

GOVERNMENT OF BRAZIL
Interministerial Committee on Climate Change
Decree No. 6263 of November 21, 2007

EXECUTIVE SUMMARY

NATIONAL PLAN ON CLIMATE CHANGE

BRAZIL

Brasília
December 2008

Casa Civil da Presidência da República

Secretaria de Assuntos Estratégicos da Presidência da República

Ministério da Agricultura, Pecuária e Abastecimento

Ministério da Ciência e Tecnologia

Ministério da Defesa

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Ministério do Meio Ambiente

Ministério do Planejamento, Orçamento e Gestão

Ministério dos Transportes

Fórum Brasileiro de Mudanças Climáticas



PRESENTATION

Global climate change has been receiving a great deal of attention in the agenda of governments, private sector and society as a whole. Although it is still marked by controversy, global warming due to human activities is widely acknowledged by the international scientific community and requires political will in order to mitigate its effects.

Brazil has done a lot to face the problem. We have become a major worldwide reference in terms of finding solutions to meet this enormous challenge. Take, for instance, our sources of energy. We are committed to do more, as part of a global effort to deal with climate change.

In that sense, Brazil is working both internally and in the international negotiations on the issue. We wish to find viable, fair and equitable responses. Our main concern is that the poor, who have done nothing to generate the problem, suffer even more the consequences of unsustainable patterns of production and consumption of richer countries.

The Brazilian National Plan on Climate Change is an important milestone for the integration and harmonization of public policies, following the general guidelines of the National Policy sent to the National Congress this year. The Plan is based on the work of the Interministerial Committee on Climate Change and its Executive Group, established a year ago to fulfill that purpose, in collaboration with other fora and institutions such as the Brazilian Forum on Climate Change, Interministerial Commission on Global Climate Change, the III National Conference on the Environment and the State Fora on Climate Change, and civil society organizations.

The goals set out in this plan are audacious, if compared with other countries. The potential of this Plan to the reduction of emissions of greenhouse gases is one of the largest – if not the largest – among all nations.

While we recognize this Plan as an important milestone to enhance the design and implementation of public policies in the country, we are committed to regularly evaluate and improve it in an inclusive manner. This is the most appropriate way to integrate, harmonize, enhance and strengthen the efforts and commitments of governments and civil society focused on building a better future for Brazilians and humankind as a whole.

LUIZ INÁCIO LULA DA SILVA
President of the Federative Republic of Brazil



PRINCIPLES

Global climate change is one of the most significant challenges of the present day. The National Climate Change Plan intends to encourage the undertaking of actions in Brazil that can collaborate with global attempts to face the problem and create internal conditions to confront its consequences.

Global warming due to human interference, despite uncertainty about its magnitude, is now a fact accepted by the scientific community. The Fourth Report of the Intergovernmental Panel of Climate Change (IPCC), published in 2007, contributed to this acceptance, which was reinforced by subsequent scientific research. Since it is global, the problem unites everyone in the search for paths and solutions that can allow our civilization to continue to prosper in its future trajectory.

Climate change is the result of the accumulation of greenhouse gases in the atmosphere, a process that has been going on since the industrial revolution. Countries have different historical responsibilities for the phenomenon depending on the volume of their anthropogenic emissions. This has contributed to the current definition of common but differentiated responsibilities, which guide on the one hand the obligations of developed countries and on the other hand, developing countries under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC). Brazil is responsible for harmonizing its actions in this field with socio-economic growth processes in the name of sustainable development.

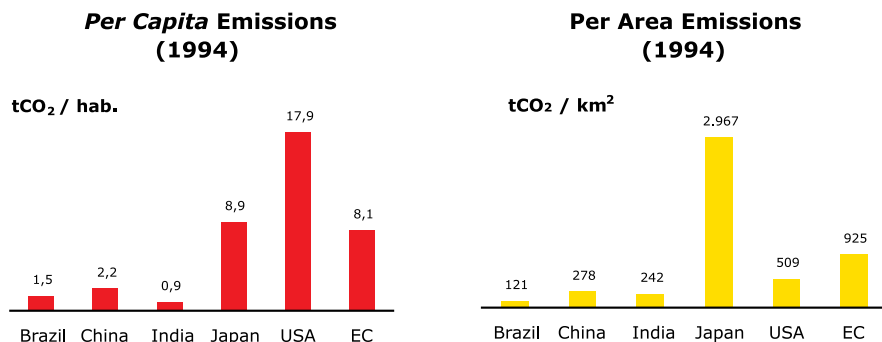
What the real socio-economic possibilities of different countries are individually and what is their disposition to face the causes and consequences of the problem are fundamental questions at present. Each country has to try to find its responses to organize its actions.

In this context, even though it does not have quantified obligations to reduce emissions under the UNFCCC, since the country does not have a significant historical responsibility for the accumulation of greenhouse gases in the atmosphere, Brazil has been trying to find a

path where the attempts to mitigate climate change are effective and the guarantee of the welfare of citizens is the principal variable.

With this dual purpose the country has been searching for solutions and levels of development in conjunction with numerous actions that are both directly and indirectly favorable to the climate.

Some indicators, such as emissions *per capita* and per area, as highlighted in the following charts, show the reduced current contribution of the country to the problem in comparison with other developed and emerging economies in the world.



Source: prepared based on data obtained in the Communications of the Parties to the UNFCCC

As the indicators show, Brazil has played its part in the mitigation of climate change and is determined and engaged to do more, taking full advantage of its national capacity under the auspices of a global effort to combat climate change. An adequate flow of financing, technological transfer and capacity building, resulting from international cooperation, will be important elements to help fully meet the objectives stipulated in the National Plan.

Brazil will not subordinate its willingness to act to the existence of international cooperation. This cooperation, however, will strengthen national capacity. It is worth emphasizing in this context that the



provision of financial and technological support to developing countries is a commitment of developed countries stipulated in the UNFCCC.

However, what does Brazil intend to do in the near future? The answers and the possibilities are numerous. Climate change is a strategic issue for both the present and the future of national development. It is not just a question of productive and technological choices, but also the preservation and, whenever possible, the increase in the competitiveness of the economy and of the Brazilian products in a globalized world. Choices are made to the extent that society recognizes the problem, understands the dynamic of the multiple forces that cause it and sees itself as a part of the solution as well as the beneficiary of the decisions taken.

As a result, Brazil's efforts are based on the commitment to reduce social inequality and to increase income by seeking an economic dynamic with a low emissions trajectory, not repeating the pattern and the standards of the countries that have already industrialized.

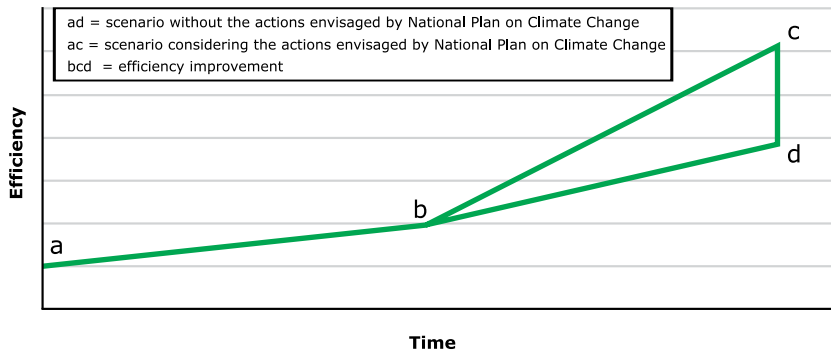
There are two challenges: the difficult task of significantly reducing emissions from land use change and the requirement of continuously increasing efficiency in the use of the country's natural resources.

The way these challenges are dealt with will be based on the coordinated, linked, continuous and synergic efforts for which the National Climate Change Plan was designed. The Plan defines actions and measures aimed at mitigation and adaptation to climate change, and has the following specific objectives:

1. Stimulate efficiency increase in a constant search for better practices in the economic sectors

For the development of the country to take place on a sustainable basis, government actions for the productive sector have to increasingly aim at a more efficient use of natural, scientific, technological and human resources. Stimulate a better performance, based on best practices in each of the specific sectors, will be a way of seeking to reduce the carbon content of Brazilian GDP, improve the competitiveness of Brazilian products in the international market, increase income and generate economic surplus that can lead to better levels of social welfare.

Improvement of Efficiency in the Economic Sectors



Furthermore, efforts are also required in the area of energy efficiency and energy conservation, as a way of reducing consumption, preventing additional electricity generation and reducing the emissions of greenhouse gases. The implementation of a National Energy Efficiency Policy will represent a reduction in electricity consumption of around 10% in 2030, equivalent to savings of 106 TWh, which can avoid emissions of 30 million tons of CO₂ the same year, in a conservative estimate.



Main Actions

- **Energy Efficiency** – implementation of the *National Policy for Energy Efficiency* that will result in a gradual energy saving up to 106 TWh/year to be reached in 2030, avoiding emissions of around 30 million tons of CO₂ in that year.
- **Charcoal** – consumption increase of sustainable *charcoal to replace coal* in steel plants, mainly through the encouragement of forestation in degraded areas.
- **Fridges** – *replacement of one million old fridges per year*, for ten years, with the collection of three million tCO₂eq/year of CFCs (gases that also deplete the ozone layer).
- **Solar Heating** – Encouragement of the use of water *solar power heating systems*, *reducing* electricity consumption in 2,200 GWh per year by 2015.
- **Replacement of refrigerant gases** – it is estimated that emissions of *1,078 billion tCO₂eq of HCFCs will be avoided* in the period 2008-2040. Part of this will be offset due to emissions of substitute gases.
- **Urban Solid Waste** – *20% increase* in recycling by 2015.
- **Sugarcane** – *phasing out of the use of fire for clearing and cutting of sugarcane* in areas where harvesting mechanization can take place. Nowadays, mechanization in these areas needs to be adopted in at least 25% of each agro-industrial unit, for each five-year period, as determined by Decree 2.661/98. This percentage will be revised in order to reduce the area under this practice. Agreements with the productive sector and cooperation with states where this practice still occurs need to be established as well as the implementation of a monitoring system.
- **Agricultural and cattle raising integrated systems** – *incentives for sustainable practices* concerned with: the recovering of a large part of the current 100 million ha of degraded pasture; carbon sinks

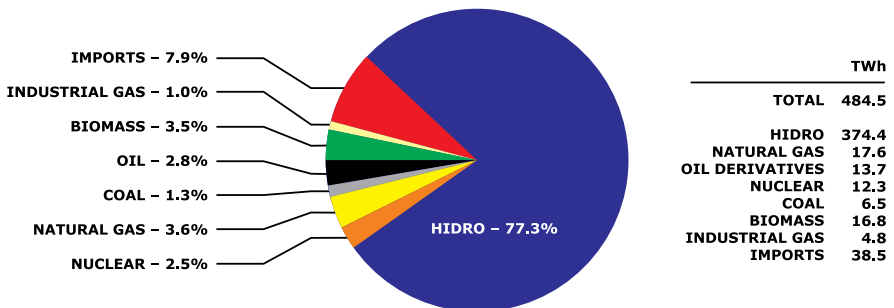
via crop-livestock integration, agro-forestry or; adoption of zero-tillage system and reduction in the use of nitrogenous fertilizers; and the organic enrichment of pasture to reduce methane emissions by cattle raising.

2. Keep the high share of renewable energy in the electric matrix, preserving the important position Brazil has always held in the international scenario

In comparison with other countries the Brazilian energy sector is relatively clean and one of its greatest challenges is to sustain this position, due to the growing demand for electricity. At present 45.8% of the energy matrix consists of renewable energy, while the global average is 12.9 %.

In relation to the electric matrix this percentage is even more significant, reaching 89.0%. The reference scenario in the National Energy Plan (PNE 2030) also stipulates that the expansion of electricity supply between 2005 and 2030 will include 95,000 MW from hydropower plants. Nevertheless, growing demand and the prospect of the long term exhaustion of hydroelectric potential, in addition to questions of socio-environmental nature, require other sources to be part of this expansion, notwithstanding the priority that hydropower deserves in the expansion of the electric system.

Electric Energy Domestic Supply 2007





Brazil has many alternatives for the expansion of electricity supply, free from CO₂ emissions, in addition to hydro-electricity. Among them, renewables should be highlighted – cogeneration with sugarcane bagasse and other forms of biomass, wind and solar – and other non-conventional sources such as wastes. In the case of cogeneration, it is estimated that electricity supply from this source will reach 136 TWh (11.4%) of the total supply in the country, in 2030.

The attempt to reduce energy wastage is also important. Non-technical losses of energy average 22,000 GWh per year. It is intended to reduce this amount in the next ten years, a rate of 1,000 GWh per year. This will represent a reduction in energy wastage of 400 GWh per year. On average approximately 25% (100 GWh per year) of this energy will no longer be produced by thermo power plants.

Therefore, governmental efforts will be made to ensure that the socio-environmental variable, referring to climate change, is introduced to a greater extent into the process of planning the expansion of electricity supply so that the share of renewable sources can be kept high.

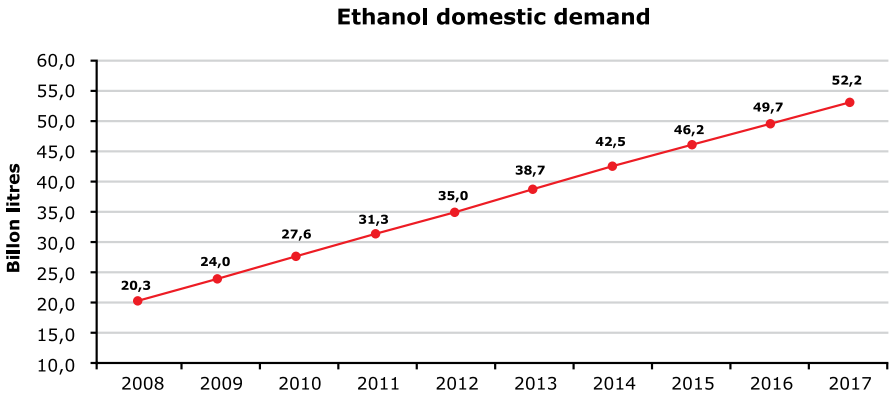
Main Actions

- **Cogeneration** – increase electricity supply from cogeneration, mainly from sugarcane bagasse, to 11.4% of the total supply in the country, in 2030, corresponding to 136 TWh.
- **Reduction of non-technical losses in the electricity distribution** at a rate of 1,000 GWh per year over the next ten years, which currently are around 22,000 GWh per year. This will represent a reduction in energy wastage of 400 GWh per year. On average, around 25% (100 GWh per year) of this energy will no longer be produced by thermo power plants.
- **Hydroelectricity** – 34,460 MW from new hydropower plants to be added to the system in accordance with the schedule of works of the Ten Year Energy Plan (2007-2016).
- **Energy from wind and sugarcane bagasse** – Increasing the share of these sources in the electric matrix through specific auctions

of renewable energy. More than 7,000 MW of renewable sources will be implemented by 2010 in accordance with the results of the *Program of Incentives for Alternative Sources of Electric Energy – PROINFA* and the auctions already carried out.

- **Photovoltaic Solar Energy** – Seeking for the expansion of the national photovoltaic industry and the use of this energy source in systems that are isolated and connected to the grid.

3. Encourage the sustainable increase in the share of biofuels in the national transport matrix and also work towards the structuring of an international market of sustainable biofuels



Brazilian biofuels, such as ethanol, and to a lesser extent biodiesel, are uncontested sources of wealth for the country, especially in the countryside. Their use replaces fossil sources that have a great impact on the climate and on the quality of the air that we breathe.

The encouragement of the increasing replacement of fossil sources in the Brazilian transport sector may allow an annual average increase in



the use of ethanol of 11% in the coming years. In the case of biodiesel the government has announced its intention to anticipate from 2013 to 2010 the obligation to add 5% of this biofuel to diesel, which could result in an increase of more than 60% of its share in relation to its current level of consumption in the Brazilian transport matrix.

At the same time technical cooperation with other countries with agricultural potential for sugarcane crop, aims to contribute to expanding the supply of ethanol in the international market, which will make it more stable and balanced, thereby allowing the sustainable expansion of demand. In this way the country will contribute to the mitigation of greenhouse gases beyond its frontiers and will provide countries with predominantly agricultural economies with the opportunity to increase their export revenues.

Main Actions

- **Ethanol** – *encourages industry* to achieve an average annual consumption increase of 11% in the next ten years. Produced from crops raised in areas defined in the Sugarcane Zoning Program, currently being implemented, it should prevent the emission of 508 million tCO₂ during the period.
- **Biodiesel** – *ongoing studies* to anticipate from 2013 to 2010 the obligation to add 5% to diesel.
- **Agro-energy** – *implementation of the National Agro-Energy Plan*, currently being planned, with the aim of carrying out research, development, innovation and the transfer of technology to guarantee agro-energy chains sustainability and competitiveness.
- **Stimulates an international ethanol market** – *technical cooperation* with other countries with a high potential for growing sugarcane to expand the offer of ethanol, making it more stable and balanced.

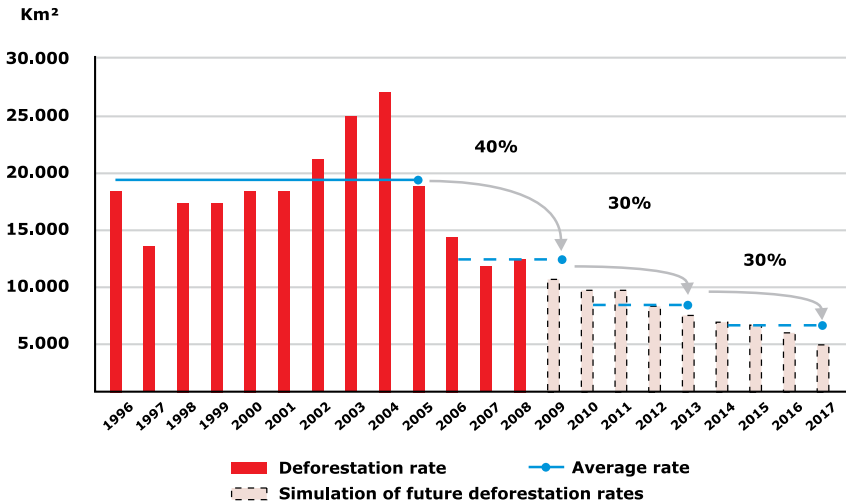
Objectives 4 and 5 are complementary.

4. Seek for sustained reduction deforestation rates, in all Brazilian biomas, in order to reach zero illegal deforestation

Specification of the Objective: Reduction of 40% in the average deforestation rate by 2006-2009 period in relation to the average rate of the ten years reference period used in the Amazon Fund (1996-2005). For each of the next two periods of four years, reach 30% of extra reduction, in relation to the previous period.

In the case of the Amazon bioma, achieving this specific objective can avoid emissions of around 4.8 billion tons of carbon dioxide between 2006 and 2017, considering a biomass carbon stock of 100 tC/ha. This value will be reevaluated after the completion of the carbon stocks inventory, to be supported by the National Forest Inventory.

Trends in deforestation rate in the Amazon





Necessary Condition: existence of national and international resources, both new and additional, including those obtained by the Amazon Fund, in order to strengthen environmental enforcement, and make sustainable the economic activities taking place in the forest region.

There are numerous variables to be controlled to reduce deforestation, which hinders the attaining of this objective. Despite constant monitoring and control, the demand for products that compete with the forest and even for the timber produced from the forest itself oscillates over time. As a result, these efforts can sometimes be quite satisfactory and at other times be completely insufficient.

What it is sought to obtain from the adoption of the measures stipulated in the Plan is to achieve a consistent reduction in the four-yearly deforestation rate. The objective is to reduce deforestation by 40% between 2006 and 2009 in relation to the ten year reference period of the Amazon Fund (1996-2005), and by a further 30% in each of the two following periods of four years in relation to the previous four years period. Combating deforestation and providing incentives for the economic adaption of the forest region require a large amount of resources. Achieving these reductions will depend on national and international resources, including those obtained by the Amazon Fund, both new and additional, at levels corresponding to the dimension of the problem.

This is a challenging task that will require, from the government, a strategy involving more than traditional monitoring and surveillance actions. In this way, the Federal Government is making great efforts as can be seen in the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon Region (*Prevenção e Controle do Desmatamento na Amazônia Legal - PPCDAM*), which resulted in a reduction of 59% in the annual deforestation rate in this biome for three consecutive years - 2004-2007. Although the central thematic areas in the PPCDAM are land and territorial organization, monitoring and control, and incentives for sustainable productive activities, the latter activity in particular should be stressed, as stipulated in the guidelines for the Sustainable Amazon Plan (*Plano Amazônia Sustentável - PAS*). PPCDAM will be extended to other Brazilian biomas through

the preparation of similar plans adapted to the particularities of each bioma with the involvement of states, municipalities, civil society and the productive sector.

This will involve the implementation of the Brazilian biomas satellite monitoring programs, aimed at quantifying deforestation and providing the basis for illegal deforestation combat and for prevention actions in these biomas.

Main Actions

- **Implementation of the National Public Forests Register (*Cadastro Nacional de Florestas Públicas – CNFP*), created by the Brazilian Forestry Service** – identification of public forests to be protected, preserved and managed, since the areas at greatest risk of deforestation and illegal occupation are unspecified land use.
- **Territorial and land organization, monitoring and control, and incentives for sustainable productive activities** – *implementation of the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon Region (Plano de Ação para a Prevenção e Controle do Desmatamento na Amazônia Legal – PPCDAM)* and similar plans in other biomes to reduce the rate of deforestation, involving partnerships between federal bodies, state governments, city governments, civil society organizations and the private sector.
- **High precision monitoring** – *implementation of the Deforestation Monitoring Program for the Caatinga, Cerrado, Mata Atlântica, Pampa and Pantanal Biomes*, using satellites, as it has already been established for the Amazonia.
- **Strengthen the environmental enforcement** – Increase the technical team responsible for the enforcement, through the holding of specific public contests, increase in the level of specialization and development of intelligence activities concerned with this issue.
- **Amazon Fund** – created in 2008, aims to raise financial resources nationally and internationally for the reduction of deforestation, sustainable use and conservation, especially in the Amazon forest.



- **Climate Fund** – Submitted to the National Congress, amongst other purposes, it aims to finance actions concerned with preventing deforestation.
- **Non-timber forest products** – *minimum price policy* has already been set for seven products (actions aimed at traditional communities and peoples) to strengthen the productive chains that create wealth through the sustainable exploitation of native forests.

5. Eliminate the net loss of forest coverage in Brazil by 2015

Specification of the Objective: as well as preserving forests at the levels stipulated in the previous objective, double the area of forest plantation from 5.5 million ha to 11 million ha in 2020, of which two million ha with native species.

Native forests have an intrinsic value that is greater than that currently perceived for environmental services. They hold an incalculable genetic heritage of which the large part is still unknown. Forests plantation, whether for the purposes of the reconstitution of eco-systems or for economic use, create very significant environmental services, since they preserve water flows, reduce or prevent rivers and lakes siltation, improve the micro-climate and allow the preservation of native species of fauna. Homogenous forests create products that substitute the use of numerous non-renewable natural resources, such as coal and raw materials for civil construction, as well as reducing economic pressure on the native forests themselves.

Among all reasons for stabilizing forestry coverage at high levels, it has to be stressed that forests – *latu sensu* – are reservoirs of carbon, whose stock in vegetation and in the soil occurs by CO₂ uptake from the atmosphere through the photosynthesis process.

Therefore, in addition to the measures announced in the previous specific objective, aimed at significantly reducing deforestation, reforestation activities will be encouraged. The purpose is to double the area of forests plantation in Brazil from the current 5.5 million ha to 11 million ha in 2020, of which 2 million ha will be planted with native

species, promoting priority planting in areas of degraded pasture, with the aim of their economic and environmental restoration. The positive impact of this specific objective can be measured under the inventory of carbon stocks, supported by the National Forestry Inventory in elaboration.

The annual forested area has grown from 320,000 hectares in 2002 to 640,000 in 2007 with an increase in the share of small producers from 7% to 25% in the same period. However, to reach the intended specific objective, annual planting will have to be increased further to reach one million hectares in 2011 and 1.2 million in 2015.

In general, the forestland area should correspond to the sum of the areas to be conserved and those suitable for forestation or reforestation. The two latter activities, to be established wherever the environmental or economic returns of them are higher than the benefits from crops or animal breeding.

Therefore, efforts will be made to organize these actions and mobilize instruments that can contribute to the achievement of this objective, including the reforestation and forestation carried out in Brazil under the auspices of MDL (Clean Development Mechanism), preserving the additionality of this important economic instrument. Furthermore, lines of credit adapted to forestry activity, technical assistance and technological research will be expanded.

Taking into account the dimension of this challenge, a significant advance is required in the means of implementation, both internal and external, in order to be able to ensure their full materialization.

Main Actions

- **Revision of current banking requirements** to make forestation and reforestation activities more attractive, including areas for charcoal production.
- **Stimulate the recovering of degraded areas that belong to legal reserves or areas of permanent preservation, in**



accordance with Law no. 11.775, dated 2008, with resources from the National Rural Credit System which is a low-cost funding.

- **National Forest Inventory** to provide information about all of the country's forests, allowing the use of areas for *reforestation to be maximized* and an *evaluation of the carbon stocks*.
- **Development of forestry products for fuel applications** – *Energetic Forests Program*, coordinated by the Brazilian Agricultural and Livestock Research Company (*Empresa Brasileira de Pesquisas Agropecuárias* – EMBRAPA Florestas), counting on the participation of the Brazilian Forestry Service through the Forest Product Laboratory, the Ministry of Development, Industry and Foreign Trade, various universities and research centers, as well as private enterprise. The program works with entire productive chain, from the forest to the final product, contributing to the economic feasibility of forestation.
- **Forestry Grant** – *concession of public forests* for the management and exploitation of forestry products and services in a sustainable form. The Annual Forestry Grants Plan stipulated the concession of four million ha by the end of 2009. A Legal Timber Pact was signed by the Ministry of the Environment and timber producers in the state of Pará.
- **Prevention of the Use of Illegal Timber in the Building Industry** – starting in Jan. 2009, the legal origin of timber will have to be proved by building companies and companies from the real estate sector.

6. Strengthen inter-sector actions concerned with the reduction of the vulnerabilities of populations

The climate change process is a challenge to society and governmental sectors. The effects of this change on the population have a multi-causal origin with diverse intensities and sectors (cultural, educational, economic, social, etc.). Its evaluation is complex and

requires an integrated and interdisciplinary approach involving health professionals, climatologists, social scientists, biologists, physicists, chemists, epidemiologists, educators, amongst others, to analyze relations between social, economic, biological, ecological, and physical systems and their relations with climatic alterations.

The need to strengthen inter-sector actions results from the fact that the current vulnerability of the population influences its capacity to respond to the consequences of climate change. Identifying the most vulnerable population groups, who are not prepared to deal with these impacts, and promoting actions aimed at strengthening the resilience of these groups are fundamental for creating effective adaptation strategies.

It should be emphasized that the lower the vulnerability of a system and the greater its capacity for self-organization, the better will be the conditions for this system to adapt to the effects of climate change.

Main Actions

- Incentives for studies, research and training related to expanding knowledge about the impacts of climate change on human health.
- Strengthening of environmental sanitation measures.
- Strengthening of communication and environmental education measures.
- Identification of threats, vulnerabilities and resources (financial, logistics, material, human, etc.) to set up prevention, preparation and response plans for public health emergencies.
- Stimulation and expansion of the technical capacity of professionals in the Public Health System (*Sistema Único de Saúde – SUS*) in relation to health and climate change.
- Creation of alert systems for harm and damage related to climatic events.



- Creation of an information panel and indicators for the monitoring of climatic events and their impacts on health.
- Implementation of sustainable educational rooms involving the adaptation of buildings (schools and universities) and management, as well as the training of teachers and inserting the question into curricula and teaching materials.

7. Identification of environmental impacts resulting from climate change and stimulates scientific research that can trace out a strategy that can minimize the socio-economic costs of the country's adaptation

Some studies have been carried out in the country seeking to understand the regional dynamics of climate and the environment, social and economic impacts, both at a national and local level, which can occur due to changes in climate in the coming century. Attempts will be made to increase the production of scientific knowledge about all aspects related to the problem, in order to achieve an adaptation that minimizes the costs incurred by the country in relation to the new climatic conditions.

Main Actions

- **Strengthening of Climate Network** (which brings together numerous research centers from all over the country) to carry out studies on the impacts of climate changes with an emphasis on the country's vulnerabilities and adaptation alternatives for social, economic and natural systems; as well as contributing to the formulation and monitoring of public policies on climate change in Brazil (in addition to actions concerned with mitigation).
- Expansion of the development and assessment capacity of regional climate change scenarios in long term temporal scales using the *supercomputers* of the National Space Research Institute (*Instituto Nacional de Pesquisas Espaciais* – INPE), which will contribute to carrying out studies on Vulnerability and Adaptation for South America.

- Creation of a partnership between the Ministry of the Environment and the National Space Research Institute for the *implementation of the Alert System for Droughts and Desertification*.
- Development of hydro-climatic models for large river basins, strengthening of the National Water Agency's (*Agência Nacional de Águas – ANA*) Situation Room for the Monitoring of Critical Events, encouragement of conservation practices and the optimization of the use of water, and the *strengthening of the National System for the Monitoring of Water Resources* aimed at the efficient use of freshwater.



Economic, Technical, Political and Institutional Mechanisms

The Clean Development Mechanism – MDL (Mecanismo de Desenvolvimento Limpo) is the main economic instrument existing for the promotion of voluntary measures to mitigate the greenhouse gases emissions. The success of this instrument in Brazil and the potential that still exists to implement new project activities under the scope of MDL have to be stressed. Thus, the National Plan will allow the additionality of MDL project activities in Brazil.

To attain the objectives of the Plan, new economic, technical, political and institutional mechanisms will be created which will:

- Promote the scientific and technological development of the productive sector which will include environmental considerations.
- Raise awareness about current environmental problems and allow the development of a society with justice, fraternity and solidarity.
- Value and conserve the forest as an attractive activity which can generate wealth and welfare for those living in it.
- Encourage and stimulate regional measures that are adequate for differentiated conditions, where each region and even each state in the country can identify the best opportunities to reduce emissions and remove carbon, and their adaptation needs in relation to climate change.

Plan Preparation Process

To place the question at the very heart of society, Presidential Decree no. 3.515, dated 20 June 2000, complemented by the Decrees of 28 August 2000 and 14 November 2000, created the Brazilian Forum on Climate Change (*Fórum Brasileiro de Mudanças Climáticas* – FBMC) the aim of which is “to raise awareness and mobilize society to discuss and make decisions” about the impact of gas emissions due to human activities that intensifying the greenhouse effect.

The FBMC is headed by the President of the Republic. Its members are Ministers of State, Presidents of Regulatory Agencies, State Secretaries for the Environment, representatives from the Business Sector, Civil Society, Universities and Non-Governmental Organizations.

In April 2007, the President of Brazil placed the preparation of the Plan on the agenda of government activities, with the aim of structuring and coordinating the actions of the government concerning the repercussions of global warming resulting from anthropogenic activities.

In November 2007, Presidential Decree no. 6.263/2007 was issued, in which the government created the Inter-Ministerial Committee on Climate Change (*Comitê Interministerial sobre Mudança do Clima* – CIM) which was given the function of preparing the National Policy on Climate Change and the National Climate Change Plan.

CIM is coordinated by the Office of the President of the Republic, and consists of seventeen federal bodies and the FBMC. The federal bodies that belong to it are: the Ministry of Agriculture and Supply, the Ministry of Science and Technology, the Ministry of Defense, the Ministry of Education, the Ministry of Finance, the Ministry of National Integration, the Ministry of Health, the Ministry of Cities, the Ministry of External Relations, the Ministry of Mines and Energy, the Ministry of Agrarian Development, the Ministry of Development, Industry and Foreign Trade, the Ministry of the Environment, the Ministry of Planning, the Budget and Planning, the Ministry of Transport, and the Strategic Issues Secretary of the Presidency of the Republic.



The responsibility for the preparation, implementation, monitoring and evaluation of the National Plan on Climate Change was assigned to the Executive Group on Climate Change (*Grupo Executivo sobre Mudança do Clima – GEx*), under the auspices of CIM, which is coordinated by the Ministry of the Environment.

Alongside the consultations within the government itself, the Decree No. 6263/2007 created public consultation processes with the aim of guaranteeing transparency in the Plan preparation process and popular participation through the contributions of interested agents. The process included very important public consultations: the III National Conference on the Environment and the meetings of the Brazilian Climate Change Forum called 'Sector Dialogues'.

Structure of the Plan

This Plan, based on the general directives of the National Policy on Climate Change proposed by the Executive to the Legislature through Projeto de Lei (bill) no. 3.535/2008, has four general themes: (I) mitigation; (II) vulnerability, impact and adaptation, (III) research and development; and (IV) enhancement of skills and dissemination. Transversally, to guarantee the enforceability of the actions stipulated in each of the thematic areas, legal and economic instruments shall also be prepared.

Next Steps

The Plan will be implemented in successive phases in way to have a constant evaluation of the intended objectives, as well as the inclusion of others that may be identified and considered feasible, in a later stage.

To ensure that the Plan will be the result of a permanent dialogue with civil society, a communication canal will be kept open to allow a wide-ranging participation of the population during all its phases.

In this first phase of the Plan, designed to be operational, the aim is to organize ongoing actions, reinforce existing measures and identify and create new opportunities in order to allow an exchange of experiences and integration of actions. Its main objective is maximizing positive results in the full set of national efforts related to the global climate and to strengthen the adaptative process of the country to the climate system.

The following phases shall include mechanisms to evaluate the performance of ongoing actions and their respective results. Additional actions and instruments shall also be presented, including pacts with Brazilian states in order to guarantee that the objectives stipulated here can be fully met. In this sense, studies related to new economic mechanisms for sustainable development shall be carried out, also covering fiscal and tax incentives, amongst others.

The use of tools, based on both the state of the art of scientific knowledge and in the acquired experience of public and private sectors, shall be expanded in order to support decision making that incorporate variables related to global climate change.

It is also necessary to implement a national policy on the management of environmental services, including the payment for environmental services, which will help reach the objectives related to reduction of deforestation and increase in forestry coverage.



The National Climate Change Plan is therefore a dynamic plan, a work in progress to be constantly reevaluated, which can be implemented in harmony with the wishes and designs of the Brazilian society.

For the full version of the Plan go to: **www.mma.gov.br**