

**Daniel Klingenfeld**

**On Strategies for Avoiding Dangerous Climate Change:  
Elements of a Global Carbon Market**

Abstract

What are the prospects for averting dangerous climate change and which strategies offer promising avenues for successfully tackling this global challenge? This dissertation looks at these questions from three interrelated angles: I begin with a study of the possibilities and limits of transnational cooperation in climate policy, in which I show that current trends in international negotiations are by no means reliable indicators of the potential for cooperation in the future. Building on an evaluation of traditional game-theoretic approaches, I expand the cooperation space by introducing elements of regime theory, where intertwined interests and the need for partners in changing coalitions leads to an increased propensity for working together. Yet even regime theory does not capture the full dynamism of interest formation at the national level: the aggregation of evolving individual preferences and changing normative worldviews leaves the distinct possibility of more cooperation in the future on condition that cosmopolitan principles gain stronger prominence. The thesis then investigates the normative underpinnings for avoiding dangerous climate change and looks at policy instruments for emissions management. The United Nations Framework Convention on Climate Change (UNFCCC) constitutes the foundation for international efforts in this area, substantiated more recently by international discussions on limiting global average temperature increase to no more than 2°C. I argue that from a risk management perspective and as a focal point, a common global target is useful to spur coordinated action. In view of the constraints for limiting global emissions and the need to involve developing countries, a comprehensive carbon market embedded in a policy mix to address further market failures appears best-suited to respond to a number of key policy criteria derived in the discussion, such as environmental effectiveness, cost effectiveness, and equity. The final part of the dissertation turns to developing an implementation strategy that seeks to address the normative criteria of the UNFCCC while remaining cognizant of the current fragmentation of international climate policy efforts. Following an evaluation of the existing international climate protection architecture as well as an analysis of competing academic proposals for integrated carbon market solutions, I put forward the concept of a Modular Carbon Market (MCM): formed by an eminent coalition of cooperating states, it would comprise emitters from industrialized countries but include in particular also large transition economies. I develop elements of an institutional structure for joint emissions management, notably the role of a future World Climate Bank in overseeing the carbon market and in distributing auction proceeds to participating countries. The thesis then examines the challenges of managing the climate rent in developing countries and concludes by embedding the use of quantity regulation as a framework for multilevel action.