

# **MINISTERE DES ARMEES**

# Observatoire de la sécurité des flux et des matières énergétiques

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# Actualités énergétiques régionales

# **Afrique du Nord - Moyen Orient**

Pétroliers : proies idéales

**Date:** 22/04/2021

Iran, Middle-East, Emerging markets

Le détroit d'Ormouz est la porte d'entrée du Golfe Persique, par lequel transite le tiers du pétrole mondial via d'immenses tankers. Ces pétroliers deviennent la cible de représailles politiques et commerciales, dont la dernière en date émane de l'Iran à l'encontre d'un pétrolier sud-coréen.

Source(s): France Culture

# How have Russia's policies in the Middle East changed since the Arab uprisings?

**Date:** 21/04/2021

Middle-East, Russia, Policy

The response of the Russian government to the Arab uprisings that began in January 2011 has aimed primarily at protecting its interests in the Middle East, including security and economic objectives. However, Russia's interests are not solely challenged by Western powers: China is another growing influence in the Middle East in recent years.

Source(s): Middle East Institute

#### GE delivers first phase of Samawa gas-fired power plant in Iraq

**Date:** 21/04/2021

Emerging markets, Middle-East, Iraq, Electricity, Thermal, Gas-fired power gen., Supply, Capacities, Projects, Power plants

GE Gas Power has delivered the first phase of the 500 MW Samawa gas-fired power plant in the Iraqi governorate of Al Muthanna. The power plant is equipped with four GE 9E gas turbines. The second phase of the project encompasses the conversion of the plant from single-cycle to combined-cycle, raising the installed capacity to 750 MW.

Source(s): GE, Trade Arabia

#### Iraq says seeking buyers for Exxon's West Qurna 1 stake

**Date:** 15/04/2021

Iraq, Middle-East, Emerging markets, Oil, Acquisition/sale

Iraq's oil ministry is anticipating the possibility of ExxonMobil exiting its major investment in federal territory and is already talking with other unspecified US firms to buy the firm's stake in the West Qurna 1 oil field. Earlier in 2021, ExxonMobil agreed to sell its 32% interest in the Baeshiqa license in Iraq's semi-autonomous Kurdistan region to DNO (Norway).

Source(s): Argus

# Le partenariat Iran-Chine « est une solution sur le long terme pour Téhéran »

**Date:** 27/03/2021

Iran, Middle-East, Emerging markets, Crude oil, Oil

La Chine et l'Iran négocient depuis plusieurs mois un accord économique, militaire et stratégique à long-terme (25 ans). La Chine est devenue un partenaire important de l'Iran et entend sécuriser ses approvisionnements énergétiques. De plus, la Chine devrait investir dans les infrastructures vieillissantes de l'Iran et également dans ses éguipements énergétiques.

Source(s): IRIS

# **Arctique**

# Northern expedition: China's Arctic activities and ambitions

**Date:** 27/04/2021

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

The report demonstrates the seriousness of China's aspirations to become a polar great power. China describes the Arctic as one of the world's "new strategic frontiers," the 'new Middle East' for energy resources, ripe for rivalry and extraction. The Polar Silk Road could be considered as part of an ambitious strategy to change China's land and sea connections to Europe and the world.

Source(s): Brookings

#### **Scramble for Yamal resources: Novatek puts its eyes on Gazprom's Tambey fields**

**Date:** 19/04/2021

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

The Tambey fields located in the northeastern part of peninsula Yamal are considered among the biggest undeveloped natural gas resources in Russia (up to 7,300 bcm of natural gas). The development licenses were granted to Gazprom in 2008. However, Novatek is seeking to take over the fields and develop them as an LNG project.

Source(s): The Barents Observer

#### Win-win Sino-Russian cooperation on the Arctic Silk Road

**Date:** 14/04/2021

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

China and Russia are interested in developing the Arctic mainly because it contains a fifth of the Earth's natural resources. But both countries seek to establish northern trade routes, not only for purely business reasons. In addition to reaping clear economic benefits, they hope to improve their energy security through the Arctic trade pathway.

Source(s): CGTN

#### Oil and natural gas exploitation in the Russian Arctic

**Date:** 14/04/2021

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

The Arctic has always been very important for Russia. First, it makes up a considerable part of the country's territory. Second, the region hosts important transport and military infrastructure. Finally, it possesses significant natural resources potential, which is not limited to oil and natural gas, but also includes minerals, timber, fish, and other resources including land itself.

Source(s): ISPI

#### Méditerranée Orientale

# La Turquie et la Libye renouvellent leur attachement à un accord de délimitation maritime controversé

**Date:** 12/04/2021

Turkey, Libya, Europe, Africa, Emerging markets, Natural Gas

Le président turc et le Premier ministre libyen ont réaffirmé leur attachement à un accord de délimitation maritime controversé qui suscite la colère de leurs voisins en Méditerranée orientale. Cet accord, non reconnu par les autres pays riverains de la Méditerranée orientale, fixe les frontières maritimes entre la Turquie et la Libye dans une région riche en gaz naturel. La Turquie s'appuie sur ce texte pour justifier les forages gaziers qu'elle mène dans des zones qui se situent en théorie dans l'espace maritime de la Grèce ou de Chypre.

Source(s): Connaissance des Energies

#### How Russia swooped Syria's hydrocarbon share in the Eastern Mediterranean

**Date:** 28/03/2021

Russia, Syria, CIS, Middle-East, BRICS, G8, Emerging markets, Oil, Policy

An investigation delves into Soyuzneftegaz's operations in Syria. In 2013, the company swooped up an energy deal that would allow Russia to exploit offshore oil and gas deposits off the East Mediterranean coast.

Source(s): The New Arab

#### **Europe**

### Czechia bans Rosatom from bidding for the Dukovany-5 nuclear project

Date: 21/04/2021

Europe, Czechia, Electricity, Nuclear, Companies, Projects, Power plants, CEZ, Rosatom

Czechia has banned Russia's Rosatom from a tender to build a new 1.2 GW unit at the Dukovany nuclear power plant, in a context of degraded diplomatic relations with Russia. In March 2021, Czechia invited EDF, KHNP, Rosatom, and Westinghouse to pre-qualify for the tender. China General Nuclear Power (CGNPC) had already been excluded for security concerns. The Czech national power utility ČEZ should set a preferred list of suppliers by 2022, sign a contract with one supplier by 2024, start construction in 2029, and commission the reactor in 2036. In March 2021, ČEZ was granted a permit for the development of two new 1.2 GW units at Dukovany, to replace the four existing Dukovany reactors that are expected to be shut down permanently between 2035 and 2037.

Source(s): France 24

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# The Nord Stream 2 dispute and the transatlantic alliance

**Date:** 20/04/2021

Europe, United States, America, G8, Natural Gas, Projects, Gas pipeline

Europe and the United States are stuck in the debate on Nord Stream 2. It would be bad for Europe if American pressure forced the cancellation of the pipeline and left Germany and other member states whose companies participate in its construction bitter and beaten. It would also be bad for Europe if the pipeline ended up bulldozing Poland's misgivings and portraying Germany as a selfish actor that did not care about its partners. Either of these outcomes would also weaken the transatlantic alliance and, more or less directly, benefit Moscow.

Source(s): European Council on Foreign Relations

#### Asie

#### China's plan for super-dam risks water security for India and Bangladesh

**Date:** 15/04/2021

China, India, Bangladesh, Asia, BRICS, Emerging markets, Large-hydro, Hydro, Renewables, Electricity, Policy, Power plants

China plans to go forward with a long-held plan to build the world's largest dam on the Yarlung Tsangpo River, which flows north into the Indian Brahmaputra river. The new dam is expected to produce at least 60 GW of electricity. This could permanently restrain India in confronting Chinese encroachment into Tibet, with the ever-present threat of droughts or floods.

Source(s): TRT World

# A greener BRI in Central Asia?

**Date:** 14/04/2021

Asia, Renewables, Electricity, Projects, Power plants

Although many BRI projects in Central Asia continue to be associated with unsustainable practices, China has set standards expected to convey national green efforts to BRI partners. Among others, the 'Belt and Road Initiative International Green Development Coalition' aims to help China's partner countries to achieve UN-led Sustainable Development Goals.

Source(s): ISPI

#### **USAID** to launch project in Bangladesh to promote growth through energy

**Date:** 10/04/2021

Bangladesh, Asia, Emerging markets, Electricity, Projects, Power plants

USAID will soon launch the "Bangladesh Advancing Development and Growth through Energy" (BADGE) initiative in Bangladesh worth US\$17m, subject to the availability of funds. This multi-year initiative will work to expand Bangladeshis' access to affordable clean energy, support clean energy entrepreneurship, foster transparent and efficient energy markets, and advance innovation, according to the US Embassy in Dhaka.

**Source(s):** The Financial Express (Bangladesh)

# Russia, Pakistan agree to boost military cooperation against terror, sea piracy

**Date:** 07/04/2021

Russia, Pakistan, CIS, Asia, BRICS, G8, Emerging markets, Natural Gas, Projects

Russia plans to start building a 1,100 km long, 12.4 bcm/year gas pipeline in Pakistan, between the southern port city of Karachi and the eastern city of Lahore, at an estimated cost of US\$2bn. The project is expected to open a fast-growing gas market for Russian energy companies. In addition, the Russian company CC RusWelding plans to set up water desalination and waste to energy projects in Karachi. Meanwhile, China's Sinohydro will build an 82 MW run-of-the-river hydropower plant in Chitral of Pakistan's northern KP province to produce 380 GWh/year, at a cost of US\$200m.

Source(s): Voice of America, Business Recorder (Pakistan), Daily Times (Pakistan)

### India, U.S agree to revamp strategic energy partnership

**Date:** 29/03/2021

United States, India, America, Asia, BRICS, G8, Emerging markets, Hydrogen, Policy

India and the United States have agreed to revamp their strategic energy partnership to focus on greater collaboration in cleaner energy sectors such as biofuels, and hydrogen production. The two countries will intensify efforts to take advantage of advanced US technologies and India's rapidly growing energy market.

Source(s): Reuters

# **Afrique**

# Le projet géant de Total au Mozambique en suspens : 3 questions à Benjamin Augé (Ifri)

**Date:** 24/04/2021

Mozambique, Africa, Emerging markets, LNG, Natural Gas, Companies, Total

Total a suspendu son projet de GNL au Mozambique. La mise en pause du projet dépendra de la volonté de l'armée de combattre. Le problème est profond : l'armée est démotivée, certains soldats sont soit mal payés, voire pas payés car les soldes sont parfois détournées. De plus, la corruption au sommet de l'armée est pénalisante pour l'efficacité des combats : un certain nombre de cadres ont tout intérêt à faire durer le conflit car cela permet l'augmentation de dépenses de défense.

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

# Russia's Rosatom signed a MoU with the Republic of Burundi

**Date:** 22/04/2021

Burundi, Zimbabwe, Africa, Nuclear, Electricity, Projects, Companies, Power plants, Rosatom

Rostatom and the Ministry of Water, Energy and Mines of the Republic of Burundi have signed a memorandum of understanding regarding cooperation in peaceful use of atomic energy. The document provides the basis for cooperation in the development of the nuclear infrastructure in Burundi. In addition, the governments of Zimbabwe and Russia have signed an agreement that will see the Russians assisting the southern African nation setting up a nuclear power station to provide alternative sources of energy to the country facing years of perennial power cuts.

Source(s): Neftegaz.RU, New Zimbabwe

# **Energie durable : le rapport de l'administration Biden sur l'Initiative Power Africa, l'accès à l'électricité**

**Date:** 01/04/2021

United States, Africa, America, G8, Electricity, Policy

Power Africa a été lancé sous l'administration de l'ancien président américain Barack Obama, dans le but d'accroître l'accès à l'électricité à travers le continent africain, grâce à des projets créant de nouvelles connexions et augmentant la capacité de production. Depuis 2013, Power Africa a clôturé 124 transactions, représentant plus de 11 GW supplémentaires.

Source(s): ADIAC Congo

#### **Autres**

# Power China and Shanghai Electric will build a 200 MW solar power plant in Argentina

**Date:** 26/04/2021

Argentina, America, Emerging markets, Electricity, Renewables, Solar, PV, Projects, Power plants

The province of Jujuy in Argentina will sign a pre-contract and a Letter of Intent with Power China and Shanghai Electric to build a 200 MW expansion at the 300 MW Cauchari solar PV plant, which started supplying power to the national grid in September 2020. The expansion will be carried out in two 100 MW phases and will be financed with a loan from the Chinese bank Eximbank.

Sources: PV Magazine (Spanish), Jujuy al dia

#### Australian state halts two coal projects, to buy out Shenhua for \$77 mln

**Date:** 21/04/2021

Australia, Asia, Coal, Coal/Lignite, Projects

Australia's New South Wales state government has halted the development of two coal mines. The state government will pay China's Shenhua Energy AUD100m (US\$77m) to withdraw its mining lease application for the Shenhua Watermark Coal project in the Hunter Valley, north of Sydney. China Watermark Coal had tried to develop the AUD1bn thermal and semi-soft coking coal mine since 2008.

Source(s): Reuters

#### Argentina discussing prospects of NPP construction with Rosatom, says minister

**Date:** 21/04/2021

Argentina, America, Emerging markets, Nuclear, Electricity, Projects, Companies, Power plants, Rosatom

Argentina is negotiating the possibility of building a nuclear power plant (NPP) with Russia's state corporation Rosatom. Argentina is also considering Rosatom's proposal to produce uranium in the country.

Source(s): TASS

# The OPEC+ will increase oil output by 1,141 kb/d over May-July 2021

**Date:** 06/04/2021 World, Oil, Policy

The OPEC+ has agreed to gradually boost oil output in May 2021 by 350 kb/d, in June 2021 by 350 kb/d and in July 2021 by 441 kb/d. In addition, Saudi Arabia will reduce voluntary outputs cuts of 1 mb/d that started in February 2021. In March 2021, the OPEC+ had agreed to a continuation of the production levels of March 2021 - when the production cut reached 8.05 mb/d - in April 2021 for most member countries. However, Russia and Kazakhstan were allowed to increase their crude oil production by 130 kb/d and 20 kb/d, respectively. The two countries had been already authorised to raise their output by a combined 75 kb/d in February 2021 and a further 75 kb/d in March 2021.

Source(s): OPEC

#### State Grid to take over transmission lot auctioned in 2020

**Date:** 01/04/2021

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

The Special Bidding Commission of the National Electric Energy Agency of Brazil has enabled State Grid Brazil Holdin, an affiliate of China's State Grid, to assume the concession for Lot 1 of the transmission auction held in December 2020. The 2020 transmission auction contracted 1,959 km of lines, in addition to substations.

Source(s): Canal Energia (Portuguese)

# **Stratégies d'entreprises**

# **Stratégies**

#### CNOOC eyes \$29bn Qatar LNG project to aid Xi's CO2 target

**Date:** 22/04/2021

Qatar, Middle-East, Emerging markets, LNG, Natural Gas, Companies, Acquisition/sale, LNG liquefaction, LNG facilities, CNOOC

CNOOC has expressed its interest in investing in the US\$29bn North Field East Project in Qatar, which should raise Qatar's LNG production capacity from 77 to 110 Mt/year by 2025. CNOOC aims to develop domestic gas resources in the Bohai Sea and the South China Sea, especially since China has announced plans to become climate neutral by 2060, but the company is also seeking projects abroad.

Source(s): Nikkei

#### Blue Dot: How to raise China's infrastructure climate standards

**Date:** 09/04/2021

United States, America, G8, Renewables, Electricity, Policy

The United States has recently announced that it is ready to respond to the economic and geopolitical threats posed by China's Belt and Road Initiative (BRI) by setting up a similar initiative pulling from democratic states and focusing on investments that are environmentally and socially sustainable, inclusive, transparent, economically viable and financially and legally compliant.

Source(s): The Hill

#### China in Brazil's electricity sector: trends and opportunities

Date: 31/03/2021

Brazil, America, BRICS, Emerging markets, Electricity

In the last decade, Chinese companies have massively invested in the Brazilian power sector through a combination of acquisitions and new projects. Whereas China's foreign investments are mainly focused on coal, investments in Brazil are directed toward hydropower, wind and solar. In 2019, Chinese investors – such as State Grid and China Three Gorges Corporation (CTG) – accounted for 10%, 12%, and 12% of the country's power generation, transmission, and distribution segments respectively, and 14 Chinese power companies had invested or were involved in construction projects in Brazil worth US\$36.5bn. CTG is now the second largest power generation company in Brazil and around 48% of Sao Paulo state's hydropower generation is in the hands of Chinese actors. In addition, Chinese companies are involved in new projects, such as Belo Monte dam's giant transmission lines, built by State Grid. They should continue to be decisive players in the overall expansion of the Brazilian electricity sector for decades to come.

Source(s): Dialogo Chino

# **Investissements et acquisitions**

# Kazatomprom (Kazakhstan) sells 49% in Ortalyk to a subsidiary of China General Nuclear (CGN)

**Date:** 26/04/2021

Kazakhstan, CIS, Uranium, Nuclear, Electricity, Companies, Acquisition/sale, China General Nuclear Power Corporation (CGN)

Kazatomprom (Kazakhstan) has agreed to sell a 49% share of the uranium mining company Ortalyk to a subsidiary of China General Nuclear (CGN); Ortalyk owns the Mynkuduk Deposit (uranium production capacity of 2 kt/year) and is exploring the Zhalpak deposit (around 40 kt of uranium). In addition, CGN and Kazatomprom have jointly built a fuel assembly plant (Ulba-FA) at the Ulba Metallurgical Plant, which should start production in late 2021.

Source(s): World Nuclear News

#### Russia's Novatek authorised to raise US\$11bn for the Arctic LNG 2 project

**Date:** 26/04/2021

BRICS, G8, Emerging markets, CIS, Russia, Natural Gas, LNG, Companies, Projects, LNG facilities, LNG liquefaction, CNOOC, CNPC / PetroChina, Novatek, Total

Novatek' shareholders have approved external financing of US\$11bn for the US\$21.3bn Arctic LNG 2 project in the Russian Arctic, which already secured a US\$3.5bn financing from the Russian state-owned bank Sberbank for the project in January 2021. The 19.8 Mt/year Arctic LNG 2 project is owned by Novatek (60%), Total, CNOOC, CNPC and Japan Arctic LNG (10% each). In September 2019, the partners took the final investment decision (FID) for the project. The export plant will consist of three liquefaction trains of 6.6 Mt/year capacity each. The first unit should be commissioned in 2023, while units 2 and 3 are expected to enter commercial operation in 2024 and 2026, respectively.

Source(s): International press

#### Russia's Gazprom approves feasibility study on Power of Siberia 2 gas pipeline

**Date:** 14/04/2021

BRICS, G8, Emerging markets, CIS, Russia, Asia, China, Mongolia, Natural Gas, Companies, Projects, Gas pipeline, Interconnection (gas), Gazprom

Gazprom has approved a feasibility study for an extension of the Power of Siberia 2 natural gas pipeline, which will connect Russia to China via Mongolia. The gas pipeline project, named Soyuz Vostok, may have an export capacity of 50 bcm/year, i.e. 1.3 times higher than that of Power of Siberia (38 bcm/year). In January 2021, Gazprom created a special-purpose vehicle in Mongolia to carry out the study. In December 2019, Russia started supplying natural gas to China through the 3,000 km-long Power of Siberia gas pipeline project. As agreed in 2014, Russia delivers 38 bcm/year of gas to China over a 30-year period using the Power of Siberia pipeline. Gazprom supplies gas from the Chayandinskoye field in Yakutia (and from the Kovyktinskoye field located in the Irkutsk region as of early 2023) to Blagoveshchensk, at the Russian border with China, and to Changling in the Jilin province of China.

Source(s): Gazprom press release

# Turbine switched on at the 1.8 GW Hamriyah gas-fired power project (UAE)

**Date:** 08/04/2021

Emerging markets, Middle-East, United Arab Emirates, Electricity, Thermal, Gas-fired power gen., Projects, Power plants

Sharjah Hamriyah Independent Power Company (SHIPCO) and GE have switched on a gas turbine at the 1.8 GW Hamriyah independent power plant (IPP) in the Emirate of Sharjah in United Arab Emirates (UAE). Almost all the civil works, up to 85% of the procurement, and up to 70% of construction and commissioning works at the project have already been completed. In 2018, the Sharjah Electricity, Water and Gas Authority (SEWA) signed a 25-year power purchase agreement (PPA) with GE Energy Financial Services and Sumitomo Corporation (Japan) to develop, build and operate the project. GE EFS, Sumitomo Corporation, Shikoku Electric Power Company and Sharjah Asset Management created a joint venture, SHIPCO, to build, own and operate the plant, following financial close in 2019. In March 2021, GE delivered the first two GE HA gas turbines for the project. The company will supply a total of three 9HA.01 units and other power generation technologies. In addition, GE will also provide parts, repairs and maintenance services for power generation assets at the site for a period of approximately 25 years.

Source(s): Regional press Regional press II

# Juridique et institutionnel

#### A dark spot for the solar energy industry: Forced labor in Xinjiang

**Date:** 19/04/202

United States, America, G8, PV, Solar, Renewables, Electricity, Policy

The United States is considering executive and legislative actions to limit imports of Chinese solar cells and modules made with forced labour, as at least 95% of the silicon-based solar modules are likely to have some Xinjiang silicon in it.

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

#### New round of US sanctions on Russia could have ripple effects into energy

**Date:** 15/04/2021

United States, America, G8, Oil, Policy

The US administration has issued a new round of sanctions targeting Russian entities and individuals, including new prohibition on dealing in Russian sovereign debt markets, which could have impacts on the Russian energy sector (energy projects in Russia or in overseas joint ventures).

Source(s): Platts

#### Biden looks to appoint special envoy to kill Russia-Germany energy pipeline

**Date:** 07/04/2021

United States, America, G8, Natural Gas, Projects, Gas pipeline

The White House is reportedly in talks to appoint a special envoy to lead negotiations on halting the construction of Russia-to-Germany gas pipeline Nord Stream 2, as the Biden administration grapples with how to stymie a nearly completed energy project that would serve as a major financial and geopolitical boon to Moscow.

Source(s): Politico

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# U.S. grants 120-day waiver for Iraq to pay for electricity from Iran

**Date:** 31/03/2021

Iran, Iraq, Middle-East, Middle-East, Emerging markets, Electricity, Supply

The United States has renewed a waiver (for 120 days) allowing Iraq to pay for electricity imported from Iran. The US has issued regular waivers to Iraq since it reimposed sanctions, but in 2020 it shortened their length to encourage Iraq to reduce its use of Iranian energy.

Source(s): Reuters

# **Innovations technologiques**

# **Energies renouvelables et biocarburants**

#### Wind power generation costs are expected to decline by 17-35% by 2035

**Date:** 19/04/2021

World, Electricity, Renewables, Wind, Forecasts, Investments

According to an expert report, global wind power levelised costs are expected to decline by 17-35% in 2035 and by 37-49% in 2050. In 2020 costs of onshore wind were slightly below US\$201940/MWh, while fixed bottom offshore wind costs were around US\$201980/MWh and floating wind slightly below US\$2019100/MWh. The report estimates the reduction in costs will be driven by changes in the configuration of the projects. By 2035 wind turbines will increase in capacity. In 2019 onshore wind turbines were on average of 2.5 MW in the US with rotor diameters of 120 m and a hub height of 89 m; by 2035 turbines will increase to 5.5 MW with rotor diameters of 174 m and hub height of 130 m. Meanwhile, offshore wind turbines will increase from 6 MW (rotor diameters of 150 m and a hub height of 103 m) to 17 MW (rotor diameters of 250 m and a hub height of 151 m). By 2035 the floating offshore wind is expected to gain a substantial share of the market, accounting for up to 25% of new offshore projects. Furthermore, experts expect the water depth at which floating becomes less costly than fixed-bottom offshore wind to decline over time from >80 m in 2019 to >60 m in 2035.

Source(s): Expert report

#### The United States unveils a US\$2,000bn infrastructure plan

**Date:** 02/04/2021

G8, America, United States, Electricity, Policy, Power grids, Transmission (power)

The US administration has unveiled a 10-year US\$2,000bn infrastructure plan, which proposes US\$100bn in spending to upgrade and build out the country's electric transmission system. The plan provides a targeted investment tax credit that incentivises the buildout of at least 20 GW of high-voltage capacity power lines and creates a new Grid Deployment Authority within the Department of Energy empowered to leverage existing rights-of-way along roads and railways. The White House proposes to extent for a decade the investment and production tax credits for clean energy generation and storage and establish an Energy Efficiency and Clean Electricity Standard (EECES) aimed at cutting electricity bills and electricity pollution. The country intends to achieve 100% carbon-free power mix by 2035. The plan includes US\$16bn to plug orphan oil and gas wells and restoring and reclaiming abandoned coal, hard rock, and uranium mines.

In addition, the country will invest US\$174bn to boost the markets for electric vehicles and US\$35bn to develop clean energy technology, including US\$15bn in demonstrations projects such utility-scale energy storage, carbon capture and storage (CCS), hydrogen, advanced nuclear, rare earth element separations, floating offshore wind, biofuel and bioproducts, quantum computing, and electric vehicles. Finally, the White House plans to spend US\$621bn for standard physical infrastructure and modernising public transit and US\$213bn to produce, preserve, and retrofit more than 2 million homes and commercial buildings.

**Source(s):** The White House press release National press International press

# Stockage d'électricité et batteries

### **BESS installations will surpass 10 GW in 2021**

**Date:** 19/04/2021

World, Forecasts, Electricity storage

According to experts, BESS installations will surpass 10 GW in 2021, mostly due to the strong development of solar + BESS projects worldwide. The leading markets in terms of development and political support (especially for solar) are Australia, Germany, Japan, and the US. The US will account for half of the global market in 2021, but the European market is expected to increase by 70% in 2021. Furthermore, residential installations will rise to 1.6 GW in 2021 worldwide. In 2020 capacity additions are estimated to have reached 5 GW.

Source(s): International press

# ESS and H2 gain more importance in China's 14th FYP

**Date:** 29/03/2021

BRICS, Emerging markets, Asia, China, Electricity, Hydrogen, Policy, Electricity storage

Energy storage has risen as a new priority in China's 14th Five Year Plan (FYP) (2021-2025). The plan brings forth the increase in RES in the energy mix and the issue of power curtailment, which will require significant power infrastructure development. For the first time, the FYP includes plans to develop pumped-storage hydropower plants as well as demonstrations of battery storage, compressed air, and flywheel storage (BESS, CAES, FES). Hydrogen has also "climbed" in the list of priorities, as it was previously considered one of the advanced energy solutions and now is one of the most critical "reformative" sectors.

Source(s): National press

# Hydrogène

#### Russia expects H2 exports to generate up to US\$100bn/year in earnings by 2050

**Date:** 23/04/2021

BRICS, G8, Emerging markets, CIS, Russia, Hydrogen, Forecasts

According to the Russian Ministry of Energy, exports of Russian green and blue H2 could reach up to 33.4 Mt by 2050, generating up to US\$100bn/year in earnings by 2050. Russia estimates that, starting in 2024, H2 exports could reach 200 kt to 1 Mt (around US\$0.6-3.3bn in earnings). By 2035, exports could reach 2-7 MtH2 (around US\$8-21bn in earnings). The country could reach a 20% global market share in the sector by 2030. The country recently issued a roadmap for the development of hydrogen energy until 2024 with clear goals on production and consumption and the establishment of Russia as an exporter.

Source(s): Peretok (Russian)

# Électricité + hydrogène, le duo gagnant pour décarboner les systèmes énergétiques

**Date:** 31/03/2021

World

Dans tous les domaines, de l'industrie aux transports, le couple « électricité + hydrogène » apparaît aujourd'hui comme l'option gagnante pour la décarbonation complète des systèmes énergétiques. Le développement de l'hydrogène, couplé aux énergies décarbonées, permettra une production à des coûts très compétitifs et pour différentes échelles d'organisation des systèmes énergétiques : du local aux « plaques continentales ».

**Source(s):** The Conversation

# Véhicules électriques

# La batterie verte : un avantage compétitif pour l'industrie européenne du véhicule électrique ?

**Date:** 12/04/2021

Europe

Dans la perspective d'un alignement entre politique climatique et politique industrielle, l'Union Européenne souhaite introduire des normes environnementales sur la fabrication des batteries destinées au marché du véhicule électrique. L'absence de méthodologies de calcul consensuelles fait aujourd'hui obstacle aux stratégies de différentiation verte, notamment en ce qui concerne l'empreinte carbone.

Source(s): IFRI

#### Le groupe chinois Xiaomi va investir 10 Md \$ dans les voitures électriques

**Date:** 30/03/2021

China, Asia, BRICS, Emerging markets

Le fabricant chinois de smartphones et d'appareils électroniques Xiaomi va créer une filiale dédiée aux véhicules électriques intelligents, avec un montant total d'investissement estimé à 10 Md \$ (8,5 Md \$) sur les dix prochaines années. Les véhicules à énergies nouvelles (hybrides, électriques, pile à combustible) connaissent un fort essor en Chine, et le géant chinois de l'internet Baidu avait annoncé en janvier qu'il s'alliait à son compatriote le groupe automobile Geely, maison-mère de Volvo Cars, pour produire des voitures électriques en Chine.

Source(s): Connaissance des Energies

#### **Nucléaire**

# **US scientists introduce new fusion reactor concept**

**Date:** 01/04/2021

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

Scientists at the US Department of Energy's (DOE) DIII-D National Fusion Facility have released a new concept for a compact fusion reactor design they say can help define the technology necessary for commercial fusion power. The Compact Advanced Tokamak (CAT) concept enables a higher-performance, self-sustaining configuration that holds energy more efficiently, allowing it to be built at a reduced scale and cost.

Source(s): World Nuclear News

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#### **Transports**

### **Future marine fuels: Navigating a complex choice**

**Date:** 29/03/2021

World, Oil, Technology

The International Maritime Organization (IMO) has ambitious targets to decarbonize the industry: a 30% reduction in absolute GHG emissions from shipping by 2030, and 50% by 2050, relative to a 2008 baseline. Several new technologies and fuels have the potential to support decarbonization (batteries, LNG, biofuels, hydrogen), yet none of them are ready for at-scale adoption in shipping. Meeting the challenge will require innovative, orchestrated, industry-wide action on an unprecedented scale.

Source(s): ISPI

# Les « SAF », carburants durables indispensables pour décarboner l'aviation

**Date:** 26/03/2021

World, Liquid biofuels, Biomass

Le transport aérien mise beaucoup sur les biocarburants (sustainable aviation fuels, SAF) pour réduire ses émissions de gaz à effet de serre (objectif de réduction de 50% entre 2005 et 2050) mais leur développement est encore limité par une faible disponibilité et des coûts pour l'instant rédhibitoires.

Source(s): Connaissance des Energies

#### CCS

#### ExxonMobil plans a 100 MtCO2/year CCS project near Houston (US)

**Date:** 21/04/2021

G8, America, United States, CO2 emissions, Companies, Projects, Technology, CCS, ExxonMobil

ExxonMobil has proposed a 100 MtCO2/year carbon capture and storage (CCS) project that would collect CO2 emissions of petrochemical plants, power plants and manufacturing facilities in the Houston area in Texas (United States) and bury them in deep geological formations under the Gulf of Mexico by 2040. The CCS plant, which would require a US\$100bn investment, should be developed under a public-private partnership.

Source(s): New York Times, Reuters, Financial Times

#### China Huaneng and Glencore partner on CCUS project in Queensland (Australia)

**Date:** 15/04/2021

Asia, Australia, CO2 emissions, Companies, Projects, Technology, CCS, China Huaneng

China Huaneng Group Clean Energy Research Institute and the Carbon Capture Transport and Storage Company of Glencore have signed an MoU to cooperate on CCUS technology. The agreement will start with the CTSCo Project at the 850 MW Millmerran coal-fired power plant in Queensland (Australia). The CO2 captured at the site will be transported and stored permanently in a non-potable aquifer at a depth of more than 2 kilometres. Key funding and project participants include Glencore, China Huaneng, Low Emission Technology Australia (LETA), Australian National Low Emissions Coal Research and Development (ANLECR and D) and the Australian Government.

Source(s): Glencore

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