

CEN

- stands for “Center for Earth System Research and Sustainability at Universität Hamburg”.
- is engaged in climate, environmental, and earth system research.
- bundles expertise from 16 institutes and institutions of Universität Hamburg and is part of the local network KlimaCampus Hamburg.
- works interdisciplinary and therefore links the natural and social sciences. Research areas involved: Oceanography, Meteorology, Biology, Geophysics, Geology, Soil Science, Geography, Fisheries Science, Wood Science, Economics and Social Sciences, Historical Sciences, Communication Sciences, and Peace and Security Studies.
- supports young scientists. Teaching and research are closely linked and young scientists are actively involved in research.
- hosts the [CEN School SICSS](#) (School of Integrated Climate and Earth System Sciences), where master students, PhD students and post docs study and conduct research in climate and earth system sciences.
- is a central research center at Universität Hamburg and is located directly at the presidium.

SCIENTIFIC FOCUS

- What are the interactions between ocean, atmosphere, biosphere and geosphere?
- How has our Earth system changed and what must we expect in the future? How do environmental risks and climate change affect marine and terrestrial ecosystems?
- What social reactions are to be expected? How do energy hunger, intensive or extensive use of resources shape our society and our environment?

CEN RESEARCH TOPICS

EARTH SYSTEM DYNAMICS

- Causes and impacts of climatic changes in the earth system
- Energy flux as a communicator of earth system changes
- Element cycling at boundary layers of the earth system
- Impacts of sea level changes on coastal regions

SUSTAINABLE STRATEGIES AND SOCIAL DYNAMICS

- Marine ecosystem services and their management
- Urban areas in global change
- Energy landscapes
- Climate change and society

EMERGING ISSUES

- Soil resources in the environment and climate system
- Food transitions
- Climate and georisks

PROJECTS AT CEN

- CEN takes part in research networks and is a member in numerous national and international programs.
- In addition, a number of joint, scientific projects at national and international level are coordinated at CEN.
- A central large-scale project is the Cluster of Excellence [CLICCS](#) (Climate, Climatic Change, and Society). CLICCS will explore climate change with broad expertise and will investigate how the climate changes and how society changes with it, thereby feeding back on climate. The cluster is guided by the overarching question: Which climate futures are possible and which are plausible?

CONTACT CEN

Universität Hamburg
Center for Earth System Research
and Sustainability (CEN)

Bundesstraße 53
20146 Hamburg

E-Mail: cen@uni-hamburg.de
www.cen.uni-hamburg.de



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CENTER
FOR EARTH SYSTEM RESEARCH
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