

Climate Change Policies in Brazil

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OUTLINE

Presentation Outline

- Current regulatory frameworks
- Industrial's emissions and participation on mitigation efforts
- Engagement of economic agencies
- Pending policy issues and examples
- Next steps

Climate Change Regulatory Framework in Brazil

Brazil has made great advancements in climate change policy

National Fund for Climate Change (FNMC), Law 12114, 09th December 2009

- To finance mitigation and adaptation action
- Main source from oil royalties
- Financial agency at the Development Bank (BNDES)

National Policy on Climate Change (PNMC), Law 12187, 29th Dec 2009

- To regulate and promote adaptation and mitigation actions:
 - Tax and credit incentives
 - Market creation mechanisms
 - Governance structure
- Emission goals: deviation of 36.1- 38.9 % from 2020 tendency

Brazil Voluntary Actions

NAMAs	BAU (Mt CO ₂ e)	Reductions (Mt CO ₂ e)		Reductions (%)	
Land Use (Deforestation Reduction)	1084	669	669	24,8%	24,8%
Amazonia (80%)		564	564	20,9%	20,9%
Cerrado (40%)		104	104	3,8%	3,8%
Agriculture	627	133	166	4,9%	6,1%
Pasture recovery		83	104	3,1%	3,8%
Crop & Livestock integration		18	22	0,7%	0,8%
Zero tillage		16	20	0,6%	0,7%
Biological Nitrogen Fixation		16	20	0,6%	0,7%
Energy	901	166	207	6,1%	7,7%
Energy efficiency		12	15	0,4%	0,6%
Biofuels use increase		48	60	1,8%	2,2%
Hydropower increase		79	99	2,9%	3,7%
Other renewable sources (SHP, bioelectricity, wind power, etc)		26	33	1,0%	1,2%
Others	92	8	10	0,3%	0,4%
Steel – replacement of charcoal from deforestation for sustainable charcoal		8	10	0,3%	0,4%
Total	2703	975	1052	36,1%	38,9%

Brazil NAMAs

Great reliance on deforestation control with 24.7% out of the total target

Industrial sector only resorting on charcoal substitution

The rest 15.2% from other sources:

- Energy: 7.7%
- Agriculture : 6.1%
- Others (steel&charcoal): 0.4%
- Target of 25% in 2020 against 2005 levels

Target	Energy	Agriculture	Others	Deforestation	Total
2020 with reduction of 38,9% against 2005 levels	92%	5%	5%	67%	25%

Sub-national regulation

Sao Paulo State Policy on Climate Change (PEMC)

- Sets 20% reduction in 2020 from 2005 levels
 - Reliance on emission standards, tax and credit instruments
 - MDL and market creation
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- Some major cities, such as, Rio de Janeiro, also proposing mitigation targets.

Additional regulation

- REDD Regime: Initiative of the Ministry of the Environment to set guidelines to monitoring and verification procedures, risk mitigation mechanisms and benefit sharing principles for REDD contract setting in Brazil (apart from the existing Fundo Amazônia)
- Voluntary Carbon Market: to be created from a proposal elaborated delivered by a working group with experts, governmental officials, representatives of the private sector including industry, agriculture, transport and financial sectors

GHG Emissions in Brazil (1)

According to the information of the Brazil Second National Communication to UNFCC , as shown in the table:

- Total of 1 637 905 in 2005 against 991 731 Gg CO₂
- Land use is still the major emitter
- Industrial sector contributes with less than 10% but it is growing faster than others

Brazil CO₂ Emission Sources

Sources	2005 (%)	Variation (%) 2005-1990
Burn of Fossil Fuel by Sector	18.3	74.0
Energy	3.0	114.4
Industry	4.6	105.3
Transport	8.1	67.0
Households	0.9	121.0
Agriculture	0.9	47.3
Others	0.7	32.1
Fugitive Emissions	0.8	81.5
Industrial Process	4.0	44.6
Land Use	76.8	64.2
Waste Treatment	< 1.0	349.4
Total	100	65.2

GHG Emissions in Brazil (2)

According to the information of the Brazil Second National Communication to UNFCCC , as shown in the table:

In total Gg CO₂eq (either 1 879 029 in GTP or 2 193 601 in GWP in 2005) the industrial sector contribution is quite small

2005 Brazil CO₂eq Emission Sources (%)

Sources	GTP	GWP
Energy	17	15
Industry	4	3.6
Agriculture	10.2	18.9
Land Use	68.1	60.6
Waste Treatment	0.7	1.9

Engagement of the Finance Ministry

- MF has entered in the policy debate as climate change is determinant to future investments and technological development
- Foreign Office and Science and Technology Ministry dominant leadership has been shared with the Ministry of the Environment and the Ministry of Finance (MF)
- Such stake was crucial for the Brazilian proposal in COP 15 towards national targets and inclusion of economic and financial instruments into the PNMC
- Although MF is now member of every working groups related to climate change, such commitment, however, is not fully mainstreamed since MF has not been able to advocate into sectoral policies to remove perverse incentives

Regulation and Enforcement Issues

- ❑ The process to define detailed actions of sectoral emission reduction targets (sectoral plans) is participative with all stakeholders (public and private) but preparation guidelines and evaluation rules are not clear yet
- ❑ Moreover, the integration of economic instruments to target accomplishment is also vague
- ❑ Industrial sector is reluctant with market based mechanisms due to cost and bias against the sector emissions and claims for subsidies (“cap without trade”)
- ❑ Economic instruments at disposal needs coordination among several governmental agencies
- ❑ So both PNMC and FNMC have not been regulated so far
- ❑ Important policy bottlenecks still exist from growth versus environmental issues and appropriate governance for applying approved regulation

Examples

Environmental restrictions issues:

- ✓ Energy: clean energy promotion and the recent deep sea oil discoveries
- ✓ Forest code: changes in legal reserve definition and protection measures to reduce restrictions
- ✓ Environmental licensing: how to introduce climate change issues for infrastructure projects

Decentralization governance issues:

- ✓ REDD policy: offset rights (domestic and international) waiting for federal policy definition
- ✓ Ecological zoning: overlapping restrictions of national and state zoning in state lands

Executive governance issues:

- ✓ Lack of specific technically capable and autonomous regulator institution to enforce them

Next Steps

- ❖ More action than rhetoric is needed to regulate already policies that include the application of economic instruments
- ❖ Efforts to match economic instruments and mitigation sectoral plans and designs to include incentive power
- ❖ Increasing partnership and ownership with sectoral ministries in the regulating process
- ❖ Articulation of sub-national and national policies
- ❖ Clear definition and differentiation of policy making and regulator governance structures