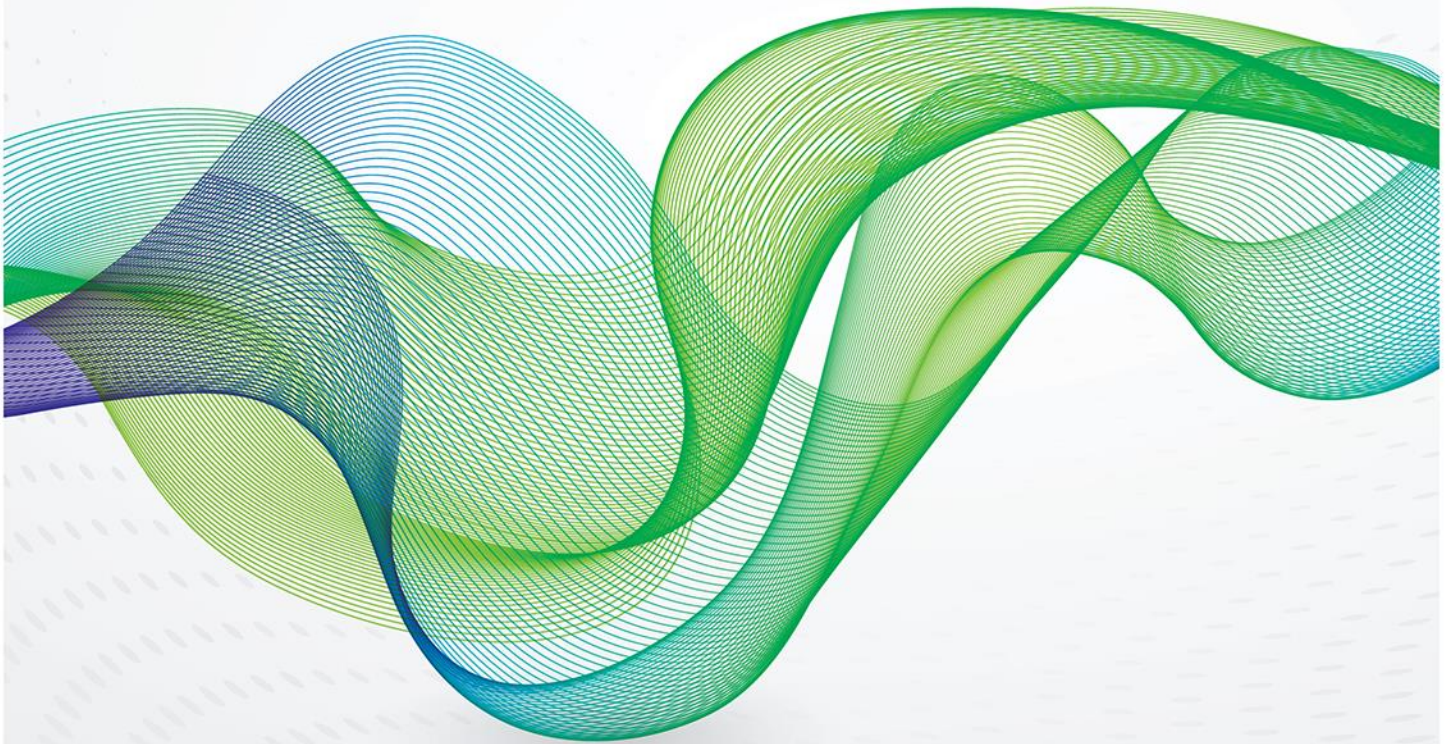


March 2022

The Russian invasion of Ukraine and China's energy markets



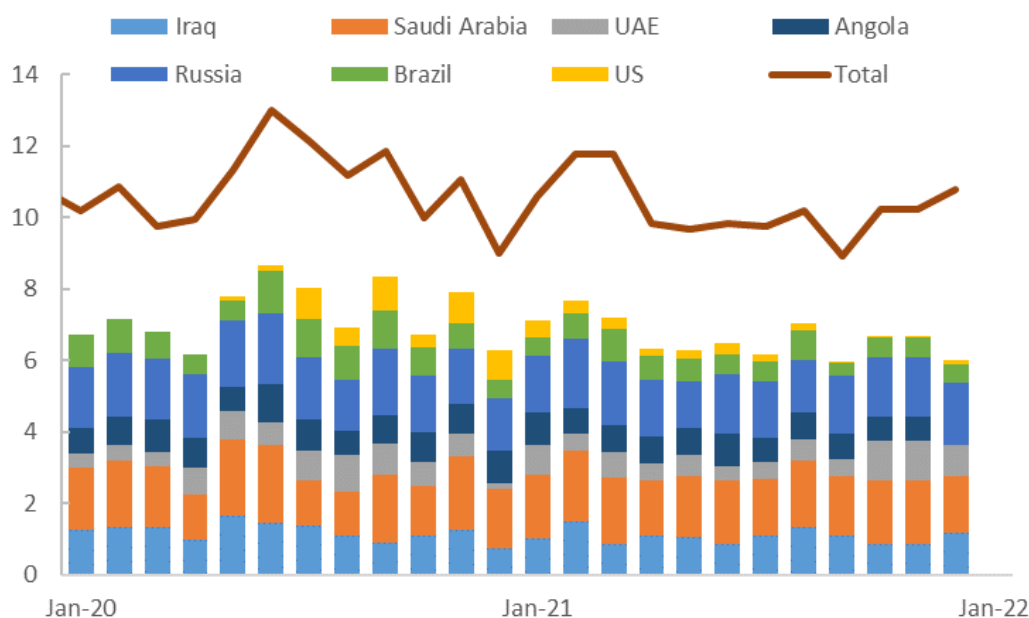
Following Russia's invasion of Ukraine on 24 February 2022, energy markets are in turmoil. Oil and gas prices are rising and exhibiting high volatility as the markets grapple with the impact of sanctions and the prospect of reduced flows from Russia¹. China is heavily exposed to Russian commodity exports and to global markets. The invasion and its aftermath have a profound impact on China's short term energy supplies, its policy priorities for the coming year and long term energy policies.

In the near term, China will suffer from higher energy costs and commodity prices² much like other energy importing countries. The economic and geopolitical fallout pose challenges for China in this critical year of a domestic leadership transition, a time when it is seeking stability. But in the longer-term, China could benefit from higher volumes of yuan-denominated trading (should Russian sellers chose to rely on it) and greater use of China's payment settlement system. Russia's growing international isolation could also lead it to offer attractively priced gas pipeline deals to China and open up new investment opportunities for Chinese firms in Russia's energy sector. This comment offers some preliminary analysis of these issues.

Russian energy supplies to China

Russia is China's second largest oil supplier and its third largest gas provider (pipeline gas and LNG combined). In 2021, it delivered 1.6 mb/d of crude to China, accounting for 17 per cent of China's oil supplies (Figure 1) and 16.8 bcm of gas, representing 15 per cent of imported gas. Russia is also China's second largest supplier of coal, accounting for around 17 per cent of total inflows (Figure 2). Much of the increase in coal supplies took place in 2021, as China introduced an informal ban on Australian supplies and domestic production growth slowed.

Figure 1: China's oil imports, select sources, mb/d

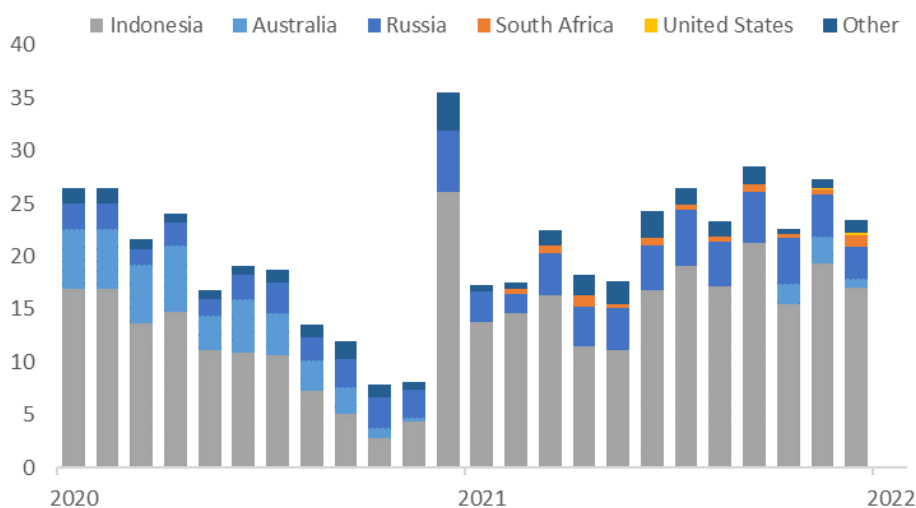


Source: China Customs, OIES

¹ For more on the implications for oil markets see Bassam Fattouh, Andreas Economou, Ahmed Mehdi, "Russia-Ukraine crisis: Implications for global oil markets", OIES Comment, March 2022, <https://www.oxfordenergy.org/publications/russia-ukraine-crisis-implications-for-global-oil-markets/> and gas markets Mike Fulwood, Jack Sharples, James Henderson, "Ukraine Invasion: What This Means for the European Gas Market", OIES Comment, March 2022, <https://www.oxfordenergy.org/publications/ukraine-invasion-what-this-means-for-the-european-gas-markets/>

² China also imports wheat, potash, aluminium and nickel from Russia

Figure 2: China’s coal imports by source, Mt



Source: China Customs, OIES

Russia-China political relations are also strong, as highlighted by a joint statement issued on 4 February 2022, just before the opening of the Winter Olympics in Beijing³:

“On the afternoon of 4 February, President Xi Jinping held talks with Russian President Vladimir Putin [...] In a warm and friendly atmosphere, the two Presidents had an in-depth and thorough exchange of views on China-Russia relations and a series of major issues that concern international strategic security and stability⁴.”

At the side-lines of this summit, Rosneft and CNPC signed a 10-year supply deal for supplies of an additional 100 million mt (0.20 mb/d of crude oil) which is effectively the renewal of an existing agreement which expires at the end of 2023 and includes crude delivered from Russia to China via Kazakhstan along the 0.40 mb/d Kazakhstan’s Atasu-Alashankou (KKT) pipeline⁵. Gazprom and CNPC signed a 10 bcma gas supply deal, expanding on the existing 38 bcma Power of Siberia (PoS) project.

The two deals signed in early February were testament to the deepening energy ties between the two countries, with the denomination of the gas supply contract in euros a strong signal of both countries’ desire to move away from dollar-denominated trade⁶. Less than one month later, following the Russian invasion into Ukraine, and in light of the sanctions imposed on Russia by the EU and the US as well as other countries, a key question is whether China will increase its imports of Russian commodities shunned by other buyers.

³ The full text of the joint statement can be found here <https://www.airuniversity.af.edu/Portals/10/CASI/documents/Translations/2022-02-04%20China%20Russia%20joint%20statement%20International%20Relations%20Entering%20a%20New%20Era.pdf>

⁴ “President Xi Jinping Held Talks with Russian President Vladimir Putin”, China Ministry of Foreign Affairs, 4 February 2022, https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/202202/t20220204_10638923.html

⁵ Rosneft extends China supply deal through Kazakhstan”, 25 Feb 22, Argus, <https://direct.argusmedia.com/newsandanalysis/article/2305905>. In 2021, flows through Kazakhstan (according to Chinese customs data) averaged 0.10 mb/d, suggesting that there is room for higher supplies through the Kazakh route.

⁶ Although it is noteworthy that they did not designate the yuan or roubles or the settlement.

A SWIFT response

Beijing's official position remains that:

“China firmly opposes all illegal unilateral sanctions, and believes that sanctions are never fundamentally effective means to solve problems. They will only create serious difficulties to the economy and livelihood of relevant countries and further intensify division and confrontation [...] China and Russia will continue to conduct normal trade cooperation in the spirit of mutual respect, equality and mutual benefit”⁷.

In principle, then, China will not cut itself off from Russian supplies. The reality, however, is more complicated given that most transactions are still settled in US dollars. Sanctions on the SWIFT payment system have reportedly led Chinese banks to restrict letters of credits (LCs) for Russian oil and coal purchases⁸. Trading could shift to the Chinese currency, the Renminbi (RMB or yuan), using China's cross-border interbank payment system (CIPS). China began developing CIPS as a yuan-denominated alternative to SWIFT in 2015, but few oil market participants are familiar with it and clearing volumes are small. Using CIPS will take time to set up and it remains unclear to what extent Russian sellers are willing to move wholesale to the yuan. Moreover, even though the Chinese government has been keen to develop CIPS and yuan-denominated trading, Beijing will want to avoid actively defying sanctions in a way that could end up exposing Chinese firms to secondary sanctions.

Beijing would want therefore to maintain imports, without those flows impeding Chinese companies' access to Western markets. Some transactions with Russia are reportedly already settled in yuan, including chemicals sold by Sibur to Sinopec⁹ as well as Gazprom Neft payments for refuelling aircraft flying to and from China¹⁰. According to Chinese press, the RMB accounted for over 17 per cent of trade settlements between China and Russia in 2021¹¹. Moscow could therefore use its foreign reserves in China to finance imports from the country or use currency swaps. China's Central Bank, the PBOC has a currency swap of 150 billion yuan versus \$1,750 billion in roubles with Russia's central bank, allowing the two nations to provide liquidity to businesses to continue trading. In addition, an estimated 13 per cent of Russia's reserves, or \$77 billion, were in Chinese assets as of June 2021¹².

Oil supplies to continue but a large ramp up unlikely

Oil supplies to China will continue, even if volumes fall in the near term due to payment issues. 0.60 mb/d of crude flows to PetroChina refineries in Northeast China through the ESPO pipeline are under a pre-financed long-term loans and will therefore not be impacted by SWIFT restrictions. But additional ESPO volumes, which are loaded through the Kozmino terminal in Russia's far east, are sold by Surgutneftegaz to large trading firms through spot tenders, for which LCs are required. China's largest state-owned refiners, PetroChina and Sinopec are not usually required to open LCs, while major trading houses and refiners with strong credit can use telegraphic transfers to finance deals¹³ and can then sell to independent refiners, which usually require LCs. But here too, Sinopec and Petrochina will be careful not to engage in activities that could impact their global trading activities.

⁷ “Foreign Ministry Spokesperson Wang Wenbin's Regular Press Conference on March 2”, 2022 https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/202203/t20220302_10647299.html

⁸ “Chinese banks cut access to financing for Russia crude”, 28 February 2022, Argus, <https://direct.argusmedia.com/newsandanalysis/article/2306346>; Muyu Xu, Chen Aizhu, “China's Russian coal purchases stall as buyers struggle to secure financing”, 1 March 2022,

⁹ “Sanctions to drive more Russian polymers to China”, Argus, 28 February 2022, <https://direct.argusmedia.com/newsandanalysis/article/2306380?keywords=sibur%20sinopec>

¹⁰ The press report however states Gazprom Neft is looking to switch from US dollars to yuan and roubles “China, Russia expand trade settlements in local currencies to counter US dollar hegemony”, Global Times, 5 September 2021

¹¹ “Yuan increasingly preferred amid de-dollarization of China-Russia trade”, Global Times, 25 February 2022

¹² “Russia-China Trade Stifled by Yuan's Surge Against Ruble”, Bloomberg Quint, 3 March 2022, <https://www.bloomberquint.com/china/russia-china-trade-seen-handicapped-by-yuan-s-surge-versus-ruble>

¹³ Chinese buyers eye Urals cargoes warily, Argus, 28 February 2022, <https://direct.argusmedia.com/newsandanalysis/article/2306639>

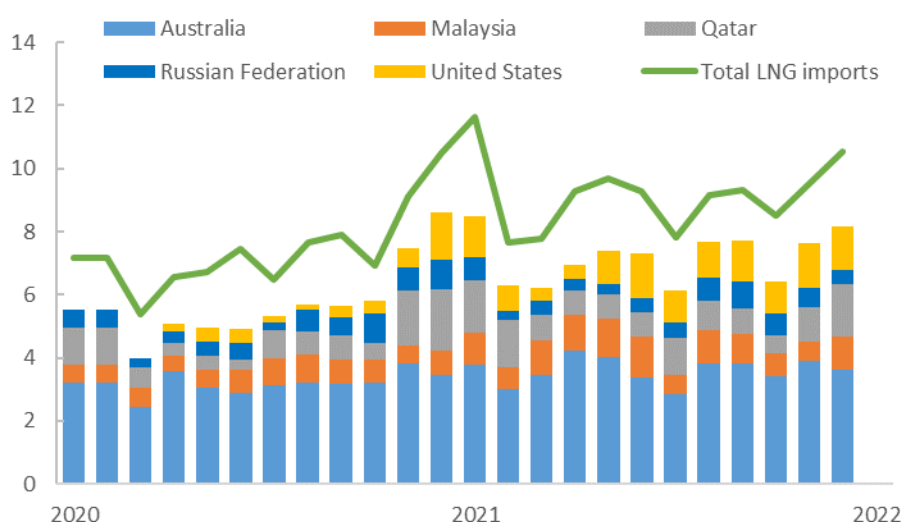
Beyond PetroChina, the Shandong market is the largest consumer of Russian oil, importing an average 0.55 mb/d of Russian crude in 2021, according to Kpler data, with flows from Kozmino accounting for an average 0.49 mb/d. Sales into Shandong could fall on payment restrictions—unless large traders act as middlemen. But to date, the Shandong market has seen lower crude demand as runs have been curtailed by the Winter Olympics and ongoing tax inspections. Stock levels, according to Kpler, have risen in Q1 22 in the province and sanctioned Iranian barrels can also be withdrawn from storage. Shandong refiners may therefore struggle to absorb more sour crude in the near term.

Chinese buyers will, however, be looking to import more crude and discounted barrels will find a home in China, but there is little urgency to do so as prices soar. Refining margins improved on higher domestic demand during the Lunar New Year while crude stocks have been drawn down from their 2020-2021 highs. A government mandate to keep barrels at home in a bid to stabilise domestic prices will also support purchases. But even with the large drawdowns of crude from storage, overall stock levels are still well above 2019 levels, offering China a buffer and limiting the urgency to import at very high costs. What is more, when global oil prices trade at above \$130 per barrel, the domestic pricing mechanism is no longer adjusted upwards so refiners start to lose money and consumers begin to limit road fuel consumption. Overall then, Chinese imports from Russia are unlikely to fall below 0.8 mb/d from the 1.82 mb/d recorded in December 2021 (including barrels through Kazakhstan). Once buyers and sellers find a way to settle transactions, flows will likely recover to 2021 average levels of 1.6 mb/d unless they are discounted widely, either for refinery processing or to go into storage. Flows will have to be seaborne or through Kazakhstan, as there is likely limited upside on the ESPO line.

Taking the long view on gas

Chinese buyers will also continue to import Russian gas. Pipeline flows through the PoS are set to rise by another 4 bcm in 2022 to 14-15 bcm. In terms of LNG, CNPC has a 3 Mtpa SPA with Yamal LNG (of which CNPC is also a stakeholder) and 4.6 Mtpa of new supplies starting up in 2023 from Arctic LNG 2, in which Chinese companies are also shareholders. Currently, most LNG flows from Russia are from Yamal LNG with some volumes from Sakhalin LNG, according to Kpler. In the near-term, any potential stranded LNG cargoes that cannot be delivered to Europe (because of financial sanctions or a Russian decision to curb supplies) could go to Asia, but this would likely incur a premium on shipping and redirection costs, in addition to the already record high spot prices. Going forward, however, additional LNG volumes could go straight to China via the Northern Sea Route, especially if they are offered at a discount.

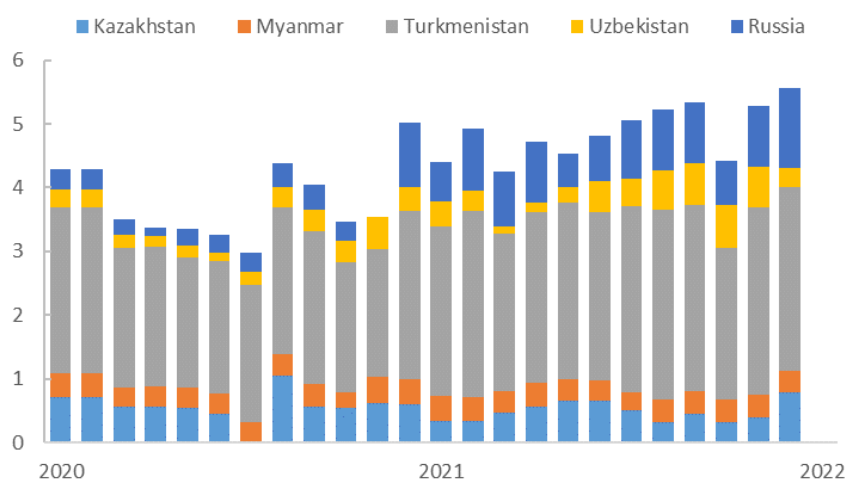
Figure 3: Chinese LNG imports, bcm



Source: China Customs, OIES

China will become an increasingly important export market for Russia. Pipeline flows cannot ramp up quickly (beyond the agreed 38 bcma on PoS 1) in the near term, and the 10 bcma gas supply agreement signed between Gazprom and CNPC on 4 February is unlikely to start up before 2024. But as Europe looks to reduce its energy dependence on Russia, Power of Siberia 2 will be a priority for Gazprom. Should Russia be in a position to offer significant price discounts to China on PoS 2, Beijing may well conclude another pipeline supply deal with Russia sooner rather than later¹⁴, while also continuing to seek new LNG contracts with Russia and with other exporters. That said, even a swift agreement on PoS would not result in flows before the late 2020s at best or early 2030s more realistically.

Figure 4: China's pipeline imports, bcm



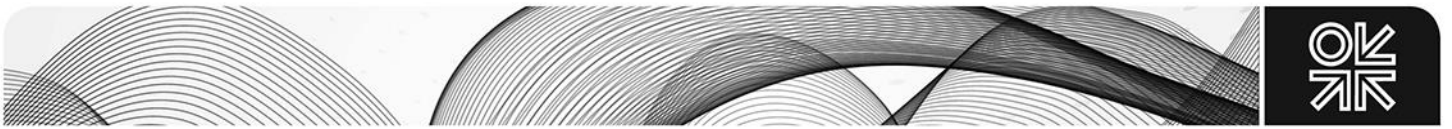
Source: China Customs, OIES

Chinese investors could also further increase their investments in Russian projects. Already since 2014, when Russian companies' access to Western financing was restricted due to sanctions, Chinese companies stepped in. CNPC bought 20 per cent shares in Yamal LNG in 2013, and in 2015 the Silk Road Fund took a 9.9 per cent stake in the project. In 2016 Chinese banks also agreed to lend Novatek \$12 billion for the project. Chinese investors are also heavily involved in Novatek's Arctic LNG 2, which is currently under development. CNOOC and CNPC each hold a 10 per cent stake in the project. Novatek has since signed supply contracts with Chinese companies including Shenergy Group and Zhejiang Energy. Meanwhile, Chinese service companies could also benefit from sanctions if and as Western companies pull out.

Long term gain, short term headache

While China stands to benefit from Russia's need to pivot East, in the short term, soaring prices of all commodities will place considerable pressure on the Chinese economy and could become a distraction in this politically important year. With a leadership transition at the end of the year, in which Xi Jinping will be sworn in for an unprecedented third term in office, Beijing would have likely preferred to avoid the inflationary pressure related to higher commodity prices and the geopolitical challenges associated with the crisis. Moreover, the surge in oil-indexed gas and LNG prices surge will weigh on China's importers (and to a lesser degree on end-users given domestic price controls) while power plants will seek to switch back to coal where possible. And given China's informal ban on Australian coal alongside Indonesia's coal export ban, domestic production will likely increase, complicating China's

¹⁴ For more details on the gas supply deal see Vitaly Yermakov, Michal Meidan, "Russia and China Expand Their Gas Deal: Key Implications", OIES Comment, forthcoming



environmental pledges, offering a reminder of the challenging trade-off between short term supply security and sustainability¹⁵.

Geopolitically, the Russian invasion puts Beijing in a bind. While China is closely aligned with Russia strategically and diplomatically, it will want to protect its economic interactions with global markets. And while Beijing may have determined that the West is in decline, it still considers that the US is seeking to contain China's rise. Thus, China will want to avoid becoming the target of secondary sanctions. The sanctions imposed following the Russian invasion of Ukraine will provide invaluable insights for Beijing on the effectiveness of sanctions regimes, and lessons as to how Beijing could protect itself from any potential sanctions the US or the West could seek to impose.

¹⁵ See "Key Themes for the Global Energy Economy in 2022", OIES Special Report, January 2022
<https://www.oxfordenergy.org/publications/key-themes-for-the-global-energy-economy-in-2022/>