



Brazilian Science and Technology Research on Climate Change at a Glance



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Ministry of Science and Technology

General Coordination on Global Climate Change

**Executive Secretary of the Interministerial Commission
on Global Climate Change**



D in Brazil

- CNPQ (National Council for Scientific and Technological Development)
 - Annual Budget (US\$ 1.5 billion in the last 5 years and increasing):
 - 2001 – US\$ 262 millions
 - 2002 – US\$ 266 millions
 - 2003 – US\$ 289 millions
 - 2004 – US\$ 311 millions
 - 2005 – US\$ 335 millions
 - Support for 51,753 scholarships in Brazil and Abroad
 - MsD - 7,256 (only in Brazil)
 - PhD - 6,863 (Brazil) and 181 (Abroad)
 - Several researches/thesis related to Climate Change
 - Bottom-up approach
- INPE (National Institute for Space Research)
 - Annual Budget – US\$ 80,5 millions
 - Several researches/thesis related to Climate Change specially on deforestation issues in Amazonia
 - Budget for Earth Observation satellites images – US\$ 2 millions (CBERS data and others)
 - MAPSAR (Multi-application Purpose Synthetic Aperture Radar) initiative (DLR)

D in Brazil

- 16 Sectoral Funds for R&D (Annual Budget US\$ 180 millions)
 - S&T Oil – US\$ 36 millions
 - To stimulate the innovation of oil sector and natural gas productive chain.
 - S&T Hydro – US\$ 18 millions
 - Capacity building of human resources and products development to improve the use of hydro resources.
 - S&T Energy – US\$ 31 millions
 - Stimulate the research and innovation turn to new alternatives of energy generation with low costs and better quality.
 - S&T Amazonia – US\$ 8,6 millions
 - To foment research activities and the development in Amazon Region.
 - S&T Transports – US\$ 86,286
 - To improve the quality, costs reduction and competitiveness increase of road transportation in Brazil.
 - Green and Yellow – US\$ 87 millions
 - To stimulate the implementation of scientific research projects and technological cooperation between universities, researches centers and the productive sector.

(Average US\$ in 2005 = 2.40)



D in Brazil

- LBA (Large Scale Biosphere Atmosphere Experiment in Amazonia)
 - Objective:
 - LBA is an international research initiative coordinated by Brazil being implemented since 1998
 - LBA to create new knowledge for the understanding of the climatological, ecological, biogeochemical and hydrological functioning of Amazonia and the impacts of land use change in the local regional and global climate
 - Annual Budget (2005) – US\$ 2,7 millions
 - 120 Projects
 - Brazilian 20
 - Brazil/USA 81 (Amazonian Countries 4)
 - Brazil/EU 18 (Amazonian Countries 2)
 - Brazil/USA/EU 1
- LBA Indicators from 1998 to January 2006
 - Scholarships 932 (MSc 297; PhD 241)
 - Papers, Monographs and Thesis 1142 (MSc 166; PhD 144)
 - Researchers 1803 (Brazilians 1054; Foreigners 749)



Priority in Climate Change

Top down



- MCT General Coordination on Global Climate Change
 - Annual budget US\$ 600,000 per year
 - National Communication – 150 institutions and 700 experts
- Inventory Preparation
 - Development of National Emission Factors
 - Livestock (Beef and Dairy Cattle)
 - Rice (Irrigated/Flooded lands in the South of Brazil)
 - Deforestation (Complete monitoring since 1978)
 - 4 Layers Cells (Soil, Vegetation, Municipalities, Land Use)
 - Methane Emissions from 10 Reservoirs in different biomes and latitudes (2 campaigns in 2 years)
- Vulnerability and Adaptation
 - Coastal Zones
 - Coral Bleaching
 - Vegetation under 2xCO₂ (Jatobá (*Hymenaea courbaril* - stinking toe) and Sugar Cane)
 - Disease propagation (Dengue, Malaria, etc)
 - Precipitation (Hydro Management)



Priority in Climate Change

- Climate Change Modeling
 - Downscaling of Hadley Centre Model and Max Planck Institute Models
 - Use of ETA/MACRO Model of INPE/CPTEC
 - 10% of Supercomputer Time (.768 T Flops)
 - 8 T Bytes Data Storage Capacity
- Renewable Energy
 - Flex Fuel Car Technology (Gasohol/Ethanol and Gasohol/Ethanol/Natural Gas)
 - Sugar Cane/Ethanol - Industrial and Agricultural Improvement of Productivity (7000 l/ha)
 - Fuel Cells using Ethanol
 - Airplane for Agriculture Use burning Ethanol (EMBRAER)
 - Biodiesel from Castor Seed Oil (Ethanol Route)
 - Cogeneration using Bagasse, LFG and Methane from Manure in Pig Farms (CDM)



http://www.mct.gov.br

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Endereço: http://www.mct.gov.br/index.php/content/view/full/3881.html

Google Search

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O MCT INDICADORES LEGISLAÇÃO FONTES DE FINANCIAMENTO UNIDADES DE PESQUISA

ORDEM E BEM-ESTAR

MUDANÇA DE CLIMA

Seções

Comissão Interministerial

- Projetos Submetidos à Comissão Interministerial no âmbito do Mecanismo de Desenvolvimento Limpo
- Procedimentos para Submissão de Projeto de MDL à Comissão Interministerial de Mudanças Globais de Clima
- Decreto de 10 de janeiro de 2006
- Resolução nº 2 de 10 de agosto de 2005
- Circular do Banco Central nº 3291 de 08.09.2005

Protocolo de Quioto

- Status da Ratificação do Protocolo de Quioto pelo Brasil
- Elementos propostos pelo Brasil para o Protocolo

Destaque

Convenção sobre Mudança do Clima

...“A Convenção sobre Mudança do Clima enfoca um problema especialmente inquietante: nós estamos mudando a forma com que a energia solar interage com a atmosfera e escapa dela e corremos o risco de alterar o clima global. Entre as consequências possíveis, estão um aumento na temperatura média da superfície da Terra e mudanças nos padrões climáticos mundiais...”

Publicações

Status de Ratificação do Protocolo de Quioto

Atualização dos Países que Ratificaram o Protocolo de Quioto até o dia 28/02/2006.

Eventos

Reunião da CIGMC

em 24 de outubro de 2006

Áreas de Atuação

Mudanças Climáticas

- Ciência da Mudança do Clima
- Convenção-Quadro das Nações Unidas
- O Brasil e a Convenção
- Comunicação Nacional
- Negociações
- Protocolo de Quioto
- Mecanismo de Desenvolvimento Limpo
- Programa Mudanças Climáticas
- Comissão Interministerial de Mudança Global do Clima
- Fórum de Liderança em Sequestro de Carbono (CSLF)
- Fórum Brasileiro de Mudanças Climáticas
- Coordenação Geral de Mudanças Globais de Clima

Internet

Iniciar

4 Internet Explorer

Relatório de Viagem ...

Adaptación Gestional ...

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