MINISTERE DES ARMEES

Observatoire de la sécurité des flux et des matières énergétiques

Revue de presse – 25 septembre 2020

Table des matières

Actualités énergétiques régionales 3
- Afrique du Nord – Moyen Orient 3
- Arctique 4
- Méditerranée Orientale 4
- Europe 5
- Asie 6
- Afrique 7
- Autres 8

Stratégies d'entreprises 10
- Stratégies 10
- Investissements et acquisitions 11
- Juridique et institutionnel 13

Innovations technologiques 14
- Energies renouvelables et biocarburants 14
- Stockage d'électricité et batteries 14
- Hydrogène 16
- Nucléaire 17
- Transports 18
- CCS 18

Actualités énergétiques régionales

Afrique du Nord – Moyen Orient

China's plan to dominate the Middle East centers around Iran

Date: 21/09/2020

China, Middle-East, Iran, Asia, BRICS, Emerging markets, Policy

The cooperation between Iran and China extends way beyond the energy sector. As China's global footprint expands, and Tehran remains incentivized to resist U.S. pressure, the two states have a basic, powerful, and potentially enduring shared motivation for cooperation: to push back against U.S. efforts in the Middle East.

Source(s): The National Interest

Iran emerging as regional electricity hub by synchronizing grid with neighbors

Date: 11/09/2020

Azerbaijan, Russia, Iran, CIS, CIS, Middle-East, BRICS, G8, Emerging markets, Electricity, Policy, Interconnection (power), Power grids

The power grids of Russia and Azerbaijan will be linked with the Iranian grid in the coming months. Iraq was the first neighbour whose national electricity network was synchronized with the Islamic Republic's power grid back in November 2019. Currently, Iran has electricity exchange with Armenia, Azerbaijan, Iraq, Turkmenistan, and Afghanistan.

Source(s): Tehran Times

China Petroleum Pipeline Engineering Company will upgrade main oil lines for ADNOC (UAE)

Date: 09/09/2020

United Arab Emirates, Middle-East, Emerging markets, Refined products, Oil, Projects, Oil pipeline

ADNOC Onshore, a subsidiary of the Abu Dhabi National Oil Company (ADNOC), has awarded a US$135m Engineering, Procurement, and Construction (EPC) contract to China Petroleum Pipeline Engineering Company to replace the two main oil lines that transport ADNOC's Murban crude oil from its oilfields at Bab, Bu Hasa, North East Bab, and South East to the Jebel Dhanna terminal, increasing the capacity of the pipelines by over 30%. The contract is expected to be completed in 30 months.

Source(s): ADNOC

Tehran, Moscow intent to expand energy cooperation

Date: 09/09/2020

BRICS, G8, Emerging markets, CIS, Russia, Middle-East, Iran, Electricity, Policy

In May 2020, Iran and Russia agreed to hold the 16th round of Iran-Russia joint economic cooperation commission in Caucasus, and stressed implementation of various construction projects with a focus on removing obstacles on the way of expansion of cooperation.

Source(s): FARS

Iraq forges US energy ties, but White House race may shape oil strategy

Date: 08/09/2020

United States, Iraq, America, Middle-East, G8, Emerging markets, Oil, Investments

The Iraqi government is seeking to implement the US$8bn energy deals with US companies, as a critical step to invigorating the country's oil and gas industry. However, the US presidential election in November 2020 could have an even bigger impact on Baghdad's future oil and energy strategy.

Source(s): Platts

Arctique

The US DoE has re-established its Arctic Energy Office (US)

Date: 23/09/2020

G8, America, United States, Technology

The US DoE has re-established its Arctic Energy Office (AEO), which will be located on the campus of the University of Alaska, Fairbanks (US). The AEO will drive coordination and collaboration on DOE's many activities in the Arctic region including the development of advanced microgrids and nuclear power systems (small modular reactors), the international cooperation on Arctic issues, and the research on methane hydrates. The AEO will report to the Under Secretary of Energy, and coordinate DOE's Arctic activities across the enterprise.

Source(s): US DOE

Trump wants Arctic drilling but oil companies not so sure

Date: 27/08/2020

United States, America, G8, Crude oil, Natural Gas, Oil, Policy

In mid-August, the Trump administration finalized its plan to auction leases for oil and gas development in the Arctic National Wildlife Refuge, a remote tundra wilderness on Alaska's North Slope. However, it remains unclear whether oil companies will purchase the leases. Given the unfavourable economy, an upcoming election, and the inevitable lawsuits from Indigenous and environmental groups, the future of the Arctic Refuge is far from certain.

Source(s): IEEFA

Méditerranée Orientale

Méditerranée : la bataille du gaz

Date: 12/09/2020

Turkey, Europe, Emerging markets, Natural Gas, Policy

D'immenses champs gaziers ont été découvert en Méditerranée orientale, et, depuis, frictions et contestations des frontières maritimes s'aggravent. Ce ne sont pas les enjeux économiques qui l'emportent, mais bien des ambitions géopolitiques rivales qui fracturent l'Alliance atlantique et embarrassent l'Union européenne. Au-delà de l'affrontement entre la Grèce et la Turquie, liées par la géographie et divisées par l'histoire, la crise accroît le risque d'accrochages armés et tourne au duel entre Paris et Ankara.

Source(s): France Culture

Russia versus Turkey: drone battles and gas disputes

Date: 03/09/2020

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

Azerbaijan as a source and transit route of natural gas is given attention in Moscow, which views Azerbaijan-sourced gas as a competitor to Gazprom in Italy, Albania, Bulgaria, Serbia, and other markets. Therefore, the latest Armenian-Azerbaijani escalation can be regarded as testing against the pipelines that compete with Gazprom's.

Source(s): Wilson Center

Europe

The renewal of Turkey's long-term contracts: Natural gas market transition or 'business as usual'?

Date: 19/09/2020

Turkey, Europe, Emerging markets, LNG, Natural Gas, Trade, Contract, Supply

Turkey's new gas strategy of reducing import dependence coincides with the expiration of all Long Term Contracts (LTCs) with the current pipeline suppliers in the 2020s. In 2021 alone, 16 bcm of LTCs will expire, of which 8 bcm is Gazprom gas and half is imported by BOTAŞ and the other half by the seven private sector importers. Gazprom has already suffered from the situation of low spot gas prices and decreasing volumes as a result of demand stagnation; the Russian giant has already lost 30% market share since 2017.

Source(s): Oxford Institute for Energy Studies

China and the Black Sea region: a bridge too far?

Date: 16/09/2020

Bulgaria, Romania, Turkey, Russia, China, Europe, Europe, Europe, CIS, Asia, BRICS, G8, Emerging markets, Oil, Natural Gas, Trade, Supply

Since the inception of its Belt and Road Initiative (BRI) in 2013, China has substantially expanded its political, legal, trade, economic, educational, scientific, and cultural presence in the Black Sea region. Trade and investment projects have primarily focused on the region's finance, energy, transit, and infrastructure sectors. Chinese influence in the region has been largely economic, though its activities could eventually have diplomatic and security implications as well.

Source(s): Middle East Institute

Estonia, Latvia and Lithuania to cut power trade with Belarus and Russia

Date: 03/09/2020

Europe, Estonia, Latvia, Lithuania, CIS, Belarus, Electricity, Policy

The government of Estonia, Latvia and Lithuania have signed an agreement on the functioning of energy trade with third countries after the start-up of the Ostrovets nuclear power plant in Belarus, which is located 20 km away from the Lithuanian border. The three Baltic countries pledged to stop energy trade with Belarus after the launch of the Ostrovets nuclear power plant, and a system of certificates of origin of electricity will be implemented for this purpose. In addition, they will introduce a single tariff for infrastructure use and decrease trading capacities with third countries. Electricity trade will be directed to the Russia-Latvia cross-section in reduced quantities, using the capacities left over from internal trade in the Baltic States. Electricity trade between Kaliningrad and Lithuania will continue in the current quantities. The new agreement will remain in force until the synchronisation of the Baltic electricity systems in late 2025. The deal is expected to halve trade between Estonia, Latvia and Lithuania with third countries.

In August 2020, Rosatom started loading fuel into the Ostrovets-1 nuclear reactor, while commissioning is expected by the end of 2020. Upon completion, the Ostrovets nuclear power plant will entail two 1,109 MW VVER-1200 pressurized water reactors (PWRs); the second reactor is expected to be commissioned in 2021. Belarus obtained US$9bn loan from Russia for the project.

Source(s): Estonia's Ministry of Economic Affairs and Communication

Asie

CNNC completes hot tests at Karachi-2 nuclear power project (Pakistan)

Date: 09/09/2020

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

China National Nuclear Corporation (CNNC) has completed hot functional tests at the second unit of the Karachi nuclear power plant in Pakistan. Two 1,100 MW Chinese-designed ACP-1000 units (Hualong One reactors) are currently being built near Karachi in the Sindh province. Construction started in 2015 at unit-2 and in 2016 at unit-3. The two reactors are expected to be commissioned in 2021 and 2022, respectively. China National Nuclear Corporation and China Nuclear Engineering and Construction Corporation (CNEC) have been selected to build the PKR959bn (US$9.6bn) project on a turnkey basis. Pakistan's Karachi nuclear power project is the first export of the Hualong One units outside China.

Source(s): China National Nuclear Corporation (Chinese), CGTN, World Nuclear News

The strategic significance of Vietnam-US oil and gas cooperation

Date: 07/09/2020

United States, Vietnam, America, Asia, G8, Emerging markets, Oil, Supply

In addition to investing in renewable energy, Vietnam is also seeking to work with United States-based partners to develop oil and gas supplies and gas-fired power plants—an effort fuelled by strategic calculations, as well as purely economic motivations. The US currently plays a key role in Vietnam’s efforts to push back China’s coercive actions in the South China Sea.

Source(s): The Diplomat

Taking power - Chinese firm to run Laos electric grid amid default warnings

Date: 04/09/2020

BRICS, Emerging markets, Asia, China, Lao PDR, Electricity, Companies, Power grids, Transmission (power), Electricité du Laos

Laos would be set to cede majority control of its power grid to a Chinese company, as it struggles to stave off a potential debt default. The power grid shareholding deal was signed between state-owned Electricité du Laos (EdL) and China Southern Power Grid Co. China is Laos’s biggest creditor – China is accused of “debt trap diplomacy” and of gaining strategic advantage in countries struggling to repay loans contracted under the Belt and Road Initiative - and the deal would bind Laos closer to its giant neighbour.

Source(s): Reuters

US official attacks China's 'manipulation' of the Mekong

Date: 04/09/2020

United States, China, America, Asia, BRICS, G8, Emerging markets, Hydro, Renewables, Electricity, Projects, Power plants

Southeast Asia's mighty river is quickly becoming a new front in US-China competition. China's dams aren't the only cause of the Mekong's woes — climate change, El Niño weather patterns, and over-cultivation also play their part — but dams are believed to play an increasingly negative effect on downstream water flows.

Source(s): The Diplomat

Afrique

US DFC approves funding for a 420 MW gas-fired power plant in Mozambique

Date: 14/09/2020

Emerging markets, Africa, Mozambique, Electricity, Thermal, Gas-fired power gen., Projects, Investments, Power plants

The US International Development Finance Corporation (DFC) has approved a U$200m loan to Central Térmica de Temane to finance the development, construction, and operation of a 420 MW gas-to-power project and 25-km interconnection line in Mozambique. The gas-fired power plant is developed by a consortium of state-owned electric utility Electricidade de Moçambique (EDM), Globeleq, eleQtra and Sasol. Gas will be supplied by South African energy and chemical group Sasol and Mozambique's national oil and gas company Empresa Nacional de Hidrocarbonetos (ENH) from the PSA gas field and electricity will be sold to EDM under a 25-year power purchase agreement (PPA). The project received a US$300m grant and a US$120m guarantee from the World Bank in June 2019. In addition, the plant was awarded a US$24m grant from the Norwegian Trust Fund, a US$33m grant provided by the African Development Bank, a US$100m lease and loan through the Islamic Development Bank, and a contribution from the OPEC Fund for International Development of US$36m. In addition, the US DFC has awarded an U$1.5bn political risk insurance to develop gas reserves in the Rovuma basin in the northern province of Cabo Delgado (Mozambique). In 2019, the government of Mozambique approved the development plan for the Rovuma LNG project, which will liquefy and export gas from three reservoirs in the Area 4 block offshore Mozambique. The liquefaction plant will include two LNG trains with a combined capacity of 15.2 Mt/year. The Mozambique Rovuma Venture (MRV) has reached an initial investment decision on the Rovuma LNG project.

Source(s): DFC, Reuters

Why is China looking beyond Africa for oil supplies?

Date: 05/09/2020

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

The continent was once the Asian giant's biggest sources of oil, accounting for more than 1/3 of China's imports, but that share has dropped to about 18% today and is projected to fall further, as Beijing increasingly sources oil from the Middle East, including Iran and Saudi Arabia. Crude oil imports from the Middle East (around 50% of China's oil imports) may even double by 2035.

Source(s): South China Morning Post

U.S. to cut $100 million in aid to Ethiopia over GERD dam dispute

Date: 02/09/2020

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

The United States had decided to cut US$100m in aid to Ethiopia amid a dispute with Egypt and Sudan over the 6,450 MW Grand Ethiopian Renaissance Dam (GERD) project that Ethiopia is building on the Nile. Up to US$100m or so will be affected, of which $26M is funding that expires at the end of the financial year.

Source(s): Reuters

Mozambique : les défis sécuritaires, politiques et géopolitiques du boom gazier

Date: 28/08/2020

Mozambique, Africa, Emerging markets, Natural Gas, LNG, Projects

Les découvertes géantes de gaz au Mozambique vont permettre à ce pays très pauvre de devenir un des futurs grands producteurs de GNL au monde d'ici deux décennies. La présence de la Chine via CNPC aux côtés d'ExxonMobil sur le bloc 4 n'a pas échappé au contexte de rivalité sino-américaine. L'administration Trump a tout fait pour empêcher le déblocage de prêts et garanties bancaires pour ce projet, craignant in fine que cela profite aux sociétés d'État chinoises.

Source(s): IFRI

Autres

USTDA supports Ecuador's power grid control center

Date: 18/09/2020

Emerging markets, America, Ecuador, Electricity, Projects, Power grids, Transmission (power)

The US Trade and Development Agency has awarded a technical assistance grant to Ecuador's National Electricity Operator (CENACE) that will enhance the real-time management of the country's electricity grid and improve the stability and reliability of its power supply network.

Source(s): USTDA

What is América Crece, the US response to the Belt and Road in Latin America?

Date: 18/09/2020

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

The US has succeeded in getting 14 Latin American countries to sign up to its "América Crece" programme so far, compared to the BRI's 19. It proposes a "whole-of-government approach" to help Latin American nations access private investment for energy, road, ports and airport projects. The programme offers to help countries "improve their regulatory frameworks and procurement structures".

Source(s): Diálogo Chino

PowerChina eyes rail project to transport oil and gas from Argentina's Vaca Muerta

Date: 17/09/2020

Argentina, America, Emerging markets, Crude oil, Oil, Supply

PowerChina is in talks with Argentina's state-owned rail entity ADIF to build a railway in Argentina that would move crude oil and natural gas from the Vaca Muerta shale region to the port city of Bahia Blanca. The project would cost US$1.2-1.5bn and would help Argentina raise production from Vaca Muerta, whose development needs greater investment in exploration and production, as well as pipelines, storage terminals, and railways to transport crude and gas.

Source(s): Reuters

Le secrétaire d'État américain au Guyana et au Surinam, où le pétrole attire les convoitises

Date: 17/09/2020

Guyana, Suriname, United States, America, America, America, G8, Crude oil, Oil, Production, Supply

Mike Pompeo s'est rendu au Guyana et au Surinam, deux pays dont les récentes découvertes pétrolières attirent les convoitises. La venue de Mike Pompeo intervient au moment où le Guyana renégocie son accord avec Exxon, qui prévoit que l'État conserverait environ la moitié de ses revenus pétroliers.

Source(s): AFP

The US reaches deal with Russia's Rosatom on uranium supply agreement

Date: 16/09/2020

BRICS, G8, Emerging markets, CIS, Russia, America, United States, Electricity, Nuclear, Uranium, Policy, Companies, Trade, Supply, Rosatom

The US Department of Commerce has agreed with the Russian state-owned nuclear company Rosatom to amend the Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation, which was originally signed in 1992. The new agreement, if finalised, would extend the Agreement to 2040 and reduce US imports of Uranium from Russia. The share of Russian imports, which is currently limited to 20% of US enrichment demand, would decrease to 17% over the next 20 years and would no higher than 15% as of 2028. In addition, the amendment would limit the share of natural uranium concentrates and conversion components of the low-enriched uranium from Russia to 7% of the US enrichment demand, and to a maximum of 5% starting in 2026, in a bid to protect US uranium miners and the US uranium converter. The new agreement would let US companies that have existing uranium purchase contracts with Russia keep them. The US authorities intend to finalise the amendment by 5 October 2020 and will take comment on it until 28 September 2020.

Source(s): US Department of Commerce, Reuters

Stratégies d'entreprises

Stratégies

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

Date: 24/09/2020

Russia, Africa, CIS, BRICS, G8, Emerging markets, Nuclear, Electricity, 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 information about nuclear technologies, raise public awareness about its applications, and promote education as well as capacity building in African countries.

Source(s): Rosatom

Shell aims to resume oil drilling in Alaska (US)

Date: 22/09/2020

United States, America, G8, Crude oil, Oil, Companies, Projects, Shell

Shell has submitted plans to drill for oil in the waters off the North Slope region in Alaska (United States) to the Alaska Division of Oil and Gas. The company holds a 100% working interest in 18 leases at the West Harrison Bay that it acquired in 2012 and that have a 10-year term. Shell plans to consolidate them into a designated unit to keep them after 2022. Under its proposed 5-year exploration plan, Shell would start drilling in the winter of 2023-2024, targeting the Nanushuk oil formation. Shell, which had committed about US$7bn into the Arctic projects and planned to invest a further US$1bn, based on estimations that the Arctic could hold more than 20% of the world's undiscovered oil and gas resources, decided to suspend oil and gas exploration activities off Alaska in September 2015, after drilling at the Burger J well proved disappointing. Unpredictable federal regulatory environment in offshore Alaska and high development costs in a context of low oil prices had made the development unprofitable.

Source(s): Alaska Public Media, Arctic Today

GE and Inter RAO will increase the level of localization in Russia

Date: 14/09/2020

BRICS, G8, Emerging markets, CIS, Russia, Electricity, Thermal, Gas-fired power gen., Companies, Power plants

GE and Inter RAO have signed a package of agreements to increase the level of localization in Russia of the production and maintenance of high-capacity gas turbines (GTBM). The agreements include the transfer of relevant technologies and the expansion of the scope of activities of their Russian Gas Turbines (RGT) joint venture. The localization level of the 6F.03 gas turbine (of up to 88 MW), which is currently being produced at the RGT plant in Rybinsk, will be raised to 100% and partners will start local production of GE' GT13E2 gas turbines (rated up to 210 MW). Under the agreement, RGT will receive the rights to manufacture, service and sell 6F.03 and GT13E2 gas turbines in Russia and several export markets. GE will also provide technical support and staff training to support the development of the required local competencies. RGT was created in 2011, to manufacture, sell and provide service support for gas turbine units (GTU) type 6F.03 under a license from GE. It has been supplying power equipment to the Russian market since 2014.

Source(s): Inter Rao (Russian), AK&M

Investissements et acquisitions

Myanmar awards 1 GW of solar capacity with lowest bid of US$3.5c/kWh

Date: 25/09/2020

Emerging markets, Asia, Myanmar, Electricity, Renewables, Solar, PV, Policy, Tender, Power plants

The government of Myanmar has allocated 1 GW of solar capacity in its first auction for large-scale PV. All but one of the 30 projects, ranging from 30 MW to 50 MW, were allocated, and the winning bids ranged between US$3.48c/kWh and US$5.1c/KWh. Most of the projects will involve Chinese companies. Chinese inverter maker Sungrow won 9 projects, while China Machinery Engineering Corp. (CMEC) was awarded 8 sites. A consortium of China's State Power Investment Corporation (SPIC) and local company Khaing Long Gems won four projects, while a consortium of Gezhouba Group, Xi'an LONGi Clean Energy and Future Energy (Myanmar) won three bids. In addition, three other consortia including Chinese companies (GCL, Xi'an LONGi Clean Energy and Universal Energy) allied with local companies won a total of 4 projects. A consortium led by German developer ib vogt and Myanmar's Gold Energy won one site. Myanmar will now sign 15-year power purchase agreements (PPAs) with the selected independent power producers (IPPs) that will develop the project under a build, own, and operate (BOO) basis. The country targets an increase in the share of renewables in electricity production to 8% in 2021 and 12% in 2025. Myanmar's solar capacity stood at less than 90 MW at the end of 2019 (around 1% of total capacity), the power mix being dominated by hydropower (49%), and gas-fired power plants 37%.

Source(s): Frontier Myanmar, PV Magazine

China's Hengyi plans a new 14 Mt/year refinery in Brunei

Date: 17/09/2020

Asia, Brunei, Oil, Refined products, Projects, Refineries

China's Zhejiang Hengyi Group is planning to build a new 280,000 bbl/d (14 Mt/year) refinery and petrochemical complex on the Pulau Muara Besar island in Brunei. The project would cost US$13.7bn and construction is expected to last 3 years. In 2019, Zhejiang Hengyi Group started up its 160,000 bbl/d (8 Mt/year) refinery project located on the same site. The US$3.5bn project was initially expected in 2015 but has been delayed due to local infrastructure issues. The capacity on the site should then increase to 440,000 bbl/d (22 Mt/year).

Source(s): Reuters, Argus Media

Israel sets to approve Chevron taking over Noble's gas assets

Date: 16/09/2020

Middle-East, Israel, Natural Gas, Companies, Acquisition/sale, Chevron

The Israeli Energy Ministry has approved the acquisition by Chevron of Noble Energy's stakes in two large offshore gas fields in the eastern Mediterranean. In July 2020, Chevron and Noble Energy reached a definitive agreement, under the terms of which Chevron will acquire all of the outstanding shares of Noble Energy in an all-stock transaction valued at US$5bn (US$10.38 per share). Including debt, the total enterprise value is US$13bn (including US$8bn in debt). Noble Energy holds low-capital, cash-generating offshore gas assets in Israel and will enhance Chevron's position in the Eastern Mediterranean. The transaction is subject to the approval of Noble Energy's shareholders and to regulatory approvals and other customary closing conditions.

Source(s): Times of Israel, Reuters

Government of Ceará signs memorandum with Chinese multinational for installation of wind farm

Date: 10/09/2020

BRICS, Emerging markets, America, Brazil, Electricity, Renewables, Wind, Offshore, Projects, Power plants

The Chinese wind turbine manufacturer Minyang Smart Energy has signed a Memorandum of Understanding with the government of Ceará (Brazil) to develop an offshore wind project (capacity non specified) in the state, which has an offshore wind potential estimated at 117 GW.

Source(s): Government of Ceará (Portuguese)

Egypt plans to issue a licence for the Dabaa nuclear project in 2021

Date: 27/08/2020

Africa, Egypt, Electricity, Nuclear, Companies, Projects, Power plants, Rosatom

The Nuclear Power Plants Authority (NPPA) of Egypt plans to issue a licence to build the first unit of El Dabaa nuclear power project. The project will be implemented by Russian nuclear company Rosatom in the second half of 2021. This permit will allow Rosatom to start preparation for concreting the foundations of installations. The first reactor is expected to be operational in 2026. The project entails four Russian-designed VVER-1200 pressurized water reactors (PWRs) with a combined nameplate capacity of 4.8 GWe. It will be supported by a Russian 13-year (2016-2028) loan of US$25bn, which will finance roughly 85% of the value of each contract for the work, services and equipment shipping. Egypt will repay the loan amounts used over the next 22 years. In April 2019, the Egyptian Nuclear Regulation and Radiological Authority (ENRRA) granted a site approval permit to the NPP1 of the El Dabaa project. The El Dabaa site was selected in 1983 but nuclear plans were shelved in 1986 after the Chernobyl disaster. The nuclear programme was relaunched after signing nuclear agreements with Russia in 2004 and 2008. Notices to proceed were signed in December 2017.

Source(s): TASS, Arab News

Juridique et institutionnel

Nord Stream 2, nouvelle guerre froide énergétique

Date: 16/09/2020

Europe, Russia, CIS, BRICS, G8, Emerging markets, Natural Gas, Projects, Interconnection (gas), Gas pipeline

Après l'empoisonnement de l'opposant russe Alexeï Navalny, la chancelière Merkel n'exclut plus de retirer son soutien au projet de gazoduc Nord Stream 2 reliant directement la Russie et l'Allemagne. Quasiment achevé, le pipeline pourrait sombrer sous les nouvelles sanctions financières des Etats-Unis, qui comptent eux aussi exporter leur gaz sur le marché européen. Une telle volte-face de Berlin pourrait constituer un tournant géopolitique majeur dans la lutte entre Russie et Etats-Unis pour le marché du gaz européen. Le projet serait alors décalé de plusieurs années, sans perspective concrète d'être relancé, au vu de l'incertitude à long terme sur la demande de gaz allemande, qui s'est engagée à la neutralité carbone d'ici 2050.

Source(s): IFRI

Molecule indifferent gas geoeconomics, not energy sanctions, are the best option to harden Europe against Russian gas coercion

Date: 09/09/2020

Russia, CIS, BRICS, G8, Emerging markets, Natural Gas, Production, Supply

Over the next decade, gas geoeconomics policies can enhance energy security, solidify market liberalization, and also reduce emissions by maximizing the use of clean-burning natural gas. Central and Eastern Europe offer fertile ground for interested countries to partner with the United States in this policy direction.

Source(s): Baker Institute

Innovations technologiques

Energies renouvelables et biocarburants

USTDA supports clean energy in Jordan

Date: 15/09/2020

Jordan, Middle-East, Emerging markets, Renewables, Electricity, Projects, Power plants

The U.S. Trade and Development Agency has awarded a grant to Kawar Energy to develop the first demonstration of "virtual power plant" (VPP) technology in Jordan, coupling solar power plants, battery storage solutions and cloud-based technologies to improve power supply when electricity consumption fluctuates.

Source(s): USTDA

Stockage d'électricité et batteries

China is set to continue dominating the li-ion battery supply chain

Date: 23/09/2020

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

According to a ranking on li-ion BESS supply chain created by experts, China will continue to dominate the li-ion battery supply chain until 2025 followed by Japan, the US and Sweden. China has made massive investments and has implemented policies to boost its market, which explains its dominance. The country already dominates the ranking in 2020 followed by Japan and South Korea. China currently controls 80% of the world's raw material refining, 77% of the world's cell capacity, and 60% of the component manufacturing. Japan and South Korea lead in terms of battery and components manufacturing but don't have the same influence in raw materials refining and mining as China.

Source(s): PV Magazine

EU launches the US$48m BATTERY 2030+ research initiative

Date: 16/09/2020

Europe, Technology, Electricity storage

The EU has launched the 3-year BATTERY 2030+ research initiative. The project is led by the Uppsala University and seeks to develop and improve safe and environmentally friendly BESS technologies. Starting on 1 September 2020, the initiative consists of seven projects in three different areas with a total budget of €40.5m (US$48.11m) from the EU's Horizon 2020 research and innovation programme. The projects of the initiative include the BIG-MAP led by the Technical University of Denmark, the INSTABAT (CEA in France), SENSIBAT (Ikerlan in Spain), SPARTACUS (Fraunhofer ISC in Germany), BAT4EVER (Vrije Universiteit Brussel in Belgium), HIDDEN (VTT in Finland), and the coordinating project BATTERY 2030 PLUS (Uppsala University in Sweden).

Source(s): Uppsala University

The US launches the Federal Consortium for Advanced Batteries (FCAB)

Date: 14/09/2020

G8, America, United States, Electricity, Technology, Electricity storage

The US Department of Energy (DOE), Department of Commerce (DOC), Department of Defense (DoD), and Department of State have launched the Federal Consortium for Advanced Batteries (FCAB) to speed up the development of advanced batteries. The Consortium will provide a framework for cooperation and coordination among federal agencies having a stake in developing advanced battery technology and establishing a domestic supply of lithium batteries. The FCAB is part of the strategy outlined in DOE's Energy Storage Grand Challenge (ESGC) Draft Roadmap, which aims to accelerate the development, commercialization, and utilization of next-generation energy storage technologies.

Source(s): US DOE

China and Russia work on new energy battery as technology cooperation broadens

Date: 08/09/2020

Russia, China, CIS, Asia, BRICS, G8, Emerging markets, Electricity, Technology, Electricity storage

China and Russia have joined forces in R&D on new energy technologies, seeking to develop new materials to produce cheap hydrogen batteries. Those H2 energy storage systems (ESS) would be more efficient and environment-friendly than conventional batteries, discharging only water or water vapor into the environment during use. Chinese researchers will focus on theoretical calculations and experimenting anion exchange membranes for fuel cells, while Russian researchers will focus on developing high-performance non-platinum catalysts. Beyond new energy batteries, China and Russia may find more cooperation opportunities in information technologies, or aircraft and armament manufacturing.

Source(s): Global Times

Kodal Minerals signs MoU with Sinohydro to review engineering, development and financing of Bougouni lithium project in Mali

Date: 01/09/2020

Africa, Mali, Electricity, Electricity storage

Kodal Minerals has signed a Memorandum of Understanding with Sinohydro (China) to work together to develop the Bougouni lithium mining project in southern Mali. Sinohydro, which is currently active in the Bougouni region, will conduct at its own expense a review of the development proposed for the project.

Source(s): Kodal Minerals

Hydrogène

DOE invests $34m to develop small-scale Solid Oxide Fuel Cell (SOFC) systems

Date: 15/09/2020

United States, America, G8, Hydrogen, Projects

The U.S. Department of Energy (DOE) has selected 12 projects to receive US$34m in federal funding under a funding opportunity announcement (FOA) for developing small-scale solid oxide fuel cells (SOFC) hybrid systems using solid oxide electrolyzer cell technologies to a point of commercial readiness for hydrogen production and power generation. It also seeks validation of SOFC using syngas from gasification facilities.

Source(s): US DoE

Energy prices and the economic feasibility of using hydrogen energy for road transport in the People's Republic of China

Date: 01/09/2020

China, Asia, BRICS, Emerging markets, Hydrogen, Projects

The study applies a well-to-wheel model to analyze the cost of hydrogen as storage for renewable energy. High capital expenditure of fuel cell vehicles, rather than the fuel cost of hydrogen, is the main barrier to achieving competitiveness against alternative power trains.

Source(s): ADB

Qui de l'UE ou la Chine deviendra leader dans la fabrication d'électrolyseurs ?

Date: 29/08/2020

Europe, China, Asia, BRICS, Emerging markets, Hydrogen, Technology

Alors que l'intérêt pour l'hydrogène ne cesse de grandir, la Chine domine actuellement le marché mondial des électrolyseurs alcalins (part de marché de plus de 50%) et produit les électrolyseurs alcalins les moins chers du monde (200 US$/kW, soit 80% moins cher que les électrolyseurs européens du même type). Cependant, l'Union Européenne est à la pointe des technologies innovantes de production d'hydrogène vert, la membrane échangeuse de protons (PEM) et l'électrolyte oxyde solide.

L'UE a lancé sa stratégie hydrogène en juillet 2020 et vise au moins 40 GW d'électrolyseurs d'ici à 2030, produisant jusqu'à 10 Mt d'hydrogène renouvelable. Cet objectif sera soutenu par une « alliance européenne pour l'hydrogène propre », et par des projets innovants tels Refhyne en Allemagne. Une production renouvelable massive sera nécessaire pour développer la filière de l'hydrogène vert, alors que le secteur pétrolier et gazier promeut le développement d'hydrogène d'origine fossile pour lancer le secteur, avant toute transition vers l'hydrogène vert.

Source(s): Euractiv

Nucléaire

The first-ever U.S. approval for Small Modular Reactor design and its implications

Date: 23/09/2020

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

In late August 2020, the US Nuclear Regulatory Commission (NRC) completed the design review process of a light-water small modular reactor (SMR) proposed by NuScale, issuing its first-ever design approval for SMRs (nuclear reactors up to 300 MWe). Utah Associated Municipal Power Systems (UAMPS) is considering building 12 NuScale reactors on the Idaho National Laboratory (INL) by the late 2020s, generating 600 to 720 MW of electricity that would be sold to the US Department of Energy (DOE) and to UAMPS member utilities. NuScale Power also has signed a memorandum of understanding with entities from Canada, the Czech Republic, Jordan, Romania, and Ukraine to explore the potential deployment of NuScale SMRs. Overseas, China has the most advanced SMR projects, including 2 small-scale, high-temperature gas-cooled reactor units that could come online later in 2020, while other contenders include Argentina, Canada, France, Japan, Korea, Russia, and the United Kingdom.

Source(s): Center for Strategic and International Studies

Signed leases open door to future uranium mining

Date: 15/09/2020

United States, America, G8, Uranium, Nuclear, Electricity, Projects

The US Department of Energy's Uranium Leasing Program (ULP) has signed lease agreements for the last remaining active ULP tracts (29 in total), paving the way to the exploration, development, and extraction of uranium and associated minerals in the Uravan Mineral Belt of southwest Colorado. These ULP lease tracts, which are estimated to hold 13.5 million pounds of uranium resources, will help the United States raise its domestic uranium production. Lease activities had been suspended between October 2011 and March 2019.

Source(s): US DoE

China turns back to nuclear power as concerns over energy security rise

Date: 06/09/2020

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

The State Council of China has approved two nuclear power projects (Changjiang and Sanao) worth US$10bn, as the country is seeking to develop efficient and low-carbon power generation. Once all reactors currently under construction will come into operation, China's installed nuclear capacity will more than double to over 108 GW; it could even reach 137 GW by 2030.

Source(s): South China Morning Post

Transports

Airbus dévoile trois concepts pour voler à l'hydrogène en 2035

Date: 21/09/2020

Europe, Hydrogen, Technology

Alors que le secteur aérien, mis à mal par la crise du coronavirus et le mouvement « flygskam », mise sur sa décarbonation, Airbus a présenté trois concepts d'avion propulsé à l'hydrogène (« ZEROe ») et vise la mise en service d'un appareil commercial zéro émission en 2035. Le gouvernement français a prévu de consacrer 1,5 Md € d'ici à 2022 à l'objectif d'avion neutre en carbone, dans le cadre de son plan de soutien au secteur aéronautique.

Source(s): Connaissance des Energies

ExxonMobil Reports Successful Sea Trial of its First Marine Bio Fuel

Date: 11/09/2020

World, Oil, Refined products, Companies, Technology, ExxonMobil

ExxonMobil has safely completed a successful sea trial using the company's first marine biofuel oil with shipping company Stena Bulk. The marine bio fuel oil is a 0.50% sulphur residual-based fuel (VLSFO) processed with a second generation waste-based FAME component. The product will be available later in 2002.

Source(s): The Maritime Executive

Interne - CMA CGM to take delivery of world's largest LNG-powered vessel

Date: 27/08/2020

France, Europe, G8, LNG, Natural Gas

CMA CGM will soon take delivery of its first ultra large LNG-powered containership built by Hudong-Zhonghua in China, which is building 9 LNG-powered vessels for the French company; all will be delivered by mid-2021. CMA CGM aims to have 20 LNG-powered vessels in its fleet by 2022.

Source(s): Offshore Energy

CCS

USTDA supports India's first refinery carbon capture project

Date: 09/09/2020

BRICS, Emerging markets, Asia, India, CO2 emissions, Technology, CCS

The U.S. Trade and Development Agency will provide a grant to Indian Oil Corporation Limited as it evaluates carbon capture utilization and storage (CCUS) technologies to reduce emissions at its Koyali refinery in Gujarat (India).

Source(s): USTDA