

Instituto de Pesquisa Econômica Aplicada



The International Policy Centre for Inclusive Growth is jointly supported by the Poverty Practice, Bureau for Development Policy, UNDP and the Government of Brazil.

Road Transport and Climate Change in Brazil

by Patrícia Helena Gambogi Boson, Representative of CNT in the National Environmental Council (Conama)

A discussion of road transportation in Brazil is of significance in the context of climate change due to its status as the second largest contributor to greenhouse gas (GHG) emissions, about 7 to 9 per cent of the national total, and its responsibility for 90 per cent of the diesel oil consumed in the transport sector, or 80 per cent of total domestic consumption.

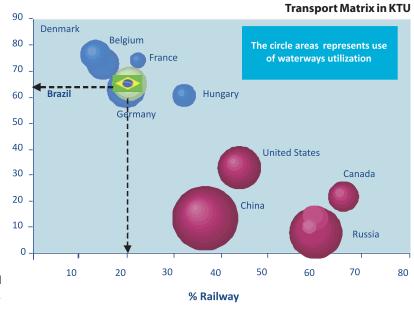
The characteristics of the Brazilian transport matrix further emphasise the relevance of the road transport sector in environmental discussions, and its implications for climate change issues. Unlike other countries with similar characteristics, 62 per cent of freight in Brazil is transported by road, compared to only 20 per cent by rail, and no more than 18 per cent by waterways. The state of the truck fleet further worsens the situation: around 1.3 million trucks traverse the country, 45 per cent of which are over 20 years old, and about 20 per cent (260,000) are over 30 years old.

Brazil's urban passenger transportation is concentrated around the use of automobiles (43 per cent) and buses (50 per cent), as measured in the number of passengers per kilometre travelled. Rail transport represents only 7 per cent of the total.

In this context, an opportunity can be found in the improvement of the Clean Development Mechanism (CDM), built into the scope of the Kyoto Protocol to facilitate engagement of the transport sector. Appropriately designed Nationally Appropriate Mitigation Actions (NAMAs), which aim to strengthen and formalise national voluntary commitments, represent another opportunity.

Considering the issues discussed above, several appropriate national actions for the transport sector include:

- development and implementation of a renewal programme for the Brazilian truck fleet;
- development and implementation of a programme to improve the road infrastructure, as well as investments in the diversification of the transport matrix;



- invigoration and formalisation of voluntary commitments, especially those aimed at the implementation of policies to discourage the use of individual motorised transport and improve public transportation and the integrated planning of transport and land use in the growing urbanisation process of the country; and
- development of mechanisms to stimulate investment in research, development and innovation, especially activities aimed at largescale production and distribution of cleaner automotive fuels.

Reference:

Boson, P. H. G. (2011). 'Road transport and climate change in Brazil', in R. S. Motta, J. Hargraye, G. Luedemann and M. B. S. Gutierrez (eds), Climate change in Brazil: Economic, Social and Regulatory Aspects. Brasília, IPEA: 123-138.

Publication: Climate Change in Brazil: Economic, Social and Regulatory Aspects, available at: http://www.ipea.gov.br/portal/images/stories/PDFs/livros/livros/livro_climatechange_ingles.pdf.



Figure 1

Telephone: +55 61 2105 5000