

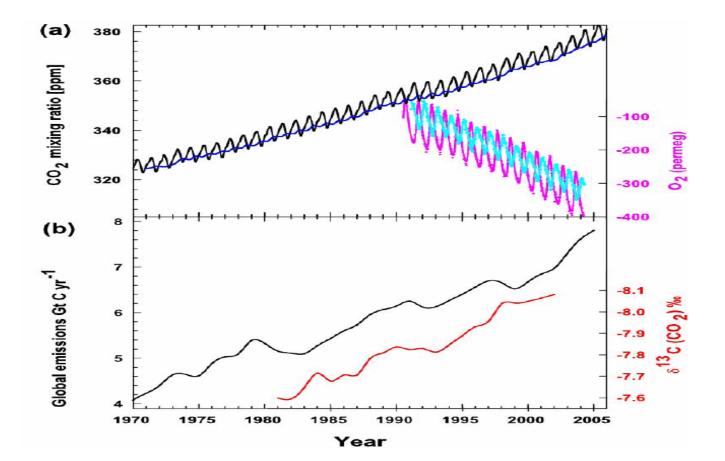
International Workshop on Carbon Markets in Emerging Economies São Paulo, 22 November 2010

An overview of the role of carbon markets

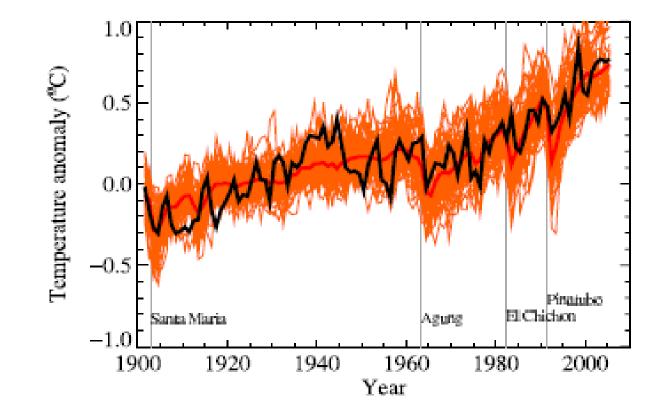
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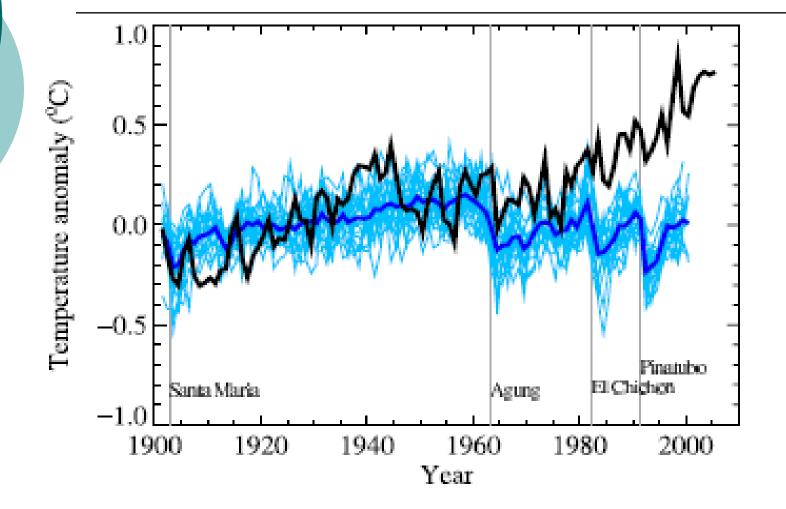




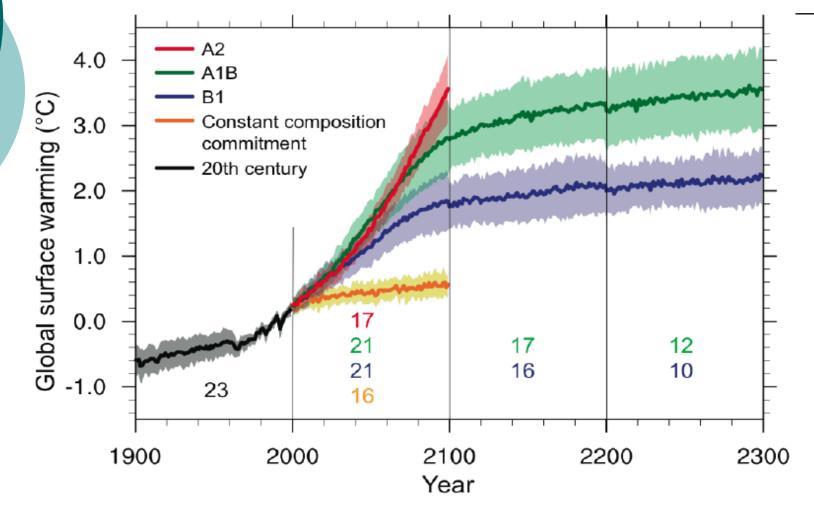














Máximo efeito sobre o clima ocorre décadas após a emissão

15% do gás carbônico permanece na atmosfera por mais de mil anos

100 80 (% do aumento) Temperatura 60 dióxido de carbono 40 metano 20 óxido nitroso 0 50 150 0 100 200 Anos após emissão



In order to stabilize the atmospheric concentration and therefore the temperature it will be necessary to reduce global emissions by 60% with respect to their 1990 levels.



In order to keep the increase in global mean surface temperature below 2 degree Celsius, measures must be taken immediatly.



The international negotiations may be pointing to industrialized countries (3/4 of 1990 global emisions) reducing emissions by 80%.



Under that scenario, emerging countries must reduce their emissions back to their 1990 levels.



There are three tools available to induce emission reductions:

- Regulation
- Taxes
- Cap-and-trade



Carbon markets are generated by a scarcity established artificially by a requirement to reduce emissions.

There is no market without such scarcity.



 The carbon market approach tends to decrease the overall cost to society of emission reductions, for these tend to migrate to wherever the marginal cost is lower, provided the transactin cost is zero or very low



Good examples are the sulphur dioxide case in the U.S. And the ETS in Europe.

- In both cases an emission cap was established by regulation.
- The state law in São Paulo also establishes a cap.



The challenge today under the UNFCCC is to implement market mechanisms beyond those of the Kyoto Protocol

 A generalization of the ETS would imply the need to negotiate initial allocations.