

Measuring Green Growth Indicators: Implication for Policy

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Abstract : The former president Lee Myung-bak's administration of Korea presented "green growth" as a catchphrase from 2008. He declared "low-carbon, green growth" the nation's vision for the next decade according to United Nation Framework on Climate Change. The government designed omnidirectional policy for low-carbon and green growth with concentrating all effort of departments. The structural change was expected because this slogan is the identity of the government, which is strongly driven with the whole department. After his administration ends, the purpose of this paper is to quantify the policy effect and to compare with the value of the other OECD countries. The major target values under direct policy objectives were suggested, but it could not capture the entire landscape on which the policy makes changes. This paper figures out the policy impacts through comparing the value of ex-ante between the one of ex-post. Furthermore, each index level of Korea's low-carbon and green growth comparing with the value of the other OECD countries. To measure the policy effect, indicators international organizations have developed are considered. Environmental Sustainable Index (ESI) and Environmental Performance Index (EPI) have been developed by Yale University's Center for Environmental Law and Policy and Columbia University's Center for International Earth Science Information Network in collaboration with the World Economic Forum and Joint Research Center of European Commission. It has been widely used to assess the level of natural resource endowments, pollution level, environmental management efforts and society's capacity to improve its environmental performance over time. Recently OCED publish the Green Growth Indicator for monitoring progress towards green growth based on internationally comparable data. They build up the conceptual framework and select indicators according to well specified criteria: economic activities, natural asset base, environmental dimension of quality of life and economic opportunities and policy response. It considers the socio-economic context and reflects the characteristic of growth. Some selected indicators are used for measuring the level of changes the green growth policies have induced in this paper. As results, the CO2 productivity and energy productivity show trends of declination. It means that policy intended industry structure shift for achieving carbon emission target affects weakly in the short-term. Increasing green technologies patents might result from the investment of previous period. The increasing of official development aids which can be immediately embarked by political decision with no time lag present only in 2008-2009. It means international collaboration and investment to developing countries via ODA has not succeeded since the initial stage of his administration. The green growth framework makes the public expect structural change, but it shows sporadic effect. It needs organization to manage it in terms of the long-range perspectives. Energy, climate change and green growth are not the issue to be handled in the one period of the administration. The policy mechanism to transfer cost problem to value creation should be developed consistently.

Keywords : comparing ex-ante between ex-post indicator, green growth indicator, implication for green growth policy, measuring policy effect

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