LNG investment call

Liquefied natural gas producers need to approve projects totalling around 20 million tonnes per annum each year — starting this year — to meet projected future demand, according to Woodside chief executive Peter Coleman, with the investments translating to between $30 billion and $50 billion.

Houston gears up to host WPC 2020 event

Fjaeran ready to take over as WPC president

Powering up

Electric vehicles face component pressures in rise against oil and gas.

US joins LNG race

Country well on way to vying with Qatar and Australia to be world’s top exporter.

New tack for EOR

Industry told to take new approach to enhanced oil recovery.

Emissions lessons

World’s up-and-coming unconventional plays can learn from US shale patch.

In the picture...

Scenes from the closing ceremony at WPC 2017.

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HOUSTON officials are excited to host the World Petroleum Congress in their city in three years’ time, and are already gearing up for preparations to welcome delegates to their city in 2020. The Bayou City 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, who made the trip to the 2017 WPC in Istanbul to pitch his home city.

However, Houston also offers so much more, from the aerospace industry to shipping to the city’s enormous medical complex. It is also the most diverse city in the US, where one in four citizens is foreign-born, Turner said.

That diversity — whether of ethnicity, language or ideas — is a point of pride, the mayor added. “We don’t build walls, we build partnerships and deliver results for our citizens,” Turner said during a session at the 2017 WPC.

The city lost out to Moscow and Vancouver to land the next WPC, the first time in more than a decade the US will have held the event, after Houston fended off competition from Vancouver to land the next WPC in 2017, respectively.

As part of the bid, World Petroleum Council officials pitched the roughly $1.5 billion in improvements to Houston’s downtown area ahead of the Super Bowl hosted in February 2017. Those include a new hotel, the Marriott Marquis, connected to the George R Brown Convention Center, as well as fresh updates to the surrounding streets and the Discovery Green park right outside.

Some 7200 hotel rooms are within walking distance, organizers said, and museums and sports venues are just a quick ride away on the city’s light rail line. “An important part of the bid is that it will be a walkable congress,” explained Galen Cobb, of the US WPC committee and vice president of industry relations at Halliburton.

The event itself will be held at the George R Brown Convention Center, with the “US Night” cultural event held at Discovery Green.

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 “match-making.”

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 firsthand look at the crown jewel of US unconventional production. The event 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.

The US committee also pledged to send 100% of net profits from the event back to a WPC fund that helps foster educational opportunities globally within the industry.

In response to a question on US restrictions on travel from abroad imposed by US President Donald Trump, Turner urged one potential delegate not to be “deterred” and organizers would work to “smooth” the journey for travelers.

Houston gearing up to host WPC 2020

World’s energy capital already preparing to hold 23rd World Petroleum Congress

KATHRINE SCHMIDT
Istanbul
Fjaeran all set to take the reins at WPC

Conference committee chairman to succeed Jozsef Toth as president and guide the group to its 2020 event in Houston

Interview

ERIK MEANS

Istanbul

As chairman of the conference committee for the 22nd World Petroleum Congress (WPC) in Istanbul, Tor Fjaeran’s main priority has been to ensure that this 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 will take a similar approach to the preparations that are already 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, sat down with Upstream on the final day of WPC 2017, not only to discuss the next WPC in Houston but also to reflect on lessons learned from the event in Istanbul.

“This has been a good congress from my perspective,” he 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 catch that into the programme.

“I think that we have been able to do it,” Fjaeran said.

“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 three years from now.

“We always have to be relevant, we have to catch the topics of the day,” he said, noting that this can be a challenging task given that the foundation for the Houston event must be made within the next six months, a full three years before the opening bell sounds to kick-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 smoother ride than they have been accustomed to in Istanbul and three years ago in Moscow.

“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.

“The exhibition area will be a lot better than this time, with more space, 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. 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 explained that the theme for WPC 2020 has not yet been chosen. “That’s a process that starts soon. We will have our first working session in Houston in December, and that will kick off the entire process... The theme will be chosen in Houston by the end of the year,” he said.

“I think you should expect to see more participants and more exhibitors because of the size of the site.”

“I think what is most important is really to capture the topics and the issues of the day and to have some very good plenaries to attract the ministers and the CEOs relevant for those topics.

“We have been good at doing that this time (in Istanbul), and I think the same will be the case next time in Houston.”
Call for more LNG investment

Up to $50 billion needed annually to meet forecast demand, says Woodside Petroleum chief executive

AMANDA BATTERSBY
Istanbul

LIQUEFIED natural gas producers need to approve projects totalling around 20 million tonnes per annum each year — starting this year — 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 22nd 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, said Coleman.

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

“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 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 that they sell into the market and the way that 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”.

FRSUs today 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 flexible. We’re seeing that big pipelines are now being replaced by virtual pipelines,” said Coleman.

QATAR’S recently stated intention to boost the nation’s liquefaction capacity to 100 million tonnes 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.

“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 22nd 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,” said Coleman.

“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. “So 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.”

Qatar this week said its LNG exports to nations including Japan, South Korea, China and India had not been impacted since Saudi Arabia, the United Arab Emirates, Bahrain and Egypt last month severed ties with the nation over alleged funding of terrorism.

Photo: TOLGA SEZGIN/UPSTREAM
Electric car industry faces metal pressures

Supply of two key components likely to hamper electric vehicles’ rise against oil and gas industry

Eoin O’Cinneide

Istanbul

The challenge of the electric vehicle market to the oil industry will be limited if manufacturers cannot overcome supply constraints of two major metal commodities: lithium and cobalt.

Speaking at a session on creating partnerships in the energy industry at the World Petroleum Congress, Bahrain’s Oil Minister Mohammed bin Khalifa bin Ahmed al Khalifa said that, at the current rate of production, US electric car manufacturer Tesla can only produce 600,000 vehicles per year.

Lithium is a major component in batteries for electric cars, but is also used in batteries for other devices such as mobile phones, while it is a key alloy with metals such as aluminum and magnesium for use in various industries.

“We don’t realise is that lithium, the major component of battery production, is a very limited resource — you cannot scale it up,” Khalifa said.

“You are actually limited in a different commodity, and that is going to have an enormous impact for electrical vehicle strategy,” he added. However, he added that lithium is not even the most precious commodity when it comes to electric vehicle manufacture.

“If you talk to Tesla, they are not worried about lithium; they are worried about another commodity they use: cobalt,” he said.

“This could actually create new investment opportunities for players inside or outside of the energy industry.

“Now you know that there are two (main) commodities, if you believe in electrical vehicles, that are going to be extremely valuable,” Khalifa said.

“Maybe that is an investment decision to make. And if you do I should get a cut (as) I told you about this — and that is an example of partnership,” he joked.

Ferenc Horvath, vice president of refining and marketing at Hungarian player MOL Group, agreed that the rise of electric and autonomous vehicles can offer opportunities for partnerships across the value chain.

“We believe that autonomous car driving and car sharing will become a very important area for the next 10, 15 or 20 years,” he said.

“Customer habits and the customer experience is recently changing very quickly and I don’t think that in 15 years the most important thing for people will be to own a car. Rather, it will be to own mileage or to have the opportunity as possible to go from A to B,” Horvath added.

“In that way there is an opportunity to make partnerships in power sharing and then someone will have to manage the fleet, so there are new opportunities in fleet management.”

Nasser confident on EVs

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 recently by the International Energy Agency, showing that the number of EVs 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 2.2 billion by 2040.

“The percentage of EVs in the global fleet “is very small but it is growing”, Nasser said, standing currently at a mere 0.2% but expected by most analysts to reach somewhere between 10% and 20% by 2040. Such a development would mean that the number of EVs 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 says.

In this scenario, he adds, the share of EVs 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 EVs, 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 channeling “a lot of investment in that direction”.

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Spotlight on best practice

A SHARP reduction in exploration and production investment amid the oil price downturn has thrown a sharper focus on best management practice in an under-pressure industry, delegates at the 22nd World Petroleum Congress in Istanbul were told, writes Fabio Palmigiani.

Miguel Moyano, upstream director at the Association of Oil & Gas Producers in Latin America and the Caribbean, said the upstream sector experienced reductions in investments of about 30% since late 2014, when oil prices started to collapse.

"The impacts of the fall in oil prices led to capex reduction of about $250 billion, re-writing of contracts, re-definition of portfolios and a relentless search for innovation and technology," said Moyano.

In light of that, Moyano said oil operators need to improve standardisation of exploration activities and processes when it comes to well engineering and design, and risk assessment.

Milton Costa Filho, secretary general of the Brazilian Petroleum Institute, said the oil industry typically requires large sums of investment, but in order to attract and deploy capital, the decision-making process must be rigorous.

"There is plenty of capital available seeking good opportunities, and many investors are not risk averse, provided that both the capital and the risk are remunerated," Costa Filho said.

"It is critical that the most advanced tools are employed to reduce risk and uncertainty. Cutting edge technologies and leading project management approaches should bring a real competitive advantage." He highlighted the pre-salt discoveries in Brazil’s Santos basin as an example where innovation was essential in order to keep a leading edge.

Costa Filho said: "The discovery of the pre-salt province resulted from the adoption of a totally new reservoir paradigm."

Anatoly Zolotukhin, professor at Russia’s Gubkin University, presented a case study of Mexico’s onshore Cantarell field.

In 2003, Cantarell was producing 2.2 million barrels per day, representing about two thirds of Mexican state oil company PEMEX’s total output.

"Production at Cantarell started to decline in 2004, and today the field faces a series of challenges that can be mitigated through the use of technologies," Zolotukhin said.

According to Zolotukhin, PEMEX has been applying well repair, secondary recovery, reservoir management, laboratory tests and fluid tests as part of an optimal development to improve efficiency in exploration and production activities in both exploration and some shallow-water fields.

LNG

US on course to vie for top LNG exporter spot

IEA report sees global gas demand rising to 2022 as US shale drives market transformation

ANAMARIA DEDULEASA
Istanbul

THE US is well on its way to challenging Australia and Qatar for the position of top liquefied natural gas exporter as its shale production drives market transformation, according to a report from the International Energy Association (IEA).

The Paris-based agency said in its Gas 2017 report that new supplies from the US will be able to meet growing demand in developing economies.

"Global gas demand is expected to grow by 1.6% a year for the next five years, with consumption reaching almost 4 trillion cubic meters by 2022, up from 3.630 bcm in 2016. China will account for 40% of this growth," the IEA said.

"(The US) will account for 40% of the world’s extra gas production to 2022 thanks to the remarkable growth in its domestic shale industry. By 2023, US production will be 890 bcm, or more than a fifth of global gas output."

Production from the Marcellus shale will increase by 45% between 2016 and 2022, even at current low price levels, as producers increase efficiency and produce more gas with fewer rig.

Additionally, while US domestic demand for gas is growing, more than half of the production increase will be used for liquefied natural gas for export.

As a result, by 2022 the IEA estimates that the US will be “on course to challenge Australia and Qatar for global leadership among LNG exporters”. "The US shale revolution shows no sign of running out of steam and its effects are now amplified by a second revolution of rising LNG supplies," IEA executive director Fatih Birol said.

"US LNG will be a catalyst for change in the international gas market, diversifying supply, challenging traditional business models and suppliers, and transforming global gas security. A new wave of liquefaction capacity is coming online at a time when the LNG market is already well supplied," the IEA said.

However, this “evolution” of the role of natural gas in the global energy mix has far-reaching consequences on energy trade, air quality and carbon emissions, as well as the security of global energy supplies.

"This LNG glut is already affecting price formation and traditional business models — and attracting new LNG-consuming countries like Pakistan, Thailand and Jordan," according to the report.

"Europe could see growing competition between LNG imports and pipeline gas as domestic production declines, creating extra uncertainty on the sources of future supply," the IEA said.

"The recent standoff involving Qatar, which supplies about a third of the world’s LNG, and neighbouring countries has also underscored potential risks to gas supply security," it added.
ENHANCED OIL RECOVERY

Industry told it’s time to think differently on EOR

Human factors of experience and expertise can help companies make the most of project nuances

KATHERINE SCHMIDT
Istanbul

DESPITE the challenges of today’s world, experts still see a role for enhanced recovery techniques in oil and gas projects even in a world where oil is below $50 per barrel, panelists said at the World Petroleum Congress.

Historically, improved oil recovery and EOR methods have faced complaints of being too expensive in comparison to other alternatives, or unpredictable, in that lab results would not bear out in the field setting, Ivan Marten, global energy practice senior partner at the Boston Consulting Group, told delegates in Istanbul.

Such projects were in some quarters also seen as being “inflexible” — requiring multi-year investments.

But considerations are project-specific, and the topic overall more complex.

“This is a subject that requires much more nuanced and detailed discussion,” Marten said.

According to Tayfun Babadagli, professor and NSERC research chair in unconventional oil and gas at Canada’s University of Alberta, too many assumptions are made about EOR.

He urged those in the business to “think differently” and also considered human factors that expertise and experience can bring to the table.

“Each EOR case is unique. Each reservoir is different geology,” he said. “Our job is to make it economic. How do you make it?”

In one example, Germany-based Wintershall takes advantage of being part of the BASF chemical group, allowing the two companies to collaborate through the value chain on chemical EOR projects, explained Ana Todorovic, head of the company’s enhanced oil recovery programme. That means the companies can work together on angles from assessment of EOR suitability, chemical synthesis and later upscaling, laboratory testing and field applications.

“You are able to look into a problem from different angles,” she said, and solve challenges.

Those joint projects include a microbial enhanced oil recovery scheme, now in a multi-well test pilot, with another exploring surface active agent solutions for Middle East carbonates in high-temperature, high-pressure conditions.

Another case is a schizophrenic biopolymer — which is derived from a fungus — that has been deployed for two years on continuous injection at the Bockstedt field.

For Mohamed Emadi, president of the EOR and EOR Institute at Iran’s NIOC, enhanced recovery represents a key tool in boosting recovery from the country’s giant fields. The country has a 25% recovery factor overall — below the global and regional average — in which it sees room for improvement.

Gas injection is generally seen as favourable for the tight carbonates found in that region.

The company is also tendering for huge joint venture projects, a significant number of which involve various enhanced oil recovery projects.

“We have a huge possibility and responsibility to increase it in the future,” he said.

Technology key to unlocking Red Sea spoils for Aramco

STATE-OWNED Saudi Aramco is hoping that innovative seismic acquisition technology will help the company to successfully explore the geopolitically complex sub-salt of the ecologically sensitive Red Sea, writes Amanda Batterby.

These innovative technologies for shallow-water seismic surveying included Magseis’ autonomous miniaturised cable nodes, while contractor Ketta deployed streamers from remotely controlled drones.

Saleh Al Saleh, manager of Aramco’s Red Sea exploration department, said that conventional seismic technologies such as ocean bottom node and ocean bottom cable (OBC) had their limitations, added to OBC being “much costlier” than the streamer system.

Aramco’s current frontier Red Sea exploration campaign started with 7 ships and three aircraft working round the clock for two years, he told delegates at the 22nd World Petroleum Congress in Istanbul.

Still, the company has said its share of the Red Sea oil and gas resources had the potential to boost Saudi Arabia’s reserves base by more than 30%.

Saleh reflected how 3D seismic technology had earlier changed the fortunes of explorers in sub-salt plays in the Gulf of Mexico — an area some geologists had referred to as the Dead Sea after a string of early unsuccessful wildcats.

A couple of years ago, Aramco put on hold its deep-water exploration in the Red Sea — where water depths are up to 3000 metres — because of the high costs involved.
Drive to beat gas flaring

**POSITIVE APPROACH**

Technology is ‘available but not used’

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 was told, writes Eoin O’Cinneide.

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

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 compressions 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.

CARBON EMISSIONS

US shale patch yields lessons on methane

**Argentina’s Vaca Muerta** and other burgeoning unconventional plays can learn from emission reduction techniques in North America

EOIN O’CINNEIDE

Istanbul

**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 his group has 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 kicks 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 at the World Petroleum Congress in Istanbul on Thursday.

“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 last 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.

Currently 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.
Stars shine bright in Istanbul

All eyes on Istanbul as industry leaders from all around the globe gather to discuss the major issues in oil and gas

ERIK MEANS

Istanbul

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 on Sunday evening 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 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 break-even costs through efficiency drives.

“We will be able to deliver a project with a break-even 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.

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 diversify the energy mix, Erdogan said from the podium.

“Oil and gas resources are now long term assets at the disposal of the people of the Turkish Republic,” he said.

“By investing in the energy sector we can 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 oil is expected to be flat this year.

“Key energy bridge” as it plans to diversify the energy mix, Erdogan said from the podium.

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“This involves not only reducing costs and increasing efficiency, but also shrinking our carbon footprint.”

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Winners show their excellence

Companies and individuals win awards for technical development and social responsibility

ANAMARIA DEDULEASA

THE World Petroleum Council handed out several awards for "excellence" in the oil and gas industry to companies and young professionals from the sector.

On the last day of the 22nd edition of the congress, this year held in Istanbul, participants gathered in the plenary room to find out the winners.

Hosted by WPC president Jozsef Toth, the ceremony was a great end to a five days-worth of serious sessions, speeches and discussions on all-things-energy.

"The WPC Excellence award distinguishes companies, institutions or any public or private organisation, engaged in the oil and gas industry," Toth said opening the ceremony.

"Thirty companies and projects were nominated and then reviewed by an independent panel of judges across two categories — technological development and social responsibility."

The winner of the social responsibility award for small and medium-sized enterprises was Woodside Energy, with its Science & Technology Collaboration community education and outreach programme.

The other two finalists were Austrian group OMV, with its Women’s Empowerment in Pakistan Project, and Salym Petroleum Development, with its Go Local programme, which aims to enhance local content, develop local resources and increase local capacity.

Amid national oil companies and large companies, the social responsibility award went to Indian Oil Corporation with the Smokeless Village initiative and Pradhan Mantri Ujiwala Yojona implementation.

BP, Saudi Aramco and HPCL were among the finalists for the award.

The prize for Technological Development for small to medium sized companies was claimed by Huisman Equipment, with its latest generation robotised drilling.

Also in the running for that award were Incendium Technologies, with a new EOR technology, and Preffered Proppants, with its coating technology FloPRO for challenging hydraulic fracturing.

Indian Oil Corporation also took home the award for Technological Development for national oil companies and large companies with its INDMAX technology.

Towards the end, young professionals were also recognised for their work, as Ahmed Almubarak, team leader at Saudi Aramco, won for an unconventional programme in the Jafurah basin.

In second place came Shuna Sharma, an engineer with India’s Oil & Natural Gas Corporation, with a technology for enhanced oil recovery using nano particles. Dhaval Gupta, manager PSU Business with Reliance Industries in India, came in third with CASHe, a new paradigm of health and safety environment management.
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In a world that is ever more connected and interdependent, fast changes in one area have wider and deeper consequences than ever before. The impact of social media on election outcomes around the world and the “uberisation” of society are but a few examples.

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One visible change on the ground is the electrification of transport. Other sectors may follow in their quest to decarbonize. Solar and wind electricity generation and the "uberisation" of society are but a few examples.

In this respect, the oil and gas industry is in a unique position to play both in the shape of different business models. Are we prepared for the impact, and are we informed on the possibilities that the tech revolution will bring to the new digital oilfield?

These key questions and disruptive trends were discussed extensively during the Young Professionals Session at WPC.

The opening by Laura Garcia (WPC YP Committee), through the international survey capturing the perception of students and young professionals, highlighted potential breakthroughs considered by the new generation.

‘Big data’ was highlighted by Saleh Al Saleh as an important factor when it comes to utilising technologies to drive future exploration. After diving at 2000 metres under water, Wim Thomas (Shell) provided a vision of the future of the energy market, where diversification, energy access for all, and carbon footprint reduction will be opportunities for the oil and gas industry to grow if embraced early enough.

Opportunities for the new generation to step in and contribute.

Stephane Rousselet
WPC YP Chair

Collective push to provide energy access

In September 2000, when the United Nations announced the eight Millennium Development Goals (MDGs) to be achieved by 2015, no specific MDG related to energy was considered, despite the importance of access to energy in achieving most of them.

However, energy has finally achieved its rightful position at the top of the global development agenda within the new set of Sustainable Development Goals (SDGs) that were approved in September 2015.

This applies in particular to SDG7 (“Ensure access to affordable, reliable, sustainable and modern energy for all”) and SDG16 (“Promote peaceful and inclusive societies for sustainable development”). The joint efforts under Sustainable Energy For All (SE4ALL) are instrumental in achieving the goal of universal access to energy.

The convening and financial power behind SE4ALL comes from the United Nations and the World Bank, with support also provided by many others entities, including the Opec Fund for International Development (OFID) and the World Petroleum Council (WPC).

In addition, concerted efforts of the oil and gas industry focused on energy poverty alleviation can be a positive contribution to the proposed SDGs and the objectives of SE4ALL.

In this respect, the oil and gas industry is in a unique position to use its resources — in particular its technical expertise and knowledge — to develop creative solutions for providing better access to energy and to create opportunities for replicating and scaling up investments in energy access.

This involves working together with other stakeholders — including development funds, business developers and other industry initiatives — to advance energy access.

As the oil and gas industry has adopted corporate social responsibility as part of its business to address the social challenges of its host communities, there is an increasing focus on addressing energy poverty.

This is important particularly in developing countries, as access to affordable modern energy is critical to foster local economic development and attain sustainable development.

The Oil & Gas Industry Energy Access Platform (EAP) was established to contribute to the achievement of SDG7 on universal energy access through the enormous potential of the industry to build upon its leadership, technology and wealth of business experience.

Members of EAP comprise Boston Consulting Group, The Global LPG Partnership, the International Gas Union, OFID, OMV, Schlumberger, Shell, Total and the World Petroleum Council.
In the picture...