

Environmental Sustainability in East Asia:
Policies and Technological Output

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Abstract

This paper examines environmental policies in East Asia – Japan, Taiwan, Korea, and China – and the correlated R&D output. The analysis is multifaceted and considers international, regional, and domestic approaches. The pattern of policies and research output to address the environment is strong in all four of these countries, and China has been particularly prolific in the number of climate change-oriented publications. There is a disconnect, however, between China's environmental targets and those of the other three countries. The opportunity for China's immediate neighbors to have a positive impact on its environment (and ultimately theirs) lies in regional research projects such as the APPCDC and technology transfer programs like the CDM. Quantitative analysis for the 2000-2008 period is based on data from the USPTO, ISI Web of Science, and ministerial-level publications.

Keywords: greenhouse gas, greenhouse effect, East Asia, regionalism, climate change, environmental policies, S&T policies, R&D, technology transfer

¹ Contact information: matthew.shapiro@iit.edu, Department of Social Sciences, 3301 S. Dearborn St., SH 116, Chicago, IL, 60616. I am grateful for the assistance of Bernat Oliveres Kunzi in compiling the list of Japanese, Taiwanese, Korean, and Chinese environmental policies and for Tom Tsai's analysis of air pollution policies.