MINISTERE DES ARMEES

Observatoire de la sécurité des flux et des matières énergétiques

Revue de presse – 26 novembre 2021

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Actualités énergétiques régionales

Afrique du Nord – Moyen Orient

Kuwait picks Chinese, local firms for 2 gas projects

Date: 15/11/2021

Middle-East, Kuwait, Oil, Projects

OPEC member Kuwait has awarded the Chinese company Jereh Oil & Gas Engineering a US$426m work package for a Jurassic gas project in northern Kuwait (near the Iraqi border); a local company was selected for another Jurassic gas project.

Source(s): Zawya

Arctique

The Northern Sea Route: A state priority in Russia's strategy of delivering Arctic hydrocarbons to global markets

Date: 24/11/2021

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

The Northern Sea Route (NSR) has emerged as a new strategic opportunity for unlocking and monetising Russia's vast oil and gas reserves in the Arctic. The NSR is an important element of Russia's Arctic strategy, that now incorporates active development of the hydrocarbon riches, development of the Arctic ports and other infrastructure. It also relies on expanding domestic shipbuilding capabilities for Arctic-class tankers and a new generation of nuclear icebreakers as these are seen as important engines of economic growth and job creation in Russia. Russia has formulated ambitious goals for increasing NSR transportation turnover by 2035, relying primarily on a handful of oil and LNG projects by Gazpromneft, Novatek, and Rosneft. From a geo-political standpoint, the NSR provides a new avenue for developing international relations with new and existing customers for Russian hydrocarbons, while also allowing Russia to compete with key rivals in a rapidly globalizing market.

Source(s): Oxford Institute for Energy Studies

Biden administration launches series on Arctic energy

Date: 16/11/2021

United States, America, G8, Electricity, Policy

The US administration has launched a series of events ("ArcticX") aimed at assessing opportunities for sustainable or renewable energy systems in Alaska's Arctic region, as the region faces high energy costs and impacts from climate change.

Source(s): AP

Gazprom sets Barents exploration drilling schedule

Date: 15/11/2021

Russia, CIS, BRICS, G8, Emerging markets, Natural Gas, Projects, Companies, Gazprom

Gazprom aims to start drilling two exploration wells on the Ledovy block in the Barents Sea in 2022 and 2023. The block, located near the Shtokman field, could hold over 4,000 bcm of gas.

Source(s): Upstream Online

China to develop new heavy icebreaker for 'Polar Silk Road'

Date: 13/11/2021

China, Asia, BRICS, Emerging markets, Oil, Policy

China plans to develop a new heavy icebreaker that should be used to rescue vessels along its "Polar Silk Road" trade route in the Arctic (as part of its global infrastructure Belt and Road Initiative). With its design due to be completed by 2025, it would supplement China's two existing icebreakers and plans for a nuclear-powered icebreaker. The United States, which has only one heavy icebreaker, should consider options to strengthen its presence in the Arctic.

Source(s): Brookings, South China Morning Post

Méditerranée Orientale

Turkey and Russia - The logic of conflictual cooperation

Date: 28/10/2021

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

The structure of economic relations between Turkey and Russia suggests an asymmetrical interdependence to the disadvantage of Turkey. In the energy sector, however, Russia seems to be more dependent on Turkey; we can observe this in two recent strategic projects, the gas pipeline TurkStream and the Akkuyu nuclear power plant. Between the start of Russia's intervention in Syria in September 2015 and the shooting down of a Russian fighter jet by the Turkish air force in November 2015, the Turkish leadership threatened to cease cooperation with Russia on both these projects.

Source(s): German Institute for International and Security Affairs

Europe

Energoatom and Westinghouse sign agreement on nuclear newbuild (Ukraine)

Date: 23/11/2021

CIS, Ukraine, Electricity, Nuclear, Projects, Power plants

Ukraine's national nuclear group Energoatom has signed two cooperation agreements with the US nuclear manufacturer Westinghouse for the construction of two new nuclear reactors using Westinghouse's AP1000 technology at the Khmelnytsky nuclear power plant in north-western Ukraine. One agreement is for the purchase of services from Westinghouse for the design of reactors, and the other for the purchase of a simulator and equipment. In September 2021, Energoatom already signed an exclusive agreement with Westinghouse to bring AP1000 reactors to multiple sites in Ukraine. Energoatom operates four nuclear power plants with 15 power units in Ukraine, among which 13 VVER-1000 power units and two VVER-440 power units with total installed capacity of 13,835 MW. In December 2020, Energoatom restarted the construction of the Khmelnytskyi nuclear power units 3 and 4 (2 x 1,000 MW). Construction on those units began in 1986 and 1987 and was stopped in 1990. The reactors are expected to be completed in 2026, at a cost of US$10bn.

Source(s): Westinghouse, Interfax, Neftegaz (Russian)

Gazprom’s ‘Italian strike’ or the latest Russian blackmail of Europe

Date: 04/11/2021

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

Russia’s decision to severely reduce natural gas supplies to Europe before the winter has sent prices skyrocketing, causing the most serious energy crisis in decades. Russia has sent a chilling message to European capitals that unless the Nord Stream 2 gas pipeline is certified, Gazprom will only deliver on existing long-term contracts, thus continuing to blackmail Europe. Russia would seek a return to restrictive long-term gas supply contracts that not only secure stable high gas prices to Gazprom but also inhibit the development of regional gas markets, particularly in Eastern and Central Europe.

Source(s): The Jamestown Foundation

Moldova signs a new gas supply agreement with Russia's Gazprom

Date: 03/11/2021

BRICS, G8, Emerging markets, CIS, Moldova, Russia, Natural Gas, Companies, Trade, Contract, Supply, Gazprom

Moldova has signed a new five-year natural gas supply contract with Russia for 3 bcm/year. The previous agreement expired at the end of September 2021 and the two sides have been discussing the new prices and Moldova's gas debt (around US$710m) since then. The Russian side had curtailed gas supplies to Moldova by 1/3 in October 2021 and threatened to discontinue the supplies altogether by 1 December 2021, compelling Moldova to accept Russia’s conditions for prolonging the multi-year contract. Under the new agreement that should be signed in 2022, Moldova will pay around US$450 per 1,000 m3 of natural gas, compared to US$250 per 1,000 m3 in the previous contract (and US$790 per 1,000 m3 initially offered by Gazprom). The two countries are expected to sign debt agreements and an agreement on cooperation in the energy sector in 2022. Moldova had no alternative in the short-to-medium term, since gas deliveries through the Iasi–Ungheni–Chisinau gas pipeline with Romania would also be procured from Russia and re-sold to Moldova with a markup.

Source(s): Reuters, Al Jazeera, The Jamestown Foundation

Asie

Armenian NPP modernization and life extension project completed with ROSATOM's participation

Date: 17/11/2021

CIS, Armenia, Electricity, Nuclear, Companies, Projects, Power plants, Rosatom

Rosatom has completed the modernization and life extension project of the Armenian nuclear power plant, which will allow to operate it for another 10 years after 2026 and increase its capacity by 15%. The 415 MW reactor, the sole in the South Caucasus region, accounts for more than 1/3 of all electricity generated in Armenia.

Source(s): Rosatom

Nervous energy: China targets new Indonesian, Malaysian drilling

Date: 12/11/2021

China, Indonesia, Malaysia, Asia, Asia, Asia, BRICS, Emerging markets, Crude oil, Oil, Projects

Over the last four months, Chinese vessels have been contesting Indonesian and Malaysian oil and gas activity in the South China Sea. Chinese law enforcement has maintained a continuous presence at the site of new Indonesian drilling north of the Natuna Islands since early July 2021 and a Chinese survey ship conducted seabed surveys in Indonesia's exclusive economic zone (EEZ) and continental shelf. Another Chinese vessel simultaneously conducted a seabed survey of Malaysia's continental shelf in apparent retaliation for new drilling off Sabah.

Source(s): Asia Maritime Transparency Initiative

With China's withdrawal from overseas coal, the pipeline for new coal in Asia could drop to 22 GW — all of which will likely not be built

Date: 10/11/2021

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

China's recent pledge to "not build new coal-fired power projects abroad" could have a major impact on coal-fired power projects in Asia that have not yet begun construction (65 GW in Asian countries outside of China and India): cancelling projects dependent on Chinese support could remove 2/3 of the projects (43 GW), and nearly all coal-fired projects in Bangladesh or Sri Lanka. Cancelling the remaining 22 GW coal-fired project pipeline could save over US$27bn in capital cost that could be invested in renewables, energy efficiency and grids, and could save 103 MtCO2/year.

Source(s): Global Energy Monitor

Cheniere Energy (US) signs LNG supply agreements with Chinese companies Sinochem and Foran Energy

Date: 08/11/2021

BRICS, G8, Emerging markets, America, United States, Asia, China, Natural Gas, LNG, Supply, Trade

The US LNG group Cheniere Energy has signed two LNG sale and purchase agreements (SPAs) with Chinese companies. The group has entered into a 17.5-year binding LNG SPA with the Chinese state-owned chemical company Sinochem, to deliver an initial volume of 0.9 Mt/year starting in July 2022, which will increase to 1.8 Mt/year. In addition, Cheniere will supply 0.3 Mt/year of LNG to Foran Energy over a 20-year period starting in January 2023 (Heads of Agreement initially signed in November 2020). Several LNG supply contracts were recently signed between US LNG producers and Chinese companies. In October 2021, the Chinese state-owned oil and gas company Sinopec signed two 20-year agreements with the US LNG group Venture Global LNG for a combined 4 Mt/year of LNG. In addition, Venture Global signed a third LNG supply agreement with Unipec (Sinopec), to deliver 1 Mt/year of LNG from its proposed 10 Mt/year Calcasieu Pass LNG project in Cameron Parish, Texas (United States), over a 3-year period starting in March 2023. In 2018, China became the world's 2nd largest LNG importer in the world behind Japan. LNG imports amounted to 90.5 bcm in 2020 (+12%).

Source(s): Cheniere, Cheniere

Russian LNG shipments to India: Strategic implications and long-term prospects

Date: 02/11/2021

Russia, India, CIS, Asia, BRICS, G8, Emerging markets, LNG, Natural Gas, Supply

Expanding energy ties between Russia and India since 2014 – when Russia's political relations with its Western partners collapsed over Ukraine – are offering opportunities for both countries. Russia, which is seeking to drastically expand its LNG production, should benefit from India's strategy to increase the share of LNG in its energy mix and the bilateral cooperation could extend to other sectors such as electrification and gasification in India. Meanwhile, India aims to boost cooperation with Russia in the energy sector, seeking to secure gas supply, guarantee imports of some quantities of oil, and even to take interests in Russian oil and gas projects.

Source(s): The Jamestown Foundation

Inter RAO almost doubled electricity exports to China since November 1

Date: 01/11/2021

Russia, China, CIS, Asia, BRICS, G8, Emerging markets, Electricity, Supply

The Russian electricity producer Inter RAO is raising electricity exports to China, whose northern provinces are facing an energy shortage. Electricity exports started in October 2021 and almost doubled in November 2021.

Source(s): TASS

Afrique

Chinese-funded electricity generation in Sub-Saharan Africa and implications for public debt and transition to renewable energy

Date: 27/11/2021

Africa, Electricity, Renewables

Despite significant liberalisation of the power sector in sub-Saharan Africa (SSA), Chinese investments in the electricity industry continue to follow state-led project contract-based models. This has failed to encourage Chinese firms to build compelling investment portfolios for competitive procurements within the region and it has exacerbated the debt burden of host country governments. Moreover, despite the global drive towards cleaner power generation, Chinese funding of electricity generation in SSA is not sufficiently channelled towards modern renewable power that could reduce vulnerability to climate change.

Source(s): Institute of Development Studies

How the U.S. lost ground to China in the contest for clean energy

Date: 21/11/2021

Africa, Congo DR

China's pursuit of DR Congo's cobalt wealth is part of a disciplined playbook that has given it an enormous head start over the United States in the race to dominate the electrification of the auto industry, long a key driver of the global economy. The United States essentially surrendered the resources to China, failing to safeguard decades of diplomatic and financial investments in Congo.

Source(s): New York Times

MCC, The Gambia Partner to Increase the Reliability of Electricity

Date: 16/11/2021

Gambia, Africa, Electricity, Policy

The US government's Millennium Challenge Corporation (MCC) and the Government of The Gambia have signed a US$25m Threshold Programme to Gambia's plans to achieve universal energy access by 2025, prioritising imports and renewables (especially solar) to help the country curb greenhouse gas emissions. MCC has invested in 7 energy programs in West Africa, including a US$550m Power Compact with Senegal starting in September 2021 and the US$450m Burkina Faso Compact (August 2020). MCC also signed an MOU with Burkina Faso and Cote d'Ivoire in June 2021, as well as a cooperative agreement with the West African Power Pool (WAPP), as part of a potential regional energy interconnection program between Burkina Faso and Côte d'Ivoire.

Source(s): Millennium Challenge Corporation

Why Angola struggles to shake off its economic dependence on China

Date: 08/11/2021

China, Angola, Asia, Africa, BRICS, Emerging markets, Oil, Policy

Angola is heavily indebted and relies on oil exports to China to pay off its loans, a strategy that has left it vulnerable to falling oil prices. The government has been trying to diversify the economy and renegotiate debts, but for now it needs China's support.

Source(s): South China Morning Post, Democracy in Africa

Autres

The US, China, Japan, South Korea and the UK announce oil release

Date: 25/11/2021

BRICS, G8, Emerging markets, Europe, United Kingdom, America, United States, Asia, China, India, Japan, Oil, Crude oil, Supply, Prices

The United States has decided to release 50 mbl of oil from the Strategic Petroleum Reserve, in an attempt to lower domestic oil prices, which have reached 7-year highs; 32 mbl will be an exchange over the next several months, releasing oil that will eventually return to the Strategic Petroleum Reserve in the years ahead, while 18 mbl will be an acceleration into the next several months of a sale of oil that Congress had previously authorised. To have a larger impact on global oil prices, the US oil release will be coordinated with China, India, South Korea, Japan and the United Kingdom. India plans to release 5 mbl, while the United Kingdom will allow the voluntary release of 1.5 mbl from privately held reserves. Japan will release "a few hundred thousand kilolitres" of oil from its national reserves (estimated at 490 mbl), but the timing of the sale remains undecided. China and South Korea have also agreed to join the coordinated move, though without specifying how much oil would be released or when.

Source(s): White House, Reuters, Reuters, Channel News Asia, CNN

Chine et Etats-Unis annoncent un accord surprise sur la dernière ligne droite de la COP

Date: 10/11/2021

United States, China, America, Asia, BRICS, G8, Emerging markets, CO2 emissions, Policy

La Chine et les Etats-Unis, premiers émetteurs mondiaux de gaz à effet de serre (GES), ont annoncé un accord-surprise à la COP26, s'engageant à "prendre des mesures renforcées pour relever les ambitions pendant les années 2020" et réaffirmant leur attachement aux objectifs de l'accord de Paris. Ils s'engagent aussi à œuvrer à Glasgow pour "une issue ambitieuse, équilibrée et inclusive sur l'atténuation (baisse des émissions), l'adaptation et le soutien" financier aux pays pauvres. Les deux pays entendent coopérer sur les cadres réglementaires et les normes environnementales liés à la réduction des émissions de GES dans les années 2020, sur les politiques visant à encourager la décarbonisation et l'électrification des secteurs d'utilisation finale, sur les domaines clés liés à l'économie circulaire (conception verte et utilisation des ressources renouvelables) et sur le déploiement et l'application de technologies telles que le captage, stockage et utilisation du carbone (CCUS) et la capture directe de l'air. Ils chercheront également à maximiser les bénéfices sociétaux de la transition énergétique et à réduire les émissions de méthane et de CO_2 (via la réduction de la production électrique au charbon en Chine, le développement des renouvelables et des politiques d'efficacité énergétique).

Source(s): Connaissance des Energies, US Department of State

China, Latin America eye cooperation on renewable energy

Date: 27/10/2021

America, China, Asia, BRICS, Emerging markets, Oil, Policy

As China and Latin American countries have complementary advantages in the field of renewable energy, the two sides see massive potential for cooperation in the sector. China and Latin American countries should jointly promote the large-scale development of renewable energy, and strengthen cooperation in advanced renewable technology innovation such as storage, hydrogen, or smart grids.

Source(s): China Daily

Stratégies d'entreprises

Stratégies

Gazprom (Russia) approves a US$24bn investment programme for 2022

Date: 26/11/2021

BRICS, G8, Emerging markets, CIS, Russia, Natural Gas, Companies, Gas pipeline, Transmission (gas), Interconnection (gas), Gazprom

Gazprom has approved its 2022 investment programme, planning to invest RUB 1,758bn (US$24bn), of which 81% will directed for capital investments. The group will seek to further develop new gas production centres (Yamal, Yakutia and Irkutsk) and the Power of Siberia gas pipeline to China and projects securing gas balance in peak periods. Gazprom also aims to create major gas processing enterprises in the east and northwest of Russia, and to renovate the gas transmission system to supply ethane-containing gas through dedicated gas pipelines up to the coast of the Baltic Sea.

Source(s): Gazprom

Lukoil discovers 250 mbl field in Block 12 on the Mexican shelf

Date: 24/11/2021

Emerging markets, America, Mexico, Oil, Crude oil, Companies, Lukoil

The Russian oil group Lukoil, which secured E&P rights at Block 12 offshore Mexico in 2017, has announced a discovery in the Yoti West structure and the oil field is estimated to hold 250 mbl. Lukoil considers Mexico a strategic region for the development of its international upstream operations. The group sold a 40% stake in Block 12 to Eni in late 2018 but retains 60% and operatorship. It also has a 20% stake in the offshore Block 10 (80% Eni).

Source(s): Neftegaz

Rosneft believes Indian market has long-term potential

Date: 24/11/2021

BRICS, G8, Emerging markets, CIS, Russia, Asia, India, Oil, Crude oil, Companies, Rosneft

The Russian oil company Rosneft promotes a framework of integrated cooperation with Indian partners across the entire value chain, from the extraction of oil to the refining and distribution of oil products. Indian companies such as ONGC Videsh Ltd. (OVL), Oil India Ltd (OIL), Indian Oil Corporation (IOC), and Bharat Petroresources already have stakes in oil projects (Vankor, Taas Yuryakh Neftegazodobycha) and LNG projects (Sakhalin-1). Meanwhile, Rosneft is betting on the long-term potential of the Indian market and expanding investments (49% stake in Nayara Energy, the owner of the 20 Mt/year Vadinar refinery). It is also negotiating with potential partners, including a consortium of Indian companies, to participate in its giant Vostok Oil project in Russia (6 Gt of oil resources).

Source(s): Eonomic Times of India

Russian companies are ready to participate in the development of the energy sector of Lebanon

Date: 22/11/2021

Russia, Lebanon, CIS, Middle-East, BRICS, G8, Emerging markets, Companies, Novatek, Rosneft

Russian companies are ready to help develop Lebanon's energy sector and rebuild the port of Beirut. Novatek, which entered Lebanon in 2018 as part of a consortium with TotalEnergies and Eni, plans to resume drilling on the Block 9 (subject to a dispute between Lebanon and Israel) and to drill another well on the Lebanese shelf in early 2022. Rosneft should be transferred the operational management of the Tripoli oil terminal for 20 years.

Source(s): Neftegaz (Russian)

Biden's other setback: OPEC+ ignores his plea for help

Date: 08/11/2021

United States, America, G8, Oil, Policy

Saudi Arabia, Russia and the OPEC+ others are in an arm-twisting competition with the United States (US) and other industrialised countries about the price of oil. Despite the US call for speeding up oil production increases to preserve the global economic recovery, the cartel is only increasing production marginally so as not to weaken oil prices.

Source(s): The Hill

Big oil's exodus from Iraq is great news for Russia

Date: 08/11/2021

Russia, Iraq, CIS, Middle-East, BRICS, G8, Emerging markets, Crude oil, Oil, Companies

The recent exodus of Western oil companies from Iraq has left Russia in a very advantageous position when it comes to negotiating its production deals in the Gulf country. Lukoil, which signed the Development and Production Service Contract (DPSC) for the West Qurna (Phase 2) Contract Area in 2010, is considering that the level of remuneration it receives per barrel drilled is too low and estimates Iraq's unpaid compensation on recovered barrels and other development payments at US$6bn. The Russian company is now seeking to improve the terms of the DPSC, rejecting any production increase and threatening to reduce its presence in the field.

Source(s): Neftegaz

U.S. construction titan Bechtel eyes $10bn Taiwan energy jackpot

Date: 02/11/2021

Taiwan, Asia, LNG, Natural Gas, Companies

The US engineering and construction group Bechtel aims to strengthen its long presence in the Asia-Pacific countries, which aim to transition away from coal and into LNG and renewables. The regional growth would be initiated from Taiwan, which would offer at least US$10bn in business opportunities over the next decade: Taiwan is seeking to reduce the share of coal in the power mix while phasing out nuclear power by 2025, leading to a strong demand for LNG terminal infrastructures, for CCGT power plants and for renewables. Bechtel has a long Asia-Pacific history, with activities in Hong Kong, South Korea, Japan and Australia. In 2019, it moved its regional headquarters from Shanghai to Taipei, and expects business to boom in Vietnam, the Philippines, Indonesia and Thailand as more tech and other manufacturers diversify their production away from China and into Southeast Asia. For the American Institute in Taiwan, Taiwan plays an important role in diversifying global supply chains away from China and the US will cooperate with Taiwan closely.

Source(s): Nikkei Asia

Investissements et acquisitions

Le géant russe Rosneft veut augmenter ses parts dans une importante raffinerie allemande

Date: 17/11/2021

Germany, Europe, G8, Refined products, Oil, Companies, Acquisition/sale, Refineries, Rosneft

Le géant pétrolier russe Rosneft a annoncé mercredi son intention d'augmenter de 54% à 92% ses parts dans la raffinerie allemande PCK à Schwedt (Brandebourg), d'une capacité de 12 Mt/an et qui assure 90% de l'approvisionnement en carburant de la région et de Berlin. Pour Rosneft, cet achat "témoigne de l'importance stratégique du marché allemand » pour le groupe, qui indique vouloir mettre en place des projets bas carbone, notamment la production d'hydrogène vert et de carburants d'aviation durable (« SAF »). Cet engagement environnemental est notamment suscité par le projet de taxe carbone aux frontières de l'UE, le client principal des hydrocarbures russes.

Source(s): Connaissance des Energies

La Chine investit dans des éoliennes en Espagne

Date: 15/11/2021

Spain, Europe, Onshore, Wind, Renewables, Electricity, Companies, Acquisition/sale, Power plants, China Three Gorges Power (CTGPC), EDP

Le groupe étatique chinois China Three Gorges (CTG) a acheté à l'énergéticien portugais EDP 12 parcs éoliens d'une capacité totale de 180 MW en Espagne pour 307 M€. CTG, qui détient une participation dans EDP, développe ses activités en Espagne avec l'acquisition de plusieurs projets solaires dans le pays.

Source(s): Le Figaro

Rosneft withdraws from gas assets in Vietnam

Date: 12/11/2021

Vietnam, Asia, Emerging markets, Natural Gas, Companies, Rosneft

Rosneft sold assets on gas production and transportation in Vietnam in the third quarter of 2021, including 100% in Rosneft Vietnam and 50% in Tomskneft, active in gas and condensate production in Vietnam.

Source(s): TASS

Gaz naturel en mer Noire : la compagnie roumaine Romgaz rachète la part d'ExxonMobil

Date: 03/11/2021

Romania, Europe, Natural Gas, Companies, ExxonMobil

Le géant américain ExxonMobil a cédé ses 50% dans le projet d'extraction du gaz en mer Noire Neptun Deep à la compagnie roumaine Romgaz pour 914 M€. ExxonMobil et OMV (50%) avaient investi plus de 1,5 Md $ dans le projet depuis la découverte de 42 à 84 Gm3 de gaz en 2012, sans que la production puisse commencer en raison de changements légaux en Roumanie.

Source(s): Connaissance des Energies

Rosatom secures construction permit for Akkuyu-4 nuclear reactor (Turkey)

Date: 03/11/2021

Emerging markets, Europe, Turkey, Electricity, Nuclear, Companies, Projects, Power plants, Rosatom

Rosatom's Turkish subsidiary Akkuyu Nuclear has obtained a construction license for the fourth 1,200 MW unit of the Akkuyu Nuclear Power Plant from the Turkey Atomic Energy Agency TAEK. Construction will start in early 2022. The 4-unit power plant is being built at a cost of US$20bn under a Build-Own-Operate (BOO) agreement and secured a 7-year loan worth US$400m from the Russian bank Sberbank in 2019. Construction of the first three units started in 2017, 2019, and 2021, respectively; the first unit is expected in 2023 (centenary of the republic). It should generate up to 35 TWh/year once fully operational, i.e. up to 7% of Turkey's electricity demand.

Source(s): TASS, World Nuclear News

Juridique et institutionnel

Les États-Unis annoncent de nouvelles sanctions symboliques contre une société liée au gazoduc Nord Stream 2

Date: 22/11/2021

Russia, United States, CIS, America, BRICS, G8, Emerging markets, Natural Gas, Policy, Projects, Interconnection (gas), Gas pipeline

Les États-Unis ont annoncé lundi de nouvelles sanctions symboliques contre deux navires et une entreprise liés au gazoduc controversé Nord Stream 2 entre la Russie et l'Allemagne, qu'ils ont toutefois renoncé à combattre frontalement. Elles viennent s'ajouter à d'autres sanctions similaires visant des entités mineures.

Source(s): Connaissance des Energies

Belarus' Lukashenko threatens to cut off gas to Western Europe

Date: 11/11/2021

Europe, Belarus, Russia, CIS, BRICS, G8, Emerging markets, Natural Gas, Trade, Supply, Interconnection (gas), Gas pipeline

Belarus may block gas transit to the European Union if it imposes more sanctions. The EU is currently discussing a fifth package of measures in a context of tensions at the Polish borders and high gas prices.

Source(s): Russia Today

Innovations technologiques

Stockage d'électricité et batteries

Long Duration Energy Storage could reach up 2.5 TW/ 140 TWh in 2040

Date: 26/11/2021

World, Forecasts, Electricity storage

According to the LDES Council, 1,500 to 2,500 MW / 85-140 TWh of long duration energy storage (LDES) could be deployed globally by 2040 to reach net zero carbon emissions. Such a deployment would require between US$1.5-3tn in investment. The study suggests that the LDES cumulative installed capacity could reach up to 40 GW/1 TWh in 2025, 400 GW/10 TWh in 2030, 1.7 TW/70 TWh in 2035, and 2.5 TW/ 140 TWh in 2040. The largest proportion of deployment is expected to be related to energy shifting capacity provision, and transmission and distribution optimisation in bulk power systems (up to 2.3 TW/135 TWh in 2040). Cumulative CAPEX investments could reach up to US$50bn in 2025, US$500bn in 2030, US$1.8tn in 2035, and up to US$3tn by 2040. For LDES cost to become cost optimal, cost must decrease by 60%.

Source(s): LDES Council, LDES Council

Hydrogène

Gazprom planning to engage in pilot hydrogen energy projects based in Russia

Date: 25/11/2021

Russia, CIS, BRICS, G8, Emerging markets, Hydrogen, Companies, Gazprom

Gazprom plans to engage in the implementation of pilot hydrogen energy projects in Russia. The group, which currently produces over 350 kt/year of hydrogen and hydrogen-containing gas, has drawn up a draft roadmap for the high-tech area of activity "Development of hydrogen energy and decarbonization of industry and transport on the basis of natural gas."

Source(s): Gazprom

Russia and the UAE sign a MoU for H2 technologies development

Date: 23/11/2021

BRICS, G8, Emerging markets, CIS, Russia, Middle-East, United Arab Emirates, Hydrogen, Policy

Russia and the United Arab Emirates have signed a Memorandum of Understanding aimed at strengthening industrial cooperation in the development of hydrogen technologies. The cooperation will focus on exploring ways to support the production, storage and transportation of hydrogen fuels. Under the terms of the MoU, both sides agreed to cooperate in the creation of equipment, especially one for the production, liquefaction and use of crude hydrogen and fuel mixtures in which hydrogen is used as the main element. In addition, the parties will develop international standards for the use of hydrogen and align their national industry standards. Also, the MoU encourages bilateral investment in hydrogen energy, joint search for solutions to emerging problems and the creation of a network of private companies in both countries that will facilitate joint development and information exchange. The UAE launched the Green Hydrogen project in May 2021.

Source(s): Russian Ministry of Industry and Trade (in Russian)

The European Commission invests €1.1bn in 7 projects using H2, CCUS and/or renewables

Date: 19/11/2021

Europe, Electricity, Renewables, Hydrogen, Technology, CCS, Investments, Power plants

The European Commission has announced an investment of over €1.1bn into seven large-scale innovative projects under the Innovation Fund. The grants will support projects aiming to bring breakthrough technologies to the market in energy-intensive industries, hydrogen, CCUS and renewable energy. The projects are located in Belgium, Italy, Finland, France, the Netherlands, Norway, Spain and Sweden and were selected for funding under the first Innovative Fund call for large-scale projects (i.e. with total capital costs above €7.5m). The selected projects cover a wide range of relevant sectors to decarbonise different parts of Europe's industry and energy sectors, such as chemicals, steel, cement, refineries, and power and heat. All projects are either already part of industrial hubs or kick-start decarbonisation clusters of interconnected industries. In October 2021, the Commission launched the second call for large-scale projects with a deadline of 3 March 2022. All the projects that were not successful in the first call are encouraged to re-apply.

Source(s): European Commission

13 GW of green H2 capacity pledged by 2030 via H2Zero initiative

Date: 17/11/2021

World, Hydrogen, Companies, BP, CLP, EDF, EDP, Enel, Engie, Equinor, Iberdrola, Shell, TotalEnergies

During the COP26, 28 companies grouped in the H2Zero initiative have pledged to accelerate the use and production of hydrogen as an essential part of the future net-zero energy system. On the demand side, they have committed to replace grey hydrogen and diesel with 1.6 Mt/year of lower carbon intensity hydrogen, saving over 14 $MtCO_2$/year. On the supply side, partners have committed to produce over 18 Mt/year of low-carbon hydrogen, which could replace grey hydrogen, natural gas for industrial heat and petroleum product for transports and avoid around 190 Mt/year of CO_2 emissions.

Source(s): WBCSD, WBCSD

Russia presents its Atlas of hydrogen and ammonia projects

Date: 28/10/2021

BRICS, G8, Emerging markets, CIS, Russia, Hydrogen, Policy, Projects

The Russian Ministry of Industry and Trade has presented its Russian Atlas of low-carbon and carbon-free hydrogen and ammonia production project. The Atlas includes 41 projects in 21 regions of Russia. The projects' production capacity range between 13 tH2/year and 5 MtH2/year. The largest hydrogen production project is a 5 MtH2/year to be fed via the Penzhinskaya tidal power plant in Kamchatka; the project will be developed by H2 Clean Energy and the Development Corporation of Kamchatka and is expected for 2031. Another big project is the 500 ktH2/year Green hydrogen production project (2030) at the Mezensk tidal power plant, whose production capacity could be expanded to 1 MtH2/year in 2033. The biggest ammonia production project is the 6 Mt/year blue ammonia project in Yakutia by North-East Alliance, and other gas companies in Western Yakutia: the project will first produce 3 Mt/year of ammonia in 2026 and 6 Mt/year by 2030. Another important project is Novatek's 2.2 Mt/year of ammonia project in Sabetta (Yamal Peninsula) which aims to produce hydrogen, ammonia and other low-carbon products at its natural gas processing complex using CCS (Sabetta).

Source(s): Russian Ministry of Industry and Trade Atlas

Véhicules électriques

Consolidating China's electric car sector: From three hundred to a few

Date: 12/11/2021

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

What China calls its new energy vehicle (NEV) sector is the world's largest electric car market. But because it suffers from huge overcapacity and low profitability, it is a drag on China's productivity and innovation capacity.

Source(s): MERICS

Nucléaire

TVEL subsidiary starts regular supplies of low-enriched uranium to Kazakhstan for fuel fabrication

Date: 16/11/2021

BRICS, G8, Emerging markets, CIS, Kazakhstan, Russia, Asia, China, Electricity, Nuclear, Projects, Companies, Rosatom

The Uranium Enrichment Center (UEC), the joint venture of Kazatomprom and Rosatom's TVEL Fuel company, has carried out the first supply of enriched uranium product to Kazakhstan for the Ulba Fuel Assembly Plant, a joint Kazakh-Chinese enterprise in Ust-Kamenogorsk, established for fabrication of nuclear fuel for nuclear power plants in China.

Source(s): TVEL

Transports

U.S. releases first-ever comprehensive aviation climate action plan to achieve net-zero emissions by 2050

Date: 09/11/2021

United States, America, G8, Liquid biofuels, Biomass

The US Aviation Climate Action Plan sets out to achieve net-zero greenhouse gas emissions from the US aviation sector by 2050. It aims at increasing production of Sustainable Aviation Fuels (SAF) produced from renewable and waste feedstocks, developing new aircraft technologies, increasing operations efficiency, and cutting airport emissions and boosting airport resilience.

Source(s): US Federal Aviation Administration

Transport maritime : CMA CGM et Engie annoncent un partenariat pour développer un carburant décarboné

Date: 09/11/2021

France, Europe, G8, LNG, Liquid biofuels, Biogas, Natural Gas, Biomass, Biomass, Companies, Technology, Engie

L'armateur français CMA CGM et le géant français de l'énergie Engie ont annoncé un partenariat pour développer et produire un carburant décarboné (bioGNL) pour le transport maritime. Trois pistes envisagées : le biométhane, le méthane synthétique et le e-méthane, qui serait issu d'énergies renouvelables (éolien ou photovoltaïque).

Source(s): Connaissance des Energies

CCS

US DOE launches its "Carbon Negative Shot" programme focusing on CCS

Date: 15/11/2021

G8, America, United States, CO2 emissions, Policy, Technology, CCS

The US Department of Energy (DOE) has announced a new programme called the « Carbon Negative Shot », which aims at accelerating carbon dioxide removal (CDR) innovation and position the US as a leader in research, manufacturing and demonstration for CCS. The programme is the third target within the US DOE's Energy Earthshots Initiative for the US to achieve net-zero emissions by 2050. Through the programme, the DOE will aim to remove gigatons of CO2 from the atmosphere and durably store it for less than US$100/tCO2eq for both capture and storage by 2050. It also aims to develop a robust accounting of lifecycle emissions and develop projects to enable gigaton-scale removal of CO2.

Source(s): US DOE

Autres technologies

Carte : Les principaux fournisseurs de matières premières critiques de l'Union européenne

Date: 20/11/2021

Europe

Les matières premières critiques sont définies par la Commission européenne comme les matières les plus importantes sur le plan économique et qui présentent un risque élevé de pénurie d'approvisionnement. L'accès à ces ressources est un enjeu de sécurité stratégique pour l'Union européenne, qui dépend des importations auprès de quelques pays comme le Chili (lithium), le Kazakhstan (phosphore), la Turquie (borates) ou encore la Chine (terres rares légères et lourdes). Cette dépendance pose la question de la diversification des approvisionnements et de la réutilisation des matières, permettant de réduire les besoins en ressources. La carte présente les pays fournisseurs de l'Union européenne pour 24 matières premières critiques et la part de ces pays dans les approvisionnements de l'UE.

Source(s): Diploweb

China to step up strategic mineral resource exploration during 2021-2025

Date: 12/11/2021

China, Asia, BRICS, Emerging markets, Crude oil, Natural Gas, Oil, Production, Supply

China will step up exploration of strategic mineral resources including petroleum, natural gas, copper, chrome, tungsten, rare earths and others during 2021-2025. The National Development and Reform Commission revealed the plan for promoting development in resource-dependent regions on its website.

Source(s): Reuters

Transition énergétique : Eramet se lance dans le lithium en Argentine avec le chinois Tsingshan

Date: 08/11/2021

Argentina, America, Emerging markets

Le groupe minier français Eramet va ouvrir en 2024 une usine de lithium en Argentine avec le chinois Tsingshan, relançant un projet mis sous cocon durant la pandémie, afin d'approvisionner le marché des batteries de véhicules électriques nécessaires à la transition énergétique. A terme le gisement, situé à 3.800 mètres d'altitude dans la province de Salta (nord-ouest), dont Eramet possède "100% des droits perpétuels", devrait produire 15% des besoins européens en lithium.

Source(s): Connaissance des Energies