

Innovation Strategies to Achieve GHG Peak and Decline A Proposal

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(A proposal for better policy coordination to scale up and accelerate focused actions to allow for the GHG emissions to peak and decline in the near future)

A. Objectives:

The principal objective of the proposal is to start a new space for policy coordination amongst key countries to address the issue of near-term peak and decline of the global GHG emissions by:

- (1) accelerating technology development, most particularly of the clean coal technologies, ccs and other selected key technologies considered crucial in the peak and decline context.
- (2) accelerating the transfer of those technologies to key developing countries most in need in the peak and decline context.
- (3) renewing and energizing the drive on energy efficiency and conservation worldwide.

B. Compelling arguments requiring global GHG emissions to peak and decline in the near future:

1. As the excerpts below from the Synthesis Report of the IPCC Fourth Assessment Report (SPM) indicate, short and near-term action for GHG emissions to peak and decline is just as important as long-term reduction for the climate stability.

“...Many impacts can be reduced, delayed or avoided by mitigation. Mitigation efforts and investments over the next two to three decades will have a large impact on opportunities to achieve lower stabilization levels. Delayed emission reductions significantly constrain the opportunities to achieve lower stabilization levels and increase the risk of more severe climate change impacts.”

“In order to stabilize the concentration of GHG in the atmosphere, emissions would need to peak and decline thereafter. The lower the stabilization level, the more quickly this peak and decline would need to occur”.

{Note} The SPM stabilization scenario indicates:

Scenario I: In order to stabilize below 490 ppm, emissions must peak by 2015, resulting in a global average temperature rise above the pre-industrial period level of 2.4C

Scenario II: In order to stabilize below 535 ppm, emissions must peak by 2020, resulting in a global average temperature rise above the pre-industrial level of 2.8C

Scenario III: In order to stabilize below 590 ppm, emissions must peak by 2030, resulting in a global average temperature rise above pre-industrial level of 3.2C

2. Assertions by Rajendra Pachauri, the IEA’s World Energy Outlook 2007 and many others of similar tenor urge the world to take immediate actions addressing the peak and decline issue. The world councils can hardly condone the issue in view of the urgency and seriousness involved. They must spearhead expeditiously a new effective action plan.

(1) Rajendra Pachauri (Nov. 17, 2007 at Valencia, Spain)

“The world would have to reverse the growth of greenhouse gas emissions by 2015 to avert a global climate disaster,” “If there’s no action before 2012, that’s too late,” “What we do in the next two to three years will determine our future. This is the defining moment.”

(2) Rajendra Pachauri (Press conference in Oslo, Norway on Dec.9, 2007)

“If the world did not put in place a system to curb total emissions by 2015 a window of opportunity would close and leave the earth with dire consequences”

(3) The IEA’s World Energy Outlook 2007:

“The next 10 years are crucial.” “There is large potential gain from enhanced policy cooperation amongst key countries.”

3. At Heiligendamm last year, the G8 already agreed “to take strong and early action to tackle climate change in order to stabilize GHG concentrations at a level that would prevent dangerous anthropogenic interference with the climate system.” (paragraph 49)

The world awaits what “strong and early action” should be taken in the peak and decline context.

C. Key Actions

The Governments can agree to start a new mechanism for policy coordination so as to:

(1) compare notes about each other's technology developing policies in order to quicken the development process, create synergy and avoid duplication in their investment.

(2) scale up and accelerate R&DD and commercialization programs of key breakthrough technologies considered crucial in the peak and decline context, most particularly clean coal technologies and ccs.

(3) call upon key developing countries to join the coordination mechanism so that transfer of those technologies be made most expeditiously.

(4) start a new drive for energy efficiency and conservation.

(5) monitor constantly the GHG emissions trend and take necessary measures in relation to the peak and decline requirements.

D. Structure

The Governments can call upon the UNFCCC and the IEA to jointly function as trustee/secretariat of such coordination mechanism. They can also invite business including the financial sector and international financial institutions to join the coordination mechanism.

The new policy coordination mechanism would function as an energizing promoter of (a) massive climate technology innovation, (b) energy efficiency and (c) transfer of the clean technologies in the peak and decline context. It can eventually develop into a general headquarters for the long-term global promotion of clean technologies and energy savings.

In order to quicken and expedite the transfer of key technologies to developing countries, the policy coordination mechanism would promote a new intimate, down-to-earth and cohesive cooperation formula where countries (governments and business) would work together on the basis of actual plans and programs instead of debating the issue on an abstract, general and theoretical basis. The key philosophy is to yield results rather than just provide target numbers.

Suppose there are plans to modernize within xx years the coal firing power plants, either nation or regional wide, then an intimate international cooperation on the basis of those real plans would procure most modern and fitting clean technologies, procure finance, procure fitting business linkage, help build local capacity, smooth out intellectual property right and other related issues, create a new sense of positive cooperation and thus bring about quicker results.

The proposed policy coordination mechanism can be a basis for the UNFCCC to have in the future a new action energizing system, as it is basically a static treaty drafting system.

E. Notes

(1) The proposal is a complement to the post-2012 negotiation. The proposed mechanism will not replace any new international framework to be negotiated under the Bali Action Plan, as it only focuses on large-scale emissions of key emitters in the peak and decline context.

(2) The proposal avoids discussions about the level of dangerous anthropogenic interference with the climate system (Art. 2 of the Convention) as they are not vital for the scope and purpose of the proposed policy coordination mechanism. Its basic objective is to shorten the original timeframe for R&DD and to quickly transfer technologies in order to contribute to the peak and decline requirements.

(3) The proposal avoids the number game. It does not involve fixing targets . It is basically an attempt to enhance policy coordination and cooperation with an aim to scale up and quicken global actions in the peak and decline context. It attempts to waste no time in negotiating on numbers but by seizing a small window of opportunity for climate stability which, according to the IPCC and IEA, may remain open only for several years.

Explanatory note on the Proposal on Innovation Strategies to Achieve GHG Peak and Decline

The proposal focuses fundamentally to the peak and decline requirements. It intends to provide a workable answer to them by creating a new policy consultation space and by urgently spearheading real actions of global scale to fend off climate catastrophe. It is for the climate quick fix. It is almost like a Climate Quick Fix Squadron.

Numerical target taking (like 25-40% by 2020 as proposed by the EU) is likely to create prolonged debates. Besides, this particular numerical target of 25-40% by 2020 does not involve the developing countries actions thus causing it to provide only a half of the possible solutions for the urgently needed quick fix to the pressing peak and decline requirements.

The author of the proposal believes that it is not a good idea to set up a (big) bureaucracy to handle the issue. The shift is now needed from our traditional penchant for structured system building to a new notion of setting up a simple, cost-effective, flexible, hands-on and above all workable system.

For the peak and decline to take place globally, the world needs to tackle the issue of coal firing power plants of key emerging economies (and the US) without excluding, though, other selected crucial sectors.

And for this to happen in a just in time fashion, the author believes that a new intimate,

reality-based (not theory-based) cooperative mechanism where developed countries (providing assistance) and developing countries (providing self-help efforts) work more cohesively.

Here is how the proposal is intended to work.

In this new policy coordination space, key emerging economies would present what one would call their National Plan for Sustainable Growth and Clean Energy.

They would basically divide the whole plan into two parts, the one which they would do by themselves (thus self-help manifests) and the other which they like to do in cooperation with developed countries, either in the form of tech transfer, direct investment, financial assistance of all kinds, capacity building etc.

The Plan must include their real action program to make their coal firing power plants cleaner in xx years.

The space would assemble governments and business of both sides to look at those action programs, start real cooperation tackling each individual case of power plants. Rich countries and emerging economies would together look at the action program and find how best they all together realize those actions quickly. Real program with host countries self-help actions would elicit genuinely effective assistance of developed world.

Business and financial institutions, private as well as international, must be an integral part of such cooperation as they are actually involved in those power plants renovation actions already.

Working together in a closer and intimate way with host countries would facilitate solving all sorts of issues, like IPR, more pragmatically. It would eventually create trust amongst countries involved which in turn would give birth to a new ambiance allowing countries to discuss more at ease about other issues.

This would be the quickest and the most effective way for the crucial technologies to arrive their destinations.

This policy coordination space is not a bank. It is not a financial fund either. It is basically an institution where countries would assemble all available resources from existing system and steer them to particular directions. It is basically that each country (government and business) provides the latest clean coal technologies through FDI or through a commercial tech transfer contract between private companies.

For example, on some key emerging economies' coal firing power plants, business of developed countries and host countries are already working with their own resources. As far as one particular major economy is concerned, there are 2-3 major Japanese companies

operating with their respective host country counterparts (private companies). They are exporting their most modern clean coal technologies on commercial basis. The US and EU are operating much the same way.

What governments can do through the proposed policy coordination space is to add to them in term of financial and technical resources but most importantly they can add to them in terms of political commitment.

In a nutshell, what this new space for policy coordination does is to show the world that the urgently needed actions in the context of the peak and decline are actually being taken and handled properly.

The other important component of this proposal is for the developed countries to join hands to accelerate their own tech R&DD in the peak and decline context.

The key objective is to quicken tech R&DD, accelerate investment in breakthrough technologies, overcome all impediments and barriers for quicker actions in the peak and decline context.

The proposed space would allows developing countries to get together, compare note in a most transparent way, monitor progress in the light of IPCC alerts, avoid duplication in investment, provide synergy, go through competition amongst themselves, establish a new set of effective tech development and TT strategies, and above all scale up their tech investment, public as well as private.

The space thus could become a virtual Headquarters of Technology Innovation for the Climate Quick Fix. It can eventually develop into a more longer-term Headquarters of Technology Innovation for the Climate Stability.

Politically, the world must be assured that the way to save the planet is in the good hands of decent governments. To reassure the world that all key governments and key businesses are joining hand and forces for scaling up investment and do the utmost for drawing CCS, for example, come to the operation much quicker than otherwise is crucial. All this is all the more important as there is an increasing need to arrest and reverse the dwindling trend of financial resources going to the climate and clean energy R&D.

All in all, the proposal intends to create and enhance trust amongst countries involved and thus make the endeavor to stop the climate catastrophe a real significant human action of historic importance, hopefully.

Policy coordination in the proposed new space can eventually develop into a long-lasting consultation mechanism for sustainable development (SD) of developing countries thus

going beyond the peak and decline context. Similar policy coordination space can be created with other developing countries and areas like Sub-Sahara (for adaptation purposes). It is far better for Africans to have a space for them to deal with adaptation in the light of regional circumstances.

It will function as a focal point of broad cooperation for the SD and climate change as it is fully compatible with CDM, with any cost reducing market mechanism, any publicly proposed formulae for developing countries actions, like No-Lose Sectoral Approach (CCAP), SD-PAM, Policy-based Approach and Sector Approach (Pew Center), among others.

In the far longer-term perspective, the author believes that this climate battle needs definitely an energizer. People are all under the impression that the UNFCCC is the focal point and energizer of this planetary movement. Yet the UNFCCC is intrinsically a law drafting institution. It is as such a static institution. We need dynamic institution which will carry forward and energize actions on what the static institution enacted. It is like the Congress and Executive. As of today we have a Congress only. And the battle is unlikely to be won if it is only the law drafting institution all that we possess.

The proposal which is originally perceived first as a quick fix in the peak and decline context can be such an energizer eventually. If it functions properly, it goes more than just policy coordination. It would push things forward for real actions. It is going to be an energizer of actions.

Of course, there is a huge problem about whether emerging economies would like to join such a policy coordination space. This is the most difficult aspect of this proposal. At any rate a lot of sensibility and tact must be employed for them to be eased in if they are to at all.