

# Towards a Less Carbon Intensive Economy in China: Accomplishments, Challenges and the Role of Clean Development Mechanism

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Given the global characteristics of climate change and China's importance as a source of future CO<sub>2</sub> emissions in line with its industrialization and urbanization, balancing China's energy needs to fuel its economic growth with the resulting potential impacts of climate change presents an enormous climate policy dilemma, not simply for China but for the entire world. This is the major reason why the role of China is an issue of perennial concern at the international climate change negotiations.

In this article, we first examine the historical evolution of China's CO<sub>2</sub> emissions during the period 1980-1997. By analyzing the historical contributions of inter-fuel switching, energy conservation, economic growth and population expansion to CO<sub>2</sub> emissions, we indicate that China has made significant contribution to reducing global CO<sub>2</sub> emissions, although none of these carbon savings have resulted from conscious domestic climate mitigation policies. Next, we discuss challenges lying ahead for China. Then, we analyze the extent to which the CDM can slow down the growth of China's CO<sub>2</sub> emissions under a variety of trading scenarios. Finally, some concluding remarks are drawn.