



Centro Clima
CENTRO DE ESTUDOS INTEGRADOS SOBRE
MEIO AMBIENTE E MUDANÇAS CLIMÁTICAS

Integrated Development and Climate Policies in Brazil

Development and Climate Workshop
“Integrated Development and Climate
policies: how to realise benefits at
national and international level?”

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MAJOR FEATURES OF THE BRAZILIAN ECONOMY - 2002



- GDP
US\$ 500 billion
- Population of 174 million inhabitants
- GDP/cap
US\$ 2,800/y
- Surface:
8.5 million km²

GHG Emissions in Brazil

1st National Communication: Inventory of Brazilian GHG Emissions in 1990-1994

- 776 million tons CO₂ = emissions from LULUCF in 1994 (2% increase from 1990) = three times higher than emissions from the energy system
- GHG emissions from cattle raising activities: nearly equal to CO₂ emissions from fossil fuels
- 237 million tons CO₂ = emissions from fossil fuels combustion in 1994 (16% increase from 1990)

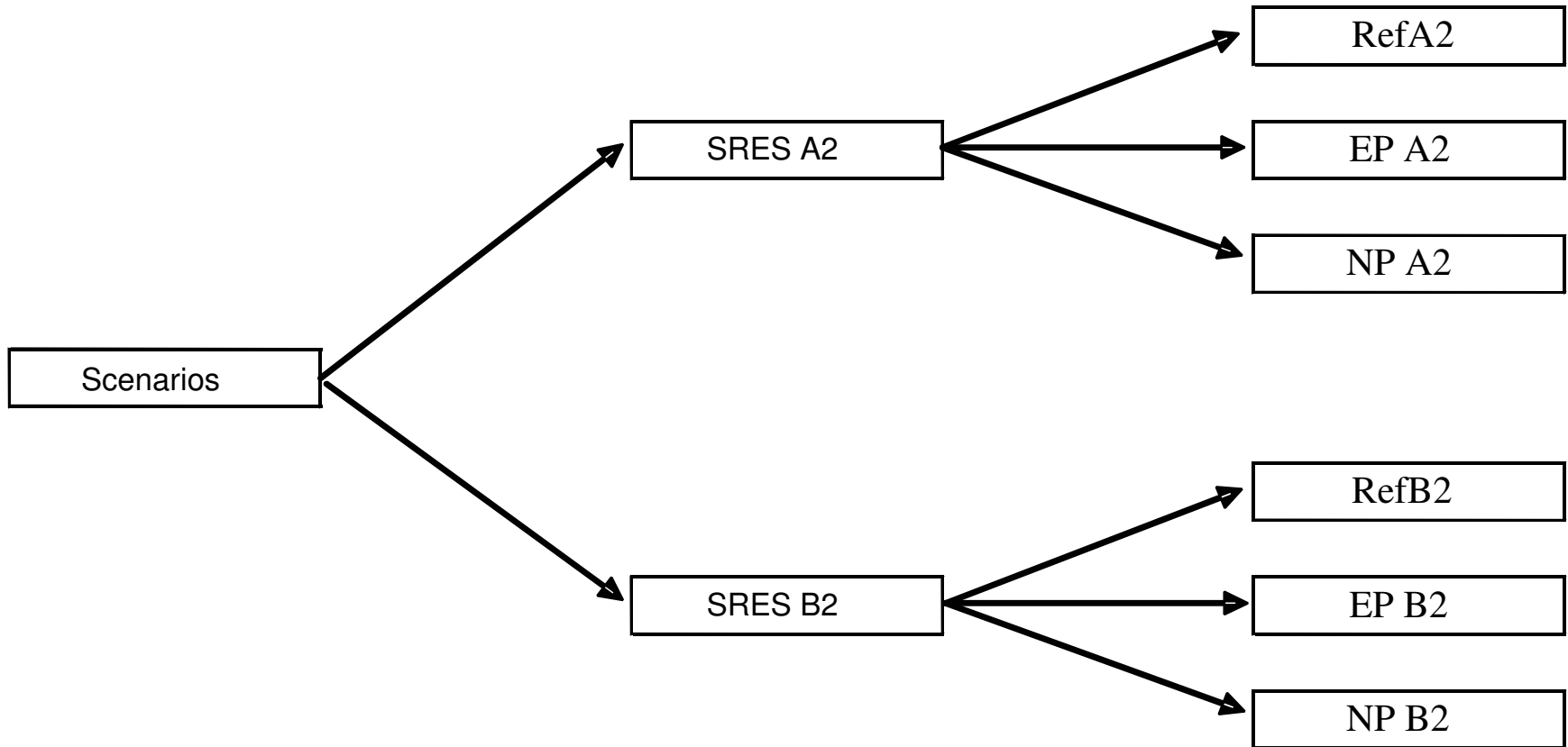
Medium and long-term prospects:

- CO₂ emissions from energy will be dominant

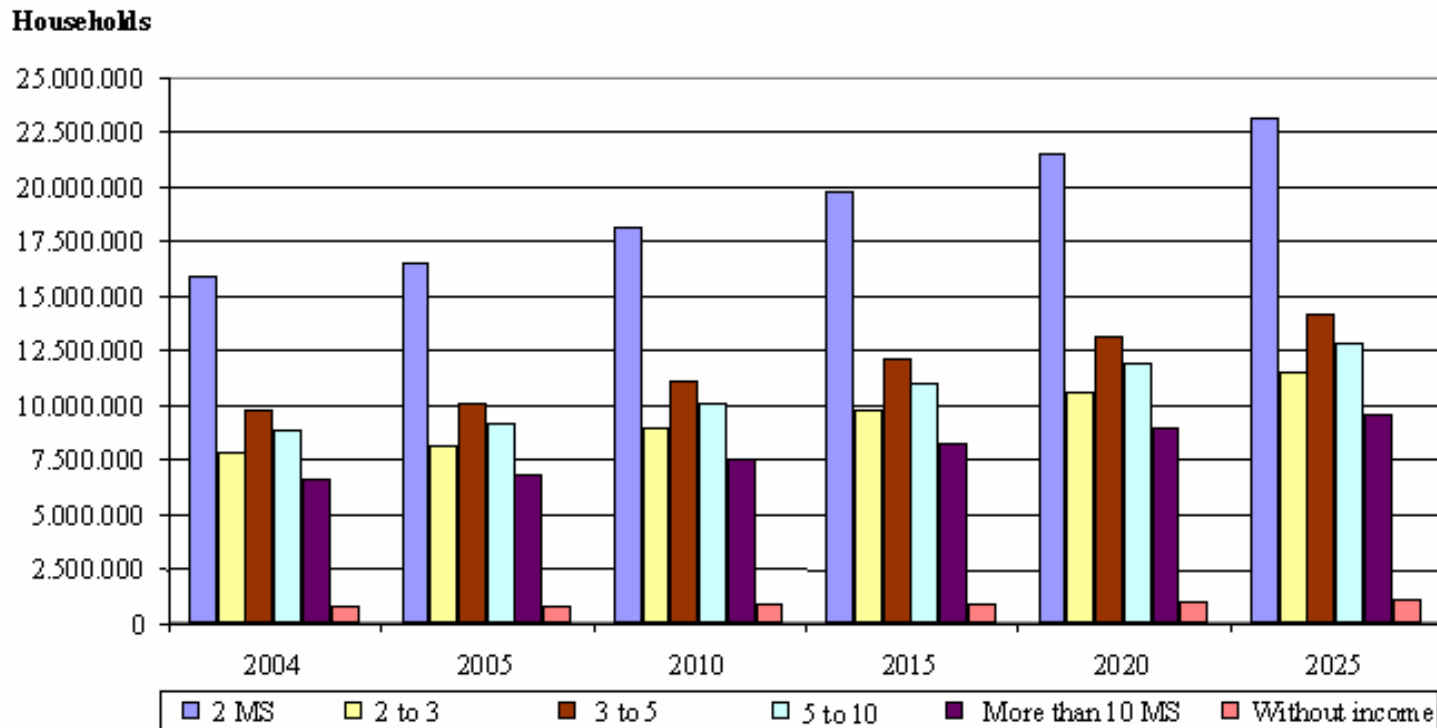
Challenges in Land-use Change Emissions

- Deforestation drivers go far beyond economic factors;
- Key drivers from social policies
 - Lack of access to land x agrarian reform
 - Governance:
land-use planning x enforcement of laws & regulations;
- How far will Amazon deforestation go?
- Huge potential for reforestation of degraded land (30 million hectares).

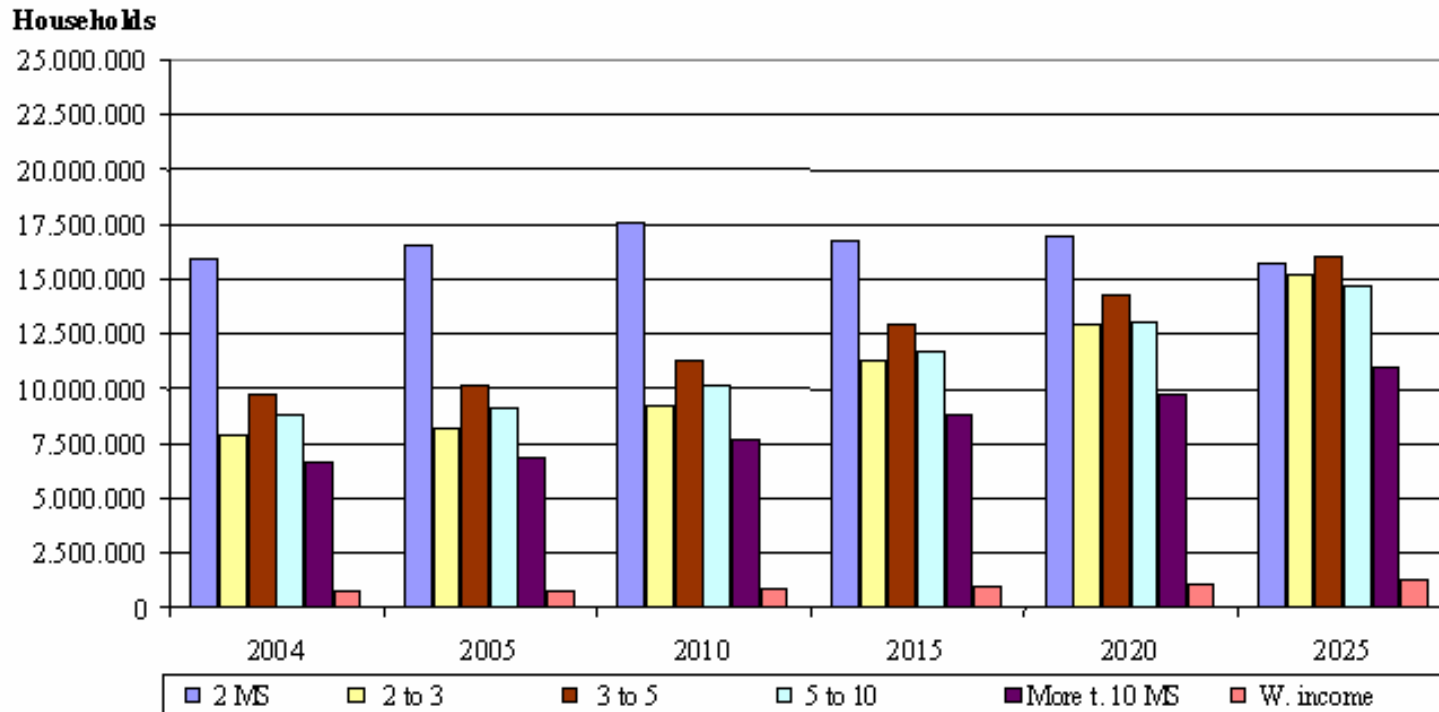
Scenarios



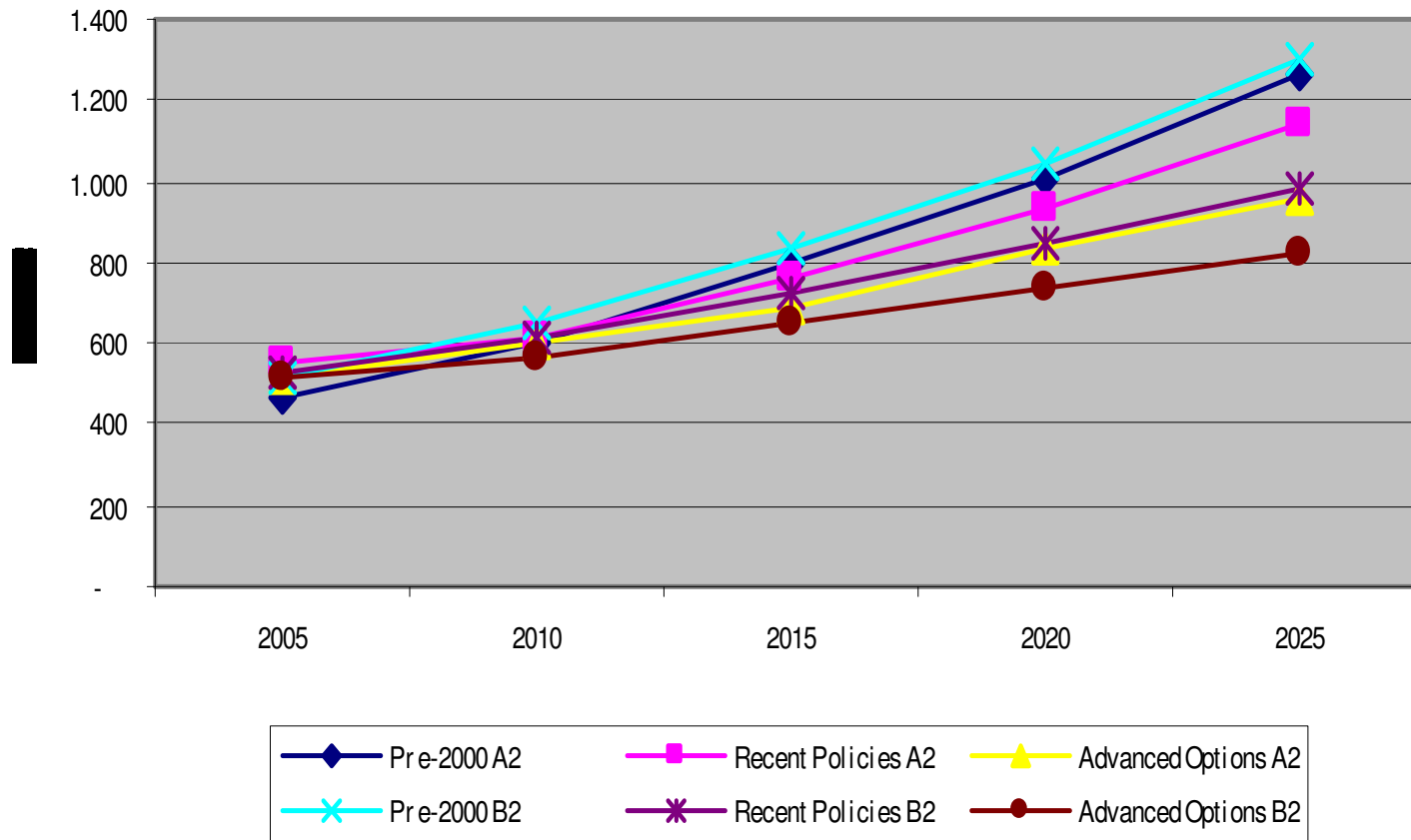
Income Distribution in A2



Income Distribution in B2



Total CO₂ Emissions from the Energy System



Conclusion: Integrated Development and Climate Policies

- Energy efficiency in industry and transport
- Natural gas in industry + residential and commercial sectors
- Hydropower potential to be tapped
- Ethanol: domestic production + exports
- Biodiesel in transport sector
- Renewable power generation in remote areas (access to electricity for rural population)