

Selection of Indicators for Green Growth by applying OECD's Framework

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Background and Aims: Climate change is emerging as one of the world's biggest environmental problems. Global warming causes weather disasters and ecological chaos, and even threatens the survival of mankind. Thus, it is imperative that economic growth and environmental substantiality be harmonized through what is termed "green growth." In order to achieve such growth, green indicators and statistics are essential, since these not only measure environmental progress and sustainable development but also monitor and evaluate policy integration.

Methods: Existing indicators relevant to green growth were first collected and compared, in order to select a potential pool of indicators. This pool was sorted according to OECD's framework. Each indicator was scored on a scale of 1 to 3 for each criterion, that is, policy relevance, analytical soundness, and measurability. For each indicator, the scores of the three criteria were summed, and the indicators were ranked according to the scores. Twelve international indicators were chosen from the indicator pool. The current data for each international indicator was compared to the OECD countries' 25th percentile data and evaluated on a scale of 1–5 within the framework.

Results: The average scores for five categories were 2.00, 1.67, 3.50, 3.00, and 2.50, respectively; (i) environmental efficiency of production and changes in production patterns, (ii) environmental efficiency of consumption and changes in consumption patterns, (iii) stocks of natural capital and environmental quality, (iv) objective and subjective environmental quality of life, and (v) responses by economic actors.

Conclusions: These findings can be interpreted as they are not at the same levels within the framework. It seems the qualities of Korea's natural capital, environment, and life are high. In comparison, its economic activity scores (production, consumption, trade) are relatively low when compared to the OECD's 25th percentile level. However, Korea's current green growth strategy emphasizes economic value, such as development of new technologies; it is moving, therefore, in the right direction.