



IEEJ e-NEWSLETTER

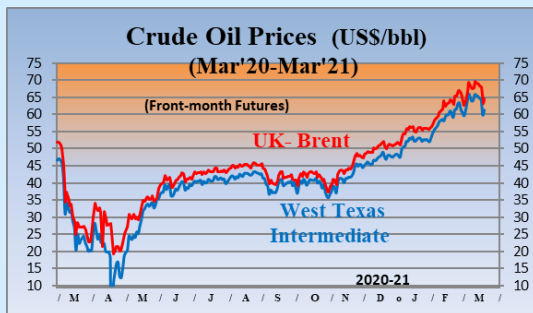
No. 205

(Based on Japanese No. 210)

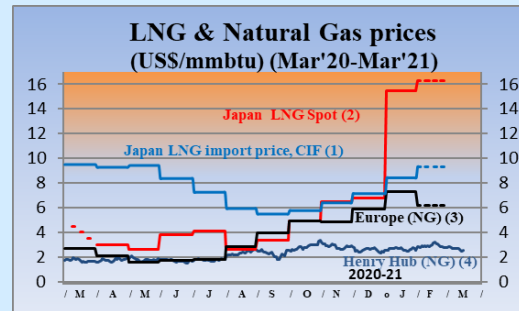
Published: March 22, 2021

The Institute of Energy Economics, Japan

(As of March 19, 2021)



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 (Netherlands Title Transfer Facility)
(4) DOE-EIA, NYMEX (Front-month Futures)



Source: x-rates.com



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

Contents

Summary

【World Monitoring】

- 1. US: Electricity Crisis Hits One Month-old Biden Administration**
- 2. EU: Debates on the Carbon Neutral Policy and Revisions to the ECT**
- 3. China: Progress in Shift to Non-fossil Electricity Sources Led by Renewables**
- 4. ME: US Adjusts Policy on Yemen**
- 5. Russia: Putin Administration Criticized in and outside Russia**



Summary

【World Monitoring】

1. US: Electricity Crisis Hits One Month-old Biden Administration

Just one month in office, the Biden administration is being forced to consider its energy and climate change policies, taking into account the devastating electricity crisis in Texas which suffered major blackouts due to historical cold weather.

2. EU: Debates on the Carbon Neutral Policy and Revisions to the ECT

Germany's RWE sued the Dutch government regarding the abolishment of coal-fired thermal power stations. Negotiations on revising the Energy Charter Treaty with respect to the protection of fossil fuel investments are expected to be difficult.

3. China: Progress in Shift to Non-fossil Electricity Sources Led by Renewables

In 2020, the share of renewable power in total power generation grew to 29.1% (including 6.1% wind power, and 3.4% solar PV). Renewables will continue to drive the shift to non-fossil power sources in 2021, during which electricity demand is predicted to grow by 6–7%.

4. ME: US Adjusts Policy on Yemen

President Biden announced the US will stop supporting the Saudi-led coalition in Yemen. He also appointed Robert Malley as the State Department's US special envoy to Iran, paving the way for the US to return to the JCPOA.

5. Russia: Putin Administration Criticized in and outside Russia

The court ruling to send opposition leader Alexey Navalny to prison fueled nationwide rallies against the Putin government and worsened the relations with the West. There is concern about the course of the administration's oppressive rule.



1. US: Electricity Crisis Hits One Month-old Biden Administration

Ayako SUGINO, Senior Researcher

Electric Power Group

Electric Power Industry & New and Renewable Energy Unit

The Biden administration faced its first electricity crisis one month into its tenure. The historical cold weather that hit the US led to state of emergency declarations in the states of Louisiana, Oklahoma, and Texas. In particular, in Texas, where a major disaster was declared, the federal government provided extensive support in the form of supplies and funds. ERCOT, which manages most of Texas' power grid, admitted that as of February 15 when planned outages were decided, the entire grid was on the verge of collapse with a risk of uncontrollable power cuts continuing for months. The causes of the electricity crisis were complex¹: wind turbines froze and stopped due to the cold weather and winter storms, and the power cut also affected gas pipelines; gas-fired power output dropped as gas operators were ordered to prioritize gas supplies to hospitals and homes amid surges in demand due to the cold weather; and coal-fired thermal power was also hit by the freeze, resulting in a loss of approximately 40% of the state's generation capacity and causing wholesale electricity prices to soar beyond the upper limit of \$9,000/MWh at one point.

The planned outages began to be lifted from February 19, but there was growing criticism of overdependence on wind power and gas-fired thermal power. This was countered by the argument that the problem was not overdependence, but ineptitude by the state which did not prepare for low temperatures despite knowing the vulnerability of wind, gas, and coal power to freezing weather. Further, Governor Abbott (Republican) criticized the Green New Deal for distorting the power mix but attracted criticism himself. Behind this dispute is the fact that Texas has experienced several freeze-induced electricity crises in the past.

At the time of the 2008 freeze-induced electricity crisis, an investigation by the Texas Legislature pointed out problems in the state's power system regulations regarding resilience. However, the Legislature merely discussed setting up a system in which prices are raised during supply crunches to incentivize both consumers and power producers. After the power crisis in 2011, FERC and others pointed out that wind turbines and gas pipelines are vulnerable to low temperature and so is coal power, the backup supply. However, ERCOT did not take protective measures against low temperature as it does not interconnect with other states and therefore was not regulated by FERC. Furthermore, for more than 20 years Texas (specifically, the Republican governors and Republican-led Legislature) have pursued a policy of boosting wind power and solar PV, causing the share of wind power and gas-fired thermal power in the power mix to grow sharply and many coal-fired plants and nuclear plants to close.

Will this electricity crisis affect the Biden administration's energy policy? While decarbonization is the administration's trademark policy, it has also promised to prioritize resilience and urge insurance companies to offer preferential rates to guarantees for resilience investments. Will measures be taken to attract investment to strengthen the climate disaster resistance of gas- and coal-fired thermal power, as well as the transport infrastructure for natural gas and coal, as the world will remain dependent on those energies till 2035 when the power sector will be decarbonized? The US returned to the Paris Agreement amid this crisis. Alongside taking climate actions, the Biden administration has also promised to create higher-paying, unionized jobs. It is not yet clear how policies will address major disasters, resilience, and a realistic timeframe toward carbon neutrality and creating jobs simultaneously.

¹ See Developments in Nuclear Energy on page 4 of this Newsletter regarding the partial shutdown of nuclear power in Texas and Update on Renewable Energies on page 7 for the relationship between the power crisis in Japan and renewable energies.



2. EU: Debates on the Carbon Neutral Policy and Revisions to the ECT

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

In February 2021, Germany's RWE filed a lawsuit against the Dutch government for 1.4 billion euros in damages regarding phase-out of coal-fired thermal power stations. The suit is based on the Energy Charter Treaty (ECT), and other EU member states such as France and Spain are facing dozens of similar cases. The ECT is an international treaty that took effect in April 1998 and stipulates rules primarily on liberalization of trade and transit of energy materials and products, as well as the liberalization and protection of investment in the energy industry, and includes an arbitration mechanism for investor-state disputes.

The ECT stipulates that when a change in energy policy has a negative impact on investment, the investor can claim monetary compensation from the government. There has been a series of declarations on carbon neutral and other decarbonization measures in Europe recently, resulting in changes in energy policy, notably phase-out from coal-fired thermal power. With the rapid change in circumstances, it was foreseeable that investors would claim damages against the government for changing policies.

With these moves in industry, France, Spain, Luxembourg, and environmental groups are becoming increasingly critical of the ECT, arguing that the current Treaty makes it hard to achieve the Paris Agreement targets and the European Green Deal and that the EU and its member states should leave it. The signatories are scheduled to negotiate revisions to the ECT in March 2021, but ahead of the meeting, the European Commission released a proposal for revisions to the Treaty in mid-February.

The Commission proposed the following revisions in response to criticism that the current Treaty hampers the achievement of Paris Agreement targets. The Commission proposed that the provisions on investment promotion and protection shall not apply to products made from coal, natural gas, petroleum, and petroleum products and suggested that (1) new investment in power plants and infrastructure shall be protected until 2030 provided that CO₂ emissions are kept below 380 g/kWh and that the infrastructure is capable of using renewables and low-carbon gases; (2) if the purpose of investments under item (1) is to replace existing oil or coal-fired power, it shall be protected for 10 years from when the revisions came into effect or until 2040; (3) similar protection shall also be applied to investment in gas pipelines provided that they transport safe and sustainable renewable or low-carbon gases, including hydrogen. Fossil-fuel-based hydrogen with CCS is also included in the scope as low-carbon hydrogen. The negotiations are likely to be difficult as the revisions must be passed unanimously and the EU member states are not all of one mind.

Meanwhile, a new move was observed in Europe regarding batteries. The European Commission approved, under EU State aid rules, a second Important Project of Common European Interest ("IPCEI") to support research and innovation in the battery value chain. The project, called "European Battery Innovation," was jointly prepared and notified by twelve member states (Austria, Belgium, Croatia, Finland, France, Germany, Greece, Italy, Poland, Slovakia, Spain, and Sweden). The twelve member states plan to provide up to 2.9 billion euros in the coming years, and the funding is expected to unlock an additional 9 billion euros in private investments. Investment by the private sector must be watched.



3. China: Progress in Shift to Non-fossil Electricity Sources Led by Renewables

Li ZHIDONG, Visiting Researcher
Professor at Graduate School
Nagaoka University of Technology

China is pushing ahead with transitioning from coal-fired thermal power to non-fossil power sources for achieving sustainable development and establishing a decarbonized society. Progress was made even in 2020 amid the pandemic.

According to the China Electricity Council (CEC), in 2020, China's electricity demand increased by 3.1% year-on-year to 7,510 TWh and generation capacity by 9.5% (190 GW) to 2,200 GW. Of this capacity, coal-fired power increased 3.8% to 1,080 GW but its share in the total installed capacity decreased by 2.7 points to 49.1% and in the entire power output by 1.4 points to 60.8%. In contrast, the installed capacity of wind power increased by 34.6% to 282 GW, solar PV by 24.1% to 253 GW, hydropower by 3.4% to 370 GW, and biomass power by 24% to 29.74 GW. The total amount of renewable power increased by 17.5% to 935 GW, growing 2.9 points to 42.5% of total installed capacity and by 1.2 points to 29.1% of total generation (including 6.1% wind power, up 0.6 points, and 3.4% solar PV, up 0.3 points). Nuclear increased by 2.4% to 49.89 GW but shrank by 0.1 point to 2.3% of total installed capacity and remained unchanged at 4.8% of total output. The share of all non-fossil fuels grew 2.8 points to 44.8% of total installed capacity and grew 1.2 point to 33.9% of total output. The shift to non-fossil power sources is being driven by renewable power sources.

2020 was the final year of the Thirteenth 5-Year Plan. Renewable power sources far exceeded the target of at least 712 GW, rising to over 900 GW. This beyond-target growth was driven by the expansion of solar PV and wind power. Meanwhile, according to the China Nuclear Energy Association (CNEA) and others, the installed capacity of nuclear grew to 65.38 GW (including 15.49 GW under construction) in 2020 but fell below the target of at least 88 GW (including at least 30 GW under construction) by 26%. The operating time in 2020 was 1,281 hours for solar PV, 2,073 hours for wind power, and 7,453 for nuclear power. Solar PV and wind power had a lower availability than nuclear but exceeded their targets in construction of facilities, making up for the shortfall in nuclear new builds and helped increase the share of non-fossil fuel power sources in generation. Reasons for nuclear power capacity not reaching the target included concerns over safety and lower cost competitiveness.

2021 marks the first year of the Fourteenth 5-Year Plan. Efforts are expected to be strengthened heading toward the new target of reaching peak CO₂ emissions before 2030 and achieving net-zero GHG emissions before 2060. CEC predicted that electricity demand will grow 6–7% year-on-year and the installed generation capacity by 170 GW to 2,370 GW in 2021 as the economy recovers. Of this amount, non-fossil sources will increase by 140 GW to 1,120 GW, with the share in total installed capacity rising 2.5 points to 47.3%. While a detailed breakdown was not released, CEC clearly indicated that solar PV and wind power collectively will expand by 112 GW to 647 GW, with their share in capacity increasing 3 points to 27.3%. Meanwhile, for nuclear, all six plants with a combined capacity of 5,930 MW whose construction had begun by 2015 but were not completed as of the end of 2020 may go into operation, increasing the installed capacity to a maximum of 55.82 GW. Putting all this information together, renewable power sources will remain the key driver in decarbonization in 2021, growing to 1,064 GW in installed capacity and its share in all power sources increasing by 2.4 points to 44.9% in terms of capacity, and 30% range in terms of output. Maintaining the stability of electricity supply under such circumstances is a concern.



4. ME: US Adjusts Policy on Yemen

Shuji HOSAKA
Director of JIME Center

After being inaugurated on January 20, President Biden swiftly changed tack in the Middle East. The US announced it will stop assisting the military actions of the Saudi- and UAE-led coalition supporting the Yemeni legitimate government and announced plans to support the UN-led intermediation efforts toward a ceasefire. Further, on February 16, new Secretary of State Antony Blinken lifted the terrorist organization designation of the Houthi militants, who are ruling northern Yemen and fighting the legitimate government.

These changes in US policy over Yemen act in favor of Iran which is supporting the Houthis and may help the US to return to the Iran nuclear deal (JCPOA) and soften Iran's stance. Further, at the end of January, it emerged that Robert Malley, who was the US negotiator in the JCPOA under the Obama administration, took office as the State Department's US special envoy to Iran, better preparing the US to return to the JCPOA.

These moves could undermine the US relationship with traditionally pro-US Gulf countries such as Saudi Arabia. However, President Biden made a gesture toward maintaining a close bilateral relationship by referring to Iran as a threat and promising continued support to protect Saudi Arabia's sovereignty and territories, to which Saudi Arabia expressed welcome.

The Saudi side also made a gesture in view of the new US administration's focus on human rights; renowned Saudi female women's rights activist Loujain al-Hathloul was freed from custody. She had been sentenced to five years and eight months in prison by a Saudi court at the end of last year but her prison term was shortened (though surveillance will continue).

Meanwhile, on February 2, Iran also announced it would free most of the crew on the South Korean tanker it had seized in January and allow them to leave Iran on humanitarian grounds. However, the South Korean captain and the tanker remain captive and the South Korean foreign ministry announced it will demand their early release to the Iranian government.

On February 5, the Libyan Political Dialogue Forum, a political discussion held in Geneva, selected the leaders of the new unified government with the intermediation of the UN Support Mission in Libya (UNSMIL). Former diplomat Mohammad al Menfi was elected as the President of the Presidential Council of Libya and businessman Abdul Hamid al-Dbeibah as the Prime Minister, but the future remains uncertain.

In economic matters, on February 8, Qatar announced the signing of a 13 billion-dollar design, procurement, and construction contract for the construction of a liquefied natural gas production plant with a corporate syndicate comprising Japan's Chiyoda Corporation and France's Technip. Meanwhile, on February 15, Saudi state media reported that the Saudi government and all its committees, agencies, and funds will stop signing contracts with foreign companies with regional headquarters located outside of Saudi Arabia starting from January 1, 2024; Japanese companies, too, may need to respond. On February 23, former Saudi Petroleum Minister Ahmad Zaki Yamani passed away in London.



5. Russia: Putin Administration Criticized in and outside Russia

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

On February 2, a Moscow court issued a decision to revoke Russian opposition leader Alexey Navalny's suspended sentence and imposed him a two-year and eight-month prison sentence. Mr. Navalny had been poisoned in Omsk in Western Siberia in August 2020 and flown to Germany for treatment, but was arrested at a Moscow airport upon returning to Russia on January 17, 2021. On the 31st, anti-Putin government rallies broke out throughout the country demanding that Mr. Navalny be freed, resulting in more than 5,000 arrests by authorities in some 90 cities.

As Western countries grew increasingly critical of the Putin administration regarding the court ruling, on February 5, the Russian foreign ministry expelled diplomats from Germany, Poland, and Sweden from Russia for "participating" in anti-government rallies. On the same day, the physician in charge of the emergency treatment of Mr. Navalny at the time of his poisoning suddenly died, the cause of his death unannounced. As the relationship with EU countries deteriorated, on February 12, Russian Foreign Minister Sergei Lavrov said in an interview with state media that Russia may break diplomatic ties with the EU if economic sanctions against Russia are tightened further. This was followed immediately by the Presidential Executive Office issuing a statement that Russia does not intend to be the first to break off ties, in an attempt to calm the situation.

On January 27, US President Biden and President Putin had their first talk over the phone. The two agreed to extend the new Strategic Arms Reduction Treaty (START) for another five years, which had been due to expire on February 5, and agreed to stay in communication. However, the US also criticized Russia for intervening in the 2020 US presidential election and its authorities for involvement in the attempted assassination of Alexey Navalny, and made it clear that the US will respond to any action by Russia that undermines the interests of the US or its allies. On February 4, in his first diplomatic speech after inauguration, President Biden criticized Russia as a country "with determination to damage and disrupt our democracy" and declared that unlike under the Trump administration, the US will not roll over in the face of Russia's intervention in internal politics and cyber-attacks, or hesitate to raise the cost to Russia. In the US under the new administration, there are increasing calls in Congress, with Democrats holding a narrow majority in both houses, for imposing tougher sanctions on Russia by strengthening ties with European allies.

On February 1, the Federal Bureau of Statistics announced that Russia's GDP declined by 3.1% year-on-year and real disposable income by 3.5% year-on-year in 2020 (preliminary figures). As with many other countries, the spread of Covid-19 was a major factor behind the economic slump. According to the Bureau's announcement on February 8, Russia had 162,000 Covid-related deaths in 2020, approximately three times the government's initial announcement and the third highest in the world.

Ahead of the lower house election scheduled for September 2021, the popularity of the ruling party, United Russia, continues to plummet. On February 1, Deputy Chairman of the Security Council and former Prime Minister Dmitry Medvedev stated that restrictions on the Internet may be strengthened and the flow of information between Russia and other countries may be suspended. As criticism of the Putin administration continues to mount in and outside Russia, the course of the hardline rule by the administration and its impact on the country's energy strategy must be watched.



Past IEEJ Events

Energy and Economy Indicators of Japan

IEEJ Homepage Top

Back Numbers of *IEEJ e-Newsletter*

Back Numbers of *IEEJ Newsletter* (Original Japanese Version - Members Only)



***IEEJ e-Newsletter* Editor: Yukari Yamashita, Managing Director**
***IEEJ j-Newsletter* Editor: Ken Koyama, Senior Managing Director**
The Institute of Energy Economics, Japan (IEEJ)
Inui Bldg. Kachidoki, 13-1 Kachidoki 1-chome, Chuo-ku, Tokyo 104-0054, Japan
Tel: +81-3-5547-0211 Fax: +81-3-5547-0223



IEEJ : March 2021 ©IEEJ 2021