence in multilateral agreements and institutions like the WHO, the WTO, the UN and geopolitics, with repercussions on regional power struggles involving Israel, Iran, Turkey and the Gulf states. Important as these issues are, the other bottom line is the need for a renewed focus of the GCC and the regions oil producers on economic diversification strategies and de-risking fossil fuel assets within a well-designed energy transition strategy.

For additional views about this and the wider regional economic outlook, listen to the IMF panel discussion from yesterday.

"Climate & Financial Stability are Interdependent Public Goods", Keynote Presentation at CEBC's "Landscape of Sustainable Finance" event, 2 Mar 2020

Dr. Nasser Saidi presented an opening keynote, titled "Climate & Financial Stability are Interdependent Public Goods", at the Clean Energy Business Council (CEBC)'s Sustainable/Climate Finance event, held in Dubai on 2nd March 2020.
The presentation provided an overview of the major issues relating to climate change globally, before moving on to exploring the various fiscal and regulatory tools available for climate action, with a specific focus on financing. Dr. Nasser Saidi also spoke at length how the Middle East can adapt to climate change before ending with a snapshot of how the CEBC plans to contribute to this effort.

Podcast on the Aramco IPO

with The National, 13 Nov 2019

The world’s biggest crude oil producer, Saudi Aramco launches the subscription period for its much-anticipated IPO as it rolls on with its ambitions to become the globe’s pre-eminent integrated energy and chemicals company.
Host Mustafa Alrawi, assistant editor in chief of The National, and Kelsey Warner, The National’s future editor, talk with Dr Nasser Saidi, regular contributor to The National and president of the economic advisory and business consultancy Nasser Saidi & Associates, about the Aramco IPO. Dr. Saidi discusses the IPO’s strategic importance, outlook for the oil market and strategy alliance with China.
In this episode:
Kelsey and Mustafa on Adipec (0m 32s)
Dr. Saidi on the IPO (8m 21s)
Headlines (27m 14s)
https://audioboom.com/posts/7421977-adipec-and-the-saudi-aramco-ipo

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Panelist at the launch of IMF’s MENA Regional Economic Outlook, 28 Oct 2019

Dr. Nasser Saidi participated as a panelist at the IMF’s launch of the Regional Economic Outlook report for the Middle East and North Africa region, which took place at the Dubai International Financial Centre on 28th October, 2019.

The panel discussion covered many aspects including the economic outlook for UAE, Saudi Arabia, Egypt and other nations while also addressing the issues of geopolitical risks, job creation and climate change among others.
The IMF report can be accessed at https://www.imf.org/en/Publications/REO/MECA/Issues/2019/10/19/reo-menap-cca-1019
Watch the video of the panel discussion below:

"Climate Change is an Existential Threat for the Middle East & the GCC", Article for Aspenia, Fall 2019

The article titled "Climate Change is an Existential Threat for the Middle East & the GCC" will be published in the Aspenia Issue, Fall edition 2019, and can be downloaded in Italian.

While humans squabble and debate their commitment to combat climate change -despite the clear and present danger warning of the 2018 report by the Intergovernmental Panel on Climate Change (IPCC)- Nature has been relentless and unforgiving. Extreme weather events are growing in intensity and frequency. Examples of which include maximum temperatures being reached in Bahrain this June since records in 1946. The ongoing drought in India and related acute water shortage continues, threatening rural communities and leading to greater poverty.

It is expected that sea levels are expected to rise between 10 and 32 inches or higher by the end of the century. Arctic ice loss has tripled since the 1980s [1]and Antarctica lost as much sea ice in four years – four times the size of France [2] as the Arctic lost in 34 years. The Global Climate Risk Index reports that "altogether, more than 526 000 people died as a direct result of more than 11 500 extreme weather events; and losses between 1998 and 2017 amounted to around US$ 3.47 trillion (at PPP rates).[3]

Moving from Climate Crisis to Climate Opportunity

The World Bank estimates the current cost of climate-related disasters at $520bn a year, forcing some 26mn people into poverty annually.[4]In comparison, the additional cost of building infrastructure that is resistant to the effects of global warming is only $2.7tn in total over the next 20 years. By contrast, the currently known cost of inaction is enormous and expected to reach a staggering USD 23 trillion a year by the end of this century [5], four times greater than the impact of the 2008 financial crisis.

The economic impact of climate change will be pervasive ranging from major disruption to food chains, the 'creative destruction' of fossil fuel based activities, widespread damage to infrastructure, increased inequality across and within countries unable to counter the effects of climate change, mass forced displacement of human and animal populations, and the destruction of human, animal and plant habitats. The climate change externality is global, long-term, persistent, and potentially irreversible. This has prompted Joe Stiglitz to say that 'the climate crisis is our third world war. It needs a bold response'.[6]

Part of the answer involves deep decarbonisation, shifting our economies from fossil fuels towards green economy solutions, based on renewable energies and technologies. Rapid technological change and innovation has made renewable energies (solar, wind, hydro, geothermal) directly competitive

with fossil fuel based technologies and enabling distributed energy resources. More recently, AI and Blockchain are being applied to renewable energies increasing their efficiency and competitiveness. These can be powerful technologies for economic development and for lifting rural communities out of poverty through 'electronification' and digitalisation. We should not, however, delude ourselves: technology is not a panacea absent of political will, commitment and public and private investment. The growing political acceptance of 'green new deals' generates some cautious optimism.

MENA/GCC climate change impact and risks

While climate change will be global, its regional impact will be varied and unequal, with MENA along with Sub-Saharan countries among the most vulnerable. Growing desertification, widespread drought, high population growth rates (leading to a doubling of population by 2050), rapid urbanisation, extreme heat, compound the effects of water scarcity to magnify the impact of climate change. Last year was the fourth warmest on record, with Algeria recording the hottest temperature (51.3°C) reliably recorded across Africa.

About 17 countries are already below the 'water poverty line' set by the UN. The World Bank estimates that climate-related water scarcity will cost the region 6 to 14% of its GDP by 2050, if not earlier. The MENA region's annual recharge rate of renewable water resources amounts to only 6% of its average annual precipitation versus a world average of 38%. In this context, it should be remembered that Saudi Arabia has exhausted almost 4/5-th of its aquifer water after misguided "food security" policies encouraged water & energy intensive modern farming to transform a largely desert country to become the world's 6thlargest exporter of wheat! This has now stopped but the environmental damage is permanent.

Climate Change and Conflict

Home to 6% of the global population but just 1% of freshwater resources, the MENA region (already in the throes of conflicts over resources, land, ideologies and religion) will very

likely be fighting “water wars” by mid-century. Ethiopia is building its Grand Renaissance Dam and Egypt claims that it will cut downstream flows and water supply to Egypt by some 25%. The potential for conflict is growing, with Egyptian President el-Sisi openly declaring that the dam is “a matter of life and death.”[7]

A growing body of evidence (for example Burke et al. (2014))[8] and research shows a strong linkage between climate and conflict, with adverse climatic events increasing the risk of violence at both the interpersonal level and the intergroup level, in societies around the world and throughout history. While climate change was not the main driver of the Arab Firestorm in 2011, the Syrian civil war is linked with an extended drought period between 2006-2011 which caused 75% of Syria’s farms to fail and 85% of livestock to die, devastating rural communities, resulting in forced displacement. The Libyan and Yemen wars as well as the Sudan civil unrest have been exacerbated by low rainfall and associated drought leading to rural impoverishment and migration.

Reliance on desalinated water for domestic use is another concern. MENA accounts for nearly half of the world’s desalination capacity and the GCC’s dependence on desalination is almost 90%. This leaves a large carbon footprint as the region is reliant on energy-intensive thermal desalination plants. Ironically, the region is also at the risk of flooding: the World Bank identified 24 port cities in the Middle East and 19 in North Africa at particular risk of rising waters [9]. For countries like Kuwait and the UAE, the threat of rising sea levels could permanently impact up to 24% and 9% of their GDP respectively. Furthermore, the wide disparity in regional wealth and incomes (about $70k per capita in Qatar to less than $1k in Sudan) implies differences in adapting to and mitigating climate change risks.

Oil Producers Face an Existential Threat

Climate change poses an existential challenge, threatening the

economic viability of the MENA oil producing countries. The energy transition to comply with COP21 and related commitments leading to a global shift away from fossil fuels to renewable energy, implies that the main source of wealth and income of the GCC and oil producers could rapidly depreciate in value as a result of the fall in demand and prices. Fossil fuel assets could become “stranded assets” i.e. assets that are not able to meet a viable economic return as a result of unanticipated or premature write-downs. To counter this existential threat, the GCC countries need to accelerate their economic diversification plans and develop and implement decarbonisation strategies. The nations have tentatively and timidly embarked on this path.

MENA/GCC policies to combat climate change

The GCC nations have initiated a phased removal of fuel, electricity and water subsidies to reduce the high energy intensity of consumption and production induced by distortionary subsidies. The removal of subsidies will reduce energy use and help shift the energy mix away from fossil fuels, and also creates fiscal space allowing funding of renewable energy investments and climate-resilient infrastructure.

The Middle East and GCC are part of the Global Sun Belt: more energy falls on the world’s deserts in 6 hours than the whole world consumes in a year! Harnessing solar power is an efficient policy choice, while wind power market is slowly catching up in Jordan and Morocco, though more than 56% of the GCC’s surface area has significant potential for wind deployment.

The GCC nations and especially UAE, are taking a lead in MENA in increasing energy efficiency-a low hanging fruit- and investing in renewable energy. There is now a GCC renewable energy project pipeline comprising over 7 GW of new power generation capacity to be realised within the next few years. The surge in projects has been supported by the rising cost competitiveness of renewables (it is now actually cheaper to build new wind and solar PV plants than it is to run existing

fossil-fuel ones), as well as the falling costs of energy storage (by 2021, the capital costs of lithium ion battery-based storage are expected to fall by 36% compared to the end of 2017 [10]).

IRENA's 2019 report [11]estimates that by 2030 the region is on track to leverage renewables to save 354 million barrels of oil equivalent (a 23% reduction), create some 220,500 new jobs, reduce the power sector's carbon dioxide emissions by 22%, and cut water withdrawal in the power sector by 17%. Renewable energy related targets range from UAE's ambitious goal of 44% of capacity by 2050 (from 27% clean energy in 2021) to Bahrain's target of 10% of electricity generation in 2035, and Saudi Arabia's 30% of generation from renewables and others (mainly nuclear) by 2030. The other important component of reducing energy consumption is energy efficiency, with a 6% target of reducing electricity consumption in Bahrain (in 2025) to 30% in the UAE (in 2030). Countries are now starting to commit to a net-zero emissions goal – 15 nations have declared the intention of reaching net zero emissions in or before 2050 [12]. The GCC are yet to announce their intentions in this regard.

In addition to the deployment of renewable energy projects, energy efficiency investments are another area for reform. Retrofitting existing buildings will improve energy efficiency and reduce carbon emissions. Green buildings [13]is another policy initiative which has gained traction: the Dubai Municipality has issued the Green Building Regulations and Specifications for all new buildings in the emirate since March 2014. But Dubai is the only city in the MENA region to join the Building Efficiency Accelerator programme, to double the rate of energy efficiency by 2030.

Climate Change Challenges facing MENA and the GCC

Looking ahead, the countries of the region face three broad challenges:

1. Institutional challenges:

2. Policies are in place to move away from fossil fuels to clean energy; however, until subsidies are eliminated, the legacy of building large conventional plants to feed demand is unlikely to end.
3. These policies should ideally be supported by adopting a Zero Net Emissions policy, to serve as a comprehensive, unifying basis for climate change policy. Other GCC nations could follow the UAE's policy direction and establish Ministries of Climate Change & Environment.
4. Unified regional standards are needed to remove barriers to trade and investment, are necessary for regional power market integration and to benefit from economies of scale.
5. Build capacity to support the creation and development of climate change policy and regulatory experts who can support the government and private sector create policies and strategies to meet a Zero Net Emissions policy.
6. Financing:
7. Introducing Carbon Taxes in MENA would generate substantial revenue, increase energy efficiency and part fund decarbonisation strategies.
8. Support for small-scale players and installations: significant initial capital requirements for big facilities deter the entry of small-scale players. Support for home and business PV installations would improve energy efficiency and creation of distributed energy resources.
9. Facilitate New Energy Financing: global green bond issuances reached a record USD167 billion in 2018. The GCC could become the center for MENA and emerging market green bonds and Sukuk.
10. Develop Green Banks to fund the private sector in decarbonizing, from energy efficiency, to retrofitting, to climate risk mitigation investments.
11. Adopting technological innovations: implement Blockchain (for power/ grid chain management) and AI to increase

efficiency, ability to store and share solar power via interconnected grids and smart meters.

Concluding remarks

Climate change poses some daunting challenges and existential risks for the MENA region, the GCC and other MENA oil producers. The bottom line is:

- The MENA countries are highly vulnerable to climate change because of their geographic conditions, demographics, lack of climate resilient infrastructure, deficient institutional capacity and preparedness to mitigate climate change risk. They also face—mainly in North Africa- the rapidly growing spillover effects of climate-induced mass displacement and migration from Sub-Saharan Africa. They face growing risks of climate related conflicts.
- The global energy transition and decarbonisation policies imply a growing risk that the fossil fuel resource wealth of the oil producers will become stranded assets. Similarly, the region's banking & financial sector faces stranded assets risk, given its heavy exposure to the oil & gas sector. These are existential risks.
- The GCC countries have developed energy sustainability policies. These are modest given their large natural comparative advantage of harnessing solar & wind power and their substantial financial resources allowing accelerated investment in renewable energy assets. A Net Zero Emissions climate policy should be developed and implemented.
- To mitigate climate change risks, the region's oil producers must accelerate their economic diversification away from oil & gas. This implies a rapid phasing out of fossil fuel subsidies. Decarbonisation and economic diversification are complementary strategies and a win-win opportunity. By diversifying into renewable and

sustainable energy and climate risk mitigating industries and activities, the GCC can create jobs and a new alternative export base, through a Green New Deal.

[1]https://www.nationalgeographic.com/environment/global-warming/global-warming-effects/
[2]https://www.weforum.org/agenda/2019/07/antarctica-lost-sea-ice-4x-the-size-of-france-in-3-years/
[3]https://www.germanwatch.org/sites/germanwatch.org/files/Global%20Climate%20Risk%20Index%202019_2.pdf
[4]https://www.worldbank.org/en/news/press-release/2016/11/14/natural-disasters-force-26-million-people-into-poverty-and-cost-520bn-in-losses-every-year-new-world-bank-analysis-finds
[5]WEF discussion: https://www.youtube.com/watch?v=su38ondAwkg
[6]https://www.theguardian.com/commentisfree/2019/jun/04/climate-change-world-war-iii-green-new-deal
[7]See "How Climate Change Could Exacerbate Conflict in the Middle East",
[8]Burke, M., Hsiang, S.M., Miguel, E. (2014): "Climate and Conflict", downloadable at: https://www.nber.org/papers/w20598
[9]Egypt's coastal city Alexandria, the second largest city, is at risk of being submerged by rising sea levels.
[10]See Lazard's report https://www.lazard.com/perspective/levelized-cost-of-energy-and-levelized-cost-of-storage-2018/
[11]https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Jan/IRENA_Market_Analysis_GCC_2019.pdf
[12]https://eciu.net/news-and-events/press-releases/2019/one-sixth-of-global-economy-under-net-zero-targets
[13]Green building is the practice of creating structures in a resource efficient way without having any negative impact on the environment.

Why climate change is an existential threat to the Middle East, Article in The National, 22 August 2019

The article titled "Why climate change is an existential threat to the Middle East" appeared in The National's print edition on 22nd August, 2019 and is posted below. Click here to access the original article.

Why climate change is an existential threat to the Middle East

While humans squabble and debate their commitment to combat climate change, nature has been relentless and unforgiving. Extreme weather events are growing in intensity and frequency. June 2019 was the hottest June in 140 years, setting a global record, and maximum temperatures last seen a century ago were felt in Bagdad, Bahrain and Kuwait. The ongoing drought in India and related acute water shortage continues, threatening rural communities and leading to greater poverty.

Sea levels are expected to rise between 10 and 32 inches or higher by the end of the century. Arctic ice loss has tripled since the 1980s and Antarctica lost as much sea ice in four years – four times the size of France – as the Arctic lost in 34 years. The Global Climate Risk Index reports that "altogether, more than 526,000 people died as a direct result of more than 11,500 extreme weather events; and losses between 1998 and 2017 amounted to around $3.47 trillion (at purchasing power parity rates).

The clear and present danger warning of the 2018 report by the Intergovernmental Panel on Climate Change (IPCC) is going unheeded.

While climate change will be global, its regional impact will be varied and unequal, the Middle East and North Africa (Mena) along with Sub-Saharan countries are among the most vulnerable. Growing desertification, widespread drought, high population growth rates (leading to a doubling of population by 2050), rapid urbanization and extreme heat compound the effects of water scarcity to magnify the impact of climate change. The near absence of climate change combating and risk mitigation policies are aggravating the impact.

The World Bank conservatively estimates that climate-related water scarcity will cost Mena 6 to 14 per cent of its GDP by 2050, if not earlier, while some 17 countries are already below the 'water poverty line' set by the UN. The lack of efficient water management infrastructure and policies exacerbate natural water scarcity.

Home to 6 per cent of the global population but just 1 per cent of freshwater resources, Mena will very likely be fighting "water wars" by mid-century. The Tigris and Euphrates rivers are drying up, building up tensions between Turkey, Iraq and Syria over water resources. Ethiopia is building its Grand Renaissance Dam and Egypt claims that it will cut downstream flows and water supply to Egypt by some 25 per cent. The potential for conflict is growing, with Egyptian President el-Sisi openly declaring that the dam is "a matter of life and death".

Copernicus Climate Change Service (C3S) confirms: July 2019 temperatures on par with warmest month on record

Climate change poses an existential challenge, threatening the economic viability of oil-producing countries. The energy transition to comply with COP21 is leading to a global shift away from fossil fuels to greater energy efficiency and renewable energy, implying a secular downward trend in demand

for fossil fuels and prices.

The implication is that the main source of wealth and income of the GCC and oil producers could rapidly depreciate in value because of the fall in demand and prices. Fossil fuel asset prices could rapidly deflate leading to “stranded assets” – that is, assets that are not able to meet a viable economic return as a result of unanticipated or premature write-downs. It is estimated that about a third of oil reserves, half of gas reserves and more than 80 per cent of known coal reserves would remain unused in order to meet global temperature targets under the COP21 Agreement.

The “stranded assets effect” would directly impact all economic activities and businesses that extract, distribute and those that use fossil fuels intensively as inputs for production, such as transportation. In turn, the prices of fossil fuel exposed assets (stocks, bonds and financial securities), would rapidly deflate to reflect the growing risks, and loans would become impaired, resulting in a loss to investors, including banks, pension funds, insurance companies and SWFs.

Central banks are raising the alarm that climate risk is a direct financial risk for the banking and financial sector. Mark Carney, Governor of the Bank of England, has highlighted three broad channels through which climate change can affect financial stability. He names physical risks affecting the insurance industry; climate change liability risks due to claims arising from climate change; and transition risks. Transition risks will crop up as changes in policy and technology result in a reassessment of the value of a large range of assets that emerge once they have been stranded. Citigroup forecast that the total value of stranded assets could be over $100 trillion in a 2015 report (based on $70 per barrel of oil, $6.50/MMBTU of gas and $70 per tonne of coal).

The bottom line is that the GCC faces three direct risks from climate change: physical, as heat, rising sea levels and water scarcity become reality; economic, as wealth destruction ensues vast oil reserves becoming stranded assets; and

financial, with a banking and financial sector highly dependent and exposed to the oil and gas sector.

What should the GCC countries do? To counter these existential threats, they need to accelerate their economic diversification plans, develop and implement decarbonisation strategies and develop neighbourhood climate risk mitigation policies. The nations have tentatively embarked on this path.