### An Outside-the-Box Approach to Climate Change Negotiations



"Never, ever, think outside the box."

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# Storyline

- Scale of the Problem
- Who Must Change
- What would a beneficent dictator do?
- Obstacles
- The Best Bet?
- Global R&D collaborative
- Global standards initiative
- Security of supply
- Reporting & verification
- How to get started?

### The Problem: Altering BAU Path

CO<sub>2</sub> emissions and equilibrium temperature increases for a range of stabilisation levels



IPCC AR4, 2007, 5.4 Emission trajectories for stabilization

### The Problem: Alter the BAU Path



#### EMISSIONS PER CAPITA FOR STABILIZING CONCENTRATIONS AT 450 PPM CO. EQUIVALENT (IN TONNES OF CO. EQUIVALENT PER CAPITA)



Source: UNDP (2007) based on Meinshausen (2007).

### Who Must Change?



# What would a beneficent world dictator do?

- McKinsey curve
- Population control



• World Diet





### GLOBAL COST CURVE

#### Marginal cost of abatement - examples €/t CO2



marginal cost

Abatement margin cost below €40/t Abatement marginal cost above €40/t



("Economic Development (8<sup>th</sup> edition)", M.P. Todaro & S.C. Smith, Addison Wesley, Boston, 2003; "Population Newsletter", UN Population Division, June, 2005 http://www.un.org/esa/population/publications/popnews/Newsletter\_No\_79.pdf) 9

# Lose Weight

- A fatter population needs 19 % more food energy for its energy requirements. The production of that extra food requires machinery that emits greenhouse gases, as well as transport systems that emit pollution.
- A fatter population is more dependent on greenhouse gas-emitting cars to help move around its people who have grown too obese to walk.
- Each "fat" person is responsible for about one tonne of carbon dioxide emissions a year more, on average, than each thin person.

Phil Edwards and Ian Roberts, London School of Hygiene and Tropical Medicine Study published in the International Journal of Epidemiology.

http://www.reuters.com/article/environmentNews/idUSTRE53I2RG20090420



### **Obstacles to Current Solutions**

- Public Skepticism
- Fixation on targets & financial transfers
- UNFCCC too big to negotiate
- US government gridlock
- Chinese allergy to leadership

### "Common but differentiated responsibilities"



The Chinese and Indian position



- Use cumulative emissions to determine targets;
- Determine targets on a per capita basis;
- Use 1990 as base year to calculate national targets;
- Account for traded goods by measuring emissions in the country of consumption of goods, not where emissions were produced.

### **US Checks & Balances**

"...liberty could be preserved only when the motions of government were slow - the power divided - and time provided for the wisdom of the people to operate against precipitous and ill-considered action. The delegates believed that they were sacrificing efficiency for liberty..."

JFK, December 4, 1953

# China hesitant to global leadership role.

Deng Xiaoping:

Observe calmly. Secure our position. Cope with affairs calmly. Hide our capacities and bide our time. Be good at maintaining a low profile. Never claim leadership. Politically pretty much everything about global climate change conspires to let governments sit on their hands. The scariest dangers mostly live in the distant future where they are easier to ignore, but the costs of policies that would eventually lessen warming are immediate. International coordination is essential but hard to orchestrate. The countries that are most vulnerable to climate change and most inspired to stop global warming are also generally the poorest and the least responsible for the problem in the first place. They can't, on their own, make much of a difference anyway. Those with rapidly increasing emissions, like China, are largely preoccupied with priorities like economic growth rather than diffuse global problems. The United

States, the largest single polluter in history, is stuck in congressional gridlock. And a few countries—Russia, notably—even think climate change could lead to a host of positives such as longer growing seasons for crops, a richer cut of timber and lower heating bills. With nations coming at the problem from differing positions, crafting serious international cooperation has been nearly impossible.

> David G. Victor The Green in the Machine



### Who is Responsible?



### REJECT



# Nothing is agreed until everything is agreed





### Targets and \$ vs. Building Blocks

"One of China's cooperative principles, 'seek common ground while reserving differences', may be helpful in guiding the first phase ... to build up trust among the member countries, perhaps issues that are not politically charged should be discussed and put into practice first before the discussion of more sensitive issues."



### **Global R&D Collaborative**

- Establish international research institutes working collaboratively to generate cheaper clean energy.
- Model on ITER/CGIAR
- Funding from governments, private sector, multilateral institutions and research centres (financial, technical).
- Pool resources and costs; license-free access for member countries
- Avoid duplication of efforts

### Energy: Security of Supply

 Change zero sum into positive sum game Create a "buyers' cartel" - cooperation versus competition – À la group insurance plan Transform Energy Charter to include USA & China, other G20 countries Jointly invest in global LNG infrastructure

### **Global Standards Initiative**

- Promote the Greenhouse Gas Protocol (WRI and WBCSD)
  - ISO 14064: International Corporate Standard on GHG
- GHG-intensive industries (Aluminium, Cement, Steel) adopt standards on energy efficiency, emissions reductions
- Set implementation schedule for standards
- Mutual recognition agreements
- Border tax adjustments to enforce standards

Reporting, Monitoring, Verification Process

- Not an intractable problem
- Get started on other three blocks first this will resolve itself over time
- Example of Nuclear Arms Control
- Start with national verification system
- Phase in international system

### How to get started? I

### <u>G20</u>

"The perfect is the enemy of the good"

Responsible for 80% of global emissions contains all the big emitters and those who can pay

France 2011: champions the cause as G20 Chair

# How to get started? II

- France designs package deal w/security of supply, global R&D collaborative, standards setting, monitoring/reporting framework
- Appeal to the selfish national interests of US and China to enroll them
- Diplomatic affinities expand China-US agreement:
- China brings in India, Indo, Saudi
- US brings in Aus, Can, EU & Japan

## How to get started? III

- Expands to include all G20 countries then to UNFCCC
- Confidence and cooperation increases
- Future targets set: time-lagged
- China and US will agree to reduce emissions if:
  - -US contributes RD&D expertise (\$) and cooperates on energy security
  - China cooperates on standards (industry competition) and energy security

