

A key goal of the priority program is to reduce the large uncertainties in our current understanding of CE impacts on the environment, politics, and society so as to create a scientific basis for a responsible approach to the issue CE. Problem-oriented basic research will evaluate the possible effects of CE on natural and social systems and international relations, study the challenges in research and governance strategies and communication between scientists and the public, and analyze the possible impact on climate policy in the context of CO₂ reduction and adaptation. Two areas of research are planned:

- Investigation and assessment of the potential effectiveness, uncertainties, and challenges of CE
- Evaluation of the legal, moral, and public acceptability of CE

Initially the focus will be on three CE methods, which have been chosen to examine a wide range of methodological scales and characteristics:

- The injection of aerosols into the troposphere or stratosphere,
- Increasing ocean alkalinity, and
- Afforestation

Since an integrative study of CE requires a significant exchange between different scientific disciplines, each project is tightly linked with a complementary partner project from another discipline.