Outgoing World Petroleum Council President Tor Fjaeran tells the Daily News that innovation is the key to the energy transition.

WPC shines spotlight on future of energy

Charitable outlook a mainstay at WPC

Energy giants prepare for low-carbon future

Contributing to a sustainable future through cleaner energy
World Petroleum Council embracing all things energy

Focus expanding while many member nations have net zero goals: WPC President Tor Fjaeran

Outgoing World Petroleum Council President Tor Fjaeran has been at the helm of the World Petroleum Council during a turbulent 48 months in the run-up to the 23rd World Petroleum Congress that opened yesterday amid the backdrop of the global coronavirus pandemic.

"We find it’s important to cover the entire value chain," says Fjaeran, while acknowledging the importance of the energy transition that is gaining traction and accelerating worldwide.

"Since the world is measuring the industry on its emissions for Scopes 1, 2 and 3... we would like to change our industry on its emissions for Scopes 1, 2 and 3. We would like to change our perception of this industry, the energy industry, is such that we attract and communicate in a way so the perception of this industry, the energy industry, is such that we attract and retain the talents," he says.

"So, it’s about innovation — technology innovation, it’s about people, it’s about climate change, it’s about politics, it’s about capital, it’s about the environment impact, social impact and perception." He adds that the Council is also concerned about the environmental impact of the oil and gas industry. "[It] is about not harming the planet Earth... it’s also important to communicate in a way so the perception of this industry, the energy industry, is such that we attract and retain the talents," he says.

"Outgoing: World Petroleum Council President Tor Fjaeran has been at the helm for four years Photo: WPC"

Outgoing World Petroleum Council President Tor Fjaeran has been at the helm for four years. According to the Paris Agreement, which the WPC (World Petroleum Council) are supporting fully," says Fjaeran. "And for us, it has been important really to listen to the members. Listen to the stakeholders, listen to the young professionals — who have a young professionals’ organising committee — to see what are the key issues framing this energy transition, which will form our agenda going forward because we are a forum for dialogue.

"The main dialogue arena is the Congress we have in the three-year cycle. In between each Congress we have also have the Leadership Forum, which is about sustainability, co-operation and response to the operations. The Council too has a Youth Forum, which addresses the issues coming up from the next generation and creates a dialogue between the external rotation and industry leaders. It also launched a downstream conference a couple of years ago.

"Fjaeran says the Council’s position is that innovation is fundamental to the energy transition — innovation that comes from people, from education, from skills.

"And we also state that climate change is the main global driver... and politics are driving the process in regulating the steps. We saw that in Glasgow (at COP26) and we will experience more of that in Houston.

"We also state that access to capital is necessary to make all this happen." He adds that the Council is also concerned about the environmental impact of the oil and gas industry. "[It] is about not harming the planet Earth... it’s also important to communicate in a way so the perception of this industry, the energy industry, is such that we attract and retain the talents," he says.

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MONDAY, DECEMBER 6, 2021

8:30 – 9:00AM CST  Opening Keynote Session
GENERAL ASSEMBLY
PRESENTERS:
THE HONORABLE SYLVESTER TURNER, Mayor of the City of Houston, Texas, USA
TOR FJÆRAN, President, World Petroleum Council
DAVID M. TURK, Deputy Secretary, U.S. Department of Energy, USA

9:00 – 10:00AM CST
PL1: Innovative Energy Solutions
SESSION TYPE: PLenary SESSION | GENERAL ASSEMBLY
SPEAKERS:
DARREN WOODS, Chairman & CEO, ExxonMobil Corporation, USA
MIKE WIRTH, Chairman & CEO, Chevron, USA
JEFF MILLER, Chairman, President & CEO, Halliburton, USA

10:00 – 11:00AM CST
PL2: Innovative Energy Solutions: The International Perspective
SESSION TYPE: PLenary SESSION | GENERAL ASSEMBLY
SPEAKERS:
ARNE SIGVE NYLUND, & Production, Chevron, USA
& Procurement, Equinor, Norway
MIKE WIRTH, Chairman & CEO, Chevron, USA
JEFF MILLER, Chairman, President & CEO, Halliburton, USA

11:00 – 11:15PM CST  Coffee Break

11:15 – 12:15PM CST
Ministerial Plenary: Future Energy Markets
MODERATOR:
TOR FJÆRAN, President, World Petroleum Council
SPEAKERS:
DAVID M. TURK, Deputy Secretary, U.S. Department of Energy, USA

12:30 – 2:00PM CST
WPC Excellence Awards
SESSION TYPE: SPECIAL EVENT | GENERAL ASSEMBLY
SPEAKER:
TOR FJÆRAN, President, World Petroleum Council

3:45 – 4:00PM CST  Tea Break

1:00 – 2:00PM CST
IE1: Exploration Hotspots
SESSION TYPE: STRATEGIC SESSION | ROOM 310
MODERATOR:
ROBERT W. DUDLEY, President & CEO, ExxonMobil, USA

3:00 – 5:00PM CST
Session Break

1:00 – 2:00PM CST
IE2: Oil Mega Projects - Best Practices
SESSION TYPE: STRATEGIC SESSION | ROOM 310
MODERATOR:
RICK BILBERRY, Chief Operating Officer, Saudi Aramco, Saudi Arabia

2:15 – 3:45PM CST
IE4: A Strategic Approach to Integrated Downstream Mega Projects
SESSION TYPE: CEO PANEL | ROOM 320
MODERATOR:
RICK BILBERRY, Chief Operating Officer, Saudi Aramco, Saudi Arabia

Evening
Private Receptions
Around the table...

Council Members from 28 countries with others linked in by Teams Meeting from around the world met again yesterday at the World Petroleum Council Meeting held in Houston in advance of the Opening Ceremony for the 23rd WPC.

Executive Committee members updated the Council on progress and projects covered in the last year and voted in the new Officers who will support the 24th WPC cycle.
INTERVIEW

High hopes for transition

In response to an Upstream survey of leading industry executives, Baker Hughes chief executive Lorenzo Simonelli gives his view on topical issues shaping the sector.

UPSTREAM: What impact will the energy transition have on the operations of oil and gas companies over the next five years and beyond?

SIMONELLI: As we look ahead to 2022, we see continued signs of global economic recovery that should drive further demand growth for oil and natural gas. Although we do not expect the same oil and gas order levels as in the past years, new opportunities are emerging.

Activity is becoming increasingly concentrated in low-cost basins and upstream spending for larger operators is being reallocated to other areas as the energy transition is driving a shift towards low- and zero-carbon fuels.

We believe the energy transition will require operators to increase efficiency through digital transformation and accelerate decarbonisation of their operations, both to achieve their own carbon reduction goals and to navigate the current macro environment.

UPSTREAM: Is natural gas becoming more attractive than oil for companies and, if so, what implications does that have for the business?

SIMONELLI: We believe natural gas should be considered both a transition and a destination fuel, although its use and applicability will vary by region and country.

Natural gas has clear emissions advantages over coal, oil, and other fuel sources. We must continue to improve the carbon footprint of natural gas to ensure it has a strong role in the long term.

UPSTREAM: How can large-scale, multi-billion-dollar conventional oil and gas developments, including in deep waters, continue to compete for capital?

SIMONELLI: Technology solutions to improve the cost and profitability profiles of current fields will be critical in the short to medium term. In addition, we must continually improve the carbon footprint of oil and gas operations to be competitive with lower to zero-carbon fuel sources.

Technologies such as carbon capture, utilisation and storage can certainly help operators avoid emissions, but industry also must deploy more methane monitoring and reduction technologies to meet current environmental standards and expectations.

UPSTREAM: The debate around COP26 revealed widespread perceptions that the oil and gas sector is more concerned about preserving the value of fossil fuel assets than engaging in real energy transition. Such divisions can be seen when the different “colours” of hydrogen are discussed. What role must oil and gas companies play in the energy transition, and how do they build trust?

SIMONELLI: COP26, as well as the gas shortages and energy crises we are seeing in places like Europe, have highlighted the larger dual challenge that the world is facing: The world needs more energy, but it also needs to reduce emissions from energy at the same time.

This challenge is why oil and gas — as well as broader energy companies — play a crucial role in the energy transition.

Companies like Baker Hughes and our customers can provide reliable, affordable, and accessible energy as we continue to work towards net-zero emissions.

To build trust, we must continue to be transparent about our ESG (environmental, sustainability and governance) goals and performance metrics, as well as rethink the way we invest and focus our time to ensure hydrogen, carbon capture, utilisation and storage, and energy storage receive the resources they need to ultimately scale for the long term.

UPSTREAM: What are your hopes and fears for energy transition?

SIMONELLI: My hope for the energy transition is that we continue to collaborate to move faster. Rather than operate in siloes, it is far more effective for companies to combine or partner to scale emerging technologies and capabilities, especially with the urgency around climate change.

The wave of collaborations since early 2020 has been encouraging. Baker Hughes has announced more than a dozen collaborations with other companies in the past two years.

As we turn our attention to meet 2030 and 2050 milestones on our way to net zero, these collaborations will mature and play an important role in moving energy forward and making a tangible difference in reaching our shared emissions reduction goals.
Charitable outlook a mainstay for WPC

World Petroleum Council Director General Pierce Riemer tells Upstream how organisation uses profits for charitable activities

We pride ourselves in being neutral, non-political where we’re open to all.

WPC Director General Pierce Riemer

NOT everyone might be aware that the World Petroleum Council, the driving force behind the usually triennial World Petroleum Congress, is registered as a charity in the UK.

This is something which the Council believes makes it unique among its peers, according to World Petroleum Council Director General Pierce Riemer.

“That is because all the profits from our events go into charitable activities in the country where we operate,” he says.

This started on a small scale in China around 1997, when the Council donated technical equipment and materials from the event.

“In Canada, we started doing it properly. The Canadian government said they would match us dollar-for-dollar because the profits were going to charity. And so, in Canada, we made C$5 million, the Canadian government gave an equivalent amount; and so we set up a millennium fund for graduates in Canada.

“It was a gift. It wasn’t a grant... and they didn’t have to join the oil and gas industry, but they had to do a business or science-related subject, and we ran that for about 10 years until the money ran out. The Council continued with similar efforts after each Congress.

In Rio de Janeiro in 2002, “because we desperately try at all our events to avoid waste, we started a scheme with the exhibition where — when the exhibition was over — all the carpets, anything that could be salvaged from the exhibition that would normally just go into landfill in Rio went to the favellas; it went to schools”, adds Riemer.

Fast forward to the Congress in Doha, Qatar, where the Council donated its profits as seed capital towards establishing an oil and gas museum there. The Council has also set up a separate fund, of which a proportion is spent in countries that perhaps could not otherwise organise a Congress."

One project was to support the training of technicians in Pakistan in basic computer, mechanical engineering, and civil engineering skills, where they could get jobs with service companies, oil companies and energy companies.

“We pride ourselves in being neutral, non-political, where we’re open to all. It’s obviously difficult in the oil and gas industry to avoid geopolitics altogether. But everybody is welcome.

“And we often have our own committee meetings where you will have the US, Israel, Iran, and Cuba all in the same room happily together,” he says.

The Council today has some 60 member nations but — especially during Congresses — it proactively encourages others to join. Guyana and Ghana are both on its current hit-list, reveals Riemer.

Organising the 23rd WPC has not been without its challenges — the Covid-19 pandemic put paid to the original December 2020 schedule, and current restrictions have stopped some people from attending this week’s event. Visa issues can also be a hurdle for some, so unfortunately government ministers from Iran are not attending this time around, but a delegation from Cuba will be here, says Riemer, proudly.

Thomas Dewhurst almost 90 years ago established the Council, and the first Congress was held in London in 1933.

“He wanted to set up an organisation that was non-political, neutral, non-religious, that could get people from around the world to come and discuss issues relating to oil and gas,” says Riemer.

“His vision at the time — I know they didn’t have vision and mission statements in the 1930s — but his vision was: He wanted a WPC to promote petroleum for the benefit of mankind,” he says of the Council’s founder.

In his honour, the Council presents the Dewhurst Award, albeit not at every Congress. The recipient this year of the prestigious prize will be Daniel Yergin.
SOUTH AMERICA

Pair in licensing revival

Colombia quickly recovering pace of licensing process as Ecuador targets fresh start

GARETH CHETWYND

Houston

ECUADOR and Colombia are both striving to attract new investment to their oil sectors, although the two Andean nations have a sharply differing contracting history.

EP Petroecuador is following up on a 29 November tax decree that will allow a return to the production-sharing contracts terminated by Ecuador’s former president Rafael Correa a decade ago.

The state-run company is now tendering for international consultation services for a sweeping analysis of the regulatory model for oil and gas, while seeking recommendations for optimising hydrocarbon resources and aligned with international good practices.

The recent tax decree also opens the way for competitive bidding processes, whether for EP Petroecuador’s assets or for open acreage.

The company’s current contractors — some of which are oil companies — on 35 fee-paying contracts have been given 90 days to notify the company of intention to convert to PSCs and initiate negotiations.

Three such notifications have been received so far, according to Ecuador’s Energy Ministry.

Ecuador President Guillermo Lasso took office in May promising measures that would boost investment and double oil production to 1 million barrels per day.

However, due to the difficulties posed by the pandemic, the administration is likely to fall short of its short-term aim of boosting output by 40,000 bpd by the end of 2021.

One of EP Petroecuador’s projects on the table for 2022 is Amistad, an offshore gas field in the Gulf of Guayaquil.

Ecuador is also preparing the second Intracampos bid round for mid-2022, covering six blocks in the mature north-eastern oil provinces of Sucumbios and Orellana.

A competitive process for Sacha, a large mature field, is also expected.

Meanwhile, Colombia, which already has a strong track record for attracting investment, held its latest bid round last week, and Canada’s Parex Resources was in the thick of the action, making highest bids for 18 areas.

Fellow Canadians Canacol Energy and Frontera Energy also submitted winning bids, while Colombia’s own Ecopetrol and its Hocol subsidiary bid on five blocks.

“Today we received valid bids for 30 new areas out of the 53 on offer,” stated Colombian Energy Minister Diego Mesa, in a LinkedIn post soon after the event.
Four Key Findings from the WPC Global Youth Survey

With widespread agreement that our industry needs to renew its talent pool as the energy transition accelerates, the 2021 WPC Global Youth Survey focused on ‘Youth Perception of the Oil & Gas Industry: Attracting, Developing and Retaining Talent.’

Sixty-eight percent of survey respondents already work in oil and gas (~1% of whom are professionals under the age of 35), 23% were students, and the balance other interested individuals.

This article highlights four of the findings relevant to young professionals today.

**Overall sentiment is positive.** Survey respondents were very positive towards the industry. Most students and those looking for employment considered working in Oil & Gas a somewhat (24%) or very attractive (69%) prospect.

However, perspectives differed slightly by geography, with North America and Europe scoring lower than other regions. These areas have more intense competition for young talent across industries, as well as greater uncertainty to realize potential energy and concern about fossil fuels. Young professionals appear to be enthusiastic about the industry, but not blind to its current issues.

**People are drawn to career growth opportunities and income potential.** When asked what aspects of work mattered most to them, employed survey respondents named monetary compensation, career growth opportunities and work-life balance as top priorities. These priorities shifted in relative weighting over time. Progressively older age cohorts showed a steady increase in the desire for financial compensation, accompanied by a corresponding decline in the importance of career growth opportunities.

Viewing these findings in the context of positive sentiments toward working in the industry suggests that Oil & Gas promises young professionals both career growth opportunities and strong income potential.

**Career challenges have remained consistent since 2017 survey.** However, the industry must improve its ability to deliver on that promise. Respondents’ main challenges have remained remarkably consistent: work-life balance, promotion opportunities, and lack of career path visibility. These were identified among top challenges both this year and in 2017.

Survey results found that the global average progression pace is 4.4 years. Since career growth is important to young professionals, this highlights an opportunity for companies to accelerate their progression practices while increasing the visibility into potential career paths and options. Interestingly, while monetary compensation was a top priority for many respondents, it was rarely identified as a concern.

**Companies have the potential to accelerate the energy transition but need to do more.** Most respondents believed that demand for oil and gas will continue to grow over the next 20 years (79%), and trust that they will still be a key energy source in 40 years’ time (64%).

At the same time, approximately half believe the energy transition will render the Oil & Gas industry obsolete.

Most see Oil & Gas playing a key role in mitigating climate change. While 90% of respondents believed that the industry could make significant contributions to reducing greenhouse gas emissions, 42% feel that it is currently not doing enough.

These insights highlight young professionals’ growing environmental consciousness and concerns with the industry’s perceived lack of action.

Overall, the 2021 WPC Global Youth Survey suggests that Oil & Gas offers an excellent career opportunity to young professionals – but that this generation will also be an important catalyst for change.

**WPC Global Forum Stage, 6 December, 2021**

The WPC Global Forum Stage will feature several sessions from the Global Sustainability Program and the Young Professionals Program and is located between the Global Sustainability Booth and the Youth Stand Café. During the sessions today, we will learn from successful innovators how startups are contributing to the innovative culture of the oil and gas industry, helping to meet today the energy needs of tomorrow.

In addition, don’t miss the opportunity to meet the WPC Young Professionals Committee, learn about the initiatives they lead abroad and discover how to get involved in international case competitions, mentoring programs, and future WPC events.

- December 6th, 11:15 to 11:45am Young Professionals and Global Sustainability Stand Opening – Global Forum stage
- December 6th, 12:00 to 1:30pm Talks with Giants – Global Forum stage
- December 6th, 1:30 to 2:00pm We Want You – Café area
- December 6th, 14:15 to 16:30pm WPC Excellence Awards – Global Forum stage
- December 6th, 3:00 to 4:30pm Industry Odysseys: Innovation – Exhibition tour, meet at the YP café
- December 6th, 5:00 to 6:00pm Young Professionals Afterwork – Between the WPC YP stand and Hess.

Young Professionals: Leading to a Sustainable Energy Future

Leading to a Sustainable Energy Future is an exciting challenge shared between members of the energy industry as we work to bring essential resources to market while reducing our carbon footprint.

To meet that dual challenge, oil and gas companies will need to drive its culture of creativity to relentlessly innovate, optimize, and invent. The 23rd WPC Young Professional’s program session

**Talks with Giants (12:00 to 13:30pm, Stage) explores what it means to innovate in our industry through the eyes of successful startups that are impacting how we meet that dual challenge.**

**During the We Want You session (1:30 to 2:00pm, Café area), World Petroleum Council Young Professional Committee (WPC YPC) representatives from the USA, Spain, and Poland will share some insight as to how the WPC YPC works within their countries and internationally to develop future leaders that are ready to address the dual challenge of our time.

Come join 23rd WPC Young Professional Program Committee for exclusive and insightful tours of the Exhibition Hall during the Industry Odysseys session (3:00pm to 4:20pm) to see how companies such as BP, Halliburton, and Cognite are leaders in providing Innovative Energy Solutions to the world.

At the end of the day, join colleagues and friends at the Youth Stand and Hess booths, where the Youth Stand and Hess booths will be open for us all to network together and explore what we collectively think are Innovative Energy Solutions.
Every three years at the World Petroleum Congress, the World Petroleum Council recognises some of the most outstanding projects and innovations in the oil and gas sector with the prestigious WPC Excellence Awards (WPCEA).

The objective of the WPC Excellence Awards is to distinguish companies, institutions or any public or private organisation (not individuals) engaged in the oil and gas industry for promoting or operating with high excellence standards.

The WPC Excellence Awards Ceremony will take place on the first day of the Congress in the Plenary Hall.

12.30 to 2pm:
WPC Excellence Awards Ceremony — all finalists are announced and the winners in each category receive their Award

2.15pm to 3.45pm:
All the finalists’ projects will be showcased during the Congress. The Social Responsibility Finalists will present their projects at the Global Sustainability Stand with the Technological Development projects presented at the Digital Poster Plaza.

Over 130 nominated projects were reviewed by the independent judging panel in this cycle’s awards nominations.

WPCEA 2021 Judging Panel:
Social Responsibility
Miguel Moyano, Executive Secretary, ARPEL, Uruguay
Dr Pierce Riemer, Director General, World Petroleum Council
Brian Sullivan, Executive Director, IPIECA

Technological Development
Andy Calitz, Secretary General Elect, IGU
Iman Hill, Executive Director, IOGP
Mark Rubin, Executive Director, SPE, USA

The Finalists in each category are:

WPCEA for Social Responsibility (alphabetically by company)
Small to medium sized companies
Pertamina Refinery Unit III: Lighting Hopes: Electrify Rural Communities from Micro-Hydro Power Plant
Sakhalin Energy: Sakhalin: Indigenous Island
Salym Petroleum Development: Good Neighbour

Large Companies & NOCs
Chevron: Peace, Prosperity, and Partnerships in the Niger Delta
Chevron: Partnering to Eliminate Malaria in Bioko Island
ExxonMobil: Building local capacity in Guyana

WPCEA for Technological Development (alphabetically by company)
Small to medium sized companies
Aramco Americas: Senior Ball
Fishbones AS: Multilateral Well Stimulation
Kayros: Geospatial Monitoring for Oil & Gas Climate Stewardship
Weatherford: Verili Automated Connection Integrity

Large Companies & NOCs
Satbayev University: SmartTranPro software—energy saving of paraffinic oil transportation through pipelines
Saudi Aramco: Carbon Capture, Utilization and Storage Enhanced Oil Recovery Project

WPC Excellence Awards for Youth (in alphabetical order)
- Taha Enes Kon, Design Engineer, Turkish Petroleum Offshore Technology Centre
- Pedro Miras, Senior Gas Balance Analyst, Repsol
- Tamara Seres, WPC YP Representative for the Serbian National Committee

In recognition of the important contribution by youth to the energy industry, the World Petroleum Council rewards the best young authors of the Congress. These have been selected from the best abstracts submitted by young professionals under 35.
Chevron aims to be leader in new energies

In response to an Upstream survey of leading industry executives, Chevron New Energies president Jeff Gustavson gives his view on topical issues shaping the sector.

UPSTREAM: What impact will the energy transition have on the operations of oil and gas companies over the next five years and beyond?

GUSTAVSON: Individual companies are taking a variety of approaches while working toward a lower carbon future. We are addressing different needs, making different investments, and exploring different technologies.

Chevron intends to be a leader in efficient and lower-carbon production of traditional energy — in high demand today and for years to come — while growing the lower-carbon businesses that will be a bigger part of the future like hydrogen, carbon capture and storage, renewable fuels, and offsets.

We believe we are well positioned with an oil and gas business that is highly profitable, supports our financial position, and targets 35% reduction in upstream carbon intensity by 2028 from 2016.

To advance our 2050 net zero aspiration for equity upstream Scope 1 and 2 emissions, we’re taking actions to reduce the carbon intensity of our portfolio, investing in many greenhouse gas reduction projects intended to reduce methane emissions and flaring, as well as improve energy management.

We are supporting our energy transition strategy by tripling our planned total capital investment to $10 billion through 2028. ($2 billion in carbon reduction projects and $8 billion in low-carbon investments.)

UPSTREAM: How can large-scale, multi-billion-dollar conventional oil and gas developments, including in deep waters, continue to compete for capital?

GUSTAVSON: At Chevron, we believe in a two-pronged approach to addressing climate change that provides energy the world needs. We have the opportunity to reduce the carbon intensity of our operations, as well as growing and commercializing low-carbon businesses.

We have increased our lower capital investments and our ambitions to progress our energy transition goals, tripling our lower carbon capital versus prior guidance to over $10 billion between now and 2028. While Chevron has shifted somewhat to more short-cycle investments overall, major projects like deep-water developments still compete for capital because they deliver on both our higher returns and lower carbon objectives.

We have a disciplined approach to reducing carbon emissions consisting of activities across the spectrum — from operational practices to design standardization, to deployment of new technologies. And US deep-water developments can produce some of the lowest carbon barrels in the world.

Our goal is to maintain our position in the first quartile of all upstream producers in producing energy at a carbon intensity well below the average of the global system.

UPSTREAM: Where do you expect the oil price to be by the end of this year? And in five years? What are your hopes and fears for energy transition?

GUSTAVSON: We do not speculate on the direction of prices or future market conditions and instead we focus on those things under our control.

Our hopes are that together, we — industry, governments, and society — can achieve our lower carbon ambitions while still delivering the energy the world needs to progress.

We believe energy transitions must work for all.

We support markets, partnership, and competition as the most effective way to deliver the progress needed to achieve shared goals.

Together, we are poised to create innovative solutions to meet the world’s biggest challenges.
Duo agree Abu Dhabi low-carbon push

Adnoc and TotalEnergies team up for hydrogen and CCS projects

NISHANT UGAL
Houston

Abu Dhabi National Oil Company (Adnoc) has signed a key strategic deal with France’s TotalEnergies aimed at working together on low-carbon hydrogen and carbon capture and storage (CCS) projects.

The agreement was signed during French President Emmanuel Macron’s visit to the United Arab Emirates over the weekend.

Abu Dhabi’s media office confirmed the development in a social media post and said the two companies would “explore areas of mutual interest”.

“The agreement covers CCS, low-carbon H2 and talent development,” it added.

The deal also aims to mutually explore opportunities in upstream oil and gas operations in Abu Dhabi.

Multiple agreements were signed between the UAE and French companies during Macron’s visit, encompassing the renewables, utilities, defence and nuclear sectors, local media reported.

TotalEnergies has a strong presence in Abu Dhabi and partners Adnoc on several oil and gas concessions in the emirate.

The two companies last year signed a deal to combine their technological know-how to drive down carbon emissions at oil and gas projects, and a framework agreement to jointly work on carbon dioxide emissions reduction and carbon capture, utilisation and storage schemes.

The agreement is in line with Abu Dhabi’s goal to reduce greenhouse gas intensity by 25% by 2030, Adnoc had said.

The company has established the Al Reyadah facility, the first commercial-scale CCUS scheme in the Middle East, with current capacity to capture 800,000 tonnes per annum of CO₂.

The company aims to expand the capacity of this programme six-fold with the aim of reaching 5 million tpa of CO₂ by 2030.
SPECIAL THANKS TO THE 23RD WPC SPONSORS

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OFFICIAL PUBLISHERS

PETROLEUM ECONOMIST  upstream
NISHANT UGAL

QATAR Petroleum (QP), recently rebranded as QatarEnergy, is highlighting its increased focus on energy transition even as the emirate prepares a massive expansion of its liquefied natural gas production capacity to 126 million tonnes per annum by 2027.

The Qatari giant is among the first Middle East national oil and gas companies to have rebranded itself as a diversified energy company as it aims to lower carbon emissions and speed up its energy transition drive.

The company said it aims to emerge as a leading global low-carbon producer of LNG, which it sees as a transition fuel in the immediate future.

Chief executive Saad Sherida al Kaabi said that becoming QatarEnergy reflects the company’s understanding of the global changes and its response to the need to protect the planet and its environment.

Al Kaabi said the company is ensuring that it protects the environment by keeping its “carbon footprint at a minimum”.

“This is why we are utilising sophisticated carbon sequestration methods to capture and sequester 9 million tonnes of CO₂ per annum by the end of this decade,” he said.

However, experts believe that increased LNG production in the coming years is likely to lead to higher emissions for the company and the emirate needs to come forward with a clear net-zero goal if it aims to substantially lower emissions. Al Kaabi said that in the ongoing energy transition, LNG offers the advantages of versatility, flexibility and price.

Al Kaabi noted that natural gas will continue to “be the partner of choice for renewables in the transition journey and beyond”.

The company is spending billions of dollars to increase LNG production from its giant North Field, with the expansion process spread across two stages.

QatarEnergy has said it plans to reduce the carbon footprint at the flagship North Field through substantial reduction of fuel gas consumption and capturing and reinjecting carbon dioxide.

Bachir Zaatari, regional downstream business plan manager for the Middle East upstream analysis vice president Aditya Sarawat said QatarEnergy intends to reach a methane intensity of 0.2% by 2025, zero natural gas flaring, and a portfolio with more than 40% LNG by 2030.

Sarawat added that the company has also set a target of reducing direct and indirect emissions, by 2025 compared to 2013 levels.

Al Kaabi earlier said that the company has commissioned a facility at Ras Laffan, which has become the largest CO₂ recovery and sequestration facility in the Middle East region with a capacity of handling 2.1 million tpa of CO₂.

Qatar’s LNG industry will be “capturing and sequestering more than 5 million tpa of CO₂ by 2025”, he noted.

Energy giants prepare for low-carbon future

Leading national oil companies in the Middle East are increasingly aiming to reduce their carbon footprints as the energy transition gathers pace, while continuing to invest heavily in expanding their oil and gas production capacities.

Opec kingpin Saudi Aramco has recently announced long-term net-zero goals, while others say they are preparing for a low-carbon future.

Saudi Aramco recently became the first player in the region to declare a net-zero ambition for 2050.

The Saudi de facto ruler said the first package launched by the country to develop its green economy would involve more than $187 billion worth of investments.

Aramco said it plans to disclose further details on its net-zero goals in its forthcoming sustainability report, to be issued in the second quarter of 2022.

Saudi Arabia aims to emerge as a leading global hydrogen player and plans to produce and export 4 million tonnes of hydrogen by 2030, its energy minister recently said.

The United Arab Emirates was the region’s first nation to reveal a long-term net-zero plan, which aims to achieve net-zero emissions by 2050.

Dubai’s ruler, Sheikh Mohammed bin Rashid al Maktoom, said the UAE would invest almost $165 billion in clean energy by 2050.

However, unlike Saudi Aramco, Emirati state-owned Adnoc is yet to come up with a similar net-zero goal.

Robin Mills, a regional energy expert and chief executive of Dubai-based consultancy Qamar Energy, said the national oil companies’ net-zero ambitions are more likely to be dictated at a national, rather than board, level.

However, he added that the companies are concentrating on developing their core business and making it more robust to the energy transition, while extending the core into closely related areas.

Adnoc has made several announcements throughout the year aimed at expanding its presence in the hydrogen market and driving billions of dollars worth of investments into clean and low-carbon energy solutions.

NISHANT UGAL
New Delhi
Adnoc steps up drive to become leading player in hydrogen market

NISHANT UGAL

Abu Dhabi National Oil Company (Adnoc) aims to become a “major player in the emerging blue hydrogen market”, with its abundant gas supplies placing it at the forefront of hydrogen initiatives in the Middle East.

The company is also exploring the potential of green hydrogen, which is made using renewable energy and is free from carbon emissions, as blue hydrogen still has associated emissions.

Adnoc believes its existing gas infrastructure and commercial-scale carbon capture, utilisation and storage (CCUS) capabilities make it well-positioned for the opportunities in the hydrogen market.

Robin Mills, chief executive of Dubai-based consultancy Qamar Energy, said Middle East national oil companies have a clear competitive advantage in blue hydrogen, “and this is where Adnoc and Aramco have focussed most of their attention so far”.

“It fits well with existing assets, skills and business models,” he said.

Adnoc, along with compatriot Fertiglobe, recently sold cargoes of blue ammonia — made from nitrogen — to Japanese players amid an increased clean energy push in the emirate.

In May, Adnoc announced that it is progressing plans to build a large blue-ammonia project as it deepens the UAE’s exposure to emerging low-carbon fuel value chains.

The facility, which has moved to the design phase, will be developed at the new Ta’ziz industrial complex and chemicals hub at Ruwais, in the west of the country.

The facility is expected to have a capacity of 1 million tonnes per annum, with Fertiglobe joining Adnoc and ADQ as a partner in the project, subject to regulatory approvals.

UK supermajor BP, the UAE’s Adnoc and compatriot Masdar recently signed a trio of agreements aimed at developing low-carbon hydrogen hubs, working on sustainable energy and mobility solutions for cities in the UK, the UAE and elsewhere.

The agreement could also potentially “lead to the first international investment in BP’s planned low-carbon hydrogen facility in Teesside (H2Teesside, in the UK), which aims to produce 1 gigawatt of blue hydrogen starting in 2027,” Adnoc said.

An Adnoc spokesperson told Upstream that the company is “working with existing and new partners around the world to identify markets, map out value chains and develop a roadmap to create a hydrogen ecosystem.”

Adnoc signed an agreement earlier this year with Mubadala and ADQ to form a hydrogen alliance focusing on both green and blue hydrogen.

It forms part of Abu Dhabi’s energy diversification plans as the emirate looks to establish itself as an exporter of hydrogen to emerging international markets, while also building a local hydrogen economy.

While green hydrogen will form part of the alliance’s plans, Adnoc has stated that its main focus will be on blue hydrogen as it looks to leverage its significant gas reserves.

The company already produces about 300,000 tpa of hydrogen for its downstream operations and has previously stated it intends to expand it to more than 500,000 tpa.

Adnoc chief executive Sultan Ahmed al Jaber has said that he believes the UAE could become “one of the lowest-cost and largest producers of blue hydrogen in the world” utilising CCUS technology.
What’s your profitable path to net-zero?

Knowing where to invest, which technologies to deploy and the right decarbonization path to pursue are big bets placed today (or perhaps better delayed) that will impact your company for decades. Understand shifting markets and evolving policies to navigate the opportunities and tradeoffs amongst biofuels, hydrogen, petchem refining integration, and a fuels-centric business.

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