South Korea's Presidential Election and Energy Implications

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South Korea's 2022 Presidential Election results were announced on March 9, and the winner was Former Prosecutor General Yoon Seok-youl.

President-elect Yoon Seok-youl won a closely contested election with former Governor of Gyeonggi Province Lee Jae-myung. This election marks a turning-point in Korean politics as the keys to the Blue House will be turned over to the opposing party after only one term in power, the first since the establishment of the Sixth Republic in the late 1980s. President-elect Yoon ran on a platform that favored both nuclear and renewable energy as key emissions reductions technologies.

Current President Moon Jae-in was an advocate of phasing out nuclear power plants in 2017. His administration hoped to rely on LNG, boosting CCUS technologies and scaling up renewables to 20% of the energy grid by 2030 to reach net-zero.[1][2]

In contrast to President Moon's nuclear phase out policy, President-elect Yoon has stated that he will conduct a full review of the nuclear phase out policy in favor of increasing the energy mix of nuclear power generation in South Korea. He has stated that he plans to drastically restrict the use of fossil energy in South Korea. Yoon has promised to review the country's energy mix with top experts and stakeholders to develop a new carbon-neutral energy mix that includes significant emphasis on nuclear power plants. It can be expected that under the new administration, nuclear energy will be expanded. For the 2030 energy mix, Yoon is hoping for nuclear to comprise 30-35% of power generation, renewable energy to comprise 20-25%, and fossil fuels to comprise 40-45%.[3][4] In this regard, Korea has shown the world that they are a credible nuclear energy partner.

President-elect Yoon has also voiced his plan to place science at the center of climate energy policy, not ideology. He has announced plans to invest a significant amount of capital worldwide in the climate energy sector. He has also stated that he has hopes to reform regulations and expand markets to support future clean energy industries, including smart grids and next-generation energy storage. Part of Yoon's climate and energy policy will focus on establishing three major clean energy focus areas: technology, finance, and human resources. Yoon plans to invest heavily in green technology development to secure global competitiveness in major technologies such as batteries and semiconductors, intelligent power grids, carbon capture, and more. Additionally, Yoon hopes to establish a green financing system that will utilize public-private cooperation to help finance clean energy efforts. Finally, Yoon hopes to establish world-class clean energy education and start-up economy to allow talent in clean energy to flourish in South Korea.[5]

Under President-elect Yoon's guidance, South Korea is likely to make significant strides in reducing emissions and reaching climate goals through heavy investments in clean

energy. Yoon's new administration will also make significant changes to the nuclear energy policy of South Korea in favor of nuclear technologies, which may have significant implications for the country's participation and cooperation with other nations in the global nuclear energy export market.

[1] http://www.koreaherald.com/view.php?ud=20211018000839
[2] https://www.jstor.org/stable/26909944
[3] https://www.bloombergquint.com/business/south-korea-s-nuclear-future-is-a-new-election-battleground
[4] https://www.koreatimes.co.kr/www/nation/2022/03/794_324743.html?fl
[5] 8th Seoul Climate Energy Conference 2021