



EUROPEAN
COMMISSION

European
Research Area

Research on Climate Change

European Research Framework Programme

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INTERNATIONAL CO-OPERATION IN THE 7TH FRAMEWORK PROGRAMME FOR EUROPEAN RESEARCH

The European climate research is research with a global scope.

The European research programme (FP7) is open to participation of all countries of the World.

Specific International co-operation actions are dedicated to developing countries and emerging economies. Research partners from these countries are also eligible for funding.

Here, we present a sample of projects from both FP7 and FP6.

“The climate change challenge requires global action and will continue to necessitate sustained significant support to international research. The European Union research activities are structuring the European Research Area (ERA) and facilitate global cooperation on climate research. Since 2003, nearly 550 million € supported more than 130 EC research projects which contributed to knowledge on the climate system, impacts of climate change and the identification of options for mitigation and adaptation. In addition, other research supported by the EC in the areas of environment, energy, transport, agriculture and fisheries are instrumental to the development and implementation of mitigation and adaptation options including technological developments. The diversity of European research confirms that climate change is an encompassing matter touching on nearly every dimension of our society”



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(José Manuel Silva Rodríguez, Director-General, Directorate-General for Research)

MODELLING CLIMATE CHANGE TO REDUCE UNCERTAINTIES

Climate projections need to be more accurate. In particular, better earth systems models (ESMs) will assist in reducing uncertainty in the projection of climate change in the next decades.

For more details on specific projects, see:
ENSEMBLES (<http://www.ensembles-eu.org>);
COMBINE (<http://www.combine-project.eu/>);
IS-ENES (<http://www.enes.org/IS-ENES.429.0.html>).



INCREASED KNOWLEDGE ON IMPACTS OF CLIMATE CHANGE

EU research has a strong focus on climate change impacts. The melting of continental ice (glaciers, ice caps and ice sheets), ocean acidification, change in ecosystems are some examples of impacts addressed by projects in FP7.



For more details on specific projects, see:

Ice2Sea (<http://www.ice2sea.eu>)

&

EPOCA (<http://www.epoca-project.eu>);

The impact on human health resulting from changing patterns of distribution of vector-borne infectious diseases is being studied in EDEN (<http://www.eden-fp6project.net/>).



EARTH OBSERVATION AND MONITORING

Europe is a leading player in the advancement of earth observation technologies and related environmental applications.

The European Commission is member and co-chair of the intergovernmental global initiative GEO (Group of Earth Observation) which is to build by 2015 the Global Earth Observation System of Systems. European remote-sensing satellites cover all of the Earth's climatic zones, while European ground-, air- and ocean-based monitoring devices serve users by providing high-quality observation data for subjects as diverse as urban planning, adaptation to climate change, disaster reduction, disease control and humanitarian relief. Furthermore, projects are funded to monitor changes in the Arctic regions.



For more details on specific projects, see:

GEOMON (<http://geomon.ipsl.jussieu.fr>);

EURO ARGO (<http://www.ifremer.fr/euro-argo>) & THOR (<http://www.eu-thor.eu>);

ENERGEO & COCOS (<http://www.COCOS-carbon.org>).



ADAPTATION STRATEGIES IN THE WATER SECTOR

Linked to enhanced knowledge on climate change impacts on water (both qualitatively and quantitatively), adaptation strategies will remain a key element in the policy debate in the water sector, partly because we already see an emerging need for climate resilience, especially in developing countries, and partly because we can expect the need for adaptation to escalate in the future.



For more details on specific projects, see:
HIGHNOON (<http://www.eu-highnoon.org>);
CLIMATEWATER (<http://www.climatewater.org>);
WATCH (<http://www.eu-watch.org>);
MACIS (<http://www.macis-project.net>);
NEWATER (<http://www.newater.info/>).

CLIMATE CHANGE IMPACTS OF TRANSPORT SYSTEMS

The European transport sector is growing rapidly, with far-reaching implications for citizens and the environment.

The European Union is committed to reducing environmental and noise pollution, including reducing greenhouse gases through technological and socio-economic means.

For more details on specific projects, see:
QUANTIFY (<http://www.pa.op.dlr.de/quantify>).

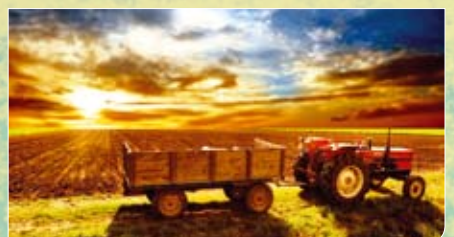


CLIMATE CHANGE AND AGRICULTURE

The EU is cooperating in the Standing Committee for Agricultural Research with European governments to develop a common European research approach on climate change mitigation and adaptation in agriculture. With the right information and incentives European land managers could reduce the emissions of greenhouse gases.

The projects PICCMAT (<http://www.climatechangeintelligence.baastel.be/piccmat/index.php>) and ADAGIO (<http://www.adagio-eu.org/>) provide an assessment and policy recommendations.

The CC-TAME project (<http://www.cctame.eu/>) concentrates on assessing the impacts of agricultural, climate, energy, forestry and other associated land-use policies considering the resulting feed-backs on the climate system in the European Union.



THE ECONOMICS OF CLIMATE CHANGE

Research on the economics of climate change such as costs of impacts, mitigation and adaptation is a priority notably for informing the policy process.

For more details on specific projects, see:
CLIMATECOST (<http://www.climatecost.cc>);
ADAM (<http://www.adamproject.eu>);
TOCSIN (<http://tocsin.epfl.ch/>) &
CLIMATE FOR CULTURE (www.climateforculture.eu).



REDUCING EMISSIONS FROM DEFORESTATION AND DEGRADATION (REDD)



Tropical forests continue to disappear at an alarming rate. The destruction of world forests is releasing about two billion tonnes of carbon every year in the atmosphere, most of the losses coming from the tropical forests of Asia, South America, and Africa. A substantial body of evidence suggests that action to prevent further deforestation would be a highly cost-effective way of reducing emissions.



For more details on specific projects, see:
REDD-ALERT (<http://www.redd-alert.eu>).

ENERGY, TECHNOLOGY AND CLIMATE CHANGE

The objective of energy research under FP7 (which benefits from a budget of 2.35 billion € over the period 2007-2013) is to stimulate the development and deployment of a broad portfolio of clean, low carbon and affordable technologies. This will be essential for transforming current supply into a more sustainable, competitive and secure system.

For more details on specific projects, see:
(http://ec.europa.eu/research/energy/index_en.htm).

Biotechnology offers promising tools for mitigation. Research in this field aims at biomass and bio products as an alternative to fossil fuels with substantial environmental benefits; energy savings and reductions in greenhouse gas emissions.

For more details on specific projects, see:
(ftp://ftp.cordis.europa.eu/pub/fp7/kbbe/docs/fiche-biotechnology-finale-1_en.pdf).



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FOR MORE INFORMATION

ON CLIMATE RESEARCH PROJECTS, SEE:

[HTTP://EC.EUROPA.EU/RESEARCH/ENVIRONMENT/PDF/COP-15.PDF](http://ec.europa.eu/research/environment/pdf/cop-15.pdf)

OR FIND

A SPECIFIC PROJECT ON CORDIS WEB SITES:

FP7: [HTTP://CORDIS.EUROPA.EU/FP7/PROJECTS_EN.HTML](http://cordis.europa.eu/fp7/projects_en.html)

FP6: [HTTP://CORDIS.EUROPA.EU/FP6/PROJECTS.HTM](http://cordis.europa.eu/fp6/projects.htm)

FOR MORE INFORMATION

ON EC RESEARCH:

[HTTP://EC.EUROPA.EU/RESEARCH/](http://ec.europa.eu/research/)

