

CLIMATE CHANGE LEGISLATION IN

BRAZIL

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A Review of Climate Change Legislation in 99 Countries



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Brazil

Legislative Process

Brazil's legislature is represented by a bicameral parliament, the National Congress, composed of a Chamber of Deputies and a Senate. The Chamber of Deputies has 513 Members of Parliament (MPs), elected for four-year terms. The most recent elections for the Chamber of Deputies took place in 2014, with the next due in 2018. The Senate has 81 Members, elected for eight-year terms. Elections are staggered so that two-thirds of the upper house is up for election at one time and the remaining one-third four years later. Last elections for the Senate took place in 2010 and 2014, and the next elections are due in 2018 and 2022.

The 1988 Constitution outlines how laws may be proposed. The legislative process may be initiated by any member or committee of the Chamber of Deputies or the Senate; the President of the Republic; the Supreme Federal Court; the Superior Courts; the Attorney-General of the Republic; and the citizens.

Each Chamber has its independent legislative process, passing laws that fall under their specific competences. If a bill is proposed by the Senate, it will be sent to the Chamber of Deputies to be revised and vice-versa. Traditionally, the Senate acts more as a reviser than as an author. All bills go through thematic committees; some of the bills do not need to go through plenary, that is, the power of the commission is terminative. The Senate has 11 permanent thematic committees, including the Committee on Environment, Consumer Protection and Auditing and Control. In some areas a proposal must undergo the legislative process in both Chambers simultaneously. There is a permanent and mixed (2 houses) Committee on Climate Change.

Legislation is presented at the Parliament in a process that entails three phases. First, the Constitution and Justice Committee assesses the constitutionality of the proposal, secondly, the text is scrutinised by one or more substantively relevant committees, where the merit of the proposed text is assessed. Finally, the legislation is discussed and voted in the plenary sessions of the congress. With the exception of legislation that modify the constitution, the approval of a law proposal requires simple majority of votes.

After the National Congress's deliberations, the President of the Republic may sanction or veto the proposition. In the first case, the project becomes a law. In the case of a veto, the project is sent back to Congress. The enactment by the President attests the existence of a new law. After the enactment, the next step is publication, which is intended to inform citizens of the existence and contents of a certain normative act. Publication has the additional purpose of determining the date on which the law will come into effect.

Approach to Climate Change

Since early 2000, Brazil has employed significant political effort to adopt climate change legislation and policies. A 2007 Decree established the governance structure that developed the National Plan on Climate Change (Climate Plan). The Climate Plan provides a comprehensive framework of 25 actions to combat climate change. The framework primarily focuses on reducing deforestation. Additionally, the plan includes provisions on energy efficiency and renewable energy. It called for adding 7,000 MW of renewable energy from bagasse cogeneration, mini-hydro, and wind; increase bagasse cogeneration to 136TWh (11.4% of energy mix); add 34,460MWh from hydro; and use solar water heating to reduce energy needs by 2,200GWh/year. In the transport sector, it requires an increase in the share of rail and water transport; improve mass transit, bicycling, and river cargo. In the waste sector, the Plan calls for recovery of methane from landfills and an increase in urban

solid waste recycling by 20% by 2015. The Climate Plan is currently being updated after the consultation process ended in December 2014.

The National Policy on Climate Change passed in 2009, establishing the country's voluntary emission reduction target of 36.1% to 38.9% compared to business as usual by 2020 with 2005 as a baseline. The policy presents emission reduction targets for four designated strategic areas: deforestation (24.7%), agriculture and livestock (4.9% to 6.1%), energy (6.1% to 7.7%) and the steel sector (0.3% to 0.4%). The policy leaves specific implementation measures to be established either by decree or determined by the Second Brazilian Inventory on GHG Emissions and Reductions. It also incorporates all laws, measures and policies pertaining to climate change.

Other relevant climate legislation was approved in the context of the UNFCCC's Conferences of the Parties. In 2010, the President passed a Decree establishing a nationwide target for annual GHG emissions of 2.1bn tons of CO₂e by 2020, as compared to the current 2020 projection of 3.2bn tons CO₂e. This Decree made Brazil the first developing country to institute an absolute limit to its GHG emissions. In addition to regulating features of the National Policy, such as the commitment to reduce deforestation rates by 80% in the Amazon Basin, by 40% in the cerrado (the savannah brushland that covers much of central Brazil), and to restore 35m ha of degraded land. The Decree also requires the elaboration of sectoral plans outlining mitigation actions for key economic sectors, with targets to be revised on a tri-annual basis.

Currently there are eight sectoral plans, in different phases of implementation: the Action Plan to Prevent and Control Deforestation in the Amazon (PPCDAm); the Action Plan to Prevent and Control Deforestation and Fire in the Cerrado (PPCerrado); the Low-Carbon Agriculture Plan (ABC Plan); the Ten-Year National Energy Expansion Plan (PDE); the Plan for Climate Change Mitigation for the Consolidation of a Low-Carbon Economy in the Manufacturing Industry; the Low-Carbon Mining Plan (PMBC); the Plan on Transportation and Urban Mobility for Climate Change Mitigation; and the Health Mitigation and Adaptation Plan. The mining, industry, agriculture and health plans are new plans especially prepared in attention to the climate legislation, while the other four plans pre-existed the National Policy on Climate Change and were taken as sectoral plans.

In terms of institutional arrangements, an Inter-ministerial Committee on Climate Change guides the development, implementation, monitoring and evaluation of the Climate Plan. It was established in 2007 to elaborate a preliminary proposal for the general objectives, principles and means of implementation of the National Policy on Climate Change, as well as the preliminary version of the National Plan on Climate Change. Co-ordinated by the President's Chief of Staff, it includes representatives from 14 Ministries, the Secretariat of Strategic Affairs of the Presidency of the Republic and the Brazilian Forum on Climate Change, as a guest. Under the Inter-ministerial Committee there is an Executive Group on Climate Change, co-ordinated by the Ministry of Environment, which is responsible for developing, implementing, monitoring and evaluating the Climate Plan. There is an Inter-ministerial Commission on Global Climate Change, chaired by the Ministry of Science, Technology and Innovation, which pre-exists the climate legislation, and which articulates the government actions under the UNFCCC.

The Brazilian Research Network on Global Climate Change (Rede CLIMA), established in 2007 by the Ministry of Science, Technology and Innovation, generates and disseminates knowledge about the causes and effects of global climate change, by producing information for the formulation and follow up on implementation of public policies on climate change and by providing subsidies to Brazilian Delegations to meetings under the UNFCCC. The Brazilian Forum on Climate Change (FBMC), presided over by the President, has as its main purpose the promotion of spaces of discussion on climate change with broader segments of the society.

Sub-national level

Sub-national governments play an important role in establishing and implementing climate policies. In the past decade climate legislation has been approved in several states (for instance, São Paulo, Minas Gerais and Rio de Janeiro) and municipal districts (such as São Paulo, Rio de Janeiro and Curitiba). The first state law was created by Amazonas, which also established a dedicated body to deal with climate change issues (phased out due to budget constraints). The state of São Paulo approved a 20% emissions reduction target by 2020, considering 2005 as the base year. The cities of São Paulo and Rio de Janeiro have also assumed reduction targets. The city of São Paulo has pledged a 30% reduction, based on emissions from 2005 to 2010, and Rio de Janeiro has pledged 8% by 2012, 16% by 2016 and 20% by 2020.

Carbon Pricing

The creation of a cap-and-trade system has been foreseen since the 2008 National Plan on Climate Change. At present, discussions on the implementation of a cap-and-trade system are most developed at the subnational level. In the State of São Paulo, the Brazilian Emissions Reductions Market, was launched in 2004 as a joint initiative between the Ministry of Development, Industry and Foreign Trade and the Brazilian Futures Stock Exchange, to support the negotiation of carbon credits emanating from national Clean Development Mechanism (CDM) projects. Parliamentarians have put forward a series of draft laws on carbon market development, including provisions on trading over-the-counter and through stock exchanges, for both spot and futures transactions, authorised by the Brazilian Securities and Exchange Commission (CVM); the establishment of CDM Investment Funds to be structured by the CVM and the Commission on Climate Change; and multiple fiscal incentives to commercialise CERs emanating from CDM projects.

In November 2014, Brazil had 330 projects registered by the CDM Executive Board, equivalent to 4.4% of the global total, occupying the 3rd position in number of projects registered. As for the reduction of GHG emissions projected through the CDM, the Brazilian potential of registered projects until November 2014 was about 370m tons of CO₂e. It means that Brazilian CDM projects registered with the UNFCCC contribute to an average reduction of GHG emissions of approximately 48m tons of CO₂e per year.

Adopted in 2011, the Green Allowance establishes payments for an ecosystem services scheme aimed at combating extreme poverty while incentivising conservation. Through the Green Allowance, payments of up to BRL 300 (USD116) will be transferred quarterly for a maximum period of two years to families living in extreme poverty to develop conservation activities. The passing of a law on payments for ecosystem services reflects an emerging consensus on a new development model that seeks to align economic growth with conservation through the promotion of sustainable production, infrastructure development, environmental protection and social inclusion.

REDD+ and LULUCF

A great part of Brazil's commitment to climate change involves measures to tackle deforestation, since 61% of the country's GHG emissions derive from the forest sector. Alongside provisions established by the National Policy and the National Plan on Climate Change, Brazil's commitment to its Copenhagen pledges is further illustrated by the national REDD+ draft law, which was initially proposed in 2009. Following the elections in 2010, a more comprehensive REDD+ draft law was introduced to both the Lower House and to the Senate. The proposed legislation covers ownership of tradable REDD+ credits, creating a dedicated dispute settlement procedure for activities in this area. It establishes participatory rights and benefit-sharing rules to protect the rights of indigenous peoples, traditional communities and small rural producers. It establishes multiple sources of funding for the National REDD+ System, the regularisation of the Brazilian Emission Reductions Market, the adoption of an international agreement that sanctions the use of REDD+ credits as a compensation mechanism between countries and a national compensation mechanism. The Bill

acknowledges the importance of both national and sub-national levels of governance, including private actors, to the implementation of REDD+.

Parallel to these developments, since 2010 the Ministry of the Environment co-ordinated the debate about development of Brazil's National REDD+ Strategy. A draft text of the National REDD+ Strategy was prepared by the Inter-ministerial Working Group on REDD+, with the participation of around 120 representatives from the aforementioned stakeholder groups, and delivered to the Executive Group of the Inter-ministerial Committee on Climate Change in 2013. However, similar to what has happened in the Legislature, the National REDD+ Strategy has not been made public nor turned into concrete action since then. Nevertheless, in the meantime regional governments have been successfully forging local plans on REDD+.

The 2010-2020 Low Carbon Agriculture Programme adopts measures to expand sustainable practices, expand commercial forests, and decrease deforestation by promoting agricultural and forestry activities (especially in the Amazon). One of the main aims of the programme is to contribute to soil recovery by incorporating a further 4m ha of land into an integrated system that will help farmers alternate their activities between forest, crops and pasture, adopting measures to better address vegetable residue use, and extending the use of environmentally-friendly fertilisers.

Energy Supply

Brazil boasts one of the most renewable energy mixes in the world, with over 41% of its supply coming from sources such as water resources, biomass and ethanol, in addition to wind and solar energy. Hydroelectric power plants are responsible for over 79% of the electricity generated.

Renewable energy is a key driver of new climate change-related legislation, reflected in Brazil's prominent role in the development of biofuels and the promotion of hydropower. Hydropower is the main element in the country's clean energy matrix. The National Plan on Climate Change determines that Brazil generate more than 80% of its power from renewable energy sources through to 2030, and establishes a series of renewable energy and biofuels requirements. The plan brings forward the 5% biodiesel blending requirement, and promotes solar and wind energy. The Federal Programme of Incentives for Alternative Electricity Sources (PROINFA) establishes comprehensive renewable measures that seek to increase electricity generation from non-hydropower renewable energy sources.

Energy Demand

At 1.2toe, Brazil's per capita consumption is 31% lower than the world average of 1.8 toe. Total energy consumption increased at the rapid pace of 3 % per year between 1990 and 2008. In 2009 it decreased as a consequence of the global economic crisis. Final consumption followed the same trend as total energy consumption. Oil is the main source of energy, accounting for 40% of the country's overall consumption. Non-commercial energy sources (wood, bagasse) come second with 32%, followed by hydroelectricity (14%), gas (7%), coal (5%) and nuclear power (3%). Industry plays an important role in final energy consumption (46%, including non-energy uses). The transport sector absorbs one-third of final consumption and is a large consumer of biomass (alcohol consumption accounts for 20% of transport consumption). The households, services and agriculture sector accounts for just 22% of final energy consumption.

The National Electricity Conservation Programme (Procel) has been operating since 1985. It is co-ordinated by the Ministry of Mines and Energy, and promotes actions in sectors including buildings, appliances, and industry. Other more recent policies promoting energy efficiency include the National Energy Plan 2030 (PNE 2030), released by the Ministry of Mines and Energy in 2007, which foresees that by 2030 Brazil will have reduced energy consumption by 10%. The Ministry of Mines and Energy is currently working on the next National Energy Plan (PNE 2050), which should be finalised in 2015. The National Climate Change Plan (PNMC) seeks to increase energy efficiency across various sectors in line with best practices, and reduce electricity consumption in around 10%

by 2030 compared with a reference scenario (equivalent to savings of 106TWh), which would avoid 30m tons of CO₂ emissions by 2030. The plan also involves the replacement of 1m old refrigerators per year for 10 years. The plan aims to improve energy efficiency in industry, transport and buildings.

Although not a law, the most comprehensive policy dealing with energy efficiency is the National Energy Efficiency Plan, adopted in 2011. This Plan focuses on improving the sustainability of the energy sector, including more renewable energy into the national grid, reducing grid losses, and improving energy efficiency criteria. The implementation of the Plan shall provide energy savings of 106TWh in the next two decades, equivalent to what the residential sector consumes in one year. ANEEL, the Brazilian Electricity Regulatory Agency issued a set of regulations specifying the criteria for state electricity providers to follow when investing in energy efficiency projects.

Transportation

The transport sector is the dominant end-user of fuels and oil products. At present, the share of road transport in national transport is high: 52% of freight and 95% of passenger transport. Given the scarcity of rail networks, economic growth-induced increases in goods traffic have been on the roads, increasing the demand for diesel. In 2012, road transport accounted for 90% of GHG emissions from the transport sector. Trucks using diesel fuel generated 40% of transport-related emissions and passenger cars 30%, mostly from gasoline. A unique characteristic of Brazil's transport sector energy mix is the high share represented by biofuels. Brazil is the world's top exporter and consumer of sugarcane fuel ethanol. However, in recent years the sector has encountered a number of difficulties, which have impacted both production and export levels.

The National Plan for Logistics and Transport (PNLT), developed by the Ministry of Transport with the Ministry of Defence and first launched in 2007, is a long-term planning document that is updated periodically. It includes a broad investment programme that aims at a shift from road towards rail and waterway freight transport. The latest edition, from 2012, determines that, based on higher logistical costs and GHG emissions of freight transport via roads, a more balanced mix of transport modes is necessary. It expects the share of rail transport to increase to 43% (from the current 30%) and waterway transport to 15% (from 13% now). In addition, the current economy-wide planning document (PPA 2012-2015), in line with the National Energy Efficiency Plan, includes a target to conserve 20TWh of electricity (compared to a trajectory without efficiency measures) through the use of more energy efficient equipment over the period. The plan also mentions increasing production of biodiesel in accordance with the national biodiesel programme.

New sectoral mitigation and adaptation plans have been elaborated for transport and urban mobility. The 2013 Transport and Urban Mobility Plan focuses on the expansion of transport infrastructure and increased use of energy-efficient modes of transport. Improvements in public transport are expected to result in a 2.7% reduction in sectoral emissions. A freight transport plan promotes actions leading to a 3% reduction compared to business-as-usual emissions, principally from a switch to rail and waterways from road.

Adaptation

The 2008 National Plan on Climate Change identified a number of adaptation interventions and potential synergies with existing programmes to combat desertification and to promote the management of watershed resources. These interventions aim to improve regional modelling of climate change impacts, promote vulnerability mapping, prepare the country for health implications of climate change, and identify the most vulnerable groups in the country. These goals fall along two general themes – increasing institutional, managerial, and legislative capacity for adaptation and promoting direct action steps for addressing impacts, risks, and particular vulnerabilities. The 2009 National Policy on Climate Change further identified specific sectors and locations in need of adaptation and proposed both short- and long-term strategies. It also

established the National Climate Change Fund (FNMC) to provide financial support to climate change mitigation as well as adaptation.

Yet Brazil still lacks of a national strategy for vulnerability assessments and adaptation measures to cope with climate change. In 2011 the President created the National Plan on Disaster Risk and Response Plan, as a priority policy to deal with climate risks and extreme weather. Further to this the Centre for Disaster Monitoring and Alert (CEMADEN) was created within the National Institute on Space Research (INPE), which is linked to the Ministry of Science and Technology. The focus of CEMADEN is in monitoring and reducing the impacts of climate extremes. One of CEMADEN's projects involves the installation of semi-automatic pluviometers to be managed by local citizens in nearly 800 communities throughout Brazil. Data will be collected to create online, open-data national monitoring maps.

In 2013 the Brazilian Climate Change Panel issued the first national assessment report on impacts, vulnerabilities and adaptation to climate change. The assessment identifies the vulnerabilities of the country in the face of global warming; evaluates the impacts in key sectors of the economy and society, according to the climate projections until the end of the century; and identifies studies on, and measures for, adaptation to climate change in place until 2012.

The Presidency of Brazil, through its Secretariat of Strategic Affairs, has been in charge of an ambitious study on adaptation, covering various sectors and using various climate change scenarios downscaled by INPE. The outcomes of this strategic study serve as the basis for an inter-ministerial Adaptation Working Group established in 2013 to prepare Brazil's National Adaptation Plan.

Brazil: Legislative portfolio

Name of law	Law 12805, establishing the National Policy on Farming-Livestock-Forest Integration
Date	29 October 2013
Summary	<p>The law establishes the National Policy on Integration of Farming, Livestock and Forestry to mitigate deforestation caused by these activities, supporting best practices that promote the development of these sectors in a sustainable manner, ultimately contributing to the recovery of degraded areas.</p> <p>The law also foresees the promotion of environmental education, targeting schools and agents involved in the production and/or trade of agricultural and livestock products. In additions, it proposes fostering activities of research, innovation and technological transfer that meet the general objective of the Policy.</p> <p>The programme is part of the Low Carbon Emission Agriculture Programme.</p>

Name of law	Law 12512/2011, establishing the Programme in Support of Environmental Conservation ("Green Allowance") and Programme for the Promotion of Rural Productive Activity
Date	14 October 2011
Summary	<p>Creates the Programme in Support of Environmental Conservation, popularly known as "Green Allowance", a payments for ecosystem services scheme aimed at: 1) incentivising ecosystem conservation (preservation and sustainable use); 2) promoting citizenship, improved living conditions and income gains for people living in extreme poverty who engage in natural resource conservation activities in Conservation Units; and 3) incentivising the participation of grant-receivers in environmental, social, educational, technical and professional capacity-building. Caixa Econômica Federal (government-owned bank) is the Programme's Operating Agency and the Ministry of Environment is charged with its</p>

execution. Establishes the Programme for the Promotion of Rural Productive Activity, a cash-transfer policy with the following objectives:

- To stimulate sustainable employment and income generation
- To promote food and nutritional security
- To promote the engagement of programme beneficiaries in capacity-building activities
- To incentivise organisation in co-operatives and associations

The Ministries of Agrarian Development and Social Development and Fight against Hunger are the executing agencies.

Monitoring and control related to the Programme in Support of Environmental Conservation will take place via sample audits and in partnership with state and municipal governments.

In order to qualify for the Green Allowance, families must be living in extreme poverty, registered in the Federal Government's Unique Registry for Social Programmes and developing conservation activities in:

- National forests, extractive reserves and federal sustainable development reserves
- Forest settlement projects, sustainable development projects or agro-extractive settlement projects established by the Incra (the National Land and Agrarian Reform Institute)
- Territories occupied by people who live on river margins, communities who Engage in extractive activities, indigenous peoples, quilombolas (communities of descendants of escaped slaves), and other traditional communities
- Priority areas defined by the Executive

Payments amounting to BRL300 (USD116) will be transferred quarterly for a maximum period of two years, which can be extended according to the Programme regulation.

To benefit from the Programme for the Promotion of Rural Productive Activity family-farmers and others must be living in extreme poverty and be registered in the Federal Government's Unique Registry for Social Programmes. The Federal government will transfer up to BRL2,400 (USD929.7) per family in a minimum of three instalments during the maximum period of two years.

Grant receivers are encouraged to participate in environmental capacity-building activities.

Name of law	Law 12187/2009, establishing the National Policy on Climate Change (NPCC), regulated by Decree 7390/2010
Date	29 December 2009; regulated on 9 December 2010
Summary	<p>This law creates the NPCC with the following key areas of concern: combining climate protection with socio-economic development; reducing anthropogenic GHG emissions from all its sources and strengthening GHG sinks; adaptation; preservation, conservation and recuperation of national biomes; land use and reforestation measures; and the development of a national cap-and-trade mechanism. The NPCC is based on Brazil's international commitment with the UNFCCC and incorporates all previous government instruments related to its key areas (the National Plan on Climate Change, the National Fund on Climate Change and others).</p> <p>The Decree regulates articles of the Law relating to the National Plan on Climate Change, National Fund on Climate Change, and Action Plans on Deforestation Prevention and Control in national biomes; the Sector Plans on climate change mitigation in key economic sectors – the Article set the precedent for inclusion of the Clean Development Mechanism and Nationally Appropriate Mitigation Actions (NAMAs) in these Plans; and the national voluntary emission reduction commitment.</p> <p>Foresees the promotion and development of scientific and technological research concerned with mitigation and strengthening of carbon sinks; reduction of uncertainty in national and regional climate projections; and adaptation measures.</p> <p>The Law recommends the establishment of the Brazilian Emissions Reduction Market (MBRE). It incorporates the National Plans for Prevention and Control of Deforestation in national biomes.</p>

Name of law	Law 12144/2009, establishing the National Fund on Climate Change (NFCC), regulated by Decree 7343/2010
Date	9 December 2009, regulated on 26 October 2010
Summary	NFCC resources may be directed to REDD+ projects, with priority being given to natural areas under threat as well as relevant biodiversity conservation strategies. Resources may be channelled to society and ecosystem adaption to climate change. The NFCC may fund activities related to the development and diffusion of technologies for the mitigation of GHG emissions. It may also fund research, the creation of project and inventory systems, methodologies that contribute to the reduction of liquid GHG emissions, and the reduction of emissions from deforestation and land use change

Name of law	Law 11284/2006, establishing the management of Public Forests, Brazilian Forest Service and National Fund for Forest Development
Date	2 March 2006
Summary	<p>This law establishes principles for the management of public forests for sustainable production; institutes, within the structure of the Ministry of Environment, the Brazilian Forest Service (BFS); and creates the National Fund for Forest Development.</p> <p>In order to attest compliance with the forest management principles established by this bill, forest concession-holders should undertake independent forest audits, every 3 years at a maximum, and at their own cost. Additionally, the National Environment System (Sisnama) agencies are responsible for control and environmental inspection. The National Fund for Forest Development has a Consultative Council formed by members from the federal administration and civil society charged with overseeing the disbursement of funds and evaluating performance.</p> <p>Regarding REDD+/land use policies, the bill establishes the following principles for public forest management:</p> <ul style="list-style-type: none"> • Protection of ecosystems, land, water, biodiversity and associated cultural value • Efficient and rational use of forests in line with local, regional and national sustainable development targets • Respect for local communities' right of access to and use of public forests and the benefits associated with conservation • Promotion of local processing, increased value-added of forest products and services, industrial diversification, technological development, and capacity-building of local entrepreneurs and labour-force • Free access to information regarding public forest management • Promotion and dissemination of research on forestry related to conservation, restoration and sustainable use of forests • Promotion of knowledge and awareness of forest conservation, recovery and sustainable use; and • Creation of stable and secure conditions for the promotion of long-term investment in forest conservation and recovery <p>The National Fund for Forest Development (NFFD) is instituted with the purpose of promoting sustainable forestry activities as well as technological innovation in the sector. Among other things, the Fund's resources should be channelled to technical assistance, monitoring and verification, recuperation of degraded areas, rational economic use of forests and environmental education. The Fund only finances projects from public institutions or not-for-profit private institutions. The Brazilian Forest Service (BSF) is created with the exclusive mandate of managing public forests; it is equally the managing authority of the NFFD. The BSF is responsible for: training, capacity-building and technical assistance; promoting of sustainable timber and wood and sustainable forest production in general; and market scoping for forest products and services.</p> <p>Research and development: the National Fund for Forest Development finances research and technological development on forest monitoring.</p>

Name of law	Law 11097/2005, establishing the Mandatory Biodiesel Requirement
Date	13 January 2005, amended in 2009 and 2010
Summary	<p>This Law establishes a series of biodiesel requirements with the purpose of stimulating the market for clean burning fuel. Biodiesel is a mixture of vegetable oil and sugarcane based ethanol.</p> <p>With regards to Energy supply-side policies, the 2005 revision of the law mandates that by 2008 2% of diesel sold to consumers is biodiesel (B2 biodiesel), and that by 2013 5% is B2 biodiesel. The law was altered so that as of July 2008 all diesel had to contain 3% of biodiesel (B3). In July 2009, the mandatory blending was increased to 5% (B5) 3 years ahead of the original schedule.</p>

Name of law	Law 10438/2002, establishing the Programme of Incentives for Alternative Electricity Sources (PROINFA)
Date	26 April 2002
Summary	<p>This Law creates the PROINFA, the largest national plan to promote the use of alternative energy sources, as well as other programmes.</p> <p>Regarding energy supply-side policies PROINFA's implementation is co-ordinated by Eletrobras (a publicly traded company controlled by the government) and divided into two consecutive stages. The first stage sets a target power production value of 3,300MW from renewable energy including wind, biomass and small hydroelectric sources. This target is to be reached by the end of 2007 through a system of subsidies and incentives drawn from an Energy Development Account. This is to be funded by end-use consumers through an increase in energy bills (with the exemption of low income sectors) as well as by financing programmes available for renewable energy projects from the Brazilian National Development Bank (BNDES). The second stage establishes a target of increasing the electricity generated by these three renewable sources to 10% of annual consumption within 20 years. In addition, Renewable Energy Certificates that are proportional to the amount of clean energy produced by each plant should be issued in this second stage.</p>

Name of law	Law 10294/2001, establishing the National Conservation and Rational Energy Use Policy
Date	17 October 2001
Summary	<p>This Law creates the National Conservation and Rational Energy Use Policy charged with ensuring the efficient allocation of energy resources and protecting the environment.</p> <p>The law determines that one year after the Executive Power publishes the required levels of energy consumption and efficiency, a Targets Programme should be established to monitor the progressive evolution of these levels.</p> <p>Regarding energy demand-side policies, the law charges the Executive Power with establishing maximum levels of energy consumption and minimum levels of energy efficiency for machines and energy consuming apparatus produced or traded in the country. It also obliges the producers and importers of these items to observe these requirements at the risk of being fined. Further charges the Executive Power with developing mechanisms to promote energy efficiency in buildings constructed after the commencement of the law.</p>

Brazil: Executive Portfolio

Name of policy	National Energy Efficiency Plan
Date	18 October 2011
Summary	<p>The National Energy Efficiency Plan (PNEf) was published by the Ministry of Mines and Energy. It presents the existing regulatory framework and instruments and actions in a number of economic sectors and areas. It also makes suggestions for improvement and further actions in each area; these include: studies, incentive mechanisms, capacity-building, financing, regulation, improved management, and better co-ordination and integration amongst the different existing programmes. The plan also seeks to clarify responsibilities for the different stakeholder institutions.</p> <p>The areas covered by the PNEf are: electricity, industry and micro, small, and medium enterprises, transport, education, buildings, public lighting, sanitation, solar heating, research and development, monitoring and verification, international partnerships, and financing. The national programmes on electricity conservation, rational use of oil and natural gas derivatives, and energy efficiency labelling are also evaluated.</p>

Name of Policy	National Plan on Climate Change
Date	1 December 2008
Summary	<p>The Plan defines actions and measures aimed at mitigation and adaptation to climate change. One of the key objectives of the Plan is to keep the high share of renewable energy in the electric matrix. With this aim, it establishes a target of having more than 80% of the power base to be derived from renewable sources by 2030.</p> <p>The Plan also aims to: increase the share of electricity derived from wind and sugarcane bagasse plants; add a number of hydroelectric projects to the electricity network; expand the solar photovoltaic industry; promote the use of solar water heaters in the residential sector; as well as establish research on energy production from solid waste.</p> <p>The plan further encourages industrial users to increase their average consumption of ethanol by 11% in the next 10 years; brings forward the 5% biodiesel blending requirement from 2013 to 2010; and supports the creation of an international biofuels market.</p> <p>The Plan determines that a National Energy Efficiency Action Plan should be created to reduce electricity consumption by 10% by 2030 and to establish other measures such as incentives to replace old electric equipment with modern equipment, and create improvements in industry energy efficiency, transportation and buildings.</p> <p>The Plan promotes a sustainable increase in the use of biofuels in the national transportation network and establishes measures on adaptation to climate change.</p> <p>The plan establishes that actions should be taken to eliminate the loss of national forest cover by 2015. The plan sets targets for a consistent cut on deforestation to be accomplished in subsequent four-year periods. The goal is to reduce deforestation by 40% in the 2006–2009 period in relation to the Amazon Fund's 10-year reference period (1996–2005). This is followed by an additional 30% reduction in the 2010–2013 and 2014–2017 periods in relation to the previous 4-year period. These targets are to be accomplished through the provision of new and additional funding from national and international sources, including the Amazon Fund.</p>

Name of Policy	National Energy Plan 2030 (PNE 2030)
Date	2007
Summary	<p>The PNE 2030 is the first study of integrated planning of energy resources held within the Brazilian government, and prepared by the Ministry of Mines and Energy of Brazil (MME). It proposes a strategic direction for expansion of energy supply. Its estimate of future electricity needs is based on a forecast percentage growth in demand per annum corresponding to an average GDP growth per annum. The PNE is composed of a series of studies that seek to provide inputs to formulate energy policies according to an integrated view of available resources.</p> <p>As a contribution to meeting that future estimated demand, the MME proposes 164GW as the country's 'exploitable, but as yet unrealised' hydropower 'potential'. Of that 164GW,</p>

the MME says that 90% (about 147GW) is in the Amazon region. If realised, this figure would amount to more than a doubling of the total installed national electricity generation capacity in Brazil – 121GW in 2012 (from all generation sources).

The PNE provides for the expansion of the electricity sector by 2030 with the use of energy sources: (1) Renewables - 191.35GW (92GW existed in 2010), (2) Conventional thermoelectric - 21.5GW (16GW existed in 2010), and (3) Nuclear- 8GW (2GW existed in 2010).

According to the PNE 2030, energy efficiency policy will be built in aiming at guiding a set of priority projects, to be conducted under the guidance of MME, in co-ordination with the other agents of the Government. The formulation of effective regulatory mechanisms and instruments for inspection will involve the regulatory agencies in the energy sector. The establishment of an operational structure able to manage implementing this policy also involves budgetary resources consistent with the importance of this mission.

Name of Policy	Decree 6263/2007, establishing the Inter-ministerial Committee on Climate Change (ICCC)
Date	21 November 2007
Summary	<p>This Decree created the Inter-Ministerial Committee on Climate Change (CIM) which was given the function of preparing the National Policy on Climate Change and the National Climate Change Plan. CIM is co-ordinated 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 Ministries of: Agriculture and Supply, Science and Technology, Defence, Education, Finance, National Integration, Health, Cities, External Relations, Mines and Energy, Agrarian Development, Development, Industry and Foreign Trade, Environment, Planning, the Budget and Planning, Transport, and the Strategic Issues Secretary of the Presidency of the Republic.</p> <p>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 (GEx), under the auspices of CIM, which is co-ordinated by the Ministry of the Environment. Alongside the consultations within the government itself, the Decree created public consultation processes with the aim of guaranteeing transparency in the Plan preparation process and popular participation through the contributions of interested agents.</p>

Name of Policy	Decree establishing the Inter-ministerial Commission on Climate Change (CIMGC)
Date	7 July 1999
Summary	<p>This Decree establishes the Inter-ministerial Commission on Climate Change (CIMGC), composed of nine ministries and headed by the Ministry of Science and Technology, for the purpose of co-ordinating discussions on climate change and integrating the government's policies in these ministries. The CIMGC provides input on the government's involvement with the UNFCCC and sets criteria and makes decisions on Clean Development Mechanism (CDM) projects.</p> <p>Order 533, of 29 August 2000, established the by-laws of the CIMGC.</p>

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