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# Energy Transition

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#### ENERGY TRANSITION NET-ZERO INSIGHTS EXCLUSIVE SOUNDINGS

# Abu Dhabi-Dubai Gas Deal Supports the UAE 2050 Net Zero Target

ADNOC and DUSUP Landmark agreement will see natural gas replace clean coal at the Hassyan Power Complex in Dubai, further reducing emissions, supporting the UAE Net Zero by 2050 Strategic Initiative.

The pioneering Agreement displays the UAE's commitment to progressive and pragmatic climate action and reinforces ADNOC's role in enabling a responsible energy transition. ADNOC is advancing its efforts to harness Abu Dhabi's vast natural gas resources to enable UAE gas self-sufficiency and meet growing global demand. Domestically produced natural gas is more commercially competitive compared to imported coal or gas and will support economic growth while lowering emissions.

The agreement will see ADNOC supply DUSUP with natural gas, which will be used instead of clean coal for electricity generation



at Dubai Electricity and Water Authority PJSC (DEWA)'s IPP (Independent Power Producer) Hassyan Power Complex, further reducing carbon emissions from the power generation process. This supports the UAE Net Zero by 2050 Strategic Initiative and its plans to generate electricity from cleaner energy sources.

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The agreement was signed at Qasr Al Watan by His Highness Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy and Director-General of DUSUP, and His Excellency Dr. Sultan Ahmed Al Jaber, UAE Minister of Industry and Advanced Technology and ADNOC Managing Director and Group CEO.

The agreement signing ceremony was attended by H.H. Lt. General Sheikh Saif bin Zayed Al Nahyan, Deputy Prime Minister and Minister of the Interior; H.H. Sheikh Mansour bin Zayed Al Nahyan, Deputy Prime Minister and Minister of the Presidential Court; H.H. Sheikh Abdullah bin Zayed Al Nahyan, Minister of Foreign Affairs and International Cooperation; H.H. Sheikh Khaled bin Mohamed bin Zayed, Member of Abu Dhabi Executive Council and Chairman of Abu Dhabi Executive Office, as well as a number of ministers and senior officials.

H.H. Sheikh Ahmed bin Saeed Al Maktoum said: "This agreement supports the vision and directives of the wise leadership to turn Dubai into a carbon-neutral economy and provide 100% of Dubai's total power generation capacity from clean energy sources by 2050. This agreement further strengthens energy cooperation between Abu Dhabi and Dubai, building on the foundations originally laid in 1998 and reinforced over the years, to expand the breadth and depth of our energy relations. While many countries around the world are returning to coal as a result of geopolitical uncertainty and energy price volatility, the UAE is delivering on its commitment to decarbonize its power sector."

H.E. Dr. Al Jaber said: "In line with the directives of the UAE's wise leadership, ADNOC is advancing its efforts to harness Abu Dhabi's vast natural gas resources to meet the world's growing demand for this important transition fuel and enable a responsible energy transition. This landmark agreement will significantly reduce power generation emissions at the Hassyan Power Complex, directly supporting the UAE Net Zero by 2050 Strategic Initiative. Working in close collaboration with our customers and partners, ADNOC will continue to expand our natural gas capacity to deliver against our strategic objectives of decarbonizing our energy and power systems, ensuring UAE gas self-sufficiency and driving long-term and sustainable growth for the UAE."

ADNOC's integrated gas masterplan links every part of the gas value chain to ensure a sustainable and economic supply of natural gas to meet the growing requirements of the UAE and international markets. The plan includes the application of new approaches and technologies to enable increased and competitive gas recovery from existing fields as well as developing untapped resources and leveraging innovation to continually drive emissions' reduction.

Domestically produced natural gas is more commercially competitive compared to imported coal or gas and it will support economic growth while lowering emissions when used as a substitute for coal in power generation.

ADNOC is a responsible provider of reliable, lower-carbon energy. In addition to the expansion of its gas operations, ADNOC is growing its new energies business to capitalize on opportunities in hydrogen and renewables, while decarbonizing its operations as it embraces the energy transition and continues to help meet global energy demand.

The Hassyan Power Complex was initially built as a dual-fuel plant with the ability to operate fulltime at full load on both natural gas or clean coal but has been transformed to run only on natural gas. Present net electricity generation capacity of Hassyan Power Complex is 1,200 megawatts (MW). A further 600 MW (net) is scheduled to be added in Q4 of 2022 and an additional 600 MW (net) will be added by Q3 of 2023.

The complex is an important addition to DEWA's power generation projects, including Jebel Ali Power and Desalination Complex, Al Aweer Power Station Complex, the Mohammed bin Rashid Al Maktoum Solar Park, the largest single-site solar park in the world with a planned capacity of 5,000 MW by 2030, green hydrogen, and hydroelectric power plant in Hatta. *Source: ADNOC* 

#### **READ FULL STORY HERE**









# INSIGHTS **Biodiversity in the Big City**



#### Bill Spindle Council on Foreign Relations International Affairs Fellow, India

A successful effort to reclaim a tiny patch of India's polluted capital is a hopeful reminder the planet can recover. If it's not pushed too far.

One third of Pakistan under water from a deluge of rain and glacial melt. California broiling under all-time record heat, in September. A "doomsday" ice sheet melting in Antarctica.

The challenges of climate change and the transformation of our lives needed to address it can seem overwhelming. Is it even possible to fix a planet this far gone?

A visit to a unique nature park located on one of the earth's most despoiled rivers, within one of the world's most densely populated and polluted cities, was a reminder of just how resilient the earth ecosystems can be. Addressed properly, damage can be reversed.

But only if the planet isn't pushed too far, very much our current trajectory.

Few cities are as polluted as Delhi, and even fewer with the size of its population, approaching 30 million people. The Yamuna River, which runs through the megalopolis, consistently ranks among the most despoiled waterways in the world. The pollution in the 900 mile waterway comes mainly from Delhi, which contributes up to about 80% of the pollutants despite taking in about 2% of the river's length.

Yet Dr. Faiyaz Khudsar, a professor of biology at The University of Delhi, gave us a tour of an extraordinary stretch of the river.

Like Dr. Krishna Ray, who we met earlier in the journey working to restore mangrove habitats



in India's Sundarbans, Khudsar studied under Prof. C.R. Babu. Babu trained many of India's prominent environmental scientists, including Ray's spouse, another botonist whose research has focused on restoring Himalayan ecosystems. Babu pioneered many of the principles of what he calls "reconstructing" severely degraded natural habitats. As we saw with Ray's work in the Sundarbans, it takes many years and often starts with grasses that gradually change the microbial and chemical composition of the soil so that other native species can re-establish themselves.

"This is the only way to preserve the natural heritage in urban centers, where most of nature has been wiped away," Babu told me before we set off on our visit of the park.

Khudsar's enthusiasm for this patch of nature he's helped restore is infectious, and comes through in this similar tour available on YouTube.

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# Olivia Azadegan

MENA Energy Transition Director Clean Air Task Force

#### MENA's Potential as a Decarbonized Energy Provider

Major producers and exporters of fossil fuels have the potential to become decarbonized energy providers. First, they need to deploy essential climate technologies and climate solutions which include fossil fuel transformation to alternatives such as low carbon hydrogen and ammonia, as well as enabling technologies and measures involving carbon management and methane controls. Second, these technologies must be commercialized. The third is fostering clean energy and energy security for Europe. Both Europe and Asia are going to need imports of clean energy to deliver on their net zero targets and the MENA region can help support these needs and demonstrate its climate leadership by moving towards large-scale decarbonization.

#### No Single Definitive Pathway to Decarbonization

We need adaptive policy that responds to changing markets. Since we have never done this before, we should refrain from thinking that there's a silver bullet policy or technology that can deliver the comprehensive systems' transformations that we need. The GCC can help develop a global market for hydrogen, but this requires partnership and international cooperation. National oil companies are in a good position to support and lead in creating a zero carbon fuels market. They can do this by scaling their supply and creating the right policy and market conditions through international cooperation.

#### **Investment in Technology**

Cost effectiveness is one dimension we should consider, but it is not the only item policy makers should consider. We want the region to be investing in decarbonized energy options and we are already seeing more ambitious hydrogen and ammonia fuels, production targets, and the scaling up of carbon capture and storage. But we need to see the deployment of climate innovation technologies at scale so that the region can be a leader. Developing zero carbon fuels projects on the enabling supply chain will provide the greater granularity on what policies would be required to allow for the further expansion of these zero carbon fuels. \*Paraphrased Comments

"Cost effectiveness is one dimension we should consider, but it is not the only item policy makers should consider."







#### FULL INTERVIEW HERE



## **EXCLUSIVE SOUNDINGS**

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ENERGY TRANSITION: "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 carbon-intensive 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."

# Sultan Al Jaber

UAE Special Envoy for Climate Change & Minister of Industry and Advanced Technology, CEO of ADNOC Source: The National - 05/09/2022

ENERGY JOBS: "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."

### **Fatih Birol**

Executive Director, International Energy Agency Source: IEA

