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Special Bulletin

A Japanese Perspective on the International Energy Landscape (465)

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Energy Transition and Future of Fossil Fuels (2)

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In "A Japanese Perspective on the International Energy Landscape (464)," I argued from a macro viewpoint that while decarbonization initiatives are attracting global attention, various uncertainties and challenges are emerging in regard to fossil fuels that constitute the center of global energy supply today. In this respect, I pointed out that it is important to build on energy realities in the world including Asia expected to become the gravity center of the global energy market to drive global energy demand growth in the future. Following the argument, I here would like to focus on investment issues in anticipating the future of fossil fuels.

Investment issues are important because investment serves as a key bridge between the present and future. Energy supply chains or infrastructure on which we depend for daily anergy supply have been formed through past investment. International and domestic energy supply chains cover the upstream, midstream and downstream sectors from energy resource development to energy delivery to final consumers. In anticipation of and preparation for the future energy supply and demand structure, the world must realize large-scale investment based on the existing energy supply system or infrastructure. The latest IEEJ Outlook by the Institute of Energy Economics, Japan, estimates a total of \$77-84 trillion in energy-related investment to be required by 2050 in the world.

The problem is that targets and ways for energy-related investment are growing uncertain or unsure amid the current global "energy transition." The more uncertain the future global energy picture is, the more difficult it is to decide on long-term energy investment.

In such situation, movements that make fossil fuel investment even more difficult are growing in the world including European and other advanced economies, particularly in the financial sector. Such movements that gained momentum on the effectuation of the Paris climate agreement are based on an idea that not only government sector funds but also private sector funds should be directed towards low-carbonization or decarbonization. They hold financial markets and private sector investors socially accountable for the climate change issue.

Under such trend, initiatives to seek disclosure of companies' investment and asset information required for financial investment decisions have made progress. A typical voluntary initiative has been launched by the Task Force on Climate-related Financial Disclosures (TCFD) at the request of the Group of 20 major economies. The initiative is designed to prevent the financial system from being destabilized by disclosing investment, asset and other financial conditions of companies to clarify how they are tackling low-carbonization or decarbonization and indicate their potential financial deterioration or losses regarding climate change risks. It also discloses how serious companies are about realizing the United Nations sustainable development goals and about tackling environmental, social and governance (ESG) issues. The disclosure not only provides standards for institutional and other investors' assessment of investment targets but also exerts

influence on the reputation of companies by indicating how serious they are about their social responsibilities. The stronger social forces or calls grow for climate change initiatives, the more conscious companies grow of such assessment or reputation.

Coinciding with the disclosure initiatives is the trend of divestment from fossil fuels including coal. Under the logic that coal featuring the highest CO₂ emission intensity and great contributions to climate change would be restricted strictly and become a stranded asset in a society seeking very ambitious greenhouse gas emission cuts, companies are tempted to grow conscious of their reputation and sell out their coal-related assets in line with their business decisions. Furthermore, initiatives to restrict or ban financing for coal-fired power plant construction, coal development and other coal-related projects have been enhanced mainly in Europe, delivering a severe blow to coal. A severe blow seems now to start to be delivered not only to coal but also to oil and natural gas. Pressure for divestment from fossil fuels and restrictions on new investment in them are spreading gradually.

Attracting interests amid such trend are arguments about a taxonomy to classify business operations and technologies by whether they contribute to sustainability under the European Union's sustainable finance initiative. In December 2019, the European Parliament and Council agreed on the taxonomy regulations that classify coal-fired power plants as environmentally unsustainable. Natural gas-fired and nuclear power plants are left for assessment based on more detailed technology screening standards later. In this way, the EU will classify business operations and technologies by sustainability standards, subjecting them to assessment under sustainable finance standards.

Taxonomy arguments and initiatives had reportedly been used to attempt to work out a "positive list" of operations and technologies that contribute to sustainability or are "green." Recently, however, there are initiatives to work out a "list of negative contributors" to enhance sustainability promotion measures. One such initiative in Europe seeks to incorporate a taxonomy into capital adequacy requirements for banks. Under this initiative, assets and loans that are undesirable from the viewpoint of climate change or sustainability can be treated as "risk assets" subjected to restrictions or cuts to help secure banks' financial soundness. At this moment, however, views are divided on this initiative within the EU. Attention must be paid to how arguments on the matter would converge. Meanwhile, there are some moves to diffuse or apply the initiative even outside the EU. Attention must be paid to these moves that could have a global impact.

These investment and financial moves and trends exert great influence on energy-related investment, particularly fossil fuel investment, through paths that are different from those for each country's energy and environment policies. Companies have no choice but to be sensitive to these trends for their survival. As noted in the previous special bulletin, however, business realities as well represent a key viewpoint. Such realities include fossil fuel business being the most important source of earnings for upstream oil companies and LNG-related firms, coal-fired power plants being the most competitive power source in many Asian countries, and the high possibility of fossil fuel demand continuing to expand mainly in Asia. Under such realities, individual companies are required to make difficult investment or business decisions based on their respective strategies.

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