BANK INDONESIA

CLOSING REMARKS[1]

Prof. Dr. Miranda S. Goeltom, Senior Deputy Governor of Bank Indonesia

Fellow Governors,

Distinguished speakers and chairpersons,

Honorable guests,

Ladies & Gentlemen,

On behalf of Bank Indonesia, I would like to express our most sincere thanks to all of you for the honor that you have just bestowed upon my invitation to participate in the annual international seminar of Bank Indonesia in our island of gods, Bali. Also, I would like to thank all honorable guest speakers, chairpersons, and participants for your valuable presentations and fruitful discussions during this one-and-a half day seminar held in such salubrious settings. In my belief, the sharing of views and experiences among central bankers, commercial bankers, academicians, bureaucrats, and the business community will enhance more productive policies with regards to global climate change phenomenon, to support sustainable growth in the long-run, as well as maintaining financial stability and alleviating poverty.

My Dear Colleagues,

Distinguished participants,

We have just completed an invigorating and very productive discussion. For the past one-and-a half day we have deliberated on a wide range of global issues related to climate change impact, in which all of them are important, some of them are crucial to the life of human being and the planet. We have been through the rigorous deliberations, and energetic but always friendly discussion. We also have summoned the spirit of this seminar and drawn inspiration to contribute within our own justification a better macroeconomic and financial stability in conjunction of global climate change.

[1] Delivered at Bank Indonesia's Annual International Seminar on "Macroeconomic Impact of Climate Change: Opportunities and Challenges", Nusa Dua – Bali, August 1 – 2, 2008

The evidence of global warming has become apparent as the consequence of human activities. We have learnt that it is not fiction or propagand a, but it is a fact and real. The costs of policies to address climate change can be contained by ensuring that mitigation policies are well designed. It will be crucial to aim at a framework that is sustainable and provides incentives for country participation.

We have made just another step in the long journey of our inspirations to mitigate the global climate change impact. Indeed, as has always happened, after every seminar that we convene such as this, we grow more unified in our thoughts, more coordi nated in our actions, and more effective in participation in international decision -making. As a result of these efforts, we keep in step with rapid march of history.

We have also thoroughly examined our options and arrived at a broad common understanding (platform) over critical issues on the global climate change impact to macroeconomic, financial stability, and poverty eradication. Climate change is predicted to have some impacts in spreading disease, earlier spring arrival, plant and animal range shifts and population changes, coral reef bleaching, downpours, heavy snowfalls and flooding, drought and fires, and other natural catastrophes. The revolution and transformation of natural changes has brought significant far-reaching effects on human well-being, particularly to the sustainable economic development and poverty alleviation. This condition would, unfortunately, generate greater risks on business and economic activities that should be addressed.

Ladies and Gentlemen,

Now, as we are approaching to the end of our seminar, please allow me to close with several salient points and comments made by distinguished guest speakers at this forum. Let me start with strong message brought to us by his Excellency the Governor of Bank Indonesia, Mr. Boediono, during his opening remarks. He stated that the threat of climate change may go beyond the usual welfare statistics and if left unresolved, climate change and the accompanying twin crises may, in due time, put our shared vision of a free, open and democratic g lobe at risk. He argued that to effectively respond to such a global challenge, we need a global and coordinated agenda of actions.

I, indeed, share his view as expressed in my paper on the Macroeconomic Policy and Climate Change in the session of economic consequences of climate change and policies option. In this regard, I believe that there are a number of key messages we need to take away today; emphasizing that the policies should be integrated in different sectors and not be instituted to sacrifice the achievement of long-term social welfare. All countries need to agree that climate change and development goals can and should be pursued jointly. International frameworks should recognize the right of nations to increase their living standards, and the common but differentiated responsibilities of developed and developing countries in mitigating the effects of climate change. For this, countries need to pursue effective mitigation at the lowest cost. In this regard, not only unequivocal political leadership of developed countries, but also strong commitment from all countries to engage on climate change, is amongst the fundamental pillars to promote global welfare.

Meanwhile, Dr. Hans Timmer emphasized that developing countries are taking center stage in the climate change issues. This conviction relies on the fact that (i) growth in developing world is much faster than expected during the 1990s and the cheapest mitigation options are in developing countries, (ii) developing countries are most vulnerable to climate impact and it has come earlier than expected, and (iii) current analysis includes distributional impacts within countries and poor are hit hardest. For that reason, climate change policies must be integrated into development strategy, and developing countries have to become key players in those policies.

Prof. Iwan Jaya Azis on his presentation, "exploring economy-wide impacts of climate change in a resource-rich country" shared with us his finding from his analysis on these issues using recursive dynamic computable financial general equilibrium (CFGE) model. His research was empirically based on resource-rich country, such as Indonesia, with a concentration on the area that the country faces substantial challenges in terms of declining productivities due to climate change, such as food, mining, forestry and fisheries. One of his finding is that optimizing the innovative approaches on developing Indonesia's enormous biological potential seems to be able to avoid a trade-off between mitigating climate change and maintaining macroeconomic stability. It was also pointed out that the appropriate policies of mitigation that lead to productivity improvements do not always involve a trade-off between income growth and poverty reduction. Furthermore, he showed us his support on carbon credit scheme, but raised issues as to whom the financial revenue should go to.

Ladies and Gentlemen,

The second session discussed whether there is a role for central bank in climate change adaptation. We started with two issues from the viewpoints of central bankers as brought up by the first speaker, Hernán Lacunza, namely how will climate change impact on the macro economy and what is the best way for monetary policy to deal with it. Lacunza argued that monetary policy by itself can not do a particularly efficient job of controlling or mitigating the factors that lead to climate change. Instead, monetary policy can devote efforts to adapt to climate change so that its contribution to macroeconomic stability is not jeopardi zed. The key here is to be flexible, in particular, the standard inflation targeting approach could be modified as necessary, in order to deal with persistent supply shocks –through the use of countercyclical policies as reserve accumulation, exchange rate management, and a more extensive use of informed judgment than before.

Meanwhile, Prof. Peter J. Sinclair argued that consumption of nature's capital calls for taxation so that there would be rewards for depleting natural capital more slowly. Regarding t he terminology of "Green GDP", Prof. Sinclair argued that it is a misnomer in that it focuses on gross income, and not on income net of depreciation in any sense. So it is fiscal policy that is centre stage in this regard, not monetary policy. He has show ed that the trend of ad valorem fossil fuel taxation can have important consequences, even if inter -temporal issues imply that its level may be irrelevant. Nevertheless, global warming has important implication for monetary policy, through its long run im pact on rates of real interest and growth, and its short run repercussions on the level of prices of fossil fuels, which may react quite strongly to changing perceptions of the character and extent of the global warming phenomenon.

At the last of this session, Dr. Junggun Oh identified impacts of climate change which might be a decrease in the potential capacity of growth, a rise in the inflation rate, a decrease in capital flows, and deterioration of exports, and thus a slowdown of global economic growth followed by changes in market interest rate. Thus the tough challenges faced by the central bank is how to keep the commitment to price stability on the one hand and how much to take the possible worsening economic growth and employment into account. As wit h Lacunza, Dr. Oh argued that climate change are largely supply shock, yet the central bank should set the optimal target rate of inflation based on studies on the impact of climate change and inflation rate.

Distinguished guests,

Ladies and Gentlemen,

Session three of this seminar was designed to discuss the role of fiscal policy in promoting environmental friendly growth and development. Fiscal stimulus among other policy measures, could encourage a market in developing green investment and production towards sustainable economic growth. As the first speaker of this session, Prof. Emil Salim highlighted the fact that market failure has locked conventional market economy in an unsustainable pattern of development with no environmental values. This has caused a subsidized growth of economy, followed by bursting energy and food crisis comparable to what we are seeing now. At the global level market failure is perpetuated by the absence of independent global institutions to develop market corrections, while at the national level, market failure prevails with subsidized energy in conventional growth without any considerations on pollution costs. In this regard, green fiscal policy come at the forefront to correct market failure. Several existing policies were mentioned such as palm-oil pollution tax in Malaysia, wind-energy subsidy in Japan, palm-oil export tax in Indonesia, and clean development mechanism, which are already adopted by several countries. He also reiterated the basic notion of green fiscal policy is to get the market price of environmental services right. To do so, the Government need to focus on long term development goal rather than the short one.

Further, Ms. Teresa Ter-Minassian, suggested that impact of climate change to public finance should be responded by fiscal measures to mitigate and to adapt its consequences. Aimed at raising the price of pollution, mitigation measures can be implemented through carbon tax, cap-and trade schemes, and reduction of fossil fuel subsidies. Despite of its obstacles, countries in the world should encourage international cooperation in mitigation measures by adopting minimum rates of carbon taxes, border tax adjustments, possible sectoral agreement, and establishing positive incentives for avoiding deforestation. At minimum, it is important to know new public investments can be climate-proofed, and the associated country level cost. More work is also needed on how financial mechanisms can be used for market-based insurance against climate change risks.

The third speaker in this session, Mr. Chalongphob Sussangkarn, argued that policy officials at Ministry of Finance (MOF) should have an understanding on environmental and climate change issues because many key policy instruments are under the jurisdiction of the Ministry of Finance, and most of them are market based instruments such as taxes. Without the understanding and support of Ministry of Finance, whether at ministerial or bureaucratic level, it would be very difficult to introduce environmental friendly mar ket based fiscal measures.

The fourth speaker in this session, Dr. Stephen Specks used the concept of an environmental fiscal reform (EFR) to address multiple policy objectives (those are environment, fiscal, and poverty reduction). He argued that environ mental reforms are a key instrument of raising fiscal revenues and fighting poverty through generating or freeing up budgetary resources to be used for pro-poor investments, while furthering environmental goals. Options of instruments of an EFR package sho uld encompass a broad range of taxes, pricing instruments and reforming subsidies. In EFR concept, he allocates revenue in some ways such as: revenue allocated to priority spending areas; revenues are used for reduction in other taxes – tax shifting exercise; or revenues are earmarked for environmental/pro poor investment programs. He also finds evidences that EFR can increase the efficiency of the economy. EFR can be a powerful tool for mobilizing revenues, while simultaneously promoting environmental obje ctives and supporting poverty eradication measures – but EFR is not a "panacea". With the concept proposed, Dr. Specks offers an important part of a development policy tool kit complementing and strengthening regulatory and other approaches to fiscal and e nvironmental management – not only in developed but also in developing countries.

My dear colleagues,

The fourth session in this morning covered issues in financial system adaptation and innovation arising from climate change. Vast impact of climate chang e on production and consumption has led to the need for financing and market structure adjustment. There is room for banking and other financial institution to transform into green banking/financial institution and for them to be innovative and to create n ew financial instruments as part of adaptation effort.

Ms Kathleen Robbins in this session outlined the problem of imbalances in trade and production subsidy between developed and non -developed countries. This is one of the reasons that can keep the poor trapped living in poverty. In this regard, "Pyramid Protocol" can be a way to help the poor and alleviate poverty and raise the real income of the poor. It is suggested that the only way to help the poor and alleviate property is to raise the real income of the poor. On the other hand, giving chance for the poor to get financial support to start small business is one way to help the poor graduate from poverty. Hence, financial returns, social benefits, and environmental benefits, are the need to be considered when designing responses to climate change.

The question of whether climate change is a big deal for financial system was addressed by our fellow from bank of Thailand, Dr. Bandid Nijathaworn. He strongly agrees that climate change is indeed a big deal for the financial system through increasing risk exposure from macroeconomic impact, risk and new business opportunities with economic transformation, and financial system role as an agent for change. However, progress in Asia is in fact much less. Nevertheless, he finds that there are several key policy principles for moving the issue forward, such as clear global rule of the market beyond 2012, market infrastructure and incentive structure provided by the government, market-mechanism should be the key driver to deal with this new paradigm, and financial regulation should be neutral. He argued that there is substantial opportunity for the financial system, especially in supporting green technology and carbon trading market.

He proposed the following actions to start-up emerging markets includes establishing the country's overall strategy on carbon trading, reducing searching cost, educating all market players, and providing tax incentive to build up the market.

Moreover, Barry Eichengreen shared his views that climate change is a clear case where financial market and instruments can be part of the solution. They offer coping strategies for firms, farmers, and governments struggling with the consequences, although both of markets and instruments find obstacle to progress. There are financial-market-like variants of cap-and-trade offering cheaper ways than mandates of limiting emissions. On the other hand, there is a spirited debate between the advocates of carbon taxation and cap-and trade. Of course, both approaches require political will.

On the other hand, Preety Bhandari on her remarkable presentation, described that the estimated investment and financial flows needed in 2030 is large compared with the funding currently available under the Convention and its Kyoto Protocol, but small in relation to estimated

GDP and global investment in 2030. Hence, she urged the need for a clever financial architecture by exploring potential new international sources. In order to solve these matters, she proposed an optimal combination of mechanisms, such as the carbon markets, the financial mechanism of the Convention, ODA, national polices and new sources of finance are needed. The entities that make the investment decisions are different in each sector and the policy and/or financial incentives needed, will vary.

Ladies and gentlemen,

The final session, included four enlightening presentations, elaborated issues on adapting poverty eradication strategies to climate change. As the first speaker in this session, Mr. Danny Leipziger of World Bank argued that poorer households will be the most affected by climate change. He also raised the issue that systemic impacts will also threaten inclusive growth. This is so because changes in relative prices will affect poverty and distribution, rising fiscal pressures will strain poverty and investment budgets, and stress over natural resources can elevate conflict risk. He proposed several actions to be done in addressing climate change and poverty reduction. They are mitigation policies to adopt less Green-House Gas intensive technologies, adaptation strategy integrated with national poverty reduction strategies, economic adjustment impacts of global climate policies and impacts that lead to rising commodity prices and changes in t rade flow. However, he also stressed that mitigation must proceed on a win -win basis with sensitivity to the needs of the poor. Finally he quoted important message from Schelling (1992) that the best defense for developing countries against climate change may be their own continued development!.

Meanwhile, Hakan Bjorkman shared the other half story of the climate change, that is beyond the issue of deforestation and rising contribution to the green houses gas. Bjorkman conveyed key messages from a UNDP report, whereby climate change threatens to undermine Indonesia's effort in poverty alleviation. The impact is intensifying the risk and vulnerabilities facing by the poor people, placing further stress on already over-stretched over coping mechanism. So far global attention has been focused on mitigation and principally effort to reduce emission and carbon dioxide. These measures are important but for the poorest community the most pressing issue how to adapt.

On the other hand, HS Dillon reiterated that developing countries dependent upon agriculture will be particularly harmed by global warming. HS Dillon also point out that the food security does not only come from impact of climate change and the lack of speed in food production to catch the rising demand, but also point the development and trade policies practiced that caused depressed agricultural prices leading to stagnant agricultural productivity in many places as well as the rapacious institutional investors playing in the commodity futures markets. Any solution, therefore, should not only be directed at cutting emissions but also enhancing the capacity of those who stand to suffer most. As part of the global solution, Dillon suggested that we focus on improving the quality of our institutions, providi ng more quality extension and easier access to credit and other resources so that even the small farmers can adapt, and adopting sound agricultural practices which allow preserving wildlife and developing rural communities at the same time in a sustainable manner

Finally Dr. Erna Witoelar shared her important messages that climate change is often recognized as a global equity issue. It's the world's poorest of the poor who contributed least to the atmospheric buildup of greenhouse gases, which are being har dest hit. It is also about countries and sections of populations who are the least equipped to deal with the harm they face, both for lack of economic resources and as a result of being geographically located in higher vulnerability areas. Meanwhile wealth ier nations and populations, which have contributed the most to the atmospheric changes linked to global warming, are experiencing fewer effects and are also better able to withstand them. She highlighted three important approaches that need to be taken into account namely: a holistic approach at all levels of governance, from local to national to global; build synergies to upscale pilot projects and good practices to reach more regions, especially remote areas and multi -stakeholder approach where governmen ts, private sector and civil society need to jointly engage, scale up and harmonized efforts to enable all least developed regions to achieve their MDGs. Lastly she believes that climate change mitigation and adaptation are far more than technology and inf rastructure. It is about people's resilience and building partnerships for everybody's informed participation in climate change mitigation and adaptation together with efforts to achieve other MDGs.

[brief message of the seminar]

Ladies and gentlemen,

We have taken another step foward in shaping a common position for mitigating the global climate change impact toward a better life of human beings. Following the Bali Roadmap on December 2007, and again through this seminar, the issues concerning the action of adaptation and mitigation of climate change will be discussed more comprehensively in searching for an effective and efficient global resolution.

Having done all these and more, I do believe that we have not only completed some part of our preparations for the world actions in mitigating negative global climate change impact, but also advanced our broad inspirations for the building of macroeconomic and financial stability, for the long lasting prosperity of human being. Considering the multitude of poi nts of view and the speakers and participants arguments, some of them conflicting with each other, on the various global climate changes impact that we have addressed, it is remarkable that we have accomplished as much as we discussed. I can only attribute this productiveness to your diligence and dedication and, above all, your will to accommodate and compromise in order to arrive at a common ground. For we all know that the stakes are exceedingly high, that the quality of life of future generations depends on the efficacy of our present efforts. We know that human welfare is indivisible and that has given us a strong sense of common purpose which is the unmistakable evidence that in all of us the spirit of Bali is vibrantly alive. Indeed, we have not merel y paid lip service to history. Through our exertions during yesterday, through what we have accomplished in this seminar, we have endeavored to pay proper homage to the first generation of world leaders who met in this island last year.

My dear Colleagues,

Distinguished Participants,

In this meeting you have all generously contributed your valuable thoughts and your power of articulation you have also given much of yourselves, many of you working until the small hours of the morning in order to fulfill thi s demanding seminar's agenda. For that I cannot thank you enough.

Also, I would like to thank IMF, ADB, GTZ, UNDP, and USAID for their valuable, partial financing of this one-and-a half day seminar. Last but not least, I would like to extend my heartfelt appreciation to the organizing committee and all support staffs, who have ensured the success of this year's seminar.

Before I close this remark, let me bring up an interesting note about Bali. The water found here on this paradise island is extremely addi ctive; once you tried it you will succumb to the island's exotic wonders and return time and time again. So, once is never enough. I urge you to make the most of your visit and explore the magnificent sights, tastes and sounds of the island, with the hope that the memories that you make will be great, unforgettable ones. And finally, may God Almighty bless your journey home, and those taking the green tour this afternoon, I know you will have a great time!

Prof. Miranda S. Goeltom, Ph.D

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Having done all these and more, I do believe that we have not only completed some part of our preparations for the world actions in mitigating negative global climate change impact, but also advanced our broad inspirations for the building of macroeconomic and financial stability, for the long lasting prosperity of human being. Considering the multitude of points of view and the speakers and participants arguments, some of them conflicting with each other, on the various global climate changes impact that we have addressed, it is remarkable that we have accomplished as much as we discussed. I can only attribute this productiveness to your diligence and dedication and, above all, your will to accommodate and compromise in order to arrive at a common ground. For we all know that the stakes are exceedingly high, that the quality of life of future generations depends on the efficacy of our present efforts. We know that human welfare is indivisible and that has given us a strong sense of common purpose which is the unmistakable evidence that in all of us the spirit of Bali is vibrantly alive. Indeed, we have not merely paid lip service to history. Through our exertions during yesterday, through what we have accomplished in this seminar, we have endeavored to pay proper homage to the first generation of world leaders who met in this island last year.

My dear Colleagues,

Distinguished Participants,

In this meeting you have all generously contributed your valuable thoughts and your power of articulation you have also given much of yourselves, many of you working until the small hours of the morning in order to fulfill this demanding seminar's agenda. For that I cannot thank you enough.

Also, I would like to thank IMF, ADB, GTZ, UNDP, and USAID for their valuable, partial financing of this one-and-a half day seminar. Last but not least, I would like to extend my heartfelt appreciation to the organizing committee and all support staffs, who have ensured the success of this year's seminar.

Before I close this remark, let me bring up an interesting note about Bali. The water found here on this paradise island is extremely addictive; once you tried it you will succumb to the island's exotic wonders and return time and time again. So, once is never enough. I urge you to make the most of your visit and explore the magnificent sights, tastes and sounds of the island, with the hope that the memories that you make will be great, unforgettable ones. And finally, may God Almighty bless your journey home, and those taking the green tour this afternoon, I know you will have a great time!

Prof. Miranda S. Goeltom, Ph.D