"MENA + Pakistan region faces \$420-\$510bn climate adaptation funding gap", Interview with Zawya Projects, 7 Nov 2025

Dr. Nasser Saidi's interview with Zawya Projects titled "MENA + Pakistan region faces \$420—\$510bn climate adaptation funding gap: CEBC Chief" was published on 7th Nov 2025.

MENA + Pakistan region faces \$420-\$510bln climate adaptation funding gap: CEBC Chief

In an exclusive interview with Zawya Projects, Dr. Nasser H. Saidi, Chairman and Founder of the Clean Energy Business Council (CEBC) MENA, explained why the MENA + Pakistan region must more than quadruple climate adaptation investment across infrastructure, and highlighted the GCC's potential to become a global hub for renewable energy.

The Middle East, North Africa, and Pakistan (MENA+Pakistan) region must significantly increase investments in climate adaptation, particularly for retrofitting infrastructure, to an estimated \$420 to \$510 billion, the chief of UAE-based Clean Energy Business Council (CEBC) MENA told Zawya Projects.

Dr. Nasser H. Saidi, Chairman and Founder of the ADGM-based non-profit, which represents the clean energy sector pointed

out that so far, the MENA+Pakistan region is discussing investments of around \$100 to \$120 billion in climate adaptation, which involves retrofitting current infrastructure, factories, and housing to be future-ready across the region.

"However, my estimate is that you need around four times that figure—to \$420 to \$510 billion—because Mother Earth has a mind of her own," he said.

"Human actions have created climate challenges, and the earth responds. While we are not in charge of that, we must integrate climate models with our economic and planning models to design effective policies."

And while numbers are still being assessed, the dynamics of climate change can be severe, he noted.

"We have to be preventive and preemptive when addressing climate risks; it concerns all our lives," he said.

Dismal scenario

Saidi cited the disastrous floods in Libya in September 2023, where two dams collapsed in Derna after Storm Daniel, releasing 30 million cubic metres of water.

"The floods swept entire buildings, with thousands of people still inside them, into the Mediterranean Sea," he explained. "This is a classic example of why the region needs to raise its investments in climate adaptation across its infrastructure and housing."

"Climate change is a priority as we are very challenged by desertification, Medicanes, water scarcity, rising temperatures, and growing urbanisation and populations. So far, there have been many commitments and bright promises for net zero at the global level, but many of those pledges have not come through, and there has been dismal performance."

Key challenges include securing enough financial resources from governments and attracting the private sector. Referencing the success of US railroads and post-war infrastructure development in Europe driven by private investment, Saidi emphasised that "whether we talk about energy, AI, data, or the digital economy, the bottom line is that the private sector will need incentives."

He stressed the need to account for climate risk and pricing, making room for new, radically different technologies from the private sector.

"Much of the technologies that we inherited from industries like electricity, water, and transport have so far been managed by the public sector. It will have to be a combination of both because we have to plan at the national, regional, and global levels," said Saidi, who is also the Founder and Head of Nasser Saidi & Associates, a consulting firm.

"All future planning should include the private sector, but with the framework and financing coming from the government and international institutions."

He noted that the CEBC, which focuses on bringing together governments, regulators, and the private sector around climate finance, e-mobility, and energy efficiency, would be open to developing a climate fund, though its core mission remains as a not-for-profit platform to drive clean energy policy and dialogue.

"I would be open to anyone who says, let us develop a climate fund together," he said.

Carbon pricing imperative

Regarding innovative funding instruments, Saidi suggested a gradual build-up. "In the end, we have to adopt carbon pricing, which means central banks, regulators, and governments have to introduce carbon pricing in everything—be

it energy, water, the way companies perform, the balance sheets of banks, and central banks."

Following the Great Financial Crisis, international banking regulations introduced measures such as the establishment of capital buffers.

It also saw the implementation of Basel III—a set of enhancements developed in response to the 2008 crisis—and subsequently Basel IV (the finalisation of Basel III), which overhauls global banking capital requirements, which is expected to significantly impact the lending landscape, particularly across Europe and the Nordic region.

"We need something equivalent to that in this area," said Saidi, a former Lebanese Minister of Economy and Industry and former Vice Governor of the Lebanese Central Bank.

"It is only when you start pricing that people respond—not just good wishes," he said, stressing that carbon pricing must eventually be integrated into the banking and financial system structure.

"Once you do that, you create opportunities for financing. But then again, you have to think long-term. Then the next question is, how do you control risks for infrastructure projects spread over a period of 15-20 years?"

"This is why pricing is so important. I am a strong believer in markets, so we need to create renewable funds and create markets where you can trade risks, particularly through financial markets," he added.

The UAE's Federal Decree on climate change, coming into force this year, mandates monitoring and control of GHG emissions across sectors while encouraging companies to participate in emission trading schemes and carbon credit markets. The country is also introducing carbon compliance regulations for eventual compliance markets.

Following the Great Financial Crisis, the world has also seen the rise of non-banking financial intermediaries, now providing almost 50 percent of the credit. "That creates its own risks. Hence, we have to involve the non-banking private sector, which consists of private credit and private funds, with the organised, regulated banking and finance sector—we have to look at the whole spectrum."

Global hub for renewable energy

While regional commercial banks do not always have the teams to assess such projects, the MENA region benefits from being awash with sovereign wealth funds and national funds.

"Hence, it would be ideal if they become involved because green and renewable energy is where the GCC, in particular, has a comparative advantage," he said, arguing that deploying public money makes sound economic sense as part of economic diversification.

"We have accumulated enormous wealth due to high energy prices, and hence, we can deploy that wealth in green, digital, and renewable initiatives, and it can create jobs. So you diversify and develop your economy, and, at the same time, it is critical for the GCC and the region to create jobs. So this is the perfect opportunity for us."

"This region is already the global hub for oil and gas," Saidi concluded. "This region also has the potential to be the global hub for renewable energy. No other country or region has that combination."

"Global Economic Diversification Index 2025", report released at the World Governments Summit, Feb 2025

"Global Economic Diversification Index 2025" was released by the Mohammed Bin Rashid School of Government (MBRSG) at the World Governments Summit held in Dubai on 12th Feb 2025. Dr. Nasser Saidi & Aathira Prasad were co-authors of the report, which was developed in cooperation with Keertana Subramani, Salma Refass and Fadi Salem (MBRSG) and Ben Shepherd (Developing Trade Consultants).

Access the latest and past reports as well as the underlying data on the website.

Effective governance of economic diversification efforts is highly reliant on the availability of representative and robust data that informs evidence-based development and policy directions. The Global Economic Diversification Index (EDI) 2025 report provides valuable longitudinal datasets to inform policy, research and economic development efforts across the globe. It specifically highlights the importance of economic diversification for commodityproducing nations to mitigate the risks of growth, trade, and revenue volatility. The report underscores the vulnerability of countries dependent on commodities to various shocks, such as price fluctuations, climate change, and global pandemics. Successful diversification can be accelerated through adopting new technologies and digitalisation, moving towards a services-based economy, focusing on value-added manufacturing, and investing in human capital

infrastructure.

The findings of this latest edition of the EDI emphasises the need for commodity-dependent nations, particularly those reliant on oil and gas, to adopt policies that prevent the natural resource curse and promote sustainable economic growth. Globally, there are numerous examples of successful transitions, including Norway's diversification into high-tech and Malaysia's move towards sectors industrialisation. However, the report highlights that there is no one-size-fits-all approach to diversification, as the urgency and pace of reform depend on multiple factors, including institutional effectiveness and governance, among others.

The Economic Diversification Index, first published in 2022, provides a comprehensive measure of economic diversification across countries. The EDI, derived by calculating the scores of three key sub-indices: government revenue, output, and trade, allows countries to assess the state and evolution of their economic diversification, as well as compare themselves with peers, and identify factors that can foster or impede diversification. The 2025 edition covers the performance of 115 countries, using publicly available quantitative indicators to ensure transparency and allowing reproducibility of the results.

The top-ranked EDI nations in the current EDI edition continue to include the United States, China, and Germany. In 2023, twenty-five of the top 30 nations were high-income countries, alongside only four upper-middle-income nations (China, Mexico, Thailand, and Turkey) and a single lower-middle-income nation (India, at rank 20 globally). Only three of the eight regional groupings show an increase in EDI compared to pre-pandemic readings (Western Europe, East Asia Pacific and South Asia). It is, however, important to highlight that while EDI and GDP per capita are generally positively correlated, high-income countries, particularly oil

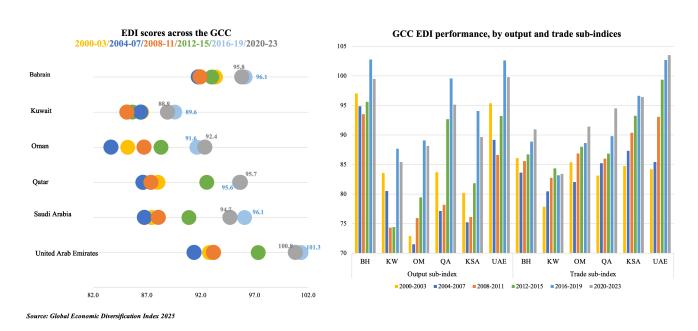
dependent economies, do not always have high economic diversification scores.

In 2024, the Global EDI report introduced new digital trade augmented index (the 'EDI+'). In the post-pandemic years, digitalisation continues to play an important role in increasing economic diversification while also enabling emerging and developing nations to catch up. The inclusion of digital indicators in the EDI shows that many developing nations are diversifying into the digital space and catching up with more advanced economies. this progress is dependent on such as infrastructure availability, regulatory support and the presence of a skilled workforce among others. The 2025 edition confirms that multiple countries in the top quintile of the EDI rise even higher with the inclusion of the digital indicators within the trade sub-index (i.e. trade+ sub-index). Over two-thirds of the nations' show greater improvements in the trade+ sub-index (comparing 2023 versus 2010) than in the overall EDI+ scores. On the other hand, the lower income groups have yet to recover to pre-pandemic levels, in either EDI or EDI+ scores. This underscores the challenge of achieving recovery without substantial investment in digital infrastructure and relevant enablers. performance of EDI+ is in line with other digital indices, with the scores showing a positive correlation.

Insights from the latest EDI scores point to a few policy directions. Commodity producing nations need to consider three key factors while deciding on economic policy: (a) the implications of climate change will have an impact on commodities production and extraction; (b) how energy transition is affecting the demand for commodities, including fuel and metals; (c) the continued risks from geopolitical tensions and trade fragmentation, particularly for low-income and emerging market countries that depend on commodities, which may potentially leading to long-term output losses.

In this EDI edition, 40 countries in the index, nearly 35

percent of the countries covered, are commodity exporters, and within that subset, close to 50 percent of the commodity dependent nations are reliant on fuels. While the more diversified Mexico and Malaysia retain top rankings, given the dynamic nature of diversification, other countries are also undertaking transformational policies: notable cases in 2023 compared to 2000 include Saudi Arabia (up more than 30 ranks), UAE (+24 ranks), Kazakhstan (+17 ranks), Qatar (+12 ranks) and Oman (+10 ranks).Low to middle-income nations such as Angola, Congo and Nigeria remain consistently within the lowest quartile (with common characteristics such as poor governance scores and/ or being politically unstable) along with upper middle-income Azerbaijan. Among the Gulf Cooperation Council (GCC) countries, Bahrain and the UAE have both scored highly in the output sub-index in recent years, while the UAE outperformed in the trade sub-index. Kuwait lags its peers in all sub-indices, making it the lowest scoring among the GCC countries.



Today, the world faces heightening environmental exacerbating social inequalities and economic instability. The World Economic Forum's Global Risks Report the to address 2025 underscores urgent need environmental concerns, with "biodiversity loss and ecosystem collapse" ranked by respondents as the second-most concerning

risk over the next decade. Climate change is forcing nations to hasten low-carbon energy transition plans and policies and consumers to make gradual behavioural shifts away from fossil fuels. Geopolitical forces also reconfiguring the global energy map. Even as the GCC countries emerge as "Middle Powers" in a globally fragmented world, its member states are stand out as energy powerhouses in both fossil fuels and renewable energy amidst global fragmentation.

"The Age of Electricity Beckons": Presentation at ABB Channel Partners event, 29 January 2025

Dr. Nasser Saidi's joined as a keynote speaker at the ABB Channel Partners Event on 29th of January 2025, with a presentation titled "The Age of Electricity Beckons".

The presentation touched upon the ongoing global economic-geo-political fragmentation, how costly it would be given it accelerates deglobalisation while also touching on the Trump Presidency and potential impact on the MENA region. Regional implications was analysed with a view that the GCC can benefit from global fragmentation via increasingly diversified, integrated & globally connected economies, emerging as "Middle Powers". The presentation focused on the challenges of climate change and energy transition in the MENA region, underscoring the fact that tech deployment is critical for energy transition.

A press release of the event quotes Dr. Saidi:

"Climate change is the name of the game," said Dr Saidi, President of Nasser Saidi & Associates and guest speaker of the event. "Private and public fundings need to be mobilized to accelerate investment in and development of renewable energy and climate technology across the region, one of the most climate stressed globally.

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Dr. Nasser Saidi's interview "Ahead of The Curve" with The

Buzz Business on CEBC's pioneering role in MENA's clean energy transition, Nov 2024

The interview with Dr. Nasser Saidi, in his capacity as the Chairman of the Clean Energy Business Council (CEBC), appeared as a Buzz Business article in Nov 2024. The focus was on CEBC's pioneering role in MENA's clean energy transition. The article titled "Ahead of the Curve" is copied below:

Ahead of the Curve

CEBC's pioneering role in MENA's clean energy transition

As climate change increasingly impacts economies and lives across the globe, the Middle East and North Africa (MENA) region finds itself at a crossroads. Here, in a land rich with fossil fuels but increasingly exposed to climate challenges, the need for a shift towards clean energy and sustainable practices is critical. Leading this charge is Dr. Nasser H. Saidi, founder and chair of the Clean Energy Business Council (CEBC), an organization fostering collaboration between the public and private sectors to catalyze the region's transition to a cleaner future.

Dr. Nasser's journey to the helm of CEBC has been as varied as it is impressive. With a career that spans academia, government, central banking, and senior positions in finance, he is no stranger to the complexities of building something from scratch. "I've always valued freedom and the ability to think independently," he says, reflecting on his time contributing to establishing the Dubai International Financial Center, which started with just a few companies and grew into a global hub. This drive to create and innovate independently

has become the backbone of his leadership at CEBC—a vision not only for clean energy but also for MENA's potential to become a global leader in climate solutions.

CEBC was born from an urgent need for more than dialogue; it was a call to action for the region's leaders to reimagine MENA's place in the global energy landscape. Dr. Nasser understood that while the region has long been defined by its fossil fuel wealth, it also possesses vast untapped potential for renewable energy, particularly solar. "This part of the world is blessed with some of the highest solar irradiation on Earth," he explains. "With partners like ACWA Power, ENOC, ENGIE, and ABB at the forefront, we're already seeing impressive advancements in solar capacity and innovative projects that could one day redefine energy systems globally."

CEBC's initiatives are built to tackle a diverse range of challenges, from energy efficiency to hydrogen innovation, emobility, and climate finance. Yet, Dr. Nasser emphasizes that the real breakthrough lies in fostering strong, lasting partnerships with both public and private sectors. This commitment to collaboration is evident in CEBC's Annual Summit, now in its 12th year, which brings together policymakers, industry leaders, and technology innovators to align on regional sustainability goals. This year's summit, themed "Strategic Levers for Decarbonizing MENA," will be held at Expo City Dubai, reflecting the growing regional commitment to decarbonization and sustainability. "By bringing government and regulatory bodies to the table, we're creating the conditions for action," Dr. Nasser says. "CEBC is not just an organization; it's a platform for real change in MENA's energy future."

The MENA region, he points out, is uniquely positioned in the global fight against climate change, with opportunities that extend beyond renewable energy into areas such as water desalination, desert agriculture, and district cooling. These technologies are critical in a region where temperatures are

rising, and water scarcity is a daily reality. "Cooling alone accounts for up to 70% of peak energy demand in the Gulf," Dr. Nasser notes. "We've pioneered district cooling systems that are not only more energy-efficient but can be powered by renewable sources. This technology could become a model for the world."

As climate disasters continue to reshape economies, MENA countries face both an urgent challenge and a significant opportunity. CEBC is working to help the region balance its reliance on traditional fossil fuels with the need for renewable energy development. According to Dr. Nasser, this transformation will require considerable investment and policy reforms, especially in terms of reducing fossil fuel subsidies and attracting private financing to fill funding gaps. The International Monetary Fund estimates that MENA will need to invest up to 4% of GDP annually to build climate resilience and meet emissions targets—a staggering number, but one Dr. Nasser sees as achievable with the right public-private "For every dollar invested partnerships. in climate adaptation, we see a return of ten in economic benefits," he says, highlighting how companies across the region can drive these returns by investing in clean energy solutions.

The private sector, he believes, will play a pivotal role, especially with national initiatives like Saudi Arabia's Vision 2030 laying the groundwork. "The goals set forth in Vision 2030 offer a roadmap for the private sector to contribute to decarbonization through investments in clean energy technologies and sustainable practices. Companies like ACWA Power, ABB, Totalenergies, BEEAH, and other CEBC partners are proving what's possible with large-scale solar and wind projects that have the power to reshape our entire region." CEBC, he adds, has been instrumental in creating platforms for private sector leaders to engage directly with policymakers, facilitating cross-border clean energy projects that address regional needs while also setting an example for the world.

Looking to the future, Dr. Nasser sees energy efficiency as a vital component in achieving MENA's net-zero ambitions, especially in high-energy sectors like construction, transport, and infrastructure. CEBC has recently partnered with the Advancing Net Zero Volunteering Team to launch a white paper focused on retrofitting existing buildings—a crucial step in reducing energy consumption across the region. He believes this focus on efficiency, combined with technological advances like AI-driven energy management and smart grids, will be key to MENA's sustainable development. But Dr. Nasser stresses that the most critical driver will be awareness, both public and governmental. "We're at a tipping point where climate adaptation isn't a choice; it's a necessity," he says, echoing the urgent tone that has defined his work and vision.

What are CEBC's key achievements to date?□

"I'd say the most critical achievement is public awareness. Climate and clean energy are now part of our regional discussions, which is something we couldn't have imagined a decade ago. Today, we have ministers in charge of climate portfolios, notably in the UAE, and I hope other countries follow. Our partnerships are creating regulatory frameworks that involve both government and the private sector in the transition to clean energy."

How optimistic are you about the region's clean energy transition?

"I am cautiously optimistic. The region's leadership has a clear vision of what's needed, and we're seeing an unprecedented level of commitment to clean energy and climate adaptation. Yet, challenges remain—subsidies for fossil fuels need to be removed, and people's perceptions around the 'cost' of energy must shift. Still, I am inspired by the strides we've made and confident that with ongoing collaboration, we can achieve real, lasting change."

What advice would you give to companies in the private sector?□

"Start with energy efficiency—look at your own operations, from building temperatures to energy sources, and be ready to invest in clean technologies. Long-term success will depend on this. I also advise companies to get involved with CEBC or similar platforms to stay aligned with national goals and regulatory developments. The future will belong to companies who adapt early and invest in sustainable practices."

Looking ahead, Dr. Nasser's vision for CEBC reflects both urgency and optimism. As the region grapples with the realities of climate change, CEBC stands as a catalyst, turning MENA's unique challenges into opportunities. With the right partnerships and a clear focus, CEBC is not just imagining a cleaner future—it's building one.



"CEBC isn't just an organization; it's a platform for real change in MENA's energy future."

Dr. Nasser H. Saidi, founder & chair, Clean Energy Business Council (CEBC)

"Trump redux could bring in the law of unintended consequences", Op-ed in Arabian Gulf Business Insight (AGBI), 5 Aug 2024

The below opinion piece titled "Trump redux could bring in the law of unintended consequences" was published in the Arabian Gulf Business Insight (AGBI) on 5th August 2024.

An Arabic version of this article was published by the Middle East Council: click to access the article.

Trump redux could bring in the law of unintended consequences

Gulf states need to expect the unexpected as an 'America First' agenda could fragment global trade

One hundred days ahead of elections in November, former US

president Donald Trump is polling strongly despite the emergence of Kamala Harris as the Democrat candidate. What would the implications be for us in the Gulf and around the world of a Trump presidency redux?

From public statements and his record in the previous 2017 to 2021 term, we can identify the basic tenets of such a presidency as nationalism, isolationism, protectionism, populism, and a clampdown on migration. In other words: "Maganomics" (after Trump's slogan, Make America Great Again).

Whether fully or partially adopted, Project 2025, a 900-page blueprint for office by a conservative think tank, offers further clues on the direction of a radical new Trump government.

The policies of such an administration would have an impact around the world, with direct and spillover effects on the Middle East.

In the first place, the trade, fiscal, energy and deregulation policies advocated by Trump, along with a crackdown on immigration, are inflationary in nature.

These could increase US nominal GDP but imply even higher US budget deficits — currently running at 6.7 percent of GDP — and Federal debt, which already exceeds 100 percent of GDP.

A resurgence of inflation would force the US Federal Reserve to keep interest rates higher for longer, delaying any monetary easing. This would boost the dollar at a time when other G7 central banks, including the ECB and the Bank of England, are easing rates.

Higher, longer lasting interest rates and a strong US dollar would affect emerging markets negatively via higher inflation and bigger budget and trade deficits.

Mena countries such as Egypt and Tunisia with high external

debt to GDP could be particularly impacted. Higher US interest rates would exacerbate the growing crisis in which global public debt already exceeds \$100 trillion, and implies higher servicing burdens.

Macroeconomic risks — sovereign defaults, market failure, unexpected shocks — would grow.

Secondly, Maganomics focuses on protectionism. An "America First" agenda means higher US tariffs. Trump has spoken of imposing higher import tariffs of 10 percent across the board and 60 percent on China, leading to greater fragmentation in global trade and investment.

Anti-dumping measures could affect GCC industrial exports to the US, including steel, aluminium and petrochemicals.

Conflict with China over trade and tech and de-coupling measures — to say nothing of Taiwan — could slow growth in the former and lower oil and gas imports in the world's second largest economy.

All these have negative implications for GCC exports and growth. This could be mitigated by China's growing non-oil linkages with the GCC, which span clean energy, financial integration, tourism and tech.

A ramping up of US-China economic warfare could turn out to be a net positive for the GCC. In an illustration of the "law of unintended consequences", <u>China could divert trade and investment to the GCC and the Middle East</u>.

Thirdly, energy is a major plank of Maganomics. Short of repealing the Inflation Reduction Act or the Infrastructure Investment and Jobs Act, a Trump administration would pursue aggressive federal deregulation. Its policies would ramp up investment in energy infrastructure and resources. It would also likely remove drilling restrictions in Alaska and the Gulf of Mexico and cut clean energy subsidies.

The objective would be to galvanise the US as a major oil and gas exporter, while Russia is sanctioned and displaced from EU markets. US crude oil exports reached a record in 2023, averaging 4.1 million barrels per day. The US was also the top exporter of LNG globally in 2023, averaging 11.9 billion cubic feet per day.

Deregulation of the oil and gas industry could boost US exports and lower oil prices, providing competition for Opec+ and the GCC.

Fourthly, a new Trump administration might reverse climate commitments — the US is the world's second-top emitter of greenhouse gases — and reduce spending on climate risk mitigation and adaptation, and climate tech. This implies that temperatures would increase globally beyond 1.5C.

This year saw cities scorched by some of the hottest summers on record. The coming decade is likely to be even hotter. This could however offer an <u>opportunity for GCC to increase its renewable</u>, clean energy and climate tech exports.

The bottom line is that Maganomics means headwinds for the GCC. Regional geopolitical risks would grow, coupled with uncertainty on likely impacts.

To counter, the GCC states individually and collectively should maintain their strategic course. They should increase openness through trade and investment agreements, focus on greater economic diversification and regional integration, pursue green industrial policies and invest in renewable energies and climate tech.

"The Gulf superstorm is a climate change omen", Op-ed in Arabian Gulf Business Insight (AGBI), 6 May 2024

The opinion piece titled "The Gulf superstorm is a climate change omen" appeared in the Arabian Gulf Business Insight (AGBI) on 6th May 2024.

The article is posted below.

The Gulf superstorm is a climate change omen

As GCC nations diversify their economies, it is critical that new policies are green by design

Climate change is increasing the frequency of extreme weather events. That much is clear as superstorms wash over Oman, Saudi Arabia and the UAE, unleashing unprecedented levels of rainfall and high winds.

Dubai received more than 250mm of rain in one day last month, compared to its standard 140mm per year. The resulting floods overwhelmed infrastructure — roads, shopping malls and public spaces — severely disrupting local life and economic activity.

The floods also disrupted flights at Dubai International Airport, which fortunately proved resilient and was functioning two days after the rains. The government's disaster recovery response, including Dubai Municipality deploying 2,500 workers to address emergencies, allowed the city to return to normality a few days later. Since then, the UAE has set AED 2 billion (\$545 million) aside to pay for and rebuild flood-damaged homes, in addition to announcing an AED 80 billion drainage system as part of Dubai Economic Agenda D33.

So, what lessons can be learned from the storm?

The growing costs and risks of climate change require urgent action from both the public and private sectors.

In the Mena region, all countries aside from Libya and Yemen (given political issues) have submitted their nationally determined contributions reports, while only Kuwait and Palestine have submitted national adaptation plans to the UN's Framework Convention on Climate Change.

Developing national frameworks means that both climate adaptation and climate risk mitigation policies must be implemented, along with supporting investments.

Extreme weather events and higher reinsurance costs lead to increased insurance premiums for consumers. Insured global losses from natural disasters totalled \$95 billion in 2023. National adaptation plans lower the cost of insurance by increasing public awareness and providing accurate data on climate-related events and vulnerabilities.

In the Middle East and Central Asia region, the International Monetary Fund believes that climate adaptation and strengthening infrastructure resilience will require an annual investment of around 1.6 percent of GDP (roughly \$80 billion in 2021).

Furthermore, the agency estimates the cost of enhancing private asset resilience at around 0.5 percent of GDP. These expenses are over and above the estimated annual \$250 billion to \$310 billion needed to mitigate climate change.

To add to these concerns, those nations with greater financing needs are also the ones least prepared, either due to fiscal limitations, high debt burdens or weak financial development.

Climate change requires businesses to redesign their risk management plans and tools. Are business continuity and business disaster recovery plans climate resilient? Extreme climate events can lead to a reduction in revenue or potential bankruptcy.

BloombergNEF, a research organisation, found that 65 percent of more than 2,000 companies failed to identify assets and operations that may be vulnerable to physical risks. Even fewer companies conduct financial assessments of climate-related risks.

Climate risk should be measured and priced. The physical risks are growing and could result in loan and balance sheet losses for banks

Businesses are also vulnerable to climate-related legal risks. Currently more than 2,500 climate lawsuits are recorded globally. About 55 percent of the 549 lawsuits outside the US have had a climate-positive ruling, according to the London School of Economics.

Climate risk, which encompasses physical and energy transition risks linked to climate change, should be measured and priced. The physical risks are growing and could result in loan and balance sheet losses for banks. Often, the damage is underreported.

The Task Force on Climate-Related Financial Disclosures is

pushing corporations to increase exposure reporting. Climate risk pricing should be required by central banks and financial regulators and translated into risk-based financing and loans.

The GCC countries are currently deploying industrial policies to support economic diversification. It is critical that these policies are green by design and imbued with climate adaptation and mitigation measures.

Climate risk mitigation includes energy transition investment and fossil fuel asset de-risking, focused on clean energy, electric mobility, carbon capture and storage and clean tech. These innovations can be private sector-driven.

There are many ways to build climate-resilient infrastructure: through public investment, public-private partnerships, or market-based private sector incentives (such as carbon pricing).

Examples include green hydrogen, solar-powered desalination and district cooling. The GCC already has a comparative advantage in these exportable technologies.

The Gulf states are also applying artificial intelligence to climate action. Abu Dhabi's G42 developed Jais Climate, the world's first bilingual large language model dedicated to climate and sustainability, "to inform, inspire and drive awareness about climate change and sustainability".

AI and machine learning enable complex and multi-dimensional data to be handled more adeptly, which lends itself to climate economy modelling and the forecasting of effective action to help combat climate change.

Climate adaptation, energy transition and green economy policies will drive growth in renewable energy and clean technologies and trade. They can play a critical role in transforming the oil-producing economies and output structures.

Dr Nasser Saidi is the president of Nasser Saidi and Associates. He was formerly chief economist and head of external relations at the DIFC Authority, Lebanon's economy minister and a vice-governor of the Central Bank of Lebanon

"A New Global Energy Map: On the Road to COP28", Presentation at the 10th CEBC Annual Summit, 31 Jan 2023

The presentation titled "A New Global Energy Map: On the Road to COP28", was given by Dr. Nasser Saidi as the opening keynote address at the 10th CEBC Annual Summit held in Dubai on 31st January 2023.

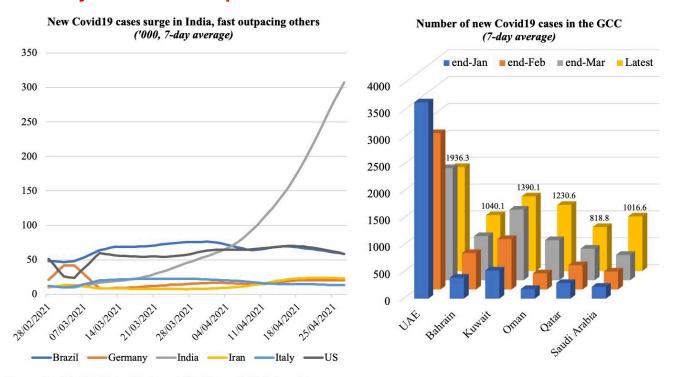
In his speech, Dr. Nasser Saidi, in his capacity as Chairman of the Clean Energy Business Council, spoke about the emergence of a new global energy map, its financing requirements as well as deep-dived into the energy transition in the GCC region & combating climate change.

Weekly Insights 29 Apr 2021: India's exponential rise in

Covid19 cases — spillovers into the UAE?

Download a PDF copy of this week's insight piece here.

1. As cases continue to surge in India, pace of global recovery comes into question



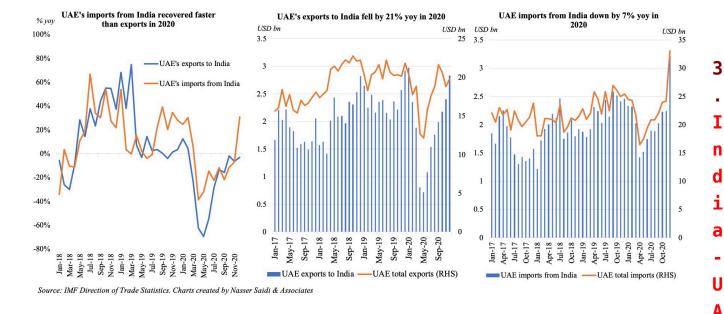
Source: Our World in Data. Chart created by Nasser Saidi & Associates

- India reported the highest-ever single day cases on Wednesday, at 379,257 & continues to account for almost half the rise in global Covid19 cases. Concerns about the accuracy of these statistics notwithstanding, it is worrisome that more than 20% of tests are coming positive and that the crumbling healthcare infrastructure (in many states) is leading to around 3k deaths per day!
- Given India's linkages with the global economy (trade, labour & investment flows), it is not surprising that emergency supplies are coming in from across the globe to contain the spread; US relaxed its previous ban on exports of raw materials for vaccines.
- Meanwhile, GCC nations (except the UAE) have seen a

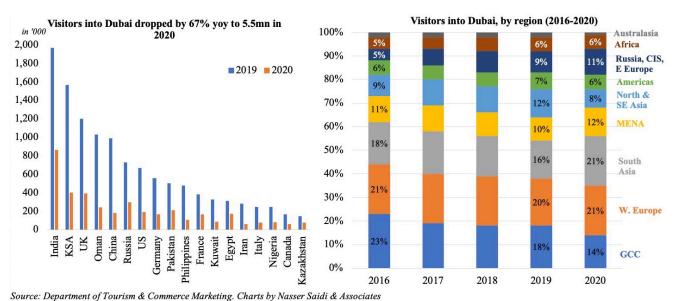
steady uptick in cases from the beginning of this year; UAE's numbers though are still the highest among the lot. In terms of new cases per million, Bahrain stands the highest (611) and Saudi Arabia the least (29), with Kuwait (326), Qatar (284), Oman (241) and the UAE (196) in between.

2. India-UAE links: Trade & Investment

- UAE has developed strong links with Asia, and especially India, over time. A prolonged slowdown in the Indian economy is likely to spillover into UAE's growth.
- First off, trade links: bilateral trade was around USD 60bn in 2019, though the Covid19 pandemic saw a decline in trade to USD 41.9bn (-30% yoy). Imports from India recovered much faster than exports into the country after the slump during lockdowns last year. India was the UAE's second-largest trading partner (after China) during pre-Covid times.
- •While oil is a key traded commodity about 8% of India's oil imports are from the UAE exports of precious metals, stones and jewelry remain significant. Indian food imports also have a significant part to play in UAE's food consumption.
- A slowdown in India would hence affect trade significantly: oil demand will decline with lower mobility; higher cases would lead to lower economic activity i.e. negative impact on industrial production lowers exports of textiles, machinery products, lower levels of agricultural production implies less food imports from the country.
- Official figures for **Indian investment in UAE** are not available: the Indian Embassy estimates it at around USD 85bn.



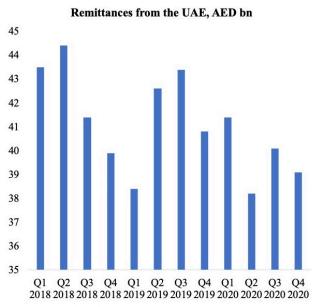
E links: Tourism

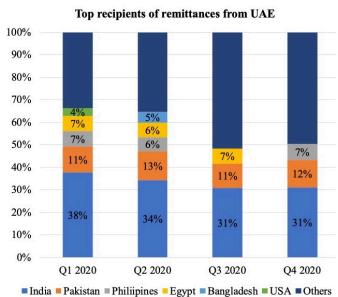


- Prior to the Covid19 epidemic, India was the largest source market for visitors into Dubai, attracting 1.97mn visitors out of a total 16.73mn.
- Covid19 cut short most tourist travel for a significantly large part of the year, resulting in a 67% decline in tourists into Dubai. India was still the largest source market for Dubai in 2020 attracting 865k persons (-56% yoy) and South Asia retained its top spot as the largest source of visitors (21% of total).
- Flights to the Indian sub-continent have been suspended since Apr 25 for 10 days, and given the exponential rise in cases in India, an extension seems likely about 300

commercial flights operated weekly in what is one of the busiest international travel corridors. Newspaper reports suggest an uptick in enquiries for private jets to ferry stranded residents (similar to the lockdowns last year). Cargo operations are carrying on uninterrupted.

4. India-UAE links: Remittances

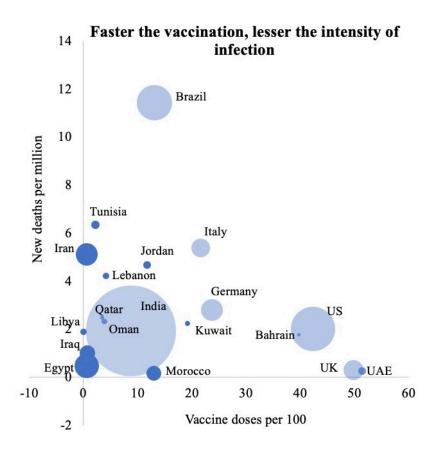




Source: UAE Central Bank. Charts by Nasser Saidi & Associates

- The UAE-India migration corridor is one of the largest in Asia: it stood at close to 3.5mn migrants in 2019. (Source: UN World Migration Report 2020). Indians account for around one-third of UAE's total population.
- In 2020, total remittances from the UAE touched a total of USD 43.2bn (-4% yoy). While Q1 saw a 7.8% uptick in remittances, Q2 saw the sharpest drop of 10.3%.
- Remittances to India accounted for 33.5% of its total remittances last year — maintaining its spot as the largest recipient of remittances from the UAE.
- As India goes into lockdown, it is possible that UAE will see an increase in remittances to the country as financial support for families in need. A weaker Indian rupee would further suport this pattern.

5. The economic case for vaccination



Source: Our World in Data. Chart created by Nasser Saidi & Associates Bubble size denotes size of the population

- The discovery of vaccines for Covid19 had brought a sense of consumer and business optimism. However, with vaccine distributions underway, its pace is less than heartening in many nations.
- Israel and UAE have topped the lists in terms of vaccination rates. There is confirming evidence from Israel of reduced transmissions as a result of the inoculations.
- As the chart on the right (focusing on MENA nations) shows, there is a negative correlation between vaccination and infection rates. Anecdotal evidence also suggests that an infection after the first dose of vaccine is much less likely to require hospitalization.
- Unfortunately for India, the pace of vaccination has been very slow. Less than 10% of the nation's residents received the vaccine, in spite of it being home to the world's largest vaccine manufacturer (the Serum Institute).

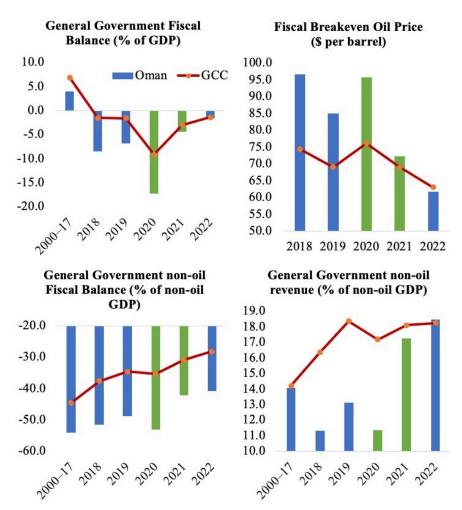
- The rapid pace of India's infections also calls into question its vaccine production and distribution channels: the Serum Institute has not fulfilled its commitment to supply the AstraZeneca vaccine globally (to UK, EU and Covax), but is also planning to sell the vaccine to state governments and private hospitals in the country (at higher rates).
- In the MENA region, new deaths per million are low in the UAE (the leader in vaccine doses per 100 persons) while Iran has a long way to go. If Israel's results are to be emulated, a coordinated effort should be underway to accelerate the pace of vaccination, resulting in faster return to higher economic activity.

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Weekly Insights 22 Apr 2021: GCC: Oil-dependence & Path to Climate Resilience

Download a PDF copy of this week's insight piece here.

1. Oman: 4th GCC nation to implement VAT



Source: IMF Regional Economic Outlook, Apr 2021

- Oman introduced 5% VAT on most goods and services,starting Apr 16
- UAE and Saudi Arabia rolled out 5% VAT in 2018 & Bahrain in 2019
- According to Ministry of Finance estimates, Saudi increased non-oil tax revenues to 32% in 2018 (vs just 10% in 2010), 36% in 2019 and estimated to rise to 46% in 2020 (given tripling of VAT)
- UAE collected AED 27bn in VAT in 2018 (1st year) & AED 11.6bn in Jan-Aug 2020 (pandemic year); VAT revenues in Bahrain touched BHD 260mn in 2019 and BHD 220mn in 2020.
- Oman's VAT is estimated to generate ~OMR 400mn (USD 1bn)
 in revenue annually, roughly ~1.5% of GDP (if
 effectively and efficiently implemented)
- As a result, the IMF projects **fiscal deficit to decline** to 4.5% of GDP in 2021 (2020: 17.5%) & **non-oil revenue to rise** to 17.2% of non-oil GDP in 2021 (2020: 11.4%)

■ This move will lead to an improvement of Oman's sovereign credit rating + lower the cost of credit + attract more FDI & portfolio investment as a result of the ensuing reduction in macroeconomic risks

2. GCC's Diversification Efforts & Renewable Energy policies => Transition to a lower-oil dependent region

- Unsustainable path of dependence on oil: current oil demand vs supply, pressure on oil prices + current fiscal & social spending policies => fiscal unsustainability: GCC's aggregate net financial wealth (est. at \$2trn) could be depleted by 2034 (IMF)
- Oil market structure & dynamics are changing, given global energy transitions: pre-Covid19, shale & renewables were already displacing conventional oil
- Major challenges for the oil market (non-exhaustive list):

-Demand-side factors:

- Gov't plans for sustainable recovery, ambitious goals for net-zero emissions
- Covid19-led collapse in demand: potential WFH policies & mobility, question marks over recovery of business/ leisure air travel
- Energy efficiency improvements, EV penetration

-Supply-side factors:

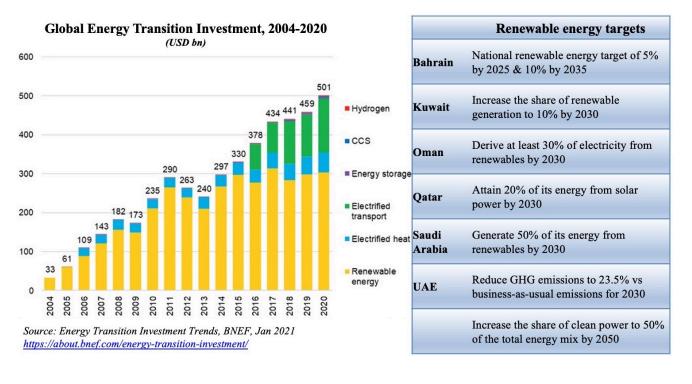
- Spending cuts and project delays could slow oil supply growth
- Large cost reductions in renewables + advances in digital technologies
- Climate Change & Decarbonisation Risks are growing could lead to sharp fall in fossil fuel asset prices =>
 stranded assets risk

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3. Energy Transitions & GCC's ambitious targets

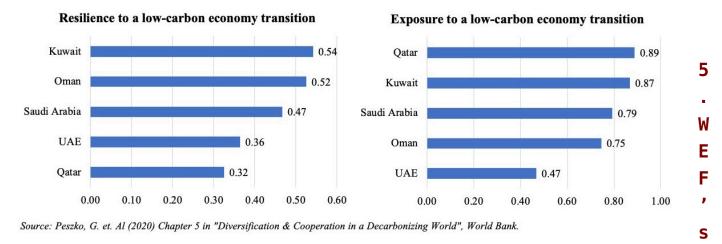
- The two-day virtual Leaders Summit on Climate (from today), hosted by the US President, brings the US back into play with respect to global action against climate change
- Latest news that banks & financial institutions with USD 70trn+ assets pledged to cut their greenhouse gas emissions & ensure their investment portfolios align with the science on the climate adds to the commitment



ations prepared for a low-carbon economy transition?

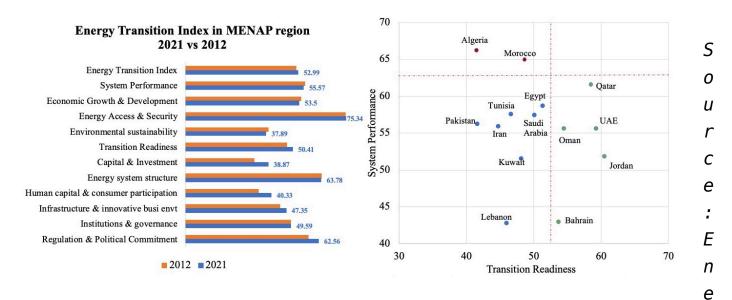
- The preparedness of countries for a low-carbon transition (LCT) is measured by exposure and resilience indexes: highlights turning the risks of an LCT into opportunities for robust growth.
- GCC nations are significantly exposed, especially given dependence on oil (resource rents, carbon intensity, GHG emissions): Qatar scores highest exposure & UAE the least
- However, the GCC are relatively well prepared for an LCT thanks to its resilience, particularly its relatively good macro stability and supportive business environment

alongside high quality of infrastructure, human capital and institutions



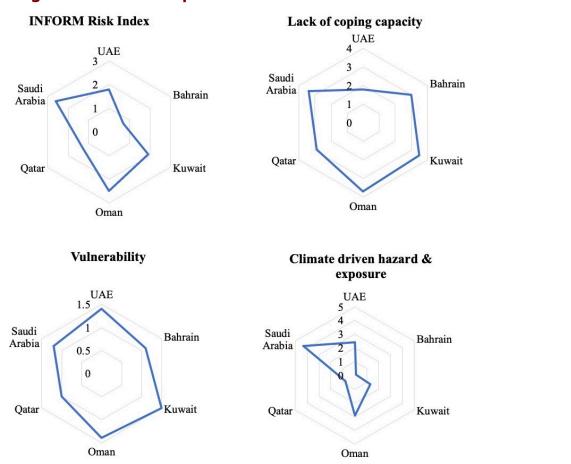
Energy Transition Index ranks UAE just behind Qatar wrt energy systems & pathways to clean energy

- UAE ranked 64th globally on WEF's latest Energy Transition Index (2021) out of a total 115 nations, just behind Qatar at 53rd position. Lebanon ranked lowest in the Middle East region at 112th.
- Among the various components of the Index, MENAP's average falls farthest from the world average in two: environmental sustainability (37.89 in MENAP vs 61.32 globally) and capital & investment (38.87 vs 55.17). Of the 11 categories, region is worse-off compared to 2012 (initial year of results) in 4: system performance, environmental sustainability, energy system structure and economic growth & development
- The chart on the right shows no MENAP countries in the top-right quadrant (high transition readiness & well-performing energy systems). 4 of 6 GCC nations are in the "leapfrog" quadrant (green dots, high readiness but system performance below the mean); two countries Algeria and Morocco fall among those with potential challenges (red dots, above-average system performance but readiness below the mean).



rgy Transition Index 2021, World Economic Forum. https://www.weforum.org/reports/fostering-effective-energy-transition-2021#report-nav

6. GCC risk for climate-driven hazards is much lower than regional counterparts



■ The climate-driven INFORM Risk 2021 Index is derived from 3 dimensions: climate-driven hazard & exposure,

vulnerability and lack of coping capacity.

• GCC nations fare relatively better, scoring between 1.3 to 2.6 out of a total 10 (riskiest). But, two scores are comparatively higher: Saudi Arabia's hazard & exposure score (largely due to conflict risk) and Oman's lack of coping capacity (institutional & governance indicators related to increasing the resilience of the society need improvement).

CountryName	HA	VU	CC	INFORM
Bahrain	0.6	1.1	3	1.3
Kuwait	1.2	1.4	3.6	1.8
Oman	2.9	1.4	3.7	2.5
Qatar	0.8	1	2.9	1.3
Saudi Arabia	4.3	1.2	3.4	2.6
United Arab Emirates	2.4	1.4	1.8	1.8

Source: INFORM Global Risk Index 2021.

https://drmkc.jrc.e
c.europa.eu/inform-

index/INFORM-Risk

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"The 50 trillion dollar question: Closing the

emerging markets' capital gap", The Economist's virtual event, 25 Nov 2020

Dr. Nasser Saidi joined a panel discussion titled "The 50 trillion dollar question: Closing the Emerging Markets' Capital Gap", organised by The Economist and supported by Standard Chartered, on 25th November 2020.

The topic overview is as follows:

The goal of ESG impact alongside financial returns is becoming the new default for investors. Today, the UN's Principles for Responsible Investing represents more assets than it ever has. The flurry of social-bond issuing this year, far above 2019 levels, to underpin the covid-19 economic recovery, is also testament to this upward trend. The implications should be heralded across the board. Sustainable finance will underpin the world's ability to meet the 2030 Agenda and the Paris Agreement. It is also key to international development, as emerging markets race against time to transition to low-carbon and climate resilient economies. For now though, sustainable investments tend to be skewed to the West. The irony is that if impact is the bottom line, then emerging markets — where the impact of every dollar is disproportionately greater should be top of mind. There is a growing imperative to transfer a portion of the estimated 50 trillion dollars under asset management into sustainable projects in emerging markets, if we are to make an impact on decarbonising.

Watch the discussion below:

Weekly Insights 22 Sep 2020: Looking beyond Saudi inflation & oil exports

Charts of the Week: Saudi inflation numbers (consumer & wholesale prices) show the impact of the tripling of VAT. For now, a proxy indicator of cement sales is showing a pickup post-lockdown, in spite of the VAT hike. We also track the recent changes in Saudi exports, also to understand the impact on government revenues.

1. Saudi inflation picks up post-Jul's VAT hike



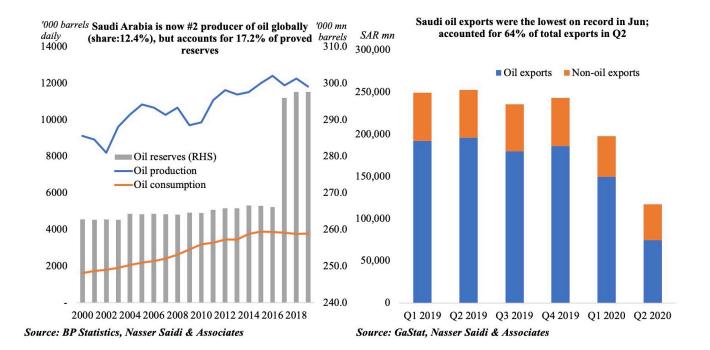
Headline inflation has been climbing in Saudi Arabia from Jul, not surprising given the VAT hike to 15% (from 5% before). The VAT effect is seen across multiple sub-categories, but note that food prices have been ticking up for many months now. Wholesale prices have also increased, similar to when VAT was initially rolled out in 2018, with metal product prices leading the way: these hikes will also filter down to the enduser.

Household spending will be negatively impacted by the VAT hike (as seen from recent SAMA data), there seems to be an increase in cement sales — a proxy for the construction sector spending

— after the expected dip during the lockdown period. This could be a result of work continuing on mega-projects like NEOM in addition to a boost from the housing market. The surge in mortgage loans this year (+94.4% year-to-date, with the value in Jun 2020 more than three-times compared to Jun 2019) and the announcement that homes priced at SAR 850k and below will not be subject to VAT will support the housing market. Risks of a severe slowdown in government spending and/or delayed payments could however affect near-term demand.

2. Oil sector in Saudi Arabia

The latest trade data from Saudi Arabia shows a drop in overall exports in Q2 this year (-53.6% yoy): oil exports were down by 61.8% yoy, and the share of oil exports fell to 64% in Q2 2020 vs 77.5% in Q2 2019. Partly attributable to the OPEC+cuts and overall weak global demand for oil (given Covid19), this implies a substantial reduction in government revenues from oil (in 2019, an estimated 63% of total revenues was derived from oil). At the same time, non-oil revenue will also have declined: government's postponement of some taxes and fees will bite into revenues and lockdowns would have negatively affected private sector activity.



Q1 has already posted a budget deficit of SAR 34.1bn, and the IMF estimates (as of June 2020) overall fiscal deficit to widen to 11.4% of GDP this year from 4.5% a year ago. Fiscal consolidation efforts have been a cornerstone of every reform discussion and will likely continue to be — removal of subsidies, reducing public wage bills, raising non-oil revenues — at least in the near-term. This will likely be accompanied by more international debt issuances to finance the deficits, in addition to developing its fledgling local debt market.

The recently released data on world energy from BP shows that though Saudi Arabia is now the second-largest producer of oil globally (behind the US), its proven reserves still account for 17.2% of overall global reserves. But, with the rising rhetoric that oil demand may already have peaked, the pertinent question is whether oil could end up being a stranded asset sooner than later. In this backdrop, with the Covid19 pandemic and a resultant push for climate change policies (before it is too late), it is imperative that the recovery model for Saudi Arabia (and rest of the fuel-exporting nations) includes a strong clean energy policy component within overall reforms, alongside a recasting of its economic diversification model and social contracts.

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Clean Energy Challenges &

Prospects, Presentation at the CEBC 7th MENA Clean Energy Summit, 20 Nov 2019

The presentation titled "Clean Energy Challenges & Prospects" was given as the opening keynote address at the CEBC 7th MENA Clean Energy Summit held in Dubai on 20th November 2019.

In his speech, Dr. Nasser Saidi, in his capacity as Chairman of the Clean Energy Business Council, provided an oversight on the clean energy and clean technology developments while outlining the major themes for the MENA region's renewable energy sector.

The focus was on energy efficiency (how it needs to be scaled up), the transformation of transportation (e.g. EVs), energy transition, and financial stability risks rising from climate change risks among others.

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 <u>Italian</u>.

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 $\frac{[2]}{}$ 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)) 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 $2017 \frac{[10]}{...}$).

IRENA's 2019 report $\frac{[11]}{}$ 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 winwin 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.

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[1]https://www.nationalgeographic.com/environment/global-warmi
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[2]https://www.weforum.org/agenda/2019/07/antarctica-lost-sea-
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[4]https://www.worldbank.org/en/news/press-release/2016/11/14/
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cost-520bn-in-losses-every-year-new-world-bank-analysis-finds
[5]WEF discussion: <a href="https://www.youtube.com/watch?v=su38ondAwkq">https://www.youtube.com/watch?v=su38ondAwkq</a>
[6]https://www.theguardian.com/commentisfree/2019/jun/04/clima
te-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: <a href="https://www.nber.org/papers/w20598">https://www.nber.org/papers/w20598</a>
[9] Egypt's coastal city Alexandria, the second largest city,
is at risk of being submerged by rising sea levels.
                             Lazard's
[10]See
                                                           report
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[11]https://www.irena.org/-/media/Files/IRENA/Agency/Publicati
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[12]https://eciu.net/news-and-events/press-releases/2019/one-s
ixth-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
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the environment.

How should MENA address the existential threat of climate change? Article in The National, 28 Aug 2019

This is part 2 of a two-part column. <u>The first can be found</u> <u>here</u>.

The article titled "How should MENA address the existential threat of climate change?" appeared in The National's print edition on 28th August, 2019 and is posted below. Click here to access the original article.

How should MENA address the existential threat of climate change?

The starting point for the Middle East and Northern Africa to address the existential threat of climate change is to reduce excessive fossil fuel use by removing subsidies and investing to increase energy efficiency.

The GCC nations — starting with the UAE — have initiated a phased removal of fuel, electricity and water subsidies that have distorted consumption and production choices and encouraged energy waste. The removal of subsidies will discourage energy-intensive activities, provide cost incentives to improve energy efficiency and shift the energy mix away from fossil fuels towards renewables. Eliminating subsidies also provides greater financial resources to fund renewable energy investments and climate-resilient infrastructure.

Given heat levels in the GCC, modernising air conditioning systems and retrofitting existing buildings can radically

improve energy efficiency and reduce carbon emissions. Green buildings standards are a policy initiative gaining traction: 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 Mena to join the Building Efficiency Accelerator programme, aiming to double the rate of energy efficiency by 2030. Overall, effective implementation of energy use targets and standards could lower energy use by some 30 per cent. Increasing energy efficiency is low hanging fruit and should be accelerated given the high returns on investment.

The Middle East and GCC are part of the Global Sun Belt: more energy falls on the world's deserts in six hours than the whole world consumes in a year.

Harnessing solar power is an efficient policy choice. The GCC nations, especially the UAE, are taking a lead in investing in renewable energy in Mena. 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. To put it in perspective, one gigawatt is roughly equal to 3.125 million photovoltaic solar panels, 412 utility-scale wind turbines or 110 million LED bulbs. The surge in projects has been supported by the rising cost competitiveness of renewables: it is now cheaper to build new wind and solar PV plants than it is to run existing fossil-fuel ones. The falling costs of energy storage is addressing the intermittency problem of renewables; by 2021, the capital costs of lithium ion batterybased storage are expected to fall by 36 per cent compared to the end of 2017. While the wind power market is slowly catching up in Jordan and Morocco, the GCC has under-invested: more than 56 per cent of the GCC's surface area has significant potential for wind deployment.

The International Renewable Energy Agency's (IRENA) 2019 report estimates that by 2030 the GCC is on track to leverage renewables to save some 354 million barrels of oil equivalent (a 23 per cent reduction). Its efforts will also create some

220,500 new jobs, reduce the power sector's carbon dioxide emissions by 22 per cent and cut water withdrawal in the power sector by 17 per cent.

Renewable energy related targets range from the UAE's ambitious goal of 44 per cent of capacity by 2050 (from 27 per cent clean energy in 2021) to Bahrain's target of 10 per cent of electricity generation in 2035, and Saudi Arabia's 30 per cent of generation from renewables and others (mainly nuclear) by 2030.

While these targets sound ambitious, they do not meet the threat of climate change. The acceleration and intensity of climate change requires deeper and holistic strategic planning and action. Climate change poses some daunting challenges and existential risks.

To address the stranded assets risk, the GCC needs to share risk on a global basis by privatising or selling participation in their vast energy reserves and related assets (upstream and downstream). Saudi Arabia's announced plan to privatise Aramco is a structural reform that could be a model for other oil producers to emulate. In the same vein, the GCC sovereign wealth funds should divest from fossil fuel assets (as Norway's Government Pension Fund Global is doing) and the banking and financial sector should gradually divest and reduce its exposure to fossil fuel assets.

The GCC countries have developed energy sustainability policies. But these are modest given their natural comparative advantage in harnessing solar & wind power and their substantial financial resources allowing accelerated investment in renewable energy assets. This is the time for the GCC to commit to and implement comprehensive, Net Zero Emissions (NZE) goal climate strategies in or before 2050, along with some 15 other nations.

Decarbonisation and economic diversification are complementary strategies and a win-win opportunity. By diversifying and investing in renewable, sustainable energy and climate risk mitigating industries and activities —through Green Economy strategies — the GCC can create jobs, innovate and develop a

new alternative export base.

The existential threat of climate change is real and becoming a clear and present danger requiring national and regional concerted policies and action, with the promise of new technologies, decarbonised growth and new economic development models. The alternative of inaction is decades of decline, dismal growth prospects, growing impoverishment, instability and conflicts. The choice is clear.

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".

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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.

"Clean Energy in MENA: Industry & Workforce Readiness", CEBC report launch, 23 Apr 2019

The Clean Energy Business Council (CEBC) launched a survey-based report titled "Clean Energy in MENA: Industry & Workforce Readiness" on 23rd Apr, 2019, at the Capital Club in Dubai.

To download the report, please access the CEBC webpage $-\frac{here}{To}$ To download the presentation, which discusses the climate change-related challenges facing the MENA region as well as

China-US Tensions, War with Iran Dominate Medium-Term GCC Risk Landscape: Interview with Bonds & Loans, Apr 2019

Dr. Nasser Saidi's interview with Bonds & Loans, published in Apr 2019, titled "China-US Tensions, War with Iran Dominate Medium-Term GCC Risk Landscape" is posted below. The original can be accessed here.

Despite a positive macro outlook, a blend of rapidly rising regional tensions and an evolving trade dispute between China and the US will weigh more heavily than previously thought on the GCC's economic prospects in the medium term, argues Dr. Nasser Saidi, Founder and President of Nasser Saidi & Associates and Lebanon's former Minister of Economy.

Bonds & Loans speaks with Dr. Saidi about the regional economic outlook, progress on fiscal reforms in the region, structural shifts in the Middle East's political dynamic, and how to avoid the pitfalls of state-led development as currently practiced.

Bonds & Loans: What do you see as the top risks facing GCC markets in 2019?

Nasser Saidi: The first major risk is the oil price. The second relates to spill-overs of international political and economic tensions. The third is climate change.

Oil prices and revenues continue to dominate the macroeconomic risk paradigm in the region, dominating trade, current

accounts, and gross output. Despite reform efforts over the past few years, we have yet to see substantial progress on making the GCC less vulnerable to oil price volatility, or on diversification more broadly. Oil prices over the next two years, which we anticipate will hover between the USD55 and USD60 per barrel bracket, subject to added geopolitical risk, remain substantially below breakeven points, which will continue to weigh on the region's current account deficits. This means that many of the GCC countries will have to continue with fiscal adjustments to address their sustainability, while drawing from new and existing funding sources to make up the difference.

Spill-overs from global economic tensions — and here specifically, the economic standoff between the US and China — is also a significant risk. This isn't just about trade, it seems, but rather increasing confrontation at multiple levels: trade; China's role on the global stage; technology; intellectual property; market access. More fundamentally, it's about economic regime change in China, the world's second largest economy. As China forges ahead with its larger strategic objectives, it is becoming a globalist on a scale yet to be seen.

The main reason why economic warfare between the US and China is important for the GCC is that it could weigh on GCC integration with Asian supply chains. Asia currently accounts for a substantial portion of commodities demand, and China is now the largest importer of GCC oil and gas, so any reduction of the growth rate in China — coupled with the fact that the US is looking to increase production and shipments of shale oil — will have a negative effect on global oil demand.

Finally, climate change is a huge risk. Extreme weather events are increasing, especially in this part of the world, and insurers — as well as investors and the banks — have significantly under-priced climate risk. We could end up having a Minsky moment as a result: once the industry reckons with the scale of its exposure to the fossil fuels industry, we could see an acute and substantial drop in the value of

assets exposed to climate risk. This is a social as well as financial risk, but it is largely only viewed as a social risk at present. That is starting to change, particularly in Europe, but it needs to shift much more quickly.

Other global macro risk factors relate to the massive build-up of household and corporate debt on the horizon blended with a tightening liquidity environment, and the uncertain interest rate trajectory in the US. In emerging markets, this is compounded by the fact that a sizeable portion of that debt is denominated in foreign hard currencies, and rising maturities over the next three years.

Bonds & Loans: A significant portion of your presentation at last year's Bonds, Loans & Sukuk Middle East conference focused on political shifts emerging across the wider Middle East. How have some of those shifts played out? Do you see geopolitical risk rising or falling?

Nasser Saidi: You still have wars ongoing in Syria and Yemen. In Syria, to an extent, we are seeing a lower level of violence, but self-congratulatory statements about defeating ISIS are blatantly misplaced; rebel and national armed forces may have temporarily vanquished the group militarily, but all of the conditions that led to the formation and growth of ISIS — high levels of unemployment, poverty, disengagement with the state, lack of viable economic prospects — continue to persist. These conditions will not change unless global powers start seriously re-considering how they approach post-violence reconstruction in places like Iraq, Syria, Yemen, and Libya among other places.

A failure to address these conditions could likely lead to another boiling over of discontent, particularly among the region's youth. Best estimates for growth in most countries in the Middle East don't exceed 2.2%, which barely covers population growth in many of them — so what this means is a decline in real income per capita.

Added to this are rising geopolitical tensions linked to the spat between China and the US, particularly around the Belt and Road Initiative, which the GCC countries — particularly

the UAE and Oman — are investing heavily into. This is to further integrate the Middle East into China's global logistics and trade infrastructure. But it's unclear whether that will come at the cost of relations with the US. That the GCC no longer talks as one coherent bloc of countries compounds this risk, and diminishes the region's capacity to negotiate at the global level.

Finally, I am increasingly concerned that we may see armed confrontation with Iran. If you listen to the rhetoric of the top brass in the US, and their diplomatic activities within the Middle East, they seem to be setting the stage for war with Iran — not dissimilar to the build-up seen before the first gulf war with Iraq. Any armed confrontation would of course have dire implications for global oil prices, and the region more specifically.

Bonds & Loans: As the largest economy in the region, many look to Saudi Arabia for a sense of the trajectory many of the region's economies are on, particularly in terms of reform. How would you assess GCC states' progress on diversifying their economies away from oil?

Nasser Saidi: This is one of the biggest challenges facing the region. It has become quite obvious since the collapse in oil prices that this is not cyclical, but structural, which means the region's governments need to target diversification in three major ways: trade diversification, in the sense that these countries need to ween themselves off their overreliance on oil exports; production diversification, so moving away from oil to non-oil activities and services; and government revenue diversification.

Saudi Arabia is the biggest economy in the Arab world, followed by the UAE. What happens in Saudi Arabia is important because of its size, and the economic benefits that its neighbours enjoy through trade. But it's also to some extent a litmus test on the success of reforms in the region. What has been proposed in Saudi Arabia, in terms of modernisation efforts included in the National Transformation Plan and Vision 2030, is really the mother of all reform efforts in the

region, and all the countries in the GCC need the country to succeed in this endeavour. Failure will invite a backlash from more conservative segments of leadership, and potentially, large pools of the population, but it will also weigh on the development of neighbouring economies as they depend heavily on the opening of the Saudi economy to boost their prospects.

Bonds & Loans: There continues to be significant optimism around Egypt's economic prospects, but some of its fundamentals — like youth unemployment, and productivity — are worrying. Do you think the country can achieve its ambitions without a fairly radical shift away from how the economy is managed?

Nasser Saidi: It's an important point, but we should also pay heed to what has been achieved so far. The IMF, and its regional peers like the UAE, Saudi Arabia, and Kuwait, have lent substantial support to the country — in large part because the country is too big to fail. We've seen a rise in interest rates and greater monetary policy freedom, with inflation trending down towards 8.5% from peaks in excess of close to 30% in 2017. We've seen a partial reform of fuel subsidies, price adjustments in the power sector, and a decline in recorded unemployment over the past couple of years, with some facilitation by Egypt's neighbours of youth participation in their labour markets.

The country needs to reconsider its state-led development strategy, which means PPPs and privatisation need to move further up the policy agenda. But it comes with a warning. Under Mubarak, the beneficiaries of privatisation largely included the coteries around the leader — including his family. There was no trickle-down, in other words, and that issue still remains; addressing this would also help address unemployment. What this also means is that the country needs to achieve a transformation away from strong dependence on agriculture and the Nile, which remains its lifeline. This can be achieved through the dispersion and increased use of technologies and modern techniques in the agricultural sector to raise productivity and reduce dependence on dwindling water

supplies, as we are seeing increasing desertification. More broadly, the industrialisation strategy undertaken by Egypt — which has been largely military or state-led — cannot be the future; this applies as well to the GCC governments, which also need to foster a more vibrant and prominent private sector.

Economic reforms — like the removal of subsidies, increasing cost recovery through public services — require a new social contract. We have the beginnings of one, but it's not there yet.

More crucial is the issue of overall governance. What you effectively have is a government within a government. President Sisi has consolidated power and is looking for a renewal of his mandate, not unlike Ergodan in Turkey, and there is a high level of concentration of power; parliament in Egypt has largely become a Potemkin parliament. The question of inclusiveness — politically, economically, socially — looms large.

Bonds & Loans: The UAE economy has undergone a significant transformation over the past decade. Can the country continue to thrive if it does not adjust to shifting demographics on the ground via the changing nature of labour migration?

Nasser Saidi: The situation in the UAE is different to that of Saudi Arabia and its neighbours in the sense that it is much more diversified. Dubai contributes about 40% of the UAE's GDP, if you include the Emirate's free zones — where a range of multinational private corporates operates. It has been able to secure significant foreign investment, much more FDI than others in the region. This is due to the quality of core infrastructure and logistics hubs, rule of law, and free zones.

For a long period, the country attracted a great deal of low-skilled, low-cost labour to build that infrastructure. Much of that infrastructure has now been achieved, which means moving onto the next phase: modernisation and digitalisation of the economy. But it will take a long time before modern sectors emerge as strong contributors to GDP, as well as human

capital; that labour needs a viable pathway to remaining in the UAE for the long-term.

There have been a number of reforms addressing this. There is a 10-year residency visa for export specialists; 100% foreign ownership is now allowed in non-strategic sectors of the economy; there is the prospect of allowing companies operating in free zones to secure dual licenses that allow them to operate both onshore and in free zones. This is the beginning of a much longer-term liberalisation effort that will foster long-term residents.

But over the long-term, the country may do well to move towards the Swiss model. If you look back at Switzerland's history, and the development of its infrastructure, it was largely developed at a time when the country was overwhelmingly agrarian by nature. It has turned itself into a strong services hub for Europe and the rest of the World by strategically investing in key sectors, but it also reformed the way in which expat workers could obtain long-term residency and, eventually, citizenship, turning a transient working population into a strong contributor to GDP composed of long-term residents.

Creating permanent economic citizens has many benefits. It is helpful in terms of balance of payments; in building a social security system and long-term investment pools, which goes hand in hand with deepening the capital markets and the insurance and pension segments. It also means the development of a true middle class, which means moving away from a model based on tourism to one that fosters more organic, domestic support of key sectors; but it also means diverging from the country's existing overreliance on real estate and hospitality, which is unsustainable in its current form.

"Is a New GCC Emerging? A Geo-Eco-Political Outlook", Closing Keynote at the Bonds, Loans & Sukuk Middle East conference, 26 Mar 2019

Dr. Nasser Saidi was invited to present the closing keynote at the Bonds, Loans & Sukuk Middle East conference held in Dubai on 26th March, 2019.

Titled "Is a New GCC Emerging? A Geo-Eco-Political Outlook", the presentation covered the regional geo-economic & political outlook, while also shedding light on the key risks (including the oil market). It looks in-depth at the performance of the GCC, its diversification policies, also outlining the steps needed to support private sector businesses and activity.

The presentation ends with a "bucket list" for economic policy and reform for the GCC, while providing a best, base, and worst case scenario for the region.

"Transforming & Disrupting the Insurance Landscape: InsurTech, RegTech & SupTech", Lecture at

Institut Supérieur des Scienc es de l'Assurance USJ, 27 Feb 2019

Dr. Nasser Saidi presented "Transforming & Disrupting the Insurance Landscape: InsurTech, RegTech & SupTech" at the Institut Supérieur des Sciences de l'Assurance, Université Saint-Joseph de Beyrout on 27th February 2019.

The presentation focused on the characteristics, trends and outlook for global and regional insurance markets, and progresses to address technology-led disruption in the sector, before ending with some key takeaways and recommendations for Lebanon's insurance sector. A section is also dedicated to the factors affecting the insurance industry including climate change and the data revolution (Big Data) among others. Click to download the presentation.