

CHINA-EU COOPERATION IN EC FRAMEWORK PROGRAMMES ON ENVIRONMENT

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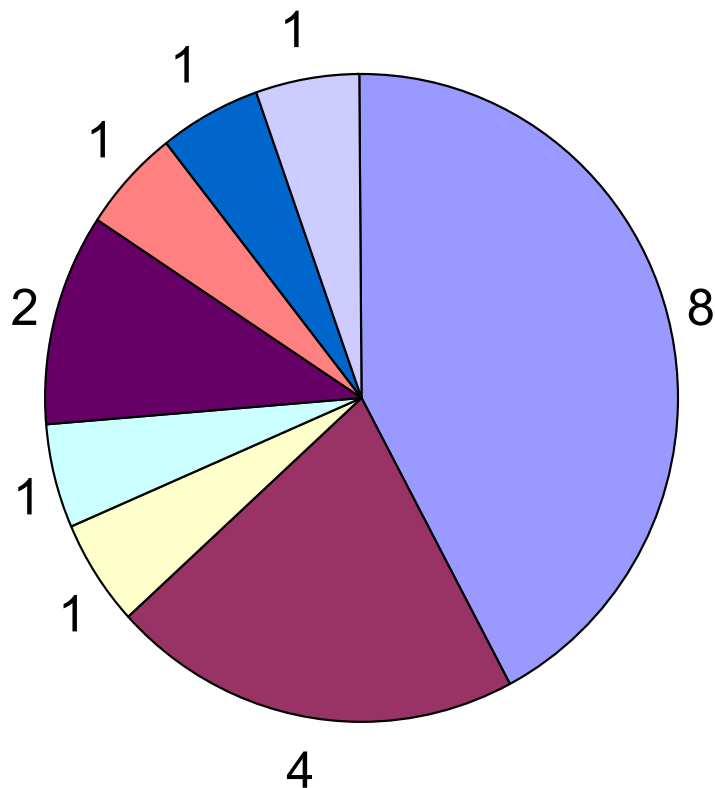
OBJECTIVES

- Overview ongoing research on environment under the 6th Framework Programme (FP6)
- Possibilities for Future Cooperation under the 7th Framework Programme (FP7)

ONGOING CHINA-EU COOPERATION FP6 GLOBAL CHANGE AND ECOSYSTEMS

19 projects (ongoing +being negotiated)	EU	China	%
Total Costs (million €)	186.3	3.9	2,1
EU contribution (million €)	126.2	2.6	2,1

COOPERATION GLOBAL CHANGE AND ENVIRONMENT : PROJECTS BY AREA



- Climate change, air pollution
- Water cycle including soil
- Biodiversity and ecosystems
- Desertification/disasters
- Sustainable land management
- Forecasting/observation
- Complementary research
- Sustainable development

CHINESE PARTICIPATION CLIMATE CHANGE AND AIR POLLUTION (1)

- **ADAM**: Adaptation and Mitigation Strategies: (Chinese Academy of Sciences, Regional Center for Temperate East Asia)
- **DYNAMITE**: Understanding the Dynamics of the Coupled Climate System (Chinese Academy of Sciences, Inst. Atmospheric Physics)
- **EUCAARI**: European Project on Aerosol Cloud Climate and AirQuality (Centre for Atmosphere Watch and Services)
- **GAINS-ASIA**: Greenhouse Gas and Air Pollution Interactions and Synergies – with special emphasis on South-East and East Asia (Energy Research Institute)

- **NITROEUROPE**: The nitrogen cycle and its influence on the European greenhouse gas balance. (Chinese Academy of Sciences, Inst. Atmospheric Physics)
- **QUANTIFY TTC**: Quantify Extension (Center for Sustainable Transportation, China Academy of Transportation Sciences, Ministry of Communications)
- **SOGE-A**: System observation of halogenated Greenhouse Gases in Europe and Globally (Chinese Academy of Meteorological Science)
- **TOCSIN**: Technology-Oriented Cooperation and Strategies in India and China: Reinforcing EU dialogue with Developing Countries on Climate Change Mitigation (Tsinghua University and Hong Kong Baptist University).

CHINESE PARTICIPATION WATER CYCLE

- **BRAHMATWINN**: Twinning European and South Asian river basins to enhance capacity and implement adaptive integrated water resources management approaches (Center for Agricultural Resources Research, Chinese Academy of Sciences)
- **HYDRATE**: Hydrometeorological data resources and technologies for effective flash flood forecasting (Wuhan University)
- **RECLAIM WATER**: Water reclamation technologies for safe artificial groundwater recharge (Tsinghua University)
- **SWITCH**: Sustainable Water management Improves Tomorrow's Cities'Health (Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Science)

CHINA PARTICIPATION OTHER AREAS OF ENVIRONMENT PROGRAMME

- **ALARM TTC:**
Assessing Large-scale environmental Risks with tested Methods (Institute of Zoology, Chinese Academy of Sciences)
- **DESIRE:** Desertification mitigation and remediation of land
(Institute of Soil and Water Conservation, Chinese Academy of Sciences and Ministry of Water Resources)
- **LUPIS:** Land Use Policies and Sustainable Development in Developing Countries
(Nanjing Agricultural University)
- **SENSOR TTC:** Sustainability Impact Assessment: Tools for Environmental, Social and Economic Effects of Multifunctional Land Use in European Regions – Extension (Institute of Geographic Sciences and Natural Resources Research Chinese Academy of Sciences)
- **ECOOP:** European Coastal-shelf sea: Operational observing and forecasting system (Institute of Atmospheric Physics)
- **OSIRIS:** Optimized Strategies for Risk assessment of chemicals based on Intelligent testing (Intertek Testing Services Ltd)
- **EXIOPOL:** A New Environmental Accounting Framework Using Externality Data and Input-Output Tools for Policy Analysis (Chinese Academy of Social Sciences)

FP7: ENVIRONMENT (including CLIMATE CHANGE)

- **CLIMATE CHANGE, POLLUTION AND RISKS**
- **SUSTAINABLE MANAGEMENT OF RESOURCES**
- **ENVIRONMENTAL TECHNOLOGIES**
- **EARTH OBSERVATION AND ASSESSMENT TOOLS**



CLIMATE CHANGE, POLLUTION AND RISKS

Pressures on environment and climate

Environment and Health

Natural hazards

SUSTAINABLE MANAGEMENT OF RESOURCES

- Management of natural and man-made resources
- Management of marine environment

ENVIRONMENTAL TECHNOLOGIES

- ❑ Environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of natural and man-made environment
- ❑ Protection and enhancement of cultural heritage
- ❑ Technology assessment, verification and testing

EARTH OBSERVATION AND ASSESSMENT TOOLS

- ❑ Earth and ocean observation systems and monitoring systems
- ❑ Forecasting methods and assessment tools

FP7 2007 – 2013

INTERNATIONAL COOPERATION ACTIVITIES : 2 MECHANISMS

- 1. Opening all topics of calls for international co-operation and encouraging participation in various topics across the Theme**
- 2. Targeted Specific International co-operation actions across all activities**

POSSIBLE TOPICS OF FP7 TOPICS ENCOURAGING INTERNATIONAL COOPERATION

- **Megacities, Air quality and Climate**
- **Climate Change impacts and adaptation strategies**
- **Full costs of Climate Change**
- **Environmental factors and their impact on Reproduction and Development**
- **Temporary water bodies management**
- **Use of natural resources: the impact on biodiversity, ecosystems, goods and services**
- **...**

POSSIBLE TOPICS OF FP7 SPECIFIC INTERNATIONAL COOPERATION ACTIONS

- **Climate change impacts Parana-Plata river South America**
- **Assessing and managing volcanic threat**
- **River basin twinning initiatives to implement EU water initiatives**
- **Biodiversity values, sustainable use and livelihoods**
- **Waste treatment technologies and services for developing countries**
- **....**

CLIMATE CHANGE, POLLUTION AND RISKS

Pressures on environment and climate

Environment and Health

Natural hazards

PRESSURES ON ENVIRONMENT AND CLIMATE

- Earth system
- **Adaptation and mitigation measures**
- Advanced models to assess changes, impacts, critical thresholds, future climate
- **Changes in atmospheric composition**
- Climate change natural and socio-economic impacts
- **Changes and impacts in the water cycle**
- Carbon cycle and greenhouse gases budgets
- **Pressures on environmental quality and on climate from pollution**
- Impacts on biodiversity and ecosystems
- **Consideration of feedbacks and abrupt changes**
- Public awareness

Overview

Possibilities 7th Framework Programme:

- **Climate Change** :
 - Workshop on the second half of 2007 on common EU and CHINA research priorities for CLIMATE CHANGE
 - Identification of a topic of common interest for the third call for proposals
- **Environment** :
 - Topics open for international partners
 - Dedicated topics

INFORMATION

More information on European Commission environmental research: <http://www.cordis.lu/sustdev/environment/>

Information on Sixth Framework Programme (FP6): europa.eu.int/comm/research/nfp.html

Information on calls for proposals on environmental research: <http://www.cordis.lu/sustdev/environment/calls.htm>

Future research

http://europa.eu.int/comm/research/future/index_en.html

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