



# ESF MENA 2021

MIDDLE EAST ENERGY & SUSTAINABILITY FORUM  
Decarbonising the Downstream Industry

24–26 October 2021 | UAE

## ADVISORY MEETING REPORT

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HOSTED BY EURO PETROLEUM CONSULTANTS

WEDNESDAY 7 APRIL 2021

## IN ATTENDANCE

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- EBRAHIM TALIB, DEPUTY CEO, **BAPCO**
- MIKAEL BERTHOD, VICE PRESIDENT, ADNOC REFINING RESEARCH CENTER, **ADNOC REFINING**
- MAITHA AL MARASHI, VP SUSTAINABILITY, **BOROUGE**
- FRANCESCO DE FRANCESCO, MANAGING DIRECTOR & GENERAL MANAGER, **ENI ABU DHABI REFINING & TRADING SERVICES**
- FAHAD AL-SHEREHY, VICE PRESIDENT ENERGY EFFICIENCY AND CARBON MANAGEMENT, **SABIC**
- UDO HUENGER, VICE PRESIDENT MARKET AREA MIDDLE EAST, **BASF**
- JIM MOSHI, GM MIDDLE EAST, **HONEYWELL UOP**
- DAN CARTER, GLOBAL DIRECTOR, DECARBONISATION & NEW ENERGIES, **WOOD**
- MAZIN AL-LAMKI, CHIEF OPERATING OFFICER, **MUBADALA PETROLEUM**
- DAVID MARION, VP MANUFACTURING AFRICA, MIDDLE EAST, ASIA & PACIFIC FOR REFINING & PETROCHEMICALS, **TOTAL**
- RAJESH SAMARTH, VICE PRESIDENT INDIA, **LUMMUS TECHNOLOGY**
- ZEYAD ALOUDAH, TEAM LEADER CAPITAL, **KIPIC**

## CHAired BY

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- OLIVER KLAUS, DUBAI BUREAU CHIEF, **ENERGY INTELLIGENCE**

## EURO PETROLEUM CONSULTANTS

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- STEFAN CHAPMAN, VICE PRESIDENT
- LAURA MCMANUS, SALES & CONFERENCE DIRECTOR
- CHRISTINA ROMANOVA, EVENTS MANAGER

## APOLOGIES

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- SAMAR AL HAMEEDI, VICE PRESIDENT, SUSTAINABILITY, **ADNOC**
- FADI MHAINI, MANAGING DIRECTOR MIDDLE EAST & NORTH AFRICA, **LUMMUS TECHNOLOGY**
- HASSAN EL-HOUJEIRI, CLIMATE AND SUSTAINABILITY GROUP LEAD, **SAUDI ARAMCO**
- ABDULLAH AL-OSAIMI, MANAGER CORPORATE PLANNING, **KIPIC**

# STATE OF PLAY IN THE MIDDLE EAST – MARKET OUTLOOK, TRENDS & KEY ISSUES

The meeting began with the question; what is the single biggest challenge for the global downstream industry at this point in time?

Uncertainty, the new normal and what does the business market look like post COVID was a starting point with many agreeing that this will define demand and supply in the future and margins accordingly. The true impact of the pandemic and energy transition is still unknown due to the volatility in the market and amount of uncertainty whilst the environmental aspects of our business are being challenged dramatically. The ability to adapt quickly and to utilise assets and feedstock in a more efficient fashion were identified to achieve competitive advantage in the current environment.



The meeting heard that the transition itself is yet to be defined with many factors and variables influencing the situation. A big challenge is how to stay competitive during the transition and within a shrinking market. Pressures from both internal and external sources are requesting operators to reshape their organisations to produce energy in different ways and sell it. Great support is needed from all stakeholders, investors, technology suppliers and customers in a uniquely holistic way to find a sustainable route to finance sustainability and quickly, in order to stay competitive.

# STATE OF PLAY IN THE MIDDLE EAST – MARKET OUTLOOK, TRENDS & KEY ISSUES

Collaboration was a huge theme during the advisory meeting with recommendations echoed throughout for the industry to adapt this approach bringing together the entire value chain from regulators, financial institutions and technology providers to stakeholders and customers in a collective forum to address carbon management. We heard that even a unified approach from within the sector between upstream, mid, and downstream could provide competitive advantage and benefits for all in the region.

Another point worth noting is that the Middle East is intricately linked to India, a huge consumer for the region. As the government's objective is to maintain economic growth and needs energy consumption for this growth, the country will be dependent on hydrocarbons for quite some time. For a developing country the size of India along with their economic aspirations, the energy transition presents a massive challenge. New forms of energy, renewables and electrification, realistically, is more likely to happen in the western world.





# DECARBONISATION – HOW IS IT PLAYING OUT IN THE REGION?

Europe are leading the way in the push from hydrocarbons to any energy that can provide lower carbon with the world overall becoming more environmentally cautious over the last year - but has the Middle East done enough? One additional development to watch closely is the US re-joining the Paris accord and the effect this will have on the future of downstream.



The meeting heard that the UAE's energy transition journey is advancing having started a decade ago but the rest of the region could be seen as lagging behind, possibly due to the lack of policy. Uncertainty is a very big challenge for the region with some countries struggling to see the clear path ahead and what role they need to play within the energy transition. There is a realisation that the Middle East needs to do more with long-term strategic plans needing strict measures towards sustainability and decarbonisation, going beyond a 'nice to have' to truly committing to a carbon neutral agenda. We are at a turning point in the industry with the opportunity to structure an improved and sustainable economic recovery post COVID.

## POLICY – TO WAIT OR NOT TO WAIT?

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It was commented that there hasn't been a considerable drive in the region in terms of regulations. Instead, companies are setting their own targets and agendas meaning the sustainability goals are not unified. Regulation has the potential to give consistency, incentives and guidance to all involved and deliver a common goal to achieve together to meet regulatory requirements.

On the other side, policy is developing too slowly and industry needs to act now to support the development of technologies through collaboration on pilot plants and scale up of investment in capital to ensure the solution deployed in the future is as cost effective as possible whilst setting targets and a roadmap to meet the 2050 goals. Any regulation and legalisation that will be implemented will reinforce the strategy set by the industry, rather than drive it. If the region waits, it will end up behind the curve and the overall solution will end up costing more.

## HOW IS THE MIDDLE EAST POSITIONED TO ADDRESS THE ENERGY TRANSITION?

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We heard about the recent achievement in Saudi Arabia where the G20 Energy Ministers endorsed the Circular Carbon Economy Platform (CCE) as a tool to manage emissions and foster access to energy. The CCE approach includes a holistic, integrated, inclusive, and pragmatic approach to managing emissions that aims to provide new pathways towards economic growth. In addition, just this month, the Saudi and Middle East Green Initiatives was announced as a valuable contribution to tackling the worldwide energy transition. The initiatives include several ambitious projects designed to reduce carbon emissions in the region by 60%.

# HOW IS THE MIDDLE EAST POSITIONED TO ADDRESS THE ENERGY TRANSITION?

Downstream is key to delivering the energy transition with opportunities arising for example, the move to EVs increases the demand for manufacturing plastics which in turn increases demand for heavier grades such as carbon black and anode grade coke used for manufacturing materials required in batteries. The Middle East needs to examine the product slate and deliver more flexible products as the region is in an ideal position for global competitiveness due to less and less assets operating in Europe as we get close to 2035 and 2050 timeframes so refineries need to make the most of this and position themselves well.

The region is blessed with the abundance of resources with big opportunities such as solar and wind but yet the best technology and panels for solar are currently manufactured and imported from Europe.



The middle east is well positioned due to the low carbon, low cost resources and needs to maximise the value sooner rather than later. During the discussion, we heard EOR and carbon capture is constantly examined but with the high cost of development along with the low crude price, it is very challenging. For downstream, an important solution is to firstly reduce and then replace the energy used during processes by not burning gas but instead use green electricity from solar and wind for example.

Turning to scope 3, there is a global push to produce less carbon intensive products, is this an opportunity for the middle east? Depending on feedstock availability, biodiesel and bio-jet need to be investigated due to demand from aviation to reduce their own carbon footprint.

## CHEMICALS ARE LEADING BY EXAMPLE

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The journey ahead for petrochemicals does seem clearer with the adoption of circular economy initiatives. The circular journey for the global producers began in 2009 by setting long-term tangible sustainable goals in response to legal requirements, ISO certification, sustainability reporting and today's compliance to ESG as per the latest GRI standards.



Consumption demand is forecasted to stay strong and the meeting heard examples of how sustainability can be achieved by setting targets for zero flaring, energy intensity, hazardous and non-hazardous waste, water management, scope 1 & 2 greenhouse gas emissions and incorporating recyclates into the portfolio and renewable feedstock into the chain. Benefits can also be achieved by embracing a blockchain system for the supply chain activities to ensure the efficiency of product delivery through digitalisation, reducing energy and time. Benchmarking and implementing improvement plans, developed alongside innovation centres and working with partners to establish circular solutions with a holistic view by designing products for recycling and with the end user in mind, are equally as important.

## HOW CAN LICENSORS BALANCE UNCERTAIN MARKET OUTLOOK WITH A CASH RESTRAINED BUSINESS ENVIRONMENT TO ADAPT?

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For licensors during 2020, instead of focusing on new sales and new business, a lot of focus has been on supporting clients' existing assets remotely and providing solutions to improve efficiency and ultimately, reduce operating costs and CO2 emissions. We are seeing more JV's for example, in petrochemicals many partnerships between waste management companies, operators and technology providers.

Operators are looking for custom built, fit-to-purpose solutions resulting in technology providers working very closely to their customers. Licensors are no longer developing technology independently but rather together with the customer to fit their requirements. Selections are no longer solely focused on profit but how sustainable the process will be. One challenge faced by licensors is that operators traditionally select well-proven technologies and do not want to be the first one to use a new technology. The development of a new eco-system of collaboration between the tech providers and customers is already happening.



## COLLABORATION VERSUS COMPETITION

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On a global platform, the Middle East is seen as the hub of downstream, but the region has been mostly working separately and collaboration is needed both in a political and an economic sense. Initiatives such as the Gulf Downstream Association and the Gulf Petrochemicals and Chemicals Association (GPCA) were established to utilise collaboration.

A discussion took place regarding a potential game changer for the region; taking the opportunity to unify some of the efforts of sustainability, transparency and reporting, sharing lessons learned, sharing of resources, developing strategy and balancing this with increased competition being the driver towards sustainability. The meeting heard that collaboration is taking place in some respects in the region and the development of EV's was an example shared of a successful collaboration.

## WHAT ELEMENTS NEED TO BE CONSIDERED TO TRANSITION TO A MORE SUSTAINABLE FUTURE?

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Industry has worked hard to become cleaner due to regulations such as IMO and top management in the region have tough decisions to make with emerging questions such as: Will there be integration between the oil sector and green energy such as hydrogen? Will there be competition between oil and green? What will happen to oil, our natural resource, if we turn to completely to green energy? Is it possible to make oil into a clean energy source? Are the technologies there?

We heard that if there is enough green energy, most of the carbon management elements can be addressed. But the industry needs to look at where this green energy will come from, will the customers pay for it, how to manage existing assets during this transition and how do we get the energy to where it is needed. Consolidated efforts are needed including government support and public-private partnerships to address these challenges.

Whilst many countries are on board with the Paris agreement with the goal of reaching net zero by 2050, very few geographies actually have policies in place to encourage industry to develop a road map of how to get there. The topic of collaboration was once again reiterated which establishes the significance of this for the industry. Nations, countries, and companies need to work together from supply chain all the way to product distribution and towards unified sustainability goals.

# DIGITALISATION OF THE INDUSTRY – HOW CAN TECHNOLOGY HELP ADDRESS ENERGY TRANSITION PRESSURES?

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When it comes to digitalisation, it can be suggested that there is a reluctance to try anything new unless someone else has tried it first. There has been an acceptance to digital transformation in the region with innovation centres developing solutions in machine learning and artificial intelligence but it is taking longer than anticipated due to the high volume of data and the need for true integration throughout the organisation.

However, it will define operational models going forward and needs to be sponsored by the very top whilst getting all involved. Digitalization is an enabler to the energy transition, and we have an opportunity here by implementing 4IR to achieve many of the UNSDGS.

In summary we heard, ESG compliance is coming, decisions for the future are coming, and the Middle East is not prepared. We need to produce energy responsibly and a good place to start is looking at what needs to be done within the current operations to achieve efficiency. For example, there are many technologies out there to achieve zero flaring and electrification of plants to move away from fuel and gas burning power plants.

Now is the time to capitalise on our unique common relationship to work together and find ways to complement each other, rather than compete. If downstream wants to compete within the energy mix, it needs to diversify together.

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**#ESFMENA21 will cover all of these topics and more, with two engaging days of strategic discussion and technical immersion. If you or your company would like to give a presentation at ESF MENA 2021, please submit your abstract by 10 June 2021 [here](#).**



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