

Role of markets in the future climate regime

Unintended pre-determination or
sustainable planning?

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Jupiter and Minerva



Jinerva

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Minerva is born from Jupiter's
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Markets are configured by default not by intentional planning

- Markets are not supernatural entities!
- Characteristics of a market are constructed or defined by default:
 - Definition of goods and services
 - Definition of property rights
 - Price – generation mechanisms
 - Income generation mechanisms
 - Re-distribution mechanisms (taxes, charges, fiscal systems)
 - Liability provisions
 - Financial instruments

Market tendencies by default

- The bigger proportion of the income goes to the "most able" (normally, equity and debt providers)
- Property rights are defined accordingly
- Price tends to volatility
- Financing also tends to concentrate
- Liabilities go mainly to the "less able"
- Exclusion of "less competitive" products (even if socially or environmentally desirable)

How MEAs work

Norm of Env. Multilateralism (Dimitrov):

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Norm of Env. Multilateralism (Dimitrov):

- Political / group interests
- Vested corporative interests
 - “Developmental” cost
 - Bureaucratic inertia

How MEAs work

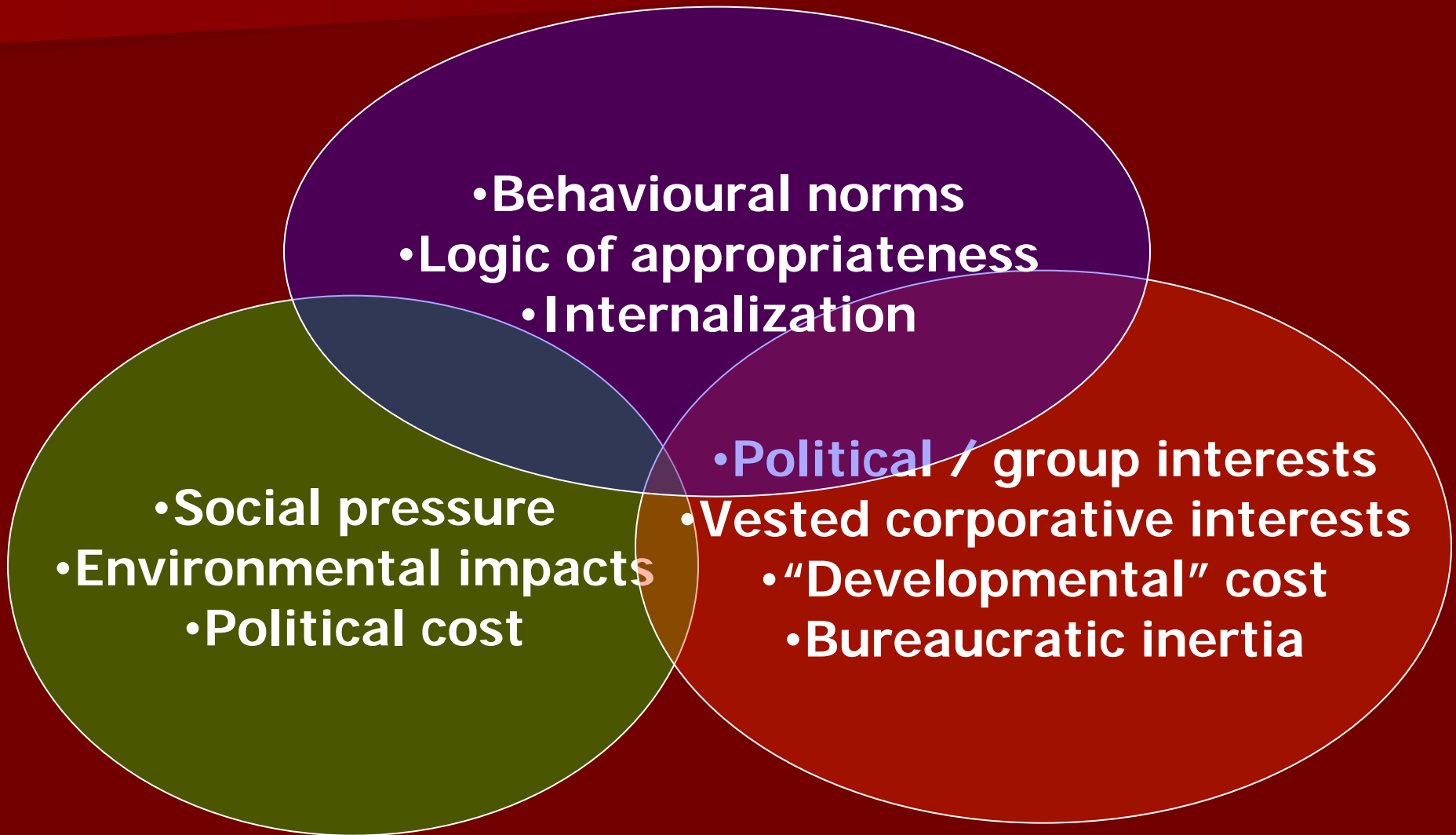
Norm of Env. Multilateralism (Dimitrov):

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- Social pressure
 - Environmental impacts
 - Political cost

- Political / group interests
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How MEAs work

Norm of Env. Multilateralism (Dimitrov):



How MEAs work

Norm of Env. Multilateralism (Dimitrov):

- Behavioural norms
- Logic of appropriateness
- Internalization

- Social pressure
- Environmental impacts
- Political cost

- Political / group interests
- Vested corporative interests
- “Developmental” cost
- Bureaucratic inertia

How market mechanisms were incorporated at Kyoto



Growth of carbon market (1)

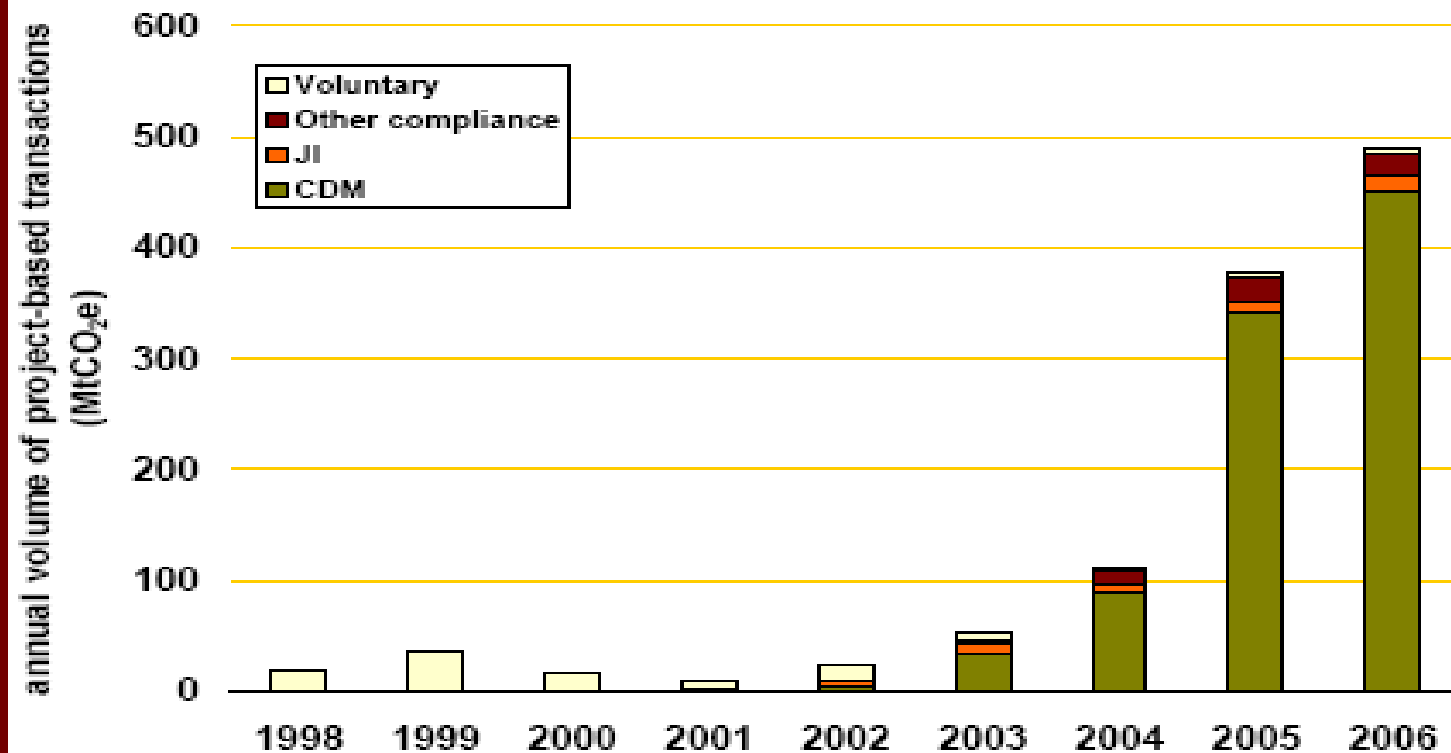
Table 1: Carbon Market at a Glance, Volumes & Values in 2005-06

	2005		2006	
	Volume (MtCO ₂ e)	Value (MUS\$)	Volume (MtCO ₂ e)	Value (MUS\$)
Allowances				
EU ETS	321	7,908	1,101	24,357
New South Wales	6	59	20	225
Chicago Climate Exchange	1	3	10	38
UK-ETS	0	1	na	na
Sub total	328	7,971	1,131	24,620
Project-based transactions				
Primary CDM	341	2,417	450	4,813
Secondary CDM	10	221	25	444
JJ	11	68	16	141
Other compliance	20	187	17	79
Sub total	382	2,894	508	5,477
TOTAL	710	10,864	1,639	30,098

Source: *Karan Capoor, Philippe Ambrosi. State And Trends Of The Carbon Market 2007*. World Bank CF Assist / IETA

Growth of carbon market (2)

Figure 2: Annual Volumes (MtCO₂e) of Project-based Emission Reductions Transactions (vintages up to 2012)

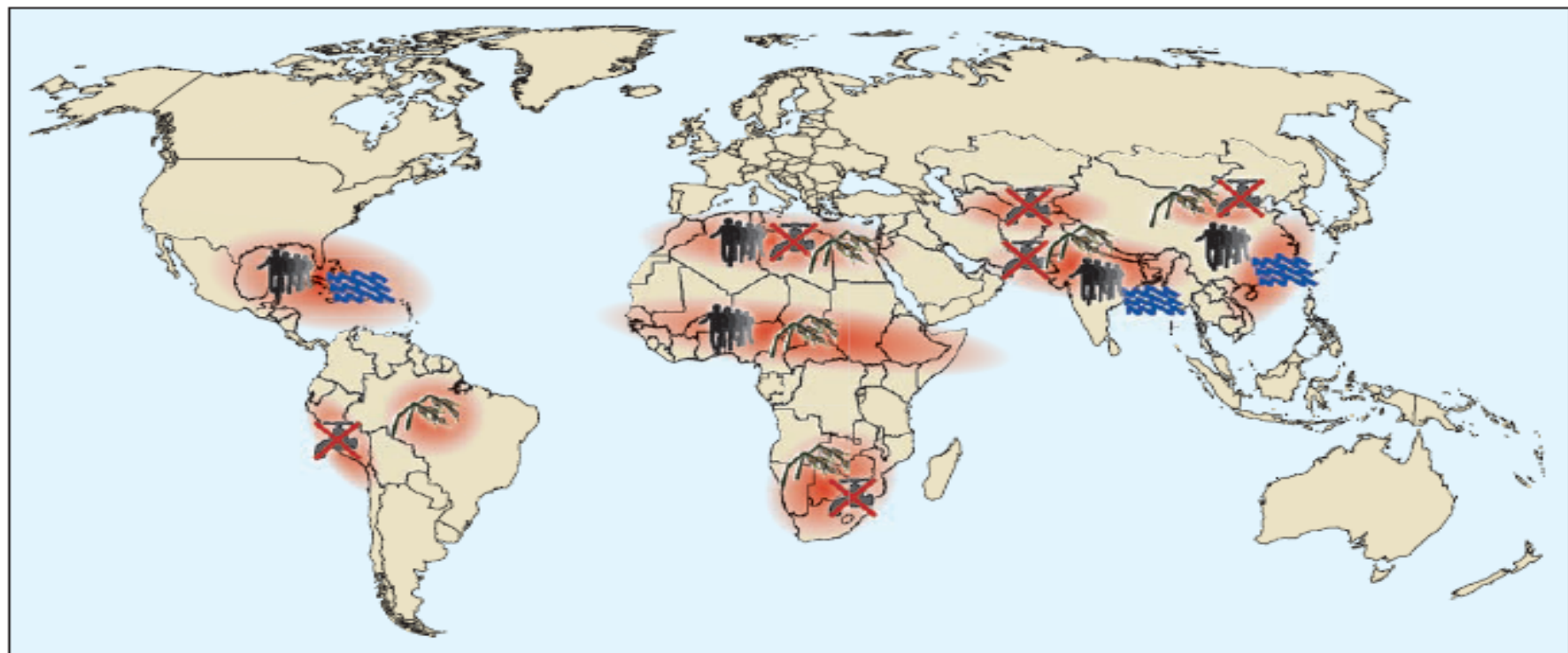


Source: *Karan Capoor, Philippe Ambrosi. State And Trends Of The Carbon Market 2007*. World Bank CF Assist / IETA

Climate Change as a potential source of conflicts (1)

- *German Advisory Council on Global Change. World in Transition: Climate Change as a Security Risk*
- ...climate change will draw ever-deeper lines of division and conflict in international relations, triggering numerous conflicts between and within countries over the distribution of resources, especially water and land, over the management of migration, or over compensation payments between the countries mainly responsible for climate change and those countries most affected by its destructive effects... An effective international climate protection regime must ensure that global greenhouse gas emissions are halved by the mid 21st century.

Climate Change as a potential source of conflicts (2)



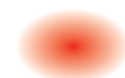
Conflict constellations in selected hotspots



Climate-induced degradation of freshwater resources



Climate-induced decline in food production



Hotspot



Climate-induced increase in storm and flood disasters



Environmentally-induced migration

Figure 1
Security risks associated with climate change: Selected hotspots. The map only shows the regions which are dealt with in this report and which could develop into crisis hotspots.

Source: WBGU

Negotiation of a future climate agreement

- The (internalized) pressures do not make possible the negotiation of another “pick and choose” agreement
 - Impacts on ecosystems and productive systems
 - Potentials for conflict
 - Increased public perception
 - Movies, Oscars and Nobels
- However, NEM makes the results not so linear:
 - On one hand, Governments have to produce an agreements
 - On the other hand, the counter tendencies tend to make the agreement as ineffective as possible

Probable configuration of the future climate regime

- Minimum political requirements for a new agreement:
 - No “pick and choose targets”, probably def. of GHG concentration at 450 or 550 ppm
 - Gradual commitments required from developing countries
 - Possible inclusion of major emitting sectors (air & sea transport)
 - A deeper treatment of adaptation
 - Possibility of enhancing market mechanisms
- However, NEM determines diluting tendencies:
 - Developed countries to look for minimum effort politically feasible
 - Eastern Europe countries looking for consolidating benefits
 - Developing countries trying to delay engagement
- Only market mechanisms will see great impulse!

Market and economic mechanisms for the future CC regime

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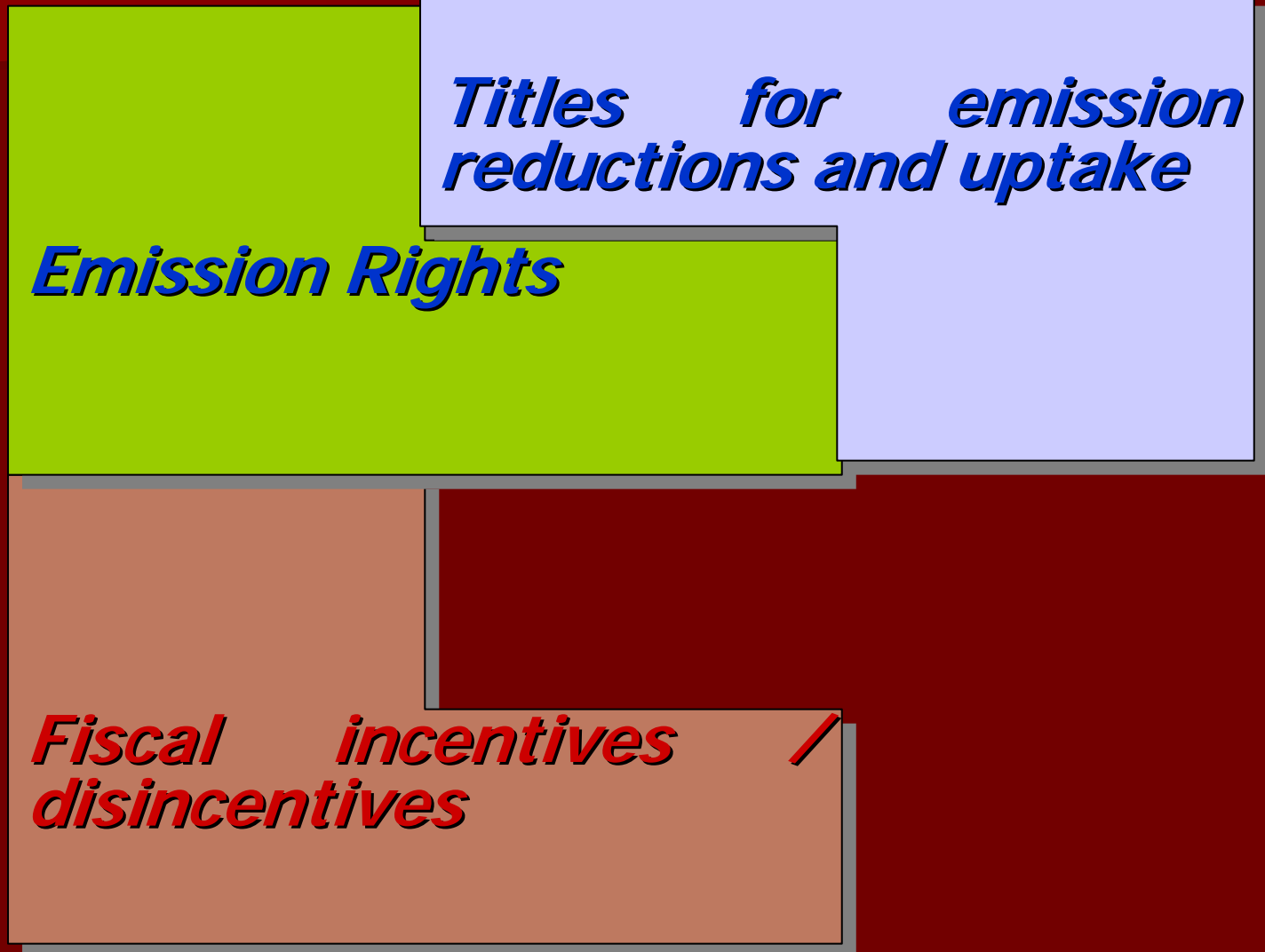
Emission Rights

Market and economic mechanisms for the future CC regime

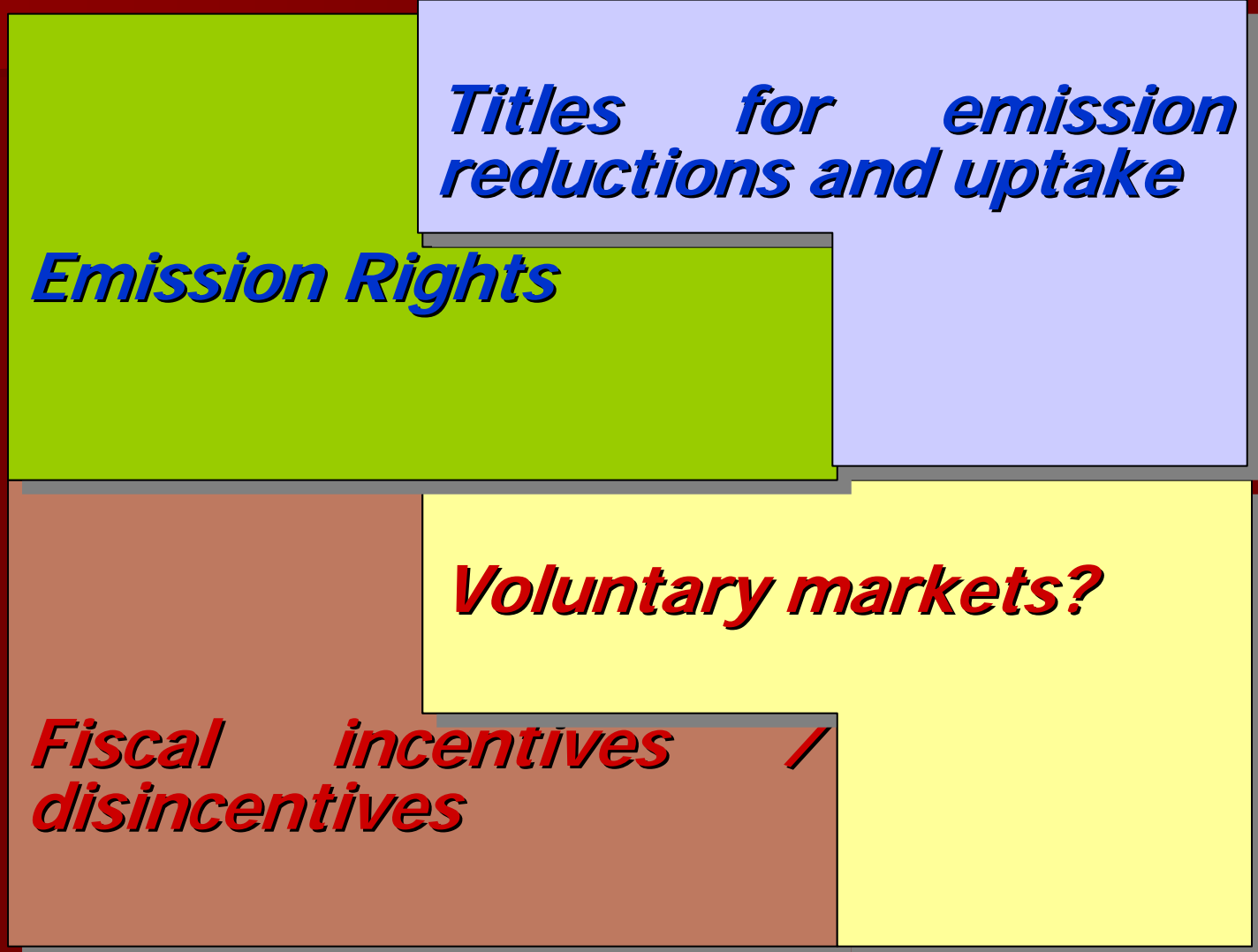
*Titles for emission
reductions and uptake*

Emission Rights

Market and economic mechanisms for the future CC regime

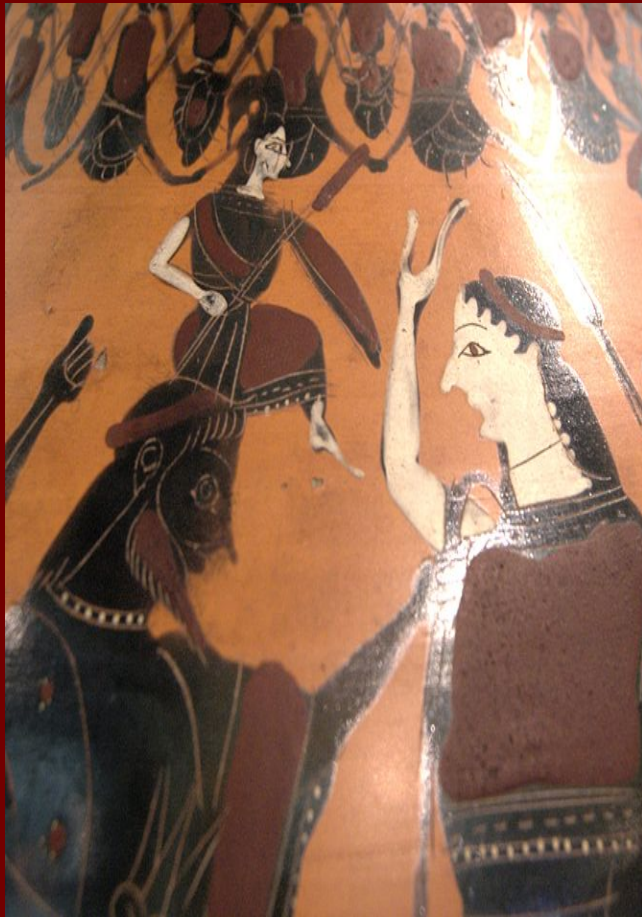


Market and economic mechanisms for the future CC regime



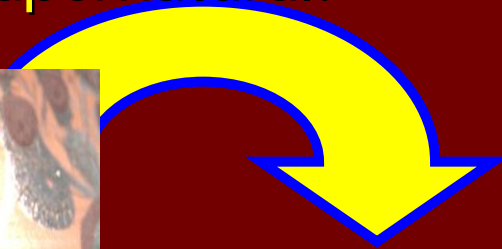
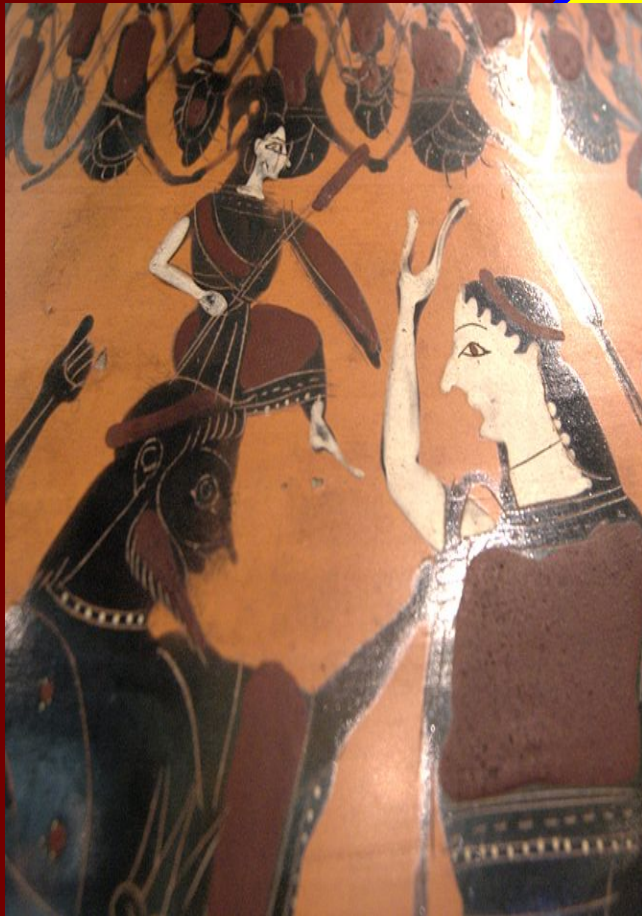
Just establish markets or plan them?

Markets are not supernatural!



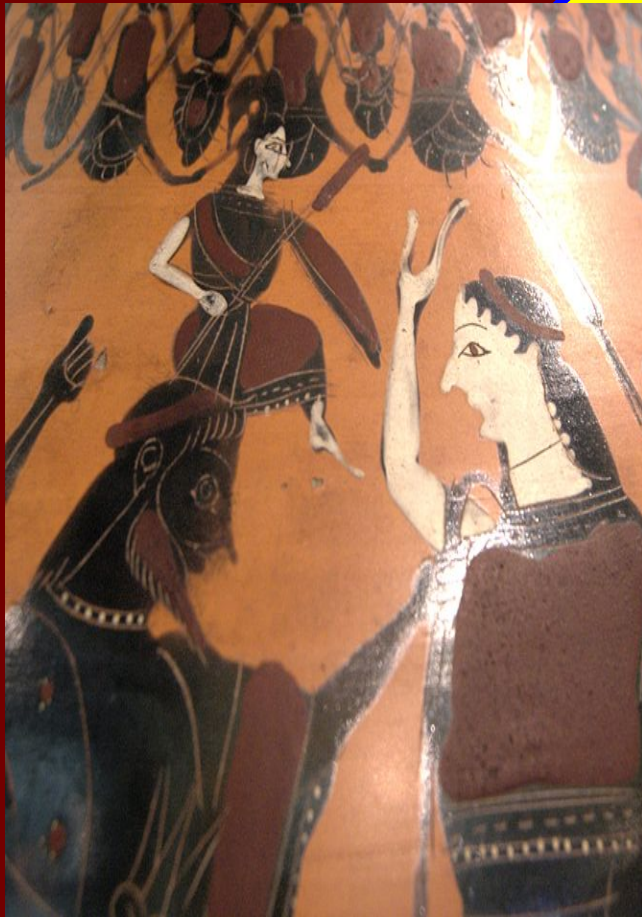
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Requisites for planned CC market

- Climatic effectiveness, not financial gain, is the priority
 - Stringent targets to create the market
 - Linked and timed to a credible framework
- Equity among sectors / actors
- With long-term effects on sustainable development
- ASAP, introduce incentives to cleaner technologies and disincentives to GHG – emitting technologies

Economic instruments for adaptation?

- Reform world agricultural markets to compensate impacts on poorer economies
- Include vulnerability premiums in international financing
- Charges on aviation and shipping to finance adaptation in vulnerable areas
- Incorporate microfinancing and microinsurance for affected smallholders
- International Migration Fund

Final Word:

Muito Obrigado!