

ITER Participation and Possible Fusion Energy Development Path of Korea

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The objective of this paper is to explore Korean plan of fusion energy R&D and technological innovations which is very likely to make fusion technology a promising power source for future national developments. In other words, this aims at a long-term strategic planning of fusion energy R&D and technological innovation in order to promote the socio-economic contributions of science and technology for the nation's future competitiveness and sustainable development and to contribute to develop the global energy security and clean environments. Korean fusion research activities up to now including ITER participation will be described, and we would like to emphasize the importance of ITER. Then, the future needs of fusion energy would be predicted briefly, and we will provide the possible Korean fusion energy development path. We are aiming at the operation of a demonstration fusion power plant in 2035. To achieve this goal, the efficiency of Korean fusion energy R&D and technological investment should be promoted by centralizing our whole activities. Assuming the hurdles ahead of us, possible fusion energy development plan of Korea should be arranged by taking into account the international cooperation.

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