

**UNFCCC COP14 Side Event
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**Addressing the threat of climatic
catastrophe under Art 3.3 of the
Convention - a win-win-win approach**

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Art 3.3 of the UNFCCC

- “The Parties should take precautionary measures....’
- ‘where there are threats of serious or irreversible damage , lack of full scientific certainty should not be used as reason for postponing such measures ...[which] ... should be cost effective so as to ensure global benefits.”

Not the conference of Parties

No need for consensus (so what the Saudis think doesn't matter)

No need for scientific certainty (by when it will be too late)

Kyoto style emissions reductions not cost effective, BCSM is.

Burden sharing conflictual, BCSM yields gains from trade

Surface Melt on Greenland

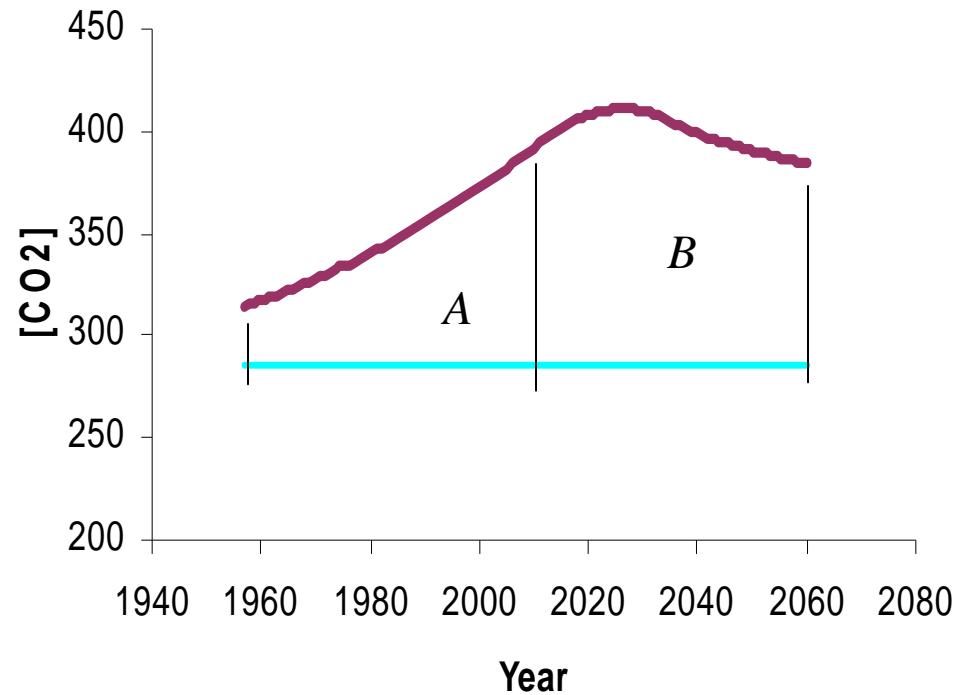
Melt descending into a moulin, a vertical shaft carrying water to ice sheet base

Quite a bit of basal lubrication here ! (*PR*)



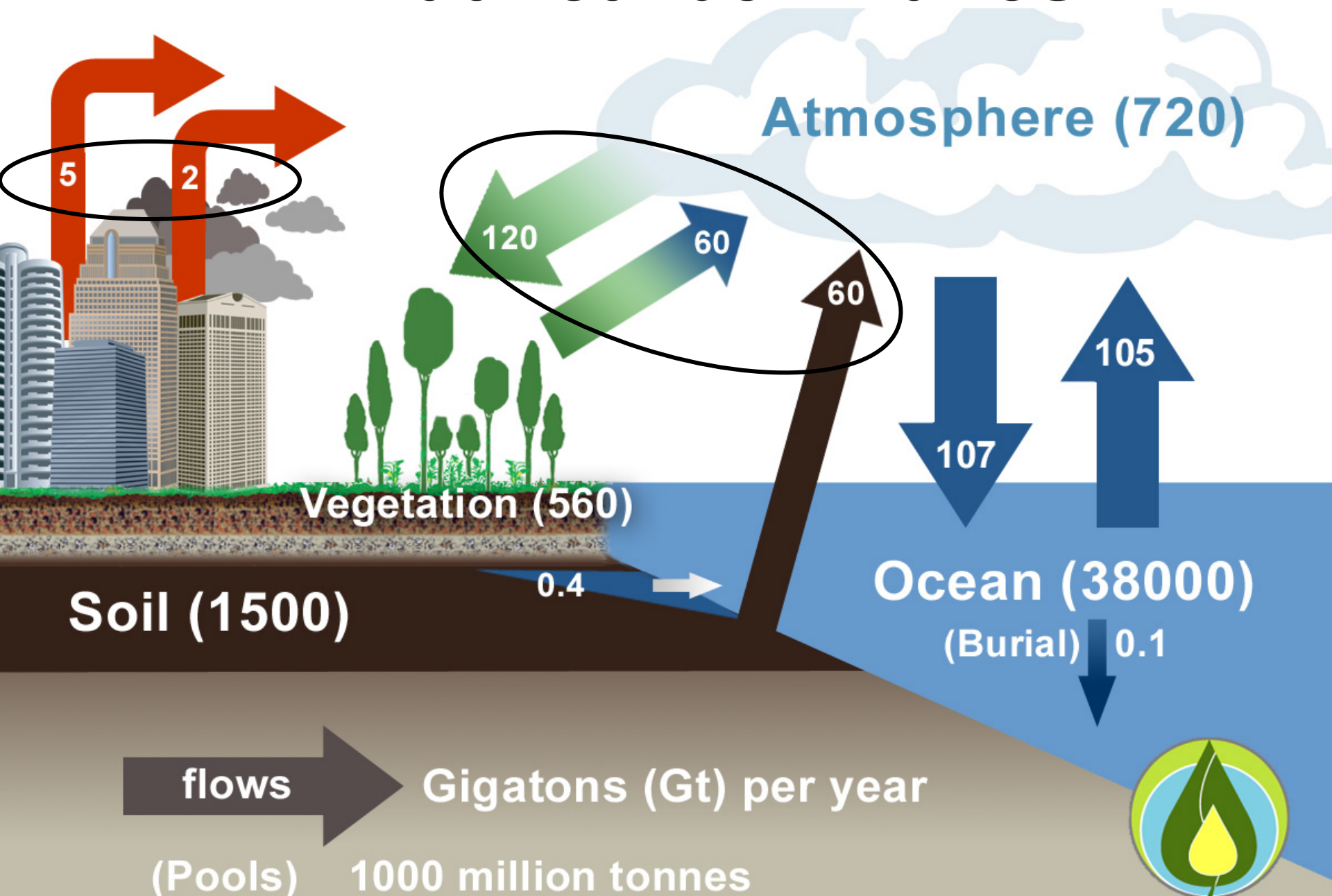
Source: Roger Braithwaite, University of Manchester

The metric for this : the integral or cumulative thermal input

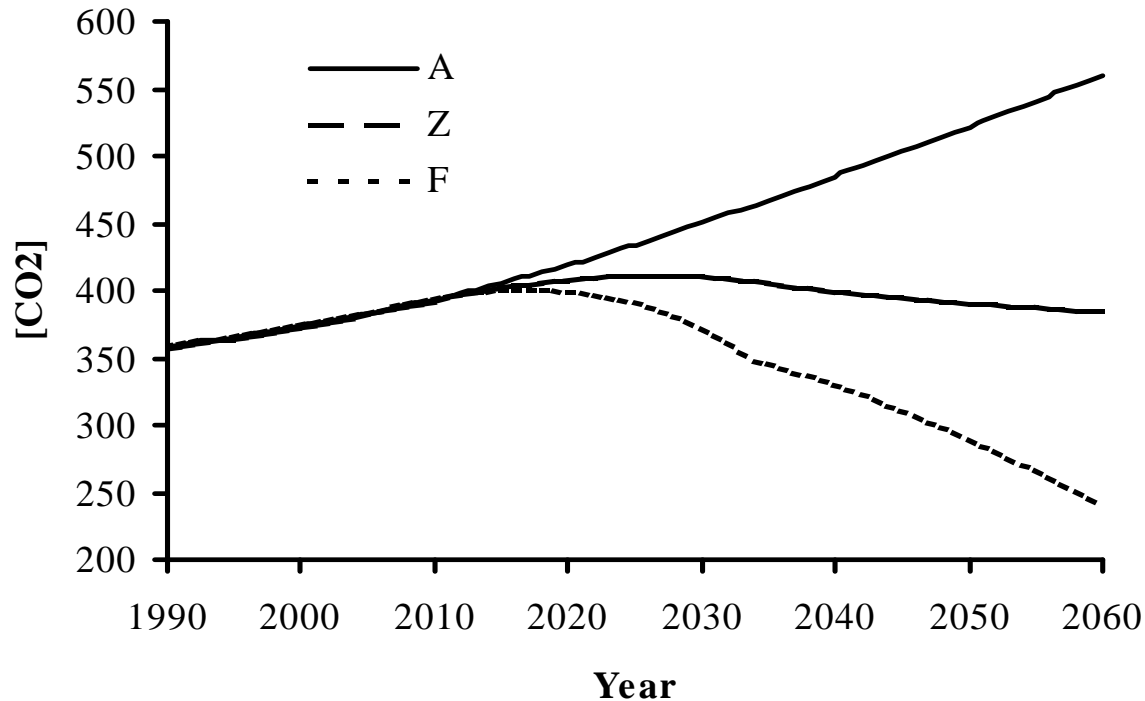


Thermal input to the climate system in the last half century
and in the next **if emissions are reduced to zero by 2035**

Annual carbon fluxes



Comparison of negative emissions systems involving biosphere carbon stock management (BCSM - F) with emission reductions(Z) in mitigating the level of CO₂ (in ppm) in the atmosphere



- A SRES-A2
- Z SRES-A2 with a transition to zero emissions technologies between 2011 and 2035
- F SRES-A2 with a transition to land improvement carbon removal technologies over the same period, with land use change complete by 2035 and technological progress to 2060

Global Gardening

Treat all managed soil – farmland and plantation forestry – the way good gardeners treat their soil.

Raise soil organic carbon and soil productivity through biochar soil amendment

Biochar is long lived ground up charcoal from pyrolyzing biotic waste material and treating with organic wastes (mulch heaps, sewerage ponds, etc) to produce long lived fertilizer – win-win-win-win-win !!!

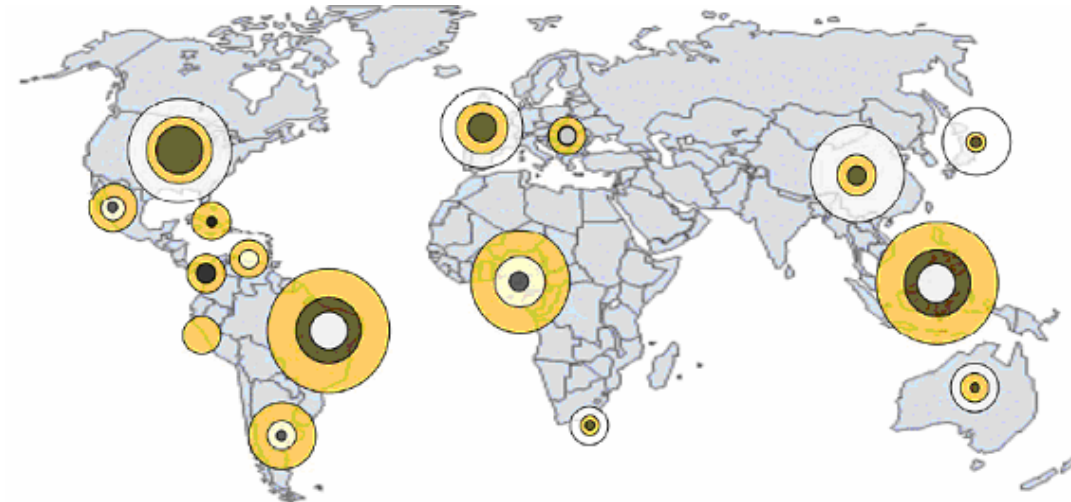
Some stand alone energy crops but mainly

- Co-produced timber + bioenergy
- Co-produced food + bioenergy

Linked to negative emissions systems

- Some wastes to biochar and C storage in soil
- Some bio-energy plants linked to CCS
giving BECCS

Gains from trade, not conflictual burden sharing



- Feedstock potential based on land available for devotion to first generation biofuel feedstocks.
- Theoretical biofuel demand, assessed to be ~30% of liquid transport fuel consumption in 2006.
- Biofuel production capacity in place at year end 2006.

- Feedstock potential exceeds biofuel demand and surplus production capacity - so export.
- Capacity less than biofuel demand so investment in infrastructure warranted to encourage export potential.
- Feedstock constrained and capacity less than demand - so import.

Source: New Energy Finance www.newenergyfinance.com

Capacity Building

So we need a corps of several tens of thousands of grassroots entrepreneurs trained to:

- understand the science and the technologies of carbon stock management
- to access markets and sources of finance for BCSM projects
- and to communicate with, and engage the commitment of, rural communities to the prospect of improved lifestyles and other millennium development goals that can be secured through well conceived BCSM projects

Where's the money coming from?

For capacity building? This is a pure public good that should be financed by the GEF (about \$50m a year should yield the needed flow of trained grassroots entrepreneurs)

For forestry projects? BCSM Portfolio Standards (Similar to a biofuel mandates) fossil fuel extractors or importers to be obliged to invest in a stock of biotic carbon that will, over a rotation (25yrs?) absorb the CO₂ emitted when their product is sold and eventually yield biofuels

How?

**Increasing Proportional Obligations
(like Renewable Portfolio Standards) to drive
biosphere carbon stock management (BCSM)
(Carbon Stock Management Portfolio Standards)**

Leaves price signaling to cap and trade

Keeps money out of the hands of governments and
bureaucracies (unlike earmarked taxes)

Leaky Bucket

Replaces

high transactions cost *ex post* project based offsets

(CDM a silver teaspoon, very costly and doesn't shift much CO₂)

With

Negotiated *ex ante* policies and measures linked to low cost best practice verification, disregarding additionality

Implement (without need for consensus) through
Sustainable Carbon Action Management Partnerships

Bi-lateral deals

Group-party deals
(a G8 SCAMP ?)

WHY??? Remember:

Quite a
bit of
basal
lubrication
here ! (*PR*)



Thank you