

## **MINISTERE DES ARMEES**

## Observatoire de la sécurité des flux et des matières énergétiques

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Observatoire de la sécurité des flux et des matières énergétiques - Octobre 2020

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## Actualités énergétiques régionales

## Afrique du Nord – Moyen Orient

## Russia's Lukoil plans Iraq oil output boost

## Date: 10/10/2020

Emerging markets, Middle-East, Iraq, Oil, Companies, Supply, Production, Lukoil

Lukoil plans to develop a new oilfield project in southern Iraq, known as Block 10. The Russian energy group owns a 75% stake in West Qurna 2 in southern Iraq, which produced 400,000 bbl/d in 2019, and is working on projects to explore part of the field. However, under the OPEC+ deal, Iraq's current output is limited to about 3.6 mb/d. Consequently, Lukoil, which planned to boost output in 2020, was forced by Iraqi authorities to produce less oil.

## Source(s): Bloomberg

## Towering ambitions: Egypt and China building for the future

## Date: 06/10/2020

Egypt, Africa, Oil, Natural Gas, Policy, Trade, Supply

The adoption of Egypt's Integrated Sustainable Energy Strategy (ISES 2015-2035), which aims at increasing the supply of electricity generated from renewable sources to 20% by 2022 and 42% by 2035, has paved the way for China-Egypt collaboration in green energy development.

Source(s): Middle East Institute

# Economic diversification in Arab oil-exporting countries in the context of peak oil and the energy transition

## Date: 02/10/2020

Emerging markets, Middle-East, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, Oil, Crude oil, Policy, Supply, Trade

The diversification strategy adopted by Arab oil-exporting countries will be conditioned by the speed of the energy transition, during which the oil sector will continue to play a key strategic role in these economies, as a means to diversification and generator of income.

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

## Arctique

## With Chinese rig, Gazprom makes another major Kara Sea discovery

#### Date: 12/10/2020

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

Gazprom made another major gas discovery in Kara Sea, which increased the commercial value of the Leningradskoye field. The Russian company appealed to China Oilfield Services Limited (COSL) for drilling services due to US sanctions.

#### Source(s): The Barents Observer

# Cargo volume on the Northern Sea Route remains stable as Novatek eyes floating storage

### Date: 01/10/2020

Russia, CIS, BRICS, G8, Emerging markets, Crude oil, LNG, Oil, Natural Gas, Trade, Supply

Cargo volume on Russia's Northern Sea Route is expected to reach 32 Mt in 2020, from 2.8 Mt in 2013 and 18 Mt in 2018. The stark increase in traffic over the past 10 years comes primarily from two large hydrocarbon developments: Gazprom's Novy Port crude oil project and Novatek's Yamal LNG project.

Source(s): Arctic Today

## Méditerranée Orientale

# Le Liban et Israël entament des négociations inédites pour délimiter leur frontière maritime

#### **Date:** 14/10/2020

Israel, Lebanon, Middle-East, Middle-East, Emerging markets, Crude oil, Natural Gas, Oil, Policy

Le Liban et Israël ont entamé des négociations inédites sous l'égide des États-Unis pour délimiter leur frontière maritime, dans l'optique de lever les obstacles à la prospection d'hydrocarbures. Ces pourparlers interviennent dans un contexte régional de fortes tensions en Méditerranée orientale autour des hydrocarbures et de la délimitation des frontières maritimes, impliquant aussi entre autres la Turquie, la Grèce et Chypre.

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

## **Getting East Med energy right**

Date: 26/10/2020

Europe, Natural Gas, Projects

The natural gas discoveries made since 2009 in the Eastern Mediterranean have elevated the region's importance in the global energy map, but the summer 2020 tensions were not a conflict over energy resources. The waters where Greece and Turkey deployed naval forces this summer are hundreds of miles away from the known discoveries in the Eastern Mediterranean. None of those discoveries are disputed either—they are entirely within the exclusive economic zones (EEZ) of Israel, Cyprus, and Egypt.

**Source(s):** Center for Strategic & International Studies

## Les hydrocarbures au cœur des tensions entre la Turquie et la Grèce

## Date: 01/10/2020

Greece, Turkey, Europe, Europe, Emerging markets, Natural Gas, Policy, Reserves

La Grèce demande des sanctions contre la Turquie. En cause essentiellement, les recherches menées par la Turquie en août et début septembre dans les eaux territoriales grecques en Méditerranée orientale. Mais les sujets de disputes sont multiples.

Source(s): RFI

## Europe

## Romania will sign a deal with the US for Cernavoda nuclear project

## **Date:** 12/10/2020

Europe, Romania, Electricity, Nuclear, Projects, Contract, Power plants

Romania and the United States have agreed to cooperate for the construction of Units 3 and 4 and the refurbishment of Unit 1 at the Cernavoda nuclear power plant in Romania. Romania will use US technology and expertise for the modernisation and new build project. In addition, the US Exim Bank would offer a US\$8bn ( $\in$ 6.8bn) financial package to the country for the nuclear units and other projects.

Romania aims to add two 720 MW reactors at its Cernavoda nuclear power plant, which consists of two 650 MW CANDU reactors. Construction was suspended in 1992 and the unfinished units were preserved. Romania initially planned to build the expansion project with 6 European companies, which withdrew between 2010 and 2013. In 2015, Societatea Nationala Nuclearelectrica (SNN, 82.5% state-owned) signed an MoU with China General Nuclear (CGN) to revive the project and in 2019 the companies signed a preliminary agreement whereby CGN would take a 51% stake in the project. In January 2020, the Romanian government announced that it would award the contract for Cernavoda Units 3 and 4 to companies from NATO and EU member countries and in June 2020, Nuclearelectrica terminated all deals and negotiations with CGN. In January 2020, SNN awarded a US\$10.8m contract to Candu Energy, a subsidiary of SNC-Lavalin, for engineering analyses and assessments of the 650 MW Cernavoda Unit 1 Candu nuclear reactor, with the objective of extending the lifetime of the plant by another 35,000 hours. Such an extension will allow the Cernavoda Unit 1 to continue operating safely until it is ready for refurbishment in 2026.

Source(s): Reuters, US Department of Energy

#### **Denmark grants an operations permit for the Nord Stream 2 gas pipeline**

## Date: 02/10/2020

Europe, Denmark, Natural Gas, Policy, Companies, Gas pipeline, Interconnection (gas), Gazprom

The Danish Energy Agency has granted an operations permit to Nord Stream 2 for laying the 55 bcm/year Nord Stream 2 pipeline on the Danish continental shelf on a number of conditions to ensure a safe operation of the project. The gas pipeline starts in Russia, passes through Finnish, Swedish, Danish and German marine areas; regulatory authorities in Russia, Finland, Sweden, Germany, and Denmark have all granted permits for the project.

A consortium associating Gazprom (50%), Uniper, Shell, OMV, Wintershall, and Engie (10% each) is building the 1,230 km-long Nord Stream 2 gas pipeline. The project, which will double the throughput of the current Nord Stream pipeline, is causing controversy as Germany would increase its dependence on Russian gas while bypassing Ukraine. In January 2020, Russia postponed the commissioning of Nord Stream 2 from mid-2020 to the end of 2020 or early 2021, due to US sanctions against the gas pipeline that could delay the projects by several months.

### Source(s): Danish Energy Agency

## **Russia's Gazprom forecasts a 15% drop in gas sales to Europe in 2020**

#### Date: 30/09/2020

BRICS, G8, Emerging markets, Europe, CIS, Russia, Natural Gas, Companies, Trade, Forecasts, Supply, Gazprom, Rosatom

Gazprom anticipates a nearly 15% decline in its gas sales to Europe from 199 bcm in 2019 to 170bcm in 2020. In addition, the company's average gas price in Europe is expected to reach US\$130/1,000 m3 in 2020. In 2019, Gazprom reported a 6.8% drop in its revenues and a 17% fall in its net profit in 2019. The decrease in revenues was due to lower gas sales (-3% to 507 bcm in 2019) and price effects. Gas sales to Europe and other countries contracted by 5% in 2019 to 232 bcm, with the average price declining by 12%. Sales to Former Soviet Union countries increased by 1.6% to 39 bcm (with a stable price) and sales to and Russia declined by 1.6% to 236 bcm (the average price rose by 3.4%).

Source(s): Reuters

## Asie

## China Energy commissions a 2 GW coal-fired power plant (Indonesia)

#### Date: 14/10/2020

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

The second 991 MW unit of the 1,982 MW Java-7 coal-fired power project has started commercial operations in Indonesia. The US\$1.9bn supercritical power project is developed by PT Shenhua Guohua Pembangkitan Jawa Bali (PT SGPJB), a consortium of China Energy (70%) and PT PLN's subsidiary PT Pembangkitan Jawa Bali (30%), in the Bojonegara district in the Banten province. The first unit was commissioned in December 2019 and the project is expected to generate up ot 15 TWh/year. The Java-7 power project is part of Indonesia's plans to add 35,000 MW of new power capacity and was developed as part of China's Belt and Road Initiative and Indonesia's Global Maritime Fulcrum.

## Source(s): SASAC

## Dongfang moves forward on 1.3 GW Belt and Road coal project in Vietnam

## **Date:** 14/10/2020

Emerging markets, Asia, Vietnam, Electricity, Thermal, Coal-fired power gen., Supply, Capacities, Projects, Power plants

Dongfang has completed work on the second 660 MW unit of the 1,320 MW Coastal Turbine supercritical coal-fired power plant project in Vietnam. The project is part of the Chinese Belt and Road initiative and is the largest coal-fired developed by Chinese companies in Vietnam.

#### Source(s): Dongfang (Chinese)

## Une évaluation des nouveaux engagements climatiques de la Chine

## **Date:** 13/10/2020

China, Asia, BRICS, Emerging markets, CO2 emissions, Policy, Carbon constraints

À l'occasion de l'Assemblée générale des Nations unies qui s'est tenue virtuellement en septembre dernier, le président chinois Xi Jinping s'est engagé à ce que la Chine atteigne son pic d'émissions « avant 2030 » et atteigne la « neutralité carbone avant 2060 ». Comment évaluer cette déclaration ?

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Selon Thomas Spencer, chercheur associé à l'Iddri basé en Inde, la réponse à cette question peut être envisagée à la fois en termes de fond (quels défis cet engagement implique-t-il pour la Chine ?) et en termes normatifs (quel est le caractère « contraignant », au sens large du terme, de cet engagement ?).

## Source(s): IDDRI

## Power Machines delivers 660 MW TPP Barkh-1 to the grid (India)

#### Date: 06/10/2020

BRICS, Emerging markets, Asia, India, Electricity, Thermal, Coal-fired power gen., Supply, Capacities, Power plants

Power Machines has fully delivered the 660 MW TPP Barkh-1 thermal power unit and the facility has now been synchronized with the Indian power grid. Power Machines has carried out design, supply, installation, and commissioning of the turbine island equipment. Equipment for power units 2 and 3 was also manufactured and fully delivered to the TPP construction site by Power Machines. Commissioning is scheduled for 2022.

Source(s): Power Machines (Russian)

## Laos expects to maximize electricity generation potential

### Date: 05/10/2020

Emerging markets, Asia, Lao PDR, Electricity, Companies, Power grids, Transmission (power)

Laos' state-owned Electricité du Laos (EDL) and China Southern Power Grid (CSG) have signed an agreement to create Electricité du Laos Transmission Company Limited (EDLT). The new company plans to install 230 kV high-voltage transmission lines, enabling large hydropower plants to increase their generation. The current lower voltage grid with limited transmission capability has prevented larger power plants from running at full production potential, especially during the rainy season.

Source(s): Xinhua

## Afrique

## US DFC grants US\$1.5m for the 50 MW Tulu Moye geothermal project (Ethiopia)

## **Date:** 19/10/2020

Africa, Ethiopia, Electricity, Renewables, Geothermal, Supply, Capacities, Projects, Power plants

The US International Development Finance Corporation (DFC) has committed US\$1.5m in technical development for the 50 MW Tulu Moye geothermal IPP power plant project in Ethiopia. DFC's grant will enable the project's technical development (including feasibility studies and technical assistance) and accelerate the schedule. DFC's technical development builds upon long-term US Government support agreement with the Ethiopian power sector. The agreement includes Power Africa, the US Embassy in Ethiopia, the US Trade and Development Agency, and the US Department of the Treasury. The Tulu Moye project is being developed by TM Geothermal Operations PLC (TMGO) and is located 100 kilometres southeast of Addis Ababa.

## **Source(s):** DFC press release

## Mauritania - Senegal: an emerging new African gas province - is it still possible?

### Date: 07/10/2020

Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal, Africa, Africa, Africa, Africa, Africa, Crude oil, Natural Gas, Oil, Projects, Reserves

Mauritania and Senegal have potentially the natural gas resources to become a new African gas province. However, the two countries will have to go through a protracted and challenging process to fully realize this objective. The full development of all these gas resources into recoverable gas reserves requires the securing of commercially viable and sustainable gas monetization options to attract all the necessary investment.

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

## La Guinée Equatoriale et la Russie lancent un projet de cartographie géologique du bassin du Rio Muni

#### Date: 06/10/2020

Russia, Equatorial Guinea, CIS, Africa, BRICS, G8, Emerging markets, Crude oil, Oil, Projects

Les sociétés russes Rosgeologiya, Zarubezhgeologiya et Yuzhmorgeologiya vont assurer des travaux de cartographie des ressources du bassin à terre de Rio Muni en Guinée Equatoriale. La région du Rio Muni est considérée comme l'une des zones les plus prometteuses pour l'exploration en Guinée équatoriale et pourrait contribuer à accroître la production nationale de pétrole et de gaz.

### Source(s): Agence Ecofin

## Rosatom and AFCONE sign MoU in the field of the use of nuclear energy in Africa

#### Date: 28/09/2020

BRICS, G8, Emerging markets, CIS, Russia, Africa, Electricity, Nuclear, Policy

Rosatom (Russia) has signed an MoU with the African Commission on Nuclear Energy (AFCONE) on cooperation in the field of the use of nuclear energy. The signing of the Memorandum is a practical step towards the implementation of the agreements achieved at the Russia-Africa Summit in October 2019. The agreement creates a pillar for cooperation between the parties in assisting African countries in the sphere of energy security, including diversifying energy sources, the use of renewable sources of energy, and the implementation of projects in the nuclear energy industry. The cooperation aims to distribute impartial information about nuclear technologies, raise public awareness about its applications, and promote education as well as capacity building in African countries.

### Source(s): Rosatom

## **Autres**

## **Understanding China's global power**

## Date: 27/10/2020

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

Since 2000, Chinese companies and banks have invested in 777 power plants overseas, reaching 83 countries in the world, and representing 186.5 GW of generation capacity. Of this, 106 GW is already online, which accounts for close to 2% of the world's total capacity outside China. Around 40% of China's overseas capacity is coal-fired, 27% is hydroelectric and 11% is other renewable energy only. Most of Chinese power generation investment overseas went to middle income countries, while 43% went to Lower-middle (LMC) and low-income countries (LIC).

Source(s): Global Development Policy Center

#### Azerbaijan-Armenia conflict: energy implications of a potential escalation

#### Date: 08/10/2020

Armenia, Azerbaijan, CIS, CIS, Crude oil, Natural Gas, Oil, Trade, Supply

The risk of the ongoing Azerbaijan-Armenia conflict spilling over to affect Azeri oil and gas exports seems low. But in the event of any supply disruptions, the impact on international oil and gas markets looks manageable. The only market which would be disrupted is Georgia. Overall, problems might be greater for Azerbaijan due to is extremely high dependence on oil export revenues.

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

## Pétrole : l'OPEP prévoit encore une hausse de la demande d'ici 2040 malgré les incertitudes

Date: 08/10/2020

World, Crude oil, Oil, Demand, Forecasts

L'OPEP (Organisation des pays exportateurs de pétrole) anticipe une augmentation de près de 10 millions de barils par jour (Mb/j) de la demande de brut sur 25 ans, passant de 99,7 Mb/j en 2019 à 109,3 Mb/j en 2040 puis 109,1 Mb/j en 2045, tirée par l'émergence de pays comme l'Inde. L'OPEP a cependant revu à la baisse ses prévisions à cause de la pandémie de Covid-19 et souligne les incertitudes.

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

## **Eletronuclear plans to extend Angra 1 nuclear plant's lifetime (Brazil)**

#### Date: 07/10/2020

BRICS, America, Brazil, Electricity, Nuclear, Supply, Capacities, Contract, Power plants

The US nuclear group Westinghouse has signed an agreement with the state-owned Brazilian nuclear company Eletronuclear to conduct engineering analyses critical to the safety, reliability and long-term life of the 657 MW Angra 1 nuclear power plant in Brazil. The pressurised water reactor (PWR) began commercial operation in 1985. Eletronuclear intends to continue operations at Angra 1 through the end of 2044 (its current operating license is valid through December 2024). Eletronuclear plans to complete its 1,245 MW (1,400 MW gross) Angra III nuclear plant project by 2027. The company is expected to select a partner by 2023. In October 2019, China's National Nuclear Corporation (CNNC), EDF (France) and Rosatom (Russia) were selected as a potential partner to complete and operate its nuclear project, which requires BRL15bn (US\$2.7bn) in investment.

#### Source(s): Westinghouse

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## Stratégies d'entreprises

## **Stratégies**

# Le Soudan signe un protocole d'accord avec General Electric dans la production d'électricité

#### Date: 16/10/2020

Sudan, Africa, Emerging markets, Electricity, Projects, Power plants, Power grids

Le Soudan, soumis à des sanctions américaines depuis 1993, a signé un protocole d'accord avec le groupe américain General Electric pour la réhabilitation de 3 centrales électriques d'une capacité cumulée de 470 MW, qui permettront de couvrir la consommation de 600 000 foyers. Les sanctions devraient être levées suite à l'annonce de la normalisation des relations entre le Soudan et Israël.

### **Source(s):** Connaissance des Energies

## Russian companies focus on hydrogen and energy storage

## Date: 13/10/2020

BRICS, G8, Emerging markets, CIS, Russia, Electricity, Hydrogen, Companies, Technology, Electricity storage, Gazprom, Novatek, Rosatom

Russian oil and gas companies are evaluating the prospects of hydrogen (H2), in a context of lower demand for oil and gas due to the COVID-19 pandemic and due to decarbonisation plans promoted by the EU and China that are the largest consumers of Russian energy. The Russian H2 market is very small currently, with a total production of around 5 Mt (mainly produced at consumption points, at gas chemistry, metallurgy and oil refining facilities). The Ministry of Energy has developed a roadmap for the development of hydrogen energy until 2024 and plans to export 0.2 Mt of H2 by 2024 and 2 Mt by 2035. On top of hydrogen exports, hydrogen could help Russia reduce the burden of the EU's proposed carbon tax on imported goods by cutting the carbon content of its exports.

Novatek is the most advanced Russian company to enter the hydrogen market, as it is already negotiating with Repsol on H2 supply. Novatek's resource base allows for the implementation of projects for the production of both LNG and hydrogen. Novatek would produce and export both blue (from methane) and green hydrogen (from wind power parks planned in northern Russia) and is planning a pilot hydrogen plant at its Yamal LNG project, which could export H2 to Europe and Asia. Novatek could also easily mix H2 with natural gas for power generation, as the GE turbines used at its Yamal and Arctic LNG 2 plants don't require significant modernisation to use up to 50% H2.

Gazprom is also viewing H2 as a way to diversify its business, improve gas utilisation efficiency and reduce its carbon footprint. The company would focus on grey hydrogen and is considering mixing H2 and natural gas, though its existing turbines can only mix 10-15% of H2.

Nuclear group Rosatom is also interested in hydrogen and could use high-temperature gas-cooled reactors (HTGR) to produce H2 (methane pyrolysis technology) in about 4 years. The group, which is working on a hydrogen train in Sakhalin, aims to use about 1.5 MW of nuclear power for electrolysis production, within 5 to 7 years and 500 MW by 2030. Rosatom would invite partners or investors.

In addition, Rosatom is interested in energy storage. Its TVEL unit has set up a dedicated subsidiary, Renera, to produce energy storage systems for emergency power supplies, renewable energy resources, and load management, as well as module type lithium-ion traction batteries for electric vehicles.

## Source(s): Peretok (Russian), PV Magazine

## Who needs a gas OPEC?

#### Date: 07/10/2020

World, Natural Gas, Policy

The collapse in gas demand due to the pandemic crisis led gas producers to adopt various strategies, making the eventual creation of a gas OPEC unlikely : while most of producers (United States, Russia, Canada, etc.) reduced exports, Qatar, the largest LNG exporter, kept producing at full capacity. Qatar is betting on low LNG prices to prevent new competitors from securing project financing.

Source(s): Center for Strategic and International Studies

## InterRAO will invest US\$580m in gas turbine joint venture with GE (Russia)

### Date: 05/10/2020

BRICS, G8, Emerging markets, CIS, Russia, Companies, Technology

Russian InterRAO reportedly plans to invest up to US\$580m the gas turbine joint venture with GE (Russia). The partnership, held 51% by InterRAO, will enable medium or large capacity gas-fired power turbines to be produced in the Russian territory. The venture can be expected to produce 79 MW-87 MW and 181 MW-210 MW gas turbines by 2025-2026. The joint venture may receive the first large order for their 77 MW turbines from RusHydro, which reportedly already asked the government to allow the equipment to be delivered to their stations in the Far East.

**Source(s):** Power Technology, Peretok (Russian)

## **Russian oil companies in an evolving world: The challenge of change**

#### Date: 01/10/2020

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

This book examines Russia's capacity to respond to a changing world through the lens of the country's oil industry, against a backdrop of social, political and climatic change, presenting a systematic analysis of how modern energy developments in the form of shale oil, offshore oil and the global energy transition are handled.

**Source(s):** Norwegian Institute of International Affairs

## Inter RAO Group presents its medium-term development strategy

#### Date: 30/09/2020

Russia, CIS, BRICS, G8, Emerging markets, Electricity, Companies, Power plants, Power grids, Interconnection (power), Transmission (power), Inter RAO

Inter RAO Group has presented its development strategy until 2025 with an outlook for 2030. The group will focus on maintaining leading position in the Russian power industry and plans moderate activity in international operations. Inter RAO will seek to implement projects promoting Russian strategic interests abroad and will consider participating in privatisations and asset management abroad. The group will also seek to cooperate with Baltic countries to make interstate electricity trading possible after their synchronisation with the European power grid in 2025, to renovate grids to maintain exports to Finland and will consider the possibility of electricity exports from power plants based in Kaliningrad region

## Source(s): Inter RAO, Inter RAO Strategy

## Russian gas: the year of living dangerously

#### Date: 30/09/2020

Russia, CIS, BRICS, G8, Emerging markets, Natural Gas, Prices, Taxes, Companies, Gazprom

2020 has been a tough year for Russian gas, giving up its market share in Europe to LNG suppliers, primarily from the US, during the first half of 2020. Gazprom has adopted a strategy of gradual adaptation to a loose market in Europe and hopes to last longer than most of its competitors. However, as Europe is transitioning towards a decarbonized future, which could have potential negative implications for Russia-Europe gas trade.

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

## **Investissements et acquisitions**

### The US will support NuScale's 2.5 GW nuclear project in South Africa

#### Date: 20/10/2020

BRICS, Emerging markets, Africa, South Africa, Electricity, Nuclear, Companies, Projects, Power plants, Eskom

The US International Development Finance Corporation (DFC), which was authorised by US authorities to support nuclear power projects abroad in July 2020, has signed a letter of intent (LoI) to support NuScale, a US nuclear energy technology firm, to develop 2.5 GW of nuclear capacity in South Africa. South Africa has a PWR nuclear plant with a capacity of 1 860 MW (2 x 930 MW), located in Koeberg, near Cape Town, which has been operational since 1984. If successful, NuScale would be the first nuclear independent power producer in Africa. In June 2020, the Department of Mineral Resources and Energy (DMRE) of South Africa published a Request for Information (RFI) for a 2 500 MW nuclear new-build programme. The technology used could be mostly Small Modular Reactors. It is expected to provide the government with insight into the cost of the programme, possible ownership structures, cost recovery, the end user cost, and the sustainability of the programme. There is not currently a timeline for this project, but it is expected to complete the procurement process by 2024.

Source(s): US DFC, World Nuclear News

## GCM, NFC, PowerChina plan 6 GW of coal-fired power projects in Bangladesh

#### **Date:** 16/10/2020

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

London-based GCM Resources has signed a framework agreement with China Nonferrous Metal Industry's Foreign Engineering and Construction (NFC) to develop the Phulbari project in North-West Bangladesh, which comprises 572 Mt of high grid coal resources. In addition, partners plan to develop mine-mouth power plants generating 6 GW. GCM Resources and NFC had already signed a Memorandum of Understanding with Power Construction Corporation of China (PowerChina), which may join the framework agreement. Coal accounts for 3% of Bangladesh's installed capacity, with 500 MW (2019). More than 5.6 GW are under construction and 11.4 GW under development.

#### Source(s): GCM Resources

## CGN Energia announces US\$1.95bn investment plan for RES in Brazil

#### Date: 07/10/2020

BRICS, Emerging markets, America, Brazil, Electricity, Renewables, Companies, China General Nuclear Power Corporation (CGN)

CGN Energia Brasil and Participações, subsidiary of China General Nuclear Power Group (CGN), has reportedly laid down a BRL 11bn (US\$1.95bn) investment plan until 2024 (Brazil). The plan foresees the development of a 3 GW RES power generation portfolio, from greenfield projects and acquisitions. CGN Energia will focus mostly on solar PV for this plan.

Source(s): ABDIB (Portuguese)

## Juridique et institutionnel

## **US** approves more sanctions targeting Nord Stream II project (Russia)

#### Date: 23/10/2020

Russia, United States, CIS, America, BRICS, G8, Emerging markets, Policy, Gas pipeline

The US State Department has broadened the scope of sanctions targeting Gazprom's US\$11bn Nord Stream II gas pipeline project. The bill was proposed by US senators in June 2020 and will expand the sanctions to include penalties on firms not only involved in the pipe-laying but also those which provide the project underwriting services, insurance, and services or facilities for the vessels (welding equipment, retrofitting or tethering of the ships). This follows another presidential decision issued in 2019 which prompted Allseas (a Swiss-Dutch company involved in the project) to stop the undersea work, thus delaying the project. The new guidance takes aim at the Russian ship that officials believe Nord Stream 2 has selected as a replacement deep-sea pipe-laying vessel. In December 2019, the United States imposed sanctions on companies working on the project, considering that it would increase the European Union's dependence on Russia and would give Russia more influence over economic and security matters in Europe. Earlier in January 2020, Russia postponed the commissioning of the Nord Stream 2 gas pipeline project from mid-2020 to the end of 2020 or early 2021, due to US sanctions against the gas pipeline that could delay the project by several months. The project, which was initially expected in late 2019 had already been postponed to 2020 in November 2019. The 55 bcm/year gas project will double the gas export capacity of the existing Nord Stream gas pipeline that stretches between Vyborg (Russia) and Greifswald (Germany). The project is developed by Gazprom (50%), in partnership with Uniper, Shell, OMV, Wintershall and Engie (10% each). Gazprom launched the expansion project in 2015 and started the permitting process with the countries where the submarine gas pipeline would be laid in 2017. The gas pipeline project was approved before in Finland, Sweden, Germany and Russia but only secured a construction permit in Denmark in October 2019, delaying its construction within the Danish exclusive economic zone, outside of Danish territorial water.

### Source(s): Seeking Alpha

## Charbon: L'Australie s'inquiète d'un possible embargo chinois

## Date: 13/10/2020

Australia, China, Asia, Asia, BRICS, Emerging markets, Coal, Coal/Lignite, Policy, Trade, Supply

Dans le contexte de la dégradation des relations bilatérales entre l'Australie et la Chine, l'Australie a demandé à la Chine si elle avait effectivement donné pour instruction aux groupes chinois de cesser d'acheter le charbon australien, ce qui aurait de lourdes conséquences sur l'économie australienne très dépendante de ses matières premières et constituerait un camouflet pour le gouvernement australien qui a renouvelé son soutien inconditionnel à la filière charbon.

## **Source(s):** Connaissance des Energies

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## Polish antitrust agency fines Gazprom €6.5bn over Nord Stream 2 project

#### Date: 08/10/2020

Europe, Poland, Natural Gas, Policy, Companies, Projects, Gas pipeline, Interconnection (gas), Gazprom

The Polish antitrust agency (Office of Competition and Consumer Protection, UOKiK) has fined Gazprom PLN29bn ( $\in$ 6.5bn) for building the 55 bcm/year Nord Stream 2 gas pipeline without its consent. In addition, the UOKiK imposed a penalty of PLN234m ( $\in$ 52m) on Engie, Uniper, OMV, Shell and Wintershall, which are each owning 10% in the project (50% Gazprom). Gazprom, Uniper, Shell, OMV, Wintershall, and Engie are developing the 1,230 km-long Nord Stream 2 gas pipeline. The project, which will double the throughput of the current Nord Stream pipeline, is controversial as Germany would increase its dependence on Russian gas while bypassing Ukraine. In January 2020, Russia postponed the commissioning of Nord Stream 2 from mid-2020 to the end of 2020 or early 2021, due to US sanctions against the gas pipeline that could delay the projects by several months.

**Source(s):** UOKiK, Reuters

## US and EU Russia sanctions update - Overview and energy sector focus (and emerging Russian countersanctions)

#### Date: 06/10/2020

Europe, Russia, United States, CIS, America, BRICS, G8, Emerging markets, Policy

The still evolving US sanctions (as well as the EU and now also emerging UK sanctions) continue to challenge Russia-related business. This presentation highlights the most recent developments and then provides a detailed overview of the relevant frameworks and their possible implications—including a focus on the energy sector—as of 5 October 2020.

Source(s): Morgan Lewis, Morgan Lewis

#### EU threatens Turkey with sanctions over East Mediterranean dispute

Date: 02/10/2020

Europe, Turkey, Emerging markets, Natural Gas, Policy

EU leaders have warned that Turkey could face sanctions if it does not cease its "provocations and pressures" and continues drilling for gas in the East Mediterranean. In case of such renewed actions by Ankara, the EU would use all its instruments and options available. Tensions began when Turkey sent a gas exploration vessel in the disputed waters (there are no agreed maritime borders between Turkey, Greece, and Cyprus) and military vessels were deployed by both Turkey and Greece.

Source(s): Deutsche Welle

## **Geoeconomics vs. Russian gas coercion**

## Date: 01/10/2020

Russia, CIS, BRICS, G8, Emerging markets, Natural Gas, Policy

With the Nord Stream 2 fight fully in view, this report will analyze the impact of energy-related sanctions directed toward Russia to curb Russian geopolitical influence and blunt Moscow's ability to coerce European gas consumers. It focuses on energy sanctions in a largely European context, its analytical conclusions impact a much broader issue that is vital to the foreign policy of multiple U.S. allies, as well as broader stability and risk management across global commodity and financial markets.

#### Source(s): Baker Institute

Observatoire de la sécurité des flux et des matières énergétiques – Octobre 2020

## **Innovations technologiques**

## Stockage d'électricité et batteries

# **DOE** awards **\$1.95M** for conceptual designs that extract critical minerals and rare earth elements from coal sources

## Date: 24/10/2020

United States, America, G8, Coal, Coal/Lignite, Technology

The U.S. Department of Energy's (DOE) Office of Fossil Energy selected 13 projects to receive approximately \$1.95 million in federal funding to develop conceptual designs of commercially viable technologies that will extract rare earth elements (REEs) from U.S. coal and coal by-product sources. Each project will receive up to \$150,000 in DOE funding. The conceptual designs will include system configurations, equipment features, performance characteristics, and associated costs for systems that produce at least 1–3 metric tons per day of mixed rare earth oxides (REOs) or rare earth salts (RESs) and other critical minerals (CMs) in some designs.

Source(s): US Department of Energy

## EU's Šefčovič: Europe must be 'much more strategic' on raw materials

**Date:** 20/10/2020

Europe, Policy

The European Union cannot achieve climate neutrality without critical raw materials like lithium and rare earths and it needs to be much more strategic in relations with supplier countries in order to ensure the bloc's strategic autonomy. The EU is pushing the concept of "open strategic autonomy" on raw materials, by developing its own supplies of lithium and rare earths while diversifying import supplies. Europe could be 80% self-dependent on lithium by 2025 and have its own rare earth mining and refining capacity ready by 2030

## Source(s): Euractiv

## **RTE ouvre le plus grand site en France de stockage d'électricité par batteries**

Date: 29/09/2020

France, Europe, G8, Electricity, Technology, Electricity storage

RTE a ouvert le plus grand site en France de stockage d'électricité sur batteries (5 600 batteries, soit 24 MWh), à proximité d'un projet éolien de 100 MW à Fontenelle (Côte d'Or). Le projet de stockage fait partie de son projet Ringo (80 M€), qui regroupera trois sites - Fontenelle (prévu d'ici mi-2021), Bellac (Haute-Vienne, fin 2021), et Ventavon (Hautes-Alpes, 2022) – pour une capacité totale de 72 MWh.

#### Source(s): Connaissance des Energies

## Hydrogène

## Les perspectives de développement d'une économie chinoise de l'hydrogène

## Date: 21/10/2020

China, Asia, BRICS, Emerging markets, Hydrogen, Policy, Technology, Forecasts

La Chine manifeste un intérêt grandissant pour l'hydrogène et déploie des politiques pour créer des nouveaux usages et développer d'autres sources de production que le charbon. L'annonce récente par le président chinois que la Chine vise la neutralité carbone en 2060 devra avoir un impact sur la stratégie hydrogène poursuivie qui, pour l'instant, ne vise pas à aider la décarbonation de l'économie chinoise et répond à des impératifs stratégiques et industriels.

Source(s): IFRI

## The utility-scale green H2 project pipeline exceeeds 60 GW

**Date:** 12/10/2020

World, Hydrogen, Supply, Capacities, Projects, Technology, Power plants, Electricity storage

The utility-scale green hydrogen developments (>1 MW) would now exceed 60 GW, mostly concentrated in projects in Europe and Australia. Off the total, around 11 electrolyser projects have a capacity that exceeds 1 GW (they account for 87% of the total capacity), and 4 of these projects will come from Australia: the Asian Renewable Energy Hub, Murchinson Renewable Hydrogen Project, Gladstone Hub, and the Pacific Solar Hydrogen. Estimates indicate that around 30 GW will be operational by 2035. Most projects will be powered by solar and onshore wind. A large capacity will be paired with offshore wind power plants, including the 10 GW NortH2 project, proposed by a Shell-led consortium in the Netherlands, and the 600 MW Westküste 100 project proposed by Ørsted and EDF in Germany. Ørsted is also considering another gigawatt-sized project in Denmark to convert power generation from a Bornholm offshore wind park.

Source(s): Rystad Energy

## Plan hydrogène en Europe : les conditions du succès

Date: 28/09/2020

Europe, Hydrogen, Policy

Dans quelle mesure l'hydrogène peut-il jouer un rôle dans l'atténuation du changement climatique ? Comment les plans de relance s'attaquent-ils aux écueils potentiels de son développement ? Sur ces deux aspects, la coopération de l'UE sera essentielle pour assurer la mise en place d'une infrastructure énergétique adéquate et la création d'un marché de l'hydrogène propre, compétitif et efficace, où l'hydrogène sera limité aux usages prioritaires.

## Source(s): IDDRI

## Véhicules électriques

## The cobalt empire

## Date: 18/10/2020

China, Asia, BRICS, Emerging markets, CO2 emissions, Technology

China controls much of the world's supply of cobalt, accounting for 2/3 of global refined cobalt production, thanks to significant acquisitions of mining assets in the Democratic Republic of Congo since the early 2000. In addition, China accounts for 40% of electric vehicles sales. China's control of the mineral raises fears about an insecure supply chain, especially as cobalt-free EV batteries don't have the same performances.

Source(s): The Wire China

## Nucléaire

## US DoE approves US\$1.35bn to support small-scale nuclear (US)

### Date: 21/10/2020

G8, America, United States, Electricity, Nuclear, Supply, Capacities, Projects, Investments, Power plants

The US DoE has approved US\$1.35bn to support the construction of a 720 MW small-scale nuclear power plant project, which will be developed by NuScale (US). The award was announced by the Utah Associated Municipal Power Systems (UAMPS) consortium of cities and will be granted over the next decade. The project, currently evaluated at US\$6.1bn, was previously estimated at US\$3.6bn. The UAMPS has already pushed the project's deadline for commercial operation from 2026 to 2030, and UAMPS members have already committed to buying around 200 MW from the project.

#### Source(s): Reuters

## Le renouveau du secteur nucléaire aux États-Unis. De "Make America Great Again" à l'"Energy Dominance"

### Date: 28/09/2020

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

Face au déclassement de l'industrie nucléaire américaine au cours de la dernière décennie, l'administration Trump s'est lancée dans de grands programmes de soutien afin de revitaliser la filière. L'accent est désormais mis sur les Small Modular Reactors (SMR) et les réacteurs avancés, et les projets commencent à fleurir avec le soutien du DOE et l'accueil favorable de l'autorité de sûreté américaine. Bien que l'AP1000 puisse encore être exporté dans des pays partenaires où les États-Unis peuvent peser diplomatiquement, les développeurs de SMR sont mis en avant afin de conquérir des parts de marché. Une stratégie particulièrement active se déploie en Europe centrale et de l'Est, afin de repousser autant que possible les acteurs russes ou chinois.

## Source(s): IFRI

## **Transports**

# Le pari de la mobilité routière propre en Europe : état des lieux, stratégies et perspectives post COVID-19

## Date: 14/10/2020

Europe, Electricity, Liquid biofuels, Hydrogen, Biomass, Technology, Forecasts

Si les années 2010 ont permis la mise en place des jalons de la décarbonation du secteur électrique dans l'Union européenne (UE), les années 2020 sont celles de la décarbonation accélérée du secteur du transport routier. La transition vers la mobilité routière propre provoque ou accompagne des bouleversements sociétaux, technologiques et géoéconomiques majeurs.

Source(s): IFRI

## **Autres technologies**

## China delivers innovative industrial test facility to produce methanol from H2

Date: 21/10/2020

BRICS, Emerging markets, Asia, China, Technology

China Chengda Engineering Co. (China National Chemical Engineering Group Corporation), CNOOC Fudao Co. (China National Offshore Oil Corporation), and the Shanghai Advanced Research Institute of the Chinese Academy of Sciences have developed a 5,000 ton/year industrial test facility to produce methanol from carbon dioxide and hydrogenation. The plant passed trial operation and technical assessment and will be used in low-cost and green methanol production. Through electrolytic hydrogen technology, hydrogen can be produced with renewable energy and nuclear energy. The facility can be used to realise carbon-negative methanol synthesis, which will promote cyclic, green, and clean energy ecology.

Source(s): SASAC