

Social science-based CLIMIT research

Social science-based research on carbon capture and storage is relevant in the following areas:

1. Instruments and finances

Public funding instruments and incentives will be crucial to the implementation of carbon capture and storage. Consequently, insight into the potential role of such instruments and incentives is needed as a basis for public policy in this area. Research efforts may comprise socio-economic analyses and models, including studies of how investments and instruments (fees, subsidies, quotas, the impact of directives requiring the use of green products, such as using green concrete with CCS or oil produced with a low-carbon footprint using CO₂ EOR) can affect the implementation of CCS. The implementation of CCS in industry is of particular interest under the CLIMIT programme. It is important that such studies consider various interactions with other trends in society, such as the introduction of other forms of sustainable energy. Other relevant topics in this area may include studies of legislation and standards, information and competence-building to accelerate CCS implementation. It is important that topics are viewed in an international perspective, particularly for Europe and the Nordic region.

2. Industrial development and spread of technology

There is a need to understand which factors are conducive to the spread of CCS technology. This may encompass business management or business models addressing CCS in the aim of commercialisation. Here, too, it is important to emphasise CCS in industry. It may be beneficial to examine this in conjunction with the implementation of other low-emission technologies, including hydrogen and new processes, and the impacts of using green products.

3. Sustainability

This area covers sustainability-related studies with a focus on biomass production in connection with Bio-CCS. Bio-CCS and negative CO₂ emissions will be essential to achieving the goal of keeping the global temperature increase to below 2°C. At the same time, it is necessary to ensure that the implementation of technology is sustainable.