Global LNG production capacity is likely to rise sharply until 2030, despite uncertainty about the USA's stance

Over the last few weeks, many forward-looking studies relating to COP 28 and the New Year have been published. They have concluded that, among other things, **the growth of the global natural gas industry will probably continue for the next few years, albeit moderately. The International Energy Agency (IEA) therefore expects upstream production to rise by 1.5% per annum on average over the 2024-2026 period. Most of this increase will be attributable to the United States,** especially if Donald Trump becomes the country's President again, as he will try to boost the US hydrocarbons sector by alleviating the fiscal, regulatory and environmental restrictions that limit the industry. **According to the IEA, gas production is also expected to increase in Europe, the Middle East and even in Russia. And then there's also Africa, where several countries are preparing to become major gas and/or LNG producers. In particular, they include Mozambique** and Tanzania, as well as the Senegal-Mauritania area, which is banking heavily on natural gas as a source of revenue over the next few years and decades.

(continued on p.3)

Mozambique: ExxonMobil and TotalEnergies postpone their projects, while Russia offers to help Maputo

Over the last few weeks, a resurgence of hostilities by armed groups claiming allegiance to the Islamic State (IS) has forced ExxonMobil and TotalEnergies to once again postpone work on their planned liquefaction terminals in Mozambique. In November last year, the two majors, along with Italy's ENI (ExxonMobil's partner in Mozambique), met with representatives of the Mozambican government and the European Union in Maputo to examine the situation. At the time, they **were hopeful that an improvement in the security situation would allow them to resume their onshore activities during the first half of 2024. For TotalEnergies, this would involve resuming the construction of a 13.1 MMt/annum LNG plant at Palma, in the north of Cabo Delgado province,** on Mozambique's border with Tanzania. Phase 1 of the project was 20% complete in April 2021, when the French group was forced to declare *force majeure* and stop work due to the deteriorating security situation. **ExxonMobil has not yet started to build its planned onshore 15.2 MMt/annum LNG plant. However, its partner ENI has been producing LNG on board a floating liquefied natural gas (FLNG) facility, moored offshore, since November 2022; its operations are continuing without any major disruptions, and even with a slight increase in production in late 2023 (3.4 MMt/annum).**

Security conditions in Mozambique improved considerably last year, mainly thanks to the actions of armed contingents provided by Rwanda and the Southern African Development Community Mission in Mozambique (SAMIM), which includes eight other African countries (Angola, South Africa, Botswana, DR Congo, Lesotho, Malawi, Tanzania and Zambia). The Palma region is still secure, thanks to the effective action of Rwandan forces. The situation varies greatly in the

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rest of Cabo Delgado province. SAMIM's effectiveness is questionable. However, the withdrawal date of these inter-African forces is fast approaching: in principle, they will have to have left Mozambique by July 15, 2024. One brigade already left the country in mid-February. **And despite the support of the European Union, the United States and India, the Mozambican army itself is still particularly ineffective. Not only does its combativeness leave much to be desired, but the population frequently compalins about ill treatment by its members. For the time being, any withdrawal by Rwandan forces, whose arrival in Mozambique was actively encouraged by France, is out of the question.** However, neighboring Tanzania is irritated by their presence. On January 23, 2024, President Samia Suluhu Hassan thus declared that the Tanzanian army is deployed along the Mozambican border not only to fight the insurgency, but also because "the army of a foreign country is there, and is along our borders".

The security situation started to deteriorate again in mid-January 2024

The security situation began to deteriorate in mid-January 2024. It looks as if the groups have received seaborne human reinforcements and supplies. They have indeed been very active along the coast, especially near the village of Mucojo, which is some 135 km south of Palma and controls the strategic Estrada Velha coastal route. **Militants from other armed groups – such as Ahlu Sunnah Wa Jamo and the Central African branch of IS – are reported to have joined the Mozambican insurgency, which was apparently having difficulty finding recruits among the local population.** If this information proves to be correct, it would mean that the Mozambican Navy is failing to control Mozambique's waters despite all the equipment and training it has received so far.

A noteworthy development: Russia seized the opportunity to remind the Mozambican government of its longstanding friendship and offer its help. In early February 2024, its ambassador in Maputo, Alexandre Surikov, declared that Moscow is prepared to help the Mozambican army to fight against the insurgents in Cabo Delgado. "If [the Mozambicans] need any specific help, we are always by their side", he said. Russia's irruption onto the Mozambican scene will only surprise those who have forgotten that **Moscow helped Frelimo, the movement which is now in power in Maputo, throughout the civil war (1977-1992).** However, the province of Cabo Delgado was controlled by the rival Mozambican movement RENAMO (Resistência Nacional Moçambicana) at the time. After the civil war, it was transformed into a political party and is now in opposition. New elections in Mozambique are due to take place in October 2024.

LNG: a small contract signed by Equinor and an Indian company hasn't passed unnoticed in Europe

In mid-February, Equinor signed a rather atypical long-term agreement. The Norwegian group has agreed to sell 0.65 MMt/annum of LNG from the Hammerfest LNG plant (and/or from the United States), to Deepak, an Indian company specializing in fertilizers and petrochemicals. Deliveries will be spread over a period of fifteen years, and are scheduled to begin in 2026. Although its broad international presence also includes the LNG sector, **Equinor doesn't usually sign agreements to export Norwegian LNG to Asia, especially on a long-term basis. However, the contract seems to be quite flexible, and most of the LNG may come from the United States, as Equinor is planning to lift US LNG during the period in question, and could resell it if it so chooses.** Deepak will use most of the LNG (once regasified) to produce ammonia for sale on the Indian market. **As a result of this agreement, the Europeans may start to take a closer look at ongoing and emerging business relationships between Equinor and clients based outside of Europe. Norway's**

neighboring countries are banking on its gas and LNG to offset – at least partly – the collapse of Russian gas imports, and their expected phase-out within the next few years. **And Oslo's role has now become even more important, as there are uncertainties about the future of US LNG** (due to Joe Biden's recent decision to freeze new approvals to export LNG to Europe).

However, the Norwegians are still complaining about their European trading partners. Oslo and Equinor both believe that the EU's gas strategy for the next few decades needs to be clarified. Norway (which isn't an EU member-state) is also irritated by criticism about its stance on climate, and the importance of hydrocarbons in its economy. Oslo is regularly accused of "duplicity" on environmental issues. **As a result, its growing relationships with non-European buyers could perhaps be regarded as a "message" to Europeans** (in essence: "trust us and stop criticizing us, or we will look for more opportunities outside Europe"). **So, for the time being, the importance of this announcement should be seen in perspective. While Equinor is a European player, it's also an international one** (although it isn't in the same league as BP, Shell or TotalEnergies), **which means that it will sign contracts like this from time to time. Furthermore, the amounts of LNG involved (in the Deepak contract) are small. Finally, it should be noted that the Norwegian company very recently (in late 2023) signed a far bigger agreement with a European buyer. The customer in question was Germany's SEFE,** which has pledged to buy 10 bcm/annum from Equinor until 2034 (with an optional five-year extension). **SEFE also signed a non-binding letter of intent to purchase huge amounts of hydrogen, produced in Norway, over three decades** (see PETROSTRATEGIES of February 12, 2024).

Equinor is irritated by the EU's attitude towards natural gas issues

In any event, India is a promising market for European oil and gas companies, and new contracts of this type are likely to be signed in future, either by Equinor or other companies based in Europe. While the majors are obviously first in line (especially TotalEnergies, which is very active in India), **the possibility that Equinor may also strengthen its commercial links with Asia can't be ruled out. Moreover,** considering that natural gas is less harmful to the climate than coal, **the Europeans (who are very keen on tackling climate change) should be pleased about such commercial ties, as every LNG contract signed with India is likely to adversely impact the coal sector**'s role in power generation and thus contribute to India's energy transition. **However, such interconnections aren't systematic: as is evident in Deepak's case, electricity isn't the only sector that consumes gas in India: its industry's needs are huge, and are set to increase. In which case, displacing coal obviously isn't the main goal.**

The global LNG supply is set to increase substantially over the next few years

(continued from p.1)

This being said, the second half of the 2020s will also see a very moderate increase in natural gas needs, according to specialists in the sector, and this trend may well continue far beyond 2030. The Gas Exporting Countries Forum (GECF) therefore believes that global primary energy consumption will grow by only 22% by 2050, with a slight increase in the share of gas, which is expected to rise from its present level of 23% to 26%. Let's just say that these figures aren't very impressive. This will be due to an anticipated decline in natural gas consumption in both Europe and North America. Tackling climate change and switching to carbon-free energies will emerge as priorities in these two regions, and this will tend to limit demand. **However, the United States will be a special case: although demand may stagnate or even decline, supply should continue to be stimulated,**

as the sector is still banking on LNG exports to various countries (including Europe, which will nevertheless seek to limit its gas purchases). **Furthermore, there is uncertainty on the climate and environmental front: US natural gas production and demand would both be boosted if Donald Trump were to return to the White House.** Over a four-year period (the length of a Presidential term in the United States), current trends (electrification and moderation of the use of fossil fuels) could be considerably slowed throughout the four years of a US presidential term, although a complete U-turn is unlikely. **For its part, China will continue to drive the global gas sector, as its demand is set to grow at a substantial rate over the next few years.**

Despite a few uncertainties **in this** otherwise **favorable context for natural gas, LNG is set to undergo impressive growth over the coming years.** Bernstein, a global asset management firm, believes that the world will need a great deal of LNG in the future. It expects demand to reach 600 MMt/annum by 2030, and 805 MMt/annum by 2040. **According to Global Sovereign Advisory (GSA), worldwide liquefaction capacity will reach 700 MMt/annum by 2030, as compared to only 400 MMt in 2023. This will revitalize all of the related infrastructure** (such as LNG plants, floating and onshore import terminals, gas pipelines, storage facilities, etc.). According to GSA, **some 1,100 gas infrastructure projects throughout the world are currently either under construction or in the financing phase.** While not all of them will be completed, this figure still gives an idea of global enthusiasm for natural gas, and more specifically for LNG. **The IEA also expects LNG capacity to surge strongly, but not to double: according to its calculations, projects that will enter service between 2025 and 2030 will add another 250 bcm/annum of capacity, which is roughly 45% more** than the current global figure (about 560 bcm/annum).

A clear distinction needs to be made between nominal capacity, real capacity and actual production

These figures refer to nominal capacities: in practice, for various reasons (technical incidents, maintenance, bad weather, conflicts, etc.), real capacities are always lower, and actual production may be even more limited if there isn't enough demand. This could possibly create a surplus market situation and lower LNG prices (at least on the spot market). While such an eventuality wouldn't surprise the IEA, GSA sees things differently: it believes that **some LNG export projects (in this case the most expensive) will be postponed or even abandoned if demand really turns out to be too limited.** In most cases, an LNG plant project will only receive final approval if it has obtained enough guarantees in the form of long-term LNG purchase/sale contracts (although there are certainly huge exceptions, such as Qatar). This longstanding rule should generally remain valid throughout the current decade.

It should be noted **that these forecasts were published just before Joe Biden announced that approvals to export US LNG to non-FTA countries were to be "paused"** (see PETROSTRATEGIES of February 5, 2024). **However, if such a decision were to involve a very long "pause" or even a definitive cessation of approvals, it could change the situation on the global LNG market**, as the United States plays a major role there. So this is yet another factor of uncertainty to take into account. For the time being, it's difficult to foresee what will happen next (nobody knows what Joe Biden will decide if he is re-elected, or even whether he will be re-elected at all). But analysts are nevertheless already trying to quantify this new parameter. Thus, **if new FIDs in the US LNG sector were to be postponed for only 18 to 24 months, the impact would probably be limited, says Wood Mackenzie; but a delay of more than two years could lead to a tighter global market after 2028**. Such a hurdle could also

have a lasting impact on the market, going so far as to jeopardize the future role of gas in the energy transition. Wood Mackenzie also says that three LNG-producing countries (Australia, Canada and Qatar) are well positioned to offset a shortfall in US LNG supplies, at least partly, if such a pause were to last more than two years. But there are uncertainties in this scenario as well: for example, LNG plants in Canada and Mexico will probably need to acquire natural gas from the United States. However, US upstream production may be lower than expected if restrictions on LNG exports are maintained.

TotalEnergies strengthens its foothold in Europe's electricity sector via a takeover and a closer partnership

Over the last few weeks, TotalEnergies has unveiled a new series of commitments in the electricity industry, in line with its strategy to substantially expand its activities in the sector. **On January 23, the French group thus announced that it had acquired Kyon Energy, a German developer of battery-storage solutions with a 770-MW project portfolio, some 120 MW of which is already operational,** with a further 350 MW under construction and 300 MW ready to be built. **Most of these assets are located in northern Germany. They complement TotalEnergies' current business portfolio in Germany, where the French group acquired the renewable energy aggregator Quadra Energy in 2023** and was awarded the development of two offshore windfarms, with a total capacity of 3 GW, in the North Sea and the Baltic. **That same year, the French group won a contract to install and operate 1,100 high-power charging points for electric vehicles.** "This acquisition will enable us to accelerate the development of our Integrated Power activities in Germany, both in production, trading, aggregation and marketing of low-carbon electricity available 24 hours a day", said Stéphane Michel, President Gas, Renewables & Power at TotalEnergies. **By 2030, the group is targeting 5 GW of battery electricity storage capacity worldwide.**

At the same time, TotalEnergies has announced that it has signed a new agreement with European Energy to develop offshore wind projects in northern Europe. In Denmark, the French group is acquiring 85% of the Jammerland Bugt offshore wind project (240 MW) as well as a 72.2% stake in the Lillebaelt South nearshore wind project (165 MW). In December 2023, the Danish Energy Agency confirmed that windfarms are to be installed on the two sites. **Final building permits are expected be issued by mid-2024, with start-up scheduled for 2030. The power generated there will be sold either on the wholesale electricity market or via corporate Power-Purchase Agreements (PPAs).** Furthermore, **TotalEnergies and European Energy have agreed** to form a joint venture **to develop and operate "new large-scale offshore wind projects" in Sweden and Finland.** The two partners also intend to bid for upcoming offshore wind tenders in Denmark.

According to TotalEnergies, this closer partnership with European Energy aims to "leverage both parties' strengths". The French group considers that it is well positioned for large-scale projects given its experience in this area. It also considers itself capable of easily marketing its electricity production on liberalized markets. For its part, "European Energy has a proven track record in developing greenfield projects and engaging successfully with stakeholders in [the Nordic] countries". **In September last year, the two companies already agreed to jointly develop, build and operate onshore renewable energy projects in several geographic areas.**

Who will control the international gas market?

Excerpt from a speech by Sadek Boussena (Algeria's former Minister of Energy and OPEC President from 1989 to 1991) during a conference in Algiers on December 2 last year[1].

The main players in the emerging "gas game" will be Russia, Qatar, Iran and the United States as producers, with China and Europe as importers.

Europe will lose its influence on the LNG spot market. Its sudden decisions to cut its imports of Russian gas and withdraw quickly from gas is introducing a new paradigm. A sharp reduction in its imports would cause it to lose influence on the international market. Moreover, if it confirms its ban on European companies participating in the development of gas projects throughout the world, it will exclude itself from a strategic business which will carry on with or without it. It is expected to become a "price taker" on the spot market.

Russia has lost control over the prices of its exports.

The Russians will no longer be in a leading position in any market. By taking the European market away from them, the Americans have moved the key to price formation. Like other exporters, Russia will thus become a "price taker".

China will use its LNG buyer's "premium card".

Its gas imports should rise to such a high level that it would de facto become the buyer/arbiter of the international market[2]. It will also be able to use the flexibility of long-term contracts and modulate its spot LNG imports to take advantage of its position as a backup buyer, transforming its dependence on the market into an advantage.

"The Americans have moved the key to price formation"

The Americans would like to influence prices on the LNG markets.

The US authorities constantly repeat that the United States will substantially increase its exports and remain the world's leading LNG exporter. To achieve this goal, it needs a relatively high price to reassure potential promoters of LNG produced from shale gas[3] (a price of more than $8.5 to $9 per MMBtu[4]). Who could give such a guarantee in today's uncertain market? However, the US government promptly intervenes in the market to influence prices whenever necessary. It will certainly try to control the LNG spot market, which could begin to guide international natural gas prices[5].

1 Before Joe Biden announced a pause in US LNG export authorizations to non-FTA countries.

2 It already imported more than 200 bcm/annum in 2023, with a (high) forecast of some 400 bcm/annum as of 2030.

3 S. Boussena: "Are US LNG exporters potential 'price-setters'?", Petrostrategies, February 27, 2023.

4 About E27/MWh, the price in September 2023. In its reference case, the IEA proposes a price of $10/MMbtu.

5 It has the means to do so: it could skilfully duplicate the policy that supported North Sea oil in 1973, when the production of more expensive oils from non-OPEC sources had to be encouraged.

BARREL NOTES

POLITICS

Ursula von der Leyen won't head NATO, but may continue as EC President

On February 19, just a few months before the European elections, which are due to be held in early June, **Ursula von der Leyen announced** in Berlin **that she was running for a new term of office as head of the European Commission. At the same time, she emphasized the need to "reconcile the economy with our planet" within the framework of the "Green Deal".** Over the last few months, her own party has been urging her to reduce "the excessive bureaucratic burden" on industry and agriculture. **She therefore stressed the importance of establishing a "reliable" legislative framework for investors and of examining with industry, "sector by sector, [...] how we can achieve our common [climate] goals". Ursula von der Leyen's decision may be partly due to her thwarted ambitions in another area, namely NATO. The former German Minister of Defense would have liked to take over** from Jens Stoltenberg (who will remain in office until October 1, 2024) **as the organization's Secretary-General.** However, according to the German press, **Chancellor Olaf Scholz is categorically opposed to such a prospect and has made this known to Joe Biden, thus ruining Ursula von der Leyen's chances. Mark Rutte, a Dutch politician** backed by Washington, London and Berlin, **is now considered the favorite for this position.**

LNG/OIL

Mauritania-Senegal: the FLNG for the GTA project and an FPSO for Sangomar arrive

Mauritania and Senegal are preparing to commercially exploit their hydrocarbon reserves via the international market. The two countries will soon become LNG producers, despite a few setbacks which could slightly delay the initial schedule. **BP has just announced that the floating liquefied natural gas (FLNG) facility for the Greater Tortue Ahmeyim** (GTA-Mauritania/Senegal) **LNG project, built by Golar LNG, has arrived on site. The GTA project should make it possible to produce LNG for more than twenty years.** Its first phase will have a capacity of 2.3 MMt/annum, and will enable Senegal and Mauritania to enter the global LNG market as producers. A second phase to double GTA's total capacity is planned. **And on February 13, Woodside Energy, the operator of the Sangomar oil project, announced the arrival of the Léopold Sédar Senghor floating production, storage and offloading unit (FPSO) off the Senegalese coast.** This step forward paves the way for the field's commercial exploitation. **Commissioning is expected around the middle of this year. Once it is up and running, production of around 100,000 b/d is expected.** Sangomar will have a substantial impact on Senegal's economy. According to the World Bank, the country should experience GDP growth of around 10% this year, driven by the oil and gas sector in particular.

GAS

EC launches a first mid-term tender for joint EU gas purchasing

On February 15, the European Commission (EC) announced the launch of an initial mid-term tender for a group gas purchase via its "AggregateEU" platform. The new service will allow buyers to submit their gas demand for multiple 6-month periods running from April 2024 to October 2029. The EC explains that "this mid-term tender **aims to ensure stability and predictability of supplies to the participating companies in the coming years, building on the foundations of the crisis mechanism put in place in 2023",** and in agreement with the stakeholders concerned. **To participate in this initial mid-term tender, buyers and sellers had to register and subscribe to the AggregateEU platform. Demand** for this initial round **was to be submitted no later than February 21** and will be put out to tender from 26 to 27 February.

CLIMATE

Climate: China may fail to meet its intermediate (2025) targets

According to the Finland-based Center for Research on Energy and Clean Air (CREA), China may fail to meet the climate targets it has adopted for 2025. This is due to its dependence on fossil fuels, which is still high and is even increasing. China is the world's largest CO_2

emitter. It has made a commitment to stabilize and subsequently reduce its emissions by 2030, then to achieve carbon neutrality by 2060. **Under the Paris climate agreement, Beijing has also pledged to meet intermediate objectives. In particular, some 20% of the Chinese energy mix is expected to come from sources other than fossil fuels by 2025. However, the CREA warns that the Chinese economy's post-Covid recovery has ruled out this possibility. CO_2 emissions from the electricity sector jumped by 5.2% last year,** as China increased its year-on-year coal consumption to generate electricity. **Another problem was bad weather, including several episodes of drought which limited the production of hydropower** (it fell to its lowest level in more than twenty years). **According to the CREA, Beijing will now have to reduce its emissions by 4% to 6% to achieve its 2025 target, which will be very difficult** unless it develops renewables on a massive scale. This isn't entirely out of the question, as China is progressing at a very impressive pace in this area (see PETROSTRATEGIES of February 19, 2024).

COMPANIES

Repsol's earnings fell by 25% in 2023 due to capital spending and oil prices

Repsol's financial results for 2023 have just been announced. The Spanish group will have to settle for net earnings of €3.17 billion, 25% less than in 2022, which was admittedly an exceptional year. **The decline is a result of moderate oil prices and a high level of investments.** In late 2020, Repsol announced an €18.3-billion five-year investment plan (equivalent to about $20 billion, at present) mainly aimed at decarbonizing its business activities. **Some €6.2 billion of this total was invested in 2023 alone. According to the management, this is the highest figure in the company's history.** More specifically, **nearly 43% of capital spending** in 2023 **involved projects in the Iberian Peninsula. As far as sectors are concerned, 30% of investments were allocated to renewables.** Repsol has thus installed some 1,100 MW of new green energy capacity, increasing its total renewable capacity to 2,800 MW. **The Spanish group intends to continue this high capex strategy over the next few years, with a budget of €16 billion to €19 billion over the four-year period from 2024 to 2027. Repsol's earnings are still respectable, despite the imposition of an exceptional tax on the profits of large energy groups** by the (left-wing) Spanish government. In theory, the tax was to be phased out this year, but the coalition currently in power wants to extend it or even make it permanent. Repsol is contesting this plan, which it considers punitive, and is threatening to reduce its capital spending in Spain if Madrid confirms that the tax is to be maintained.

NUCLEAR

Sweden: Vattenfall confirms its plan to install new reactors

Sweden's Vattenfall has confirmed its plan to commission a new atomic reactor by 2035, in line with the relaunch of nuclear energy in the country. In June 2022, the Swedish state-owned company launched a "pilot study" to build two small modular reactors (SMR) at the Ringhals power plant. "We have concluded that we see good opportunities to build new nuclear power on the Varo Peninsula, but that it is too early to choose a reactor type. [...] **It is still our ambition to have the first reactor in operation in the first half of the 2030s"**, says Vattenfall. In Sweden, the right-wing coalition currently in power said in November that it wanted to produce nuclear energy "massively" in order to decarbonize the national power grid and meet growing electricity needs. With this goal in mind, Vattenfall is currently acquiring land in the area where it is planning to build new reactors. The company is also preparing to apply for the necessary environmental permits. According to the conclusions of the pilot study, **the Ringhals site is "suitable" for building new reactors, despite significant environmental constraints** (the presence of protected natural reserves). **Vattenfall believes that the Värö peninsula can accommodate some three to five SMRs (generating 1.5 GW) or a single high-capacity conventional reactor. However, more will not be possible**, due to the presence of the nature reserve. **However, Vattenfall would like to be able to quickly build at least the equivalent of two conventional reactors (or a capacity of 3 GW). After that, Sweden is even planning to achieve a capacity equivalent to ten new conventional nuclear reactors by 2045**. At present, the country operates six nuclear reactors, all of which were commissioned between 1975 and 1985. Several other reactors have been shut down since 1999.

IN BRIEF

Indonesia: JERA and PLN EPI are to collaborate on LNG

Japan's JERA and Indonesia's PT PLN Energi Primer Indonesia (PLN EPI) have signed a Memorandum of Understanding to develop the LNG value chain (supply, development and operation of import terminals) in Indonesia. The two partners will also study the development of activities involving Carbon Capture, Utilization and Storage (CCUS). The agreement follows a recent agreement between JERA and Indonesia's Pertamina relating to investment opportunities in infrastructure for low-carbon fuels.

Nigeria: moves to end electricity subsidies

Nigeria is to put an end to its electricity subsidies, due to supply difficulties as well as the heavy debt generated by such incentives. According to Adebayo Adelabu, the country's Minister of Electricity, Nigeria is in debt to the tune of $857.5 million, and it also owes $1.3 billion to gas companies. Nigeria has set aside some $297 million for electricity subsidies this year, but they could end up costing much more.

India: Adani Total Gas and InoxCVA form an LNG alliance

Adani Total Gas (ATGL), an Indian urban gas distribution company, and Inox India (InoxCVA), a storage and distribution solutions provider based in the state of Gujarat, are to become partners under a reciprocal support agreement for the provision of LNG equipment and services. The agreement covers the development of LNG-related infrastructure, including small-scale import terminals and distribution stations.

China: CNOOC's Suizhong 36-1/Luda 5-2 starts production

In China, the secondary development project of CNOOC's Suizhong 36-1/Luda 5-2 offshore oil field in Liaodong Bay (Bohai Sea), at an average water depth of about 30 meters, has started production. Some 118 development wells are planned, including 81 production wells and 37 water-injection wells. The project is expected to achieve production of around 30,300 b/d of crude oil in 2025. CNOOC (operator) is sole holder of the license.

Spot ✶

• According to Eurostat, there were almost 3 million battery-only **electric passenger cars** in EU countries in 2022, a 55% increase over 2021 (1.9 million vehicles) • The **NNPC** and **TotalEnergies** joint venture has achieved zero routine gas flaring on all its assets in Nigeria. This is due to the elimination of flaring on the OML-100 block. Similar measures have already been implemented on OML 99 (in 2006), OML 102 (in 2014) and OML 58 (in 2016) • **Lithium de France** (a subsidiary of Arverne Group) has obtained a new exclusive license, by ministerial decree, to search for "lithium and related substances" in France's Bas-Rhin region. The permit covers an area of 151 square kilometers • **India** is to start negotiations to fully join the International Energy Agency (IEA). Its application is supported by France and the United States in particular. The IEA currently has thirty-one members.

Exchange Rates *

Country	Currency	US$1=
Algeria	Dinar	134.4282
Angola	Kwanza	839.0550
Argentina	Peso	837.8500
Australia	Dollar	1.5282
Azerbaijan	Manat	1.7025
Bahrain	Dinar	0.3770
Bolivia	Boliviano	6.9100
Brazil	Real	4.9339
Brunei	Dollar	1.3440
Bulgaria	Lev	1.8101
Canada	Dollar	1.3513
CFA Area	CFA Franc	607.0585
China	Renminbi	7.1886
Colombia	Peso	3934.8300
Czech Rep.	Koruna	23.4288
Denmark	Krone	6.8982
Ecuador	Sucre	25000.0000
Egypt	Pound	30.8952
Hungary	Forint	358.4055
India	Rupee	82.9713
Indonesia	Rupiah	15635.0
Iran	Rial	n.a.
Iraq	Dinar	1310.0000
Japan	Yen	150.2500
Kazakhstan	Tenge	451.2600
Korea Sth	Won	1334.7000
Kuwait	Dinar	0.3078
Libya	Dinar	4.8450
Malaysia	Ringgit	4.7940
Mexico	Peso	17.0643
Nigeria	Naira	1650.0000
Norway	Krone	10.4877
Oman	Rial	0.3850
Pakistan	Rupee	279.5000
Philippines	Peso	55.9525
Poland	Zloty	4.0026
Qatar	Riyal	3.6410
Romania	Leu	4.61
Russia	Ruble	92.5000
Saudi Arabia	Riyal	3.7501
Singapore	Dollar	1.3440
South Africa	Rand	18.9125
Sweden	Krona	10.3818
Switzerland	Franc	0.8808
Syria	Pound	n.a.
Taiwan	Dollar	31.5335
Trinidad/Tob	Dollar	6.7518
Tunisia	Dinar	3.1259
Turkey	Lira	2.91
UAE	Dirham	3.6729
UK	Pound	0.7928
Venezuela	Bolivar	1.00
Yemen	Rial	250.1650
EU-11	Euro	0.9254

* As at February 21, 2024

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