

### **MINISTERE DES ARMEES**

# Observatoire de la sécurité des flux et des matières énergétiques

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### Actualités énergétiques régionales

### Afrique du Nord - Moyen Orient

### How will the war in Ukraine affect Gulf oil producers?

**Date:** 04/03/2022

Middle-East, Crude oil, Oil, Supply, Trade

Although Western countries have managed to limit Russia's capacity to export oil, Gulf oil producers are unlikely to be able to benefit in the near term. This may change in the long run, however.

Source(s): Middle East Institute

### 'Not our war': Gulf states resist pressure to raise oil output

Date: 03/03/2022

Middle-East, Crude oil, Oil, Supply

The Gulf countries, which had suffered from declines in oil prices since 2014have so far resisted Western pressure to raise output as they benefit from the short-term price surge.

Source(s): Al Monitor

### **Europe**

### Putin's Ukraine move puts a northern Finland nuclear plant project in jeopardy

Date: 22/03/2022

Finland, Europe, Nuclear, Electricity, Projects, Power plants

Developments in Ukraine could bring the proposed new nuclear power plant in Pyhäjoki in northern Finland to a halt. The Finnish authorities are to grant final approval for the 1200 MW Russian-designed project, currently being built by Fennovoima, partly owned by Russia's Rosatom. In addition to providing the reactor itself, Rosatom is co-financing the construction of what would be Western Europe's northernmost nuclear power plant.

Source(s): Arctic Today

### L'Allemagne, l'Italie et la Bulgarie veulent diversifier leurs approvisionnements en gaz naturel

**Date:** 21/03/2022

Germany, Italy, Algeria, Qatar, Europe, Europe, Africa, Middle-East, G8, Emerging markets, Natural Gas, Supply, Trade

Afin de réduire sa dépendance au gaz russe, l'Allemagne s'est engagée à accélérer la construction de deux terminaux de gaz naturel liquéfié (GNL) dans le cadre d'un accord énergétique de longterme avec le Qatar, un des trois premiers exportateurs mondiaux de GNL) qui prévoit d'augmenter sa production de 50% d'ici 2027. L'Italie prévoit d'accroitre ses importations de gaz algérien (son deuxième fournisseur derrière la Russie). Sonatrach pourrait exporter davantage de gaz via le gazoduc Transmed vers l'Italie. L'Italie envisage également d'installer 2 terminaux GNL flottants d'une capacité cumulée de 10 Gm3/an et deux anciens projets de terminaux GNL proposés par le Sorgenia-Iren à Gioia Tauro (12 Gm3/an) et Enel à Porto Empedocle (8 Gm3/an) ont été relancés. Enfin, la Bulgarie ne souhaite pas renouveler son contrat d'approvisionnement en gaz russe avec Gazprom qui expire à la fin de l'année 2022.

**Source(s):** Connaissance des Energies, Connaissance des Energies, Reuters, Reuters, Reuters, Reuters

### The European Commission and the IEA unveil plans to reduce the European Union's reliance on Russian natural gas

**Date:** 18/03/2022

European Union, Natural Gas, Supply, Trade

The European Commission has released a communication entitled 'Joint European Action for more affordable, secure and sustainable energy', outlining a plan to make Europe independent from Russian fossil fuels well before 2030, starting with gas, in light of Russia's invasion of Ukraine. EU gas imports from Russia (pipeline and LNG combined) totalled 155 bcm in 202, which could be reduced by 2/3 (101.5 bcm) before the end of 2022, by increasing non-Russian gas supply by 63.5 bcm and reducing gas demand by 38 bcm, displacing 101.5 bcm of Russian gas imports. The European Commission proposes most notably to increase imports of liquefied natural gas (LNG) by 50 bcm and piped gas imports by 10 bcm, reduce gas demand in the power sector by 20 bcm by deployment of wind and solar and implement EU-wide energy saving to cut gas demand by 14 bcm. In addition, the International Energy Agency has provided a 10-Point Plan to European Union for reducing reliance on Russian supplies by over 1/3, while supporting the European Green Deal. The key actions recommended in the IEA's 10-Point Plan include not signing any new gas contracts with Russia; maximising gas supplies from other sources; accelerating the deployment of solar and wind; making the most of existing low emissions energy sources, such as nuclear and renewables; and ramping up energy efficiency measures in homes and businesses. Taken together, these steps could reduce the European Union's imports of Russian gas by more than 50 bcm, or over 1/3, within a year. This takes into account the need for additional refilling of European gas storage facilities in 2022.

Source(s): Oxford Institute for Energy Studies, IEA, IEA

### Ukraine and Moldova synchronise their power networks with the European grid

**Date:** 18/03/2022

CIS, Moldova, Ukraine, Electricity, Policy, Power grids, Interconnection (power)

The electricity grids of Ukraine and Moldova have been successfully synchronised with the Continental European Grid. Ukraine and Moldova, which were previously synchronised with the IPS/UPS electricity system (former USSR system) including the Unified Power System of Russia as well as the national networks of Kazakhstan, Kyrgyzstan, Belarus, Azerbaijan, Tajikistan, Georgia, and Mongolia, disconnected their power systems from the networks of Russia and Belarus in February 2022, when the Russian army attacked Ukraine. Subsequently, Ukrenergo applied for emergency synchronisation with the European power system, which was previously scheduled in 2023. The Ukrainian transmission system operator (TSO) Ukrenergo has been preparing the power system for synchronisation with the European Network of Transmission System Operators for Electricity since 2017, when the Agreement on the conditions for the future interconnection was signed.

Source(s): European Commission, Ukrenergo

### EU countries' coal-phase out plans on hold to stop relying on Russian gas

**Date:** 17/03/2022

European Union, Electricity, Thermal, Gas-fired power gen., Coal-fired power gen., Policy, Forecasts, Power plants

Several EU countries have put on hold their coal phase-out strategies following the Ukraine invasion by Russia, as reducing coal-fired power generation might increase their reliance on Russian gas imports. Coal could keep a temporary role within the energy mixes by the end of 2030 to allow countries to find new alternatives. Some future investments might be directed towards coal mining and coal-fired power plants instead of gas infrastructures and renewables (as previously planned). Czech Republic, which is 90% dependent on Russia for its gas supply (though gas only accounted for 11% of its power mix in 2020), planned to use gas as a gas transition fuel in its coal exit strategy; Czech companies now plan to switch back from gas to coal for power generation. Bulgaria's plan to build a large gas-fired power plant as part of its national recovery plan has also been cancelled. The country plans to continue using its coal-fired power plants until the construction of at least two new nuclear reactors. Romania also plans to boost coal mining capacity (without reopening mines). Following the war in Ukraine, Germany has required its coal-fired power plants to remain on standby if needed, and Italy (which announced its plans to exit coal by 2025) is considering re-opening coal plants to fill any shortfall in the immediate future if needed.

Source(s): Euractiv

### Guerre en Ukraine et dépendance au gaz naturel russe : quelles stratégies pour l'UE et la France ?

**Date:** 17/03/2022

European Union, Oil, Natural Gas, Coal/Lignite, Trade, Supply

L'IDDRI propose quelques principes pour accélérer la fin des importations de gaz naturel en provenance de Russie en France et en Europe. Les États membres devraient accélérer la mise en œuvre de leurs politiques de décarbonation, en particulier les stratégies de réduction de la demande énergétique. Cela signifie redoubler d'ambition dans le domaine de la rénovation énergétique des bâtiments. À cela s'ajoutent des mesures comme le rationnement volontaire ou réglementé des consommations énergétiques et la diversification des approvisionnements, à condition de ne pas engendrer de verrouillages dans des consommations d'énergie fossiles.

Source(s): IDDRI, IDDRI

### EU strategic autonomy in the context of Russia's war on Ukraine : What Think Tanks are thinking

**Date:** 10/03/2022

European Union, Oil, Natural Gas, Policy, Trade, Supply

Many politicians and analysts have been arguing in recent years that the European Union should boost its strategic autonomy and/or develop a higher degree of European sovereignty. Russia's military offensive in Ukraine gives this issue great urgency. In energy, the European Commission has now published plans to cut EU dependency on Russian gas by two-thirds this year and end its reliance on Russian supplies of the fuel well before 2030. This note offers links to recent commentaries, studies and reports from international think tanks on the European issues related to European strategic autonomy and sovereignty.

Source(s): Parlement Européen

#### **Asie**

Bangladesh commissions a 1.3 GW coal-fired power plant developed under China's Belt and Road Initiative, while sanctions on Russian banks may stall transactions over Ruppur nuclear power plant

**Date:** 22/03/2022

Emerging markets, Asia, Bangladesh, Electricity, Thermal, Coal-fired power gen., Projects, Power plants

Bangladesh has commissioned the 1,320 MW Payra ultra-supercritical (USC) coal-fired power project in Kalapara Upazila of Patuakhali District in the Division of Barisal. The US\$2.8bn power plant was developed by Bangladesh China Power Company (BCPCL), a 50:50 joint venture between the China National Machinery Import and Export Corporation (CMC), an affiliate of China General Technology Group (Genertec), and Bangladesh's state-owned power utility North-West Power Generation Company Ltd (NWPGCL). The project, which will produce  $8.5 \, \text{TWh/year}$ , is part of China's Belt and Road Initiative (BRI) and the Bangladesh-China-India-Myanmar Economic Corridor. In addition, western sanctions on several Russian banks have created uncertainty over transactions relating to the implementation of Bangladesh's Rooppur nuclear power plant project (2 x 1,200 MW), which is built by Rosatom and funded by the Russian development bank VEB.

Source(s): TBS News, The Financial Express

### China's LNG imports from Russia double in Feb. amid Ukraine crisis

**Date:** 21/03/2022

The volume of China's LNG imports from Russia grew 2.2 times from the previous year in February 2022, while in value terms, the imports increased 2.7 times to around US\$300m, according to the Chinese General Administration of Customs. China is Russia's largest energy importer.

Source(s): Kyodo News

### China and Russia reluctant to support Pakistan's energy sector

**Date:** 15/03/2022

China, Pakistan, Asia, Asia, BRICS, Emerging markets, Electricity, Policy, Power plants

China is reluctant to invest in the China-Pakistan Economic Corridor (CPEC) arrangement until problems related to overdue payments owed to Chinese independent power producers (IPPs) are solved (around US\$2.3bn). In addition, Russia has made no commitment to Pakistan's demand for sovereign guarantees on the proposed gas pipeline within Pakistan built with Russian support. The proposed North-South gas pipeline was agreed upon in 2015 but has remained in limbo since then.

Source(s): MENAFN, The Economic Times

### India, Russia discuss ongoing and potential joint energy projects

**Date:** 12/03/2022

Russia, India, CIS, Asia, BRICS, G8, Emerging markets, Oil, Policy

India and Russia have held detailed dialogue on current and potential joint projects in the fuel and energy industry and probable mechanisms for transactions amid sweeping sanctions on Russia.

Source(s): The Economic Times

### The Russian invasion of Ukraine and China's energy markets

Date: 07/03/2022

China, Asia, BRICS, Emerging markets, Trade, Supply

The invasion of Ukraine and its aftermath have a profound impact on China's short term energy supplies, its policy priorities for the coming year and long-term energy policies. In the near term, China will suffer from higher energy costs and commodity prices much like other energy importing countries. But in the longer-term, China could benefit from higher volumes of yuan-denominated trading (should Russian sellers choose to rely on it) and greater use of China's payment settlement system. Russia's growing international isolation could also lead it to offer attractively priced gas pipeline deals to China and open up new investment opportunities for Chinese firms in Russia's energy sector.

Source(s): Oxford Institute for Energy Studies

#### China announces South China Sea drills close to Vietnam coast

Date: 05/03/2022

China, Vietnam, Asia, Asia, BRICS, Emerging markets, Oil, Supply

China is carrying out more than a week of military drills in the South China Sea in an area between its southern province of Hainan and Vietnam, warning shipping to stay away. Part of the area is well within Vietnam's 200 nautical mile exclusive economic zone and Vietnam has previously criticised China for what it calls infringements on its sovereignty.

Source(s): Reuters

### **GE** commissioned the 500 MW Anyang 2-2 CHP plant (South Korea)

**Date:** 03/03/2022

Asia, South Korea, Electricity, Thermal, Gas-fired power gen., Projects, Power plants

GE has announced the start of commercial operation of the 500 MW Anyang 2-2 CHP plant in Anyang city (Gyeonggi Province, South Korea). The project consists of the renewal of older gas-powered assets with one GE 7HA.02 gas turbine, with a matching GT H65 generator, one STF D650 steam turbine and a ST A39 generator, along with a Mark VIe Distributed Control System (DCS) software solution and services. The Anyang District Heating Plant is capable of reaching close to 62.2% net plant efficiency in combined cycle and more than 93% efficiency in district heating mode. GE had previously modernised the 500 MW Anyang 2-1 CHP unit that started in 2018. The CHP plant will connect to Korea's Direct Heating System (DHS), a centralised system which distributes heat to residential developments since the 1990s.

Source(s): GE

### Russia's Rosatom starts building Tianwan-8 nuclear reactor in China

Date: 01/03/2022

BRICS, Emerging markets, Asia, China, Electricity, Nuclear, Projects, Companies, Power plants, Rosatom

Rosatom has started building the eighth unit of the Tianwan nuclear project, located in the Jiangsu province of China. As part of an agreement signed in June 2018, four VVER-1200 reactors will be supplied by Russia to China, including two for the Tianwan project (units 7 and 8) and two for the Xubadao project in Liaoning (northern China). Tianwan 7 and 8 are expected to be commissioned in 2026-2027. The Tianwan nuclear power plant is operated by the Jiangsu Nuclear Power Corporation, a joint venture between CNNC (50%), China Power Investment Corporation (30%) and Jiangsu Guoxin Group (20%). The power plant already includes a first phase of two 990 MW (1,060 MW gross) units, which were commissioned in 2007. Tianwan-3 (1,060 MW net, 1,126 MW gross) entered commercial operation in February 2018 and Tianwan-4 (990 MW net, 1,060 MW gross) in December 2018. Two additional 1,000 MW (1,080 MW gross) ACPR1000 reactors, Tianwan-5 and 6, were commissioned in September 2020 and June 2021. Tianwan-7 entered construction in May 2021. With all eight reactors in operation, Tianwan would become the largest nuclear power plant in the world, with a total capacity of 8.1 GW.

Source(s): World Nuclear News

### **Afrique**

# Gabon : la construction des centrales hydroélectriques FE2 et Impératrice Eugénie va nécessiter 453 M\$

Date: 24/03/2022

Gabon, Africa, Hydro, Renewables, Electricity, Projects, Power plants

A l'arrêt depuis plusieurs années, les travaux de construction des centrales hydroélectriques de l'Impératrice Eugénie (88 MW) sur la rivière Ngounié et du FE2 (36 MW) sur la rivière Okano à Mitzic (Gabon) pourraient bientôt redémarrer. Un accord tripartite entre l'Etat gabonais et les entreprises Coder et China Gezhouba Group Corporation (CGGC, Chine), chargées de financer et matérialiser ce projet, a été signé le mardi 15 mars à Libreville. A travers cet accord, la Compagnie de développement des énergies renouvelables (Coder) s'engage à mettre à la disposition de la CGGC les fonds nécessaires pour réaliser ces infrastructures.

Source(s): Agence Ecofin

### **US programme supports Ghana nuclear progress**

Date: 11/03/2022

G8, America, United States, Africa, Ghana, Electricity, Nuclear, Policy, Power plants

The USA and Ghana have announced their partnership to support Ghana's adoption of small modular reactor (SMR) technology under the US Department of State's Foundational Infrastructure for Responsible Use of Small Modular Reactor Technology (FIRST) programme.

Source(s): World Nuclear News

#### **Autres**

Reroute, reduce, or replace? How the oil market might cope with a loss of Russian exports after the invasion of Ukraine

**Date:** 10/03/2022

Russia, CIS, BRICS, G8, Emerging markets, Oil, Policy

The authors evaluate the global oil market's ability to deal with a disruption of Russian production and exports after Russia's invasion of Ukraine. This paper examines the potential for disruptions and a possible direction of change in Russia's participation in the global oil market.

Source(s): Center for Energy Studies

### Russia-Ukraine crisis: Implications for global oil markets

Date: 02/03/2022

World, Crude oil, Oil, Market

Looking forward the market focus should not only be on whether the oil sector will be directly targeted by sanctions, but also the crescendo effect of self-sanctioning along the oil supply chain all the way from marketing to financing to shipping. Fears over energy sanctions and the ambiguity over the banking sanctions have already seen companies avoid purchasing Russian barrels, pushing prices to new multiyear highs and shaving-off shock mitigation policies such as the SPR releases. Also, it has become clear that traders holding Russian crude on their books are struggling to clear cargoes and this has been reflected in widening differentials and rising shipping and insurance costs.

**Source(s):** Oxford Institute for Energy Studies

### The US plans oil release after Ukraine-related surge in global crude oil prices

**Date:** 28/02/2022

G8, World, America, United States, Oil, Crude oil, Prices

The Russian invasion of Ukraine has sent global crude oil prices to record highs, with the Brent price surging above US\$105/bbl on 24 February 2022 for the first time since the summer 2014, and the US West Texas Intermediate (WTI) exceeding US\$100/bbl. Since then, prices have eased, at around US\$98/bbl for Brent and US\$93/bbl for WTI. The US administration has consequently announced that the United States was working with other countries on a combined release of crude oil from strategic crude reserves. Japan and Australia would follow the oil release movement. In November 2021, the United States decided to release 50 mbl of oil from the Strategic Petroleum Reserve (SPR) through exchanges (32 mbl) and sales (18 mbl), in an attempt to lower domestic oil prices, which had reached 7-year highs. In order to have a larger impact on global oil prices, the US oil release was coordinated with China, India, South Korea, Japan and the United Kingdom. The US SPR currently holds around 582 mbl of oil. The Ukraine crisis also led to a more than 30% surge in gas prices in Europe (which imports 40% of its gas from Russia, mainly through Ukraine and Belarus), even if Russian gas deliveries to Europe remained uninterrupted. On 24 February, British and Dutch gas prices were 40-60% higher than the day before (gas price reached €140/MWh for the frontmonth contract TRNLTTFMc1 in the Dutch gas market), before declining on 25 February. Asian spot LNG prices also surged by more than 50%, following the jump in European gas prices.

Source(s): Reuters, Reuters, Nasdaq Reuters

### Stratégies d'entreprises

### **Stratégies**

### Stratégies des entreprises occidentales envers la Russie

BRICS, G8, Emerging markets, Europe, Denmark, Finland, France, Italy, Germany, Portugal, Russia, Oil, Crude oil, Refined products, Natural Gas, Coal, Biomass, Companies, Supply, Trade, BP, Eni, Equinor, ExxonMobil, Fortum, Galp, Shell, TotalEnergies, Uniper, Ørsted

Suite à l'invasion de l'Ukraine par la Russie fin février 2022, de nombreuses compagnies énergétiques européennes et américaines ont annoncé des mesures envers la Russie.

- Achats de pétrole, de produits pétroliers, de gaz, de charbon et de biomasse russes :
  - Eni a arrêté d'acheter du pétrole et des produits pétroliers russes et étudie son approvisionnement en gaz russe (36% de ses importations en 2020, soit 62 Gm3).
  - Shell va cesser tous ses achats spot de pétrole russe
  - Galp va suspendre tout nouvel achat de produits pétroliers russes ou vendus par des compagnies russes.
  - Equinor continuera d'importer du pétrole et des produits pétroliers dans le cadre de ses contrats existants, mais le groupe cessera de négocier du pétrole russe, ne conclura aucun nouveau contrat et ne s'engagera dans le transport de pétrole et de produits pétroliers russes.
  - Uniper ne renouvellera pas ses contrats d'importation de charbon russe à leur expiration fin 2022. Le groupe va maintenir ses achats dans le cadre de contrats existants (200 TWh, soit 54% de son portefeuille long-terme) mais ne conclura pas de nouveaux contrats de longterme avec la Russie, mettant l'accent sur les gaz bas-carbone et le LNG (résurrection d'un projet de terminal GNL à Wilhelmshaven en Allemagne)
  - Ørsted continuera d'acheter du gaz russe dans le cadre des contrats de long-terme existants mais n'importera que le minimum contractuel et ne les renouvellera pas à leur expiration en 2030. Le groupe a cessé d'approvisionner ses centrales en biomasse et charbon russes et ne conclura pas de nouveaux contrats avec des compagnies russes.
- Arrêt des nouveaux investissements dans le pays
  - Uniper enregistre une perte de valeur totale sur son prêt à Nord Stream 2 entre la Russie et l'Allemagne (987 M€)
  - Wintershall Dea va annuler son financement à Nord Stream 2 et ne va pas poursuivre de nouveaux projets pétroliers ou gaziers en Russie; le groupe restera impliqué dans les projets existants (gazoduc Nord Stream 1, projets gaziers de Yuzhno Russkoye et Achimov en Sibérie).
  - OMV revoit son implication dans le projet Nord Stream 2
  - Fortum va arrêter tout nouvel investissement en Russie jusqu'à nouvel ordre et réduire son exposition « thermique » (centrales thermiques et de chauffage urbain) en Russie.
  - ExxonMobil n'investira plus dans de nouveaux projets en Russie.
  - TotalEnergie n'investira plus dans de nouveaux projets en Russie (10% dans le projet Arctic LNG 2 de 19,8 Mt/an) mais conservera ses participations dans Novatek (17%), et Yamal LNG (20%).
  - Equinor exclut tout nouvel investissement en Russie
- Cession de participations dans des projets russes
  - Eni va céder ses 50% dans le gazoduc Bleu Stream entre la Russie et la Turquie via la Mer Noire (50% détenus par Gazprom).
  - Uniper va reprendre le processus de cession de sa filiale russe Unipro (83,73%) qui exploite 5 centrales thermiques (11,4 GW)
  - Shell va mettre fin à sa participation au gazoduc Nord Stream 2 et se désengager de ses coentreprises avec le groupe Gazprom en Russie, notamment sa participation dans le projet
    GNL Sakhalin 2 (27,5%) et dans Salym Petroleum Development et l'entreprise énergétique
    Gydan (50%).
  - OMV cesse ses discussions avec Gazprom quant à l'acquisition d'une participation de 24,98% dans la phase Achimov 4A/5A du projet gazier d'Urengoy en Russie.

- ExxonMobil entend céder sa participation de 30% dans le projet pétrolier et gazier Sakhalin 1 dont le groupe est l'opérateur et se retirer du projet de liquéfaction Far East LNG prévu en 2023.
- BP va se désengager de Rosneft (participation de 19,75% acquise en 2013) et se retirer de ses autres activités avec Rosneft en Russie (3 co-entreprises).
- Equinor va sortir de ses co-entreprises russes.
- Suspension des activités en Russie :
  - Shell va fermer ses stations-services russes et ses activités de carburants pour l'aviation et de lubrifiants.
  - GE va suspendre ses opérations en Russie (sauf soutien aux services électriques existants et fourniture d'équipements médicaux essentiels)

**Source(s):** Reuters, Vesti Kavkaza, Reuters, Uniper, Shell, Ørsted, OMV, Galp, Wintershall DEA Reuters, Daily Sabah, Market Watch, Shell, ExxonMobil, TotalEnergies, TotalEnergies, BP, Equinor, Equinor

### Les producteurs américains de GNL s'apprêtent à augmenter leurs exportations, notamment vers l'Europe

**Date:** 25/03/2022

United States, America, G8, LNG, Natural Gas, Companies, Projects, LNG liquefaction, LNG facilities, Supply, Trade

L'inclusion du gaz dans la taxonomie européenne et surtout la volonté de la Commission Européenne de trouver des alternatives au gaz russe sont autant de signaux positifs pour l'industrie gazière américaine, où les autorisations de construction de terminaux de production et d'exportation de GNL se sont déjà accélérées. Quatorze nouveaux terminaux de liquéfaction ont été approuvés par la Commission fédérale de régulation de l'énergie (FERC), et certains projets suspendus faute de financement (comme Driftwood LNG en Louisiane) devraient entrer rapidement en construction. Les exportateurs américains de GNL exportent près de 100% de leur capacité et, en mars 2022, le "Department of Energy" a approuvé l'augmentation de 7,4 Gm3/an des volumes exportés par les terminaux de Sabine Pass (Louisiane) et Corpus Christi (Texas) de Cheniere Energy vers des pays n'ayant pas signé d'accord de libre-échange avec les Etats-Unis et vers l'Europe. De plus, les États-Unis et l'Union européenne ont annoncé la création d'un groupe de travail visant à réduire la dépendance de l'Europe envers les énergies fossiles russes, via la diversification des approvisionnements en GNL (les Etats-Unis s'efforceront de fournir 15 Gm3 supplémentaires de GNL à l'UE en 2022 et via la promotion de l'efficacité énergétique et le déploiement rapide des énergies renouvelables.

Source(s): Connaissance des Energies, US DOE, Reuters, White House, Connaissance des Energies

# China's energy import dependency: potential impacts on sourcing practices, infrastructure decisions, and military posture

**Date:** 22/03/2022

China, Asia, BRICS, Emerging markets, Oil, Supply

China is likely to remain heavily reliant on seaborne crude oil, and to a lesser extent, on LNG supplies. Sustained high oil and gas prices could incrementally ameliorate the trend by incentivizing conservation, making domestic drilling more profitable, and further accelerating vehicle fleet electrification efforts, which would avoid China spend up to US\$50bn/year to move seaborne oil onto pipelines and build a Middle Eastern base network.

**Source(s):** Rice University's Baker Institute for Public Policy - Center for Energy Studies

### Equinor plans to increase natural gas production in Norway

**Date:** 17/03/2022

Europe, Norway, Natural Gas, Companies, Equinor

The Norwegian state-owned oil and gas company Equinor is taking steps to meet the gas demand in Europe thanks to adjusted production permits from the Ministry of Petroleum and Energy allowing higher gas production and exports from the Troll, Oseberg and Heindrun fields. Indeed, the adjusted production permits will allow the Oseberg and Troll field to increase their gas production by around 1 bcm for the period until 30 September 2022. For the Heidrun field gas exports can increase by 0.4 bcm for the calendar year 2022. This should enable Equinor to export an additional 1.4 bcm of gas to Europe.

Source(s): Equinor

## Srbijagaz plans to sign a 10-year contract with Gazprom to supply Russian gas to Serbia by June 2022

Date: 03/03/2022

Europe, Serbia, Natural Gas, Supply

Serbia plans to sign a 10-year gas contract with Gazprom by 1 June 2022. Under the existing contract that expired at the end of 2021 but that was extended in the first half of 2022, Serbia receives Russian gas at a price of US\$270/1000 m3, much below the current prices. Serbia aims to import 3 bcm/year of Russian gas with flexible delivery terms.

Source(s): Neftegaz (Russian)

### US LNG producers sign LNG agreements with Shell and Guangdong Energy (China)

**Date:** 09/03/2022

G8, America, United States, Natural Gas, LNG, Companies, Supply, Trade, Contract, LNG facilities, LNG liquefaction, Shell

Venture Global has announced the execution of a new long-term 20-year Sales and Purchase Agreement (SPA) with Shell for the supply of 2 Mt/year of LNG from Venture Global's 20 Mt/year (27 bcm/year) Plaquemines LNG export project in Plaquemines Parish, Louisiana (United States), which should be commissioned in 2023-2024. This new agreement builds on Shell's existing contract for 2 Mt/year from the Calcasieu Pass LNG export terminal, raising Shell's total long-term offtake from Venture Global's facilities to 4 Mt/year. In addition, the US LNG producer NextDecade has signed a 20-year binding Heads of Agreements with the Chinese group Guangdong Energy for the supply of up to 1.5 Mt/year of US LNG from its Rio Grande LNG project in Texas, expected to be commissioned in 2026.

Source(s): Venture Global, Next Decade

### Industrie nucléaire : le grand jeu géopolitique

**Date:** 01/03/2022

Russia, United States, China, CIS, America, Asia, BRICS, G8, Emerging markets, Nuclear, Uranium, Electricity, Electricity, Supply, Power plants

Rosatom est le premier exportateur mondial de centrales et contrôle 30 % du marché. Cette réussite relève d'une diplomatie nucléaire proactive épaulée par un réseau commercial implanté dans 60 pays. En matière de combustible, la stratégie d'expansion russe repose sur le développement d'exploitations à l'étranger, via Uranium One, filiale de Rosatom. Si le Kazakhstan reste l'unique source, Uranium One a fait de l'Afrique une zone de développement prioritaire. Cette orientation pourrait créer des tensions avec la Chine, dont la consommation d'uranium représente 15 % du total mondial. L'approvisionnement chinois suit la stratégie des « trois tiers » visant à augmenter la production nationale, acquérir des ressources à l'étranger et acheter sur le marché.

Source(s): The Conversation

### **Investissements et acquisitions**

### China's SPIC strengthens its presence in Saudi Arabia and in the Middle East

**Date:** 21/03/2022

China, Middle-East, Asia, BRICS, Emerging markets, Renewables, Electricity, Acquisition/sale, Power plants

Chinese companies are developing low-carbon projects in the Middle East. A consortium led by the Saudi group ACWA Power and including China's SPIC Huanghe Hydropower Development (HHDC) and Tabreed Cooling Company has achieved financial close for the US\$1.3bn Red Sea multi-utilities project in Saudi Arabia, which includes 340 MW of solar PV and 1.2-1.3 GWh of off-grid battery energy storage systems. The first phase of the project is expected at the end of 2022. Moreover, SPIC and ACWA Power are taking part in the 700 MW Ar Rass solar PV independent power plant (IPP) in Saudi Arabia's Al Qassim province, with a 40% stake each. The project, which is expected to reach financial close in the fourth quarter of 2022, has signed a power purchase agreement (PPA) with the Saudi Power Procurement Company (SPPC). Finally, SPIC HHDC and AMEA Power have agreed to jointly develop solar, wind and green hydrogen projects in the Middle East and North Africa as part of a new partnership.

Source(s): ACWA, Energy Storage, ACWA Power, Renewables Now

### Cofece authorizes China Three Gorges to acquire participation in 5 photovoltaic plants

**Date:** 17/03/2022

Mexico, America, Emerging markets, Solar, Renewables, Electricity, Projects, Companies, Power plants, China Three Gorges Power (CTGPC)

The Federal Commission of Economic Competition (Cofece) of Mexico has authorized the Chinese investment companies Kinichi Energía and China Three Gorges the direct or indirect acquisition of five solar PV power plants with a combined capacity of 626 MW owned by the Spanish company X-Elio.

**Source(s):** Energía a Debate (Spanish)

### **China's Global Energy Finance Database**

**Date:** 15/03/2022

China, Asia, BRICS, Emerging markets, Electricity, Policy, Power plants

In 2021, China's policy banks provided no new energy finance commitments to foreign governments for the first time since the start of the 21st century. Since 2000, Chinese policy banks provided \$234.6 billion in financing to foreign governments in the energy sector. The China's Global Energy Finance Database tracks and displays this overseas development finance in the energy sector provided by China's two global policy banks—the China Development Bank and the Export-Import Bank of China.

Source(s): Global Policy Development Center

### Chinese companies Southern Power Grid and SPIC secure permits for power projects in Chile.

Date: 14/03/2022

Emerging markets, America, Chile, Electricity, Projects, Power grids, Solar, PV, Companies, Transmission (power), Power plants, State Power Investment Corporation (SPIC)

The Chilean National Economic Prosecutor has authorised the Yallique consortium of ISA, Transelec and China's Southern Power Grid to build, operate and maintain a 500 kV HVDC transmission line that will run over 1,500 km between the substations of Kimal, in the Antofagasta region, and Lo Aguirre, in the Metropolitan region. The Kimal - Lo Aguirre line will have a capacity of 3,000 MW and the planned investment in the development of this infrastructure is more than US\$2.5bn. The line should enter commercial operations in 2028. In addition, Pacific Hydro, an affiliate of the Chinese State Power Investment Corporation (SPIC), has secured an environmental permit to build a 293 MW solar project in Los Loros, in the Atacama desert (Chile), requiring an investment of US\$300m. Construction will last approximately 18 months and the power plant is expected to produce 780 GWh/year.

**Source(s):** Revista EI (Spanish), La Tercera (Spanish)

### China's CNNC connects Karachi-3 nuclear project to Pakistan's grid

**Date:** 11/03/2022

Emerging markets, Asia, Pakistan, Electricity, Nuclear, Projects, Power plants

China National Nuclear Corporation (CNNC) has connected the third unit of the Karachi nuclear power plant (KANUPP) to Pakistan's power grid. The 1,100 MW reactor completed hot functional tests in November 2021 and achieved first criticality in February 2022. It is expected to enter commercial operations later in 2022. The KANUPP nuclear power project consists of two 1,100 MW Chinese-designed ACP-1000 unit (Hualong One reactors), Karachi-2 and Karachi-3. The project is the first China export of its Hualong One reactor technology. CNNC and China Nuclear Engineering and Construction Corporation (CNEC) have been selected to build the PKR959bn (US\$9.6bn) project on a turnkey basis. Construction started in 2015 at unit-2 and in 2016 at unit-3, respectively. KANUPP-2 was connected to the grid in March 2021 and commissioned in May 2021. Pakistan aims to reach 8.8 GW of nuclear capacity by 2030 and 40 GW by 2050. Another 1,100 MW Hualong One is under consideration at the 1,215 MW Chashma nuclear power plant.

Source(s): Daily Pakistan, Gulf News

### **Westinghouse Completes Acquisition of 50% of Tecnatom**

**Date:** 10/03/2022

Spain, United States, Europe, America, G8, Nuclear, Electricity, Acquisition/sale

Westinghouse Electric Company stepped up its long-term partnership with the Spanish engineering company Tecnatom after receiving all regulatory approvals for the 50% acquisition of shares previously owned by Iberdrola and Naturgy, as announced in October 2021. With this acquisition, Westinghouse enhances its growth strategy and increases its global nuclear capabilities, especially in nuclear refueling, engineering and digital services. Tecnatom will be managed as a joint venture between Endesa and Westinghouse.

Source(s): Westinghouse

### China considers buying stakes in Russian energy, commodity firms

Date: 08/03/2022

Russia, China, CIS, Asia, BRICS, G8, Emerging markets, Electricity, Acquisition/sale

China is considering buying or increasing stakes in Russian energy and commodities companies, such as gas giant Gazprom and aluminum producer Rusal International, according to people familiar with the matter. Beijing is in talks with its state-owned firms, including China National Petroleum Corp., China Petrochemical Corp., Aluminum Corp. of China and China Minmetals Corp., on any opportunities for potential investments in Russian companies or assets, the people said. Any deal would be to bolster China's imports as it intensifies its focus on energy and food security -- not as a show of support for Russia's invasion in Ukraine -- the people said.

Source(s): Bloomberg

#### ConocoPhillips completes the sale of Indonesian assets to Medco

**Date:** 04/03/2022

Emerging markets, Asia, Indonesia, Natural Gas, Companies, Acquisition/sale, Gas pipeline, ConocoPhillips

ConocoPhillips has completed the sale of its oil and gas assets in Indonesia to MedcoEnergi for a total consideration of US\$1,355m. The transaction, which was announced in December 2021, includes a 54% interest in the Indonesia Corridor Block Production Sharing Contract (PSC), which has two oil fields and seven gas fields holding around 70 mboe of reserves and producing 51,000 boe/d in 2021, and a 35% shareholding interest in Transasia Pipeline Company. This acquisition raises MedcoEnergi's oil and gas production by 40% to 155,000 boe/d and strengthens the group's position as Indonesia's leading independent energy and natural resources company.

**Source(s):** ConocoPhillips, MedcoEnergi

### What can we learn from the DFC's 2021 energy project approvals?

**Date:** 03/03/2022

United States, America, G8, LNG, Natural Gas, Investments

The US Development Finance Corporation (DFC) works to spur private investment in support of foreign policy and development goals. Armed with a \$60 billion investment cap and new financial tools including equity, DFC - like OPIC before it - is especially important for accelerating energy investments in low-income and emerging markets. In its first two years, DFC has approved ~\$3.4bn for energy supply projects and at least \$330m for energy-adjacent projects. Of these, the Biden Administration has approved seven energy supply projects worth about \$1bn (~\$500m for 6 projects in FY21 plus \$500m for First Solar in FY22 so far).

Source(s): Energy for Growth Hub

### Juridique et institutionnel

## Guerre en Ukraine : les Etats-Unis et le Venezuela entament un rapprochement autour du pétrole

Date: 22/03/2022

G8, Emerging markets, America, United States, Venezuela, Oil, Crude oil, Supply, Trade

Selon la presse américaine, les Etats-Unis et le Venezuela, socialiste et sous sanctions américaines, auraient entamé un début de rapprochement sur fond d'envolée des prix du pétrole, et les Etats-Unis envisageraient de lever partiellement les sanctions, bien que la Maison Blanche assure qu'il n'y a pas de discussions actives entre les deux pays.

Source(s): Le Monde, Connaissance des Energies

### The European Union agrees on the Carbon Border Adjustment Mechanism (CBAM)

Date: 17/03/2022

European Union, CO2 emissions, Policy

European Union (EU) countries have reached an agreement on the Carbon Border Adjustment Mechanism (CBAM) regulation, targeting imports of carbon-intensive products, namely cement, aluminium, fertilisers, power generation, iron and steel. The main objective of this measure is to prevent offsetting the EU's greenhouse gas (GHG) emissions reduction efforts through imports of products manufactured in non-EU countries, where climate change policies are less ambitious than in the European Union. The CBAM will function in parallel with the EU's Emissions Trading System (EU ETS), to mirror and complement its functioning on imported goods, gradually replacing existing EU mechanisms to address the risk of carbon leakage, in particular the free allocation of EU ETS allowances. A three-year transition phase for the levy would start in 2023. The CBAM is part of a package of EU climate change policies designed to cut the EU net GHG emissions by 55% by 2030 from 1990 levels.

Source(s): Council of the EU, Reuters

### The US and the UK ban Russian oil and products imports

**Date:** 10/03/2022

BRICS, G8, Emerging markets, Europe, United Kingdom, CIS, Russia, America, United States, Oil, Crude oil, Refined products, Natural Gas, Coal, Coal/Lignite, Policy, Supply, Trade

The United States has banned Russian oil, natural gas and coal imports in response to the Russian invasion of Ukraine, a move that could lead to a spike in US energy prices. In 2021, Russia accounted for 8% of US crude oil and refined products imports (only 3% of crude oil imports) and for 9% of US steam coal imports, according to the US Energy Administration. The country did not import natural gas from Russia in 2021. Similarly, the United Kingdom has decided to phase out Russian oil and oil products imports by the end of 2022. The country is also considering banning Russia natural gas imports, which account for 4% of the domestic gas supply.

Source(s): CNN, Reuters

### Le Canada retire la Russie et le Bélarus du traitement tarifaire de la nation la plus favorisée

Date: 03/03/2022

Canada, America, G8, Taxes

L'invasion de l'Ukraine par la Russie, soutenue par le Bélarus, a conduit le gouvernement du Canada à émettre le décret de retrait du tarif de la nation la plus favorisée (2022-1), qui retire à ces pays le droit au traitement tarifaire de la nation la plus favorisée (NPF) en vertu du Tarif des douanes. La Russie et le Bélarus deviendront, avec la Corée du Nord, les seuls pays dont les importations sont assujetties au tarif général, soit 35% sur toutes les importations. Le Canada prévoit également l'interdiction d'importer du pétrole brut en provenance de ces pays.

Source(s): Gouvernement du Canada

#### US Treasury issues more details on permitted Russian energy transactions

**Date:** 03/03/2022

BRICS, G8, Emerging markets, CIS, Russia, Oil, Crude oil, Policy

The US Treasury Department has issued more details on permitted Russian energy transactions that appear to be aimed at preventing potential sanctions overcompliance by traders wary of violating the restrictions. Under the General License 8A, parties can continue energy-related transactions through six sanctioned banks (Central Bank of Russia, Sberbank, VTB, VEB, Otkritie, Sovcombank) until 24 June 2022. Waiver defines energy very broadly. So-called "U-turn transactions" allow payments to go through non-sanctioned, third-country banks. Other US sanctions include foreign investment restrictions on 13 major state-owned firms, including gas producer Gazprom, oil producer and refiner Gazprom Neft, pipeline operator Transneft, energy financier Gazprombank, and shipping company Sovcomflot. They also include a bon on exports of oil refining technology to Russia.

Source(s): SP Global

### **Innovations technologiques**

### **Energies renouvelables et biocarburants**

### Huawei will build a 1 GW solar-plus-storage plant in Ghana

**Date:** 10/03/2022

Africa, Ghana, Electricity, Renewables, Solar, PV, Projects, Power plants, Electricity storage

Huawei Digital Power has signed an agreement with Meinergy Technology to provide a complete smart PV and energy storage system (ESS) solution for a 1 GW solar PV plant and 500 MWh ESS project in Ghana. Ghana's power capacity reached 5.3 GW at the end of 2020, split between oil and gas (69%), hydro (30%), and gas (29%).

Source(s): Huawei

### Stockage d'électricité et batteries

The European Commission and the US DOE collaborate on the development of BESS supply chains, while the US DOE launches a US\$150m funding for H2, LDES and CCS projects

Date: 21/03/2022

G8, Europe, America, United States, Policy, Technology, Electricity storage, Hydrogen, CCS, Investments

The European Commission and the US Department of Energy have announced support for a collaboration between the European Battery Alliance and the US Li-Bridge alliance to accelerate development of robust supply chains for lithium-ion and next generation batteries, including the critical raw materials segments. The two alliances have the objective to satisfy the growing demand for batteries in Europe and the United States, as well as creating a competitive and sustainable battery cell manufacturing value chain respectively in Europe and in the US. In addition, the US Department of Energy has announced a US\$150m open funding for research projects focused on increasing efficiency and curbing carbon emissions from energy technologies and manufacturing, which includes technologies such as hydrogen, long duration energy storage (LDES), and CCS. Contingent on congressional appropriations, total planned funding is up to US\$150m, with up to US\$50m in Fiscal Year 2022.

Source(s): European Commission, US DOE

#### China exported over US\$28bn worth of BESS in 2021 (+78%)

**Date:** 07/03/2022

BRICS, Emerging markets, Asia, China, Market, Electricity storage

The China Chamber of Commerce for Imports and Exports of Machinery and Electric Products (CCCME) has announced that China exported US\$28.43bn worth of Li-ion BESS in 2021, i.e., a year-on-year increase of over 78%. The Li-ion battery exports in December 2021 reached a monthly peak at US\$3.474bn (i.e., +81% year-on-year). According to the CCCME, the top ten countries/regions which imported Chinese BESS in 2021 were: the US, Germany, South Korea, Vietnam, Hong Kong, Japan, the Netherlands, India, Spain, and Slovakia, which altogether accounted for 76% of Chinese exports. In 2021, the US imported US\$4.975bn worth of BESS (i.e., a 100% year-on-year increase).

**Source(s):** CCCME (in Mandarin Chinese)

### Hydrogène

### New technology could cut green H2 production cost below US\$1.5/kg by 2025

**Date:** 21/03/2022

Asia, Australia, Hydrogen, Technology

Researchers from the Australian University of Wollongong (UOW) and ARC Centre of Excellence for Electromaterials Science (ACES) have developed a new electrolyser technology, which claims to have a productivity superior to other existing technologies (and superior to the IRENA's 2050 target). It could enable hydrogen production of below US\$1.5/kg by 2025 and could enable the drastic decrease in hydrogen production cost to match the production costs of fossil fuels. A UOW spin-out company, Hysata, was formed in 2021 to commercialise the new hydrogen electrolyser technology. The company plans to build a pilot electrolyser manufacturing plant in 2022. Hysata's overall electrolyser system has been designed for ease of manufacturing, scaling and installation, delivering 95% overall system efficiency, equivalent to 41.5 kWh/kg, compared to 75% or less for existing electrolyser technologies.

Source(s): UOW

### Potential development of renewable hydrogen imports to European markets until 2030

**Date:** 15/03/2022

Europe, Hydrogen, Trade, Supply

The paper provides considerable detail regarding the background to the potential use of low carbon hydrogen in the energy transition, the development of European hydrogen strategies, as well as details of the energy systems in the potential exporting countries of Morocco, Ukraine, Norway, and Western Russia. To the extent that there is a case for hydrogen imports from outside Europe, the paper concludes that Norway and Russia, currently the two main natural gas providers to the EU, could provide hydrogen sooner and at a lower cost, most likely starting with blue and, perhaps, turquoise hydrogen. On the other hand, a greater diversity of H2 exporters may be preferred politically to increase security of supply and promote competition.

Source(s): Oxford Institute for Energy Studies

#### **Nucléaire**

#### New US programme to investigate recycling of used fuel

**Date:** 16/03/2022

United States, America, G8, Nuclear, Electricity, Policy

The US Department of Energy (DOE) has announced funding of up to US\$48m for a new programme to recycle used nuclear fuel to produce feedstocks for advanced reactor fuel. Converting UNF Radioisotopes Into Energy (CURIE) will be run under the auspices of the Advanced Research Projects Agency-Energy (ARPA-E).

Source(s): World Nuclear News

### Kärnfull plans to deploy GEH's BWRX-300 SMR in Sweden

**Date:** 16/03/2022

Europe, Sweden, Electricity, Nuclear, Projects, Power plants

Kärnfull Next, an affiliate of the Swedish cleantech startup Kärnfull, has signed a Memorandum of Understanding (MoU) with GE Hitachi Nuclear Energy (GEH) to deploy the BWRX-300, a 300 MW water-cooled, natural circulation small modular reactor (SMR) with passive safety systems in Sweden. Preparations of the planned development sites around Sweden will continue in parallel with investor discussions. Kärnfull has secured initial funding from Corespring Invest. The project could be commissioned in 2028 at the earliest.

Source(s): Kärnfull Next

### Fact sheet: Developing a bold vision for commercial fusion energy

**Date:** 15/03/2022

United States, America, G8, Nuclear, Electricity, Policy, Power plants

The US Administration has announced that it is developing a bold decadal vision to accelerate fusion, a clean nuclear energy technology that uses the same reaction that powers the Sun and stars. The White House will hold a Fusion Summit to initiate discussions exploring the promise of the technology and the remaining challenges and will launch an agency-wide initiative, coordinating across program offices, to develop a decadal strategy to accelerate the viability of commercial fusion energy in partnership with the private sector.

Source(s): The White House

### Nucléaire : pourquoi le géant russe Rosatom pourrait prendre 20% des turbines Arabelle

Date: 09/03/2022

France, Russia, Europe, CIS, BRICS, G8, Emerging markets, Nuclear, Electricity, Acquisition/sale, Companies, Power plants, Rosatom

Alors qu'EDF doit concrétiser le rachat des turbines Arabelle auprès de General Electric, le géant russe Rosatom pourrait intégrer le capital de la filiale chapeautant cette activité stratégique de la filière nucléaire tricolore. Alors que la France ambitionne de retrouver l'autonomie de son atome et que les sanctions économiques pleuvent sur la Russie, cette possibilité rapportée par Le Figaro pourrait interpeller. En réalité, elle souligne des liens étroits qu'entretiennent les deux pays sur certaines activités nucléaires.

Source(s): La Tribune