

## **Importance of U.S. in Global Energy Situation under the Next Administration (2)**

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While U.S. President Donald Trump has yet to declare his defeat in the presidential election, with uncertainties lingering about the transition to a new U.S. administration, President-elect Joe Biden's announcement of his incoming chief of staff and other moves toward a Biden administration have happened. In such situation, climate change policy among U.S. policies expected to change dramatically under the new administration is attracting attention in the United States and the rest of the world.

Trump has been skeptical about the climate change issue itself since his campaign for the 2016 presidential election. As soon as his administration was inaugurated, he unilaterally offered to withdraw the United States from the Paris climate agreement that his predecessor Barack Obama tried hard to produce, claiming the pact was detrimental to the U.S. economy, industries and employment. Trump has supported the expansion of shale oil and gas production and exports backing up U.S. economic prosperity and admitted the importance of coal, implementing policies giving priority to fossil fuels. No one can say that the Trump administration has seriously tackled the climate change issue. Trump's policy stance thus can be understood as negative on climate change countermeasures.

In contrast, Biden known as a centrist Democrat has clarified his positive attitude of tackling the climate change issue, though distancing himself from aggressive environmental conservation policies or stances advocated by hardcore environmentalists within the Democratic Party. In pursuit of victory in the presidential election, Biden has offered long-term environmental targets including the decarbonization of the U.S. power sector by 2035 and the entire United States by 2050, while giving due heed to hardcore environmentalists in a bid to secure the party's unity and conciliation. He has also clarified his plan to come back to the Paris Agreement soon after his inauguration as president. Biden's climate change policy message clearly differs far from Trump's.

The dramatic revision of the U.S. climate change policy message is destined to exert great impacts on climate change and energy issues in the United States and the rest of the world. First, it would enhance global momentum for tougher climate change countermeasures. As the United States under the Trump administration has retained a negative stance on climate change countermeasures in contrast to the European Union's proactive stance on them, developed countries have been divided over climate change. Japan has been positioned to balance between the United States and the European Union. Recently, however, China has offered a target of achieving carbon neutral status by 2060 in the wake of the European Union's 2050 carbon neutrality (net zero greenhouse gas emissions) target. Japan has also come up with the 2050 carbon neutral status target. Moves to enhance climate change countermeasures have thus gained momentum. If the Biden administration is realized, a U.S. 2050 carbon neutrality target would lead such moves to accelerate.

Irrespective of whether the tough carbon neutrality target is achievable within their

respective target period, Japan, the United States, the European Community, China, and South Korea that pursue carbon neutrality accounted for 58% of global energy-related CO<sub>2</sub> emissions in 2019. If these major CO<sub>2</sub> emitters commanding more than half of the global emissions try to achieve carbon neutrality, it would be significant. Their emission reduction would not only make great contributions to global emission cuts but also encourage other countries to enhance climate change countermeasures. International talks on tougher climate change countermeasures could gain momentum.

The United States itself would have to implement various measures or initiatives to achieve carbon neutrality in the power sector by 2035 and in the whole of its economy by 2050, exerting great impacts on its economy and society and its energy sector. First, the United States would have to thoroughly enhance energy efficiency. To this end, it would be required to toughen auto fuel efficiency standards that have been eased under the Trump administration, as well as efficiency standards for energy-consuming appliances and buildings. The United States would also be required to promote overall electrification including vehicle electrification while achieving zero emissions in the power sector. The power sector decarbonization would require the United States to spread non-fossil power generation using renewable energy such as wind and solar photovoltaics, as well as nuclear power plants including small module reactors. Large-scale investment in clean energy innovations would also be required to develop and diffuse advanced or innovative technologies. Given that energy supply and demand would have to structurally be transformed to achieve carbon neutrality, the U.S. energy market would undergo dramatic changes towards 2050.

However, the problem is how far the policy message change under the new administration could lead the U.S. energy market to be actually transformed. As noted above, carbon neutrality is not an easy challenge. In 2019, natural gas was the largest power source in the United States, accounting for 39% of power generation, followed by 24% for coal. Fossil fuels thus covered a combined 63% of power generation. Coal-fired power generation is on a decline. Given the large power generation share for natural gas that has grown more competitive, however, it would not be easy for the U.S. power sector to achieve zero emissions in the next 15 years. Of primary energy supply in the United States in 2019, oil captured the largest share at 39%, followed by 32% for natural gas and 12% for coal. Fossil fuels accounted for a combined 83%. Given oil's competitiveness and convenience as transportation fuel and the vast land of the United States, it would not be easy to dramatically lower the oil share. Natural gas that has become price-competitive thanks to abundant supply through the shale revolution would remain competitive. Therefore, it would be indispensable for the United States to seriously mobilize all policy and investment resources to achieve decarbonization.

At present, however, top priorities for the United States include the fight against COVID-19, economic reconstruction, and healthcare reform. Climate change countermeasures are unlikely to become a real top priority. One option is to follow suit behind the European Union that has positioned clean energy investment as the center of economic reconstruction from the COVID-19 pandemic to simultaneously realize economic reconstruction and emission cuts. However, whether such option would be accepted widely in the United States is uncertain. How far the next U.S. administration would mobilize policy resources for climate change countermeasures or what priority it would give to climate measures would attract much attention. Both Obama and Trump had difficulties in coordinating with Congress over policy planning and implementation and depended on executive orders and authorities in dealing with various issues. Such relationship between the executive and legislative branches could remain unchanged under President Biden. If Republicans win control of the Senate, Congress will remain divided, forcing key policies accompanied by

budgetary measures to be stalled. In this sense, whether Biden could realize his policies would depend on twin runoffs in Georgia on January 5 next year. At present, Republicans have won 50 seats against 48 seats for Democrats in the 100-seat Senate, leaving two seats for the Georgia runoffs.

Within the Democratic Party, confrontation between hardcore environmentalists and conservatives has grown remarkable since the presidential election. How Biden would promote climate change countermeasures could be susceptible to various opinions within the party. The Democratic Party could not necessarily be completely united to promote climate change policies. We should pay much attention to what specific changes would come in the United States in response to climate policy message revisions.

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