



# IEEJ e-NEWSLETTER

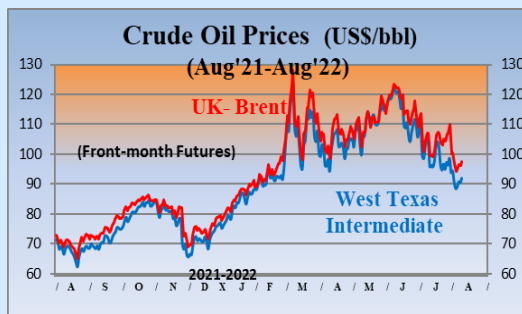
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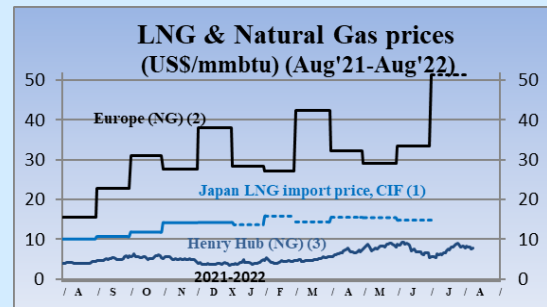
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Sources:  
 (1) DOE-EIA  
 (2) Investing.com



Sources:  
 (1) Ministry of Finance "Japan Trade Statistics"  
 (2) Ministry of Economy, Trade and Industry (arrival month basis)  
 (3) Estimated by World Bank (Netherland Title Transfer Facility)  
 (4) DOE-EIA, NYMEX (Front-month Futures)



Source: x-rates.com



Sources:  
 (1) Finance. Yahoo.com  
 (2) Investing.com

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## Summary

### 1. Developments in Nuclear Power

The European Parliament agreed to include nuclear power in the EU Taxonomy, and France announced plans to nationalize EDF. In South Korea, the new administration made a policy shift to promote nuclear power, and Japan decided to operate nine nuclear plants this winter.

### 2. Recent Developments in the Oil and LNG Markets

Uncertainty grows over the Sakhalin 2 LNG project operation and supply. Securing sufficient supply of LNG and crude oil for the coming winter has become a challenge.

### 3. Update on Climate Change, Energy Conservation, and Renewable Energies

Prime Minister Kishida announced plans to create a new ministerial post in charge of GX implementation. Standards for expanding the use of non-fossil energy began to be considered for the Act on Rationalizing Energy Use. For renewable energy, many local governments in and outside Japan are setting mandatory requirements to install solar panels on houses.

### 4. Europe and US: Moves toward Strengthening Energy Security

Both Europe and the US are firmly maintaining their current decarbonization policies. However, Europe is faced with the challenge of short-term energy supply stability (especially gas), while the US must deal with soaring energy prices.

### 5. China: Share of NEVs in Sales Surpasses 20%, Reaching 2025 Target

In the first half of 2022, sales of NEVs grew 2.2 times year-on-year to 2.6 million units, now accounting for 22% of all units sold, up 12 points. Thus, the target of the 5-year Plan to reach 20% by 2025 was achieved ahead of schedule.

### 6. ME: President Biden's Tour of the Middle East

President Biden visited the Middle East for the first time since taking office. He held highly-anticipated talks with Crown Prince Muhammad bin Salman in Saudi Arabia as well as a summit with leaders of neighboring countries, demonstrating the presence of the US.

### 7. Russia: Russia Remains Belligerent, Ukraine Invasion Deadlocked

Russia is seeking to expand the area under its control but Ukraine is striking back hard; the war is now deadlocked. Despite the West's sanctions, the Putin administration has reinforced Russia's wartime economic system and remains belligerent.



## 1. Developments in Nuclear Power

**Kenji KIMURA**, Ph.D, Senior Researcher  
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At the end of June, the International Energy Agency (IEA) published a report titled “Nuclear Power and Secure Energy Transition.” Like its 2019 version, the new report states that nuclear power can play an important role in achieving sustainable development in an economically rational manner. However, it also notes soaring fossil fuel prices and the invasion of Ukraine as key changes in the international situation since the 2019 report, and emphasizes that nuclear power is now important for energy security as well.

Even very recently, there have been events supporting this argument by the IEA in the world. On July 6, the European Parliament, one of the main institutions of the European Union (EU), announced that they have denied a motion opposing the inclusion of nuclear power and natural gas in the EU taxonomy, which certifies an economic activity as sustainable. Due to this European Parliament resolution and the Council of the European Union made up of ministers of the Member States not filing an objection by July 11, the delegated acts for taxonomy are now scheduled to become effective on January 1, 2023. However, Austria has stated that it will challenge the taxonomy in court.

Furthermore, on July 6, French Prime Minister Borne announced in a parliamentary speech that the government would fully nationalize Électricité de France (EDF). The purpose is to allow the government to take the initiative in pushing forward with France’s climate actions and energy supply security initiatives. The policy is expected to provide a powerful boost to the plan to build six (a maximum of 14) new European Pressurized Reactors (EPRs) announced by President Macron in February. This move symbolizes France’s resolve to achieve its policy targets even at the cost of reversing the trend toward liberalization.

On July 5, the South Korean government announced plans to increase the share of nuclear power in total electricity output to at least 30% by 2030 and to resume the construction projects for Shin Hanul 3 and 4 that had been halted. This is a turnaround from the previous administration’s policy to abandon nuclear in the long run, but the country’s nuclear industry remains calm. The industry appears able to respond smoothly and ready to move forward in line with the new policy.

In Japan, on July 14, Prime Minister Kishida announced a policy to have up to nine nuclear power plants online to prepare for possible electricity shortages this winter. While this policy reflects the Japanese government’s view that nuclear power is essential for the stable supply of electricity, it is a short-term response and the plants that will be put online include those that have been suspended after having “restarted.” In the medium to long term, it is not clear whether the issue of prolonged safety assessments can be resolved in order to accelerate the restarting of plants.



## 2. Recent Developments in the Oil and LNG Markets

**Hiroshi HASHIMOTO**

Head of Gas Group  
Fossil Energies & International Cooperation Unit

A Russian presidential decree of 30 June unilaterally notified that operation of the Sakhalin 2 project would be transferred to a new Russian entity and that foreign partners - including two Japanese companies - should notify the Russian government of their intention to stay within a month of establishment of the new Russian entity. Although Japanese equity participation and the supply should be kept, measures to respond to the potential loss of them should be prepared. Every possible short-term measure to secure LNG is necessary. Alternative supply under long-term contracts will be also essential from other sources including grassroots projects. The trust in Russia as an investment destination and procurement source for LNG has disappeared. Japanese companies have legitimately invested in the project and procured the LNG with no reasons to be threatened.

The world traded nearly 200 million tonnes of LNG, a 4% increase year-on-year, in the first half of 2022. LNG imports by the European Union and the United Kingdom in the first half of 2022 grew by 50% from the same period in 2021 to reach 56 million tonnes, representing 28% of the global total. The increase essentially was created by the shift of LNG from the United States sent to Europe, rather than Asia. European spot gas prices and Asian spot LNG prices have been sticking in high levels since their surge in the latter half of 2021. Japan's LNG import prices in its own currency were the highest in the history in April and May.

The global LNG industry has observed revitalized procurement and investment activities, toward long-term procurement of LNG supply. Investment decisions in LNG liquefaction facilities of combined capacity of 23.33 million tonnes per year in the Gulf of Mexico region in the United States were announced - one each in May and June. Between late February and late July, long-term LNG sales contracts amounting to 40 million tonnes per year were announced, all from North American supply sources. Following the Communiqué from the Leaders of the Group of Seven (G7) in late June, which stressed the important role of LNG, expectations are emerging on measures from the governments to support investment in the sector.

The same G7 summit endorsed a proposal to put a cap on Russia's oil prices, which aimed at limiting Russia's oil revenues and appease those countries who continue importing Russian oil. However, the scheme has its own uncertainty over possible Russia's retaliatory export ban and effects of the ban on tanker insurance. While the Brent crude prices went down below USD 100 in the middle of July and early August as the market feared economic slowdown, Russia's retaliatory export ban in a massive scale should lead to a surge in prices. U.S. President Biden said that he expected further oil supply increases from Saudi Arabia within weeks, after meeting with its Crown Prince on 15 July. The OPEC Plus members responded on 3 August with additional 101 thousand barrel per day increase for September. The average Brent price for the latter half of 2022 is expected to be USD 105 with risks of both ups and downs.



### 3. Update on Climate Change, Energy Conservation, and Renewable Energies

Junko OGAWA, Senior Researcher  
Climate Change Group  
Climate Change and Energy Efficiency Unit

At a meeting of the “Clean Energy Strategy” expert panel held in May 2022, it was announced that the investment needed to meet the 2050 carbon neutrality (CN) target is approximately 17 trillion yen for 2030 alone and 150 trillion yen for the next 10 years. Prime Minister Kishida laid out a plan to issue green economy transformation(GX) bonds to fund the CN initiative.

In June, the Cabinet approved the Basic Policy on Economic and Fiscal Management and Reform 2022, which designated green transformation investment as one of the key areas of investment toward the “new capitalism.” The plan is to initially gather funds from investors by leveraging Japanese government’s creditworthiness, and use them as a catalyst to attract private decarbonization investments. The government plans to spend 20 trillion yen in total over several years, with the aim of attracting 150 trillion yen in private and public investments over the next 10 years. Mr. Kishida also announced plans to establish a Minister for Green Transformation in charge of GX implementation ahead of the meeting. The government aims to put together a decarbonization roadmap, which will include the specific mechanism of the GX economy transformation bond, by the end of this year.

In May 2022, the “Act on the Rational Use of Energy” was renamed as the “Act on the Rational Use of Energy and Shift to Non-Fossil Fuels.” Accordingly, the scope of the Act was widened to include non-fossil energy, in addition to fossil energy. With this amendment, one of the largest in the 40-year history of the Act, it now aims to strengthen energy resilience through such efforts as the recent expansion of renewable energy capacity and the promotion of demand response.

The specific rules will be formulated within this fiscal year through discussions in the Working Group on Classification Standards for Plants and Other Facilities under the Energy Efficiency and Conservation Subcommittee of the Committee on Energy Efficiency and Renewable Energy, Advisory Committee for Natural Resources and Energy. This fiscal year, standards that contribute to wider use of non-fossil energy will be implemented initially in the following industries: (1) steel (blast furnaces, electric furnaces for ordinary steel and special steel), (2) chemicals (petrochemical and alkali industries), (3) cement, (4) paper manufacturing (western paper, cardboard), and (5) auto manufacturing. The revised Act is headed for implementation in April 2023, after reviewing the calorific value of energy sources associated with the wider scope of energy sources, incorporating a mechanism to evaluate electricity demand leveling measures, and undergoing intensive deliberations in autumn.

In Tokyo, the metropolitan government continues to study revisions to the municipal ordinance that would require the installation of solar panels on all new buildings, including detached houses. The Metropolitan government is aiming to raise the share of renewables to 50% to achieve its 2030 target of “Carbon Half” which is to cut GHG emissions by 50% (from 2000 levels), but the current share of renewables is just 17.3% (as of 2019). There is a global trend toward setting mandatory requirements to install solar panels on new houses. Europe, which is urgently decarbonizing to break its dependence on fuels from Russia, has drafted plans to launch the mandatory installation of solar panels on new houses by 2029 in REPowerEU, the EU’s plan to shift away from Russian fossil fuels published in May. In the US, it has been mandatory to install a green roof or solar panels on new houses in the state of New York since 2019, and the state of California also made the installation of panels mandatory in 2020.



## 4. Europe and US: Moves toward Strengthening Energy Security

Kei SHIMOGORI, Senior Researcher  
Global Energy Group 1  
Strategy Research Unit

Since the start of the invasion of Ukraine, energy security (phasing out Russian fossil fuels) has been front and center in Europe. Key measures toward this end include, in the short term, diversifying LNG and pipeline gas supplies (securing non-Russian supplies), postponing the exit from coal-fired power generation, and extending the operation of existing reactors. Plans to tolerate a temporary increase in CO<sub>2</sub> emissions have also been indicated. In particular, with Russia continuing to squeeze supplies through major pipelines, concern about natural gas supplies in Europe this winter is mounting. Accordingly, in July 2022, the European Commission proposed “Save Gas for a Safe Winter,” which contains new draft rules and plans for curbing gas demand. It sets a target for Member States to cut gas demand by 15% from August 2022 through the end of March 2023. Further, to strengthen ties with neighboring countries, the European Commission signed a memorandum of understanding with Azerbaijan on expanding gas imports. In terms of LNG procurement, purchases from the US and Qatar are scheduled. However, Europe’s rush to secure LNG may spur competition with Japan (and the Asian market) over supplies and cause negative effects such as price increases.

Meanwhile, the EU is firmly maintaining its 2050 climate neutrality policy even after the invasion of Ukraine. REPowerEU, which aims to reduce its dependence on Russia, has set a goal of reducing natural gas consumption by 155 bcm by 2030 (equivalent to the EU’s imports of Russian gas in 2021) through energy conservation, diversifying energy supplies, and accelerating the expanded use of renewable energy based on Fit for 55, a policy package to reduce GHG emissions by at least 55% from 1990 levels by 2030. The medium- to long-term direction is to link energy security with decarbonization to accelerate the conventional moves toward decarbonization. In addition to the expansion of renewables, the use of nuclear power (including new builds) is also an option in France, Britain, and Eastern Europe. Further, there are moves in Germany to consider extending the operational lifetime of existing nuclear reactors as a means to reduce gas demand.

In the US, there is no change in the Biden administration’s policy to strengthen climate actions as a key strategic target. Meanwhile, soaring energy prices have emerged as an urgent issue and are being tackled by releasing strategic oil reserves, allowing the sale of 15% ethanol-blended gas in the summertime, and the resumption of oil and gas exploration on federal lands. In July, President Biden visited Saudi Arabia to urge them to go increase oil production. The US has shared with the EU its policy to pursue carbon neutrality in the long term and has indicated that it is willing to help the EU to purchase additional LNG to phase out its dependence on Russia.

The US hopes to play the main role in increasing LNG production going forward, but investment decisions to increase production require long-term demand commitments. How far can we expect the US and other countries to increase LNG production, when they need to maintain their carbon neutrality and other long-term decarbonization targets and their investments in the gas sector may become stranded assets? Moves to secure long-term contracts and progress toward decarbonizing fossil fuels must be closely watched.

(written on July 25)



## 5. China: Share of NEVs in Sales Surpasses 20%, Reaching 2025 Target

Li ZHIDONG, Visiting Researcher  
Professor at Graduate School  
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China is shifting from gasoline-fueled cars (ICEVs: internal combustion engine vehicles) to new energy vehicles (NEVs, including EVs, PHEVs, and FCVs, but not HVs) to achieve sustainable growth, establish a decarbonized society and transit from a major car manufacturing country to a car manufacturing powerhouse. Major progress was made in the first half of 2022 during which the Ukraine crisis started.

According to the July 11 announcement by the China Association of Automobile Manufacturers (CAAM), automobile sales in the first half of 2022 were 12.057 million units, down 6.6% year-on-year. Of this number, sales of NEVs, primarily EVs, increased by 115.6% to 2.6 million units (2.062 million EVs and 0.536 million PHEVs), pushing up the share of NEVs in all units sold by 12.2 percentage points to 21.6%. The target share for NEVs of 20% in 2025 that the government set in November 2020 has thus been met three years early. Meanwhile, sales of ICEVs dropped by 19.1% to 9.457 million units, falling for four years straight to 2021 and continuing to fall in the first half of 2022.

Due to the impact of lockdowns in Shanghai among others, China's economic growth rate fell to 2.5% for the first half, with 4.8% for Q1 and 0.4% for Q2, making the annual target of around 5.5% hard to reach. As an economic stimulus, the government halved the acquisition tax from 10% to 5% for cars with a displacement of 2,000 cc or lower and a price of up to 300,000 yuan (1 yuan  $\doteq$  20 yen) from June 1 to the end of the year. Thanks to this stimulus, ICEV sales in June increased by 8.4% year-on-year to 1.906 million units, up 147,000 units. Meanwhile, NEV sales increased by 132.8% year-on-year to 596,000 units, up 340,000 units. As a result, total automobile sales surged by 24.2% to 2.502 million units, up 487,000 units. NEVs accounted for 69.8% of the increase in sales, far exceeding the share of ICEVs of 30.2%. Further, the share of NEVs in the sales of new cars in June increased by 12.6 percentage points to 23.8%. The 50% cut in the ICEVs acquisition tax boosted the economy to some extent but not sufficiently to halt the tidal shift to NEVs.

Behind this trend is the advantage of NEVs over ICEVs (refer to the February edition of this Newsletter). For example, NEVs are exempt from acquisition tax (ad valorem duty, 10%), consumption tax (displacement-based ad valorem duty, 1–40%), and automobile tax (displacement-based specific rate duty, 60–5,400 yuan/year). There is a subsidy for NEVs at the time of purchase (maximum 13,900 yuan for EV passenger cars in 2022; to be abolished from 2023). These preferential treatment policies and corporate efforts are estimated to have made NEVs 20,000 to 50,000 yuan cheaper to acquire and own than gasoline vehicles. The scheduled acquisition tax cut of up to 15,000 yuan for gasoline cars from June will not affect NEVs' advantage. Furthermore, assuming that a gasoline car can travel 15 km per liter of gasoline and an EV 6.7 km per kWh of electricity, the mileage cost of EVs per kilometer is just 20% (normal residential charger) to 50% (external rapid charger) that of gasoline vehicles. Meanwhile, with gasoline prices rising by up to 33% from the start of the year due to the war in Ukraine while electricity rates remained stable, the mileage cost of EVs has fallen to 15–38% that of gasoline cars. Based on the above, CAAM revised down the 2022 full-year car sales to 27.0 million units from the initial forecast of 27.5 million units, while revising up the forecast for NEVs from 5 million units to 5.5, and the share from 18.2% to 20.4%. Meanwhile, there are some estimates that the share of NEV sales for June will be maintained, that the full-year NEV sales will reach 6.2 million units, and that their share in sales will increase to around 23%.



## 6. ME: President Biden's Tour of the Middle East

**Akiko YOSHIOKA**  
Senior Analyst  
JIME Center

US President Biden visited the Middle East for four days from July 13 through 16 for the first time since taking office. After visiting Israel and Palestine, he traveled to Saudi Arabia where he held highly-anticipated talks with Crown Prince Muhammad bin Salman (MbS) as well as a summit with leaders of neighboring countries.

First, in Israel, the President had talks with Prime Minister Lapid, touched upon the importance of progress in the normalization of Israel-Arab relations in recent years, and stressed the US' willingness to help Israel engage in regional cooperation with Arab nations, including Saudi Arabia, with which there are no diplomatic ties at present. Saudi Arabia had announced that it would allow Israeli aircraft to fly through its airspace during President Biden's visit, which enabled the President to fly directly into Saudi Arabia from Israel. Also, timed with the visit, the leaders of the I2U2 Group, which consists of Israel, India, the US, and the UAE and which was formed at the foreign minister level in October 2021, held a summit for the first time, albeit online. The group reflects the Biden administration's intention to draw on the thawing relations between Israel and Arab nations to form a US-led regional collaborative framework modeled after Quad, which promotes collaboration in the Indo-Pacific region.

In Palestine, the President held talks with President Abbas of the Palestinian National Authority and promised economic assistance, but showed no particular gesture to actively solve the Middle East peace issue.

President Biden then visited Jeddah in Saudi Arabia. There was much attention on whether the President would have talks with MbS, who is considered responsible for the murder of Jamal Khashoggi, a Saudi journalist of the Washington Post murdered in the Saudi Consulate in Istanbul in 2018. In fact, there was major media coverage of the two bumping fists and chatting pleasantly, sending the message that the murder case is now behind them and that bilateral ties have normalized. As for increasing oil output, which was the other key point, no specific increase was mentioned in the press conference or the joint statement despite being one of the key agenda items in the talks. Meanwhile, the stability of international oil markets was also a topic in the talks between Saudi Foreign Minister Faisal bin Farhan Al-Saud and Prime Minister Kishida and Foreign Minister Hayashi when the Saudi minister visited Japan on the 19th. However, Prince Faisal maintained a cautious stance throughout.

On the 16th, the final day of the Middle East tour, the Security and Development Summit was held, attended by the leaders of the US, the six member states of the Gulf Cooperation Council (Saudi Arabia, Kuwait, Bahrain, Qatar, Oman, UAE), Egypt, Jordan, and Iraq. The Final Statement underscored the partnership between the US and these countries and stressed the US involvement in security and defense, implicitly referring to the threat of Iran, pledged to enhance regional cooperation and integration in areas such as renewable energy development, and provided an opportunity to reaffirm the US's long-missing presence in the Middle East. However, though the statement did include words on curbing the regional presence of China and Russia, the Middle East is unlikely to change its stance of striking the right balance between the US and Russia after this Summit.





## 7. Russia: Russia Remains Belligerent, Ukraine Invasion Deadlocked

**Shoichi ITOH**, Manager, Senior Analyst  
Global Energy Group 2, Strategy Research Unit

On July 3, the Russian Defense Ministry announced that Russian forces had captured Lysychansk, a strategic location in Luhansk Oblast in eastern Ukraine, and put it under complete control. The Russian forces continue attacks in the neighboring Donetsk Oblast as well and the fighting is now deadlocked with the Ukrainian forces armed with West-supplied weapons. In an address to parliamentary leaders on July 7, President Putin dared the West to defeat Russia if they can, and said Russia has not even started serious action yet, stressing his willingness to fight. On July 15, Ukraine's Ministry of Defense announced that US-supplied precision rocket systems had destroyed more than 30 Russian military facilities. The next day, the 16th, Secretary of the National Security and Defense Council Oleksiy Danilov hinted at the possibility of attacks on the Crimean bridge that connects the Crimea peninsula with the mainland, prompting former Russian President Dmitry Medvedev to warn that Ukraine would suffer "doomsday" if such attacks are carried out.

On July 11, President Putin signed a presidential decree that offers a simplified Russian naturalization process to all citizens of Ukraine. On July 19, US National Security Council spokesperson John Kirby warned that Russia will force a referendum on annexation to Russia in eastern Ukraine and other regions as early as September, and effectively bring the military-captured regions under de facto Russia rule, as was done when Crimea was annexed in 2014. On July 20, Russian Foreign Minister Lavrov declared that Russia plans to retain control over not only eastern Ukraine (Luhansk and Donetsk regions) but also the Kherson and Zaporizhzhia regions in southern Ukraine. On July 22, in an interview with the Wall Street Journal, Ukrainian President Zelenskyy stressed that entering a ceasefire without regaining the lands invaded by Russia would prolong the war rather than shorten it. On the same day, Ukraine, Russia, and Turkey signed an agreement to export grain from Odesa and other ports with the UN as intermediary, but the very next day Russian forces launched missile attacks on the Port of Odesa. The Russian Ministry of Foreign Affairs admitted the attacks on the 24th and the country is once again being harshly criticized in the West for renegeing on its promise.

As of May 2022, Russia's industrial output was down 1.7% year-on-year, with auto production falling 97% year-on-year (Russian Federal State Statistics Service) and the real GDP growth rate worsening further from last month's minus 2.8% year-on-year to minus 4.3% (Economic Development Ministry). As the impact of the West's sanctions on the lives of Russian people increases, the Putin administration is doing its utmost to tighten control over the population and continue the war. On July 14, President Putin signed a law that implements "special economic measures," giving legal grounds to the state procurement of military supplies, and another law that makes it easier to prosecute individuals as "foreign agents" (meaning the West's spies).

On July 21, EU diplomats met and agreed on the seventh round of economic sanctions against Russia, which includes the freezing of assets of Russia's largest bank, Sberbank, and an export ban on gold produced in Russia. The next day, the 22nd, the US announced an additional \$270 million in military aid to Ukraine. On June 30, President Putin signed a presidential decree to transfer the operator of Sakhalin 2, in which Japan holds an interest, to a newly established Russian company. However, no details or conditions have been released.



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