Energy in focus
Top-level talks tackle challenges

Stars align
Istanbul hosts industry leaders

Houston calling
WPC 2020 heads to Texas

Crossing the energy bridge
From Istanbul...

...to Houston
You deserve some VIP treatment

Upstream has, in just over twenty years since its launch, firmly established itself as the leading news source in the international oil and gas industry. Our policy is to relentlessly pursue accurate, exclusive and independent news on the entire upstream oil and gas industry in every corner of the globe. The focus is on business, policy and the key players. The daring news content is supported by features, commentary and profiles offering an inside view of the issues and the people that make a difference in the industry.

Upstream newspaper is read each week by almost 40,000 influential executives in more than 100 countries. With an experienced team of 30 reporters strategically located in key oil & gas cities on six continents, Upstream provides the unbiased, independent journalism that business leaders have come to depend on to fill their news and information needs. Upstream publishes a weekly newspaper complemented by round-the-clock digital news coverage.

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Our team in Turkey did an amazing job. Headed by the chief executive of TP and under the auspices of the President of Turkey they pulled out all the stops. We attracted more than 12,000 attendees from 102 countries. Included within the attendees we had seven heads of state, 38 ministers, 620 speakers and more than 500 chief executives, presidents and heads of international organisations.

Energy transition was a key topic discussed in several sessions. It is often portrayed in the media in terms that compare it to a revolution, a moment in time when everything changes. Countries and different sectors will advance at different speeds and we are talking about changes that will take place over generations.

Despite the growth of renewables, fossil fuels will continue to be a major part of the energy mix. Most organisations estimate that more than 70% of the world’s energy needs by 2050 will be provided by coal, oil and natural gas. However, the energy mix is expected to gradually shift over time towards more renewables.

We will need all energy sources in order to satisfy this rising demand and continue to support economic development, while at the same time mitigating the impact of climate change — another key issue discussed at the congress.

Driving technology and innovation in combination with clear, predictable energy policies making lower carbon energy sources competitive were issues seen by many as critical.

Over the next 25 years we are going to see a world economy that will double in size and billions of people moving out of poverty as living standards rise, resulting in at least another 2 billion energy consumers.

How will the oil and gas industry be able to continue to provide the safe, affordable, reliable, and sustainable energy required by the world’s growing population, while mitigating its climate impacts?

Firstly, it will require open and competitive markets. Secondly, we think that natural gas will provide a vital lower carbon energy source. It is abundant and affordable. Thirdly, we must leverage the power of innovation and technology to make the use of oil and gas more efficient and minimise emissions.

The final factor is policy. In some places policy-makers are acting to advance lower carbon energy. In others, technology and economies of scale are acting to bring down the cost of lower carbon energy. Either way, we need to respond by making our businesses fit for a low carbon world.

The World Petroleum Council has been dedicated to promoting the sustainable management and use of the world’s petroleum resources for the benefit for all. Since 1933, our mandate has been to provide a neutral platform to bring together the best minds in the industry with key decision makers to discuss the best way forward for all involved in oil and gas.

WPC is contributing through our “meeting places” including expert workshops, our leadership conference and youth forum to the congress. All are ideal arenas and platforms for establishing and nurturing relations and contacts that are the basis for co-operation, not only between companies, but also between organisations and nations.

At the Congress we awarded the Dewhurst Award to Rex Tillerson, Secretary of State for the US. In his acceptance speech he congratulated the industry on its achievements and welcomed everybody to the next Congress in Houston, which he said he will attend “in some form”. A large number of industry leaders and experts will be gathered there in Houston in 2020 to hear the views of key decision-makers on future developments in our industry.

We expect that the geopolitical context, climate change, cost resilience, energy mix developments, producer/consumer issues, people, technology & innovation and the industry’s reputation and role in society all will be relevant and challenging issues. We will also be able to see how governments and industry leaders take leadership, commitment and a long-term perspective in securing the future of clean and sustainable energy.

Dr Pierce Riemer
Director General of the World Petroleum Council
US Secretary of State and former chief executive of ExxonMobil delivered a very personal speech at the opening of the 22nd World Petroleum Congress in Istanbul as part of his visit to receive the prestigious Dewhurst Award, write Kathrine Schmidt and Erik Means.

US Secretary of State Rex Tillerson delivered the Dewhurst Lecture at the opening of the 22nd World Petroleum Congress in Istanbul, saying that oil and gas players will continue to “make the massive investments, they’ll take the risks and they’ll persevere” to keep the world supplied with the energy it needs.

A moved Tillerson was in Turkey to accept the prestigious Dewhurst Award at WPC on the opening night of the congress.

The former ExxonMobil chief, who spent more than 41 years in the industry, credited his professional success to the people of the US supermajor.

“I’m here because of what they did, not because of what I did,” he told a packed auditorium. The audience included myriad energy ministers and executives from across the globe. The usually reserved Tillerson further used his brief remarks to pay heartfelt tribute to the “remarkable” people of the oil and gas industry, who he said worked with great risk and little public notice to deliver the energy crucial to economic growth and poverty alleviation.

Fundamental ingredients are required to keep investors active, he said, citing “a strong rule of law, international order, a respect for contract sanctity, and a level of integrity between partners and counterparts”.

Tillerson added that the industry “must continue to invest in human talent” moving forward.

“What I miss most, I miss all of you. I miss you as colleagues, I miss you as partners, I miss you as competitors, I miss the healthy debates, the collaboration, the breakthroughs that were achieved.”

Tillerson, who was notified of his selection for the award in 2016, joked that he expected to make the visit to Istanbul as a leisurely and relaxing trip after his expected retirement from the US oil giant.

But, he said wryly, “it didn’t quite work out that way”, with Donald Trump winning the US presidential election and asking Tillerson to take the job as...
the nation's top diplomat, a role he also filled on Sunday night. “Turkey is also an important partner in our efforts to promote greater energy security,” he said. “The United States looks forward to engaging with Turkey on projects that will increase global energy security, such as the southern gas corridor and eastern Mediterranean gas. These projects will enable Europe to diversify its energy sources thereby improving its energy security.”

Tillerson also took a moment to remember those killed or injured in July 2016, when a coup was attempted against the Turkish government. “Nearly a year ago the Turkish people, brave men and women, stood up against coup plotters and defended their democracy,” he said.

With the next WPC taking place in Houston in 2020, Tillerson assured listeners he would show his gratitude by being present at that event. “We look forward to hosting you as well.” He added wryly: “I will be there, in some capacity, one way or the other.”

Rex Tillerson, US Secretary of State and past chairman and chief executive of ExxonMobil, was recognised for his “outstanding contribution to the oil and gas industry” with the highest honour of the World Petroleum Council, the Dewhurst Award. This distinguished lifetime achievement award celebrates his exceptional leadership of the largest publicly traded oil and gas company in the world over the past 10 years. Tillerson is only the tenth recipient of the Dewhurst Award in the history of the WPC.

The award is named after Thomas Dewhurst, who organised the first World Petroleum Congress in 1933.

Past recipients of the Dewhurst Award:

- Dr Saleh Al-Athel, president, King Abdulaziz City for Science & Technology, Saudi Arabia (1991)
- Sir Peter Holmes, former chief executive, Royal Dutch/Shell group (1994)
- Kenneth Derr, chairman and chief executive, Chevron (1997)
- Pierre Jacquard, chairman and chief executive, IFP, France (2000)
- Euan Baird, chairman and chief executive, Schlumberger (2002)
- Lord Browne of Madingley, chief executive, BP (2005)
- Guilherme De Oliveira Estrella, chief E&P officer, Petrobras (2011)
- Abdulla Bin Hamad Al Attiyah, former deputy prime minister of energy, Qatar (2014)
22nd WPC Opening ceremony
AT THE SHOW

Photos: Tolga Sezgin
All eyes on Istanbul as industry leaders from all around the globe gathered to discuss the major issues in oil and gas, writes Erik Means.

Those who have experienced previous editions of the World Petroleum Congress — be it as a speaker, a delegate or an exhibitor — have learned to expect something extraordinary, and the 22nd WPC lived up to these high expectations with flying colours.

There was a buzz in the air right from the outset, as industry leaders from all corners of the globe gathered for an opening ceremony where the main attraction was the Dewhurst Lecture presented by US Secretary of State Rex Tillerson.

The former chief executive of US supermajor ExxonMobil spoke fondly of the industry he served for more than 40 years, honouring the “remarkable” people who work with great risk and little public notice to deliver the energy that is crucial to economic growth and poverty alleviation.

The star power continued the next morning when the congress got rolling, with Turkish Petroleum chief executive Besim Sisman chairing the opening plenary session, covering the very theme of the 22nd WPC — ‘Building Bridges to Our Energy Future’.

The keynote speakers in the first two plenaries were a bona fide Who’s Who of the oil and gas industry, with the chief executives of ExxonMobil (Darren Woods), Saudi Aramco (Amin Nasser), Shell (Ben van Beurden), Socar (Rovnag Abdullayev) and China National Petroleum Corporation (Wang Yilin) all sharing their thoughts, along with the energy ministers from Russia (Alexander Novak) and Qatar (Mohammed bin Saleh Al-Sada).

Immediately thereafter, the conference centre was turned on its head as Turkish President Recep Tayyip Erdogan arrived for the Presidential Ceremony.

Turkey is working to become a “key energy bridge” as it plans to reduce its energy dependency by diversifying the energy mix, Erdogan said from the podium.

“Oil and gas resources are now associated with war, bloodshed and conflicts. But Turkey wants these resources to contribute to peace and prosperity in the world, and we have the ability to be at the epicenter,” he added.

This was a recurring theme during the week, and numerous speakers addressed the preeminent challenge facing the oil and gas industry — to provide the world access to affordable, reliable and sustainable energy.

Energy transition and sustainability were at the forefront of keynotes given by the likes of Amin Nasser from Aramco, Bob Dudley from BP and Ben van Beurden from Shell.

All of them spoke of the need to invest in and develop renewable energy, but they also agreed that oil — and in particular gas — will continue to be a dominant force in the energy mix for decades to come.

Fatih Birol, executive director of the International Energy Agency (IEA), noted that demand for crude will continue to grow for many years to come, despite the steep rise in the number of electric vehicles.

At the same time, the IEA released a report showing that the oil and gas industry spent...
25% less on upstream operations in 2016 compared to 2015, and spending is expected to be flat this year. Aramco boss Nasser spoke of the vast under-investment in the sector in recent years, saying “almost $1 trillion of investment was supposed to come to the upstream sector that was deferred or cancelled, and this will have an impact over the mid-to-long term on supply”.

The Ministerial Sessions are always a main attraction at WPC, and this year’s congress was no exception. Energy ministers from myriad countries — including Russia, India, Qatar, Algeria, Israel and, of course, host nation Turkey — were on site at the Istanbul Congress Valley for meetings and sessions. As were the likes of Opec secretary general Mohammed Barkindo and Decio Oddone, director general of Brazilian market regulator ANP.

Another central message delivered by several prominent leaders during the week was that technological development will continue to be vital in order for the industry to tackle the challenges that lie ahead. This involves not only reducing costs and increasing efficiency, but also shrinking our carbon footprint.

“Technology holds the promise of reducing global energy poverty and emissions,” said ExxonMobil’s Darren Woods.

Total boss Patrick Pouyanne added that even challenging deep-water fields, such as those in Brazil’s Santos basin, “can be as profitable as shale” if the industry is able to keep its focus on lowering breakeven costs through efficiency drives. “We will be able to deliver a project with a breakeven of under $20 per barrel of oil,” he said. “It is just a matter of focus (and) of innovation.”

For the organisers behind the World Petroleum Congress, their focus can now shift to Houston and ensuring that WPC 2020 will again attract the top names from the oil and gas industry for an innovative week of high-level discussions on the future of the sector.
Turkey looks to bridge the gap

Country aiming to cut dependency on imports by diversifying its energy mix and building up its own resources, writes Anamaria Deduleasa.

As is the norm at the World Petroleum Congress, the head of state of the host nation held a much-anticipated address on the first full day of the event in Istanbul.

Turkey is working to become a “key energy bridge” as it plans to reduce its energy dependency by diversifying the energy mix, President Recep Tayyip Erdogan said in his speech.

“A strong country has its own energy resources or has a say in it,” Erdogan said, warning that the exploitation of such resources can lead to conflicts.

“Oil and gas resources are now associated with war, bloodshed and conflicts. But Turkey wants these resources to contribute to peace and prosperity in the world, and we have the ability to be at the epicentre,” he said.

He called Turkey a “considerable actor on the energy arena”, as it is involved in the construction of new plants and the development of pipelines that will transport resources from Russia, Azerbaijan and the Caspian Sea into Europe.

The country is at the centre of the huge Tanap and TurkStream pipeline projects that will open up additional gas corridors to Europe.

“Today Turkey is dependent on imports of oil and gas due to limited carbon resources. But we need to reduce our import dependency by maximising our local resource,” Erdogan said.

“We also aim to incorporate local resources, diversify our energy mix by adding renewables and nuclear. Promoting energy efficiency is also a priority for us.”

Erdogan wants to see Turkey become “a bridge nation” that can further promote co-operation and, as a result, energy security.

Turkish Prime Minister Binali Yildirim added: “We want to ensure we become a key global economy around the world. What we need to do is ensure energy...
Turkey is investing in the upstream sector in an attempt to reduce its energy import dependency, while at the same time ploughing resources into large midstream projects to ensure security of supply in the wider region, writes Eoin O’Cinneide.

Speaking at the opening of the 22nd World Petroleum Congress, Turkey’s Minister of Energy & Natural Resources Berat Albayrak said: “Oil and gas alone will constitute maybe more than 50% of global energy supplies in the near future... And yet we are far behind the level of investment in this sector to ensure global security of supply.”

To meet strong domestic demand and in an effort to secure “predictable market conditions”, the Ankara administration is looking to take a more direct stake in upstream investments.

“We have begun focusing on oil and gas exploration studies in the Mediterranean and Black Sea regions,” Albayrak said.

“We have intense studies already under way to conduct seismic research in the Mediterranean basin, and we intend to do the same for the Black Sea as well. These studies will (be followed by) further exploration and drilling activities and will push forward the potential in both seas as well as the security contribution of supply in Turkey and our region.”

Albayrak name-checked the Tanap and TurkStream midstream projects as significant investments from Turkey in wider regional energy security.

“Our energy diplomacy, however, is driven neither by pure commercial interests nor by security of supply alone. We emphasise the role of energy as a peacemaker and the supporter of prosperity, rather than as causing conflicts, as we have seen in the past.”

security for Turkey, and energy diversity to guarantee peace and co-operation.”

Turkey is investing in the upstream sector in an attempt to reduce its energy import dependency, while at the same time pushing for renewable and nuclear energy development.

“Turkey has significant potential for the development of renewable energy, which is expected to account for 30% of Turkey’s energy mix by 2023,” Yildirim said.

“We also want to add nuclear to the energy mix, and are working with Russia, Japan and France to build nuclear plants by 2023.”
World is heading towards major energy transition

Shell chief executive Ben van Beurden calls for industry to shape up and to look at collaboration in effort to meet the challenges of future supply and demand, writes Fabio Palmigiani.

A nglo-Dutch supermajor Shell has warned that the world is undergoing a major transition of its energy system, and that the oil industry must shape up and collaborate to secure the planet’s energy future.

In a keynote speech at the World Petroleum Congress in Istanbul, Shell chief executive Ben van Beurden said the world needs to cross three important bridges to address the existing energy challenges, making a parallel to the three bridges that now cross the Bosphorous Strait in Istanbul. “First there is the bridge of perception. The energy transition is regularly portrayed in terms that compare it to a revolution, a moment in time when everything changes,” he said.

“In truth, different countries and different sectors will advance at different speeds. We are not talking about a moment in time, but of change that will take place over generations.”

Quoting a United Nations study, he said the world’s population is expected to increase from 7.5 billion to 11.2 billion by the end of the century, with the vast majority of the growth to take place in Asia and sub-Saharan Africa.

“Consider where these people will be, where the energy demand is going to emerge. It is in areas where we can expect to see living standards rising. There is a huge opportunity here,” he said.

He said whereas countries in Europe will have to “renew and evolve” infrastructure, those in other parts of the world with minimal infrastructure, limited finances and growing populations will have an entirely different task — they have the potential to “shift more directly onto a less energy-intensive pathway to development”.

Nevertheless, he added that these countries will still require hydrocarbons to develop their industries, and that the energy revolution and shift to cleaner sources of power, like natural gas and renewables, will happen over time.

“There is not one single energy transition under way, but many, all running alongside each other,” Van Beurden said. “These are happening right now, but they will take many decades to play out.”

The second bridge to be
There is not one single energy transition under way, but many, all running alongside each other.

Shell chief executive Ben van Beurden

crossed, he explained, relates to solutions. In transport, battery electric cars are gaining consumer acceptance in some parts of the world, while wind and solar are contributing more and more to the global energy supply, he said.

Van Beurden highlighted that, as the world “decarbonises”, hydrogen fuel cell vehicles will be needed, as well as liquefied natural gas as a transport fuel and the next generation of sustainable biofuels.

“Different challenges throughout this energy transition will require different solutions. There is no one, single answer to all these challenges, and that means there will be many winners,” he predicted.

The third and final bridge, in which the world must make a commitment to change and move in the same direction towards a successful energy transition, is perhaps the most difficult to achieve, Van Beurden said.

Shell will be investing up to $1 billion per year on its new energies division by the end of the decade, and is supporting other initiatives such as the Carbon Pricing Leadership Coalition, launched in Paris in November 2015.

“Creating the investment landscape in which all these different solutions, and many more too, can be developed and deployed at scale, is one of the great challenges in the world,” he said.

“We have one planet and, for good or ill, a shared destination. Even as the world moves forward with different solutions and at different speeds, it must commit to moving in one direction.”
Technology is the key, says Woods

Key challenges for the oil and gas industry include not just reducing capital spending and reducing emissions, but also bringing energy to new markets to help increase living standards, ExxonMobil chief executive Darren Woods said.

Woods told a plenary session at the World Petroleum Congress in Istanbul that technology, including that which drove the global shale boom, has been and continues to be a key driver for those goals.

“Technology holds the promise of reducing global energy poverty and emissions,” he said. “It’s about taking advantage of global abundance to increase global affluence.”

That is an important goal when some 1 billion people worldwide still lack electricity, and 3 billion are still working only with primitive fuels, he said.

ExxonMobil is cultivating new technology to drive innovative projects, such as efforts to develop carbon-capture fuel cells and advanced biofuels from algae.

However, technology has also played a key role in the company’s staple capital projects, such as its $19 billion PNG liquefied natural gas project in Papua New Guinea.

There, the company leveraged innovation to fly in large drilling rigs to drill productive gas wells and used special techniques to install about 700 kilometres of pipelines crossing rough volcanic terrain. Production from the project began in 2014.

“Technology was critical to scale up and make the investment profitable,” Woods said.

Another technology-driven project involved the company’s giant refining and petrochemical plant in Singapore, which according to Woods included the 2013 start-up of the world’s only steam cracker that uses crude as a feedstock.

Other key efforts include liquefied natural gas in Qatar and the West Qurna field in Iraq, as well as the Abu Dhabi and Saudi Arabia markets.

ExxonMobil also works to build on strong relationships across the world, including with national oil companies and governments.

Industry’s challenge, he said, is “reducing energy poverty by increasing energy access”.

However, certain conditions need to be present to facilitate such investment, Woods said.

“We can do our jobs when markets are open, rules are clear and investments are protected,” he said. Without those conditions, “the investment case is much more difficult”.

“If governments restrict markets, these restrictions should be applied evenly,” Woods said, to generate a level playing field.
Hedging seen as safer bet to offset low prices

ExxonMobil sees diversification among projects as a key hedge against the uncertainty created by today’s low oil price environment, a top exploration executive said, writes Kathrine Schmidt.

That is why the company has invested in increasing its position in the short-cycle Permian basin in the US state of Texas, the PNG LNG liquefied natural gas project in Papua New Guinea, and deep-water Area 4 off Mozambique, according to Steven Greenlee, president of the ExxonMobil Exploration & Production company.

Speaking in a panel at the World Petroleum Congress in Istanbul, Greenlee said ExxonMobil does not pretend to be smart enough to predict which types of projects — short-cycle, long-cycle or liquefied natural gas — will eventually emerge as top performers. Instead it aims to focus on a variety of projects that will perform well with low oil prices, but also offer an upside if prices go up.

“We’re trying to insulate ourselves,” Greenlee explained. That said, each different company will reach different conclusions about how best to handle the challenge.

While some deep-water projects are not as profitable as they once were, break-even costs have become “much lower”, meaning those who aim to focus only on unconventionals “might want to reconsider”.

ExxonMobil’s vision also includes a role for top exploration projects and acreage. The company spudded its Payara-2 exploration well off the south American nation of Guyana two weeks prior to the WPC gathering, Greenlee confirmed.

This is the latest exploration test of the major discovery called Liza and surrounding accumulations that the supermajor believes could contain between 2 billion and 2.5 billion recoverable barrels of oil equivalent.

ExxonMobil had just reached a final investment decision on the $4.4 billion first phase on Liza, to be produced with a 120,000 barrel per day floating production, storage and offloading unit.

Partnerships with key stakeholders are also crucial for the supermajor across its projects.

“The cycles come and go, but the partners are there for the duration,” Greenlee said.

The sector’s uncertain future also exerts a cost in human capital, with recruiting routinely suffering during downturns, Greenlee said.

Technology holds the promise of reducing global energy poverty and emissions. It’s about taking advantage of global abundance to increase global affluence.

ExxonMobil chief executive Darren Woods
Aramco targets overseas gas

Saudi Aramco chief executive Amin Nasser speaks to Upstream editor-in-chief Erik Means in exclusive interview.

Saudi Aramco, the world’s pre-eminent producer of crude oil, is actively pursuing an ambitious new strategy to invest heavily in international gas production.

Aramco chief executive Amin Nasser, in an exclusive interview with Upstream in Istanbul on the sidelines of the World Petroleum Congress, said the company “is exploring all opportunities” within the international gas sector.

He declined to reveal specifics on production targets, investment levels or geographical regions that have caught the eye of the Saudi national oil company, but he emphasised that international growth is a priority for Aramco. “We are ambitious,” he said.

“There is a big team looking at it, assessing the opportunities globally, and then hopefully it will come to our board and (we will) seek approval based on where the opportunities are and where we want to get in... All of this is ongoing right now.”

Aramco has previously revealed ambitious gas production goals, aiming to double its output to 23 billion cubic feet per day within the next decade — but that target, Nasser explained, involves only domestic production. “Our programme is all currently in the kingdom. All of our production is coming from associated and non-associated gas, including unconventional gas, and this is our target over the next decade — to bring 23 billion cubic feet per day. But this is from existing resources within Saudi Arabia,” Nasser said.

“We are at the same time looking at international investment in gas. This is a new strategy to look at international gas development and production. We are exploring opportunities in different countries.”

He added that there are many questions that need to be addressed on such investments — conventional or unconventional, onshore or offshore, upstream or downstream.

Asked when such overseas investments might be forthcoming, Nasser remained noncommittal. “You will see it whenever we announce certain joint ventures or partnerships or heads of agreement.”

Nasser also spoke freely on topics such as the vast underinvestment in the upstream oil and gas sector worldwide over the past few years and the recent rise of US shale output.

“There is an under-investment that we have seen — almost $1 trillion of investment was
Nasser sees open road for electric vehicles

Saudi Aramco chief executive Amin Nasser agrees that the world fleet of electric vehicles will skyrocket in number in the years to come, but he does not expect this to cause a reduction in global demand for oil, writes Erik Means.

Nasser, speaking with Upstream on the sidelines of the World Petroleum Congress in Istanbul, pointed to a report published by the International Energy Agency, showing that the number of electric vehicles in operation worldwide has surpassed 2 million following 60% growth from 2015 to 2016.

However, this number pales in comparison with the total size of the world passenger vehicle fleet, which is currently thought to stand at about 1.2 billion and is projected reach 2 billion by 2040.

The percentage of electric vehicles in the global fleet “is very small but it is growing”, Nasser said. That percentage stands currently at a mere 0.2% but is expected by most analysts to reach somewhere between 10% and 20% by 2040. Such a development would mean that the number of electric vehicles would balloon to between 200 million and 400 million by 2040.

“There has to be improvement in the infrastructure and the battery charging time... you need to have the incentives being made available. All of these things need to happen for that growth to continue,” Nasser said.

In this scenario, he added, the share of electric vehicles in the global fleet “will be significant compared to what it is today, but that means also that conventional vehicles will grow in terms of numbers”.

The number of conventional passenger cars would grow from 1.2 billion at present to between 1.6 billion and 1.8 billion in 2040, thus posing new environmental and technological challenges.

“We are a strong believer that technology is going to help us to reduce emissions,” Nasser said. He noted that, as improvements are made in charging time and the infrastructure for electric vehicles, there will in parallel be positive developments to reduce emissions from conventional cars.

The oil industry and the car manufacturers will continue to make gains in reducing emissions, Nasser said, because they are channelling “a lot of investment in that direction”.

supposed to come to the upstream sector that was deferred or cancelled — and that will have an impact over the mid-to-long-term on supply,” Nasser said.

The Aramco chief executive is on record as saying his company plans $300 billion of investment over the next decade, mainly on the upstream side. “That is an indication of our continued investment, regardless of the cycle, because our view is that the market, in terms of demand, will increase.”

He went on to predict that global demand is likely to rise by between 6 million and 7 million barrels per day over the next five years, and the industry will be hard-pressed to meet this demand.

“US shale definitely is helping by adding a certain amount of supply to the market,” he observed. “However, shale alone is not going to be sufficient.”

“You have 97 to 98 million barrels of supply today, and on that supply we are looking at a 3% to 5% (annual) rate of decline, so we’re talking about 3 million to 5 million bpd in decline that needs to be caught up.

“Add to this a lack of investment of $1 trillion, so there is a need to have additional production coming from conventional oil,” he said.
Saudi Aramco sees oil and gas as key long-term component ‘at the heart of the mix’ for decades to come, writes Amanda Battersby.

Oil will continue to play a key role in the global energy mix but continued investment in the sector is vital to ensuring global energy security, according to Saudi Aramco chief executive Amin Nasser.

“Rising demand for all sources of energy — with oil and gas at the heart of the mix — will be the reality for decades to come,” he said.

In his plenary session address at the 22nd World Petroleum Congress, Nasser questioned whether the world is paying sufficient attention to ensuring adequate energy supplies during the long transition towards alternative energy sources.

“There seems to be a growing belief that the world can prematurely disengage from proven and reliable energy sources like oil and gas, on the mistaken assumption that alternatives will be rapidly deployed.

“If we look at the long-term situation of oil supplies, for example, the picture is becoming increasingly worrying,” he said.

Nasser told delegates that around $1 trillion-worth of investments has already been lost during the latest crude price slump against the backdrop of burgeoning oil demand and natural decline at producing assets. “Even conservative estimates suggest about 20 million barrels per day needs to be offset over the next five years to counter these two effects... that is a lot of production capacity to be made up.”

He said that industry leaders and policymakers must develop “an aligned and compelling narrative” that will attract the level of investments needed.

Meanwhile, there has been a dearth of new oil and gas discoveries in recent times, with the volume of conventional oil found in the last four years down more than 50% on the prior 48 months.

“And none of this is being helped by misleading narratives about ‘peak oil demand’ and ‘stranded resources,’” Nasser said.

He added that this translates to financial investors shying away from making much-needed large investments in oil exploration, long-term development and related infrastructure.

Aramco is transforming its own business model to build the resilience and discipline to see the company through the transition.

“We plan to invest more than $300 billion over the coming decade to reinforce our preeminent position in oil, maintain our spare oil production capacity, and pursue a large exploration and production programme.
Saudi Aramco will spend more than $300 billion over the next decade as the state-owned giant looks to play its part in the ambitious Vision 2030 plan, designed to reduce the kingdom’s dependency on oil and gas revenues, writes Eoin O’Cinneide.

The company is also looking to ramp up gas production to feed into the domestic power sector. “Over the next 10 years Saudi Aramco will be spending more than $300 billion,” Ahmad al Saadi, senior vice president of technical services at Saudi Aramco, said at the World Petroleum Congress in Istanbul. The $30 billion or so per year will go on both energy projects development and the services sector as part of Aramco’s large-scale IKTVA (In-kingdom Total Value Add) programme.

The oil company’s two major flagship projects are the $5.2 billion King Salman International Complex for Maritime Industries & Services, to be situated at Ras Al-Khair in the Persian Gulf, and the new Energy Investor City. The maritime centre — involving partners Aramco, Lamprell, Hyundai Heavy Industries and Saudi state shipping company Bahri — will build and maintain jack-up rigs as well as offshore and commercial vessels. Another nearby yard venture with McDermott International will work on offshore platforms.

The new industrial city, to cover 50 square kilometres close to Abqaiq on the east coast, will be “a world-class city with high-quality infrastructure,” Saadi said. “It will serve as a hub for support industries directly related to the energy sector.”
From the floor...
PEC Secretary General Mohammed Barkindo revealed at the World Petroleum Congress in Istanbul that the oil producers group had, for the first time, reached out to US shale players with a view to deepening the dialogue between the on-paper rivals.

“We went out of our way to meet with our colleagues in this important industry in the US and have kick-started this dialogue with them,” Barkindo told the audience in a plenary session at WPC.

He admitted that the two producing “groups” probably had limited knowledge of each other’s business prior to that meeting.

“They are operating in a very short-cycle project sector of the industry, whereas we have long cycle, but we all belong to the same market,” Barkindo said.

“We thought it was very important for us to reach some understanding... we all have a shared responsibility to ensuring stability in this market.

“Because, at the end of the day, when we first met in Houston with all the leading producers from all the shale basins, we realised that we were all impacted by this cycle in very negative numbers.”

Barkindo said that these US shale producers were forthcoming on the financial issues with which they were prevailing to contend in the current market.

The US shale producers and Opec agreed that, going forward, there is a need for both to be conscious of their shared responsibility to ensure stability in this market.

“This is a shared responsibility that requires shared and joint action,” Barkindo argued.

Although he described the business relationship between Opec and US shale producers as a “work in progress”, Barkindo said the cartel intended to deepen its discussions and would continue this energy dialogue with them.

“As an organisation, we do not necessarily see the shale industry as an extraneous component of the oil industry,” Barkindo said.

“The shale revolution, if you would like to call it that, in the US played a very critical role in meeting demand at a time when the energy landscape was facing severe difficulties, particularly in some of the major producing countries,” he told delegates.

“We should not forget the role this shale industry played in ensuring security of supply and ensuring stability in the market,” he added.
A new approach to business is needed

The world could be facing a supply shortage of oil and gas in the latter half of the 2020s if investment towards sustaining production is not stepped up, according to Chiyoda chairman Katsuo Nagasaka, writes Amanda Battersby.

Boosting investment will require new business models across the whole value chain to improve profitability by reducing costs. There also needs to be risk sharing between stakeholders, Nagasaka told the World Petroleum Congress in Istanbul.

“A harder challenge is [the] impact from global warming, which requires reduction in carbon dioxide emissions,” he said.

Japan has already reduced its share of oil in the primary energy mix, from a high of 76% to around 41% today, while gas is expected to become more important in the next few decades, Nagasaka told delegates.

“This is due to its availability... and reduced CO2 emissions,” he said.

However, Nagasaka cautioned that new investments in liquefied natural gas projects had become “stagnant” under the current economic conditions.

“To confront challenges and materialise investment, it is necessary to implement appropriate business models to reduce costs and share risks among stakeholders,” he said.

Nagasaka added that engineering companies worldwide were focusing on reducing plant costs and construction costs “by working jointly with owners, contractors, vendors and government agencies”.

Japan has committed to tackling global warming and the nation is studying a wide range of balanced energy options, while Chiyoda itself is working on three new technologies to support energy supplies in the medium to long term.

SPERA hydrogen is the contractor’s proprietary technology that is claimed to lead the way towards the “extensive introduction” of hydrogen as a new energy source.

Chiyoda is exploring ways to safely and economically store and transport hydrogen in large volumes.

The company is also working on Japan’s first pilot project for the production of renewable jet and diesel fuels.

Furthermore, Chiyoda is participating in the consortium studying the potential commercial exploitation of methane hydrates, which are said to be “widely abundant around Japan”.

In 1972 the company published its ‘Legacy for the 21st Century’, which advocated the need for harmony between industrial development and environmental preservation. Nagasaka said this charter is still valid today.
BP ‘ready’ to meet dual challenges

Supermajor aims to play its part in providing key resources while also adapting to the realities of climate change and a move to a low carbon world, writes Kathrine Schmidt.

Today’s energy industry faces tough challenges in meeting global energy needs and adopting to the realities of climate change, but BP is ready to dive into the task, its chief executive Bob Dudley said at the World Petroleum Congress in Istanbul.

Demand is continuing to grow, “driven by fast-growing economies like Turkey”, Dudley told a plenary session. “We need to respond by making our businesses fit with a low carbon world,” he said.

“First, by providing more energy than ever before, and second, reducing carbon emissions more than ever before. There are no quick fixes, no overnight solutions.”

Operational excellence, as well as key partnerships, will be crucial in achieving the task at hand, Dudley continued. The company aims to simplify by “doing less, not more” and roll back bureaucracy, aiming to use “common sense at a large scale” across the organisation.

Technology, where “what used to take weeks can now literally take minutes”, will also be crucial, Dudley said.

Renewables will play a role and are seeing a “competitive” business case in some circumstances, according to Dudley. So will natural gas, which is being produced by six of the seven major projects the company is bringing online this year.

As for the host nation, projects such as the TurkStream and Tanap pipelines will deliver resources from Russia, Azerbaijan and the Caspian Sea into Europe.

“Turkey is helping write that story as one of the great transport hubs of the world,” Dudley added.

He concluded: “There’s a transition under way, and we’re going to be part of it.”
Call for oil companies to be more socially aware

Oil companies should avoid trying to be “the power behind the throne” when striking deals with governments but must also not shirk their responsibilities when it comes to being a socially responsible partner in emerging economies, according to former South African president FW de Klerk, writes Eoin O’Cinnide.

“I think it would be wise of companies to limit their political intervention to just making sure they have a good regulatory regime in the countries where they operate, to help those governments to offer them a fair legal system with good security with regards to their investment,” the Noble Peace Prize Laureate said at the World Petroleum Congress in Istanbul.

“But they should stay out of politics because they should not try to be the power behind the throne and get involved in internal politics — (albeit) with one qualification,” De Klerk said, referring to what he sees as companies’ obligation to be socially responsible partners in the process of nation building.

De Klerk, speaking alongside another legendary peacemaker in former Algerian foreign minister Lakhdar Brahimi, said the three biggest challenges facing the world this century are: the fight against poverty, climate change, and how to manage diversity in societies.

“Capital rich companies operating in countries need to take an interest in the social situation in those countries. They need to get involved in channelling part of their profits towards the development of opportunities for the people of that country, to help create jobs, to help if there is a medical crisis in that country,” De Klerk said.

“Social responsibility is a big issue when it comes to multinational companies, and I am glad to say that, in all my interaction with these companies, I get the impression they are taking this seriously.”

Oil players also have a heavy burden to bear when it comes to helping combat climate change, meaning there will be an increased need for diplomacy and conflict resolution. De Klerk said the Paris Accord on climate change “certainly involved a great deal of intense diplomacy on behalf of 195 signatory countries”.

However, referring to the recent decision by the US to unilaterally pull out of the accord, he added: “President Trump’s decision has enormous implications for diplomacy. So, there will be plenty of work for diplomats and negotiators in the energy field in the foreseeable future.

“Some have to secure new exploration rights, some will be working for or against energy cartels, others attempting to resolve territorial disputes over energy-rich regions, and others exploring ways and means of preserving our fragile environment through the reduction of carbon emissions.”

De Klerk said he hoped crises — such as climate change — can be resolved peacefully through diplomacy and negotiation.

“The alternative of trying to resolve such disputes by war, or by doing nothing to address climate change, would be too ghastly to contemplate.”
Argentina’s Vaca Muerta and other burgeoning unconventional plays can learn from emission reduction techniques in North America, writes Eoin O’Cinneide.

Emerging unconventional markets such as Argentina can learn from North America’s mature industry to help cut out methane emissions even before production is brought online, according to Bjorn Hamso, programme manager at the World Bank’s Global Gas Flaring Reduction Partnership (GGFR).

Hamso said at the World Petroleum Congress in Istanbul that his group had been speaking with stakeholders in the likes of Argentina’s Vaca Muerta shale patch to try to convince them to introduce technologies and regulations to reduce flaring before the sector really kicked off.

“One good thing coming out of the shale oil industry in North America is that there has been a lot of technology... to monetise the associated gas,” Hamso said.

“Unfortunately, in 2016 there has been an increase in flaring globally,” he said, with GGFR research showing more than 149 billion cubic feet of methane emissions that year, up from 147.3 Bcm in 2015.

Iran posted a rise of 4.3 Bcm, with Russia up 2.8 Bcm and Iraq ahead by 1.5 Bcm. The US, however, was down by 3 Bcm, with the rest of the world collectively down 3.6 Bcm.

The reduction in the US came despite satellite imaging, gathered in 2015, showing a high degree of flaring in core US shale basins — such as the Permian, Eagle Ford and Bakken — as well as Canada’s oil sands province. Despite continued upstream activity in the US, Hamso said flaring in the US appeared to have peaked and he hoped further reductions would follow.

The number of companies operating in the North American shale space that have expressed an interest in gas flaring reduction has doubled in the past few years, he said.

The US sat at number six in the list of the top 10 flaring nations between 2013 and 2016, information from GGFR showed, with Russia at the top, followed by Iraq and then Iran. Venezuela, Algeria, Nigeria, Mexico, Angola and Malaysia, in descending order, rounded up the top 10.

In terms of cubic metres of gas flared per barrel of oil equivalent produced, the US performed even better, with Russia also far better off than Iran and Iraq, while...
Uzbekistan was way out on its own as the worst performer, GGFR data showed. The World Bank’s Zero Routine Flaring by 2030 initiative challenges oil companies to make development plans for new fields with zero routine flaring, while seeking economically viable solutions to end routine flaring no later than 2030.

The initiative has 24 signatory governments — including the US, Russia, Canada and Iraq — as well as 32 companies, including Shell, BP, Total, Statoil, Eni, Oil & Natural Gas Corporation, Sonangol and Lukoil.

Drive to substantially cut back on gas flaring

Industry is routinely ignoring existing technology that, if applied, can make substantial and immediate inroads into cutting methane emissions from oil and gas operations, the World Petroleum Congress in Istanbul was told, writes Eoin O’Cinneide.

“The current information is largely based on estimates... The technology is available, but it is not being used,” said Scott Foster, director of the sustainable energy division at the United Nations Economic Commission for Europe (UNECE).

Foster said there is a huge opportunity with methane management in the extractive industries to have a positive effect — both economical and environmental — if companies and regulatory regimes would only put more effort into properly assessing how much and where they are actually emitting methane.

“We are finding we don’t have a common approach to methane management across countries. “We need to address the scope and the standards for how you measure, how you monitor, and what is the right technology and units, and how you report (these things),” Foster said. He used a recent example of how Kazakhstan’s state player KazMunaiGas was persuaded to do a fresh assessment of flaring at its oilfields.

“They went and undertook to do a measurement with a company — they did a very detailed research — and to their shock, when they passed by their operations with infra-red trucks, they found enormous amounts of methane” being leaked from the seals or compression components.

“There were problems all along the way, and they fixed them on the spot. So, it was simply by becoming aware that they were able to fix them right away — and it was in their own commercial interest to do so.

“So, leak detection and repair can be highly effective and has positive returns on investment. The estimate is that 60% of methane leaks that are happening today are economic to fix and stop,” Foster said.

“We should not stop and just wait for technology to advance — we just have to get on with it,” he added.
Call for more LNG investment

Woodside Petroleum chief executive says up to $50 billion needed annually to meet forecast demand, writes Amanda Battersby.

Liquefied natural gas producers need to approve projects totalling around 20 million tonnes per annum each year in order to meet projected future demand, according to Woodside chief executive Peter Coleman.

“This year we expect there will be maybe zero to 5 (million tpa of committed new investment). So we are already behind the curve,” he told the World Petroleum Congress in Istanbul.

The touted 20 million tpa investment translates to between $30 billion and $50 billion, depending on the location of the liquefaction projects.

New customers, many of them smaller buyers, are emerging and they have a different make-up from and requirements to traditional long-term LNG purchasers, Coleman said.

“These new customers have different credit abilities, they have different needs for contracts, different expectations and different pricing points,” he added.

“Many of our customers are seeking shorter, more flexible contracts and with smaller parcel sizes. These are all contrary to the investment thesis for long-cycle LNG projects.”

Coleman told delegates this means that LNG producers will have to put on their thinking caps to come up with ways of being more flexible in their marketing and contracting strategies to meet the needs of prospective new buyers. “We need to help solve this problem.

Qatar gas expansion ‘positive’ for industry

Qatar’s stated intention to boost its liquefaction capacity to 100 million tonnes of LNG per annum is not expected to come at the cost of other such projects, according to Seyed Mohammad Hossein Adeli, secretary general of the Gas Exporting Countries Forum, writes Amanda Battersby.

“I’m not sure that a project of one country would lead to the cancellation of a project in another country,” he told reporters at the World Petroleum Congress in Istanbul.

“I don’t think that the cancellation and postponement of projects which is now happening in many places would be because of the initiation of this project in Qatar.”

Meanwhile, Woodside chief executive Peter Coleman said that Qatar’s move, despite competing with Australian LNG projects, was not a negative one.

“I think it’s a very positive signal for the market. If I was a buyer I’d say it was a very positive signal because it gives me surety of supply going out into the future,” Coleman said. “So you have a reliable supplier, a low-cost supplier, coming into the marketplace. The timing of the Qatari decision aligns with where most forecasters are saying that new supply is required into the market. “As I sit here and look at it, I say that’s a very sensible signal to the market that they’re going to produce supply out there, and if I was a buyer I’d be very pleased with it.”
GAS MARKETS

LNG is rising as a cleaner fuel option

The role of natural gas in providing cleaner fuel is seen as a key driver for liquefied natural gas growth even though the sector faces significant challenges from a rush of new supply coming on stream and high project development costs, among other factors, writes Mark Hillier.

Steve Hill, executive vice president of Shell Energy in Singapore, told delegates attending a session on the “role of LNG in security of global energy supply” at WPC in Istanbul that renewables provide clean and increasingly competitive power.

However, he added that they alone do not supply reliable power, whereas the combination of renewables and natural gas does do that.

Responding to concerns about natural gas oversupply, Hill said that was not an issue that he was overly concerned about, arguing the sector will be helped by its role in meeting demand growth outside the power sector.

He explained that natural gas has the potential to capture new markets in areas such as transportation fuels and city heating, helped by its clean burning properties.

On top of that, LNG demand is forecast to grow more rapidly than that for natural gas, aided, for instance, by its flexibility in supplying seasonal markets.

LNG is also able to make use of existing infrastructure in countries like Pakistan and Jordan, where original domestic supply sources are running short.

Laurent Vivier, president of gas for French giant Total, spoke of how LNG import projects can be developed much more quickly and cheaply now, citing the five years it took his company to develop the large Dunkirk onshore facility in France and comparing that to the 18 months that are planned to get a project online in Ivory Coast using a floating import facility.

UK-based Chris Pateman-Jones of consultant EY acknowledged LNG’s advantages but warned of what he sees as the lack of adequate investment going into LNG right now. He argued that the scale of projects and their high investment requirements remain a challenge.

He also warned that renewables can grow faster than the oil and gas sector is expecting and can come online initially at a smaller scale, thus needing more modest investments.

That means, he suggested, that LNG players need to focus on developing their projects as economically and innovatively as possible, making use of strategies such as modular construction.

or else this opportunity will pass. If our energy (LNG) is not available, these customers will simply go somewhere else.”

He added that LNG sellers need to change the way they sell into the market and the way they manage risk in their portfolios.

“Gone are the days of big, long-term pipeline contracts that were simply cash registers.”

Meanwhile, LNG contract pricing is expected to change, with a likely bias towards a constant for part of the cost — perhaps even a fixed price for an entire short-term deal — rather than an oil or gas price-linked formula. Coleman noted that imports to new countries have been facilitated by novel business models and the advent of floating storage and regasification units — “a new game-changer for the industry”.

FSRUs were said to account for about 30 million tpa of imports, up from about 10 million tpa in 2012.

“That’s just going to continue to grow. It’s a business model that’s flexible. We’re seeing that big pipelines are now being replaced by virtual pipelines,” Coleman said.
Israel underlines gas ambitions

Energy Minister confident that new reserves off his country can replace declining output from North Sea, writes Anamaria Deduleasa.

Israel is pushing ahead with its plans to become a “significant natural gas exporter” in the near future, as work advances on two possible pipelines from the country into Europe, and more offshore fields are being brought online.

Speaking at the World Petroleum Conference in Istanbul, Israeli Minister of National Infrastructure, Energy & Water Resources Yuval Steinitz said he believes the new reserves found in the region’s deep waters will replace the declining reserves from the North Sea. As a result, “the situation in the region regarding energy is changing rapidly”, he said.

“The real change is that in the eastern Mediterranean several significant discoveries have been found and more are expected in the next few years, as we explore the area further,” Steinitz said.

Two of Israel’s large discoveries are the already producing Tamar field, with more than 320 billion cubic metres in place, and the Leviathan field, with between 500 Bcm and 600 Bcm. The wider region is also home to the Zohr field off Egypt and Aphrodite off Cyprus.

Additionally, Steinitz said Israel’s waters are home to between 6 billion and 7 billion barrels of oil, and around 200 Bcm of gas still to be discovered, according to government research.

“In Europe, depletion has already started, and it’s estimated that in the near future there will be a sharp decline in reserves in the North Sea. However, if you look at depletion levels and the huge resources we discovered in the eastern Mediterranean, the levels balance out,” Steinitz said.

He added that Israel was engaged in “intensive talks” about building export pipelines.

The situation in the (Mediterranean) region regarding energy is changing rapidly.

Israeli Minister of National Infrastructure, Energy & Water Resources Yuval Steinitz

Russia warns of ‘destructive’ political tendencies

Russian Energy Minister Alexander Novak, in a speech at the World Petroleum Congress in Istanbul, called for the removal of “politically motivated restrictions” on oil and gas infrastructure projects to bring the industry in line with a global trend of openness and transparency, writes Vladimir Afanasiev.

Novak said the global energy industry is transforming very fast and may become unrecognisable in 20 years. He added, however, that Russia has noticed “destructive tendencies”, such as “artificial and one-sided barriers” that are erected by some countries to create “uncompetitive marketing of (domestic) production”. Additionally, he claimed restrictions are being put in place to prevent the free development of infrastructure.

Novak said Russia has seen “plain sabotage” of economically attractive infrastructure projects such as the Gazprom-led Nord Stream 2 subsea gas export pipeline from Russia to Germany.

“Some countries even go as far as refusing clean energy sources, such as nuclear power and natural gas, under the influence of political considerations,” he said.

Novak called for producing countries to concentrate on uniting their efforts and ensuring that the global economy is adequately supplied with energy to underpin its growth and transformation. He added that the “source of that energy is not important”.

Instead, the energy should be easily available on demand, competitive on price and compliant with end-customer requirements, he said.
Brazil ready to benefit

Investments in the Brazilian oil and gas industry have the potential to increase in coming years and reach a tenth of the world’s total capital expenditure, as the country opens up to private-sector spending with a series of initiatives to attract new players and diversify the market, writes Fabio Palmigiani.

Brazil completely revamped its regulatory framework in 2016 and 2017, in a bid to improve competitiveness, and it passed new legislation allowing companies other than Petrobras to operate upcoming pre-salt assets to be offered.

Brazil also set up a bidding calendar through to 2019, including reduced local content requirements. “The current government is making these changes because it believes it is in the country’s best interest,” said Milton Costa Filho, secretary general of the Brazilian Petroleum Institute.

He said Brazil represented less than 5% in global exploration and production investments but, despite challenges related to low oil prices, there are still many opportunities in the country. “We can easily attract more than 10% in light of our huge potential,” Costa Filho told a ministerial session at the World Petroleum Congress in Istanbul.

He highlighted that average production from a single well in the Santos basin pre-salt province — about 25,000 barrels per day of oil — equals 40 onshore wells in non-conventional plays in the US.

“Iran sights on international markets

Iran is hoping to use its massive production potential to become a significant player in the international natural gas market in the next decade, writes Mark Hillier.

Deputy Minister of Petroleum for Trade & International Affairs Amir Hossein Zamaninia told a session at the World Petroleum Congress in Istanbul that by 2021 Iran’s uncommitted natural gas production capacity could climb as high as 365 million cubic metres per day.

Zamaninia said this production potential — backed by Iran’s abundant reserves and its close proximity to the major growing markets of China and India — will combine to boost the country’s position in the sector.

These factors mean Iran can play “an important role in the future energy market, particularly the global gas market”, he said. “In terms of oil, Iran is a heavyweight with 110 years of experience, but in the gas market we are the new kid on the block.”

Zamaninia added that Iran is also trying to do as much as it can to make the best use of its natural gas resources at home.

Iran exports natural gas to countries in Europe. We already have enough gas to justify these two pipelines,” Steinitz said. “The Israel-Italy pipeline is a very ambitious and challenging project. But the European Union and the European Commission have already started the initial feasibility study,” Steinitz said. “The study found this project is technologically feasible and would cost between $6 billion and $7 billion, which is less expensive than building another liquefied natural gas facility in Israel or Cyprus.”

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Brazilian offshore can be ‘as profitable as shale’

Total chief executive Patrick Pouyanne says if operators keep a tight rein on breakeven costs then giant deep-water fields can be attractive investment options, writes Eoin O’Cinneide.

Brazil’s giant offshore oilfields “can be as profitable as shale” if operators keep the focus on breakeven costs, according to Total chief executive Patrick Pouyanne.

The French major is partnered with state giant Petrobras at the huge Libra field in the pre-salt Santos basin, where a pilot development via a floating production, storage and offloading unit is under way.

Speaking at the World Petroleum Congress in Istanbul, Pouyanne said Total has switched its focus amid the oil industry downturn from chasing production to driving down per-barrel breakeven costs.

With offshore plays facing stiff competition from short-cycle North American tight oil production, where breakevens have dropped dramatically, Pouyanne said the focus on per-barrel costs can make the larger offshore projects attractive, although over longer cycles.

“When you have giant fields like the ones in Brazil, these giant deep-water fields can be as profitable as shale,” Pouyanne said.

“Maybe they are long-cycle, and shale is short-cycle, but in terms of profitability, in the giant deep-water fields, it is easy to make money” if you focus on costs, Pouyanne said. “Your job is to control the breakeven.”

Of the Libra development in the northern part of the field — where Shell, China National Petroleum Corporation (CNPC) and China National Offshore Oil Corporation are also partners — Pouyanne said: “We will be able to deliver a project with a break-even of under $20 per barrel of oil.”

He added: “Everything is possible. It is just a matter of focus (and) of innovation.”

The Frenchman also said he sees a definite shortage of global energy supply by 2020, even with...
a rise in US shale production, as final investment decisions have in the main been lacking since the oil price downturn at the end of 2014.

Dealing with such market volatility is one of the biggest challenges facing oil players today and in the years ahead, along with geopolitical instability and the threat of climate change, he said.

On geopolitical risk, Total took a contrarian view by continuing to invest in Russia despite sanctions on the Kremlin administration over the 2014 annexation of Crimea. Total is a major partner in the Novatek-led Yamal liquefied natural gas project.

Poyanne said oil companies can either “adopt a wait and see attitude and freeze any important decisions” while waiting for any clarification that may never arrive, “or you can be bolder, like Total has decided to be by continuing to invest in Russia, despite sanctions, or by deciding to be the first international oil company to come back to Iran”.

Total recently became the first Western player to re-enter Iran’s upstream sector by committing to the South Pars Phase 11 gas field development, along with CNPC and state player Petropars.

Decio Oddone, director general at Brazil’s market regulator ANP, said that even though the country is going through extremely challenging times in the political spectrum, its planned licensing rounds would proceed as scheduled, writes Fabio Palmigiani.

“We don’t need any additional political decision to go ahead to conduct the 2017 bid rounds. We are opening up a new era in exploration activities in Brazil,” Oddone said in a speech at the World Petroleum Congress in Istanbul.

With Brazilian President Michel Temer fighting for his political survival in the midst of corruption investigations, Oddone remained focussed on forging ahead with the bid rounds.

The ANP was determined to offer concession contracts for 287 offshore and onshore exploration blocks, estimated to hold unrisked volumes of 50 billion barrels of oil in place, in the 14th licensing round, scheduled for September 2017.

A month later, Brazil aimed to host two coveted pre-salt rounds simultaneously, featuring eight large areas under production sharing agreements.

In order to make the rounds more appealing, the ANP introduced a sharp reduction to local content requirements and sweetened terms to try to attract as many players as possible. “We need to create a very dynamic market, and we want to create opportunities for small and mid-sized companies,” Oddone told the audience.

The ANP expected to raise billions of US dollars in signature bonuses with the three offerings, especially in the pre-salt polygon. Output in the prolific pre-salt province topped 1.5 million barrels per day of oil equivalent from 75 wells in May 2017, less than seven years after first production from the Lula field.

Nevertheless, Brazil remains an underexplored country when it comes to upstream activities, something that Oddone hopes to change in the future.

“We have a new exploration and production policy which features a calendar with 10 bid rounds scheduled from 2017 to 2019. We have less than 30,000 wells drilled in Brazil. We still have two virgin basins,” he said of the Madre de Dios and Pernambuco-Paraiba basins.

On a more global perspective, Oddone said that even though natural gas is gaining momentum, the world will continue to need oil as the main source of energy for many years to come.

“The energy mix will eventually change, and the industry will change too. Many are saying large amounts of oil will be left unexplored, so these reserves need to be produced sooner rather than later,” Oddone argued.

“We no longer discuss peak oil. Ours is a time of big changes and the challenges ahead of us are huge.”
Shale drive fuels surge in capital

US sector boom adds to changing landscape as different industry cycles come into play, finds Eoin O’Cinneide.

Capital markets are driving a surge in shale production, which is set to see the US record its highest ever daily output level, according to analyst stalwart Daniel Yergin.

“The US shale really is a big part of the new oil and gas industry,” the vice chairman of IHS Markit said at the World Petroleum Congress in Istanbul, as he contemplated the major changes to the market in recent years.

“I think what has been harder to come to terms with is that this is a different oil industry — it has a different dynamic, a different rhythm, a different metric to it,” he said. “What we have is a multi-cycle oil industry. The short cycle is dominated by different players, such as the independents, and has remarkable resilience — it is not a $70 (per barrel) business, it is a $40 to $50 business,” he said. The US liquids-rich unconventional market — such as in the Permian basin and Delaware sub-basin — has been virtually the only sector in the oil industry attracting significant new investment, and it has attracted a new class of player.

“What is different is that it has a different cash machine — there is a very high impact from private equity financing it, and we are talking about tens and tens of billions of dollars. To give you an example of the impact, when oil prices had reached their bottom and the drilling rig numbers went to their lowest level of around 300 and then increased by 300 rigs, 290 of the new rigs that came back into operation were financed by private equity, not by traditional oil companies.”

Capital markets players have been drawn into the shale plays due to their short-term cyclicality as well as significantly reduced production costs through technological advancements in drilling and completions. This has seen US production rise, and Yergin predicted it would soon reach a peak.

“The numbers are quite striking. Just looking at the state of Texas, 10 years ago Texas produced 1 million barrels per day; today Texas produces more than 3 million bpd — and that is just one state.”

Yergin predicted that US production would climb in 2017 by about 1 million barrels a day and that its output total would soon grow to historic levels.

“The US will reach the highest level of production it has ever reached in history, exceeding its highest level in the early 1970s.”

However, he cautioned: “We do think that growth in the US will actually be lower — we are outside the consensus in that view for a number of reasons.”

PDVSA has key vision to become low-cost

Venezuelan state oil company PDVSA sees itself as a key low-cost supplier of heavy oil to the eastern hemisphere, an executive said at the World Petroleum Congress in Istanbul.

The country aims to position itself as a key provider of heavier crudes to growing markets such as China, India and the Russian Federation, according to Hector Andrade, executive director of corporate planning at the oil giant.

“We have the largest crude oil reserves on the planet. The oversupply right now is mainly related to light oil,” Andrade said during a session in which the company showcased its business plan.

He added: “Our vision is to be the primary provider of low-cost heavy oil around the world.”

Venezuela has faced its share of economic and political struggles lately, with economic stagnation and high levels of state control by President Nicolas Maduro, successor to Hugo Chavez.

However, it still possesses the world’s top oil reserves at more than 300 billion barrels, and some of the lowest production costs, Andrade highlighted.

Using numbers from 2015, the average production cost for PDVSA was about $10 per barrel, given the upgrade process for heavy oil.

However, when heavy oil and light oil are mixed, the cost of production stands at below $5, he explained.

“We have other things to solve, but the cost of production and the low oil price is not an issue for us,” Andrade added.

PDVSA has teamed up with partners in a range of joint ventures, which include 23
Iran is aiming to attract billions of dollars of investment to its upstream oil and gas sector as it looks to boost oil and gas production over the next five years to 4.8 million barrels per day and 1.3 billion cubic metres per day, respectively, writes Mark Hillier.

The Middle East producer’s output capacity stood at 4 million bpd of oil and about 850 MMcmd of gas, said Reza Dehghan, manager of oil and gas upstream contracts co-ordination for National Iranian Oil Company.

On top of the oil production, condensate production is targeted to reach 1 million bpd.

Dehghan was speaking as part of a high-ranking delegation, led by Deputy Minister of Petroleum for Trade & International Affairs Amir Hossein Zamaninia, that was outlining upstream investment opportunities at the World Petroleum Congress in Istanbul.

To reach its capacity targets, Iran is likely to need as much as $150 billion of investment, of which about two thirds could come from foreign companies, said Dehghan.

NIOC is involved in as many as 26 parallel negotiations about upstream projects and Dehghan reiterated that the state oil company is prioritising fields that either have common reservoirs with neighbouring countries or are in the second stage of their lives and will benefit from enhanced recovery techniques. A total of 30 oil and gas fields have been defined as falling into these categories.

Dehghan explained that NIOC has pursued a strategy whereby it has signed a sizeable number of memoranda of understanding with oil companies that are non-binding and usually run for about six months.

Twenty-two such MoUs had been signed with foreign oil companies and another eight with domestic players, he added.

After those are completed, NIOC can decide whether to pursue negotiations for a specific field on the basis of direct negotiations or hold a tender for the asset.

Those efforts yielded their first tangible result mid-2017 when French oil giant Total, China National Petroleum Corporation and domestic player Petropars signed a $2 billion agreement covering the South Pars Phase 11 development—a project that will eventually be expanded to a $5 billion investment over its 20-year contract period.

Separate to the opportunities for oil operators, Iran is also offering foreign engineering, procurement and construction contractors the opportunity to bid for a series of upstream infrastructure projects covering, for example, pipelines, compressors, offshore platforms and well workovers.

About $5 billion of work was thought likely to be made available through this series of 27 tenders, according to Iranian officials.
Sector is facing a new era

Downstream players confident of healthy growth rates for business but they also see challenges, such as from carbon emission constraints, finds Mark Hillier.

Downstream executives are confident about growth prospects both for petrochemicals and for refining and marketing, but they acknowledge the sector faces challenges from factors such as carbon emission constraints and industry competition.

John Abbott, downstream director of Anglo-Dutch supermajor Shell, who chaired a session on Strategies for Refining & Petrochemicals at the World Petroleum Congress in Istanbul, said petrochemicals are poised for healthy growth rates of as much as 3.7% per annum.

“People need petrochemicals,” he said, arguing that the sector should be seen as part of the energy transition by supplying, for example, materials that can be used to make lighter and more efficient vehicles.

Abbott argued there is also a bright future for refining, in which competition from new environmentally friendly innovations such as electrical vehicles is only one part of the picture.

He said the number of electrical vehicles may reach 7.5% of the global fleet by 2040 versus less than 0.2% now, but that will still leave 92% of a total of 2 billion vehicles for other fuels.

However, “this is not a reason to be complacent”, he said, arguing downstream players should pursue full integration, reduce the carbon intensity of their operations and embrace digital technology as they navigate the energy transition.

Bernard Pinatel, president of refining and chemicals at French giant Total, pointed out that his company had already merged refining and petrochemicals. He said Total was targeting value by leveraging integration, focusing on its chemical product line and pursuing partnerships with other players.

Pedro Miro, vice chairman and chief executive of Spain’s Cepsa, on the other hand, acknowledged the challenges faced by refiners in European markets such as Spain, Italy and France, where “there is no doubt we are facing falling demand”.

On top of that, refiners face competition from other regions, meaning they must pursue rationalisation and make the best use of technology and innovation, Miro said.

Bakheet al Rashidi, president of Kuwait Petroleum International, predicted the Middle East will be a net exporter of almost every kind of refined product in the short and long term, while Tufan Erginbilgic, downstream chief executive for BP, predicted growth for both refining and petrochemicals between now and 2035.

However, Erginbilgic noted: “The fundamentals of the downstream sector are changing faster than at any time I can recall.”
Turkey Night...
The International Energy Agency (IEA) recognised that the World Petroleum Congress in Istanbul — where thousands of executives and government officials from the global energy industry were gathered — was an ideal setting to unveil its much-anticipated World Energy Investment 2017 report.

Many in the oil and gas industry had hoped to see a resurgence of spending in 2017 after two years of declines, but IEA executive director Fatih Birol told an audience at WPC that they needed to remain patient. Total global energy investment in 2016 was about $1.7 trillion, 12% down on the previous year in real terms and accounting for 2.2% of global gross domestic product, according to IEA report. The investment numbers for 2017 were projected to be “more or less flat”, Birol said. “Unfortunately, we do not expect a major rebound in expected investments in 2017.”

Upstream oil and gas investment fell by more than a quarter in 2016, while there was a 9% increase in spending on energy efficiency and a 6% hike in electricity networks, according to the IEA report. “Falling unit capital costs, especially in upstream oil and gas, and solar photovoltaics, was a key reason for lower

IEA report shows fall in sector investment in 2016, with no significant turnaround expected in 2017, but notes 53% increase in US shale spending, write Amanda Battersby and Kathrine Schmidt.
The International Energy Agency (IEA) said it expects demand for oil to continue increasing in coming years, a forecast said to be contrary to the views of some other consultants, writes Amanda Battersby.

“We think oil demand will continue to grow in years to come, unlike some others who think oil demand will peak and then go down,” said IEA executive director Fatih Birol.

He told delegates at the 22nd World Petroleum Congress in Istanbul that others cite the increase in the number of electric cars as the reason for oil demand being set to wane. “Some people say that because of... electric cars, we are going to see the end of oil sometime soon and the demand will go down.”

The Paris-headquartered agency disagreed, Birol said, “because oil demand growth is not coming from cars, it is coming from trucks, then ships, jets and (the) petrochemical industry.”

In 2016, electric cars accounted for 1% of total car sales worldwide. However, Birol noted that looking over the next 20 years, even if electric cars were to account for one out of every two cars sold, global oil demand would still continue to grow.

“It will grow maybe a bit slower than in the past but it will continue to grow. Therefore we still need investment, we still need supply, we still need the oil of Opec and non-Opec countries.”
Sonatrach looks to bring back foreign investment

Algerian state company keen to attract fresh business again after suffering during downturn, writes Mark Hillier.

A lgerian state oil company, Sonatrach, is targeting a new relationship with oil companies as it looks to reinvigorate its oil and gas sector after the downturn caused by the oil price crash. Recently installed chief executive Abdelmoumen Ould Kaddour, speaking in an interview with Upstream during the World Petroleum Congress in Istanbul, said that in the first three months after he was appointed to the job he focussed on improving sentiment towards the Algerian oil and gas sector.

Algerian state company keen to attract fresh business again after suffering during downturn, writes Mark Hillier.

Algeria has plans for capital investment of as much as $53 billion in the period from 2017 through 2021, but knows that it has had difficulty attracting investment from foreign players after the downturn amid concerns about the terms under which they have been operating.

Ould Kaddour said this meant that Sonatrach and its partners needed to develop a “new vision” for the sector.

“Definitely there is a need for Sonatrach looks to weather downturn

Total has reshaped its portfolio and embarked on a new exploration strategy as the French major positions itself to weather the latest industry downturn, writes Amanda Battersby.

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Recovery boost for projects

The outlook for global oil and gas projects and capital investment has improved on the back of the oil price recovery and an upturn in activity, according to Oil & Natural Gas Corporation managing director Dinesh Kumar Sarraf.

However, only the best projects are passing the final investment decision test, Sarraf told the World Petroleum Congress in Istanbul.

This will translate to an expected continuing fall in global upstream capital investment, which is forecast to slide annually from around $430 billion in 2017 to some $360 billion in 2021, according to Global Data.

ONGC itself is “defying industry trends” and has embarked on the $5 billion-plus KG-DW-98/2 Cluster 2 project, which it is hoped will contribute to Prime Minister Narendra Modi’s ambitious aim of reducing India’s hydrocarbon imports by 10% by 2022.

The Cluster 2 project is aiming for peak production of 78,000 barrels per day of oil and 15.7 million cubic metres per day of gas after coming on stream in 2019.

ONGC is also drawing up plans for the $3.2 billion ultra-deepwater Cluster 3 development, which would add a further 19.5 MMcmd of gas production from the offshore Krishna Godavari basin block.
Spotlight on gender imbalance in industry

Leading executive Peter Coleman says more needs to be done across the sector and workforce targets are one option, writes Anamaria Deduleasa.

Top executives in the oil and gas industry need to be held accountable for gender balance and inclusiveness within their own companies or the sector will risk its competitiveness.

Peter Coleman, chief executive of Australian independent Woodside Petroleum, said the company implements gender-specific targets into executives’ contracts.

“We tried to balance the gender issues within the company without these targets, but it simply did not work. Therefore we had to introduce them,” Coleman said at the World Petroleum Congress in Istanbul.

“Our workforce is now made up of 30% women. However, as a chief executive, I have the joy of being able to take this discussion beyond the gender one and into talking about inclusion.”

Almost 80% of the human resources department of Woodside is made up of women.

“This is an issue that needs a top-down approach. If you care, so will everyone else,” Coleman said.

Coleman’s comments came after the release of a study on gender balance within the industry from the Boston Consulting Group (BCG) and the World Petroleum Council (WPC) revealed that women account for only 22% of the industry’s workforce, one of the lowest among major industries, and the percentage drops significantly at higher levels. Coleman said that in order to change the balance, companies need to set gender targets and then keep replenishing the talent pool.

“Once people see there is a competitive advantage in having women in the workplace, they will start pushing for a more balanced workplace,” Coleman said.

“However, I strongly encourage women to make a personal choice and leave if this does not happen. Come work for us. The best way to
Women are being “overlooked” in the oil and gas industry, creating a massive gender imbalance worldwide and risking the future workforce of the sector, according to a report from the Boston Consulting Group (BCG) and the World Petroleum Council, writes Anamaria Dedulescu.

The study, released at the World Petroleum Congress in Istanbul, revealed that women account for only 22% of the industry’s workforce, one of the lowest among major industries. “Although men and women start out on an equal footing, women rarely reach the top of the organisation. This is not due to a lack of ambition, but because there is a shortage of qualified female candidates,” according to the report.

Women also rarely reach the top ranks in oil and gas companies. Among women who are still working in the industry after 15 to 20 years, most have a less than 20% chance of landing a senior executive job, the research revealed.

Additionally, the study showed that the percentage of women in the industry’s workforce drops over time and falls particularly sharply — from 22% to 17% — between middle management and senior leadership career stages.

“This trend will not change unless chief executives make gender diversity a higher strategic priority, as men working in the industry care about gender balance more if they perceive their chief executive to do so,” it said.

BCG’s Katharina Rick, one of the authors of the report, said: “Despite in-depth analysis, we could not find any statistically significant difference among companies in different countries and regions.

“This consistency reflects the powerful influence of the industry’s current culture. This culture needs to change materially if the industry hopes to make meaningful strides towards gender balance.”

Unless companies develop a critical mass of women across all roles, meaningful progress towards gender balance in the industry will not occur,” Rick said.

Research was based on detailed interviews of more than 60 male and female senior industry executives worldwide and a survey of around 2000 male and female industry professionals.

CULTURE SHIFT: Boston Consulting Group managing director Katharina Rick.

Photo: Tolga Sezgin
Human resources specialists fear oil industry will see shortfall in number of petro-technical professionals by end of the decade, reports Anamaria Deduleasa.

The oil and gas industry is increasingly losing the fight for young talent, prompting human resources analysts to warn of shortages by the end of the decade.

Aleek Datta, managing director of consultancy Accenture Strategy, warned during the World Petroleum Congress in Istanbul that analysts believe there will be a shortage of petro-technical professionals (PTP) in the near future.

Datta said that while the industry tried to protect PTPs in the early days of the downturn, companies capitulated in 2016.

"From 2011 to 2016 there was a drop in PTP capital expenditures," Datta said.

"In 2011 around $590 billion was spent on workforce, which then increased to $760 billion in 2014. However, by 2015, capex dropped by 25% to $570 billion, and is declining ever since."

Research showed that recruiting graduates is increasingly a "challenge", as more than half of the 2015 graduates, who came onto the workforce market just as the oil price fell, are now "unlikely to come back to oil and gas jobs".

"If we assume demand will increase, and we keep the hiring levels at current levels, we will have a 30% deficit of PTPs in early 2020," Datta warned.

"The oil and gas industry is losing the fight for top millennial talent. Top talent prefer other industries, mostly technologically-orientated ones like Facebook, Amazon and other such tech companies. Only 2% of US graduates consider oil and gas as a primary career choice," he said.

"It might seem counter-intuitive to train and invest in people when the oil price is down, but if we do not, we are at risk of not having a workforce."

However, there are those trying to bridge the gap. Anna Illarionova, a WPC young professional and student committee representative from Russia, said during the same session that "the industry is trying to balance cost cutting with retaining and recruiting best talent".

According to Illarionova, 75% of companies in the industry "may add programmes in the future".

Zdravka Demeter Bubalo, vice president HR at MOL Group, said that the Hungarian operator had already set in motion three such programmes aimed at recruiting young talent and growing interest in the industry.

She said MOL had initiated a programme targeting middle-school students, aged up to 15, a separate programme aimed at university students, and a female engineers programme that is "trying to work on maintaining a gender balance in the industry".

Looking to recruit fresh faces

The Young Professionals Lounge at WPC, targeting students and young professionals attending the congress, was again a busy and popular hub on the exhibition floor, where networking, mentoring and dialogue were at the top of the agenda all week.

Stephane Rousselet, chair of the WPC Young Professionals Committee, said the ‘Fine Tune CV’ proposition was extremely well received.

"Students and young professionals met with HR managers and industry experienced professionals to fine tune their CVs and to learn how to stand out from the crowd as they enter their journey into the oil and gas industry,” Rousselet said.

Furthermore, many talented young individuals from top tier companies were invited to the lounge to present their area of expertise.

Students and young professionals had a technical tour to company stands, including those of Saudi Aramco, Halliburton and Total, where they had the opportunity to exchange ideas and knowledge on the entire petroleum value chain and job perspectives.

Key questions pertaining to the technological revolution, digitalisation and disruptive trends were discussed extensively during the Young Professionals Session at WPC.
Closing ceremony...
Houston energy capital of the world

The United States has among the highest concentration of energy technologies and infrastructure in the world — and one city in Texas is at the hub of it all.
Houston is core to the development of energy technologies as a hub for industry innovation, with world-class facilities and research in areas such as production optimisation, water conservation, hydraulic fracturing and others. Houston is home to 4800 energy-related companies, including leading US exploration and production, oilfield services, and pipeline transportation firms. Several international companies such as BP, Petrobras, Pemex, Aramco Services and others also maintain operations in Houston. A large percentage of US oil and gas production, refining, transportation and base petrochemical capacity is generated in Houston. In alternative energy from renewable sources, Houston leads the nation in wind power purchases, represents 29% of US biodiesel capacity and produces five mega-watts of solar power per year.

High Attendance & Large Exhibition
Supported by the robust energy industry in Houston, the 23rd World Petroleum Congress is anticipated to be among the best attended and largest in WPC history, with 10,000 delegates and 50,000 square metres of exhibition space. Networking opportunities will include specially organised Business Forums and a VIP Match-Making for ministers of energy, heads of state and chief executives. Events designated specifically for young professionals and women in the industry will also be arranged.

Technical Agenda
The theme for WPC 2020 and programme details are not finalised, but expect high-quality technical content, enriched by the innovative, leading-edge infrastructure in Houston. To maximise access, all technical sessions will be available online via recorded archives.

Technical Tours
Subject to Change
Houston is well located for technical tours to offshore Gulf of Mexico and US unconventional shale plays, and technical tours within one hour of Houston will be organized to facilities such as:
- ExxonMobil Baytown Petroleum & Petro-Chemical Complex
- Halliburton Real Time Centers™ for Virtual Well Management
- OneSubsea™ Cameron & Schlumberger Subsea Reservoir Recovery
- Baker Hughes Engineering, Science, R&D and manufacturing facility
- Space Technologies NASA Johnson Space Center and Space Port Project
- Texas Medical Center, the world’s largest medical center - energy & medical collaborate

Houston Energy Companies
- 4800 energy-related companies
- 750 in exploration & production
- 800 in oilfield services
- 80 in pipeline transportation
- 16 of the top 25 US publicly traded E&P companies
- 14 of the 20 largest US interstate pipeline companies

US Oil & Gas Capacity in Houston
- 39% of US oil pipeline capacity
- 45.2% of US natural gas pipeline capacity
- 42% of US base petrochemical capacity
- 25.6% of US jobs in oil & gas extraction (45,900 of 179,400)
- 12.5% of US refining capacity
- 10 refineries, 2.2 million barrels per day
The World Petroleum Congress brings together energy industry leaders from around the globe, and proceeds from the 23rd World Petroleum Congress will be shared globally to benefit the next generation of energy industry young professionals.

The Global Legacy Programme, an initiative proposed by the US National Committee to WPC and host for WPC 2020, will establish multiple Legacy Projects around the globe.

A first in WPC history, 100% of the congress net profits will be donated back to the World Petroleum Council to fund the Global Legacy Programme.

Each Legacy Project will align with WPC Legacy Committee initiatives, including educating and developing future generations.

All WPC member nations will be eligible to submit a Legacy Project for funding consideration in the normal manner. The Legacy Project selection process and funds allocation will be administered by the World Petroleum Council Legacy Committee. This committee will make sure there is balance in the geographic distribution of Global Legacy Project funds.

WPC 2020 is projected to be well attended with healthy profits. Through the Global Legacy Programme, congress proceeds will establish Legacy Projects that positively impact the energy industry well beyond the scope of WPC 2020.

Sources:
Greater Houston Partnership, May 2017
1 Greater Houston Partnership / IHS, Oct 2015
WPC 2020 delegates are likely familiar with Houston as a global energy industry hub, but they may not be aware of the cultural and leisure aspects that make Houston, the fourth largest US city, a vibrant and attractive destination.

Houston is home to a respected and energetic arts scene, celebrated restaurants featuring flavours from 35 countries, world-renowned theater groups, and the brains behind US space exploration — Houston is a diverse metropolis brimming with personality. In fact, in 2017 Forbes named Houston among the top 12 destinations in the world to visit.

Travel to Houston
Before you can enjoy Houston, you need to get there. Houston’s two international airports offer convenient air access with direct flights from 195 cities, including 74 international destinations, and flights from every inhabited continent.

All qualified WPC 2020 delegates will be extended a visa to attend WPC in Houston. Upon arrival, experience expedited US Customs & Immigration processing with a queue dedicated exclusively for WPC 2020.

Welcoming & Diverse
Houston is the Number 1 most ethnically diverse US city. More than 140 languages are spoken in Houston, and nearly 25% of the population is foreign born. More than 91 foreign consulates are also located in Houston.
Convention & Entertainment District – Avenida Houston

The smart layout of Avenida Houston, the Convention & Entertainment District located in the heart of downtown Houston, is designed to enhance convenience and walkability.

The convention facility, WPC 2020 event venues, hotels, dining options, and even 48,562 square metres of green space are all located within the compact, Avenida Houston campus. The configuration allows you to spend less time in transit and more time interacting with colleagues and enjoying the area, which recently received $1.5 billion worth of improvements. As a bonus, complementary Wi-Fi is available throughout Avenida Houston.

If you wish to explore, METRORail transit connects Downtown with Midtown, the Museum District, and the Texas Medical Center, making it easy to travel within the city.

Green

Reduced transit is not the only environmentally friendly feature. WPC 2020 in Houston will aim to be a paperless congress, held in a LEED Certified convention facility.

Leisure

Ample leisure options, from cultural arts to professional sports to shopping, are located near the Convention District.

On any given night, there is likely to be a show presenting in the Houston Theater District. The 17-block area in downtown Houston is home to the Houston symphony, opera, drama and ballet. Tucked between the Downtown and Medical Center areas rests Houston's leafy, park-like Museum District. Nineteen world-class institutions, including the Menil Collection, Museum of Fine Arts, Houston and the Houston Museum of Natural Science are clustered in this area, drawing a reported seven million visitors to the district each year.

For sports enthusiasts, Houston is home to professional teams, including American football (NFL Texans), basketball (NBA Rockets), baseball (MLB Astros), and soccer (MLS Dynamo).

Space Center Houston, the Official Visitor Center of NASA Johnson Space Center, is Houston's Number 1 attraction for international visitors.

Shopping is also a major draw, with options to suit every taste, from designer labels to unique boutiques to discount outlets, shopping in Houston is world-class.
Houston pitches in

Third time lucky for the world’s energy capital as the city’s mayor shares his own experiences and highlights the diverse nature of the city waiting to welcome the 23rd WPC in 2020, writes Kathrine Schmidt.

Houston Mayor Sylvester Turner assumed his office in January 2016, and since then has played an active role in helping recruit the World Petroleum Congress to Houston, making multiple international trips to destinations, including Bahrain, to pitch the city’s bid.

He also was present at the 2017 WPC in Istanbul to cement Houston’s role as the next host for WPC 2020.

Persistence was key in helping ultimately land the successful bid, Turner said. “We tried two times before, unsuccessfully. We lost out to Russia, then we lost out to Istanbul. So this was the third attempt,” he told Upstream in an interview. But sticking to that perseverance was something Turner knew about personally, as he recounted to the WPC delegates in his presentation.

He himself ran for mayor three times, but lost the first two, “I wanted to come personally because I knew what it meant to go for something twice, and not get it, but not give up and go after it a third time,” he said.

“As the third time was the charm for me, I hoped that the third time would be the charm for the city of Houston.”

Turner said he sees Houston bringing multiple unique advantages to the table.

While folks know the “Bayou City” as the energy capital of the world, there are many other selling points that visitors might not be aware of. “We’re very, very diverse. We would argue that we’re the most diverse city in the US,” Turner said.

“We talked about the focus we place on parks and green space, our cultural attractions that exist here, the people, the restaurants. And any given date you can travel around the globe in the city of Houston because we are just that diverse — we remind people that one in four Houstonians is foreign born.”

That diversity — whether of ethnicity, language or ideas — is a point of pride, the mayor added. “We don’t build walls, we build relationships,” Turner emphasised during a session at the 2017 WPC.

That global perspective is in addition to the city’s huge medical centre and Johnson Space Centre, of the famed US spaceflight programme.

“We are a bit country and at the same time we are urban chic,” Turner added, noting that Houston is a city that also possesses a “lot of personality and a lot of southern charm”.

The city boasts a raft of recent improvements downtown, including a new hotel and updates to the George R Brown Convention Center, set to host
Conference to benefit from close community

Houston is known as the world’s energy capital, synonymous with the oil, gas and other energy industries that have shaped it, according to Mayor Sylvester Turner, writes Kathrine Schmidt.

Houston fended off stiff competition from Vancouver to land the next WPC, the first time in more than 30 years that the US will have held the triennial event, after Houston itself played host in 1987.

Some 7000 hotel rooms are within walking distance of the George R Brown Convention Center, organisers said, and museums and sporting venues are just a quick ride away on the city’s light rail line.

“Ancient part of the bid is that it’ll be a walkable congress,” explained Galen Cobb, of the US WPC committee and vice president of industry relations at Halliburton.

“We look forward to the World Petroleum Congress coming here. We are starting to make preparations for them. We just want to make this one of the best WPC conferences that they’ve had.”

WPC in 2020, and Discovery Green, which will be the setting for the “US Night” cultural event during the congress.

These improvements were aimed at promoting green space and walkability before the 2017 Super Bowl — a truly gargantuan sporting event — and the same features were showcased again when the Houston Astros baseball team made a championship run through the playoffs to win the 2017 World Series. Minute Maid Park stadium also hosted multiple games of the action-packed play-off series.

Turner said collaboration between the city and its energy industry continues to blossom, citing companies including Chevron, Shell, Halliburton and ExxonMobil. “All of the companies here in the city have played very pivotal roles to the city and have been very strong corporate partners,” Turner said.

In addition to the fun, officials are pitching the event as a productive and strategic event that will help attendees forge global partnerships and deliver results for their business, with events like Business Forums and VIP “matchmaking”.

The event also aims to offer guests a window into the US shale business, and tours are planned for technology centre sights around town, as well as trips outside the city to the Permian basin for a first-hand look at the crown jewel of US unconventionals production.

WPC 2020 will be held in early December so as not to conflict with Houston’s events calendar, which also boasts events like the North American Prospect Expo (NAPE), CeraWeek and the Offshore Technology Conference.

The date is also designed to be during more pleasant weather to avoid Houston’s oppressively hot and humid climate in June and July, when the Congress has been held in its last couple of iterations.
Keeping it topical

Norwegian Tor Fjaeran speaks to Erik Means about his priorities as he takes over the role of WPC president.

As chairman of the conference committee for the 22nd World Petroleum Congress in Istanbul, Tor Fjaeran’s main priority was to ensure that the conference would be as topical and relevant as humanly possible.

Now, having been chosen to succeed Jozsef Toth as president of the World Petroleum Council, he is taking a similar approach to the preparations that are under way to ensure that the next WPC will be even more topical when it kicks off in Houston on 6 December 2020.

Fjaeran, a Norwegian geologist who has spent his entire professional career with Statoil, is very proud of how WPC in Istanbul was conducted by the organisers and received by the delegates, while at the same time being conscious of key lessons learned from the event that can be put to good use in Houston.

“This has been a good congress from my perspective,” Fjaeran said. “This event has been organised in challenging times, really, with a lot of things happening in the larger global context — geopolitically, volatile oil prices, the energy mix is changing — and it has been really important for us to include that into the programme. I think that we have been able to do it.

“We have had almost full rooms all the time. That’s good for us, it seems that there’s a lot of interest, and it’s also a reflection of quality.”

The trick now will be to translate lessons learned in Istanbul into a successful event at the modern George R Brown Convention Center in Houston in three years.

“We always have to be relevant, we have to catch the topics of the day,” Fjaeran said, noting that this can be a challenging task given that the foundation for the Houston event must be made nearly three years before the opening bell sounds to start the 23rd WPC.

“Of course in that respect we have to understand the global context, and we have to be out there catching that in this period, and translate that into a programme relevant for Houston,” Fjaeran noted.

“What that will be, only time will show. But the world is different than it used to be. Things change faster in some areas than they used to.

“We are dependent on working closely with the national committees, and it’s important for us to work with the host in Houston, so we build a programme with relevance both for that site but also for the WPC as a whole.”

He added: “It’s important to work closely with the young people, because the future belongs to them, and I want them to be involved in defining that future.”

One thing that Fjaeran can say about the next WPC is that visitors will be able to expect a very smooth ride.

“Houston is a lot easier logistically. Everything is there in one location... everything will be close, within walking distance from hotels into the congress centre and into the exhibition.”

He noted that the exhibition will be held in a modern, spacious and user-friendly facility. “And the congress centre is very flexible so we can build what we need from scratch. So I think logistically things will be very easy,” he said. “We have a very skilled US national committee, and they are prepared. We have a mayor of Houston (Sylvester Turner) who is very much behind this, very enthusiastic, and he supports what we do.”

Fjaeran predicted that participants at WPC in Houston will find that the event has grown in size.

“I believe you should expect to see more participants and more exhibitors because of it being arranged in a location where most industry players across the entire oil and gas value chain are represented.

“Critical to its success is to really capture the topics and the issues of the day and to build a programme that will attract the ministers and chief executives relevant for those topics.

“We have been good at doing that this time (in Istanbul), and I hope the same will be the case next time in Houston.”
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