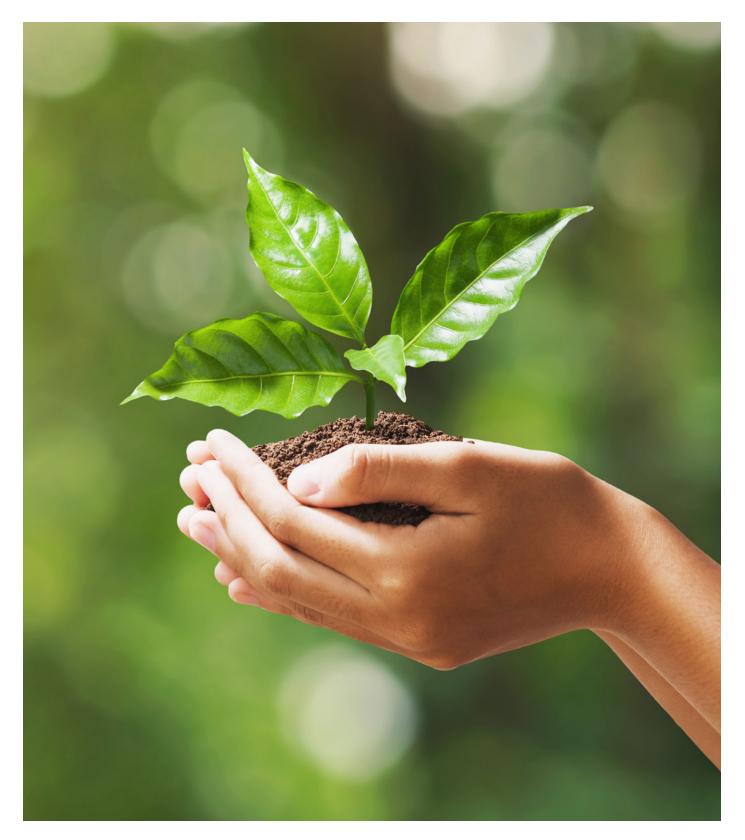
المشرق 🚧 mashreq

QUARTERLY ENERGY NEWSLETTER

Q3, 2022





A Message from Mashreq's Energy Sector Team

The success of our team is built on consistent knowledge exchange with our stakeholders, partners, and customers. We hope you find the insights inside valuable and useful.

Thank you for taking the time to read our quarterly newsletter. We wish you the best of health and wellbeing always.

Disclaimer: Mashreq Bank is required to act in accordance with the laws and regulations operating in various countries and regions around the world relating to international sanctions. Under these sanctions requirements, the bank is prohibited from engaging in certain transactions. These limitations include, but are not limited to, the acceptance of cheques presented for deposit that are drawn on sanctioned Financial Institutions and/or the acceptance of cheques presented for clearing by sanctioned Financial Institutions.

The materials and information contained in this newsletter are provided for general information only and should not be used as a basis for making decisions. Any advice or information received via this newsletter should not be relied upon without consulting primary or more accurate or more up-todate sources of information or specific professional advice. You are recommended to obtain such professional advice where appropriate.

Contents

Mashreq In Review – Q3, 2022

- **Opinion Editorial: Smart Climate Finance is Non-Negotiable** 04
- **Rise Every Day:** Mashreq Redefines Its Role with Historic 06 New Identity and Customer Proposition
- **Energy Markets Quarterly Review** 08
- **Energy News Highlights** 10
- **Energy Markets Survey** 11
- **Energy Transition Q3 Review** 12
- Mashreq In-Numbers: Climate Finance 14







Mashreq Opinion Editorial





Smart Climate Finance is Non-Negotiable

By Badar Chaudhry, Senior Vice President, Unit Manager, Energy Sector, Mashreg Bank



t took the world decades to agree that the huge investment needed to tackle climate change is far cheaper than the environmental and social price of doing nothing. Today, we simply do not have that time again; the margin for indecision around climate finance is near nil.

This red flag must be front and center as we countdown to COP27, the world's biggest annual climate gathering, in Equpt this November. That climate finance has remained so high on Arab Gulf leaders' radar during COVID-19, the most disruptive pandemic in a centuru, is very good news. The global climate agenda was largely side-tracked during the global recession in 2007-2009 – so lessons have been learned.

Thankfully so, for the stakes are now far higher. The Middle East is one the planet's most vulnerable areas to the effects of accelerated climate change, notably water, food, and social security. Also consider that there is a total of 3.6 billion people worldwide considered highly vulnerable, which is a staggering 45% of the global population.

SPOTLIGHT ON THE PS

We need both 'Ps' to make climate finance work: the public and private sector. The innovative thinking, appetite for positive disruption, and talent development in each 'camp' is vast. Just imagine how much can be achieved if they joined forces for even more publicprivate partnerships (PPPs).

Blending finance, especially for large-scale and / or exploratory clean infrastructure projects, is the fastest route to Net Zero by 2050 - in the UAE and worldwide.

For now, 70% of clean energy investment over the next decade is expected to be carried out by private developers, consumers, and financiers, detailed the International Energy Agency's (IEA) Net Zero Emissions by 2050 Scenario. This is not to say the public sector is plauing a less important role; their expertise, strategic understanding, and ability to unite many different stakeholders is invaluable. Plus, dynamics in the Middle East's energy sector are changing so rapidly that all forecasts must be considered with gentle caveats.

POWER OF AGILITY

Climate-smart PPPs are undeniably a vital piece of the financial outlook, but they too must be ready to evolve. Typically, PPPs are based on high predictability and steady frameworks and agreements, but a learning curve lies ahead. They will have to become more open to flexing and adapting as the balance between energy security, geopolitics, and climate change become more complex. Progress is already well underway, and of course more change will take time. But the more we communicate, the safer and more commercially viable the process.

There are some other factors to consider, such as sustaining fungibility amid the surge in international alliances in the UAE and wider Middle East, both for PPPs and in bilateral partnerships. The same applies to bolstering confidence among private investors by de-risking finance, such as via governmentbacked guarantees and joint investments, like syndicated debt with the support of export credit agencies (ECAs). Finding these areas of common ground is imperative as the bill of a cleaner, greener, and healthier future – i.e., largely the cost of the energy transition - varies hugely. Amid many published estimates, non-profit organization One Earth recently said \$1.5 trillion per year is

needed to limit alobal warming to 1.5°C, as per the Paris Agreement, while consultancy McKinsey expects the annual cost of getting to Net Zero to be \$9.2 trillion – \$3.5 trillion higher per year on current levels.

While we urgently need more clarity, we must also be patient with such diversity; we are trying to accurately predict the cost of a massive global change that lies nearly three decades away. The geopolitical, environmental, economic, and social uncertainties are too great. Look how the surprise of COVID-19 has already written the global status quo of work, health, and geopolitics. Therein lies even more reason to collaborate on PPPs and climate finance, so we can unpick the guesswork to find real solutions.

TOGETHER, WE ARE STRONGER

Much work is underway. For one, more than 200 climate and finance experts met in Cape Town for the first time in May to discuss the new collective auantified goal on climate finance. Representatives from governments, multilateral development banks, nongovernmental organizations (NGOs), academia, and the private sector from around the globe came together, the United Nations (UN) said. One of the key messages emerging from the UN's recently launched ad hoc



Work Programme on the New Collective Quantified Goal on Climate Finance is that climate flows for the Arab region are directed at priority sectors like water, agriculture, coastal zones, health, energy, transport, and waste. However, the amount of finance remains below the estimated needs of the region.

A firm believer in partnerships, the UAE has provided more than \$1 billion in financial support to more than 40 nations and pledged another \$160 billion to help achieve Net Zero by 2050. An early mover in renewables, the country also began financing clean energy projects more than 15 years ago and has invested over \$40 billion in the sector to date. I am alad to sau that this is the tip of the iceberg, as many others are stepping in. For example, the World Bank delivered more than \$26 billion of climate finance in fiscal year of 2021 alone. Among the World Bank Group's Roadmap for Climate Action in the Middle East and North Africa (MENA) is \$10 billion of World Bank and International Finance Corporation (IFC) funding for climate-smart projects and policy reforms, with an additional \$2 billion in private sector financing from 2021-2025. The wave of change is clear to see. Now, we must focus on finessing and scaling it up at COP27, for there is truly no time to waste.





Mashreq Redefines Its Role with Historic New Identity and Customer Proposition



Ahmed Abdelaal **Group Chief Executive Officer** Mashreg Bank

ise Every Day talks directly to people all over the world who look to corporations for guidance. expertise, and a helping hand, reflecting Mashreg Bank's commitment to equipping people with the practical tools and life skills they need to get the most from how they live their daily lives, and how they engage with the digital economy. The move is a landmark evolution that will see Mashreg adopt a challenger brand status as it seeks to achieve social and economic impact by supporting the aspirations, dreams and needs of every customer. With an invitation to everyone, everuwhere to unlock their

personal vision of success, Rise Every Day captures Mashreg's mission to be the region's most progressive challenger bank through a collaborative, digitalfirst approach to building a new banking-as-a-service (BaaS) – an approach that goes way beyond banking as it used to be and delivers the best in class experience for its customers. Mashrea's new brand identity is anchored on a three-pronged approach of 'innovation, consistency and prudence' towards customer experience. This stems from the convergence of innovation towards futuristic value and to create an ecosystem that is agile enough to evolve dynamically and incessantly to support the changing needs and wants of customers every day. Commenting on the new

brand identity Abdul Aziz Al



Through an invitation to 'Rise Every Day', Mashreg Bank - one of the leading financial institutions in the UAE - has revealed a historic brand evolution with a transformation of its corporate identity and overarching strategic purpose as an enabler of inclusive financial, personal and professional development.

> Ghurair, Chairman of Mashreg, said, "Rise Every Day is a statement of intent that exemplifies where Mashrea has come from and where it is going in the context of today's rapidly changing and ever more complex digital world. l understand from my own journey over several decades that to create a brand that truly makes a difference bu giving people the tools they need to realize their dreams – each of us needs to rise every day. When we rise to the challenge, we put in the hard work, we disrupt the status quo and lay down the grit to experience the glory.

> Ahmed Abdelaal, Group CEO, Mashreq bank, added, "The new brand positioning comes at a veru crucial moment for us as we lead the evolution of digital finance and the wider digital economy through the innovation and deployment of truly transformational platforms and solutions. The new identity reflects our new direction that aims at building deeper and more personalized connections with our customers and partners. The principles behind Rise Every Day come from Mashreg's belief in building better lives and livelihoods through hard work and innovation. Our core focus is to challenge the status quo, inspire our customers and build a banking-as-a-service ecosystem fit for the digital economy - a framework that encourages every customer to Rise Every Day to realize their dreams."

Source: Mashreq Bank https://bit.ly/3SchxE0

Energy Markets Q3 Review

H.E. Haitham Al Ghais, Secretary General, OPEC

"I believe there are lots of forms of potential cooperation between the oil industry at large, oil producing nations, and climate energy transition dialogue. And I think one of the best venues that we have coming up is COP27, which is going to be held in Egypt and then COP28, which will be held in one of Opec's leading producing countries, in the UAE. And I would love for Opec to have a bigger voice, a louder voice, more participation in these discussions of COP27/28 because you cannot simply transition away from oil. It's like driving a car and shifting from first gear straight into fifth or sixth gear. It does not happen that way. You have to transition smoothly and in a non-disruptive way."to bear fruit."



Global Oil Demand

World oil demand growth in 2022 remained unchanged from the previous month's assessment at a healthy level of 3.1mn b/d. This includes the recently observed trend for additional oil demand growth due to fuel switching in power generation. Oil demand in the OECD is estimated to grow by 1.6mn b/d in 2022, while non-OECD growth is expected at 1.5mn b/d. The second quarter of 2022 is revised higher amid better-than anticipated oil demand in the main OECD consuming countries, while the Q3 2022 and Q4 2022 have seen offsetting revisions. For 2023, the forecast for world oil demand growth also remained unchanged from the previous month's assessment to 2.7mn b/d. The OECD is expected to grow by 0.6mn b/d and the non-OECD by 2.1mn b/d. Oil demand in 2023 is expected to be supported by a still-solid economic performance in major consuming countries, as well as potential improvements in COVID-19 restrictions and reduced geopolitical uncertainties. Sources: IEA, OPEC

Global Oil Supply

Non-OPEC liquids supply growth in 2022 remained broadly unchanged from last month's assessment at 2.1mn b/d. A downward revision in Other Eurasia and OECD Americas was offset by an upward revision in Latin America and Other Asia. The main drivers of liquids supply growth for 2022 are expected to be the US, Canada, China, Brazil and Guyana, while the main production declines are expected in Indonesia and Norway. In 2023, the forecast for non-OPEC liquids production growth remained unchanged from last month's assessment of 1.7mn b/d. The main drivers for 2023 growth are expected to be the US, Norway, Brazil, Canada and Guyana, whereas oil production declines are projected mainly in Russia and Azerbaijan. However, geopolitical concerns and uncertainties around the operational side as well as financial aspects of US production remain high. OPEC NGLs and non-conventional liquids are forecast to grow by 0.1mn b/d in 2022 to average 5.4mn b/d, and by 50k b/d in 2023. In August, OPEC-13 crude oil production increased by 618k b/d m-o-m to average 29.65mn b/d, according to available secondary sources. Sources: IEA, OPEC

	JULY 2021	AUGUST 2021	CHANGE (AUG/JULY)	YEAR-ON-YEAR (Y-O-Y)	
				2021	2022
wтı	\$99.38/bl	\$91.48/bl	-7.9 %	\$64.23/bl	\$100.06/bl
BRENT	\$105.12/bl	\$97.74/bl	-7.0 %	\$67.08/bl	\$104.00/bl
DME OMAN	\$102.90/bl	\$97.24/Ы	-5.5%	\$65.71/bl	\$101.47/bl
SPREAD					
Brent-WTI	\$5.74/bl	\$6.26/bl	-9.1 %	\$2.85/bl	\$3.94/bl

Sources: IEA, CME, DME and OPEC







SEPTEMBER 2022

US DOE ANNOUNCES NOTICE OF SALE OF ADDITIONAL CRUDE OIL FROM THE SPR

The U.S. Department of Energy's (DOE) Office of Petroleum Reserves announced a Notice of Sale of up to 10 million barrels of crude oil to be delivered from the Strategic Petroleum Reserve (SPR) in November 2022. This Notice of Sale is part of President Biden's announcement on March 31st, 2022 authorizing the sale of crude oil as continued support to help address the significant market supply disruption caused by Putin's war on Ukraine and aid in lowering energy costs for American families.

Source: DOE https://bit.ly/3qUP2Pb

THE GLOBAL RACE TO HIKE RATES TILTS **ECONOMIES TOWARD RECESSION**

Central banks are intent on driving the world economy perilously close to a recession. Late to see the worst inflation in four decades coming, and then slow to crack down on it, the Federal Reserve and its peers around the globe now make no secret about their determination to win the fight against soaring prices – even at the cost of seeing their economies expand more slowly or even shrink. The Fed looks willing to tip the US into a slump if that's what's needed to beat inflation. Other central banks are ready to make the same gamble

Source: Bloomberg https://bloom.bg/3dtBjf5

THE ENERGY MARKETS NEXT CRISIS: OIL TANKER SHORTAGES

In the new era of energy shortages, one aspect of the situation has tended to get overlooked: the transport of energy. Demand for tankers has been on the rise since the European Union slapped sanctions on Russia in the spring, and this trend is only going to intensify in the coming months as the EU embargo on Russian oil and fuels enters into effect.

Source: OilPrice.com https://bit.ly/3BpOnu0

AUGUST 2022

FRENCH NUCLEAR WOES STROKE EUROPE'S POWER PRICES

Power from neighbouring countries is needed to help France handle its nuclear shortage. With gas making up the majority of the deficit, the extra demand is driving prices higher again. Technical problems have hampered French nuclear reactors along with summer maintenance and drought has curbed hydroelectric production, a key source of electricity generation.

Source: Reuters https://reut.rs/3eVpSNB

UK ENERGY CRISIS IS 'BIGGER THAN THE PANDEMIC'

The United Kingdom will have to find an answer to soaring energy bills soon or risk a humanitarian crisis. But freezing gas and electricity prices over the next two winters could cost the government over £100 bn (\$118 bn), more than it spent paying millions of people's salaries during the pandemic. Source: CNN https://cnn.it/3S6KXn1

OIL MIXED AS OPEC SUPPLY CUT PROSPECT OFFSETS DEMAND FEARS

Oil prices were mixed on Monday as investors balanced expectations the OPEC will cut output to support prices against concerns sparked by Federal Reserve Chairman Jerome Powell saying the United States will face slow growth "for some time". Sources last week said OPEC would consider cutting output to offset any increase from Iran should oil sanctions be lifted if Tehran agrees to revive a nuclear deal.

Source: Economic Times https://bit.ly/3LD57mk

JULY 2022

RUSSIA WON'T SUPPLY OIL TO THE WORLD **MARKET IF PRICE CAP IMPOSED**

"If these prices being talked about are lower than the cost of producing oil, then of course Russia will not ensure the supply of this oil to world markets. This means we are simply not going to work at a loss," cited Deputy Prime Minister Alexander Novak as telling Russian television.

Source: Reuters https://bit.lu/3Uzu5aG

SAUDI ARABIA'S ABILITY TO PUMP MORE OIL "LIMITED"

Saudi Arabia has limited additional crude oil production capacity. The market is spooked by a lack of spare capacity, particularly of OPEC's largest producer, adding more volatility to already volatile oil prices. Saudi Arabia's production quota will be lifted to 11.004 mn b/d after August.

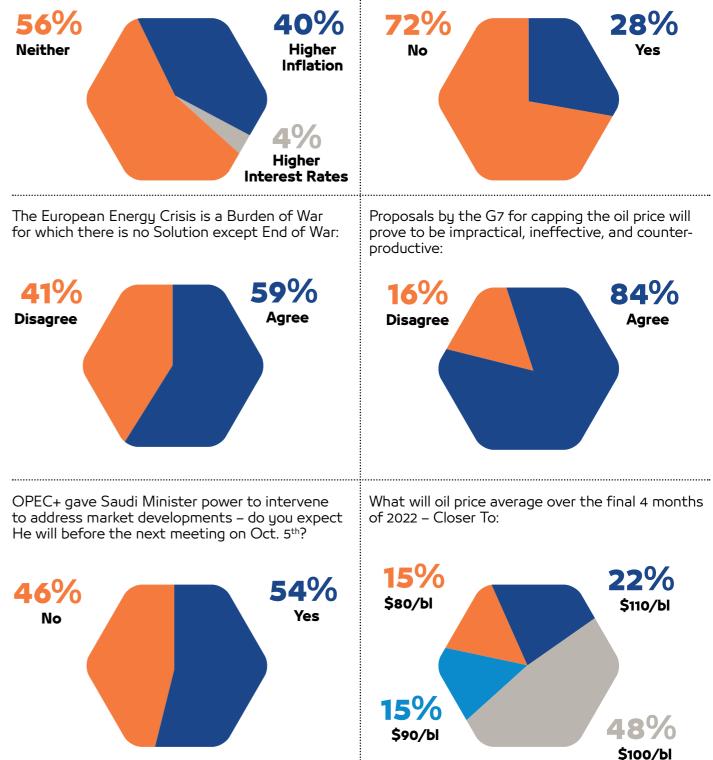
Source: Oil Price.com https://bit.lu/3S8cxAi

TURKEY: ERDOGAN'S VISIT 'TURNING POINT' IN **IRAN- TÜRKIYE TIES**

Iran and Türkiye on Tuesday agreed to extend their gas supply contract for another 25 years and set an ambitious trade target of \$30 bn. In the presence of the two presidents, Iran and Türkiye signed eight memoranda of understanding in political, economic, sports, and cultural fields after bilateral talks.

Source: Anadolu Agency https://bit.ly/3fkwPYH

What will deliver a higher oil price?







Will OPEC+ supply cut achieve its stated objective and remove market volatility?



MENA Region can Lead the World in **Green Hydrogen and Renewable Energy**

"The MENA region can lead the world if it shifts promptly to renewables and applies green hydrogen in its steel sector," says author of the IEEFA report Soroush Basirat.

ortuitously, the region's sector is dominated by direct reduced iron-electric arc furnace (DRI-EAF) technology, which releases lower emissions than the increasingly obsolete coal-fuelled blast furnace and basic oxygen furnace (BF-BOF) process used in 71% of global crude steel production in 2021.

Basirat says the DRI-EAF process, which uses syngas made from natural gas or gasified coal and also electricity, could be zero emissions if green hydrogen (produced using renewable energypowered electrolysis) and electric arc furnaces powered by renewable energy were used.

"MENA has an established supply of DR-grade iron ore and its iron ore pelletising plants are among the world's largest.

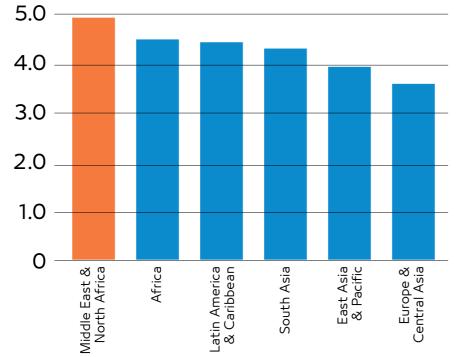
"In 2021, MENA produced just 3% of global crude steel but accounted for nearly 46% of the world's DRI production. "MENA's knowledge of this specific steel technology is an invaluable asset. This production knowledge, abetted by further work on iron ore beneficiation, pelletising and DR plants, is among the most important steel decarbonisation pillars, and will greatly assist MENA's transition.

"Compared to other regions, MENA's existing DRI-EAF capacity means no extra investment is needed for replacing the base technology. All new investment could be focused on expanding production of green hydrogen among other renewables. Channels need to remain open to support the credible transition plans of carbon-intensive companies, recognizing that half of the investment required to get on track for net zero over the next decade goes to projects that do not immediately deliver zero emission energy or energy services. "Having access to such high

MENA REGION LEADS IN SOLAR POWER POTENTIAL

Solar Power offers low-cost option for green hydrogen

Average practical potential (kWh/kWp/day)



Sources: World Bank & IEEFA

solar energy resources allows for production of green hydrogen at a competitive price," says Basirat. "With Mena's available capacity, producing green hydrogen below \$1/kg is achievable by 2050."

"Mena's producers are ahead in terms of their market positioning and will remain so if they accelerate the transition to carbon-free steel using the green hydrogen DRI-EAF route.

"Providing green electricity, a big challenge for steel producers in some parts of the world, is not a barrier in Mena.

Egypt, Saudi Arabia and UAE are Mena's pioneers in shifting towards renewables and green hudrogen.

"If it acts fast, MENA has the potential to lead the world in green steel production." The International

Energy Agency (IEA) in its Net Zero Emissions scenario models the global share of hydrogen-based (H2) DRI-EAF production reaching 29% of primary steelmaking by 2050.

BloombergNEF estimates that 56% (840 million tonnes) of primary steel production will come from H2DRI-EAF by 2050 in a net zero emissions scenario. Soroush Basirat notes MENA has excellent solar resources to aid production of green hydrogen from renewable electricity.

"With ample renewable energy potential, the region could become a leader in hard-to-abate and carbon intensive industries, specifically steel."

Source: IEEFA



"Given that oil and gas are still expected to account for as much as a third of the energy mix by 2050, producers and policymakers need to work together to make sure that each new barrel is less carbonintensive than the last one, and that the transition to renewables is expedited and facilitated. This is why partnership and collaboration are essential. The energy transition depends on our ability to come together to achieve a common goal."

& CEO of ADNOC Source: The National - 05/09/2022

"No matter how important the climate factor is, each country will work at its own pace and strengths when it comes to transitioning to clean energy. Therefore, you are going to see a variety of progress when it comes to policies and regulations in different countries and different regions."

H.E. Sharif Al Olama, Undersecretary, UAE Ministry of Energy & Infrastructure for Energy & Petroleum Affairs Source: Gulf Intelligence - 14/09/2022



"Countries around the world are responding to the current crisis by seeking to accelerate the growth of homegrown clean energy industries. The regions that make this move will see huge growth in jobs. Seizing this opportunity requires skilled workers. Governments, companies, labour representatives and educators must come together to develop the programmes and accreditations needed to cultivate this workforce and ensure the jobs created are quality jobs that can attract a diverse workforce."

Source: IEA

"The twin COPs in Egypt and UAE are a bridge to more sovereign issuance from emerging markets. We should be looking to a post-COP28 environment where green, social, and sustainable sovereign debt from developing nations has been supported and is multiplying with new deals on horizon. Sovereign issuance is an indicator of action from policymakers and financial regulators in facilitating north to south climate investment. The next two years of COPs are a springboard for policymakers to turn commitments into trillions, directed where it's needed most."

Sean Kidney CEO, Climate Bonds Initiative

Source: Climate Bonds Initiative





H.E. Dr. Sultan Ahmed Al Jaber, Minister of Industry and Advanced Technology & UAE Special Envoy for Climate Group MD



Fatih Birol Executive Director, International Energy Agency



المش Mashreq In-Numbers: Climate Finance máshreo

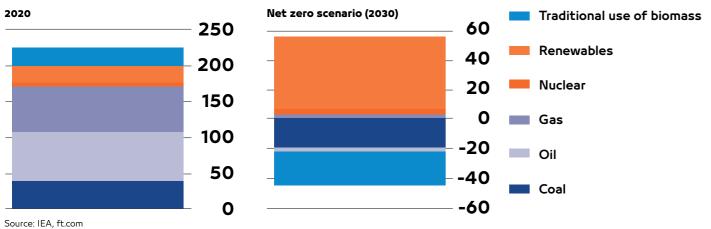
Emerging Markets and Developing Economies (EMDEs)

is the total amount of additional investment needed for EMDEs to reach net zero by 2060

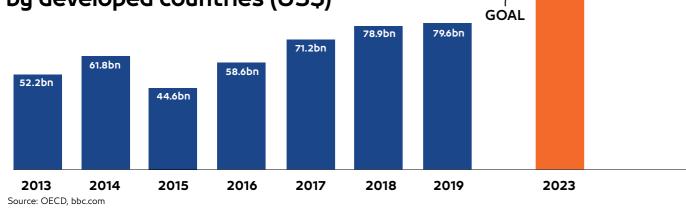
00Ьг

Source: Standard Chartered and World Economic Forum

Total energy supply in EMDEs by fuel (exajoules)



Amount provided and mobilised by developed countries (US\$)



International community must take the lead in energy transition for EMDE's to succeed.

