

**LEGAL AND ECONOMIC ASPECTS FOR IMPLEMENTATION OF
NATIONAL FUND ON CLIMATE CHANGE IN
BRAZIL¹**

Prof. Msc. Anderson Lanzillo. Prof. Dr. Patricia Borba Vilar Guimarães.

Universidade Federal do Rio Grande do Norte, Natal, Brasil.

1 INTRODUCTION

Modern economic and social development has brought many consequences to the way of thinking and life of modern man. However, among all the perceived changes, climate change has attracted the interest of both the scientific community and the global community for its impact on the future of mankind.

Previously climate change was placed as a discussion without more tangible evidence, now it is seen more clearly because of environmental Legal and Economic Aspects of the Implementation of National Fund on Climate Change in Brazil disasters that happen around the world.

Environmental disasters caused by climate change are affecting many natural systems and social systems. If the extinction of species of fauna and flora does not move the economic debate and political enough, social and economic losses have come to show that actions to face global warming and climate change are required. In Brazil, social and economic losses due to climate change are happening especially because of droughts and floods.

In this context, the global community is building a set of legal instruments to combat the effects of climate change (United Nations Framework Convention on

¹ Esse trabalho foi originariamente submetido e aceito para publicação nos anais do evento *Climate 2011*. Disponível em: <http://www.klima2011.net/en/background>. Acesso em 20 de julho. 2011.

Climate Change and Kyoto Protocol) and, following the global trend, Brazil has created the National Fund on Climate Change according to general provisions of the National Policy on Climate Change. The creation of the environmental fund is presented with the clear purpose of promoting actions that seek to mitigate / adapt existing social conditions to the effects of climate change, but its implementation depends on the analysis of the economic environment and public policy.

In this study we have taken into account the Brazilian public policies related to the topic, as well as economic data from Brazilian Energy Balance and International Energy Agency.

2 FEATURES OF NATIONAL FUND ON CLIMATE CHANGE

Public policies and actions by private agents are required in the current scenario to deal with climate change. Although there is a discussion whether this phenomenon has its origin from human action or even it happens in fact, the environmental disasters caused by profound changes of climate leave no doubt that measures must be taken at the global level to increase regulation (Figueres, C., Maria, H.I., 2005: 233).

In Brazil, the National Fund on Climate Change (Law No 12.114/2009 and Decree 7.343/2010) is a kind of environmental fund arisen in the context of National Policy on Climate Change (Law No 12.187/2009). The National Policy on Climate Change recognizes the existence of climate change as a result of human action directly or indirectly, causing adverse effects on natural and socioeconomic systems, as well as on human health (Article 2, II and VIII, Law No 12.187/2009).

Beyond this recognition, the National Policy on Climate Change shows that the actions related to climate change (especially the incentive to reduce emissions) must combine social and economic development and protect the climate system (Article 4, Law No 12.187/2009). Brazil has assumed a voluntary commitment to reduce projected emissions between 36.1% and 38.9% by 2020 (Art. 12, Law No 12.187/2009).

Thus, in order to achieve these objectives, National Fund on Climate Change has been created to acquire and distribute funds focused on projects, studies and ventures aimed at mitigating climate change or adapting the human life to its effects (art. 2, Law No 12.114/2009).

The fund is administered by the Steering Committee, under the Ministry of the Environment, whose mission is to manage the investments from the financial recourses in the fund and to approve projects according to plan approved by the Ministry (Article 4, Law 12.114/2009 and art. 9, Decree No 7.343/2010).

The financial recourses from the National Climate Change come from a diverse base:

a) special government participation on the production by large or highly profitable oil reservoirs, b) the Union's budgetary resources, c) financial resources from agreements between the federal, state and municipal governments; d) donations, e) loans from financial institutions; f) Legal and Economic Aspects of the Implementation of National Fund on Climate Change in Brazil reversal of the annual balances not used g) resources of interest and amortization of financing (Article 3, Law No 12.114/2009).

There are two lines of financing that are covered with the resources of the fund: a) financial support in the form of repayable loans, b) non-refundable financial support for projects aimed at mitigating climate change or adapt to its effects. In addition, the fund's resources can be used to implement various activities related to the environmental education, studies on climate change studies, climate science and emission reduction of greenhouse gases (Article 5, Law No 12.114/2009).

Since the creation of National Fund on Climate Change, there is no comprehensive data on its application, but the fund is in operation, at least in the budget level. In 2011, the National Fund on Climate Change is provided with a budget of R\$ 233,727,463.00 (more or less U\$ 149,000,000.00) (Ministry of the Environment, 2011).

3 CHALLENGES FOR THE IMPLEMENTATION OF NATIONAL FUND ON CLIMATE CHANGE

It is known that developing countries are often less prepared to develop actions to address climate change because due to their economic weaknesses (Figueres, C., Maria, H.I., 2005: 239-240), but Brazil is living a special moment in the economic area and attracts more and more resources that can be applied to projects related to climate change.

To complement this good perspective, data from Brazilian Energy Balance 2010 show that Brazil has an energy matrix predominantly from renewable energy, with 76.9% of hydro power and biomass 5.4% (Energy Research Company, 2010: 12). However, this view may well be impeded by conflicting signals from the Brazilian energy policy.

Despite the large presence of renewable energy, Brazil still lacks an overall regulatory framework on renewable energy. Brazil has only one incentive program: Incentive Program for Alternative Sources of Energy (PROINFA), established by Law No 10.438/2002) and sparse regulations on biofuels.

On the other hand, there is an extensive legislation that encourages the exploration of oil and gas to Brazil (Law No 9.478/1997 and Law No 11.909/2009). After the discovery of oil and gas in pre-salt layer, Brazil has strengthened further this policy to get more oil in ultra deep water, creating a law to increase state presence in the activity (Law No 12.351/2010) and spending more resources for an energy resource that is increasingly recognized as a main cause of CO₂ emissions (Moomaw, W. et al. 2011: 03).

From a financial standpoint it is understandable that policy: today oil-related activities are responsible for much of the collection of taxes, and are of great presence on the account of the gross national product in Brazil. *Petróleo Brasileiro S.A (PETROBRAS)*, a stated-owned company, is among major national companies.

What is the greatest danger? According to data from World Energy Outlook 2010, fossil fuels will still be accounting for 50% of energy demand by 2035. Moreover,

countries not members of the OECD will account for 93% of the increase in energy demand, especially China (International Energy Agency, 2010).

Looking at these data, fossil fuels remain the main fuel around the world. Before this demand, Brazil could direct the production of oil, especially one from the pre-salt layer, to supply the global market. Exporting oil to the global market establishes a paradox: while nationally Brazil has favorable conditions to reduce their Legal and Economic Aspects of the Implementation of National Fund on Climate Change in Brazil emissions, this same country contributes to "export" the production of emissions, meaning that other countries will be keeping producing emissions.

Thus, although National Fund on Climate Change indirectly establishes a "compensatory policy," since part of the income from oil and gas finances it, this is not enough for the fund to meet their goals. As it is increasingly recognized, renewable energy resources contribute to mitigate the effects of climate change (Moomaw, W. et al. 2011: 03) and Brazil needs to recognize that fact in a more broadly way, and must seek the approval of a comprehensive regulatory framework for renewable energy.

This is a basic condition so that the resources of the fund can be approved in projects that contribute nationally and globally to cope with the issue of climate change.

5 REFERENCES

Energy Research Company. (2010). **Brazilian Energy Balance 2010**. EPE, Rio de Janeiro.

Figueres, C., Maria, H. I. (2005): Mudança Climática: Interesses Nacionais ou um Regime Global? In: **Governança Ambiental Global: opções e oportunidades** [Etsy, D. C., Ivanova, M. H. (eds), Senac, São Paulo.

International Energy Agency. (2010) **World Energy Outlook 2010: fact sheets**. IEA, Paris. Available at: www.iea.org.

Ministry of the Environment. (2011): **Fundo Clima**, Brazil. Available at:
<http://www.mma.gov.br/sitio/index.php?ido=conteudo.monta&idEstrutura=251&idConteudo=11036&idMenu=11927>.

Moomaw, W. et al. (2011): Introduction. In: **IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation** [O. Edenhofer, R. Pichs-Madruga, Y. Sokona, K. Seyboth, P. Matschoss, S. Kadner, T. Zwickel, P. Eickemeier, G. Hansen, S. Schlömer, C. von Stechow (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at: <http://srren.ipcc-wg3.de/report>.